



House of Commons  
Select Committee on the  
Crossrail Bill

---

**Crossrail Bill**

---

**First Special Report of Session  
2006–07**

***Volume II***

*Oral evidence*

*17 January to 23 March 2006*

*Ordered by The House of Commons  
to be printed 18 October 2007*

## The Select Committee on the Crossrail Bill

The Select Committee on the Crossrail Bill is appointed by the House of Commons to consider:

(a) any Petition against the Bill presented by being deposited in the Private Bill Office at any time not later than 16th September 2005, and

(b) any Petition which has been presented by being deposited in the Private Bill Office and in which the Petitioners complain of any amendment as proposed in the filled-up Bill or of any matter which has arisen during the progress of the Bill before the Select Committee, being a Petition in which the Petitioners pray to be heard by themselves, their Counsel or Agents.

That, notwithstanding the practice of the House that appearances on Petitions against an opposed Private Bill be required to be entered at the first meeting of the Select Committee on the Bill, in the case of any such Petitions as are mentioned in sub-paragraph (a) above on which appearances are not entered at that meeting, the Select Committee shall appoint a later day on which it will require appearances on those Petitions to be entered.

That any Petitioner whose Petition stands referred to the Select Committee shall, subject to the Rules and Orders of the House and to the Prayer of his Petition, be entitled to be heard by himself, his Counsel or Agents upon his Petition provided that it is prepared and signed in conformity with the Rules and Orders of the House, and the Member in charge of the Bill shall be entitled to be heard by his Counsel or Agents in favour of the Bill against that Petition.

That the Select Committee have power to sit notwithstanding any adjournment of the House, to adjourn from place to place and to report from day to day the Minutes of Evidence taken before it.

That three be the Quorum of the Select Committee.

### Current membership

Mr Alan Meale (*Labour, Mansfield*) (Chairman)  
Mr Brian Binley (*Conservative, Northampton South*)  
Ms Katy Clark (*Labour, North Ayrshire and Arran*)  
Mr Philip Hollobone (*Conservative, Kettering*)  
Kelvin Hopkins (*Labour, Luton North*)  
Mrs Siân C. James (*Labour, Swansea East*)  
Mr Ian Liddell-Grainger (*Conservative, Bridgwater*)  
John Pugh (*Liberal Democrats, Southport*)  
Mrs Linda Riordan (*Labour, Halifax*)  
Sir Peter Soulsby (*Labour, Leicester South*)

### Publications

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee are on the Internet at [www.parliament.uk/parliamentary\\_committees/crossrail.cfm](http://www.parliament.uk/parliamentary_committees/crossrail.cfm)

**Committee staff**

The staff of the Committee are Sian Jones (Clerk) and Darren Hackett (Committee Assistant).

**Contacts**

All correspondence should be addressed to Private Bill Office, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 3250; the Committee's email address is prbohoc@parliament.uk

**Footnotes**

During the proceedings, the Committee received 405 memoranda, in the form of Petitioners' exhibits and Promoters' response documents, which have been reported to the House. Many of these exhibits were shown to the Committee on screen, via the PaSS System (Parliamentary Support System), during the evidence sessions. These have, where possible, been cross-referenced and footnoted in the Oral Evidence.

In the footnotes of this Oral Evidence, references to evidence generally submitted by Petitioners are indicated by, for example 'Committee Ref: A18, ...'

References to evidence submitted by the Promoter are indicated by, for example 'Crossrail Ref: P2, ...'

# Petitions against the Crossrail Bill and Promoters' Statements in Volume II

---

## **Tuesday 17 January 2006**

Promoters Opening Address Ev 2

## **Wednesday 18 January 2006**

The Petition of Corporation of London with British Land Ev 20

## **Thursday 19 January 2006**

The Petition of Corporation of London with British Land Ev 50

## **Tuesday 24 January 2006**

The Petition of Corporation of London with British Land Ev 64

## **Wednesday 25 January 2006**

The Petitions of Corporation of London with British Land Ev 106

## **Thursday 26 January 2006**

The Petition of Corporation of London with British Land Ev 137

## **Tuesday 31 January 2006**

The Petition of Corporation of London with British Land Ev 174

The Petition of the London Fish Merchants Association Ev 196

The Petition of Corporation of London Ev 200

## **Wednesday 1 February 2006**

The Petition of Corporation of London with British Land Ev 214

The Petitions of Robert McCracken; and Covent Garden Community Association Ev 216

An introduction to Groundborne Noise and Vibration Ev 229

An introduction to Ground Settlement Ev 237

## **Tuesday 7 February 2006**

The Petition of The Mayor and Burgesses of the London Borough of Islington Ev 246

## **Wednesday 8 February 2006**

The Petition of The Mayor and Burgesses of the London Borough of Islington Ev 279

The Petition of London Borough of Camden Ev 280

**Thursday 9 February 2006**

The Petition of London Borough of Camden Ev 311

**Wednesday 15 February 2006**

The Petition of City of Westminster Ev 322

**Tuesday 28 February 2006**

The Petition of Smithfield Market Tenants' Association Ev 353

**Wednesday 1 March 2006**

The Petition of Smithfield Market Tenants' Association Ev 385

**Thursday 9 March 2006**

The Petition of Springdene Ltd Ev 392

The Petitions of The Stafford Partnership and Mercury Theatres Ltd Ev 409

**Tuesday 14 March 2006**

The Petition of The Mayor and Burgesses of the London Borough of Islington Ev 418

The Petition of Confederation of British Industry Ev 420

**Wednesday 15 March 2006**

The Petition of British Land Ev 446

The Petition of Salisbury House Offices Limited Ev 449

**Tuesday 21 March 2006**

The Petition of EMI Music Publishing Limited Ev 452

**Thursday 23 March 2006**

The Petition of British Board of Film Classification Ev 478

The Petitions of Grand Central Sound Studios Limited Ev 515

# Petitions against the Crossrail Bill and Promoters' Statements in Volume III

---

## Tuesday 28 March 2006

The Petitions of Minnie Cockle; and Mr Frederick and Mrs Lilian White	Ev 522
The Petition of Mr Stuart and Mrs Tamsin Owens	Ev 524
The Petition of Mr Michael Sabin	Ev 525
The Petition of Mrs Maxine Fanning	Ev 527
The Petition of Mr Kenneth Cork	Ev 529
The Petition of Petitioners in Brentwood	Ev 535
The Petition of Alistair and Susan Ennals	Ev 546
The Petition of Christopher Brown	Ev 550
The Petition of Beryl Clark	Ev 551
The Petition of Michael and Natalie Wood	Ev 552
The Petition of Gregory and Claire Hodgkiss	Ev 553
The Petitioners of Brentwood	Ev 554

## Wednesday 29 March 2006

The Petitioners of Brentwood	Ev 558
The Petition of Brentwood Borough Council	Ev 567
The Petitions of Brentwood Borough Council; and Petitioners of Brentwood	Ev 590

## Thursday 30 March 2006

The Petitions of Brentwood Borough Council; and Petitioners of Brentwood	Ev 596
The Petition of Ms Meldal-Johnsen, Mrs Alison Human and Mr Antoine Lurot	Ev 603
The Petition of Mr Leo Walters	Ev 608
The Petition of George Iacobescu, CBE and others	Ev 611
The Petition of Mintel International Group Limited	Ev 614
The Petition of The Residents' Society of Mayfair and St. James' and The Grosvenor Mayfair Residents' Association	Ev 633

## Tuesday 18 April 2006

The Petition of The Residents' Society of Mayfair and St. James' and The Grosvenor Mayfair Residents' Association	Ev 638
---	--------

## Wednesday 19 April 2006

The Petition of London Borough of Havering	Ev 663
The Petition of Antique Hypermarket Limited	Ev 685
The Petition of London Borough of Havering	Ev 689

**Thursday 20 April 2006**

The Petition of London Borough of Havering Ev 698

**Wednesday 3 May 2006**

The Petition of London Borough of Newham Ev 725

**Tuesday 9 May 2006**

The Petition of Jonathan & Angela King Ev 727

The Petition of London Borough of Greenwich Ev 732

**Wednesday 10 May 2006**

The Petition of London Borough of Greenwich Ev 766

**Thursday 11 May 2006**

The Petition of London Borough of Greenwich Ev 794

**Tuesday 16 May 2006**

The Petition of London Borough of Bexley Ev 801

The Petitions of David Waterman; I Waterman (Box Makers) Ltd; The AA Waterman Trust; Alberon Securities Ltd; Executor of A A Waterman; and Trustees of I Waterman Pension Fund Ev 832

The Petition of Gareth Pearce Ev 836

The Petition of James Middleton Ev 838

**Wednesday 17 May 2006**

The Petition of Ferrotec (UK) Limited Ev 843

**Thursday 18 May 2006**

The Petition of The Reverend Christopher Burke Ev 859

**Tuesday 23 May 2006**

The Petitions of Kempton Court Residents Committee Ev 867

The Petition of Southend Arterial Road Action Group Ev 878

**Wednesday 24 May 2006**

The Petition of Swanlea School Ev 884

The Petition of East London Line Group Ev 892

The Petition of Wan & Pang Ltd (The Tai Pan) Ev 895

**Tuesday 6 June 2006**

The Petition of LA 21 Traffic and Transport Group Ev 899

**Wednesday 7 June 2006**

The Petition of London Borough of Tower Hamlets Ev 900

**Tuesday 13 June 2006**

The Petition of Dr Annetta Pedretti	Ev 930
The Petition of The Spitalfields Society	Ev 934
The Petitions of Dr Annetta Pedretti; and The Spitalfields Society	Ev 957
The Petitions of Fiona Atkins and others; R and P Adams; and N and M Symons;	Ev 961
The Petitions of Huguenot Court Ltd; and Mark and Suzanne Lancaster	Ev 961
The Petition of Panyotis Cleovoulou and others	Ev 964
The Petition of Robin Tutty and others	Ev 966
The Petition of H J and S F Critchley	Ev 968
The Petition of Shahjalal Community Group	Ev 970

**Wednesday 14 June 2006**

The Petition of Friends of Mile End Park	Ev 973
The Petitions of The Spitalfields Trust; J Akker & E Hill; Oliver Theis and others; and Ali Nehru and others;	Ev 978
Statement on Crossrail Depot Strategy	Ev983
Crossrail Public Consultation	Ev 985
The Petition of The Spitalfields Practice	Ev 996
The Petitions of Alistair and Eleanor Ferguson; Eleanor Ferguson; Gerald Collins and Mona Hatoum; and Caroline Hamilton	Ev 998
The Petition of George Galloway MP	Ev 1001

**Thursday 15 June 2006**

The Petition of Spitalfields Festival Ltd	Ev 1017
The Petition of The Spitalfields Centre	Ev 1022
The Petition of The Spitalfields Community Association	Ev 1035
The Petition of Spitalfields Housing Association	Ev 1050
The Petition of Patricia Jones	Ev 1055
Crossrail National Opinion Polls	Ev 1058

**Tuesday 20 June 2006**

The Petition of the Spitalfields Historic Buildings Trust	Ev 1060
The Petition of Christchurch PCC	Ev 1064
The Petition of Jemima Broadbridge	Ev 1066
The Petition of Thomas Sparks and Susan Goodbody	Ev 1069
The Petition of Spitalfields Small Business Association Ltd	Ev 1071
The Petition of Guy Carpenter	Ev 1082
The Petition of Woodseer & Hanbury Residents Association	Ev 1088

# Petitioners against the Crossrail Bill in Volume IV

---

## **Wednesday 21 June 2006**

The Petition of Westminster City Council	Ev 1093
Promoters' closing submissions relating to the Spitalfields and Hanbury Street site	Ev 1108
The Petitions of Paddington Residents Active Concern on Transport; Rodney Fitzgerald; and Katie Black and John Shepherd and others	Ev 1125

## **Thursday 22 June 2006**

The Petition of Royal Borough of Kensington & Chelsea	Ev 1138
---	---------

## **Tuesday 27 June 2006**

The Petition of Maidenhead Civic Society and others	Ev 1160
The Petition of Royal Borough of Windsor and Maidenhead	Ev 1176
The Petition of Thames Reach Residents Association	Ev 1194
The Petition of Westbourne Park Villas Residents Association	Ev 1197

## **Wednesday 28 June 2006**

The Petition of Theresa May MP	Ev 1212
The Petition of The Association of Councils of the Thames Valley Region	Ev 1220
The Petition of The East of England Regional Assembly	Ev 1227
The Petition of Great Western Studios	Ev 1229
People with Reduced Mobility	Ev 1233
The Petitions of Jean Lambert MEP and others	Ev 1241

## **Thursday 29 June 2006**

The Petition of Corporation of London and British Land	Ev 1246
--	---------

## **Tuesday 4 July 2006**

Railway Industry Issues in the Bill	Ev 1289
The Petitions of Association of Train Operating Companies; and London Eastern Railway Ltd, c2c Rail Ltd, Silverlink Train Services Ltd	Ev 1310
The Petition of London Travelwatch and Passenger Focus	Ev 1316
The Petition of South East England Regional Assembly	Ev 1319
The Petition of The South West Regional Assembly	Ev 1321

**Wednesday 5 July 2006**

The Petition of Robert Wilson MP	Ev 1327
The Petitions of Martin Salter MP and The Reading Evening Post	Ev 1331
The Petition of Thames Valley Chamber of Commerce Group	Ev 1341
The Petition of Frank Browne	Ev 1344
The Petition of Thames Gateway London Partnership	Ev 1349

**Thursday 6 July 2006**

The Petition of Rail Freight Group	Ev 1359
The Petition of Freight Transport Association Ltd	Ev 1363
The Petition of Tarmac Ltd	Ev 1368

**Tuesday 11 July 2006**

The Petition of Network Rail Infrastructure Ltd	Ev 1378
The Petition of English Welsh & Scottish Railway Ltd	Ev 1383

**Wednesday 12 July 2006**

The Petition of Freightliner Group Ltd;	Ev 1433
The Petitions of Aggregate Industries (UK) Ltd; Plasmor Ltd; and London Concrete Ltd	Ev 1449
The Petition of The Quarry Products Association Ltd	Ev 1450
The Petition of London Thames Gateway Forum	Ev 1459

**Thursday 12 July 2006**

The Petitions of Hutchinson Ports (UK) Limited (HPUK), the Felixstowe Dock and Railway Co, Harwich International Port Ltd and Maritime Transport Services Ltd	Ev 1465
The Petition of Maersk Co Ltd	Ev 1483
The Petition of the ExCel Centre	Ev 1486
The Petitions of Mendip Rail Ltd	Ev 1505

**Wednesday 18 July 2006**

The Petitions of Mendip Rail Ltd	Ev 1509
The Petition of Save Britain's Heritage	Ev 1511
The Petition of Royal Borough of Windsor and Maidenhead	Ev 1525
The Petition of Tarmac Ltd	Ev 1527

**Thursday 19 July 2006**

Promoters' closing submissions relating to Railway Industry Issues in the Bill	Ev 1541
The Petitions of Alistair & Eleanor Ferguson; Eleanor Ferguson; Gerald Collins & Mona Hatoum; and Caroline Hamilton	Ev 1545

**Thursday 26 July 2006**

The Interim Decisions of the Committee	Ev 1555
--	---------

**Thursday 26 July 2006**

The Petitions of John Payne

Ev 1559

The Petitions of Open Spaces Society/Ramblers Association

Ev 1571

# Petitioners against the Crossrail Bill in Volume V

---

## **Wednesday 11 October 2006**

The Promoter's Response to the Select Committee's interim decisions on the Bill	Ev 1582
The Petition of Anne-Marie Cousins	Ev 1588

## **Thursday 12 October 2006**

The Petitions of Kempton Court Residents Committee	Ev 1596
The Petitions of D J Saunderson and D J Saunderson and K J Baxter	Ev 1598

## **Tuesday 17 October 2006**

The Petition of London Borough of Tower Hamlets	Ev 1630
The Petition of The Eleanor Street Travellers All Residents Group	Ev 1634
The Petition of Paperback Ltd	Ev 1635

## **Wednesday 18 October 2006**

The Petition of Fairfield Conservation Area Residents Association	Ev 1639
The Petitions of Barbara and Tony Wheeler	Ev 1660
The Petition of Anthony Chambers	Ev 1666

## **Thursday 19 October 2006**

Committee Statement on Woolwich Station	Ev 1669
---	---------

## **Tuesday 24 October 2006**

Promoter's Response to the Committee Statement on Woolwich Station	Ev 1670
--	---------

## **Tuesday 16 January 2007**

Promoter's Statement on the third set of Amended Provisions to the Bill	Ev1671
The Petition of Emma Jeffery	Ev 1673
The Petition of Barbara and Tony Wheeler	Ev 1678

## **Wednesday 17 January 2007**

The Petitions of Alistair & Eleanor Ferguson; Eleanor Ferguson; Gerald Collins & Mona Hatoum; and Caroline Hamilton	Ev 1685
The Petition of The Barbican Association	Ev 1689

## **Thursday 18 January 2007**

The Petition of Paddington Churches Housing Association	Ev 1690
Promoter's Statement on the third set of Amended Provisions to the Bill	Ev 1693
The Petitions of G Selway and Michael Harrison	Ev 1697

**Thursday 25 January 2007**

The Petition of Open Spaces Society and Ramblers' Association	Ev 1706
The Petition of Great Western Allotment Association	Ev 1714

**Tuesday 30 January 2007**

The Petition of Spitalfields Community Association	Ev 1721
The Petitions of Roy Adams and Pascale Adams; and The Petitions of Fiona Atkins and others	Ev 1733
The Petition of Patricia Jones	Ev 1743
The Petitions of Robin Tutty and others	Ev 1747
The Petition of The Spitalfields Society	Ev 1749
The Petitions of Harold Critchley and Sandra Critchley	Ev 1755
The Petition of Spitalfields Small Business Association	Ev 1757

**Wednesday 31 January 2007**

The Petition of Jessica Da Silva and others	Ev 1764
The Petitions of Woodseer and Hanbury Residents Association	Ev 1768
The Petitions of GE Pensions Limited	Ev 1776

**Tuesday 6 February 2007**

The Petition of London Borough of Havering	Ev 1797
The Petitions of Paddington Residents' Active Concern on Transport	Ev 1809

**Wednesday 7 February 2007**

The Petition of Land Securities plc	Ev 1817
-------------------------------------	---------

**Thursday 8 February 2007**

The Petition of The British Land Company plc	Ev 1832
--	---------

**Tuesday 20 February 2007**

The Petition of Grand Central Studios	Ev 1834
---------------------------------------	---------

**Wednesday 21 February 2007**

The Petition of Grand Central Studios	Ev 1873
The Petition of Association of Professional Recording Studios and UK Post	Ev 1893
The Petition of City of London	Ev 1897
The Petition of Association of Professional Recording Studios and UK Post	Ev 1909
The Petition of The Residents' Society of Mayfair and St. James' and The Grosvenor Mayfair Residents' Association	Ev 1910

**Tuesday 27 February 2007**

The Petition of English Welsh and Scottish Railway Limited	Ev 1914
--	---------

**Thursday 1 March 2007**

The Committee's interim decision on the revised depot strategy Ev 1948

**Tuesday 13 March 2007**

Promoter's Statement on Romford Station Ev 1949

The Petition of London Borough of Tower Hamlets Ev 1951

**Wednesday 14 March 2007**

The Petition of Westbourne Park Villas Residents Association Ev 1952

The Petitions of Marriott Hotels Limited; and West India Quay  
Development Company (Eastern) Limited Ev 1973

The Petition of Canary Wharf Group plc Ev 1980

**Tuesday 20 March 2007**

The Petition of West India Dock Commercial Ship Owners Ev 1986

The Petition of Woodseer and Hanbury Street Residents Association Ev 1994

**Thursday 22 March 2007**

Promoter's statement on Woolwich Station Ev 2004

**Wednesday 28 March 2007**

The Petition of Poplar Dock Boat Users Association Ev 2008

The Petition of Trustees of the SS Robin Trust Ev 2014

The Petition of The Residents' Society of Mayfair and St. James' and The  
Grosvenor Mayfair Residents' Association Ev 2019

Closing submissions of the promoter following the completion of  
hearings into petitions against the bill and three sets of additional  
provisions Ev 2030

**Tuesday 10 July 2007**

Promoters opening on Woolwich additional provision and other matters Ev 2037

The Petition of Citipost AMP Limited and Mr Daniel Albert  
Charlesworth Ev 2040

Promoters final closing Ev 2059

**Thursday 12 July 2007**

Committee announcements Ev 2063

**Tuesday 9 October 2007**

Promoter's Response to the Select Committee's Interim Decisions Ev 2067

# Oral evidence

---

## Taken before the Select Committee on the Crossrail Bill

on Tuesday 17 January 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone  
Kelvin Hopkins

Mrs Siân C James  
Mr Ian Liddell-Grainger  
Dr John Pugh  
Sir Peter Soulsby

---

MR DAVID ELVIN QC, MS NATHALIE LIEVEN, MR TIMOTHY MOULD,

MR REUBEN TAYLOR and MS RACHEL BATESON appeared on behalf of the Promoters.

WINCKWORTH SHERWOOD appeared as Agents.

Ordered: that Counsel and Parties be called in.

1. **Chairman:** Good day, ladies and gentlemen. Welcome to the first public meeting of the Select Committee on the Crossrail Bill. May I begin today's meeting by introducing the Members of Parliament who are going to serve on the Committee. There is myself, Mr Alan Meale. I am the Chairman of the Committee. I am the Member of Parliament for Mansfield. We then have Ms Katy Clark, who is the Member for North Ayrshire and Arran. We have Philip Hollobone, who is the Member of Parliament for Kettering. Mr Kelvin Hopkins, who is the Member of Parliament for Luton North. Mrs Siân James, who is the Member of Parliament for Swansea East. Ian Liddell-Grainger, who is the Member of Parliament for Bridgwater. Dr John Pugh, who is the Member of Parliament for Southport. Sir Peter Soulsby, who is the Member of Parliament for Leicester South. We also have two other Members who do not seem to be with us at the present time but may join us at any time. They are Brian Binley, who is the Member of Parliament for Northampton South, and also Linda Riordan, who is the Member of Parliament for Halifax.

2. The purpose of this Committee is to give the petitioners and their agents every opportunity to present their case within the scope of their legitimate interests. However, petitioners will not impress Members of the Committee merely by the length of their statements and repetitious arguments will be deprecated.

3. I want to remind all present that petitioners should remember that by giving the Crossrail Bill a Second Reading, the House of Commons has already approved the principle of the Bill. Therefore, we will not take evidence on whether the Crossrail transport system should go ahead or not.

4. In this respect, copies of the money resolution connected with this Bill are available in the room. Money resolutions authorise any part of a Bill which involves a significant charge on central government funds.

5. The House of Commons has also provided several instructions to the Committee defining what we may consider and how we should deal with certain issues, including the Environmental Statement. The instructions are clear and I do not propose to enter into discussions regarding their interpretation or any other procedural matters. Any queries on these matters can be addressed by petitioners or their agents to the Committee Clerk outside the meeting. I say that at the outset, ladies and gentlemen, so there may be no doubt whatsoever.

6. Petitioners may be assured that if their arguments extend outside the Committee's instructions we will advise them during their statements to the Committee. The instructions are available in the room and we ask all petitioners and agents to familiarise themselves with them.

7. Today we will sit until 4.30pm. On Wednesday the 18th we will sit from 10am to 12pm and from 2.30pm until 4.30pm. On Thursday the 19th the Committee will make a visit in the morning and the Committee Members and relevant petitioners will be collected from New Palace Yard at around 8am. The details are available at the back of the room. We will then sit in the afternoon from 2.30pm until 4.30pm. All meetings this week will take place in the Boothroyd Room.

8. Thereafter, the Committee will meet, unless otherwise directed, in Committee Room 5 in the main building: on Tuesdays from 10am until 1pm and from 2.30pm until 4.30pm; on Wednesdays

---

Promoter's Opening Address

---

from 10am until 12pm and from 2.30pm until 4.30pm; and on Thursdays from 10am until 1pm and from 2.30pm until 4.30pm.

9. The Committee has so far agreed a preliminary future programme; copies are available in the room from Winckworth Sherwood, the Government's Agents for the Bill, and on the parliamentary web page under the Committee's pages at [www.parliament.uk](http://www.parliament.uk).

10. The Committee has also agreed that petitioners are not required to enter appearances on the first day on which the Committee meets nor to enter an appearance in advance of being represented by themselves, their counsel or agents.

11. The Committee has also agreed, and I assume the legal profession agree, that counsel should appear in wigs and gowns.

12. The Committee would be grateful when anyone rises to speak if they could be loud, clear and give their name at the beginning of their remarks. Will those speaking to this Committee also please deposit 16 copies of any documents they are using in the room with the Committee Assistant at the beginning of the meeting. Copies must also be provided to the shorthand writer and to the display screen operator.

13. I ask all Members of the Committee, petitioners, agents and counsel and all members of the general public during the course of the Committee to ensure that mobile phones are switched off.

14. Finally, can I advise all present that the Government has not challenged the *locus standi*, that is the right to appear, of any petitioners, so in line with normal practice on a Hybrid Bill we will begin the proceedings with a factual statement from counsel to the Government about the proposals contained within the Bill. I should stress it is not in order at this stage to interrupt counsel in the course of his statement. Petitioners will get the chance to make their own views known in due course.

15. I now ask counsel for the Promoters to introduce his team and begin. I call Mr David Elvin to start this procedure.

16. **Mr Elvin:** Chairman, thank you very much. Chairman, Members of the Committee, can I begin by introducing the team promoting the Bill. I am appearing with my learned friends Ms Nathalie Lieven, Mr Tim Mould, Mr Reuben Taylor and Ms Rachel Bateson, all of whom are instructed on behalf of the promoting department.

17. As you will be aware, the Bill is promoted by the Government through the Secretary of State for Transport. It is co-sponsored by Transport for London and Crossrail London Links Limited, which is jointly owned by the Secretary of State, and Transport for London is the project developer.

18. There is available to the Committee, and I do not know whether they have been distributed already, three documents, one rather longer than the others. Can I just introduce those. Firstly, perhaps most usefully, there is the Crossrail Quick Guide, which was produced last year by CLRL, Crossrail London Links. This simply provides you with a useful overview map of the route, is handy to carry around and can be referred to and gives you some indications of the general locations of the stations and what is proposed. We also thought it would be useful for the Committee to have at this stage a copy of the main Environmental Statement Non-technical summary which has got some of the more detailed maps which I might refer the Committee to during the course of my opening submission in due course. The third document, which is the bulky one, is the information papers which have been prepared and published and are currently available on the Crossrail Bill document website which contains effectively a series of generic policy documents which explain a number of important matters which will affect many, if not most, petitioners relating to matters such as how the scheme was developed, a summary of the powers of the Bill, how environmental controls are proposed to be approached, property and compensation issues, and some particular papers with regard to the specific parts of the scheme. Those documents will be referred to in our response to most of the petitioners as we proceed.

19. **Chairman:** Mr Elvin, can I just ask one question. In relation to the two first documents, which were the Quick Guide and the Environmental Statement, are these available for petitioners?

20. **Mr Elvin:** Yes. They are available both in paper form and electronic form on Crossrail's website which I will come to in a moment. The Non-technical summary was part of the main Environmental Statement which was published at the time of Bill deposit last February.

21. As the Committee will know, this is the first hybrid Bill in a decade, the Channel Tunnel Rail Link having received Royal Assent 10 years ago in 1996. As the Committee will be aware, a hybrid Bill is an unusual composite of features of public and private Bills, and I do not think I need to say much more about it given that you summarised its principal characteristic in your opening address, namely the principle of the Bill in a hybrid Bill is fixed by the House on Second Reading. I do not, I anticipate, need to touch on the instructions at this stage but if any issue arises in due course then obviously I will address the Committee.

22. There are some short procedural matters that it would be useful to address at the end of the Committee hearing today or first thing in the morning if that is more convenient.

---

**Promoter's Opening Address**


---

23. Also, I ought to say that although we are not operating under the full IT system which the Committee had demonstrated to it last Thursday in Committee Room 5, we do have two screens available upon which a number of images are proposed to be projected during the course of these submissions just to illustrate some of the points. In respect of detailed plans and the like, can I apologise that it is much more difficult to see the maps on these screens than it will be on the screens which you were shown last week in Committee Room 5 where you will each have an individual screen and the screen for the public will be that much easier to see. Where necessary, I will refer to plans in the Environmental Statement Non-technical summary as it saves eyestrain, because I for one certainly cannot make out all the detail from this distance and I think you are further away from the screen at the back, sir, than I am from the one at the front.

24. Crossrail is a major new cross-London rail link. It is a project which serves not only London but the South East of England and, in many respects, the nation as a whole. It will support and maintain the status of London as a World City by providing a much needed world class transport system. You have there, and it is in the Quick Guide and the Non-technical summary right at the front, the main route of that, which I imagine you will be at least passingly familiar with already at this stage. It is page two of the Non-technical summary.<sup>1</sup>

25. The introduction of lines for heavy rail running from one suburb to another by a tunnel under the city centre with underground stations would be new to London but it is not to other cities. The RER system in Paris is perhaps the best known of this type of system. That system now has five lines.

26. The Crossrail project, therefore, represents a fundamental change to the past development of rail services which has resulted today in a cordon of termini of mainline rail stations that force the large proportion of people today who want to get from the rail termini to the centre of the city to transfer to underground or buses in order to get to their destination. Crossrail will enable those people to get much more directly to their final destination. It will increase the passenger capacity available for such journeys and will relieve the congestion at the termini and on London Underground, which of course has wider benefits, about which I shall say more in a moment.

27. The project includes the construction of a twin-bore tunnel on a west-east alignment under central London beginning at Royal Oak just west of Paddington and the upgrading of existing National Rail lines to the east and west of central London. Crossrail includes the construction of seven central area stations providing interchanges with London Underground, the National Rail system and bus services, and the upgrading or renewal of existing

stations outside central London. It will also allow an integrated upgrading together with Transport for London of Tottenham Court Road tube station to provide a joint interchange.

28. Crossrail will provide fast, efficient and convenient rail access to the West End and the City by linking existing routes from Shenfield in the east and Abbey Wood in the south-east with Maidenhead and Heathrow in the west.

29. Crossrail will be a significant and essential addition to London's transport infrastructure and the South East. It will deliver improved services for rail users through the relief of overcrowding, faster journeys and a range of new journey opportunities, which both the line and the interchanges will provide. It will have wider social and economic benefits, not only for London but, as I have already mentioned, for the South East as a whole, and in particular for the regeneration of areas such as Docklands and Thames Gateway and, as such, will also have national benefits.

30. The three key objectives of Crossrail are: firstly, to support the development of London as a World City and its role as the financial centre of Europe and the United Kingdom; secondly, to support the economic growth of London and its regeneration areas by tackling congestion and the lack of capacity on the existing rail network; and, thirdly, to improve rail access into and within London.

31. It will achieve these objectives by addressing problems of inadequate capacity on the National Rail and Tube networks by improving accessibility to regeneration areas, and by providing transport capacity for the growth expected for London. This is not at the expense of regional services, such as to the South West and to Wales. Crossrail services will use only the slow lines during normal operation, not the fast lines into Paddington and Liverpool Street that the regional services use.

The scheme has been in the planning for many years, the need is a longstanding one and therefore has been subject to extensive consideration. Cross London Rail Links Limited, CLRL, was set up in 2001 to undertake the necessary feasibility, design and assessment work to support an eventual application for powers to authorise the project. CLRL was established as a joint venture company initially owned by TfL and the former Strategic Rail Authority. Following the Rail Review, the role previously taken by the SRA was assumed by the Secretary of State for Transport who, together with TfL, is the joint shareholder of CLRL. The Bill proposes that the Government shall nominate one or more organisations, known in the Bill as the nominated undertaker, to take the project forward once Royal Assent has been given, but until any such nomination is made the Secretary of State will himself have the powers of the nominated undertaker under the Bill. The Bill will, however, allow the devolution of the project, if that is thought appropriate, to either the Greater London

<sup>1</sup> Crossrail Non-Technical Summary, Route Map, billdocuments.crossrail.co.uk (LINEWD-EXH02-001).

---

Promoter's Opening Address

---

Authority or to Transport for London, which will include the power to appoint the nominated undertaker.

32. Can I now turn to the question of consultation, which as the Committee may recognise is a very important factor in a project of this scale and this importance to London and the South East. There has been very wide consultation over many years. That consultation programme has continued during the whole of the development of the Crossrail proposals; it has sought to involve major stakeholders, including local authorities, key environmental bodies and the general public, of course, at all stages beginning with the route selection process in the Spring of 2002. The consultation programme fed into the project and the environmental assessment at four different levels: firstly, consultation on the scope and methodology for the assessment of environment effects; secondly, consultation with key environmental bodies and other stakeholders to ensure that appropriate data was used in the assessment and that appropriate recommendations were incorporated into the emerging design of the proposals. For instance, CLRL consulted English Nature to determine the approach to assessing the impact on matters of ecological importance, protected species, English Heritage with respect to the build heritage and archaeological matters and local highways authorities with respect to transport and traffic issues.

33. Thirdly, CLRL organised local authorities and key stakeholders into a series of fora that covered issues such as the consent process, planning, the environmental assessment and the project programme. These various bodies are still operating and still a primary means of consultation, and they are the high level forum, which is, as it says, the forum placed at the highest level in the consultation process. It is chaired by the Minister, Mr Twigg, and it was established to act as the top tier for stakeholder consultation during the development and implementation of the project and comprises local authority leaders, consent granting bodies, environmental bodies, representatives of the business community, other government departments and railway industry bodies.

34. Secondly, there is the planning forum, consisting of local authorities along the proposed project route, and is the focus for planning and environmental matters. There are various subgroups dealing with matters such as environmental health, highways and heritage and design which report to the planning group.

35. Thirdly, there is the statutory agency forum, which consists of various agencies established under statute, exercising statutory powers, which include local authorities and provides the basis for discussions as to environmental matters under the Bill with those various statutory organisations. Those are the three fora which are the focus point for

major consultations. In addition to that there has been extensive public consultation since 2003, and since the deposit of the Bill in February of last year, of course, there has also been consultation in the consideration of the Environmental Statement which was published at the same time as the Bill. Indeed, not only has there been the initial Environmental Statement, of which the Committee has the non-technical summary, but that has been followed by further information in the form of an addendum, a first supplementary Environment Statement and a second supplementary Environmental Statement which is about to be published this week. It has been available electronically for a month but is about to be published in paper form. Finally, there will be the Environmental Statement that deals with the additional provisions which were the subject of the promotion last week in the House of Commons. So public consultation also exists in that location.

36. So, as I say, public consultation began in 2003 with a public awareness campaign along the route to introduce and explain the proposals and its various benefits to the consultees, seek initial comments from interested persons and announce the forthcoming public information round. There you see one of the mobile information centres that were taken to a variety of locations so that local people would have easy access to the information and be able to ask questions and get information. In the first round of those public information centres the route proposals were introduced, preliminary project designs were displayed and comments were sought. A variety of material was provided to help assist, and you see some of it illustrated there. Information was available in 11 community languages, Braille, large print and audio cassette versions. Consultation responses which were received were evaluated by CLRL and they were considered then in the next stage of the design of the scheme and any mitigation measures that were considered necessary to support it.

37. In 2004 there was a second public awareness campaign followed by a second round of public information centres, exhibiting the second stage of design and development, with the supporting materials to inform the public of where matters had then proceeded to, following the designs and the changes which had followed the first. Indeed, the results and the response to the first consultation round were published at that time and you see a copy of it up there. Overall, there were 103 days of information centres at 55 locations across the route of Crossrail, attracting over 15,000 visitors. Invitations were distributed to residential and business properties near the route, properties above the tunnels and at the relevant railway stations, accompanied by widespread advertising. Directly affected property and land owners were contacted separately and supported by a property call centre. Again, the consultation responses received after this second consultation round were evaluated and were considered in the design of the project and the

---

**Promoter's Opening Address**


---

mitigation measures. So there were two major public consultation rounds which were rounded off with an information round, rather than a consultation round, in February of last year, which accompanied the deposit of the Bill, to inform the public as to what had happened to the proposals which had been consulted upon and which were now the subject of the Bill. That included matters such as a general document such as that, and a whole series of detailed documents. You will see the noise and vibration document put up, but there were a whole series of them (and the quick guide, of course), giving information to those wishing to see the difference between the state of the project at the time of the initial consultation rounds and the version put before Parliament.

38. In addition to those structured phases of consultation and information with the public, consultation meetings have also been carried out by CLRL with the local community, and they were set up together with a 24-hour, 7-day a week helpdesk with deals with enquiries. The helpdesk apparently has dealt with nearly 11,500 enquiries in the last three years, and the website has also played an integral part in the consultation process. I certainly cannot see it in detail at this distance (perhaps Mr Bennett can zoom in a little) but you will see that there are various links to the left on the website, with a vast amount of information, various document, the consultation responses, the details of the scheme, the Montague report—all the major documents associated with the development of Crossrail are available and can be downloaded by members of the public. That site has received in the order of three-quarters of a million visits since it was set up in 2001.

39. In addition to that level of public information there are two other major sources of information to the public in the electronic form: there is the Bill supporting documents website, also run by CLRL, and which is linked from the Crossrail main website.<sup>2</sup> All the environmental information, Environmental Statements, the supporting documents, the information papers, all of the major material which is available and has been prepared in order to assess the effects and explain the major policies which lie behind the taking of the Bill forward, are set out in electronic form there. They are all, of course, available in paper form. They are also given to those who may be less proficient in terms of downloading or use of electronic documents, with a whole series of addresses, local libraries and the sorts of locations where they can go and see paper copies if they wish to.

40. In addition to that, there is the DfT website which sets out more formal procedural matters to explain the Bill process and, again, provide links back to the Crossrail site so that members of the public can easily find their way to the major documents if further information is required.<sup>3</sup> Of course, since then there has now been the Select

Committee's own website which provides links to both of those sets of sites, the Crossrail site and the DfT site.<sup>4</sup>

41. It has been clear for many years that there has been considerable support, if not clamour, for the Crossrail scheme in many quarters. It includes support from the business sector. The Institute of Directors has said that "Crossrail is a vital infrastructure project for London. If the Capital is to compete as a place for business, the public transport has to improve." The CBI has said that it is "The single most important new piece of infrastructure for London, and the benefits will spread beyond the capital." London First, as an organisation of business, says that, "If we want to keep London competitive we have to improve its transport system. This means relieving current overcrowding on the networks and catering for continual growth. Crossrail is essential for achieving these goals".

42. The Greater London Authority, the Mayor, and Transport for London support the proposals and local authorities (although taking points of detail) also support the proposals. In particular, you will see and, no doubt, hear in the next few days from the City of London Corporation, which has been vociferous in its lobbying for bringing forward Crossrail and seeking to persuade government that there should be no delay in bringing forward Crossrail and it sees Crossrail as a component, if not a major component, of economic growth and success. Indeed, something of the flavour of the widespread support for differing sectors of opinion can be seen from the debate on the floor of the House when the second instruction was being considered on 12<sup>th</sup>, last week.

43. I will turn now, if that is convenient, to the question of the need for the scheme, although of course this is a hybrid Bill and need does not have to be demonstrated. Nonetheless, it is important to understand the details of the case as to why this project is being brought forward. In transport terms Crossrail is a major project which responds to the transport challenge facing London and the South East. London has relied, as the Committee knows, on railways and underground lines built largely by the Victorians and it now needs Crossrail if it is going to cope with the demands of the 21<sup>st</sup> Century. However, the railway proposed by this Bill will bring enormous benefits, as I have already mentioned, not only to London but to the South East and to the wider UK.

44. Firstly, there is the issue of overcrowding. The underground network suffers from overcrowding on a daily basis and when measured against London Underground standards for crowding and capacity, figures show the central sections of *all* Tube lines operate in excess of capacity during the morning peak. Could I ask Mr Bennett to zoom on the tables so that it is perhaps a little clearer to Members of the

<sup>2</sup> [www.crossrail.co.uk](http://www.crossrail.co.uk)

<sup>3</sup> <http://www.dft.gov.uk>

<sup>4</sup> <http://www.parliament.uk>

---

 Promoter's Opening Address
 

---

Committee?<sup>5</sup> Of course, sir, paper copies of these will be available to the Committee as well. You will see from that table in respect of five mainlines affected, including the Northern Line, the position in 2001 as a percentage in excess of guideline capacity (that is measured according to London Underground standards) and the extent to which the current underground system is already stretched. You will also see the figures projected for 2016 by TfL and they show the extent to which the situation will only get worse without Crossrail. Then the final column shows the figures which demonstrate that Crossrail will have a major benefit effect in terms of overcrowding issue. With Crossrail it will achieve additional capacity so that the position will not only improve but it will improve well beyond the situation experienced in 2001. So you see, for example, in the first column, the Paddington to Oxford Circus, Bakerloo Line section, instead of the 32 per cent experienced in 2001 in excess of capacity, it returns to 10 per cent in excess of capacity—perhaps not returning to planned capacity, as such, but plainly a massive improvement over the situation both at present and which will hold good in 2016 without Crossrail.

45. In addition to overcrowding on the trains themselves, passengers experience a poor quality of environment. Many of the central area Tube stations have inadequate internal circulation space to allow passengers to move freely and comfortably through the system. As well as the resources that are required to maintain and upgrade what is essentially Victorian infrastructure to modern standards there is also a lack of acceptable modern facilities including a lack of access for those who are mobility impaired. Commuter trains running on the national network suffer from overcrowding as well. Many services into London termini operate above planned capacity and the most severe overcrowding is on Great Eastern services into Liverpool Street and the services into London Bridge. So there can be no doubt, we say, that London and the South East transport network experiences serious overcrowding, and if that is the case now all forecasts indicate that the pressure on the network will increase in the future as the economy of London and the surrounding South East of England continues to grow strongly, as is predicted.

46. In London alone, employment is forecast to increase by around 636,000 to 5 million from 2001 to 2016, and the population forecast to increase by about 800,000. Up to 48 per cent of total employment growth is expected to take place in central London, which places particular demand on public transport, given that public transport is the dominant mode of commuting within the central area and that rail links, as I have mentioned, already experience, both in terms of overland links and in terms of underground links, overcrowding and lack of facilities.

47. Outside London and the rest of the South East the Government has committed to provide major growth in four areas: the Thames Gateway, Milton Keynes/South Midlands, Ashford and the London-Stansted-Cambridge corridor. Between 2001 and 2016 demand for peak travel to and from London and across the South East is forecast to increase significantly, with flows into central London during the morning rush-hour rising, for example, by almost 25 per cent compared to 2001 levels. Although this increase in demand will, in part, be met by the additional capacity on the underground and national rail networks, future levels of overcrowding will exceed those experienced today, particularly within central London. I have already shown the Committee the table, and I do not propose to go over that again, but it gives the Committee a flavour of the difficulties, and further details are available if required within the context of the Environmental Statement where these matters are set out at some length.

48. On the Underground, Crossrail will give rise to a reduction in passengers on all but one line, the Northern Line. The largest percentage decreases will occur in the five lines which are indicated on the chart: the Central, Bakerloo, Metropolitan, Hammersmith & City and Jubilee Lines. Overcrowding will be reduced very significantly during the morning peak, and large sections of the network will experience significantly reduced levels of overcrowding. These are just the headline figures, of course; other sections of the Tube, which are not formally classed as overcrowded on LUL standards, are still busy by any normal sense of the word, with at least 80 per cent of capacity used, and they will also experience major reductions in passenger flows as a result of Crossrail

49. Several national rail services into many of the London termini will directly benefit from a reduction in crowding and the scope for an increase in reliability as passengers divert onto Crossrail because, of course, it is a much more convenient means of getting directly into the centre of town rather than, as they do at the moment, as I mentioned earlier, having to stop at one of the cordon of main rail termini and then transfer to Underground or bus.

50. Network Rail services will indirectly benefit because of the direct connection between major termini at Paddington and Liverpool Street, reducing the need for passengers to interchange. In other words, someone coming from the west who is commuting into the City of London will not have to get off at Paddington and then change and perhaps change again but will be able to go straight through via Paddington to Liverpool Street, the journey from Paddington to Liverpool Street taking some 11 minutes.

51. In addition to providing relief from overcrowding, Crossrail will provide significant savings on journey times, and again that is detailed

---

<sup>5</sup> Crowd reduction on the London Underground Network (2001 and 2016) (LINEWD-EXH02-012).

---

**Promoter's Opening Address**


---

in the Environmental Statement. There is no other transportation scheme which is deliverable or which is remotely within the reach of sensible planning which will provide London with all of these benefits. London and the south east simply cannot afford for Crossrail not to happen. The Mayor's London Plan identifies it as critical to supporting the growth of the financial and business services sector in central London and the Isle of Dogs. That leads in, of course, to the economic rather than the transport case for Crossrail because there is a broad economic case in part arising, of course, from the transport benefits which supports Crossrail.

52. So far as regeneration is concerned, Crossrail will support policy objectives aimed at reducing social exclusion and bringing about regeneration. We have put up a plan and there is a better version of that in the Non-technical summary, if the Committee wish to look at it, at page 26 which shows the relationship of Crossrail and its stations to the major regeneration areas which are usefully covered. You will see there, for example, the Isle of Dogs, the Thames Gateway to the east and the others which are noted in red. Therefore, particular benefits will come not only to the Thames Gateway, which is a national and regional priority for regeneration and growth, but also to the other areas there.<sup>6</sup> Crossrail will increase accessibility, leading to an increase in the provision of jobs and homes within the area, and the image and perception of the areas will improve which will bring further long term benefits as land values increase and the quality of the built environment increases.

53. The project, as I have mentioned, has economic significance for the country as a whole. The West End, the City and the Isle of Dogs are the three most productive clusters of the finance and business service sector in London and the UK. Crossrail directly serves each of those areas. By providing the additional capacity that I have mentioned in the London rail network Crossrail will enable more people to travel to, from and across London, enabling employment growth in these highly productive areas, resulting in significant GDP growth for the UK as a whole.

54. There are also benefits in job creation. Mr Bennett is about to put up a table which you will not be able to read the key to. We will provide you with a better copy of that so that you have it for your records. The employment bases are shown in that graph. The violet area at the bottom is employment in the tunnelling, the dark purple or blue is the central stations, green is employment in the systems, yellow is surface working to the west, orange is surfacing working to the east, and the red is indirect employment benefits.

55. In addition, as the City Corporation and the Mayor's plan both state, Crossrail is essential to support employment and economic growth.

Crossrail will bring particular benefits to the high value financial and business centres in the West End, the City and the Isle of Dogs by improving accessibility by public transport, removing what would otherwise be a deterrent to investment. As a result the project is predicted to facilitate growth in these areas by up to 13,000 jobs in 2016 and up to 40,000 jobs in 2026. Crossrail is expected to attract over 80,000 additional jobs to regeneration areas, the areas which I have shown you on the plan. As a result approximately 9,000 people in these areas who would otherwise have been unable to obtain employment will have an opportunity to gain employment as a result of improved accessibility.

56. Crossrail also meets critical transport needs and provides major benefits to the economy more generally and this is reflected in the conclusion of the review of the Crossrail business case which was conducted by Adrian Montague two years ago. The Montague Review concluded that the scheme proposed by the Bill provided good value for money given the expected population and employment growth predicted, which are predictions supported, as far as we can see, by the Mayor's plan and by the City's plan. As I have mentioned, the needs case can be seen in greater detail in the Environmental Statement. A glance at the various development plans for London authorities and those otherwise affected by Crossrail shows the recognition of its importance to London and wider with its consequential benefits.

57. The matter is most clearly put, as one might expect, in the London Plan 2004, and perhaps I could ask Mr Bennett just to put up the main policy and then to zoom in on it so that the Committee can see it.<sup>7</sup> I am not sure whether it is legible to the Committee at the moment but what it says is that in the case of new cross-London links with an enhanced London national rail network the Mayor will work with strategic partners to improve the strategic transport system in London, including cross-London rail links, to support future development and regeneration priority areas and increase public transport capacity. The first of the bullet points is that implementing Crossrail 1 is a particularly high priority to support London's core business areas, an important statement because it echoes the views of local authorities as a whole and the views of the business sector as well.

58. Turning to the development of the scheme, the concept of an east to west rail link is not new. It was originally advanced in the early part of the 20<sup>th</sup> century and was revisited after the Second World War in the Abercrombie Plan for London in 1945. The original concept was developed following the 1989 Central London Rail Study and a direction was issued to safeguard the alignment of the Crossrail proposals at that time. However, a private Bill which was deposited in Parliament in 1991 was rejected but

---

<sup>6</sup> Crossrail Environmental Statement, Non-technical summary, p26, <http://billdocuments.crossrail.co.uk/>

<sup>7</sup> The London Plan, Policy 3C.11 New cross-London links within an enhanced London National Rail network, [www.london.gov.uk](http://www.london.gov.uk) (LINEWD-EXH02-016).

---

 Promoter's Opening Address
 

---

the route was protected for the ensuing period from incompatible development. In December 1999 the Deputy Prime Minister commissioned a review in relation to rail travel on an east-west axis across London and the findings of that review, which were in the hands of the SRA, called the London East-West Study, was published in 2000. That study and its conclusions led to the planning and development work for the Crossrail project as it is now presented in the Bill. The scheme has been developed by CLRL with the assistance of a team of expert consultants. TfL has had a major involvement in the development of the project as part owner of CLRL and as transport authority for London.

59. As part of the development process it is right to say that alternative routes for Crossrail and its design have been considered and refined over a long period. What is now presented in the Bill is considered to represent the best compromise between achieving the objectives of the project and managing the effects of construction and operation. Details of the process of assessing the alternatives can be found in Chapter 6 of the main Environmental Statement and can, of course, be provided in further detail if the Committee requires it. For illustrative purposes I will just show the Committee this.<sup>8</sup> There the Committee will see the central section showing the alternatives that were looked at. It is a little difficult to see but perhaps Mr Bennett could zoom in on the central section. The line running through the centre is Crossrail as it currently stands. The southern line is what was then called Super Crossrail and the blue line, which is something the Committee will come across at a later stage in respect of some of the petitions, is the Northern Alignment promoted by the Residents Association of Mayfair. Those were alternatives, that is, the brown, the Super Crossrail, and the Northern Alignment, which were considered to have a poor and unjustifiable transport case; hence the central route now promoted through the Bill, was considered to be by far the most preferable. That is no doubt an issue which will be taken up in due course.

60. There are also plans showing examples of the alternatives to the western alignment. That can be seen in the Non-technical summary, although I do not think it is necessary to trouble the Committee with the details of it. Similarly for the eastern arms, again, alternatives were looked at and rejected.

61. Turning to the question of policy support rather than other forms of support, the project meets national policy requirements because it provides sustainable, accessible and inclusive transport. It provides important relief to congestion, to the transport system of London, and provides further incentives for the use of sustainable transport over private vehicles of those living and working in and around London. As I have already mentioned, and I think we are just about to have the diagram again,

it will integrate well with the existing rail and Underground systems, and there is the central area showing the interchanges between Crossrail, the national rail system and the various branches of the Underground system. It also enjoys the support of planning authorities, as I have mentioned. All Underground lines will see a reduction in passengers, other than the Northern line, as I have already mentioned, with the greatest decreases occurring on the five lines that I have already indicated and you have the table. Providing better accessibility, it provides support for the policies of regeneration again in the areas which have been identified.

62. Turning now to the planned services, once Crossrail is constructed and fully operational it will be expected that there will be considerable demand, not surprisingly, we would say, given the circumstances both at present and then likely to hold sway when it is opened. The proposal therefore is that 24 trains per hour will be run in the central section. To the east this will split equally with 12 trains per hour to Abbey Wood down to the south east and to Shenfield in the north east. The western side has only one limb, which is the Great Western main line, with a branch from the Great Western main line to Heathrow airport. This means that only a proportion of Crossrail trains will run west of Paddington, up to 10 per hour, four of which will run to Heathrow and at least four of which will run to Maidenhead.

63. The new Crossrail line to Abbey Wood, running parallel on the existing North Kent line, will only take trains going through the central tunnel, but on the line to Shenfield Crossrail services will share the slow or so-called "E lines" with those suburban passenger services not subsumed by Crossrail and which are designed to be complementary. The further distance passenger trains and the freight trains which use the fast lines, once Crossrail opens, will be unaffected during normal operation. The Committee will recall that, as I said earlier, it is not proposed that Crossrail will interfere with the current main line services which will retain their use of the fast lines. On the Great Western main line Crossrail will share the slow or so-called relief lines with freight and complementary passenger services to Reading. The intercity services and Heathrow will continue to use the fast or main lines during normal operation. Greater capacity is obtained on the existing network by a variety of features: the use of longer trains, fitting in more trains through investment in the infrastructure, which is part of the Crossrail project, and in increased attention to design of the timetable. There is a variety of measures to create that improvement in capacity.

64. We now turn to a brief description of the Bill. The Bill provisions and the concepts used in the Bill borrow a good deal from the experience of the last major infrastructure Bill in 10 years, that is, CTRL, but it also borrows from the experience gained from operating that legislation. Some lessons have been

<sup>8</sup> Crossrail Environmental Statement, Volume 1, Chapter 6, [billdocuments.crossrail.co.uk](http://billdocuments.crossrail.co.uk)

---

**Promoter's Opening Address**


---

learned. The Bill seeks a range of powers to build and operate Crossrail, which include the following matters: the power to construct and maintain Crossrail and its associated and enabling works; granting deemed planning permission to construct Crossrail and its associated and enabling works; removing the need for special heritage consents, listed building and conservation area consents, in buildings and areas specified in the Bill where this is necessary to construct the railway and the associated works.

65. It confers powers of compulsory purchase in two forms. There are powers of direct compulsory purchase in the normal sense of taking the land absolutely but there are also powers to enable temporary possession to be taken in certain circumstances. The Bill will authorise the stopping up or closure of highways and other public thoroughfares, including navigable waterways. It will also allow the alteration of highways, and they are specified. It will enable rights to use certain rail facilities to be taken by Crossrail or varied specifically for the purposes of the Crossrail services; and it will confer such other powers that are required in connection with the construction and operation of Crossrail and its various associated and enabling works.

66. The provisions of the Bill deem planning permission to be granted for the authorised works, and that is deemed to be subject to conditions requiring the approval of the local planning authority for certain matters of detail. The Bill does not preclude the influence of local planning authorities in the detailed design of the scheme. The extent of matters subject to approval under these conditions will depend on whether the local authority is a qualifying authority, that is, it has given an undertaking to the Secretary of State about the way in which it will handle applications for approval of details. For qualifying authorities the matters subject to approval will include certain construction arrangements. Where works affect highways certain matters will be subject to the approval of the highway authority. I do not pretend, of course, that it leaves matters significantly in the hands of the local planning authority in the way that a normal planning application would but nor does it cut out local authorities completely from consultation and influence on details of the scheme.

67. With regard to compulsory purchase powers, it is considered in the case of those powers that the public interest in acquiring the land to build the project, whether permanently or temporarily, outweighs the interest of owners and occupiers. There is, of course, no sensible way to build a scheme of this size through the nation's capital without acquiring land held by others. For that reason of overriding public interest the scheme is compliant with the provisions of the European Convention on Human Rights.

68. The Bill seeks powers for compulsory acquisition within the limits of deviation for the works. These limits are intended to ensure sufficient flexibility of the detailed design of the scheme. The full extent of the land within the limits, however, will not necessarily be acquired. The Secretary of State has policies which are contained in large part in the information papers the Committee has been handed today, policies to mitigate the effects of compulsory purchase wherever possible, including Information Paper C9, which is the land acquisition policy. What this says in simple terms is that while the Bill generally includes full land acquisition powers, the exercise of those powers in an individual case will operate on the basis that the Secretary of State will seek to exercise the powers only so far as is necessary at the time that the detailed design has been carried out. In other words, the compulsory powers in the Bill are for the maximum extent of the Secretary of State's powers to compulsorily acquire. The Secretary of State will operate a policy of only taking so much as is reasonably required once the detailed design works have been done. It should be possible and practicable to acquire in many cases smaller areas of land without compromising the Secretary of State's ability to secure the construction and implementation of the project in a timely and economic manner and, in accordance with any undertaking given by the Secretary of State in respect of the Bill, agreement will be sought with the landowners where reasonable terms can be reached. In other words, the compulsory powers will only be used as a last resort.

69. It is also necessary to draw the Committee's attention to what the Bill does not do. There are a number of locations in central London where the Bill seeks powers to demolish buildings, including some which are listed buildings and some which are in conservation areas, but does not seek powers from Parliament to replace those buildings in addition to the operational works needed for the construction of the railway, the construction of the station and other associated works such as ventilation and emergency access.

70. Locations effectively fall into two categories: those where operational works are to take place, such as the construction of stations or shafts, and those where demolition is required for the use of the land as a work site, but there are no permanent operational works on the land. In those two categories of case the Bill does not seek permission for non-operational development above the stations or above the structures, whatever they are going to be. These replacement structures which the Bill does not contain powers to authorise are referred to in the Environmental Statement and elsewhere as OSD, over-site development. The form of OSD should be applied for and determined through the normal planning process by the appropriate planning authority subject, of course, to the power by the Deputy Prime Minister to deal with such cases on appeal or by virtue of his powers of call-in.

---

 Promoter's Opening Address
 

---

71. The Bill will require that any OSD will either require an environmental impact assessment on its own where the works are integral to the new works, or they will require environmental assessment where the planning authority determines that it is necessary because it would be likely to have significant environmental effects. What this ensures via the powers of the local authority is that there will be assessment where only the loss of the buildings has been assessed by the Environmental Statement of the Bill. As I say, the Bill only seeks powers to remove them and for limited operational replacements.

72. Although, of course, the Bill does not give powers for OSD, there is an obvious and overwhelming likelihood that in all these cases some form of development will take place at the same time as the construction of Crossrail or very soon thereafter, and the reasons why we say it is extremely unlikely that only the operational works will be constructed are these. First, all the stations will have to be designed to ensure the appropriate load bearing and servicing facilities, with assumptions being made about the size and general dimensions of the buildings that are likely to go up. Secondly, the sites are within areas with very high land values—Oxford Street and Tottenham Road and the like—where there will be a strong financial incentive to redevelop. Thirdly, there are currently discussions between the department and the local authorities as to what might be a reasonable timescale for making outline planning applications for each of the OSDs. The Secretary of State intends that, following those discussions, an undertaking will be brought forward before the Committee by the time of the end of the hearing, so it is intended that those discussions will reach fruition before the Committee hearings conclude.

73. To assist the Committee and others material has been provided as to the appearance of the operational works in question in the Environmental Statement and illustrative material has been provided at Appendix C2 of the possible form that OSDs could take, as suggested by the requirements of load bearing and servicing of the works which are authorised by the Bill. I will just give the Committee an illustration. This is the corner of Tottenham Court Road and Oxford Street.<sup>9</sup> The Committee will see on the right hand side Centre Point and in blue the location of the fountains that are currently in front of Centre Point, and then to the left is the corner of Charing Cross Road and Oxford Street, which has one of the major entrances to Tottenham Court Road Tube at the moment, which is marked as a cleared site. This is obviously a high value and prominent location where there will be considerable works and where the Bill only seeks powers to put back the operational works needed for the station. What the plans in the Environmental Statement

<sup>9</sup> Crossrail Environmental Statement, Appendix C2, Plaza Ticket Hall, Crossrail Operational Structures - Eastern Ticket Hall Site Plan, [billdocuments.crossrail.co.uk](http://billdocuments.crossrail.co.uk) (LINEWD-EXH02-023).

show is not what is going to go back in terms of the final form of development but what the operational characteristics are of the development which is authorised by the Bill, therefore showing the maximum impact that could happen because, of course, in reality one simply will not see this because there will be additional development over the station to deal with the buildings that were lost.

74. This is a view, with Centre Point on the left, facing down Charing Cross Road, so looking due south, and that is Oxford Street to the right.<sup>10</sup> If we zoom in a little the Committee will see on the right hand side, with various arrows, an assumed line of Gosleth Yard operational buildings and the like. All this plan shows just above street level is the operational works which the Bill authorises. It does not give the Committee or anyone else an impression of what will go there ultimately because that will be a matter for the normal planning processes. The local planning authority will in the usual way decide, having regard to their policies and the context of the site, what is appropriate development to go over the top. This location can also be seen in a number of different directions, and perhaps we can look at them briefly. This is the view facing due east, facing Centre Point and its fountains, and this is the view looking west up Oxford Street, and again you will see the blank areas to the left.<sup>11,12</sup> The railway development is shown above the railway to fill in the gap once the works are complete. That remains a matter for the local planning authorities in the usual way. I have not put up any illustrative material for the Committee and I stress to anyone looking at the Environmental Statement illustrative material that it is just that, for the reasons I have just mentioned, namely, the decision as to what goes back in place of the buildings that are lost, is for normal planning powers.

75. I then propose to turn to the works which are comprised in the Crossrail project. This is a plan which shows the main works proposed throughout the route which I am not going to ask the Committee to decipher because there are more detailed plans which I can show the Committee.<sup>13</sup> If the Committee would turn up the Non-technical summary of the Environmental Statement, at page 40 the Committee, for example, will see the main works in the western section, where the new stations are to be, where existing routes or tunnels are to be used, where there are to be bridge works and the like; similarly, if the Committee turns to page 46, for the north eastern section. There are plans for each of the

<sup>10</sup> Crossrail Environmental Statement, Appendix C2, Plaza Ticket Hall, Crossrail Operational Structures - Eastern Ticket Hall - Oxford Street Elevation facing south, [billdocuments.crossrail.co.uk](http://billdocuments.crossrail.co.uk) (LINEWD-EXH02-024).

<sup>11</sup> Crossrail Environmental Statement, Appendix C2, Plaza Ticket Hall, Crossrail Operational Structures - Eastern Ticket Hall - Charing Cross Road facing east, [billdocuments.crossrail.co.uk](http://billdocuments.crossrail.co.uk) (LINEWD-EXH02-025).

<sup>12</sup> Crossrail Environmental Statement, Appendix C2, Plaza Ticket Hall, Crossrail Operational Structures - Eastern Ticket Hall - Charing Cross Road facing west, [billdocuments.crossrail.co.uk](http://billdocuments.crossrail.co.uk) (LINEWD-EXH02-026).

<sup>13</sup> Crossrail - Main works proposed (LINEWD-EXH02-027).

---

**Promoter's Opening Address**


---

sections and, as I mentioned earlier, the Committee will be getting a legible copy of this plan showing an overview of the main works as they are distributed across the route.

76. The works, as I have mentioned earlier, comprise twin-bore tunnels and this diagram gives the Committee a comparison between the dimensions of the Crossrail tunnels with the most recent Underground works, which was the Jubilee Line extension, and the Committee will see that the Crossrail tunnels are somewhat larger and that the trains in use are more appropriate to the type of service that Crossrail will operate rather than a pure Underground metro service.<sup>14</sup> You will see from that diagram that the trains will operate overhead electrification. I will come back to the rolling stock in a moment but that gives the Committee an idea of the comparative size of the tunnels.

77. Also to be provided, of course, will be stations. This is a typical layout of a station showing the twin tunnels and platforms and the various points of access, ticket halls and the like.<sup>15</sup> Perhaps Mr Bennett can zoom in on one side or another to show that in a little more detail, as the Committee will expect, the various services to be provided so that one can buy a ticket and get to the train, or get away from the train, as the case may be. Also required are emergency intervention points, ventilation shafts and escape shafts.<sup>16</sup> This illustrative diagram shows the sort of provision that is needed and if Mr Bennett will zoom in on the left hand side the Committee will get an idea of the sort of shafts that are needed. You will see that there is a shaft with emergency access stairs, and you can see the emergency access from the running tunnel through to the emergency access stairs and the ventilation shaft, both separately accessed.

78. There will be train depot and stabling facilities, track works, traction power and signalling systems, communication systems, a route control centre, works at existing stations to improve and include platform lengthening, and a river crossing for the south eastern section. Perhaps that can be put up for the Committee.<sup>17</sup> That is the crossing from the portal of North Woolwich down to the south eastern route and the Plumstead portal, which is the portal on the far right hand side of the picture. Works will also improve existing rail facilities in a number of places. To take one example, a substantial increase in passenger capacities will be created in the growing rail corridor which is east of Maidenhead and, as I mentioned earlier, it will subsume or alter the existing slow suburban services rather than the main line fast services. The use of the Great Western

corridor east of Maidenhead will be intensified by means of investment in infrastructure and the use of longer trains.

79. The trains for Crossrail, as I mentioned earlier, and this is an illustration, are somewhat larger than the trains that London is used to by way of Underground trains.<sup>18</sup> The rolling stock for Crossrail will be about 200 metres long comprising 10 cars of 20 metres each grouped into five. They will be more spacious than London is used to in terms of the accommodation in Underground cars, and they will be so designed to allow quicker and easier access and exit. They will draw power from overhead electrical lines, as you will see from the illustration, and, as I have mentioned already, it is proposed that there should be 24 trains per hour running through the central section. The fleet size will allow at peak demand the operation of 116 five-car units at any one time from a fleet of about 129 five-car units.

80. Having looked at those details, perhaps I can now take the Committee in a little bit more detail to the three main sections of the route. If the Committee will forgive me I will not go in geographical order but I will start with the central section because that is the section that the Committee are going to be concerned with in terms of the initial periods of petitions. On the central section, as the Committee will see, the first main station in the west is Paddington, the portal being at Westbourne Park, and then the line runs through to the City and then out to Whitechapel and then splits going north east, coming out at Pudding Mill Lane just west of Stratford, and then down to the Isle of Dogs where ultimately it crosses the Thames.<sup>19</sup>

81. This represents the single largest scale engineering component of the project. It comprises six-metre diameter twin-bore tunnels running under central London that will connect existing railways to the east and to the west. The tunnels will generally be at a depth of between about 20 and 40 metres. At a point beneath Stepney Green the route will fork, as you see in the diagram, one fork north eastwards towards Stratford, the other south eastwards to the Isle of Dogs. Perhaps Mr Bennett can show us the vertical alignment.<sup>20</sup> The diagram that is about to come up is a compressed scale vertical alignment showing the Committee how the tunnel varies in depth throughout the length of the central section, and perhaps Mr Bennett can highlight the central section. If it helps the Committee, part of the section is shown in the quick guide on the same page as the route plan. There you will see how the vertical alignment changes throughout the central section from Paddington through to the Isle of Dogs, so depths of between approximately 20 and 40 metres.

<sup>14</sup> Comparison of Crossrail and Jubilee Line Extension tunnels (LINEWD-EXH02-028).

<sup>15</sup> Illustrative layout of a Crossrail station (LINEWD-EXH02-029).

<sup>16</sup> Illustrative diagram of a Crossrail station, indicating shafts (LINEWD-EXH02-030).

<sup>17</sup> Aerial view of the South Eastern Route (LINEWD-EXH02-031).

<sup>18</sup> Illustration of Crossrail rolling stock (LINEWD-EXH02-032).

<sup>19</sup> Map of the Central Section (LINEWD-EXH02-033).

<sup>20</sup> Vertical Alignments - Central Section (LINEWD-EXH02-034).

---

**Promoter's Opening Address**


---

82. New stations will be provided at intervals along the new tunnel alignment at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street, Whitechapel and the Isle of Dogs and, with the exception of the Isle of Dogs and possibly Whitechapel, each station will have two entrances and ticket halls to provide access to the east and west ends of the below-ground platforms. At the Isle of Dogs there will be a passive provision for a second ticket hall. New portal structures will be provided at Royal Oak just west of Paddington and in the east at Pudding Mill Lane near Stratford. For the south east route to Docklands the tunnel will be continued east of the Isle of Dogs to the south east route section. In particular locations along the new railway shafts connecting the tunnels with the surface, as shown in the earlier diagram, will be provided for access and ventilation. Sometimes they will be located within the station infrastructure, sometimes they will have to be separately constructed.

83. The twin-bore tunnels will be excavated using tunnel boring machines, as shown, at approximately the dimension which will be used for the Crossrail tunnels.<sup>21</sup> Up to nine of these will be working in the central section at any one time, and there is available at page 12 of the Non-technical summary a diagram which Mr Bennett can also put up which shows the various directions in which the tunnel boring machines will operate.<sup>22</sup>

84. I then turn to the western section. The western section runs from the existing station in Maidenhead to the Portobello junction at Westbourne Park where the portal will shortly take it at Royal Oak Underground to Paddington. At Stockley junction, roughly halfway along the western route, there is a link for Crossrail for trains coming from London to the terminals at Heathrow. That link will use existing rail infrastructure at the airport and will not involve any construction activity within the airport. Again, I think I have shown you already the main works planned for the western region and perhaps Mr Bennett will put it up to remind the Committee. The western section will mostly use the existing Great Western main line relief lines. It will, however, require the provision of additional new track or track realignment in some locations.

85. New structures and facilities along the western route include a new rail underpass at Acton, a new flyover at Stockley for Heathrow, a freight loop from Langley to West Drayton and new or remodelled sidings in three locations. There will be at various locations new and extended stations to accommodate the 200 metre long Crossrail trains. Some of the platform lengths are not sufficient at present. There will also be improved facilities at nine stations. The other main construction work associated with the western route section relates to overhead line electrification. Since most of the Great

Western line is not electrified, only the section between Paddington and the Stockley Road bridge in electrified at present, provision will need to be made for that and works will need to be carried out to bridges in order to accommodate the electrification of lines.

86. Turning to the eastern section, first the north eastern route, runs from Stratford after it has emerged from the Pudding Mill Lane portal just to the west in east London to Shenfield in Essex. The services in this route section will run on the existing electric suburban tracks of the Great Eastern main line. There will be little new rail alignment here, although new track is required to provide a freight loop between Goodmayes and Chadwell Heath. Crossrail again, as in the Great Western section, will require new or extended platforms to accommodate the extended Crossrail trains. New station buildings and other facilities are required to be provided at Romford and Ilford, and at Shenfield there are various works of construction, including new stabling for the rolling stock, a new platform and alterations to existing lines.

87. The other major facility is a new depot and stabling sidings to the west of Romford station, which no doubt the Committee will hear more about in due course. This is linked to the eastbound and westbound running lines of Crossrail by a new rail underpass enabling Crossrail trains to access the depot without hindering services on the main lines.

88. The south eastern route runs from a point to the east of the Isle of Dogs station to Abbey Wood in the London boroughs of Greenwich and Bexley. Crossrail will use the existing main line railway alignment in this route section with track alignment modifications in places. Again, the detailed diagram will be provided to the Committee but this summarises the main works.

89. Crossrail will operate underground in the twin-bore tunnel in the section between the Isle of Dogs station and Victoria Dock portal, at which point the line will emerge and operate at surface level. It will serve a new station at Custom House and then follow the existing alignment used by the north London line through a refurbished Connaught tunnel to Silvertown. It will then descend a ramp to the North Woolwich portal, which is illustrated here, where a new twin-bore tunnel will be constructed that will pass beneath the Thames and surface at Plumstead.<sup>23</sup> That Plumstead portal is located between the existing Plumstead and Abbey Wood stations. The terminus will be in this branch of Crossrail at Abbey Wood, where there will be new tracks, new platforms and a new station to allow 12 Crossrail trains using this branch of the line to terminate. Again, overhead line electrification is required to be installed for the whole route section.

<sup>21</sup> Tunnel boring machines (LINEWD-EXH02-039).

<sup>22</sup> Start and end points of the tunnel boring machines (LINEWD-EXH02-040).

<sup>23</sup> Crossrail Southeast Section (LINEWD-EXH02-046).

---

**Promoter's Opening Address**


---

90. The construction of Crossrail has a varied methodology according to the location of the train provisions since the railway is partly underground and partly over ground. Specific issues will be addressed as necessary when dealing with petitions and indeed the Committee has available to it in one of the information papers probably more information than it may care to have as to the details of the various types of tunnelling work but the information is there in the pack which the Committee has, and should any issues arise, of course, further information can be provided.

91. Significant parts, of course, will be in tunnels, especially in the central section. Historically, running tunnels for underground railways, for example, the Jubilee Line Express, have been constructed in short lengths, usually between stations or between a portal and a station. Very often the excavated material arising from the construction of the tunnels has been removed from site to disposal site by road, although in some cases rail or river access was used. The strategy which has been developed on the other hand for Crossrail, whereby the main running tunnel excavation is to be carried out from the portals at each end of the tunnel and an intermediate location, will allow a different approach. The excavated material can be brought by rail from the tunnels along the Great Western and the Great Eastern main lines.

92. Based upon the work which is outlined in the information papers a strategy for Crossrail has been devised which will enable construction within a six-year timetable which will allow for simultaneous tunnelling from six different sites. If the Committee would look at page 12 again it will see on the tunnelling diagram the various different locations from which tunnel boring machines will be set to operate and will tunnel in different directions. That allows for timescales which are predicted in the Environmental Statement.

93. Construction of the running tunnels is essentially a linear process. It uses tunnel boring machines such as the one that the Committee has seen on the photograph. They will excavate and support the ground until the tunnel lining, which will be made from pre-cast concrete or cast iron segments, is erected. In certain locations, particularly the station boxes, the support lining will be provided using a method known as sprayed concrete lining. Again, for those Members of the Committee interested, there is more detail on these issues in the information papers. The type of tunnel boring machine is dependent on the ground conditions and the method of construction of the tunnel, again, will depend on local ground conditions. Details are provided to those interested in the papers and in the Environmental Statement.

94. Tunnelling operations are proposed to be carried out on a 24 hour, seven day a week basis allowing for planned and unplanned stoppages, maintenance and replacement of equipment; extension of conveyors

and service railway; the slowing of the TBMs through areas of importance through central London; and the removal of obstructions where and if necessary. Where possible, tunnelling will be carried out continuously to provide the optimum control of ground movements.

95. The strategy which has been adopted offers an optimum construction programme with the principal tunnel drives being integral with the station works and thereby minimising periods of inactivity and speeding up the overall construction programme. It also offers a construction programme, therefore, which is compatible with the project's revenue staging strategy.

96. Turning to an important issue which is the concern of many who have petitioned Parliament, that is measures for environmental protection and mitigation. Again, these are set out in public policy form particularly in Information Papers D1, D2 and D9.

97. Environmental protection measures are an important element of this project, recognising the disruption which can obviously occur from any project of this nature given the sorts of issues that can arise of noise and traffic, settlement and the like, issues which figure significantly in the petitions.

98. In common with similar projects, Crossrail will have a Construction Code which sets out a series of objectives and measures to protect the environment and limit disturbance from construction activities so far as is reasonably practicable. The Code will require the nominated undertaker to produce a number of environmental management plans—EMPs—and it is proposed that the Code would require the preparation of EMPs on matters which are of obvious importance, such as area management, health and safety, traffic management, emergencies, including dealing with pollution incidents, noise and vibration, dust, site waste, ecology, community liaison, green travel and water. All of those are proposed as the subject of management plans under the Construction Code.

99. When the Bill receives Royal Assent it is expected that the Secretary of State will appoint a nominated undertaker, as mentioned. The nominated undertaker will be required to comply with the Construction Code by the Secretary of State and will be responsible for ensuring the relevant provisions of the Code are observed by its contractors and subcontractors.

100. The Code is intended to form part of the environmental minimum requirements—EMR—for Crossrail and has been issued to the planning forum and statutory agencies forum to encourage early discussion with the statutory bodies, local authorities and other stakeholders. The environmental minimum requirements will cover a number of issues related to design and construction

---

Promoter's Opening Address

---

and environmental impacts and will be finalised through the final stages of the Bill through Parliament.

101. The general approach to the control of environmental impacts is driven by the need to mitigate environmental impacts. This has also been a consideration through the design of the project, as I mentioned in relation to the consultation rounds. Design decisions have included consideration of the environmental constraints and opportunities along the route. Changes to the design have been made, where possible, to avoid or reduce significant environmental effects.

102. The means of mitigating impacts arising from the construction and operation of Crossrail have been developed as part of a mitigation hierarchy. That hierarchy basically operates in this way. Firstly, impacts have been avoided or reduced at source, wherever possible. This is done by designing the project so that impacts are avoided where they can be avoided, for example by proper design of track. The second stage in the hierarchy is that mitigation measures have been included in the project to reduce adverse impacts where it is not practicable to avoid or reduce the impact the source. An example of this includes the provision of noise barriers for sections of the operational railway. If you cannot design the track to eliminate noise or reduce it to sufficiently low level then it is necessary to put in barriers to attenuate the noise effects. The third stage in the hierarchy is for those adverse impacts that remain significant even after the application of the measures taken to reduce impact. They involve the taking of additional measures or, if not practicable, compensatory measures by some other means.

103. The Environmental Statement identifies the likely significant effects that will arise from the construction and operation of Crossrail and identifies the range of mitigation measures that could be used to reduce or eliminate the effects. The assessment of effects is based upon a number of assumptions about design and construction practices, which are set out. As the project is taken to detail design and actual construction is prepared there may be some changes to assumed working practices, design or even according to local circumstances.

104. The mechanisms that exist within the Act and supporting the Act to control changes to the project and provide reassurance that the nominated undertaker will not be able to change the design and working practices at will are as follows: the arrangements for approving detailed design and construction; the policy commitments and undertakings entered into outside of the Act; and existing legislation unless expressly or impliedly disapplied or modified by the Crossrail Act, for example section 61 of the Control of Pollution Act.

105. Further, the planning permission for non-scheduled works is restricted by clause 10 of the Bill to those works which have been the subject of environmental assessment.

106. The Secretary of State has given a statement of intent to carry out the project so its impact will be as assessed in the Environmental Statement. It is not intended that there should be a departure from the assumptions made in the Environmental Statement except in three cases: either where there has been a change in circumstances which was not likely at the time of writing the Environmental Statement; where the change would not have or would not be likely to have significant adverse environmental effects; or where the departure is the subject of a separate consent process in which case there will be due assessment if it is required as part of that consent process.

107. This approach ensures that where there is a legal requirement for environmental assessment procedures to be followed, works will not take place until the appropriate environmental assessment has been carried out, particularly in the context of any further consent process.

108. The Bill also contains control through planning powers because the Bill deems planning permission to be granted for works authorised subject to various conditions. Those conditions are set out in Schedule 7 of the Bill and I do not propose to take time going through them. They cover the sort of material which the Committee would expect to control various matters such as waste, dust, restoration of land and the like.

109. So far as highway works are concerned, there are a number of controls imposed by the Bill which relate to highway works and, again, could be the subject of further detail if required later.

110. So far as overhead lines are concerned, the Bill requires that the Secretary of State for Trade and Industry and the Secretary of State for Transport must act together jointly for the installation or keeping of any electric line above ground and the relevant local planning authority is consulted.

111. There are also important controls outside the Bill. The Crossrail scheme includes a suite of documents referred to collectively, as I mentioned, as the environmental minimum requirements, which are being developed in consultation with local authorities and other stakeholders. The nominated undertaker will be bound to comply with the controls set out in the EMR. They comprise a number of matters including, as I have already mentioned, the Construction Code.

112. Chairman, in accordance with paragraph 2.5 of Information Paper D2 on the control of environmental impacts, on behalf of the Secretary of State I now give an undertaking to Parliament in these terms: insofar as the environmental minimum

---

**Promoter's Opening Address**


---

requirements are not directly enforceable against any person appointed as a nominated undertaker or to whom the powers of the Bill are devolved under clause 53 of the Bill, he will take such steps as he considers are reasonable and necessary to secure compliance with those requirements.

113. That undertaking is given on the basis that it may require amendment in due course to reflect any changes to the Bill provisions which may subsequently be made.

114. So far as undertakings generally are concerned, drawing on practice in hybrid Bills in the past, during the passage of the Bill, the Secretary of State will enter into a range of undertakings and assurances, as well as putting on the record certain statements of intent concerning the project. These undertakings, assurances and statements of intent will be recorded in an official register held by the Department.

115. Undertakings and assurances given to Parliament will be made legally binding upon any nominated undertaker. A register of all undertakings will be compiled and produced before Third Reading in the House of Lords. Undertakings will range from those which are generic to the whole project to the site specific.

116. This is the usual practice for hybrid Bills and experience shows that it has worked well. Trying to deal with all of the matters that can be made the subject of undertaking by Bill amendments, as you can imagine, is not practical and would bog the Bill down way beyond any acceptable period of time. We hope the continuation of that practice will commend itself to the Committee.

117. So far as working hours are concerned, which is a matter of some importance, the Construction Code for Crossrail describes the working hours which are currently under review with local authorities. The normal or core working hours currently proposed, which are under discussion, are to be from eight in the morning to six in the evening from Monday to Friday and eight in the morning to one o'clock in the afternoon on Saturday with a one hour start-up and shut-down period either side of the core hours. Non-disruptive work is to be carried out on Saturday afternoons or between 8am and 5pm on Sundays. It is proposed that there would be limited activities allowed during the start-up and shut-down periods and certain activities explained in the Code are required to be completed outside these periods for the obvious safety or operational reasons.

118. These works outside of the core working hours are essential to the project for a number of reasons, including the need to limit settlement and the risk of damage to adjacent infrastructure, from safety, the need to limit impact on the environment and to reduce, simply put, delay in the construction programme in the delivery of the railway.

119. Construction traffic is another issue and I cannot possibly do more than mention the issues at present. Inevitably construction of the railway will have an effect upon existing roads, car parks and rights of way. It is unavoidable that construction generates traffic movements associated with both the delivery of materials and equipment and the removal of excavated material and surplus material which requires a number of car parks in the vicinity of stations to be used as work sites. Again, that is simply unavoidable.

120. Any nominated undertaker or any contractors will carry out the works in such a way that seeks to minimise undue inconvenience to the public arising from increases in traffic flows.

121. The Bill contains requirements for qualifying local authorities to approve construction arrangements and matters such as the routing of lorries.

122. The provisions in the Bill will be reinforced by the Construction Code which will require the nominated undertaker to prepare traffic management plans in consultation with the local highways authority and traffic authorities.

123. I mentioned earlier, sir, that as part of the consultation process a Highways and Traffic Sub-Group of the Planning Forum had been set up. This reports both to the Planning Forum and the High Level Forum and is a forum to discuss common highways and traffic issues with all the local highway authorities along the route and with Transport for London. It is hoped that the major issues will be dealt with through that process.

124. Finally, I wish to touch briefly on some of the issues which are likely to arise before the Committee.

125. The petitions which have been lodged with Parliament are generally supportive of the principle of the Bill but they seek either amendments, additional provisions or some form of assurance or undertaking. We are seeking to meet such issues as appear to be both reasonable in their nature and reasonable in their implications.

126. With the assistance of CLRL, the Department has been working hard to resolve many of the issues raised in the petitions, particularly the issue of environmental controls which I outlined in the last section of my submissions. There have been detailed discussions with local authorities. Those authorities have discussed the principal controls through the various fora and elsewhere. The first draft of the Construction Code, which is one of the principal means of control, was issued to local authorities in December 2004. The majority of petition issues are, perhaps unsurprisingly, concerned with the environmental impacts and the consequences of both the construction and operation of the railway.

---

Promoter's Opening Address

---

127. Many petitioners also raise issues of compensation, which I will deal with very shortly to say simply this: on compensation issues, the Department takes the view that the National Compensation Code for the acquisition of land, which applies generally to acquisition of interests throughout the jurisdiction, should apply equally to Crossrail. It would be neither appropriate nor fair to apply a different system of compensation which is not applicable to other and similar projects.

128. In a scheme of such scale and importance as this it is not feasible to meet the expectations or indeed, in some cases, the demands of all petitioners either in terms of reducing or eliminating the impacts or in terms of extending the infrastructure and facilities planned to be provided.

129. Undoubtedly, given that the railway is being driven through the centre of London and through other areas of population, there are bound to be adverse effects but, for reasons I have already mentioned and through the mechanisms touched upon, it is hoped to keep those to a minimum.

130. Crossrail is a huge project; it will generate enormous benefits to the UK but the cost of constructing it is also large. Funding the project represents a major challenge. At Second Reading the Secretary of State was explicit in reminding the Committee that adding hugely to the cost of the project would ensure that it would never be built. Petitioners may argue for changes that taken by themselves appear small relative to the project as a whole, but we do urge the Committee when considering the requests of petitioners to bear in mind the cumulative impact of changes could be significant. I am sure the Committee will not need reminding that an apparently modest cost increase in comparison to the total cost of Crossrail would nonetheless be a large sum in its own right pre-empting resources that may be needed elsewhere in the economy.

131. The Department and TfL are working with CLRL to manage costs tightly and ensure good quality design development. In other words, we are looking to keep costs under tight control and, wherever we can, to drive them down, whilst preserving the benefits of Crossrail so that the costs can be kept to affordable and acceptable limits.

132. I hope you do not mind me saying that we do ask the Committee when approaching requests for changes by petitioners to take a balanced and proportionate approach bearing those matters in mind. Crossrail will deliver considerable public benefits but cannot, we would respectfully suggest, reasonably be expected to deliver what each petitioner would like. Simply because one addition may be argued to be small as a percentage of the whole, it can mount up to a sizeable sum when comparing this with whatever else it might be spent on.

133. Environmental impact assessment issues have been raised and you have already helped with that in your opening address as to how you see that being dealt with.

134. Can I simply say this about the issues that are raised: in a complex and evolving project such as Crossrail, it is not unusual to find the Environmental Statement being supplemented as the consent process advances and in addition to the main ES there have been a number of additional documents which I mentioned earlier, the two supplementary Environmental Statements and the additional provisions which are shortly to be published.

135. There has been an extended consultation procedure provided for the Environmental Statement documents to date and a further period will be provided. It is necessary to bear in mind, of course, when considering complaints about environmental assessment that one takes a broad approach and that the purpose of environmental assessment is not to produce a perfect document necessarily but to produce a sensible analysis of likely effects upon which those interested can comment. The process of environmental assessment is not a one-sided process that produces a long document, such as an Environmental Statement, it is the process of producing that document and then being the sponsors to that document by others. It is the totality of the process: the document, the Environmental Statement and the views of the public and stakeholders who are consulted, which forms the Environmental Impact Assessment.

136. It is proposed at the end of the process in this House that a statement of reasons should be given to meet the requirements of the law by the Minister at Third Reading which can then be taken into account by Parliament when giving the Bill its Third Reading.

137. I do not propose to say anything much about the legal requirements of environmental assessment but we simply consider that the requirements of the European Directive on environmental assessment as amended will be met by the process of this Bill through both Houses. It is inevitable that some will not like the conclusions reached in the Environmental Statement; it is inevitable that some will wish to challenge the approach to the analysis that is taken or the judgments that are expressed. Such disagreements are entirely usual, not only in projects of this size but in much smaller projects. The adequacy of an Environmental Statement is a broad question for the decision-maker, in this case, of course, Parliament. It is well-established the mere fact that there is a difference of view or a difference of approach as to how one should judge a specific issue does not render an environmental assessment invalid. Indeed, part of the reason for a consultation process being part of an environmental impact assessment is to allow, precisely, disagreements and different views to be expressed because, at the end of the day, the environmental impact assessment is

---

**Promoter's Opening Address**


---

there as a tool for the decision-maker; it is to inform transparent decision-making, not to provide as one eminent member of the Court of Appeal remarked fairly recently, "an obstacle course to decision-making". It is there to help not to hinder.

138. Can I just remind the Committee, also, that equality impact assessments and health impact assessments have been carried out. They have been published electronically at the end of last month and will be available shortly this month in paper form. So far as Human Rights are concerned, the Secretary of State has already confirmed, as he is required to do, in respect of the Bill, that in his view the provisions of the Bill are compatible.

139. A number of Petitions raise issues of settlement, which the Committee might well understand given the nature of the tunnelling process. A number of major tunnelling projects have been undertaken in London in recent years, including the London Water Ring Main, the Heathrow Express, the Jubilee Line Extension, of course, extensions to the DLR, the Channel Tunnel Rail Link, and the Heathrow Express and Piccadilly Line extensions to Heathrow Terminal Five. There is, therefore, extensive experience and extensive recent experience of how ground behaves when tunnels are constructed, and how steps can be taken to minimise settlement affecting buildings above. There has been a three-stage assessment process used in Crossrail to identify in a conservative fashion the buildings that are likely to be at risk of damage from the construction of the scheme. This assessment process establishes whether there is a requirement for protective works to mitigate against the risk of damage arising, and if such works are required the assessment process assists in the design and implementation of such works.

140. The primary form of mitigation is simply good tunnelling practice, which avoids the need for such protective works. The mitigation measures, however, which are proposed are tried and tested. They have proven effective in mitigating potential settlement effects on other major projects of a similar scale, and in respect of similar examples of complexity of tunnelling and excavation. Subject to certain provisos, the Secretary of State will require the nominated undertaker to reimburse property owners for the reasonable cost they incur in remedying material physical damage arising from ground settlement caused by the authorised works. A mechanism for making such a claim has been identified, which includes the provision of structural surveys of buildings at risk of damage to be undertaken before this and after tunnelling has been undertaken.

141. So far as noise, which is another frequent issue raised by Petitioners, is concerned, this, like settlement, is the subject of detailed discussion in information papers. It is a requirement that any nominated undertaker or any contractors will obtain prior consent for the work on the

construction sites from the relevant local authority under Section 61 of the Control of Pollution Act. A Section 61 Consent offers advantages to contractors and to local authorities in managing the noise and vibration impacts from construction worksites. It is the standard method used on an everyday basis for controlling construction sites. It ensures that the standards of performance with respect to the control of construction noise and of vibration can be agreed well in advance with the local authority, subject to a right of appeal, together with the effective management of the works programmes.

142. However, if after applying on-site mitigation significant noise impacts are still predicted, further noise mitigation will be offered to eligible residential properties either in the form of noise insulation or, in extreme cases of prolonged noise or extremely loud noise, temporary re-housing. Some schools and other community facilities are predicted to experience construction noise impacts, and it is recognised this may potentially affect the use of such facilities. Noise-sensitive facilities, clearly, are bound to give rise to greater concerns in many instances. When further details of the construction methods, timing and duration of the works are available (namely, once the scheme has been subject to detailed design) any nominated undertaker will have to take the necessary steps to ensure that residual impacts on such noise-sensitive properties are minimised.

143. In certain circumstances, the occupiers of affected buildings, as I have mentioned, will become eligible for temporary re-housing, either because of extremely high noise levels when other forms of mitigation are insufficient or extremely lengthy periods of exposure to noise. The conclusion set out in the Environmental Statement is that with the adoption of the methods there set out no significant impact is likely to arise from ground-borne noises associated with construction activities, and with respect to vibration a similar conclusion is reached.

144. On the issue of freight, which again will come before the Committee in due course, although the Crossrail Bill includes numerous freight facilities within Bill limits, as a general principle the Promoter does not seek to extinguish any freight terminals unless unavoidable, and is working with the freight operating companies to minimise temporary and permanent effects of construction. So far as railway capacity and timetabling issues, on freight and passenger services, are concerned, in the context of services on the existing network there has been a number of Petitions. Train timetabling and modelling is complex and there is a specially formed timetabling working group which is dealing with the issues. It has an industry-wide membership and an independent chairman, and it aims to resolve concerns on timetabling and to resolve the basis of any difference in views before the Petitioners are heard by this Committee.

---

 Promoter's Opening Address
 

---

145. On the issue of the Olympics, Crossrail works are expected to overlap the works for the provision of the 2012 Olympics and, contrary to views which have appeared in the press from time to time, it has not been intended, and still is not intended, that Crossrail will serve the 2012 Olympics. Indeed, it is not expected to be completed until sometime after the Olympics conclude in 2012. The works will take place and be so arranged that they will not interfere with the works needed for the Olympics or interfere during the period of the Olympics themselves, as the Secretary of State indicated to the House during the debate last week on 12 January. There have been negotiations which continue with, initially, the LDA and, subsequently, there will be with the ODA, which will ensure a co-ordinated approach so that Crossrail, as the Secretary of State said, will not interfere with the smooth running of the Olympic Games.

146. Sir, as I indicated at the outset, there are a number of short, procedural matters which might be usefully dealt with now. Those conclude my general statements with regard to the project. If the Committee wishes to do so, the matters can be dealt with first thing in the morning, but I am quite happy to deal with them now.

147. **Chairman:** I am quite keen, Mr Elvin, that we conclude at 4.30 today. We can resume tomorrow with this detail, unless you feel that the time remaining to 4.30 is sufficient.

148. **Mr Elvin:** I think we may be able to deal with most of it. Can I just outline the process that has been followed in dealing with Petitions to-date, and then what we propose to do in Committee? Clearly, we will be guided by the Committee as to what will most assist the Committee in its deliberations. So far as generic issues are concerned, you have already got the information papers which set out the general approach to certain issues. In the case of individual Petitions, Petition responses are being provided in writing, it is hoped, at least four weeks before the Petitioner is due to be heard. We have extended that period recently to try and deal with some concerns that were raised by Petitioners. You will get, I understand, through your Clerk, packs of the Petition responses and the necessary material that accompanies them at a time convenient to yourselves. There will be a pack either for each group of Petitioners being heard or for individual Petitioners where appropriate. If there is anything we can do in order to assist that process, or make it easier for the Committee, then no doubt the Committee will let us know.

149. So far as the Bill is concerned, can I just note that the additional provisions are to be submitted on 18 January, together with the Environmental Statement, which will be subject to consultation for a period rather longer than the Bill petitioning period. As the Secretary of State informed the House during Second Reading, there will be a further set of additional provisions in due course, and that is

partly to deal with an issue between ourselves and the City of London Corporation with regard to the crossover at Farringdon, and that is an issue which it is hoped can be resolved and a whole series of issues put to one side and agreed. Sir, we hope that by putting those issues to one side and negotiating and bringing forward further additional provisions we can deal with a whole series of petition issues without having to trouble the Committee. I also ask the Committee to note that other minor amendments to the Bill have been submitted to you already by the Secretary of State.

150. Sir, you are embarking on the first of a series of site visits this week. We would like to suggest at some stage that you also have a general site visit devised by our noise consultant to allow you to experience the sorts of noise and noise attenuation that you would expect on construction sites today. One of the issues that you will come across time and time again in the Petitions is the question of noise levels and what is acceptable and what is not, and what can be achieved and what cannot. We propose in due course to arrange for the Committee to have a site visit so you can experience the sort of noise levels from construction sites at a time convenient to yourselves. I hope that is acceptable.

151. Sir, in addition, we would also like to suggest to the Committee that in relation to two of the technical issues, namely noise and settlement, which I only dipped a very small toe in the water of this afternoon, we felt it might be useful to the Committee to have a general presentation from the noise expert and the settlement expert of about 25 to 30 minutes each to give the Committee an idea about the issues arising and the approach taken to both noise issues and to settlement issues. We thought that could be timetabled at a time acceptable to the Committee, but it might help give the Committee a general feel for the issues before you get into the nitty-gritty of detailed argument about specific noise levels, and the like. In that connection, I need to ask the Committee whether, if that is acceptable, the Committee would be willing to allow the noise expert, as part of his presentation to the Committee, to bring along, effectively, a tape recorder of some description so he can play certain noise levels to the Committee to illustrate his points. I understand this has not been done before, except in response to particular issues, but this would be more of a general presentation first, but it would save more by playing a few seconds of tape than, probably, five minutes of description would illustrate. So we are in the hands of the Committee as to whether that would be acceptable.

152. **Chairman:** I think, as long as you promise that it will be as slight as that, we will go with it. My colleagues and I will discuss all these considerations and let you know through the Clerk.

153. **Mr Elvin:** As a final suggestion, sir, and I am nearly finished, it might be a major benefit to speeding up the process of hearing Petitions and

---

**Promoter's Opening Address**

---

resolving issues if the Committee were to agree to, effectively, the production of summary statements by each side, say a day or two in advance of the Petition hearings, so that each witness presents the Committee with a summary paper setting out the bullet points of their main contentions. Traditionally, hybrid Bills have been presented so that you just listen to the witness and take a note or look at the transcript later, but it might help deal with the matter more expeditiously if you have written notes of evidence in advance.

154. **Chairman:** I think that is a very, very good suggestion, and we will suggest it to all Petitioners. However, as you will appreciate, there may be some Petitioners who will find it quite difficult, perhaps, to do that, and in those circumstances we would give some leeway.

155. **Mr Elvin:** Sir, we were thinking principally of the major cases of those Petitioners who were represented and presenting substantial cases. Clearly, in the case of individuals and those not represented one has to take a much more pragmatic approach. Clearly, it could not apply to Petitioners who were about to appear as well, but if the Committee would follow that line that is likely to result in much speedier resolution of issues.

156. **Chairman:** I think all of us will welcome suggestions. As I say, the Clerk will liaise and let you know.

157. **Mr Elvin:** The other thing I am reminded to say is not only are we putting out our written responses but we do not propose in all cases necessarily to call witnesses. We will take a view at the time and, of course, subject to any views that the Committee might have, in some cases we may simply make submissions or put in a written paper. Again, we will look to deal with the matter in the most efficient way to deal with the Committee's understanding of the issues.

158. If the Committee will bear with me for 30 seconds more, finally we would also ask, at the end of each Petition or group of Petitions, to make a short closing statement at that time rather than save everything up for, maybe, five or six months and give it to the Committee in one blast. It would seem to us more helpful to the Committee to have submissions on each individual set of Petitions as they occur and then, simply, at the end of the hearing of the Petitions to have an overview set of closing submissions from us.

159. **Chairman:** I think, again, that is a welcome suggestion, but brevity is probably the order of the day—

160. **Mr Elvin:** I failed to be brief this afternoon, but I hope the Committee understands it is not a small project. We will seek to be very brief in terms of our presentation of closing submissions on each set of Petitions.

161. **Chairman:** Thank you very much indeed, Mr Elvin, for your concise contribution. Can I just call an end to today's proceedings and tell everyone that tomorrow we will resume in this room at 10.00 am.

---

**Wednesday 18 January 2006**

Present:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone  
Kelvin Hopkins

Mrs Siân C James  
Mr Ian Liddell-Granger  
Mrs Linda Riordan  
Sir Peter Soulsby

---

Ordered: that Counsel and Parties be called in.

The Petition of Corporation of London with British Land plc

*Bircham Dyson Bell appeared as Agent*

162. **Chairman:** Mr Elvin, I understand that you want 60 seconds for clarification.

163. **Mr Elvin:** Sir, that is correct. Sir, I mentioned yesterday, when dealing with noise issues, residential noise mitigation. It was thought, for the assistance of those who may be reading the transcript at a later stage and coming before the Committee later, that I might unpack very briefly something that I said about residential noise mitigation in order to clarify so that there is no misunderstanding. This came at paragraph 142 of the transcript dealing with the extent of mitigation provided for noise at residential premises. This, as you will understand, is a concern which applies to a large proportion of the route. What I would say is this: where, in spite of mitigation measures being provided and the requirements of any consents under section 61 of the Control of Pollution Act, noise levels are expected to be significant to the extent that they exceed the trigger levels set out in the Environmental Statement, and, sir, the references to that are volume 6A of the main statement, paragraphs 3.1.11 to 12, that, as part of the test for eligibility, noise insulation or temporary rehousing will be provided. That was packed together rather too densely yesterday and that, I hope, clarifies what eligibility means a little further.

164. Can I just note for the record that we have now provided for the Committee legible copies of the employment generation graphs which were shown on the slides yesterday. Thank you, sir.

165. **Chairman:** We are grateful for that, Mr Elvin. Can I just clarify for your purposes that the requests that you made at the end of your summary yesterday, they are all being dealt with and we will make some statement on that some time later today, perhaps at the start of the afternoon session.

166. In relation to the matter of an expert coming to the Committee about the hearing element of it and a possible session that we could have, we are also going to take advice on that and give you a statement or a decision later today.

167. **Mr Elvin:** Yes, it was noise and settlement issues, yes. Thank you very much, sir.

168. **Chairman:** Can I now call the representative for British Land Company and George Laurence QC. Could you outline your team.

169. **Mr Laurence:** Thank you very much, sir. In accordance with the direction that you gave yesterday, I begin by introducing my junior, Mr Neil Cameron, who sits on my right.

170. Sir, could I just begin by saying this: that nobody denies that Crossrail is a great project, although some have doubted whether it will be made to happen. The Corporation of London and British Land plc are not amongst the doubters. Mr Neil Cameron and I appear before you, instructed by Mr Paul Double, the City Remembrancer for the Corporation, and Mr Ian McCulloch of Bircham Dyson Bell for British Land, to remind you that our clients have been in the past, and remain, Crossrail's most steadfast supporters. They want Crossrail to happen and they believe that it will. At first blush, it may, therefore, be thought surprising that the Corporation and British Land appear before you today as Petitioners. It is in fact not surprising at all and, if you will permit me in a moment, I will spend a little while explaining in my own words why that is so, but first, sir, may I just deal with three matters of housekeeping.

171. The first is this: that you will have observed in front of you, members of the Committee will have observed in front of them, a splendid model of the relevant part of Liverpool Street Station. It is a model which we hope will be able to be fitted into committee room 5 in due course and will be available for you to look at as and when you find it useful to do so for the elucidation of points which the witnesses will be making.

172. Secondly, sir, on the table are some documents, a small bundle of documents, including a street plan, to which we will be wanting to make reference in the course of our opening pleas, so perhaps you can just have that little bundle to hand when you need it.

173. Thirdly, I will ask Mr Walker please now to hand out a copy of the outline of the opening which I and Mr Cameron want to make to you this morning.

---

**The Petition of Corporation of London with British Land plc**

---

That is not at all with a view to your reading it as we go along; it is just that you may find it a useful document to have separate from the transcript to refer to at some future time.

174. As I indicated a moment ago at the end of what is paragraph one of the document which has just been handed to you, I would like to spend a few moments explaining in my own words why it is not surprising that the Corporation and British Land appear before you today as Petitioners. There are really two main reasons.

175. The first, although technical, is obviously important. The Crossrail Bill is a kind of private bill, although it is hybrid. It is a kind of private bill because those who want to see it changed may lodge Petitions and, if the Promoter fails to meet their concerns to their satisfaction, appear before the Select Committee, that is your Committee, sir, a committee which has been chosen to hear and determine those Petitions.

176. The second reason is this: that the Corporation and British Land have taken advantage of their right to petition not merely because they have some serious concerns of their own, personal concerns, so to speak, which they want your Committee to hear about, but there is also one particular concern which the Corporation brings before you in its capacity as custodian of the interests of all who work in the City of London and its immediate environs. The concern is this: that at Liverpool Street Station, the Promoter is proposing to provide an inadequate ticket hall. Passengers alighting from Crossrail who choose to exit at the eastern ends of the Crossrail platforms underground will be disgorged into, and clash with, those entering and leaving the escalators which serve the Central Line underground in that part of Liverpool Street Station. They will clash with those entering and leaving the Metropolitan and Circle Line, the so-called 'sub-surface lines', as I think the experts call them. They will clash with National Rail passengers entering the ticket gates as Crossrail passengers and exiting London Underground Limited passengers leave the same gates. The gates themselves will remain seriously constrained. British Land share that concern for the same reasons, although in its case of course its concern is sensibly commercial; as a substantial owner of property in the immediate vicinity Liverpool Street Station and elsewhere, it obviously wants the City of London to remain an attractive place in which to work, and to become more so.

177. The 1991 Crossrail proposals included provision of a new ticket hall at Liverpool Street Station with exits to the street. Similar provision was included in the scheme that CLRL consulted on in September 2004. The Bill does not include such provision. The explanation given by the Promoter for not including an eastern ticket hall at Liverpool Street Station is to be found in the Environmental Statement. It is said that forecasts of passenger demand do not justify a separate ticket hall and that

the London Underground ticket halls are sufficient to accommodate predicted passenger numbers. As a result, it is necessary for the Petitioners to examine that explanation and to consider those forecasts. That would involve consideration, I am afraid to have to tell you, sir, of passenger demand numbers, a subject which I find, and continue to find, quite extraordinarily complex, and one reason why I have written down everything that I have and given it to you is in the hope that I might have rendered partly intelligible what is a difficult subject. We do not, however, rely solely on an analysis of passenger numbers. There are other broader considerations which also indicate the necessity of providing better access to Crossrail at Liverpool Street Station. I will ask Mr Cameron, with your leave, sir, a little later to deal with those broader aspects as part of this opening before I finish with some concluding remarks. However, we must turn to the numbers first and then return to those broader issues later.

178. Sir, for what is about to follow, you may find your little bundle useful to have. The street plan is really there to assist you so that at any time you find you just need to orientate yourself, you have on A4 a separate street plan to which you can make reference, and I will just get mine out in case anything arises on this.<sup>1</sup>

179. Under the proposals put forward in the Environmental Statement by the Promoter, Crossrail passengers will emerge into the ticket hall along a tunnel at the point I have marked 'M' on the sketch plan, which you have as your first A3 document, at the bottom of the plan.<sup>2</sup> You will see the northern alignment and you will see the Crossrail connection with the point M identified on that plan. The tunnel leads to escalators which lead to another tunnel and then to further escalators down to the level of the east-west Crossrail platforms. I will hand round another sketch which shows that. It is figures A and B, prepared by Mssrs Ove Arup's Mr Tim Chapman who will be giving evidence to you in due course, which show you that if you pick up point M at the point I identified on the plan and go in a broadly westerly direction along what we have called 'tunnel 2' to point J, you then go down to what are described as 'shallower escalators' under Liverpool Street to the end of the escalator, points H or E2. You then go along tunnel 1 under Blomfield Street to yet another escalator, a second escalator, which begins at point G and finishes at point F and it is at point F that you reach the level, deep underground, of the Crossrail platforms themselves. Those details have been provided for you as well on figure B on the next page in order that you can see exactly where the proposed tunnels and escalators under the Crossrail scheme are aligned in relation to the streetscape above. So, for example, you see that what we call

<sup>1</sup> Committee Ref: A4, Ordnance Survey map of Broadgate (Liverpool Street/ Moorgate area).

<sup>2</sup> Committee Ref: A2, Exhibit A—British Land plc Liverpool Street Station Plans.

---

**The Petition of Corporation of London with British Land plc**

---

‘tunnel 1’ under Blomfield Street is indeed more or less exactly under the alignment of Blomfield Street which is also separately annotated on figure B.

180. Turning to paragraph 6, the Crossrail tunnels deep underground run more or less east-west underneath two existing stations, Liverpool Street Station and Moorgate. The Crossrail passenger who arrives deep underground between those stations at a place I shall call the ‘Livergate platforms’, or ‘Livergate’ for short, has a choice. He or she can either go out of the western end of the Livergate platforms and emerge at Moorgate Station or they can go east, in which case they have only one option, that is, to use the two escalators and two tunnels I have just mentioned and emerge into the existing London Underground ticket hall at point F. That ticket hall is called ‘ticket hall B’. There are two other ticket halls, A and C, but these are not of immediate concern. That is because the Crossrail passengers who leave the Livergate platforms in an easterly direction must first go via the two escalators and two tunnels to point M and from there into ticket hall B. Sir, if you look at the first of the diagrams that are put before you, the one labelled ‘Exhibit A Liverpool Street Station’ at the bottom, you can see from that in the top left-hand corner a rather small, current isometric view which you can make sense of if you compare it on the left with the larger layout mainline station, concourse layout, on the right and that will also enable you to identify ticket hall B, not so labelled, but you see the words ‘ticket hall’ under the ‘49’ and it will also enable you to see that what is ticket hall A is to the south of that where you see the little letter ‘d’ on the current isometric view. Just to the left of that ‘d’, you will see the words ‘ticket hall’ identifying the ticket hall to the south and the third of the three ticket halls shown on the current isometric view, ticket hall C is the one a bit further to the north that serves purely the Central Line. Unfortunately we have not got the C, the B and the A on the isometric view, but I hope it is tolerably clear. You go from south to north, A at the south, B in the middle and C at the top.

181. Now, sir, I return to paragraph 7. Once these Crossrail passengers arrive at ticket hall B, they have various choices.

182. **Mr Binley:** Mr Laurence, could I just clarify this please because I am slightly confused. I am looking at the current isometric view on the front and I see two ticket halls and I am not quite sure I understand the relevance of those two. I understand the one you are talking about being Liverpool Street, but what is the second?

183. **Mr Laurence:** We are talking about three ticket halls, A, B and C, at Liverpool Street Station.

184. **Mr Binley:** Thank you.

185. **Mr Laurence:** I was also earlier referring to Moorgate which is a separate entrance/exit altogether further to the west.

186. **Mr Binley:** That is what confused me because I thought one of these might be Moorgate, but it is not.

187. **Mr Laurence:** In order to assist, because it is very helpful if members of the Committee indicate when they are confused, I have called the platforms deep underground by a name nobody else has coined and I find it useful to identify that place by a name, Livergate. I describe it as that because at those platforms you have the choice of either going out at the westerly end of the platforms up to Moorgate Station or out at the eastern end up to Liverpool Street Station and it helps you to keep in mind that it is the level at which you are discussing the subject matter that determines the appropriate name to give to the place you are talking about.

188. Sir, on to paragraph 7. Once these Crossrail passengers arrive at ticket hall B, they have various choices and for that I would suggest that the current isometric view is not helpful and it would be helpful to have the lower part of the plan put on to the screen. They can turn a sharp left at point M and go down to the Central Line at point P, or they can turn right and go down to the Circle and Metropolitan Lines, the so-called ‘sub-surface lines’, at point Q, R and S, or they can go straight on and exit at one of the 16 gates shown, although not numbered one to 16 on the sketch, and hence, after walking up the stairs at E, on to the mainline concourse and from there on to National Rail or up further escalators, ramped walkways and steps to the street. You need, in order to understand the journey that the type of passenger I have just described would be taking, to go from the lower of the two drawings to the upper one to see how you emerge having gone through the gates, how you go up at E, up the steps on to the mainline concourse, and you then have various choices, one of which is to go on to National Rail, another of which is actually to go out and emerge at street.

189. Immediately before Crossrail opens, and this is where it is going to start getting a bit more technical, let us assume in 2016, as the company CLRL, the company assisting the Promoter with the Bill, predict, that there will be 11,000 passengers who will want to get out of those 16 gates in the morning peak, 4,100 of them emerging from the Central Line escalators at point P and the other 6,900 emerging into ticket hall B from the sub-surface lines via Q, R and S. Picking up the lower of the two drawings again, the Central Line passengers emerge into the ticket hall at point B in a southerly direction, the sub-surface line passengers, that is the Met Line or the Circle Line or the Hammersmith & City Line, they emerge into the ticket hall travelling in a northern direction through exits Q, R or S. Therefore, before Crossrail opens, the prediction is that in the morning peak hours, 7 to 10am, there will be 11,000 such passengers.

---

The Petition of Corporation of London with British Land plc

---

190. Immediately after Crossrail opens, some of these London Underground passengers will obviously have transferred to Crossrail, that is to say, they will arrive at Liverpool Street via Crossrail, not London Underground, but the total number of exiting passengers CLRL predict will want to use those 16 gates in the morning peak will be 13,500, that is to say, 2,500 more than the 11,000 predicted to be wishing to use the gates to exit before Crossrail opens. We concentrate on the morning peak because recent pedestrian count surveys show that ticket hall B has higher overall numbers in the morning peak.

191. The total number of people in and out, whom CLRL predict will wish to use the gates in the morning peak, will not change materially before and after opening in 2016. The relevant numbers are: before 2016, ie, without Crossrail on my assumption, 33,100; after Crossrail opens, on CLRL's predictions, 33,300. The predicted increase of 2,500 in the total numbers of those wanting to get out, which I just mentioned above, will be compensated for by a 2,300 decrease in the numbers of those wanting to get in. No doubt some National Rail passengers will have transferred to Crossrail. To meet London Underground's April 2005 Station Planning Standard, 15 gates will be needed to accommodate the predicted 33,100 morning peak passengers before Crossrail opens. After Crossrail opens, 16 gates will be needed. That is because there will, on CLRL's figures, be an extra 2,500 passengers who need to exit the gates after Crossrail opens and the formula which prescribes what the number of gates must be is slightly biased, as you would expect, in favour of those exiting as opposed to those entering.

192. The Standard, which I just referred to a moment ago, states in terms that it is London Underground's response to requirements laid down by HMRI, Her Majesty's Railway Inspectorate, and *Railway Safety Principles and Guidance*. Paragraph 2.4 requires the Standard to be used "to ensure that station proposals meet the requirements of HMRI *Railway Safety Principles and Guidance*, Part 2, section B, Guidance on Stations". The document also states under the heading "Safety Considerations" at 5.2.1 that, "Failure to apply the criteria set down in this Standard is likely to result in poorly planned and congested stations. This is likely to cause passenger distress and the need for temporary station closures". The declared purpose of the Standard is to "define the space requirements for public areas . . . in stations" and it is stated to be "applicable for all works to stations that affect passenger movement or that have an impact on the overall station size". Paragraph 3.1.1 requires space for normal operations in stations to be planned to minimise congestion and to be resilient to surges in demand and train service disruption.

193. It should be noted that the predecessor of this document was a 1999 publication called *London Underground Limited Station Planning Standards and Guidelines*. Sir, I am not sure whether the

reference to guidelines meant that it was not really mandatory. It is clear that the differently titled April 2005 Standard from which I have been quoting paragraph 10 is mandatory. The document tells us that, that is the 2005 Standard. A Standard is defined as a mandatory document which sets out the minimum requirements expressed as outputs or a mandatory document which defines an interaction or a commonality which meets a defined LUL requirement.

194. Now, sir, on CLRL's figures, there is superficially no problem caused by Crossrail at ticket hall B. The total number of entering/exiting passengers using the gates stays about constant. That, however, raises a vitally important point, in our submission, which is this: that before Crossrail opens, on Crossrail's own figures, there should be 15 gates at ticket hall B to cope with the 33,100 passengers out and in, then wanting to use them. As soon as Crossrail opens, the total number of passengers needing to use the gates will be, as I have already mentioned, about the same on CLRL's figures, that is to say, 33,300, although the actual gateline requirement will increase to 16 for the reasons I mentioned. The number of gates actually available is 16. In other words, passengers in the peak period will have just enough gates to enter and exit UTH B, underground ticket hall B.

195. You cannot play fast and loose, it goes without saying, with LUL's recently adopted Station Planning Standard. Mr Joe Weiss for the Corporation and Mr Tim Spencer of SDG, that is Steer Davies Glead, for British Land will be telling you in detail why not. They will also be telling you that the actual need will be well in excess of 20 gates. If you accept their evidence, you have sufficient reason to require a solution other than the Promoter's to the problem of getting to and from the Crossrail platforms. Since Parliament has given its assent to the principle of the Bill, a principle we fully support, it makes no sense whatever to have a Crossrail design which does not from the beginning address and solve the gateline capacity problem. The mandatory requirements of the Standard are seriously breached because the connection of the Crossrail tunnel to ticket hall B at point M involves work that, within the words of the Standard, we say very substantially, "affect passenger movement" within the meaning of paragraph 1.2 of the Standard and so entail the mandatory obligation to observe the relevant requirement of the Standard in relation to gate provision.

196. There is much more to this, however, than just the Gateline Standard. There is also the matter of sensitivity testing of the robustness of the demand forecast and capacity assessment. The station at Liverpool Street being planned by CLRL for that station is not being designed for 2016. It is meant to have a 60-year design life. The relevant guideline document, which is called *Guideline Document Station Demand Modelling*, states in a paragraph that I would like to read in a moment what is set out

---

The Petition of Corporation of London with British Land plc

---

on page 8 of my draft, but can I, however, begin with a reference to one other passage right at the beginning of that document under the heading “Introduction” where this appears:

197. “These guidelines define a standard approach to station demand modelling. Station modelling can support the following projects/processes”, and then there are a number of bullet points of which I would just like to read the first, if I may, sir: “station rebuilding—major rebuilding exercises needed to be assessed to ensure that the capacity of the rebuilt station will be sufficient both at projected demand levels for the appraisal year and at the upper limit demand levels that may be reached during the appraisal period”, and paragraph 5.7 of the document reads as follows:

198. “Sensitivity testing of scheme design. A number of uncertainties exist around forecast levels of demand, including:

199. “The accuracy of assumptions regarding which large-scale schemes (for example, new or extended lines) are implemented in any given future year scenario. Large schemes may well have a significant effect on the demand forecast for the station being considered: for example, at Victoria, Thameslink 2000, if it proceeds, would reduce demand by diverting passengers away from it.

200. “The accuracy of assumptions regarding employment and population growth. The uncertainty could be associated with the scale of growth, as well as the location of the growth.

201. “The accuracy of assumptions regarding the demand growth rate assumed in years subsequent to the Future Year.

202. “In order to validate that a design is adequate for expected future demand levels, the scheme design must be subject to sensitivity testing. In order to do this, it is necessary to forecast the maximum demand level that the station might have to handle”.

203. Then in a box, setting it all out with, I hope what you think is, clarity, sir, this follows:

204. “The scheme design(s) should be tested against the high case demand scenario for the future year. The future year (scheme design) will usually be 2076—60 years after the future year (appraisal). As explained above, 0.5% growth should be assumed for each year after 2016, which generates a compound growth of 35% after 60 years. Therefore, the total demand level that should be tested is: test demand level = high case demand scenario (2016) x 1.35.”

205. I will just read the first of the two paragraphs which follow:

206. “As explained above, a number of Railplan scenarios exist, with different assumptions about underlying demand levels and the major schemes that will be pursued. The highest case for the station should be identified and used to generate a high case scenario.”

207. **Mr Binley:** Mr Laurence, would you please clarify this again because I am concerned about the phrase “sensitivity testing”? Am I wrong in assuming that that is from a human point of view when you talk about sensitivity or not and, secondly, am I right in assuming that the trip from the Crossrail platform to the gates is something in the order of 200 metres up two escalators and does the sensitivity testing take that journey into account?

208. **Mr Laurence:** As to the latter, it is easy to answer. I certainly do not know, so we will check and find out. As to the former of the two questions, sir, you asked whether it has, as it were, a human element to it, this sensitivity testing. As I understand it, it is not to do with that at all, but it is a way of arriving at getting a feel for how large, how comprehensive, how commodious your new station needs to be not merely at the year when it is expected to come on stream, but over a period of 60 years ahead when it is still expected to do the job for which it is designed. You will be hearing a lot more about that in due course.

209. Sir, I will pick it up at paragraph 15. Thus the guidelines mean predicting what numbers of passengers will want to use those gates to exit and enter in the morning peak in 2016 and adding 35% to the predicted 2016 figure. A 35% increase in a gateline requirement of 16 gates adds the need for another four gates (total now needed 16 plus four equals 20) even if you assume that CLRL have got the Moorgate/Liverpool Street split right. That is something I have not yet mentioned and will come to. When I am talking about the Moorgate/Liverpool Street split, I am talking about the question of predicting how many of the Crossrail passengers alighting at Livergate will chose to go to Moorgate as opposed to going to Liverpool Street. If they have it wrong, the gateline requirement rises further. To provide 16 gates when you need 20, and more if the split is wrong, is folly.

210. For those alert Members of the Committee who have noticed that if you add 35% to 16 you do not obviously get four; you get a number more like five or approaching six, the reason as I understand it that you get as low a number as four—I am putting it purely in layman’s language—is that there is a complicated formula that has to be applied that ends up where you have 10 gates or more with you having to add two gates. The way I have explained it to myself is that in order to see what is the effect of 35% through 16 gates you have to begin by taking away two gates and that gives you 14. You increase 14 by 35% and add two. I will no doubt be told I have this

---

**The Petition of Corporation of London with British Land plc**

---

completely wrong but that produces an increased requirement for another four gates. At any rate, we are being properly conservative.

211. We say it is folly to provide 16 gates when you need 20. It is also potentially dangerous. Mr Weiss on behalf of the Corporation and Mr Spencer of SDG on behalf of British Land will tell you why. This critically important example shows that the Corporation and British Land come before you not merely to seek redress in respect of matters which are of particular concern to them, but also because they want to see the Bill improved for the benefit of all who care about the Crossrail project, including the Corporation, British Land, the Promoter, CLRL and the nominated undertaker in due course.

212. The matter does not of course stop there. Still using only CLRL's predicted figures for 2016 with Crossrail, the number of Crossrail passengers needing to exit through ticket hall B's gates, 3,600—not a number you have heard before—is part of a larger number, 5,300, leaving Crossrail in the morning peak who proceed along the two tunnels and two escalators to point M.

213. Point M is the point at which the second tunnel exits into the ticket hall. When you go round tomorrow, you will be shown that a great big hole will be made in a wall just here. That is precisely where you will be able to imagine these 5,300 Crossrail passengers coming through in the morning peak in 2016 if the promoter is allowed by your Committee to introduce its scheme.

214. From point M, 3,600 then go through the gates. The remaining 1,700 set off for the street in the direction of ticket hall A. These 1,700 extra Crossrail passengers of course contribute to the general overcrowding on the paid side of ticket hall B, especially near point P. That is where the Central Line escalators go up and down. Our concern is not only with that number; it is with the 3,600 Crossrail passengers alighting at Livergate who CLRL predict will use the gates at ticket hall B. Every passenger from Crossrail in excess of that number, 3,600, who elects to get to the street via ticket hall B rather than via Moorgate adds to the particular gateline problem that I have already identified.

215. The 5,300 Crossrail passengers who exit to the street at Liverpool Street Station in 2016 may be contrasted with the 9,200 Crossrail passengers who CLRL predict will arrive below ground but exit to the street via Moorgate. There is a reference there to a table which I would like to hand out now.<sup>3</sup> These tables will be referred to by Mr Spencer. They are documents that are simplified versions of station demand matrices, 10 car, Hybrid Bill Scheme, CLRL, December 2004. It does not take long for the mind to begin to boggle if you look at them for any great length of time. However, it is table 11 that I want you to look at on page five.

---

<sup>3</sup> Committee Ref: A3, Technical Annex to the proof of Evidence of Mr Tim Spencer.

216. The heading tells you that these are CLRL 2016 forecasts with Crossrail. There are four columns, A, B, C and D. Down the right hand side of the entire page we have put number that go from one to fifteen in order to aid elucidation of where is the particular number that I am referring the Committee to. The one that I want the Committee to look at is at line five in table 11, columns B and C. Those two columns tell you that what is predicted by CLRL is that at Liverpool Street there will be 5,300 Crossrail emerging passengers. At Moorgate there will be 9,200 alighting passengers. In other words, of that total of 14,500 in column D at line five, the prediction is that the split will be 5,300 to Crossrail, 9,200 to Moorgate.

217. If Crossrail are right that those 9,200 alighting passengers will choose to exit at Moorgate, fine, but what if they are wrong? What if instead, say, 4,000 of those 9,200 passengers who alight at Moorgate on CLRL's predictions choose to use UTH B's ticket gates instead? The answer is simple. You will need to add another two gates to the 16 you already need even on Crossrail's figures and without taking any account of the need to add 35% in order to ensure that the new station has the 60 year design life which the guidelines require. That is still only the half of it.

218. CLRL's figures, we respectfully submit, are themselves completely wrong by an order of magnitude. That is because the model on which they are based is a strategic model and it cannot be expected accurately to predict the use of individual stations—see the Environmental Statement, volume 8A at paragraph 2.37. Mr Spencer has written to CLRL about this. His letter dated 9 January 2006 reads as follows:

219. "We note with interest paragraph 2.37 of the Environmental Statement, volume 8A, appendices, transport assessment: methodology and principal findings: 'Although the Railplan model replicates the overall number of passengers travelling into and within London for 2001, a strategic model—these are the words I would stress—cannot be expected to predict the use of individual stations; the forecasts of station use are always thoroughly checked and, where necessary, adjusted. The forecasts also draw on any actual passenger counts that are available, using a statistical "goodness of fit" technique developed jointly by London Underground and Transport for London. Changes to the 2016 Baseline resulting from the introduction of Crossrail'

220. "We ask that Cross London Rail Links firstly confirm that CLRL has applied the post-model adjustment methodology as described in paragraph 2.37; secondly, if such adjustments have been made in relation to Liverpool Street Station, provide an itemised list of model adjustments for Liverpool Street Station and what passenger flow adjustments have been made and when exactly to reflect those model adjustments; and, thirdly, confirm that paragraph 2.37 is, in itself, complete or, if not, provide what appears to be the missing final text."

---

The Petition of Corporation of London with British Land plc

---

221. He is referring to the fact that, as you see, the last sentence I have quoted from the italicised section seems to say, “Changes to the 2016 Baseline resulting from the introduction of Crossrail” and then it just stops. Mr Spencer is asking whether that is a misprint or what it is. His letter goes on:

222. “We look forward to hearing from you on this matter. If you have any questions please do not hesitate to contact me.” Crossrail normally answer jolly quickly, in my experience. There has been no response from them to this particular letter. Not only that. The ES itself is very misleading, we again respectfully say, at paragraph 8.9.90 of volume two. It is there correctly stated that (i) “A substantial reduction in passengers entering and exiting at Liverpool Street is forecast which will relieve peak hour congestion.”

223. CLRL do indeed forecast that in 2016 without Crossrail 77,700 passengers will exit Liverpool Street Station in total. With Crossrail, the figure reduces to 73,300. The passage from the Environmental Statement just quoted however is immediately followed by a reference to the new station proposed at the western end of the Crossrail tunnels at Moorgate. The clear implication is that no such facility is required at the eastern Liverpool Street end. That is indeed made explicit at paragraph 8.9.130: “(i) Forecasts of passenger demand do not justify a separate Crossrail ticket hall and the London Underground ticket halls are sufficient to accommodate passenger numbers.”

224. One of those ticket halls—here I am getting to why we respectfully say at paragraph 22 that the Environmental Statement is misleading—the most important by far for present purposes, since that is where the Crossrail tunnels and escalators directly lead at point M on your sketch plan, is ticket hall B. CLRL anticipates significant growth in passenger numbers between 2001 and 2016 but much less than the employment growth which the Petitioners anticipate in the local area. Hence matters could be a lot worse than as assessed by Crossrail prior to the opening. Ticket hall B is a most important location for us because it is the point of arrival and is already a very multifunctional space. There, as I have already stated, the prediction is for a 2,500 increase in the gateline numbers exiting the ticket hall and no change in the total numbers entering and leaving those gates: 33,100 without Crossrail; 33,300 with Crossrail.

225. CLRL’s predicted passenger numbers mean that UTH B will be at capacity in 2016 with Crossrail. Ticket hall B will not, as stated in the Environmental Statement, be “sufficient to accommodate passenger numbers”, we say, since ticket hall B will require four extra gates to reflect the requirement to plan for a 60 year design life, even assuming that CLRL have the Moorgate/Liverpool Street split right and even assuming that CLRL has its overall passenger number prediction right.

226. Mr Cameron helpfully tells me that at table six, column B, row five, you will find the figure of 77,700 I mentioned earlier. At table 11, column B, line six, the number 73,300 appears that I mentioned at the beginning of paragraph 23. It may have occurred to Members of the Committee that if there are 16 gates at the moment could you squash some more in, so we turn to that issue. In a very recent test carried out for the Promoter, it is suggested that the number of gates could be increased to 20.

227. Without quarrelling with the suggestion that with new gateline technology that might be possible, we would say that the question is whether those additional four gates would deliver any real increase in capacity. Messrs Weiss and Spencer will be talking to you about what happens when you have a staggered deadline such as is shown on this appendix A document and you try and put in further gates where there are columns holding up the ceiling and the deadline is not unconstrained in both directions et cetera.

228. This very recent suggestion that you could increase the number of gates to 20 looks to us very much like an afterthought. Certainly the Environmental Statement says nothing about it. That was published without prior consultation with the Corporation in February 2005 in the particular respect we are here complaining about, simply dumping the longstanding previous proposal for a proper eastern ticket hall. Just to get the context of this, I wonder if I could refer to two short paragraphs from a Corporation of London Planning and Transportation Committee Report of 26 October 2004. That is some five months before the Environmental Statement and deposit of the Bill. Paragraphs 14 and 15 of that Report under the heading, “Liverpool Street Station” say this.

229. “Proposals for the east end of Liverpool Street Station have also been modified since consultation round one. At the Liverpool Street end of the Crossrail Station, new escalators from the Crossrail platform would link directly into the existing London Underground ticket hall giving access to the mainline concourse”, so far a fair and accurate description of what I have already shown you is proposed. Paragraph 15 however goes on:

230. “At the eastern end a new ticket hall would be built over the London Underground Circle Line platforms replacing the Liverpool Street arcade at street level. This new ticket hall would replace the London Underground ticket hall currently on the corner of Old Broad Street and Liverpool Street. Limited access would be provided to the Metropolitan westbound platform. A commercial development could be built over the new ticket hall.”

231. The first intimation that the proposal was to be ditched came in the form of a poster at Liverpool Street Station which remained in situ, as far as we can gather, for a single day. It appeared a week before the Environmental Statement was published.

---

**The Petition of Corporation of London with British Land plc**

---

It appears that the change of mind came so late in the day that there was insufficient time to make all the necessary changes to the Environmental Statement. I will not ask you to turn it up now but if you have leisure time to consult C7(i) in volume 4A of the Environmental Statement you will find that, as we interpret it, it still includes reference to that kind of eastern ticket hall as described in paragraph 15 of the October 2004 report of the Corporation.

232. The Corporation and British Land are very unhappy about the way in which this was done. We know that for many weeks the Promoter has been looking closely at our cases on Liverpool Street but in his responses has simply and shortly brushed them aside. The Promoter says that we have overestimated the passenger demand arising from Crossrail. The Promoter accordingly rejects our contention that there should be an enhanced eastern ticket hall at Liverpool Street Station. The Corporation's case and that of British Land is not however dependent on demonstrating higher passenger demand at Liverpool Street Station than is predicted by CLRL, as I have already shown. Moreover, the Corporation strongly contests the accuracy of the split for Crossrail passengers in 2016 predicted by CLRL as between Liverpool Street and Moorgate: the figures of 3,600 plus 1,700—5,300—for passengers exiting to the street via ticket hall B and A respectively at Liverpool Street Station and 9,200 at Moorgate, the two figures which I drew your attention to earlier on and which you find in your tables.

233. As I foreshadowed earlier, there is more to this case than the technical matter of forecasting actual passenger numbers. What I would now like to do with your leave, before coming back to some other matters that I need to deal with at the end, is to ask Mr Cameron to address you in relation to those other, broader matters.

234. **Mr Cameron:** I am going to address you on what Mr Laurence described as the broader matters, less technical but nonetheless important. They also provide some explanation as to why the Corporation and British Land say that Crossrail have the split between Moorgate and Liverpool Street wrong.

235. The Crossrail project has three key objectives: to support the development of London as a world city and its role as the financial centre of Europe and the UK; to support the economic growth of London and its regeneration areas by tackling congestion and lack of capacity on the existing rail network and to improve rail access into and within London.

236. An important aspect of London's world city status is its leading role in financial and business services. London enjoys a role at the moment as the world's leading international financial and business centre.

237. As recognised by, amongst others, the Mayor of London, that role and status as a world city cannot be taken for granted. Globalisation makes international business increasingly footloose. International companies will choose other world cities if London does not complete effectively. London's continued dominance is not merely of interest to Londoners; it is of vital importance to the whole of the UK. Furthermore, London's international financial services sector offers a significant opportunity to the UK as it has the potential to grow at a faster rate than both the average world output and the UK average output.

238. In due course you will probably be taken to the socio and economic reports produced on behalf of the Promoter but those reports indicate that the dominant sector behind future employment growth will be the financial and business services sector. Crossrail's role, as you heard yesterday from Mr Elvin, is said to be to support and enable that growth.

239. That support that Crossrail can bring to the sector is seen to be vital for the UK economy as a whole. It is acknowledged that if the growth does not come to London and to the existing clusters of financial and business services it is unlikely to go elsewhere in the UK. The Crossrail project will fail to achieve its objectives if it does not provide the enhanced public transport access required to facilitate growth in that sector. At Liverpool Street the approach taken by Cross London Rail Link is not to enhance public transport access but merely to provide access to an existing heavily used ticket hall.

240. The reason I say that is because they are not planning to propose a new ticket hall at the Liverpool Street end of Livergate but they are proposing to, to put it crudely, knock a hole in the wall of the existing ticket hall and direct passengers into that existing ticket hall, ticket hall B.

241. The planning, transport and economic policies promoted by the Mayor of London are also designed to maintain the continued attractiveness of London to world business with a phased supply of appropriate floorspace for international business activities and the specialist services that supply them.

242. The importance of Crossrail is acknowledged in the Mayor's transport strategy and of particular importance to this case which your Committee is considering the link between the Crossrail project and future growth opportunities is identified. It is noted that Liverpool Street is close to the key development opportunity at Bishopsgate Goods Yard.

243. If Crossrail is to achieve its objectives, it is vital that it provides the necessary transport infrastructure to serve the offices which are needed to facilitate the growth in the financial and business services sector which is in turn essential to the

---

 The Petition of Corporation of London with British Land plc
 

---

maintenance of London's world city role and its continued substantial contribution to the health of the UK economy.

244. These planning policies are not just promoted by the Corporation of London and neighbouring authorities; they are promoted by the Mayor of London. They indicate where growth in employment needed to sustain London's role and to provide jobs for its residents is to take place. Businesses such as British Land that provide office accommodation for the international financial and business service sector users rely on those policies in making investment decisions, as one would hope and expect. If Crossrail is to achieve the stated objectives it is essential that it provides the capacity to serve the development that is envisaged by the policies. The Mayor of London's policies envisage considerable additional employment growth in London for 2016. Of the 636,000 additional jobs anticipated in the period between 2001 and 2016, it is expected that the financial and business service sector will contribute 463,000. The London Plan, in planning for that growth, assumes that 93,000 jobs will be added in the City of London by 2016. In addition the London Plan identifies two significant opportunity areas adjacent to the City at Bishopsgate/South Shoreditch, where it anticipates 16,000 jobs and 800 homes by 2016 and Whitechapel/Aldgate at 14,000 jobs and 700 homes by 2016.

245. You will ask why do we need to know these precise figures. In due course you will hear evidence as to the location of those areas and their proximity to Liverpool Street. That is the relevance. The City of London's unitary development plan seeks to promote the City as the world's leading international financial and business centre. The plan identifies Bishopsgate/Spitalfields as a major development opportunity. It also identifies an eastern cluster of high buildings and it sets a policy framework which envisages further tall buildings where they would enhance the City's skyline.

246. That eastern cluster, you will hear, is closer to the Liverpool Street end of the proposed station than it is to Moorgate. That is of significance. The job growth in the eastern cluster is expected to take place closer to Liverpool Street than Moorgate.

247. The Corporation estimates that the pipeline of permitted developments and other identified sites could add over two million square metres of gross office floorspace by 2016 which is likely to be sufficient to accommodate the 93,000 additional jobs envisaged by the Mayor. It is not only the City that is planning for this growth. The neighbouring boroughs of Islington, Hackney and Tower Hamlets also envisage office and business related development in the area surrounding the City, the City fringe.

248. It is not only planning policy which envisages this growth, but it is happening. The existing office stock in the City is 7,540,000 square metres as of June 2005. There are 412,000 square metres of offices under construction and an additional 1,049,000 square metres has the benefit of planning permission, but construction has not started. On top of that, sites under discussion have further potential for an additional 280,000 square metres of office floorspace.

249. Analysis of employment distribution in the City of London—not taking account of employment distribution in the City fringe—within 800 metres of Moorgate and Liverpool Street Stations indicates that the bulk of existing employment floorspace is closer to Liverpool Street Station than to Moorgate. The relative proportions are 39% closer to Moorgate and 61% closer to Liverpool Street.

250. To illustrate that, you should have a bundle of documents, a blue bundle with the City of London's logo on the front.<sup>4</sup> If you go to tab nine, you will see this point illustrated. You will find the figures that I have just mentioned in the first bar. You will see that two circles have been drawn showing an 800 metre radius from Moorgate Station and Liverpool Street, a line drawn down the middle where they meet. You will see that the area outside the City of London is shown white but you will know that it is not green fields but intensive development.

251. For the purpose of this exercise, it is just the City floorspace that is looked at. These are 2003 figures. You have the 39% closer to Moorgate and 61%. The permitted shows similar proportions and under discussion again it is all biased in favour of Liverpool Street. The City fringe is not based on the plan on the left.

252. **Sir Peter Soulsby:** Can you explain why 800 metres and why the area outside the boundary is drawn as envisaged?

253. **Mr Cameron:** 800 metres is given as a convenient walking distance. We also have figures of 400 and 600 metres. The 800 metres is the distance people might be expected to walk from a station to a place of work. The answer to the other question is because we have access to detailed employment figures for the City. We do not have access to detailed employment figures for the areas outside the City. That is why this table has been produced in this form.

254. **Sir Peter Soulsby:** Surely for us to make a realistic assessment of the situation we do need to see the wider picture.

255. **Mr Cameron:** Yes, sir, and during the course of the evidence I anticipate you will do. This is just a graphical illustration based on the best information available because the City has detailed employment

---

<sup>4</sup> Committee Ref: A2, Exhibits produced by the City of London.

---

**The Petition of Corporation of London with British Land plc**

---

figures for areas within the City. We have not ignored outside the City, this is just an illustration on the basis of the best figures we have, but we will come back to the City fringe.

256. Turning to paragraph 41, significant tall or large buildings which are being proposed in the vicinity of Bishopsgate would be more accessible from Liverpool Street Station than from Moorgate. Buildings with planning permission include 51 Lime Street, the Heron Tower, 201 Bishopsgate, 122 Leadenhall Street, the Minerva Building and the former Stock Exchange.

257. British Land owns a significant quantity of offices in the City of London and elsewhere. They have significant experience of making development decisions and of tenant requirements. Tenant requirements are of particular importance as they have a significant bearing on the ability to let or relet premises. Consequently, developers are unlikely to provide buildings to accommodate growth in the financial and business services sector unless those buildings meet tenant requirements. It is British Land's experience that a key factor in the continuing appeal of their Broadgate development is its proximity to public transport facilities. One of the first considerations for a city business considering relocation is how the change of premises will affect their existing staff's commuting patterns. The ability of existing staff in locations such as Broadgate to access Liverpool Street Station is an important factor for tenants occupying that space. Similar considerations are likely to apply to tenants considering occupying space in offices developed in the Bishopsgate/South Shoreditch area of opportunity and the eastern cluster of tall buildings. Unless landlords are able to offer buildings with good public transport access they are unlikely to be able to provide the new office space required to facilitate job growth in the financial and business services sector.

258. The Promoter's decision, late in the day, to alter the project by removing the proposed eastern ticket hall at Liverpool Street Station will undermine Crossrail's ability to provide the enhanced public transport capacity required to serve the growth in financial and business services employment in the vicinity of Liverpool Street Station and thereby jeopardise the proposals for growth set out in the planning policy documents and, as a result, both undermine London's ability to meet the challenge posed by international competition. Sir, on that part I hand back to Mr Laurence.

259. **Mr Laurence:** Thank you for that. It follows from everything that Mr Cameron has been saying and what I said before that, as frequently happens between the best of friends, something of a squabble—really, quite a serious one—has broken out. Fortunately, your Committee is here to help resolve it. I am here on behalf of the Corporation to call two main witnesses to explain why there must be a proper ETH at Liverpool Street Station for

Crossrail passengers. They are Mr Peter Rees, who Mr Cameron will call first, and Mr Joe Weiss, who I will then call, each hugely experienced in his field. I do not intend, as was once common in proceedings such as these, to steal their thunder by summarising any further their evidence before they have actually given it. It is enough for me to tell you, sir, what the Corporation says should be your attitude while you consider that evidence. But before I do that I would wish to say something more about the position of British Land.

260. British Land strongly supports the Petition of the Corporation, as I have already said, and has of course lodged its own Petition. British Land will be calling three witnesses: Adrian Penfold, Head of Planning and Environment at British Land; Mr Tim Spencer of SDG and Mr Tim Chapman of Ove Arup. Mr Penfold will be giving planning policy evidence to supplement that of Mr Rees. Mr Chapman will be telling you about a viable alternative solution for the capacity at Liverpool Street Station, but it is Mr Spencer of SDG who will be taking the case on capacity even further than I have done at the moment. He will be expanding on the point that even on the Promoter's own figures the solution proposed by him fails very badly. He will wish to go further; he will seek to persuade you, sir, that the total figures have been quite seriously underestimated.

261. I will take us to the example of the number of 14,500 Crossrail passengers in the morning peak alighting deep underground at Livergate. Mr Spencer will challenge the correctness of that figure and suggest that the number will be far greater, and the split will not be in the proportion 5,300 to Liverpool Street and 9,200 to Moorgate. Therefore, Mr Spencer will be taking on the evidence to be given by Mr Weiss. If you accept Mr Spencer's evidence, putting it crudely, there will be about (these are very rough figures) 20,000 Crossrail passengers alighting at Livergate of whom roughly two-thirds will head for ticket hall B and one-third for Moorgate. Instead of 5,300 Crossrail passengers passing point M into ticket hall B there will be, if Mr Spencer is right, 13,000 odd passengers doing so. Most of those Crossrail passengers will be heading straight for the underground ticket hall B gates. Apart from the huge increase in congestion in the ticket hall, more gates will be required to accommodate them than can, on any possible basis, be squeezed into the existing space.

262. Sir, that is still not the end of the story. Shall I just add one thing that is not in the text, please? If Mr Spencer is right, the pressure on the gates will not just be from Crossrail passengers; if CLRL have underestimated Crossrail passenger numbers it stands to reason that the numbers of passengers alighting from the Central Line and subsurface lines will have been underestimated too. What is more, if the Livergate split between Moorgate and Liverpool Street Station has been misjudged for Crossrail, it is not clear to me, at any rate, why it would not also

---

**The Petition of Corporation of London with British Land plc**

---

have been misjudged for the Metropolitan Line, for there the alighting passenger has a choice just as the Livergate alighting passenger has.

263. For this, sir, if you would look at your tables, it is Table 11 again on page 5, what you see is, under the heading “Arrival mode”, there are identified, amongst others, the subsurface lines and Crossrail. The subsurface lines have in common with Crossrail that they serve both Liverpool Street and Moorgate; the Central Line serves only Liverpool Street, the Northern Line serves only Moorgate, but the subsurface lines and Crossrail serve both Liverpool Street and Moorgate.

264. So if you look at line 3, the subsurface line figures, you see a projected split there on Crossrail’s figures, of 12,600 for Liverpool Street and 8,000 for Moorgate. For reasons that I do not understand, at Crossrail it is suggested the split will be the other way round: 5,300 for Crossrail, 9,200 for Moorgate. My point here is a different point. It is a simple point, really, that if at line 5 the figures for Crossrail should be more passengers alighting—

265. **Kelvin Hopkins:** I am sorry to interrupt your flow, at this point. Is there not a possibility that, if Liverpool Street becomes an impossible scrum, passengers to the Liverpool Street catchment area might actually travel to Moorgate and walk back? The split might be a little more shifted towards Moorgate for that reason. Not a good reason, and I accept there might be more numbers, but there will be people who will be deterred from using Liverpool Street and therefore go on to Moorgate and even walk from Crossrail through the tunnel to the Moorgate end rather than the Liverpool Street end.

266. **Mr Laurence:** Of course, if you effectively force people—if I have understood your question rightly—to choose another means of exiting the station because the one they want to use is not conveniently available without having to suffer unacceptable congestion, then they do, in that sense, have a choice. You will be hearing from our witnesses why they say that is not the kind of choice that ought to be foisted on passengers.

267. Sir, you raise your question just at the point that I was saying that my point for present purposes was not to question the split as such at line 3 on the subsurface lines between 12,600 and 8,000 but just to point out that if, in due course, you hear and, subsequently, accept evidence that the overall numbers will be greater than those identified for Crossrail in line 5, then the same reasoning could, on the face of it, appear for the other place where passengers have a choice of where they get off, that is to say passengers on the Metropolitan Line or the Circle Line, the so-called subsurface lines, whose numbers are given at line 3 in Table 11.

268. I am now able to bring the threads together before Mr Cameron calls our first witness, and I do so in this way: we suggest that there are, in the face

of all this, two critical questions for the Committee. The first of them can be framed like this: can this Committee allow the Crossrail project to be taken forward to detailed design and construction on the basis of the Promoter’s predictions of passenger demand, bearing in mind that even if these are wholly correct the ticket hall is placed under unacceptable strain from the outset? To that question we invite you to give an unequivocal negative answer.

269. The second question is this: what is it that this Committee should direct the Promoter to do if it accepts our evidence on passenger demand at Liverpool Street Station? This is difficult because the Promoter has failed to complete essential preliminary work in order to identify the best option for providing a proper eastern ticket hall at Liverpool Street Station. The Corporation and British Land, who support them, consider that there are realistically only two options which are feasible. One of these has already been identified by Ove Arup on behalf of British Land, and I would like to ask you to look briefly at your little clip of diagrams to see what that alternative option involves.

270. Skip the first three documents which you have already seen, skip Figure 1 and Figure 2 and go to Figure 3. This is an Ove Arup document under the heading: “Crossrail at Liverpool Street Station: suggested alternative layout”. Over the page, at Figure 4, you see the same scheme with a section along Eldon Street with Crossrail Scheme dashed. Mr Tim Chapman will obviously be able to explain all this to you in greater detail in due course. What this scheme shows, sir, in very broad outline, is an additional method of exiting Livergate, showing passengers emerging into the corner of Blomfield Street and Eldon Street just near the number 102, Figure 3. You have still got a connecting passageway between the exit from the second of the two escalators but the escalators and the tunnels which I mentioned earlier are differently aligned because, under this scheme, it becomes necessary to reach shallow level sooner than it is necessary to do under the Promoter’s scheme.

271. For present purposes, all I need invite you to do is to note that there is an alternative that Ove Arup has been working hard on for the last three or four months, I think. Let us call that option the British Land Company option (or the BLC option, for short). CLRL themselves have been looking at it in detail and have even made suggestions for its improvement. That is the option Mr Tim Chapman of Ove Arup believes, on the present evidence, stands the best chance of solving the capacity problem at Liverpool Street Station. You will hear from him, however, that he remains entirely open-minded about the possibility of identifying a better option.

272. There is, in theory, a number of other possible options but, in practice, Ove Arup believe, only one. That other option would have to involve a very

---

**The Petition of Corporation of London with British Land plc**

---

substantial enlargement of ticket hall B. There may well prove to be practical constraints which rule it out. Let us call that massively enlarged ticket hall option the METH option. CLRL told us in late December that by early January they hoped to have carried out “an assessment of other options for providing additional ticket hall provision”. (I am quoting from a letter from Mr Ben Wilson of CLRL to Mr Chapman, dated 22 December 2005, under cover of which he provided, in draft form, a detailed critique of the Ove Arup option.)

273. Somewhat to our surprise, we recently learned that work on the assessment of such other options has been halted. Of the alternative options up to now discussed, Mr Chapman believes that only the METH option is a runner. However, as he will tell you, he also thinks it will take a few more months from now for CLRL to reach the point where as much work has been done on the METH option as has been done on the BLC option to enable them to be realistically compared. So it is not a question of getting to the detailed design stage, obviously, on either of these options, but it is a question of doing enough work on the options to be able to compare them realistically. At that stage, when the extra work has been done, a few months from now, your Committee ought to be in a position to make a judgment which option to choose, if necessary after hearing further evidence in the absence of agreement between Petitioner and Promoter, as to which is best.

274. Sir, there is a terribly important rider to all this. The BLC option, the one Mr Chapman currently thinks will best serve the needs of commuters, will be precluded if the existing Crossrail scheme is implemented. That is because the position and angle of the tunnels and escalators of the existing Crossrail scheme and of the BLC option are different. There are tunnels and escalators for both schemes but they are aligned differently. So if the arguments of the Corporation and British Land on capacity are accepted, it is not an option for the Promoter to say that provision for extra capacity at Liverpool Street can be bolted on to the existing scheme by way of a subsequent scheme. The decision which is the best option must be taken as soon as possible, we would suggest by the end of April at the latest, in conjunction with the Corporation and British Land, and that the Promoter must then be required to set in train the necessary procedures for amending the Bill, providing a supplementary Environmental Statement, etc, if necessary after the Committee has ruled which is the best option.

275. Sir, I do not want to suggest that we anticipate that there will necessarily be disagreement between the parties on the subject, because if we succeed in persuading you that our capacity case is right there is absolutely no reason to think that the Promoter will not voluntarily get under way again with the assessment of alternative solutions to the problem, which we were told, on his behalf, on 22 December, was then under way and which it was hoped would

be completed by early January. If this Committee hears our case on capacity and decides that it is sound and that something has got to be done, we apprehend that Mr Elvin, on behalf of the Promoter, will be saying: “Of course we will carry on looking at alternative options, the massively enlarged ticket hall option in particular, perhaps, but it will take us so long to do it and what we would then hope, in conjunction with the Corporation and British Land, is to reach agreement as to which of the two options is the best option to take forward, if necessary by amending the Bill and producing an Environmental Statement, and so on and so forth”.

276. There are, potentially, lots of issues that will have to be resolved in relation to the choice of the two options. If the massively enlarged ticket hall option, for example, is the one that the Promoter, in the end, thinks is the best there is the position of National Rail and London Underground to consider because, as far as I am aware, they have not been brought into this debate very much at all up to now, and issues of that sort will no doubt have to be looked at. That is why I foreshadow, as a possibility, that if we are successful on the first part of our case it may be that we will end up disagreeing with the Promoter as to which of the two options is the best option. It is not purely a matter of engineering; it is cost and all the rest of it that will have to be considered. If that happens, we may have to ask you, sir, to adjudicate on that, but you certainly cannot adjudicate on it now.

277. My last two paragraphs, sir. Mr Darling, on 13 December 2005 made another £100 million available for further development of Crossrail. In his statement on that day he indicated that the additional money would allow CLRL, working with the Department and Transport for London, to do the necessary research and planning before Crossrail can enter the next phase of development. I do not mean to be too flippant here; there will be money to pay my learned friends and something left over to identify the best option for “additional ticket hall provision”, in the words of Mr Ben Wilson. But that option ought to have been identified long ago. Your Petitioners, of course, appreciate the efforts that have belatedly been made to identify options for a suitable Liverpool Street eastern ticket hall, but urge your Committee on no account to allow that latter issue to be kicked into the long, or any, grass. We respectfully argue that provision for a properly designed Liverpool Street eastern ticket hall must form part of the Bill, and the Bill must be suitably amended to achieve this unless the Promoter, of course, can satisfy us that the best option is to enlarge the ticket hall and that that can be done without amending the Bill, which will obviously be delightful but we remain to be persuaded.

278. I should add this by way of further emphasis as to why these Petitions have been lodged: your Petitioners want the best possible Crossrail Bill in order to achieve the project’s stated objectives. It makes no sense whatever for the main entrance and

---

The Petition of Corporation of London with British Land plc

---

exit from the Crossrail station which serves the heart of the world's leading international finance and business centre to be created by funnelling passengers into an existing crowded ticket hall. Now is the time to do something about it.

279. I note that it is 12.45 or thereabouts. I am in your hands. We could get started with Mr Rees; Mr Cameron is here to call him and I know Mr Rees is in the room. Is that what you would like to do?

280. **Chairman:** I am reluctant to go on for very much longer. It provides the perfect opportunity to give Members the chance to be in at the start of Prime Minister's questions. I think we will adjourn till this afternoon.

281. **Mr Laurence:** That is an adjournment until 2.30, is it, sir?

282. **Chairman:** Yes, 2.30 this afternoon.

After a short adjournment

283. **Mr Laurence:** Sir, I am going to ask Mr Cameron, with your leave, to deal with two matters that were raised by way of question before the adjournment and then to call Mr Rees, if that is acceptable.

284. **Chairman:** Mr Elvin, did you want to comment?

285. **Mr Elvin:** Can I, sir, if you will forgive me, just read into the record the fact that the additional provisions were deposited today, along with the additional provisions' Environmental Statement.

286. **Chairman:** By the end of today we hope to have some response to your concerns which were raised yesterday.

287. **Mr Elvin:** Thank you very much, sir.

288. **Mr Cameron:** Sir, just before calling Mr Rees, can I attempt to deal with two questions raised this morning by Members? Mr Binley asked a question about the distance from the subsurface level when the passenger got off the Crossrail train to the gate line, so on Figure A in the set of drawings that Mr Laurence referred to, from point K to the gate line in ticket hall B, the answer on distance is this: it is measured horizontally—that is just on the plan (that is all we have been able to do, so far)—250 metres, and then once the passenger has left the gate line it is another 75 metres until he or she gets to the street. That is the distance. I think that probably answers part of Mr Binley's question. If there are other parts of it—

289. **Chairman:** That is 360 metres.

290. **Mr Cameron:** It is over 300 metres to get to the street: 250 metres horizontally to get to the gate line.

291. **Mr Binley:** Can I just come back on that very quickly, because this is an important issue and it is a particularly important issue for those active and, maybe, less flexible and agile than yourself—that includes me, I do not suggest the Chairman. We do need to note that, with the sort of flows of traffic that you are going to have to get through this length of space, people with disabilities, and so forth, are not going to be overly inconvenienced. That is a real problem, as I see it, over such a distance and such an obstacle course with elevators and so forth, it seems to me.

292. **Mr Cameron:** Sir, those matters will be considered certainly in the alternative design we are putting forward for mobility impaired people access (MIP is the acronym). Unless you tell me, I do not think there is a specific question to answer now except to promise you that we will deal with it when we come to Mr Chapman's alternative design.

293. **Mr Binley:** As long as it is flagged, Mr Chairman, I am very happy.

294. **Mr Cameron:** The second point, sir, was Sir Peter Soulsby's question to me, and that was about the exhibit I referred to at Tab 9. Sir, the proportions that you have in red and blue relate to a land use survey carried out in the City where officials from the City Corporation visit every building and they take a record of the number of people employed. The neighbouring boroughs do not carry out a similar exercise, so it is not possible to provide an equivalent figure for the City fringe. However, sir, we have not ignored it; one of our later witnesses, Tim Spencer, who deals with the passenger numbers, is going to be able to provide the Committee with 2003 figures for employment in what he calls the Moorgate area and in the Liverpool Street area. They are not exactly co-terminus with the radius drawn from each station because they are blocks or zones. Put simply, he deals in squares and Mr Rees has dealt in circles. Mr Spencer has taken the City Corporation's figures from their land use survey, so the same figures as Mr Rees, but a slightly different area; he has not got equivalent figures for the City fringe, so what he has done is taken the Promoter's figures, accepted them and put them into his calculation and then, for 2016, he has used that base and taken information about planning permissions, likely planning permissions, and so forth, and worked out a figure. It does include the City fringe. So it is a long way of saying that there will be an answer to the question, it will come in due course when Mr Spencer gives evidence, but Mr Rees, who I am about to call, will not be able to help on the detail.

295. **Sir Peter Soulsby:** That is very helpful, Mr Chairman.

296. **Mr Cameron:** If I may, sir, I will call Mr Rees. Mr Peter Wynne Rees, sworn

---

 The Petition of Corporation of London with British Land plc
 

---

Examined by **Mr Cameron**

297. **Mr Cameron:** While Mr Rees is getting ready, the only documents you will need, as far as I am concerned, are all in this blue bundle. Mr Rees, if I can introduce you, you are Peter Wynne Rees. Is that right?

**(Mr Rees)** Correct.

298. You currently hold the position of City Planning Officer for the City of London and you have held that position since 1987. I think I am right in saying that you held an equivalent position for two years before that.

**(Mr Rees)** That is correct.

299. So you have 20 years' experience of planning in the City, as the lead officer responsible for planning.

**(Mr Rees)** That is true, yes.

300. In terms of your qualifications, you are qualified as an architect and as a town planner. Is that right?

**(Mr Rees)** Yes, that is true.

301. Beyond that, outside your duties as City Planning Officer, you lecture throughout the world on urban planning and design, you are a founder member and director of the British Council for Offices and you received their President's award in 2003 for presiding over one of the most extensive periods of redevelopment in the City's long history. Is that right?

**(Mr Rees)** That is correct.

302. You received the Barbara Miller award from the Faculty of Building in 2004.

**(Mr Rees)** That is true.

303. Turning to your current responsibilities, can you just turn up Tab 1, please, and explain to the Committee the area of your responsibility?

**(Mr Rees)** Yes, the map at Tab 1 shows the outline of the City of London, with the southern boundary the River Thames, of course; from the Temples in the west across to the Tower of London in the east, and north to Liverpool Street Station, Broadgate and Smithfield Market. You can just see the line of the Crossrail printed in blue across the top of that patch and a number of landmarks to help you to orient yourself and to show you the distribution of public transport within the City.

304. Turning away from that general introduction to Crossrail, the City of London's support for Crossrail is well-known and I would like you, please, to explain to the Committee the extent and nature of that support.

**(Mr Rees)** The City has for a long time campaigned for improvements for public transport in central London. Crossrail is an excellent example of how we can increase both the capacity and convenience of public transport. It has not only the ability to offer an extra route with more potential to it but relieve existing overcrowded lines such as the Central Line.

The Corporation has, as I say, supported this for many years and, indeed, has even assisted in helping to look at alternative methods of funding for the proposals. So I think that proves our commitment to the cause.

305. In terms of public transport capacity, what is the view of the Corporation on any role that Crossrail can play in enhancing public transport capacity?

**(Mr Rees)** Insofar as the Crossrail route parallels a number of other east-west transport routes, particularly as I mentioned earlier the Central Line which is currently beyond its capacity, it does give that relief whilst, at the same time, connecting to destinations that are currently difficult to reach, like Heathrow Airport, which is difficult to reach from the City. Therefore, it is overlaid an existing complex plan, which is shown at Tab 2, in fact, and shows how the City is well-served traditionally by public transport from the 19<sup>th</sup> Century with railway lines radiating out in all directions, but the one area that is under-provided is the east-west access through the centre of the City. Crossrail fills that gap.

306. In due course you will explain to the Committee the planning policies which are pursued by your Corporation, your employer, and by the Mayor of London. Is there any linkage between that planned employment growth and the role that you envisage Crossrail will play?

**(Mr Rees)** Certainly it is often said that a city is either growing or it is dying, and the City of London is going through a period of strong growth, based largely on the international financial and business sector. If we are to do anything which precludes that growth by making it harder for people to reach the City and not gaining maximum advantage from new transport routes that are opened, then the City will go into the reverse mode and will start to decline. So it is extremely important to us, in terms of growth and capacity of the City, that we harness the potential of Crossrail.

307. Turning from support, if the Corporation is such an enthusiastic supporter of Crossrail and sees its advantages, put very simply, before we go into the detail, why are you here?

**(Mr Rees)** Well, we want to make sure that it works; works in terms of supporting the important role of the City which I have mentioned already, and ensuring that during its construction and operation it reaches its full achievable benefit for London as a whole and the City in particular, with particular regard to Liverpool Street Station and the eastern exit from that station. We believe that it is not able to do that in its current configuration.

308. The Corporation has got a number of issues in its Petition. I think you are here today just to deal with Liverpool Street Station and the eastern ticket hall in particular. Is that right?

---

 The Petition of Corporation of London with British Land plc
 

---

**(Mr Rees)** That is correct. There are a number of other outstanding issues which we are busily negotiating with Crossrail. I hope that in time those will be resolved within a short time-scale. If, of course, they are not resolved we may need to appear before you again.

309. In terms of the concern about the passage and facilities of Liverpool Street, what is it that the City anticipated would be provided as part of Crossrail, in broad terms, at Liverpool Street?

**(Mr Rees)** In previous iterations of this scheme there had always been an additional facility on the south side of Liverpool Street, across the road from the main railway station which dealt largely with those passengers from Crossrail who wished to come out to street level and disperse to employment in the City rather than those who are connecting with the railway station. That disappeared at a late stage, shortly before the current Bill, and the Corporation is, to say the least, mystified by that and fears that this loss will have a significant effect on the ability of the station to operate effectively.

310. In terms of the function of the City and the function of Liverpool Street Station, can we turn on to a different heading in your evidence, which is the current importance of London to the financial and business service sector? What is London's—and in particular the City's—role at the moment?

**(Mr Rees)** Insofar as London is one of the three world financial centres and the City of London, as a core of that, is important, London is probably pre-eminent. It is always difficult to tell because different areas of financial dealing vary according to the different centres, but at Tab 3 we see a breakdown showing the share of the international financial market that London held in 2004 in various sectors. I think all one needs to take from that is to see that there is a substantial contribution in various sectors and an overwhelming contribution in a number of them. London, by all measures, is in the top three, and, by most measures, is number one.

311. So this diagram, Tab 3, we can see. What is the source of that information that is shown in diagrammatic form there and the bar chart?

**(Mr Rees)** That is the Centre for Economics and Business Research report in 2005, entitled *The City's Importance to the EU Economy*. It is an annual report and this can be seen at Tab 12, the extracts from it, if Members wish.

312. If we go to Tab 12 we find the figures which are then portrayed on the diagram at Tab 3?

**(Mr Rees)** That is correct.

313. So that the City and London's role in international financial services you have described. What function does Liverpool Street and the City of London perform in relation to that role?

**(Mr Rees)** The City of London is the core of that activity, providing the home of most international banking, international insurance dealing and, indeed, the supporting professions, like accountants

and lawyers, that go with that activity. Liverpool Street Station is the busiest station within the City; it carries the largest number of people to and from work in the Square Mile. Bear in mind that over 90% of those who work within the Square Mile arrive by public transport; the vast majority of those—over 80%—by train, some by bus, and less than 5% arrive by car. That is unique to any business centre in the world. Liverpool Street plays probably the most important role of any station in that provision of public transport facility to those who work in the City. It is also the means by which the City is able to trawl a population of 20 million people in the South East of England every day to draw the talents it needs to maintain its activities, and that is enabled purely through our radial public transport lines leading out of the City. So the biggest station in the most important public transport network bringing the highest proportion to work by that mode anywhere in the world.

314. Tab 3 is the City's role in financial and business services. That is a 2005 report based on 2004 figures. We can see at the top of the table. Can I turn from how London is doing at the moment to growth prospects? Are you able to help on prospects for growth in financial services?

**(Mr Rees)** I sincerely hope so. The report which I would draw attention to is the report of Lombard Street Research in 2003 entitled *Growth Prospects for City's industries*, and that is at Tab 13 in your bundle. The conclusions of that report are summarised graphically in Tab 4, which is the diagram for average annual output growth rates, and that indicates that the international financial services output growth is of the order of 7% compared with a world output growth of 3.5% and a UK output growth of round about 2, 2.3%. One can see that this component of business on a worldwide basis and reflected by London's pre-eminent role in that worldwide activity far outstrips any other growth rates.

315. What opportunities, if any, does that offer for London?

**(Mr Rees)** Obviously, London is in the best position to capitalise upon such growth rates and to take advantage through taking a larger proportion of that increase in the overall market, and indeed its recent development over the last few decades has proved its ability to do so—provided it has the facilities it needs to house that extra activity.

316. Those figures you have produced at Tab 4 refer to output growth, not employment growth. How do those figures translate into employment growth and consequent demand for office floor space?

**(Mr Rees)** The actual translation into employment growth, of course, show much lower percentages. Most of this is achieved by the systems that are in place handling more business. This is to a great deal automated rather than manual activity. Therefore, the sort of employment growth rates which we have been seeing are of the order of 1.75% per annum to meet these sorts of growth rates in activity. That is

---

**The Petition of Corporation of London with British Land plc**

---

something which we have tested at various stages when we have been producing our local planning policies, and the average for these growth patterns has stayed very stably around 1.75% per annum. This is a figure which is taken to hold true by both ourselves and the Mayor of London in the predictions he is making in his own plan.

317. Can I ask you to turn to Tab 13, please? I think there you have got an extract from a report from Lombard Street Research Limited *Growth Prospects for City Industries*. Are you able to point out a source in that document for your expected employment growth rate? Perhaps I can help you to save time. Can we go to page 8—unless somebody tells me I should not—the second paragraph?

**(Mr Rees)** In the materials provided on both those extracts, pages 8 and 11, it shows how they have analysed the economy over the last 25 years, and its growth rates, and extrapolated forward, bearing in mind global factors, that there will be a range of employment changes which average at 1.75. We have always played safe in the City, as indeed has the Mayor in his predictions, in taking the mid-point of range that these documents offer. Obviously, there is some difficulty in factoring in international events and certain factors—the effect that those might have on financial growth.

318. Translating all this into your area of responsibility, that the City is a world leader in certain aspects of financial services, and opportunities for growth translate into employment growth, how do you, as a City Planning Officer, advising the Corporation, plan for that growth in your planning policies?

**(Mr Rees)** Above all, we have to ensure that the developments are in place to provide modern office accommodation for those who chose to move their business to the City and those who choose to expand here. We have had considerable success in the last 20 years in encouraging international banking and international insurance to come to London, and that has been as a result of providing good, modern office accommodation, being flexible in the type of buildings that we provide and working with the development industry—and, indeed, leading architects—to provide interest in the product that is being provided to make it a good and efficient business centre for people to use. That is shown by firms like Swiss Re, the Swiss re-insurance company, moving from Zurich and moving into dealing in London; Deutschebank from Frankfurt—although its headquarters are in Frankfurt it does its dealing in the City of London—Merrill Lynch from the States—one can go on. There have been numerous examples over the last 20 years of international companies moving into the City, taking high-quality accommodation and having their main place of activity within London rather than their home city.

319. Can I ask, in terms of Tab 5, and looking at the employment distribution of financial and related business services, a part of City employment, how does the City fare as a result of your policies and other matters as against other areas of London?

**(Mr Rees)** I think that diagram clearly shows that the overwhelming portion of the pie, the red part on the left and top, of the activity, takes place within the City of London. However, it cannot all be accommodated within the Square Mile without the expansion of satellite locations, such as Canary Wharf, which is shown in 2002 as having 24,000 employees and that has increased because that is being built up and occupied. The City fringe wards, the areas immediately around, some of which are accessible from Liverpool Street Station, show 56,000 and other parts of central London and the South Bank also playing a part, but you can see overwhelmingly the core, the focus, of the activity is within the City of London, within the Square Mile.

320. Having informed the Committee about employment and employment growth, can we now turn to planning policies and, after that, we are going to focus specifically on Liverpool Street Station? So we turn to two policy documents, I think, which we do not have to provide in massive detail but from which we have extracts, a London Plan, which is the Mayor's Plan, and then the Corporation's own plan, the City of London Unitary Development Plan. If I can just take us through your extracts and to highlight the relevant parts of that plan, for this Committee's deliberation, I think we need Tab 14 for the Mayor's Plan.

**(Mr Rees)** Yes. Within the extract which we have provided for you at Tab 14 we can derive that the London Plan assumes a long-term trend of employment growth, increasing employment in London by 636,000, and that is from the period from 2001 through to 2016. That is on page 224 of that Plan. It is the second page of the extract in Table 5A(i). The London Plan expects—

321. It might be helpful, for those that have not got it, to have that on the screen. It is from Tab 14, second page, which is page 224. You referred, I think, to a figure that Mr Elvin referred to in opening, the 636,000 employment growth assumed in the Plan. Again, I am going to lead you (it is not rocket science) by taking the 2016 figure and taking off the 2001 figure.

**(Mr Rees)** That is correct.

322. I interrupted you when you were about to go on.

**(Mr Rees)** If one turns back to the previous page of Tab 14, which is marked page 89, you will see that the London Plan expects that the finance and business services sector is going to make the most significant contribution to economic growth and that 463,000 of those jobs by 2016 will be within that sector. That is shown in Table 3B(i) on that preceding page, page 89. This one is totalled out directly, in the left-hand column, to be 463,000. As I have already said, this sector is clustered in and

---

 The Petition of Corporation of London with British Land plc
 

---

around the City, both the financial and the business sector, and the London Plan accepts and assumes that the growth of employment in the City of London will be approximately 93,000 by 2016. That is out of that overall total. That is contained on page 225, which is the third page.

323. I think, to get to that 93,000 figure in the City, we have to do some maths, do we not?

*(Mr Rees)* We would need to join the dots, basically.

324. Would you like to explain to us how we do that?

*(Mr Rees)* The Mayor has taken the various parts of London. He has produced a sub-regional growth strategy for each part of London, including the eastern sub-region, which includes the City of London, and attributed certain amounts of growth to each of those areas. The east London total would be 249,000 of the total that makes up the overall figures for London. This is assuming growth in the Thames Gateway but by taking off the growth figures for the Isle of Dogs—that is basically Canary Wharf—he gets down to a figure of 93,000 which will have to be accommodated in the City itself. That is the figure that we are taken with and indeed it is very close to our own predictions of what we expect growth to be within the Square Mile for which we are providing with our new developments.

325. Looking at page 235, you have your 249,000 jobs for the east London sub-region including the City and the Isle of Dogs. You have a figure for beyond the City and the Isle of Dogs and if you turn to page 247 do we have a figure in that table for expected new jobs in the Isle of Dogs?

*(Mr Rees)* Yes, the 100,000 shown in the middle column, third line down.

326. Joining up all those dots we get to your 93,000?

*(Mr Rees)* That is correct.

327. Looking at the London planned growth assumptions, is there any indication in the plan if we go to that 93,000 figure as to where that growth should be taking place? It is 93,000 for the City. Are there other indications as to the areas or zones where the development is to take place?

*(Mr Rees)* Yes. In terms of the Mayor's assumptions, he also has opportunity areas on the City fringe immediately east of the City in the Shoreditch and Bishopsgate Goods Yard areas and within the City assumes that a large part of that growth will be accommodated within the eastern cluster of high buildings which I will be describing later.

328. If we go back to table 5C.1 on page 247, tab 15, does the Mayor give an indication as to the extent of growth he expects in those two opportunity areas you have just mentioned?

*(Mr Rees)* Yes. The first one, Bishopsgate and Shoreditch, is 16,000 new jobs and further south at Whitechapel and Aldgate he is indicating another 14,000. These are all in the eastern fringe of the City, on the City boundary.

329. Can we go back to your initial plan of the City at tab one? Can you point out where those opportunity areas are?

*(Mr Rees)* Yes. It is the eastern fringe, running down the right hand side of the map. You will see Liverpool Street Station. If we go up a 45 degree angle from that, Bishopsgate Goods Yard will be found in the north east quadrant and the opportunity areas run south into the Spitalfields area, south Shoreditch, around the northern cusp of the City and Whitechapel and Aldgate would be further south down that eastern boundary.

330. Turning to the Mayor's plan, the expectation for the City is 93,000 plus opportunity areas immediately adjacent and to the east?

*(Mr Rees)* Yes.

331. Turning to the City's own plan, can we turn to tab 15 and could I invite you to highlight the relevant parts of these extracts?

*(Mr Rees)* In setting out our vision in our own unitary development plan we seek a strong economy, a good quality of life, a sustainable future and opportunities for all. Within that the vision is complemented by strategic policies including strategic plan 2A, page 18, tab 15, which is to promote the City as the world's leading international, financial and business centre which is a sustainable part of London's central activity zone and contributes significantly to London's role as a world city, the national economy and to the provision of employment opportunities for London and the surrounding regions. The planning policy approach which we use in the UDP gives an indication of the likely pattern of office development in the city, having taken that as our overall aim. The UDP policy environment three, page 145 of the extracts in that section, states that the Corporation's policy is to permit high buildings where they would enhance the City's skyline and not adversely affect the character or amenities of their surroundings or the City's environment to an unacceptable degree. In other words, we are looking at the environmental factors which might preclude the building of tall buildings in various parts of the City of London. Spatial indications of the policy are indicated on UDP map 10.1. That is over the page. One will see from that those areas that are coloured are largely areas that are protecting views of St Paul's from a distance.

There are only two substantial areas of white. One is the north central area at the top of the map and the other is clearly marked "Eastern Cluster". The north central area is largely occupied by the Barbican estate, the largest section of residential accommodation in the City accommodating approximately half the City's residential population. The scope for substantial increases in office accommodation, especially for building tall buildings in that location, is very much limited by the potential impact on the residential environment. However, the eastern cluster which has tall buildings already provides an opportunity to increase density

---

 The Petition of Corporation of London with British Land plc
 

---

by increasing the height of the towers in a way which will not immediately impact upon people's living conditions, nor have a negative impact on the environment, the City and views of St Paul's. The growth is largely, if not overwhelmingly, predicated upon that eastern cluster.

332. In due course we are going to look at the development pipeline. Perhaps we can stick to the policies at the moment. If you go back to the first page of the extract at tab 15, you refer to Strat 2A and there is a policy Strat 2D which refers to the strategic potential of Bishopsgate and the Spitalfields area, a major development opportunity. What is that policy contemplating?

*(Mr Rees)* It is important to point out that although the Corporation is not the planning authority for areas outside the Square Mile we have to recognise that the sites which offer great potential for redevelopment often lie outside our boundaries. In the Bishopsgate/Spitalfields area there are considerable areas of land which are either currently vacant or underused, where there is the opportunity for large scale redevelopment close enough to the City to be able to provide office accommodation for the financial sector. That strategic policy recognises the important role which this part of the City fringe will play in the growth of the financial sector.

333. Are there any conclusions that you would like to draw from that short trip through your policies?

*(Mr Rees)* Both national, strategic and local planning policies all point in the same direction, towards the continuing strength and expansion of the City as the heart of London's financial offer. The growth that is being predicted for London and our own unitary development plan can be accommodated but will be accommodated to a very large degree by an increase in height of buildings in the eastern part of the City. This is something that has been rolled out by recent planning permissions and a cluster is rapidly developing in this part of the City. Providing the accommodation is simply part of that. We then have to have the transport to go with it and to ensure that the current transport is not negatively affected in its ability to serve this part of the City.

334. I would like to move to employment patterns in the City. If we go to the specific area around Liverpool Street Station and Moorgate, in terms of general employment growth, can you turn to tab seven? What has happened as a result of these policies in terms of City type employment in the City of London?

*(Mr Rees)* It is always difficult to look at a year on year pattern of employment in an active business district like the Square Mile in the City of London, the problem being that when there are waves of development the occupation in the offices goes down relatively rapidly after there have been buildings demolished and sites cleared but will rise equally rapidly when there is availability of office accommodation. To try to smooth that out and make it more understandable we have averaged out

the working population for City type employment in the City of London during the 1970s, 1980s and 1990s and taken an actual figure at 2001 and moved forward to the growth planned for in the London plan for the City of London, the 93,000. You will see how that has moved up since the 1970s from 165,000 to an actual in excess of 233,000 and how that needs to accommodate an additional 93,000 on top of that within our particular area.

335. Employment growth means buildings for people to work in, in the main offices. How does the area around Liverpool Street Station contribute to that accommodation supply?

*(Mr Rees)* The area around Liverpool Street Station provides an opportunity through the eastern cluster of building taller buildings than currently exist. In many parts of the City, although it is possible to redevelop, it is not possible to increase the scale of the building significantly and therefore the numbers of people who will be employed in the albeit improved accommodation will not be substantially greater. In this area, particularly to the south and east of Liverpool Street Station, it is possible to build taller and therefore to accommodate more people and to cluster them together in a way which is attractive to them. As with any occupation, the more people you have doing the same thing in a small area the more the spin-off benefit and synergy of bringing them together. That is something the City cluster can make a substantial contribution towards by increasing density and keeping it tightly organised within a particular area.

Taking an 800 metre circle from the stations we find that 66% of the City's workforce in 2003 was located within the circles from one or other of those entrances to this new, combined station.

336. Shall we go to tab nine? The 66% that you refer to refers to what?

*(Mr Rees)* 66% of the City's working population within that double cell, the two intersecting circles, the red and the blue, people who could choose to access their jobs through this particular combined station.

337. Within the cell there is 66% of the total City workforce?

*(Mr Rees)* Correct.

338. On the right hand side of the diagram you break it down. What have you done in that horizontal bar chart?

*(Mr Rees)* We have taken jobs which occur within the City of London or within one or other half of that curved shape. The ones on the right will find it easier to access the station via the Liverpool Street entrance while those in the area on the left in the red part will find it easier to access the station at Moorgate. For existing employment we find that the split between the two falling within one or other of those circular shapes is 39% for Moorgate and 61% for Liverpool Street.

---

The Petition of Corporation of London with British Land plc

---

339. What is the source of that information?

*(Mr Rees)* That is our own land use survey. The Corporation is able to survey each building individually. We have up to date land use survey information for the whole of the Square Mile and we are able to ascertain how many people there are working in each building and therefore within in each block and to define the overall figures for the two segments that we have shown.

340. That is existing?

*(Mr Rees)* That is correct.

341. What does permitted mean?

*(Mr Rees)* That indicates what is possible as a result of the planning permissions that have been granted. These are the schemes in the pipeline, waiting to be built or under construction. Looking at the split of those extra jobs that would be permitted by the desk space that is being created, 40% of those would fall within the red section, the Moorgate section and 60% would fall within the Liverpool Street portion.

342. If I went to your planning department, knocked on the door and asked for details of discussions, would there be a register of those? What is that?

*(Mr Rees)* These are the schemes that we know about that are yet to come in as planning applications. Developers frequently discuss with us the potential for developing individual sites in the City prior to making decisions on whether to submit a planning application. This is looking as far ahead as we can in terms of knowing what is likely to come forward in planning applications within the next 12 months to two years. Of those speculative schemes that are yet to become hardened into planning applications, the floorspace created by those would lead to jobs which would distribute 31% in the Moorgate end of the diagram and 69% in the Liverpool Street end. As we look further forward, the proportion of expansion in the Liverpool Street part of the diagram is greater than it is in the Moorgate area, which is not surprising because that is where the potential is for the cluster of tall buildings; whereas in Moorgate you are much closer to residential accommodation and therefore buildings are more likely to stay at their current scale.

343. What is the City fringe?

*(Mr Rees)* The City fringe is our understanding of the growth proposed by the Mayor for the opportunity areas either to the west or to the east of the City on that northern fringe. The 11% on the left would probably be more easily accessible from Farringdon Station than Moorgate but it is not accessible from Liverpool Street. However, the 89% on the right is what is accounted for by the Bishopsgate Goods Yard and the expansion of the Spitalfields area through those opportunity areas on the eastern boundary of the map which I indicated earlier. They would of course need to be served from Liverpool Street rather than Moorgate.

344. In terms of total floorspace growth, can we turn back to tab eight? What does that show?

*(Mr Rees)* In the salmon coloured bar on the left this shows the existing floorspace in the City, 7.54 million square metres. We can see the planning permissions and those that are under construction adding another 1.46 million square metres to that, another 19%. In our discussions on further off applications, we can see a total of 23% increase over the salmon colour on the left, taking us up to a total of 9.28 million square metres if all these schemes are realised.

345. Translating all those figures into what it is going to look like on the ground, can you go to tab ten, a view from Waterloo Bridge? Can you remind us what is there and in particular what is contemplated that is not there at the moment?

*(Mr Rees)* We do so much in tables, graphs and diagrams that I thought it would be useful to include a photograph and a photo montage showing the tall buildings that are either currently permitted or under discussion. All bar one of those currently shown, which is the spiral shaped one in the middle, enjoy planning permission and are ready to be built or have been constructed. The spiral one will be coming forward within the next couple of weeks to the planning committee. You can see those buildings just to the right of the centre of that picture form the new, high rise cluster in the eastern part of the City. St Paul's Cathedral is very much to the left of that. The building indicated alongside the arrow where Moorgate is shown is at the very northern end of the Broadgate development close to Liverpool Street Station. We must remember we are looking from the south west so one must not assume that that one tall building is near to Moorgate; it is not. Liverpool Street is closest to the area of activity and growth in terms of tall buildings and this give you a very graphic representation of how the City has grown in the eastern area.

346. Can I go to tab 11? You might be able to show us where that building is on the plan.

*(Mr Rees)* The one that appears in the photograph is the most northerly pink area in the lobe on the right hand side of the map. It is just at the top of Broadgate. You can see all the other red, new buildings are clustered around this eastern cluster lower down the map and that all of those are in the Liverpool Street Station ambit rather than Moorgate, where you simply have the two existing blue buildings shown as buildings over 100 metres in height.

347. Looking at tab 11, of those existing tall buildings, permitted or under construction or those where an application is contemplated, in broad terms, those are closer to Liverpool Street or Moorgate?

*(Mr Rees)* They are overwhelmingly closer to Liverpool Street.

---

 The Petition of Corporation of London with British Land plc
 

---

348. As the City planning officer, of those 93,000 extra jobs that are expected to be provided in the City in the Mayor's plan, is the majority likely to be near Liverpool Street or Moorgate?

*(Mr Rees)* Since the physical limitations of the Moorgate area preclude major expansion, they will have to fall within the ambit of the Liverpool Street Station entrance to this new station.

349. Is there anything else you would like to say about the eastern cluster of tall buildings or the potential to accommodate further jobs in the City and on its fringes?

*(Mr Rees)* These are not simply pipe dreams of developers. We are seeing these buildings under construction. We had a developer come back to the planning committee only yesterday to ask for a modest increase in the height of a project that he is hoping to begin within the next couple of weeks, the Heron Tower immediately adjacent to Liverpool Street Station. We see construction activity in the final phases of Broadgate. We see keen interest to go ahead as soon as vacant possession is obtained on other high rise buildings in that cluster and the occupation is coming in to fill those buildings as they are being constructed. The best buildings being constructed are attracting the best tenants.

350. Having looked in broad terms at economics, consequential demand for offices planning, policy response and the developers' response to those planning policies, what role do you anticipate Liverpool Street or Livergate Crossrail Station is going to play in facilitating that expansion?

*(Mr Rees)* Livergate is a very complex station. It has to play two important roles of improving passenger transport interchange with Liverpool Street Station and the other modes of transport at that point and to some extent at Moorgate Station. From the City's point of view, the most important thing is that it provides as efficient, and hopefully more efficient, a means of getting to and from employment in the City. The bulk of the people who are already working in the City using this combined station will prefer to come out via Liverpool Street. This is the entrance that is most easily accessible from their place of work. Moorgate will not offer them the same convenience. If we were to find that we had designed a station at Liverpool Street that could not accommodate reliably current levels and certainly not the area of growth that is anticipated, we would be having to send people out of the wrong entrance to the station.

It would be the equivalent of asking Members of Parliament not to exit at Westminster Station, purpose built with growth potential underneath this very building, to come out in Trafalgar Square and walk down Whitehall in the rain.

351. Turning to Liverpool Street, what are the consequences for the City if the worst fears turn out to be right and there is congestion at Liverpool Street Station and people do not find it easy to exit

or enter the new Crossrail facility? What will the consequences be for the City and its planned growth?

*(Mr Rees)* The greatest problem that we face in London in the financial sector is that the majority of the firms working here are owned by companies based in other cities around the world. They do not have to be in London unless we provide what they need. We do provide the skills base. We are able to provide the accommodation they need. We must also provide the transport which they need to be able to utilise this business centre efficiently. If they are unable to locate in the core, which is where a large number of main international companies appear to wish to be, they will not simply go to some other part of London. Our experience has been that they then look to New York, Chicago or Frankfurt or one of the other international centres that can offer them a home that does have the facilities they require. The danger is not that it might drift from one part of the metropolis to another but that we would lose it for UK plc altogether and it would go to another place closer to the home of the company operating the facility.

352. As the City planner seeking to make provision for this growth and seeing these tall buildings appearing in the eastern cluster closer to the Liverpool Street end, in terms of not only congestion but of impression, what impression do you consider is likely to be created if the passengers from this new railway system are directed through the existing ticket hall?

*(Mr Rees)* I do not believe that they will find it acceptable that in order to get out of the station after getting off the train on Crossrail they have to be processed through the existing transport infrastructure with people arriving from other Underground lines in difficult collisions at corners in the booking office and then have to fight their way through gates which are currently near to capacity; then, even after they have done that, to be thrown out into the station concourse of the busiest station in the City and have to fight their way up escalators to get to the street. I believe that people using a modern facility like Crossrail will anticipate that when they arrive at one of its principal stations in the City they will be able to get out efficiently and quickly and start the final part of their journey to their office.

353. If they cannot, what effect is that going to have on the City's economic role?

*(Mr Rees)* A lot of those people who would be fighting their way through the crowds have the positions in companies to decide where they are located. It will not be too much frustration on their part that will cause them to reconsider whether London is the best place for their operation.

354. Is there anything else you wish to add before cross-examination?

---

 The Petition of Corporation of London with British Land plc
 

---

(*Mr Rees*) No.

355. **Sir Peter Soulsby:** You have drawn a distinction between the Liverpool Street Station ambit and the Moorgate ambit. I wondered whether you would like to elaborate on that. Is it not the case that that distinction is more apparent than real? As one gets further away from the two stations the choice between the two is pretty much of a muchness. The lines drawn on this map are certainly not as firm as they appear.

(*Mr Rees*) That is true. Some of the ambit from Moorgate Station will be taken by Farringdon Station, the next station down the line. If you can imagine another dot to the left of Moorgate Station just outside the City boundary, more or less in the angle you see to the left, that will create another circle which will overlap Moorgate and that will take some of that catchment. However, the point that we are making is that the bulk of the growth in the City is much closer to the Liverpool Street Station exit than the Moorgate exit. There will of course be an overlap. It will depend whether you arrive from the east or the west which station you get off at but nevertheless Liverpool Street remains the closest entrance for the bulk of the growth in the City.

356. Is it not though fair to say that what is described as much closer is in this case perhaps 400 metres, the difference between the two stations, a walk of a few minutes?

(*Mr Rees*) You then have to balance that with the numbers of people moving through the City, the congestion of the streets inevitably, with large numbers of people arriving during the rush hour. People literally do use every square foot of the pavement in their walk to the office from the station. If you make that journey more complex and require them to take more redoubles, bearing in mind that they are not able to walk in straight, diagonal lines and are going to have to go around blocks to get there, you are making their journey that much more difficult. Minutes do count, especially for people travelling from meeting to meeting. We are not just talking about people coming to work at nine o'clock in the morning and leaving at five in the evening. We are talking about a lot of people who work from numerous, different offices throughout London to whom a few minutes count quite greatly.

357. **Mr Binley:** I hope you do not get the impression that I think barristers might overstate a case. That would be far from my mind but I am concerned about the difference between permitted planning in tab nine and discussions. If we take any trend from permitted planning it would suggest, only very slightly, that the benefit is to Moorgate's favour, but when I see you talk about discussions, which are slightly looser to say the least, it swings heavily in Liverpool Street's favour. Could you give me an idea of what you mean by discussions because if we do not have an understanding that there is real meaning in your discussions we might be led to believe that perhaps they are presented for the purposes of

making a case—forgive me; I am not saying that you are misleading us in any sense at all—rather than to mirror reality.

(*Mr Rees*) The Corporation of London is unique in local authorities in this country in dealing with applications through negotiation prior to the submission of planning applications. We deal with development proposals with developers in discussing with them whether they are or are not in accordance with our policies. Because we know that we are a business area and therefore the presumption is in terms of permission of business expansion, we are able to guide them through to an application which will be 99% certain of approval. Of course it has to be put before the elected members and the recommendation has to be placed before them. They have to weigh the evidence but we approve over 99% of all applications in the City following lengthy negotiation.

The discussions I am talking about are those negotiations which take place before the application is made. That will be a well developed scheme. This is not simply somebody coming in off the street saying, "I have this idea of putting up an office block." That we have discounted. These are people with whom we are already deeply in negotiations, who have developed the schemes and who are waiting to put in planning applications when we tell them we believe they are in accordance with our policies.

358. On the strength of your professional standing, you would back that 99% figure?

(*Mr Rees*) Yes.

359. Can I move to tab 11? It as said of the Indian northern border that it was a very thick pencil line on a very small map and that sometimes gave a rather odd impression. This map could be misleading in terms of the placing of stations because we are simply talking about Liverpool Street and Moorgate. Are there any other stations that impact on this catchment area either outside of the boundary you have drawn or to the south of it which might have some import on the pedestrian traffic flow that you talk about?

(*Mr Rees*) If I can turn you back to tab one you will be able to see all the stations in the City, the underground stations shown by the London Transport roundel and the old British Rail symbol showing the above ground stations. Looking at the line of Crossrail at the top of the map, you will see Moorgate and Liverpool Street fall within the City serving the Crossrail proposal and Farringdon Station is just to the left of the words "Smithfield Market" to the left of the picture. That stop on Crossrail will have some impact in terms of taking some movements that are going to and from the western part of the City, some people who might otherwise have chosen to use Moorgate, for instance, but it is too far from the Liverpool Street exit to have any impact on those movements. The next station beyond on Crossrail is Whitechapel which is off the edge of this map. It is very unlikely that the new Whitechapel Station will have any

---

 The Petition of Corporation of London with British Land plc
 

---

impact in providing a service to the eastern part of the City. In terms of Crossrail movements, we really can focus our attention on the growth prospects, on these two exits from this one station. Of course a lot of people arrive by other routes into the City from the south who will not be considering using Crossrail. Of course a lot of people are on the Underground network and will remain on it. In terms of the impact of Crossrail and its utility to the City, we are addressing these two entrances to this new, combined station.

360. **Mr Binley:** I am sure this is a very dated view. I tend to be quite old and that impacts upon my thinking. We had things like Centrepoint which remained empty for a considerable time and tended to be a balance sheet asset rather than a building for use almost. At least that was the thought. There is none of that sort of development, I assume, that goes on in the City any longer?

**(Mr Rees)** The banks learned their lessons quite a while ago about lending money on developments that were purely being put up for those speculative purposes. Buildings in the past have been put up either as an act of speculation for the long term or even as ego symbols, if you like. The buildings that are going up in the City are either largely owner occupied and therefore do not go up until a particular person wants to put up a building or are being designed for a very specific sector of the market. They are not being put up in the hope that one big tenant is going to be coming along; they are looking at buildings which are sub-divisible to accommodate the known requirement. The vacancy rate in the City is around 12%. That is good in the sense that it provides ready provision for people to move in. When you get up above 20%, you start to get worried. When you go through those periods you know the banks have got it wrong, the developers have got it wrong or it is being done for the wrong reasons. We are not in that kind of era at the moment. Although the press love to quote Swiss Re as an example of a building that has been built but has not been fully let, you are looking there at a very specialised example. It was built by a particular owner occupier. They wished to expand into the remainder of the building in the medium term and therefore they are looking for very high quality tenants to take small amounts of space for a very short period and at a high price. In other words, they have specialised their market greatly. It is not just space waiting to be let, so the impression that might give you in the press would not be correct of the general market in the City at present.

361. **Chairman:** Further to a question which Brian has just asked you there, you talked about the City being unique in the fact that nearly all the negotiations are concluded before it gets to a decision. I think you will find that many of the local authorities up and down the length and breadth of Britain are also engaged in it, although, I have got to admit, on not such a grand and professional scale as the City of London. What interests me is that one of the terms you used in your earlier answer was about

speculation. Now, how much does that play a part because I know from my own experiences at local level and in industry and the rest of it that many developers speculate quite a lot about what can be done with particular sites and that actually, when the end product arrives, it is usually quite a bit less than what their expectations were in the first instance, so how much does speculation play a part in the actual figures you have produced in the documents here today?

**(Mr Rees)** In terms of office accommodation, we find it very rare that a developer chooses to build less than he is permitted. Usually it is a case of the other way round where we have to try and rein them in.

362. **Chairman:** But it sometimes tends to be a lot more and that is what I am trying to get at.

**(Mr Rees)** Well, we find that the accommodation that is being built on site in the City is along the lines we predict. We have considerable experience and, because we are focused and specialised in the kind of accommodation of settling in the City, we have a very clear idea of what can be accommodated on the sites, so, even before we get to the point of a final permission on a site, we are very clear about what its capacity is in planning terms and in development terms.

363. **Chairman:** So it is fairly accurate?

**(Mr Rees)** Yes. That might be very different if you were looking at a mixed-use development or a retail development or especially a residential development.

364. **Chairman:** The other question I wanted to ask you also was the projections on growth, I think it was in tab 4. The figures you gave were from 1970 to 2001 and showed 7%, I think, and you have predicted the need for even more. There have been certain decisions taken in the international finance world since then which have put centres in places like Frankfurt and other places, so does that not mean that there will be less growth or are you fairly confident that the predicted growth level in other parts of your evidence today will still go on?

**(Mr Rees)** I am. In fact you mentioned Frankfurt as an example. I think Frankfurt is an example where Frankfurt had a policy to build buildings which they thought the international financial market would occupy. They put in place transport, they put in place all sorts of effective measures to get banks to move to Frankfurt. It is now a market town with skyscrapers. It does not have the other attributes of a world city which London can offer. It does not have the nightlife, the culture, the education, the skill base and, above all, it does not have people; they live in villages and they commute in every day, so they do not have any activity in the centre of their city, in other words. Frankfurt have found that they cannot take the role that they would have liked to have taken from London, so simply providing it is only part of the equation. At the end of the day you have to be able to prove that you are already a success and that you are a rounded world city and it is one of those cases where it is almost impossible to

---

**The Petition of Corporation of London with British Land plc**

---

create it. It is not very difficult to lose it when you have got it if you do not play your cards right and do not plan properly though and, in London's case, we are trying to hang on to something where we are an acknowledged success, envied by many others around the world, and it only takes the slightest mistakes in that process for that to slide away from us because others are waiting hungrily to take it.

365. **Chairman:** So are you very confident about the growth predictions?

**(Mr Rees)** I am, provided we can get our planning right.

366. **Mr Liddell-Grainger:** I am intrigued about the employment distribution. You have included the City fringes of Canary Wharf. Is it fair to say that you are competing head to head with Canary Wharf, the fringes, and the area outside the City of London? Do you see them as competitors?

**(Mr Rees)** To some degree of course there is internal competition, but Canary Wharf depends on the City and it is a satellite. At various times in history new centres have been developed around London. In the 1970s Croydon was developed. Croydon was a satellite of central London, it took the overflow from central London and London could not manage without it. Canary Wharf is the same now. It provides accommodation for firms that cannot find space in the square mile or do not have a need to be in the very centre of London depending on the kind of activity that they are having and the amount of face-to-face meetings they have, that kind of operation. Similarly, with the City fringe, there is scope for people to move further away from the centre and to expand into those areas. The City is not saying that everything must be within the square mile by any means, but we have to provide enough accommodation to keep the core of the activity healthy.

367. **Mr Liddell-Grainger:** One of the things which strikes me is that the employment of the City between 1971 and 2001, and there are exceptions, but there are enormous fluctuations. The height was

2000 at 256,000 and it has gone down to 232,000, but in 1987 when we had the crash, it went down dramatically from 222,000 to 174,000. It is a bear or a boom market, is it not? One of the problems is that you are creating speculation to create the growth, but yet in a volatile market at all times.

**(Mr Rees)** That is why we averaged out the City employment in decades for you because it is, as you say, a switchback with, depending on development cycles and whether banks are prepared to lend on development, depending on the demand and of course the supply never comes at the same time as the demand, there is always this lag in it, this always produces great volatility and of course the international financial markets.

368. **Mr Liddell-Grainger:** For all you are saying that you want developers to be able to build with the end users in mind, in fact a lot of it is in fact speculation.

**(Mr Rees)** There has to be a degree of speculation, that is correct.

369. **Mr Liddell-Grainger:** Can you say what percentage, given that there has been a decrease, quite a large decrease, in City-type employment and in fact in, yes, all other employment within the City, how much of this new development has got potential end users? Have you got any idea, and you may not know the answer?

**(Mr Rees)** Well, as I have pointed out, the vacancy rate on currently constructed stock is about 12%.

370. **Mr Liddell-Grainger:** Is that going up or down?

**(Mr Rees)** That is going down slightly at the moment. It peaks at about 13% and it has dropped back now to about 12. We regard eight as the lowest healthy vacancy rate to allow scope for people to move.

371. **Mr Liddell-Grainger:** After 1987, what was the percentage rate after the crash?

**(Mr Rees)** After the crash it went up above about 26% at one stage and there were American cities where it went over 30% and they survived, just.

**Chairman:** Mr Elvin?

---

*Cross-examined by Mr Elvin*

372. **Mr Elvin:** I need to follow up some of those points, if the Committee please. Mr Rees, can I just check with you, that, so far as the supply for office accommodation is concerned, you have shown the Committee part of the Mayor's plan and I think we have it at your tab 14. I think it is Exhibit PWRN and if we go past the photocopy of the cover page, we get to the table, 'Demand for office space, jobs and floor space', and then we have got on the next page, 'Indicative sub-regional population'. It is right, is it not, that the Mayor, or the GLA, in its assumptions for growth, does not disaggregate the City from the Isle of Dogs and that the areas which are taken are much broader than that? You have the central area, the east, the west, the north and the south.

**(Mr Rees)** He does disaggregate within his sub-regional guidance.

373. **Mr Elvin:** Therefore, the headlines figures though are a much broader-based set of figures?

**(Mr Rees)** Yes, but he then does give specific figures for the Isle of Dogs in his sub-regional guidance.

374. **Mr Elvin:** In terms of the Isle of Dogs, and the Isle of Dogs appears to me perhaps to share some of the characteristics of Frankfurt in terms of the absence of nightlife or at least the sort of nightlife that people with families would be interested in, it does not have the characteristics of the City in

---

**The Petition of Corporation of London with British Land**

---

terms of its access to facilities and services in the evening and one must travel a little further afield in order to get those?

*(Mr Rees)* Yes, one would go to the West End, as one would from the City.

375. **Mr Elvin:** Indeed. The Isle of Dogs has the benefit though, does it not, not only of now being on a tube line, but it is proposed that there be a Crossrail station on the Isle of Dogs as well in the north dock close to Canary Wharf?

*(Mr Rees)* Yes, that is true.

376. **Mr Elvin:** So in terms of an alternative location for office development rather than the City, if there is any issue about not providing quite the level of choice that an office developer might want, the Isle of Dogs will offer an alternative with much faster transport links now into the West End?

*(Mr Rees)* Not necessarily because of course it is surrounded on three sides by the river, it is landlocked and it is gridlocked frequently now by motor vehicles because a much higher proportion of people accessing Canary Wharf use cars rather than public transport. Equally, it is that bit further from the West End and you have to travel through the City to get to the West End from Canary Wharf.

377. **Mr Elvin:** How many stations will it be on Crossrail?

*(Mr Rees)* It is two stations beyond the City, Whitechapel and then Canary Wharf.

378. **Mr Elvin:** So it will only be four or five stations to get into the West End on Crossrail, will it not?

*(Mr Rees)* Indeed, yes.

379. **Mr Elvin:** So if there is any residual concern about there perhaps being any deterrent effect on the City, the Isle of Dogs offers at least as an attractive an alternative location these days as Frankfurt?

*(Mr Rees)* Yes, but Canary Wharf itself suffers if the City suffers by being less than 25% of the amount that is in the City and, therefore, being a satellite of it.

380. **Mr Elvin:** It will be less of a satellite once Crossrail is in because the connections into the City and the West End will be very rapid.

*(Mr Rees)* That depends on where people are coming from. You have to remember that a lot of people commuting to Canary Wharf will not be coming via Crossrail because they are not coming in on the westerly axis, but they are coming in from the south-west via Waterloo, so it will not do anything for their journey.

381. **Mr Elvin:** Well, at least we will have the benefit of established West End and City facilities which clearly Frankfurt has not been able to provide. We are simply providing better accessibility to an established centre, a world city.

*(Mr Rees)* Yes, it is the London offer that is important.

382. **Mr Elvin:** Can I just go to some questions of clarification relating to the proposed Crossrail station, and you will forgive me if I do not enjoy the word “Livergate” because it sounds a little bit too much like raw meat! Perhaps Mr Bennett can put up a plan of the proposed location of the station for me. Mr Rees, lest there be any doubt, Moorgate is the western entrance to the Crossrail station and Liverpool Street is the eastern entrance to the Crossrail station. The station in fact runs between the two.

*(Mr Rees)* That is correct.

383. **Mr Elvin:** So someone getting off a Crossrail train is faced with making the choice of whether to go to Moorgate or Liverpool Street actually on the platform and not in any other location?

*(Mr Rees)* That is correct.

384. **Mr Elvin:** What the plan shows is that of course the route to Moorgate from the platform is a very direct, linear one, does it not?

*(Mr Rees)* Well, both the exits are linear to a large extent. You are flowing either west or east.

385. **Mr Elvin:** To get to Liverpool Street, as Mr Binley noted earlier, there is then quite a long tunnel which we can see coming up beyond the top end of the station which equates to the lip of the tunnel which we can see on your figure A.

*(Mr Rees)* Yes, but heading more or less in the same direction, yes, that is true.

386. **Mr Elvin:** Ms Lieven will pick up with your colleague, Mr Weiss, the comparative distance within the details. I am only dealing with the general impressions that you dealt with, but in fact the route from the platform up to Liverpool Street is lengthier and more circuitous than the route to Moorgate from the platform, is it not?

*(Mr Rees)* It is lengthier, but I do not think it is necessarily more circuitous. It depends where you are going when you get above ground.

387. **Mr Elvin:** We will leave that point for the Committee to digest. Can I ask that your Figure A be put up please because I just want to deal with one of Mr Binley’s questions about access for those who are less able to take the tunnel. What you did not tell Mr Binley, Mr Rees, is that there are separate accesses, MIP accesses, for those who are less able to use the lengthier route. There are direct accesses for those who are mobility impaired via lifts straight to the street, are there not? If we look at the running tunnels for Crossrail where the number ‘125’ appears, there are lifts provided at platform level straight up to Old Broad Street.

*(Mr Rees)* That is correct. We are simply seeking equivalent facilities for the able bodied.

388. **Mr Elvin:** Sorry, I am dealing with Mr Binley’s question, you will forgive me, Mr Rees. When Mr Binley asked the question, he might have obtained the impression that there was no special access for the mobility impaired. There is direct access because

---

The Petition of Corporation of London with British Land

---

one needs simply to go from either platform at grade, at level access, to those escalators and you get straight up to street level and the journey, therefore, is very straightforward. There is also a similar provision, though not shown on your plan, at Moorgate for access for mobility-impaired passengers for platform level straight up to street level.

*(Mr Rees)* Yes.

389. **Mr Elvin:** Mr Binley, I hope that deals with that point.

390. **Mr Binley:** Yes, it does and it clarifies a point that I was concerned about.

391. **Mr Elvin:** Could Mr Bennett please zoom in on ticket hall B please, and this is still Figure A of Mr Laurence's plans.<sup>5</sup> In terms of what will happen for those who do not use the mobility impaired exits, they will come up the tunnel and join the existing concourse at point M. Now, it was suggested, I think, that there was simply a breaking through of the wall at point M, which the Committee will see on their site inspection tomorrow, but in fact there are going to be greater improvements in the ticket hall, are there not? There is an office just at the bottom of where it says 'point M' which are going to be removed, thus widening the circulation space of the concourse. That is visible at least on Figure A as a dotted line and I think it is visible on the screen. There is currently an office there and that will be taken out to widen the concourse. Were you aware of that?

*(Mr Rees)* I am not clear whether actually widening it or creating a route around behind it, a relief route to get to the Circle and Metropolitan Lines, but Mr Weiss will be able to advise you better on that matter.

392. **Mr Elvin:** Firstly, it is to be removed and, secondly, the Committee can see it tomorrow and they will also see the point at which it is proposed to break through into the existing ticket hall, so, if that is right, it is not just a question of breaking through the wall and doing nothing else, is it?

*(Mr Rees)* I am not in a position to be able to answer your question.

393. **Mr Elvin:** Very well. Can I come to the question of development locations and the like and can I just pick up an answer you gave, I think it was, to Sir Peter earlier or maybe to the Chairman about comparative locations of stations and could we go please to your tab 1 and the map of existing rail and Underground stations. You suggested that there might be some take-up of Moorgate area passengers by Farringdon and you pointed to the Underground symbol just above the word 'market'.

*(Mr Rees)* No, the Underground symbol to the left of the word 'Smithfield'.

394. **Mr Elvin:** Well, I want that clarified because it seemed to me that you might have been referring to the other.

*(Mr Rees)* No, that is the Barbican.

395. **Mr Elvin:** That is the Barbican tube which is not part of Crossrail?

*(Mr Rees)* That is correct.

396. **Mr Elvin:** In order for anyone in the Moorfield area to access a Crossrail station to the west, the Underground symbol which is diagonally above 'Smithfield', above the market, that is the easternmost ticket hall of Farringdon?

*(Mr Rees)* Yes, that is correct.

397. **Mr Elvin:** Can I ask for some clarification about the opportunity areas unconstrained by the policies for conservation reviews where you expect higher buildings to be permissible. That was the plan at the end of your tab 15, the east cluster versus the north-central area. Again it is a point of clarification so that the Committee understands the context. So far as the constraints on development are concerned, and this is part of the problem of course caused by the division of local authority boundaries, you have only shown the constraints in the eastern cluster which lie within the City of London so far as the conservation areas are concerned, have you not? You have not gone beyond the City boundaries?

*(Mr Rees)* That is correct.

398. **Mr Elvin:** Sir, I will just have this put on the scanner and it is from the Environmental Statement. It is not in the non-technical summary, but volume 4A of the Environmental Statement, map C7I. We will make sure that the Committee have a copy. Mr Rees, just to give the Committee the context, we can see Liverpool Street as the big, purple rectangle in almost the centre and we can see the conservation areas in yellow in the City just to the right, but there the City boundary ends, as we can see on your other plan. If we go into Tower Hamlets, we can see that a very large proportion indeed of the area immediately across the City boundary in the same area as indicated by the eastern cluster is a conservation area. There is a scheduled ancient monument which we can see in dark brown, there is Spitalfields Market which is Listed and various other Listed buildings in the area of Spitalfields, so there are considerable constraints outside the immediate boundaries of the City which do not appear because you have just produced the City constraints.

*(Mr Rees)* But it also indicates the large opportunity areas in the Bishopsgate goods yard at the top of the map and Spitalfields Market area where you have that large, black development shaded.

399. **Mr Elvin:** I do not want to spend a lot of time on this particular point because clearly there are a number of opportunities across the whole area. I just do not want the Committee to be misled, and I do not mean that in any pejorative sense, by a plan

---

<sup>5</sup> Committee Ref: A2, Exhibit A—British Land plc Liverpool Street Station Plans..

---

**The Petition of Corporation of London with British Land**

---

which only indicates the constraints up to what might be regarded as an artificial administrative boundary.

*(Mr Rees)* I hope the Committee understand that I can only represent the policies within the square mile of the City of London as that is where I am the Planning Officer. Of course there are various constraints over the boundary and indeed it is for those authorities to decide whether they wish to have development or not. That is not something which I can comment upon.

400. **Mr Elvin:** Can I ask you about discussions. I was going to put to you the point which the Chairman put to you. It is entirely common practice for pre-application discussions to take place not only amongst the London authorities and prospective developers, but for planning authorities throughout the country.

*(Mr Rees)* I think the difference is the degree of certainty and the degree of negotiation which we carry on prior to an application being lodged.

401. **Mr Elvin:** Of course part of the problem might be the inconvenience, particularly with large schemes, so that you may find that the Office of the Deputy Prime Minister decides to intervene and call the proposals in for a public inquiry.

*(Mr Rees)* I am pleased to say that happens very rarely.

402. **Mr Elvin:** It has happened with some major developments in the recent past, has it not?

*(Mr Rees)* It has, yes.

403. **MR Elvin:** Would you like to give some examples?

*(Mr Rees)* The first Heron Tower application, which was one of the tall buildings in the cluster, is one of the key schemes that came in for his determination, but of course that then gave a degree of certainty to the cluster because the concept of the cluster was established at that public inquiry and subsequent applications which have come in have not been challenged.

404. **Mr Elvin:** The only difficulty is of course that the larger the development, the greater the likelihood there is of controversy and, therefore, of uncertainty because of the risk of calling, even if that particular cluster has been rendered more certain.

*(Mr Rees)* Luckily, in our case the area where there is likely to be development more out of the current order, as it were, larger than currently exists and within a well-defined cluster and the heights of those buildings within that cluster are now well defined even by the capping that has recently been declared by the Civil Aviation Authority, we know the scale of it, we know the bounds of it, we know the height of it and, in those circumstances, then there is less grounds for the planning system to be surprised.

405. **Mr Elvin:** Do you have current figures that you can provide for us of office and business premises vacancy rates within the City's boundary?

*(Mr Rees)* I told you that the vacancy rate for new property is approximately 12%.

406. **Mr Elvin:** And for old property?

*(Mr Rees)* I cannot tell you that because it is not possible to know where the property is available. Sorry, 12% is the overall vacancy rate, I am sorry, and I must make that clear. Sorry, I misled the Committee. The vacancy rate for the City of London is approximately 12% for all available property. A small part of that is brand-new, grade-A space, so I was giving you the more generous figure of the 12% for everything. There is substantially less of the new stuff.

407. **Mr Elvin:** On the question then of Liverpool Street and the issues you have identified, can I just ask for your clarification on these points. Mr Laurence referred in opening to the issue of existing crowding at Liverpool Street. Is that the perception of the City?

*(Mr Rees)* Insofar as the station has to be closed occasionally because of overloading, yes.

408. **Mr Elvin:** And yet, at the time of the adoption of the UDP, which was 2002—

*(Mr Rees)* Yes.

409. **Mr Elvin:**—the Crossrail Bill had yet to receive the support of the Government and indeed the Crossrail project had yet to receive the support of the Government, which was announced a year or so later, and the Bill of course was only deposited last year, so the UDP was adopted prior to the Government's support for the current project.

*(Mr Rees)* Yes, but it was certainly something that was envisaged and hoped for.

410. **Mr Elvin:** That I understand, but the UDP could not do other than support Crossrail, but it did not know at that stage what the final position on the project would be?

*(Mr Rees)* Correct.

411. **Mr Elvin:** Yet the UDP does not seek to impose constraints on development in the City, particularly in the area of Liverpool Street, because of any problems with Liverpool Street Station, does it?

*(Mr Rees)* No.

412. **Mr Elvin:** Members of the Committee will look in vain at your policies to see any indication that developments should somehow be constrained, even though at that stage it was not known whether the Government would bring forward the Crossrail Bill.

*(Mr Rees)* But, in deciding what the UDP should do, we had to make two assumptions. If Crossrail does not go ahead, then it is not a specific problem of Liverpool Street Station, but it is dispersed through a wider range of stations because people are arriving in different ways. If Crossrail were to go ahead, it should be provided in a manner which was adequate for the City's needs.

---

The Petition of Corporation of London with British Land

---

413. **Mr Elvin:** I am sorry, you are misunderstanding my line of questioning. All I am suggesting to you is that the City did not, at the time of adopting the UDP, see the situation at Liverpool Street as so grave that it needed to adopt a policy or even refer to the fact that you should be careful in granting planning permission for major developments because it would aggravate a problem at Liverpool Street. We do not find that, do we?

**(Mr Rees)** I do not believe at that time there had been examples of closure of the station or that a problem existed.

414. **Mr Elvin:** This is April 2002?

**(Mr Rees)** Correct.

415. **Mr Elvin:** We do not find any policies in your UDP, do we, Mr Rees, which say that major investors in the City in terms of big business, financial services and the like should make a contribution towards upgrading Liverpool Street, do we?

**(Mr Rees)** They should make a contribution to upgrading transport and that is contained within the Supplementary Planning Guidance on section 106 agreements, so they do so.

416. **Mr Elvin:** So do you assess upgrading to Liverpool Street and, if so, how?

**(Mr Rees)** We have done. Certainly the pedestrian facilities in terms of the subway beneath Liverpool Street and access to that subway has been one issue that has been looked at and the pedestrian movements to and from the station, we are looking at a major scheme to enhance the streetscape around to allow better pedestrian access to that station, all of those things which improve the interchange that are within our control.

417. **Mr Elvin:** That flurry of answers conceals the fact that they are all dealing with matters on the surface or outside the boundaries of the station. You do not require that contributions be made in order to assist the upgrading of facilities to increase capacity within the station?

**(Mr Rees)** The sort of contributions that would be available would come nowhere near touching the issues.

418. **Mr Elvin:** So you are content, as a planning authority, to allow your office and business developments to grow without restraint in policy terms and without, at the time of the plan, adoption of a policy of contribution to Liverpool Street?

**(Mr Rees)** At the time of the plan adoption, there was no problem apparent.

419. **Mr Elvin:** As I read your local development scheme, and I am not going to trouble the Committee with it unless we have to go to it, the local development scheme published under the provisions of the new Planning & Compensation Act was only issued last June. Is that right?

**(Mr Rees)** Yes.

420. **Mr Elvin:** It simply carries forward the Crossrail policies we see in the UDP.

**(Mr Rees)** Except that, by that time, we had been led to believe that there would be an enhanced station at Liverpool Station with a separate entrance to and from the ground.

421. **Mr Elvin:** I am going to come to that. I am going to question whether that is accurate as a matter of fact. Your LDS is June 2005, is it not?

**(Mr Rees)** That is correct.

422. **Mr Elvin:** We will come back to that particular point about what you knew and the consequences of that in a moment, but you still do not have any policy, whether it is a UDP policy or some form of informal policy, which seeks to constrain development unless and until Crossrail is secure?

**(Mr Rees)** Without Crossrail, it is not a serious problem.

423. **Mr Elvin:** So you perceive, do you, the level of development that you expect absent of Crossrail and the implications that has for what Mr Laurence described as an existing situation at Liverpool Street to be acceptable in planning terms?

**(Mr Rees)** It can be accommodated through use of the various stations in the City, yes.

424. **Mr Elvin:** Therefore, the fact that new development is for ever increasing and putting pressure on Liverpool Street is something which you expect Liverpool Street to cope with without any assistance from the City? Is that right?

**(Mr Rees)** Absent of Crossrail, yes.

425. **Mr Elvin:** So it becomes quite clear from that line of answers, Mr Rees, that Crossrail is being expected not only to redistribute passengers around the network, but to deal specifically with the problems which already have built up at Liverpool Street, not just in the macro level, but in the very local level as well?

**(Mr Rees)** No, it is needed to cope with the effects it causes by the redistribution which occurs as a result of the building of Crossrail.

426. **Mr Elvin:** Well, your entire case then pivots on Crossrail making a critical difference to the amount of passengers going through Liverpool Street.

**(Mr Rees)** From the planning point of view, yes.

427. **Mr Elvin:** Can I ask in general terms whether you accept that there would be a balance to be struck with a degree of overcrowding and a degree of beneficial development which aggravated the overcrowding because you might see that there are other benefits which outweighed that disbenefit?

**(Mr Rees)** People accept that in a busy City there will be a degree of overcrowding on public transport. What they find difficult to accept is that the station will be closed when they arrive at their place of work.

---

The Petition of Corporation of London with British Land

---

428. I am sorry, do you accept the general proposition, though, that simply because you may decrease the quality of the experience of going through the ticket hall, or however you want to phrase it, just because it becomes a little more crowded in the ticket hall and there may be a little more congestion, you do not see that as a reason to refuse planning permission? You would regard that as acceptable because of the other benefits the development might bring.

*(Mr Rees)* If there were simply more crowding and nothing worse than that I would not see that as a problem.

429. Would it be the case that you would accept that the same principle would apply to Crossrail?

*(Mr Rees)* Provided something works and has adequate capacity to cope with what it is creating and the growth allowance for that new project, yes.

430. Would you accept, therefore—and I am only putting this on a hypothetical basis, because the Committee will need to see all the other material first—that if Crossrail does deliver benefits which, of course, extend well beyond Liverpool Street Station, if they caused a degree of additional overcrowding at Liverpool Street in one or more of the ticket halls, providing that did not make the station unworkable, the fact that the situation might be aggravated in a number of locations would not, taken with the overall level of benefit it would achieve, justify necessarily the steps that you are suggesting should be taken? It is only if it reaches the extreme position of making the station, effectively, unable to operate.

*(Mr Rees)* Correct, even if that be on an occasional basis.

431. Can I ask you about what the City knew? You said to the Committee earlier that it came as a surprise at the time of Bill deposit that the new ticket hall, the arcade ticket hall, was removed from the scheme, and that what the City has done since then flows from that.

*(Mr Rees)* Yes.

432. The fact is the City was told in December 2003, was it not, that there was no longer a business case for that ticket hall? That is right, is it not?

*(Mr Rees)* I do not know. I am not aware.

433. Can I have circulated—

*(Mr Rees)* I know the safeguarding line showed one.

434. The safeguarding line was imposed when -1991?

*(Mr Rees)* It was still in place at the date you mentioned.

435. This is of a meeting at which Mr Weiss was present. I am giving him advance notice by putting the point to you because you said it came as a surprise to the City.

*(Mr Rees)* No doubt he will be grateful.

436. You will see this is a meeting note with the Corporation on 3 December 2003.<sup>6</sup> We can see that amongst the attendees were Joe Weiss, who is giving evidence. If you go to the next page, the second page, 2.6, under the heading “Buses and Taxis”, two-thirds of the way down there are two references to Richard Davies. The second says: “Richard Davies advised that the arcade ticket hall did not currently appear to be justified in terms of the business case”.

*(Mr Rees)* Yes.

437. So there was at least a warning in December 2003 from Crossrail that the ticket hall did not stack up in terms of the business case.

*(Mr Rees)* The matter may have been mentioned at a meeting. I was not aware of that and it certainly had not caused alarm bells to ring so it cannot have been made very forcibly.

438. Mr Weiss is the Strategic Transportation Director.

*(Mr Rees)* That is correct.

439. Can I now have circulated meeting notes from 21 February of last year, at which Mr Weiss was also present?<sup>7</sup> It is a meeting with the Corporation of London on 21 February. Mr Weiss was present. This is a week or so after the deposit of the Bill and the Environmental Statement. If you go, please, to 1.14: “JW [that is Joe Weiss] advised he was pleased that the arcade was no longer included in the scheme.” Yes?

*(Mr Rees)* That is what it says.

440. Whatever one wants to read into that, and I am not going to ask you any questions about what one reads into that, the very least one can get out of that is that he, the Strategic Transportation Director, was aware within a week that the arcade hall had been removed from the scheme and was not in the Bill.

*(Mr Rees)* I can only comment on the words in front of me; you must ask him to comment on that.

441. Were you aware of that at about that time?

*(Mr Rees)* I was aware that there were discussions about the access to street level and to the areas of safeguarding. I was not aware that a separate entrance to the air, if you like, had been dropped from the scheme. At no point was I made aware that the only way out of the Crossrail towards Liverpool Street would be into the existing ticket hall.

442. The only way out is not via the ticket hall; there are four ways out. There are ways out to Moorgate and the two MIP.

*(Mr Rees)* I am sorry, the first into the ticket hall. You have to come out through the hall into ticket hall B.

---

<sup>6</sup> Committee Ref: A5, Crossrail Meeting Note with Corporation of London, 3 December 2003.

<sup>7</sup> Committee Ref: A6, Crossrail Meeting Note with Corporation of London, 21 February 2005.

---

**The Petition of Corporation of London with British Land**

---

443. If you are coming out through Liverpool Street and you are not using the MIP access, yes. There are four exits.

*(Mr Rees)* I am sorry, the others are at Moorgate.

444. Two are at Moorgate and two are at Liverpool Street. One is mobility impaired and one is the general access to the ticket hall.

*(Mr Rees)* I am sorry, I am talking about the large numbers of able-bodied people using Liverpool Street Station.

445. Just making sure we are absolutely accurate. Can I now have circulated, finally, (and this is my last question on this small group of questions) a letter from the Corporation of 17 March of last year, so just after a month after the meeting between Mr Weiss and Crossrail.<sup>8</sup> It is a letter from Mr Weiss, and the purpose of this letter is a review of the important points of concern which the City had following Bill deposit. If you look at the bottom of the first page, the penultimate paragraph: “Now the hybrid Bill is deposited we are keen to take up the Minister’s invitation and seek resolutions of our key concerns”. Then, in the last line: “There are an exceedingly wide range of issues ... could we please discuss our main concerns which are briefly indicated in the attachment to this letter.” Then Mr Weiss signs the letter. Then we have the attachment: “Issues of Major Concern to Corporation of London”. Whatever you know at this point we certainly know that Mr Weiss knew that the arcade ticket hall had gone. Can we just look at the penultimate page, which has on it “Finsbury Circus” and “Liverpool Street”? The concerns which are set out here do not touch on the loss of the ticket hall, do they? Perhaps you would like to read it through.

*(Mr Rees)* I do not see a reference to it, no.

446. The concerns are in four bullet points: construction process for works; construction methodology; traffic impact analysis, and the bus service stops and routes on which the buses are to be relocated during the works. We know that the issue of overcrowding was in the mind of Mr Weiss because it is in the last three lines, but that is in relation to issues arising from construction works and construction methodology. So we get a letter from Mr Weiss, the Strategic Transportation Director, who knows that the ticket hall has gone, setting out the major concerns of the City and not, in a single place, do we see any regret at the loss of the ticket hall, or any concern. Is that right?

*(Mr Rees)* With regard to this particular communication, that is the drift of what it is saying.

447. Thank you very much, sir.

448. **Chairman:** Thank you very much, Mr Elvin. Mr Cameron, I presume you will want to come back with the witness, but not today.

449. **Mr Cameron:** You presume correctly, sir.

450. **Chairman:** If we can arrange that with the Clerk, we can do that as best suits the Committee. Mr Elvin, just to answer a few of the things that you have requested. The first thing is you did show us a slide from the Environmental Statement a little bit earlier. If you could get clear copies of that sent to Members—

451. **Mr Elvin:** Could I ask for your guidance, sir? Would the Committee like a complete set of the plans? I am not going to suggest the Environmental Statement because otherwise you will break your arms but there is a relatively small bundle of plans for the central section, setting out what is proposed in the environmental impact. It is Volume 4a.

452. **Chairman:** If it can be put in a small bundle and given to Members. In answer to some of your other queries, first the one you asked about the noise expert. The Committee has taken a view it may be necessary to make visits to understand the arguments about specific noise levels. However, we do not agree it appropriate to actually demonstrate these in Committee, as we could not actually take them as evidence. What we would be willing to accept is anything in writing—say, graphs, or whatever it is—and that may cause us to wish to visit an area in connection with that sometime later.

453. **Mr Elvin:** Could I just raise one point? The only point I think that is important for the Committee to hear demonstrated, and it may be we have to deal with it by way of evidence and rebuttal through a later Petitioner than simply explain it to you if you feel it is not correct to hear it straight off, is that some Petitioners are raising the issue of the difference in perception between an increase in noise of one decibel as opposed to three, which is a question of the level of perception. That is all we wanted to demonstrate with the general presentation.

454. **Chairman:** Yes, in the context of a visit but not in Committee. That is the view.

455. **Mr Elvin:** Would you be prepared to hear it, however, if it is in rebuttal to a Petitioner’s case?

456. **Chairman:** We will review that request.

457. **Mr Elvin:** We will try and accommodate it in some way in which the Committee feels it can hear it.

458. **Chairman:** On the summary question, which you asked us, we do not agree that summary statements from Petitioners would speed up the process of resolving particular issues. The Committee is ordered by the House to consider Petitions in their entirety themselves, individually, and we intend the summary of the Petition is for them to have the opportunity to actually raise objections themselves. We expect each case to be dealt with accordingly. Finally, the response of Promoters. We are happy for the Promoters to make

---

<sup>8</sup> Committee Ref: A7, Letter from Mr Weiss, Corporation of London, to Mr Norman Haste, Chief Executive, CLRL, 17 March 2005.

---

**The Petition of Corporation of London with British Land**

---

short closing statements at the end of each group of Petitions. However, Petitioners will also be entitled to make the same statements if they so wish. We would, however, like to point out to Promoters that we want to ensure that any statements made by the Promoters will not become inflexible, because of that, in any negotiations which are on-going with particular Petitioners.

459. Finally, we would like the opportunity for other people to be present at the visit tomorrow, if they so wish, but we are aware, as a Committee, that the size of the delegation of sorts which goes to Liverpool Street is so large that it may cause problems with the

operations of Liverpool Street, and we do not want to be blamed for causing panic in the City. So we would ask, unless people find it absolutely necessary to be there, to just leave it to the Committee and the experts who go along. Is that clearly understood by everybody? Yes.

460. Mr Cameron, if you could liaise with the Clerk in relation to your witness being brought back, we would be grateful. Just to say to all Members present that the visit starts tomorrow at 8 o'clock and the transport will leave from New Palace Yard at 8.00. The Committee will meet again in this room at 2.30 pm.

---

Thursday 19 January 2006

Before:

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

*In the absence of the Chairman*, Mr Ian Liddell-Grainger was called to the Chair.

Ordered: that Counsel and Parties be called in.

461. **Mr Liddell-Grainger:** Ms Lieven?

462. **Ms Lieven:** Sir, there is just a point that arose out of the site visit this morning which I have been asked to deal with. Some members of the Committee have asked whether it would be possible to do a kind of computer fly-through through the station. Members may remember that that was raised on the site visit. I have been instructed that we can do it but it is being commissioned in Australia and it will take until at least next Friday, possibly longer, but we have been promised next Friday. I hope that is acceptable. We are doing our best.

463. **Mr Liddell-Grainger:** Next Friday would be marvellous. We would be prepared to go to Australia at a push.

464. **Ms Lieven:** We will keep that in mind, sir.

465. **Mr Liddell-Grainger:** Mr Elvin?

466. **Mr Elvin:** Sir, I just wanted to read into the record the fact that you should now have received volume 4a of the main Environmental Statement, which has the central area plans.<sup>1</sup>

467. **Mr Liddell-Grainger:** Thank you very much; we have indeed. Mr Cameron, are you ready?

---

*Mr Peter Wynne Rees*, recalled

Re-examined by **Mr Cameron**

468. Mr Rees, I have a few questions for you in re-examination, not very many, everybody will be relieved to hear. As a result of the overnight break you, like everybody else, will have been able to see the transcript and I am going to ask you the type of question that barristers are never meant to ask, an open question. I am going to ask you whether there is anything that you would like to say to the Committee, having read the transcript.

*(Mr Rees)* There are two points. At page 24 of the transcript in paragraph 309 there is an ambiguity as a result of a slip of my tongue. In the last line it talks about “the effect on the inability of the station to operate effectively”. That should, of course, be “the effect on the ability of the station to operate effectively”. I have ended up with a double negative and I would like to make that clear. It certainly was not my intention to say that. The only other point is at page 37 where Mr Liddell-Grainger asked me a question about the vacancy rates on buildings in the City of London. Off the top of my head I was able to say that the latest figure of which I knew was 12%. I have been able to get later figures since then and I can now inform the Committee that the vacancy rate for property in the City of London, on estimates from various property professionals and surveyors, ranges from between nine% at the lowest estimate to 11% at the highest estimate. I would say that reasonably it is between 10 and 11% and that that breaks down into seven% for new floor space (of what is available) and 17% vacancy rate of all the second-hand floor space that is available, so it shows

that there is considerably less new floor space and that the vacancy rate is falling.

469. Thank you for that, Mr Rees. I would like to ask you first of all about something which may be fresh in the minds of members following the visit this morning and that is a question you were asked about the Barbican Tube. You were asked by Mr Elvin about your plan, which was at your tab 1, and about the Underground symbols. You were asked about the symbol for the Barbican and it was said to you, “That is the Barbican Tube which is not part of Crossrail”, and you said, “That is correct”. I wonder whether it would be possible to turn to volume 4a of the Environmental Statement. Perhaps we can have it up on the screen. It is diagram C6(i). At the same time can I ask you whether you have got the Promoters’ response document in response to the City? That diagram is not there but we now have it. I think members of the Committee have that extract from the Environmental Statement. Can I at the same time ask you, Mr Rees, while that is on the screen, to turn to the Promoters’ response to the City of London Corporation and in the back you will find some drawings at Appendix A. The drawing that I am interested in at A9 and A10—they probably are not numbered like that—are the ninth and tenth pages in the drawings bundle and they are drawings of the Barbican station.

---

<sup>1</sup> Volume 4a, Environmental Statement, <http://billdocuments.crossrail.co.uk/>

---

The Petition of London with British Land plc

---

470. **Mr Liddell-Grainger:** Mr Cameron, would you be kind enough to say which were the map numbers in the back of the response?

471. **Mr Cameron:** There is a list at the front, sir, and the number is "1", and then it is probably IO 406 C1 P01 P00 F50037. It is the ninth document. The difficulty is that they do not have numbers on the pages themselves which makes it almost impossible to follow. We did suggest a numbering system. We have got the right one on the screen. The title, sir, is 33-37 Charterhouse Square. It took me rather a long time to get there, Mr Rees. You are ahead of me. Can you tell us what that shows please?<sup>2</sup>

**(Mr Rees)** Yes. At a late stage of the project there has been a direct interchange introduced between the Crossrail station at Farringdon and the Barbican Underground station and the blue area shown on that plan shows you, at the bottom left, escalators coming up the ticket hall and entrance at the Barbican end Barbican end of Farringdon station, and in the top you can see blue branches going off towards the right which link to the platforms at Barbican station, so it is true to say that now Barbican station is part of the complex which is represented by the new Farringdon station in the way that Moorgate is linked to Liverpool Street at the other end.

472. Mr Rees, to get it absolutely clear, when Mr Elvin said to you, "That is the Barbican Tube which is not part of Crossrail" and you said that was correct, were either of you right?

**(Mr Rees)** He is no longer correct and what I said in response was incorrect. It is now part of it.

473. That is all I wanted to ask you about that point and I apologise, sir, for the trail through the papers. What we were going to suggest and what hopefully might be done if we have to look at that again is to number those A1 and following so that we do not come across that problem, but we will try and sort that out. I come to a different point now, Mr Rees. You were asked some questions about the provision to the Isle of Dogs and to Canary Wharf in particular. They came near the beginning of your cross-examination. Do you remember those questions?

**(Mr Rees)** Yes.

474. What Mr Elvin put to you was that if there is any residual concern about access to Liverpool Street and the deterrent effect that might have on

office users wishing to locate in the City, the Isle of Dogs would offer at least an attractive alternative. If you took the approach suggested by Mr Elvin of saying that it does not matter if there is a residual concern because there is an attractive alternative in the Isle of Dogs, would the Crossrail project serve the purposes which the City Corporation at least wishes to see it serve?

**(Mr Rees)** No. It certainly is the wish of the City, and indeed the Mayor of London, that the City of London itself as a location should benefit as a central office location from the construction of Crossrail. It is also worth pointing out that a considerable proportion of people going to Canary Wharf in fact have first to come into London via Liverpool Street station, so any deficit at Liverpool Street station will have a significant impact on the Isle of Dogs as an office location as well as the City. One of the things we have seen from the dispersal of offices outwards from the City over the years is greater pressure on transport rather than less because people tend to remain at the address where they live and not move home when they move jobs and as a result tend to be passing through the centre of London. That is why it is that we see stations like Kings Cross and Victoria closed in the rush hours because more people are now interchanging in central London to go on out again to some dispersed location.

475. You were then asked a number of questions about various correspondence that was put to you and I do not ask you to turn it up. Were you present at any of the meetings referred to?

**(Mr Rees)** No, I was not. Mr Weiss was present but not myself.

476. Did you write any of the letters referred to?

**(Mr Rees)** I did not.

477. In the light of those clear answers I am just going to indicate to the Committee that it will be Mr Weiss who deals with those letters and I do not intend to ask Mr Rees anything else about them. Thank you very much, Mr Rees. Those are all the questions I have for you.

The witness withdrew

478. **Mr Liddell-Grainger:** Mr Laurence?

479. **Mr Laurence:** Sir, I am the fourth to speak but I will be a little bit longer than my learned friends because I am now going to ask Mr Weiss, with your consent, to come to the chair.

---

Mr Joe Weiss, sworn

Examined by **Mr Laurence**

480. Mr Weiss, may I begin by asking you to introduce yourself to the Committee? Tell them your name and the role that you perform.

**(Mr Weiss)** My name is Joe Weiss. I am the Transportation and Projects Director for the Corporation of London. I am a chartered civil engineer, a Fellow of both the Institution of Civil Engineers and the Institution of Highways and Transportation. My role as a local authority director

---

<sup>2</sup> Crossrail Ref: P2, Promoter's Response Document: Appendix A.

---

**The Petition of London with British Land plc**

---

in the City primarily is to look after the local as well as the broader strategic transportation issues, as well as public realm projects, notably the highways between buildings as well as road control.

481. Will you tell the Committee something of your experience please?

*(Mr Weiss)* I have been around the block a few times. I have 35 years of professional experience as a civil engineer. I have worked in the public sector, a considerable time in the private sector, with central government and with local government. I have some experience at first hand of working on railway projects when I worked in Hong Kong for a company known as the Mass Transit Railway Corporation.

482. Have you played a role in advocating the merits of the Crossrail project in recent years?

*(Mr Weiss)* I certainly have. The Corporation is a very strong supporter of transport projects, particularly rail. When Crossrail was coming through a decade ago the Corporation was very keen to see the project across. When it failed the private Bill hearing at the time I was charged with keeping, to all intents and purposes, the project alive. That I trust I have done because I am delighted to see the project taken forward. I am delighted to see the commitment the Government has to taking it forward to the next stage.

483. Mr Weiss, you have told the Committee that you are the London Chairman of the Technical Advisers' Group which promulgates engineering and highway advice amongst the London boroughs and provides specialist advice to the Association of Local Government and that as a chartered civil engineer you hold a Fellowship of the Institution of Civil Engineers and also of the Institution of Highways and Transportation.

*(Mr Weiss)* That is correct.

484. To get a feel for the scope of your evidence you, of course, are looking at a proof of evidence which traditionally the Committee does not have. You have produced some exhibits and where necessary, so that we do not get lost, I will refer you to paragraph numbers of your proof but the idea is that you take this as briefly as the subject matter allows and we will not necessarily say everything that is in the document, the Committee will be pleased to hear.<sup>3</sup> What is the principal purpose of your evidence?

*(Mr Weiss)* The principal purpose of the evidence is to question whether the provision to be made at Liverpool Street station is adequate to take forward this wonderful railway into the 21<sup>st</sup> century.

485. Is there a statement in the Environmental Statement that you particularly invite the Committee to focus on?

*(Mr Weiss)* Yes. If I can draw the Committee's attention to paragraph 8.9.130 of the Environmental Statement, it says: "Forecasts of passenger demand do not justify a separate Crossrail ticket hall and London Underground ticket halls are sufficient to accommodate passenger numbers".

486. Is that a statement that you seek to challenge?

*(Mr Weiss)* I do indeed.

487. You have divided your evidence into a number of related topics and it might assist the Committee if we were to say what they are. I think there are seven in all. Would you just headline them so that those reading the transcript may know where they are at given points?

*(Mr Weiss)* I will run through the headline points and do the detail later. The first is that I would like to describe the operation of the current Liverpool Street station. I understand that you had a successful site visit this morning. I would then like to talk about the transport policies and then the strategic rail context, particularly to the City of London Corporation. I would like briefly to go through the evolution of the design pertaining to the eastern ticket hall at Liverpool Street. That leads to why as a local authority we felt it necessary to perhaps review the passenger flows associated with that design, and then, looking forward to 2016 when the project is to be opened, to test whether it was it for purpose in our view.

488. And the fifth topic?

*(Mr Weiss)* To describe as the local planning authority what we know about where people work in the vicinity of Moorgate and Liverpool Street and how that influences our judgment of where the passengers might come out at either station.

489. I think as part of that exercise you will be content to look at the figures produced by Crossrail or by CLRL themselves?

*(Mr Weiss)* Absolutely. In future forecasting, particularly of complex overlapping rail systems, and that is quite a mouthful, you have got main line railways, you have got underground railways, you have got bus services, you have got the ability for people to change between the two. To forecast what might happen in the future is an incredibly complex game, one that we do not wish to challenge as a local authority, so we have gone forward on the not unreasonable basis that the Promoters ought to know what they are doing and have taken their figures in all cases. With that as a base we then decide whether or not to apply our overview to some of what they have taken forward to be perhaps better placed in terms of where passengers might exit in terms of where they would like to go as against where the computer put them.

490. Your sixth and seventh topics please?

*(Mr Weiss)* We then, as I have just described, reassigned the Promoters' own flows in line with our judgment of where people work, our knowledge of where people work and our judgment as to where

---

<sup>3</sup> Committee Ref: A8, Exhibits produced by Mr Joe Weiss, Transportation and Projects Director, City of London.

---

**The Petition of London with British Land plc**

---

they would prefer to exit the station, and, finally, to show the effect of that in terms of what might be needed for operational purposes in the eastern ticket hall.

491. Mr Weiss, I will, of course, want to ask you, as part of what you talked to the Committee about, to deal with the issue of what you knew about the proposed change at Liverpool Street as regards the eastern ticket hall, and it seems to me, just having reviewed those seven main topics that you are going to want to be dealing with, that the sensible thing is to ask you some questions about that when you come to tell the Committee something about the evolution of the scheme both before and after the change. Would that be convenient?

*(Mr Weiss)* That sounds sensible.

492. Taking Liverpool Street station first of all, and considering its existing function, what do you say?

*(Mr Weiss)* I would like to draw the Committee's attention to Liverpool Street not as a station but as a busy place. The last count made by Network Rail put some 141 million visitors to this station each and every year. To get a context for a figure of this quantum, Heathrow airport, which has the ability of four terminals, carries some 67 million people, so we have got this railway station carrying over twice the world's busiest international airport, as BAA like to call Heathrow, so it starts as a busy place where an awful lot is going on. It is a key national transport hub. It has got 18 national rail platforms served by four Underground lines and 18 bus routes. It is an important place where people do not just arrive at but also interchange and that is part of the role that the future Crossrail seeks to address. It also is a main line station that links Stansted airport and you have probably seen the news recently that BAA have launched a campaign to try and put a second runway into Stansted and at least grow the passenger numbers there, so, nothing to do with Crossrail, the potential for growth at that station for main line rail passengers appears to be something likely to be taking place in the future.

493. The Committee, of course, has heard Mr Rees's evidence. Perhaps you would tell them in your own words what you see as being the key to the importance of the station to the City.

*(Mr Weiss)* One of the exhibits Mr Rees showed was the proximity of Liverpool Street to a significant majority of the workforce in the City, particularly to the very large buildings that Mr Rees described which have gone up, such as the Swiss Re building, likely to go up, such as the Heron Tower and several tall buildings with concentrations of employment within short walking distance of the station, such as Tower 42.

494. Would members of the Committee please have to hand if possible the tables of passenger movements in 2001 and 2016, which you will recall my handing in during my opening? Perhaps the documents are headed at the top "Technical Annex to the Proof of Evidence of Mr Tony Spencer". I

want to concentrate if I may on the 2001 figures, Mr Weiss, for the purposes of the questions that follow. Table 1: what is the total number approximately of passengers alighting at Liverpool Street station, that is to say, exiting the station, according to CLRL's figures?

*(Mr Weiss)* If you go to column B on table 1, the figure in bold at the bottom, a summary, shows the figure very clearly to be 68,300 people. That is quite frankly the population of a small town.

495. So far as the National Rail passengers that are part of that number are concerned?

*(Mr Weiss)* There are some 42,200 people leaving National Rail to exit the station.

496. As for those entering the station, can we take it that the figure in table 2 of those entering the Underground system, Central line and subsurface lines, totalling 23,550, are, almost of them, National Rail passengers? Table 2, column B, line 10.

*(Mr Weiss)* Yes, the figure is very clear; absolutely, some 23,550.

497. So 42,200 National Rail passengers exiting the station and another 23,550 National Rail passengers entering the London Underground system?

*(Mr Weiss)* That is correct.

498. You get those numbers from tables 1 and 2?

*(Mr Weiss)* And that shows the strength of this location as an interchange between the two different modes of rail.

499. That is the station as a whole. If we want to know how many of those 23,550 use ticket hall B which table do we need to turn to?

*(Mr Weiss)* If I can draw the Committee's attention to table 4, you will find column C, ticket hall B, which is the second line down, runs across to the figure of 18,100, so most of these passengers would then use ticket hall B.

500. In order to get at the number who use ticket hall C, part of that number of 23,550 that I mentioned a moment ago, do we see that in column C, line three?

*(Mr Weiss)* Yes, absolutely. You need to add the two figures to come to the larger figure that you came to.

501. Yes, and there are also 300-odd who appear to use ticket hall A, as we see from column C at line one. If you would now turn to the 42,000 National Rail passengers who exit the station, they are, of course, not the only ones who exit the station. Who else do the Committee need to concentrate on?

*(Mr Weiss)* We need to concentrate on the National Rail passengers who use London Underground and ticket hall C.

502. What I am inviting you to do is go back to table 1 to identify the numbers of passengers who are exiting the station altogether in 2001. We have got

---

The Petition of London with British Land plc

---

the 42,200 National Rail passengers. What are the other two components of the total number that you mentioned earlier of 68,300?

*(Mr Weiss)* If I draw the Committee's attention to column B, lines two and three, you have the two figures of 15,300 and 10,800 of those people who are leaving the station but arriving respectively from the Central line and the subsurface lines.

503. Anyone can see, but I will just mention it for the record, that those numbers total 26,100; is that right?

*(Mr Weiss)* That is correct.

504. I mentioned earlier that 68,300 passengers therefore exit the station in the morning peak. That is table 1. We see that at column B, line five. So that the Committee can then get a feel for where it is that these 68,300 exiting passengers actually go, would it be helpful to turn up your exhibit A, which is the same document, sir, that I introduced in opening, and it looks like this (indicating) and which you will find in the City of London bundle of exhibits at tab 16?<sup>4</sup>

*The Committee suspended from 3.02 pm to 3.15 pm for a division in the House*

505. **Mr Laurence:** Mr Weiss, I was asking you about that number of 68,300 exiting passengers comprising partly National Rail passengers and the remainder people coming of the Underground, and I was inviting the Committee's attention to exhibit A with a view to marking the exits. The Octagon Arcade—can we call that number 1, the way out to Broadgate? Over on the other side, the way out to Bishopsgate—can we call that number 2? Exits 3A and 3B, respectively the escalator and the stairs, shown as a way out to Old Broad Street: that also leads to Liverpool Street, I think.

*(Mr Weiss)* If I may explain for the benefit of the members, I have said "Old Broad Street". It is actually obliquely the other side of Liverpool Street. Liverpool Street, of course, is an east-west street that goes not only in front of Liverpool Street station but alongside the building in front, so to avoid confusion we have called it Old Broad Street, but technically it leads to Liverpool Street first.

506. Then, although not shown on your drawing, Mr Weiss, so that the Committee can follow the numbers you are about to give them, exits 4 and 5 are at a higher level, are they not, and are respectively exits to the bus station and an exit towards Sun Street?

*(Mr Weiss)* That is correct.

507. In order therefore just for the Committee to get a feel, although they would have got that this morning already, of how the exiting passengers that we have been talking about reach the street via these various exits, did you have recourse to the numbers given in the Liverpool Street Interchange Study of 2002?

*(Mr Weiss)* We did, sir. We did this study because as a local authority, conscious of the very large numbers of people who have business in and around the station, reminding ourselves that we have no real business in the station as a local authority, our control really stops at the edge, we were looking to find out how best to accommodate interchange in the public realm, and this is cycling, walking, buses, mobility impaired, so that those people leaving the station by whatever mode and with whatever needs were properly provided for.

508. So give the Committee if you would, by reference to those various exit numbers, the figures thrown up by that study.

*(Mr Weiss)* Certainly. Exit 1, which is to the west, the Octagon Arcade, some 21,000 people went there in the morning peak. Exit 2 towards Bishopsgate, which is to the right, this is the exit to the east, some 25,000, the largest element by far. Exit 3A, which is the escalator, 8,000 used that. Next door to and leading to the same destination as the escalator on 3B, the stairs took 7,300. Exits 4 and 5 together were running at about 3,800. This totals a figure of 65,100. It does not equate exactly to the CLRL figure as used in their matrices of 68,300 but, being based on 2002, the relationship between the splits and the approximate figure remain the same, so the principle of where people wanted to go to stands with what CLRL produced and that which we observed independently in 2002.

509. What is the real purpose of giving the Committee those numbers?

*(Mr Weiss)* We are dealing with exit flows of 21,000 and 25,000 to discrete areas—the sheer business and usage that large numbers of people regularly, each and every weekday, using the station.

510. Finally, on these numbers that involve the use of the tables that I handed in in my opening, and the 2001 table in particular, Mr Weiss, would you like to say something about the figures that are relevant as illustrating how many passengers use London Underground?

*(Mr Weiss)* If we go to table 1, London Underground is used by 26,100. To remind the Committee, this is column B, lines two and three.

511. That is those who exit the street. What about those who enter the Underground system, where do we need to look for that figure?

*(Mr Weiss)* There are 23,500 entering the system. This is table 4.

---

<sup>4</sup> Committee Ref: A2, British Land plc—Liverpool Street Station Plans—Exhibit A (LONDLB-26-003).

---

**The Petition of London with British Land plc**

---

512. Table 2, I think. Sorry to correct you.  
(*Mr Weiss*) Table 2, column B.

513. 23,500?  
(*Mr Weiss*) Correct.

514. By my arithmetic, a total of 49,650 people in the morning peak using the Underground system. If we then want to know in relation to that how many use ticket hall B, let us take those who exit first, what is the number?

(*Mr Weiss*) If we turn to column 4.

515. Table 4.

(*Mr Weiss*) My apologies, table 4. We look at the exits, ticket hall B, which is the second line down running horizontally, we can see some 9,000 leaving ticket hall B, 18,100 entering ticket hall C, 9,600 exiting.

516. Total for ticket hall B, including the 4,200 who interchange, 31,300 out of a total of 53,850 for all three ticket halls?

(*Mr Weiss*) That is correct. Once again, this is stressing the relationship of how much busier ticket hall B is than ticket hall A or ticket hall C.

517. Turning back to your proof of evidence please at 2.2.3, I do not think we have got any tables to illustrate this but can you tell the Committee what the corresponding figure for use of the Underground station is in the evening peak?

(*Mr Weiss*) Certainly, Sir. The corresponding figure for the use of the Underground station in the evening peak is slightly larger at 52,000 passengers.

518. **Mr Liddell-Grainger:** Can we ask where that is in the submission, Mr Laurence?

519. **Mr Laurence:** You do not have that number on the table, Sir. It is just to get a feel for what the position is in the evening as compared with the morning peak.

520. **Mr Liddell-Grainger:** Right.

521. **Mr Laurence:** You say slightly larger, in fact it may be that it is an out of date figure that you were referring to. It is slightly smaller, to all events, than the CLRL numbers at 53,850.

(*Mr Weiss*) It is indeed. Perhaps, Chairman, I can understand where you are coming from perhaps. The reason we do not investigate further the evening peak is because the intensity of the morning peak, and this is quite usual because people tend to have to go to work for a set of time, their choice of leaving times means that generally, and this is certainly true for our observations at Liverpool Street Station, the evening peak is more spread. With the intensity, were problems to occur because of the peakiness, one tends, in transportation terms, unless there is a very good reason, always to look at the morning peak. We have concentrated our analysis on that.

522. If you now look at your exhibits again, and I think it would be helpful to have both exhibit A available, Sir, as well as the photographs at exhibit B.<sup>5</sup> Tabs 16 and 17 of your bundle. You have numbered these photographs in the top left hand corner picture one, picture two, picture three, et cetera. My text has you commenting, first of all, on the evening peak. Do you want to do that just to stick to the order in which you deal with it in your proof, Mr Weiss?

(*Mr Weiss*) If you wish. The pictures are really not meant to represent anything other than a snapshot in time. We can always argue you take a picture of the busiest moment and the least busy moment. We wanted to convey that this station, which I mentioned, carries 141 million passengers per year. It is a busy place and lots of elements are not only busy but certainly at peak times are particularly crowded. If you go to the top left hand picture which is picture one, that was taken on 13 December at 8.25 in the morning. Those are the stairs that we marked up as 3B when I mentioned the spread of passengers going through the station.

523. Is that exit E on your plan that we see in the background?

(*Mr Weiss*) No, not yet, that is picture two.

524. What is that entrance to the Underground?

(*Mr Weiss*) The one on the screen at the moment shows the stairs leading up to the concourse which we annotated on the plan as exit 3B.

525. Just so you see what I am asking you, can you see the left hand side of the photograph, Mr Weiss, in the background?

(*Mr Weiss*) Certainly, the foot of the stairs to the left, if we go back to exhibit A, is where the eastern ticket hall intended for Crossrail would first meet the concourse. That would be point E.

526. Point E, I had that right. I am relieved. Thank you. Go on.

(*Mr Weiss*) Looking further, looking towards point E, picture two shows an example of the main Underground concourse—if the exhibit can be moved along to the next one please—this was taken on 6 December at 5.40 in the evening. There are a lot of people leaving there, quite well subscribed. Moving along very quickly, picture three is looking down on the eastern ticket hall, looking down particularly at point E. The last picture, the first picture in the bottom line, picture four, from the bus station level looking down on the concourse, this is about half past five in the evening taken on 6 December. None of these is exceptional operating circumstances. There are no particular delays. This is what could be regarded as a typical operation of this station. Picture five, the one in the middle of the bottom line, taken at 5.38, looking towards the Octagon Arcade. We marked Octagon Arcade as point one when we annotated exhibit A. What is

<sup>5</sup> Committee Ref: A2, British Land plc, Exhibit B (LONDLB-26-005).

---

The Petition of London with British Land plc

---

interesting about that, such is the volume of people wishing to get back into the station that they are queuing to enter the mainline railway concourse.

527. Do you want to say something about the last of your pictures as well?

*(Mr Weiss)* When the concourse fills up there might be a long length to the 18 mainline railway ticket gates which come to the concourse, passengers tend to queue on the mainline rail platforms themselves. The ticket gates are open so people, finding it particularly uncomfortable standing on the concourse, actually go through the ticket gates and crowd on the platform which is all well and good if that is the platform for the train that they wish to catch away from the place but if it is not I am sure it could pose operationally issues for Network Rail, the operator of this station.

528. Before you turn to your transport policies as your second topic, is there anything else about this subject of overcrowding that you want to mention?

*(Mr Weiss)* Where we would be coming from as a local authority is we have this very expensive, very necessary new provision of a mainline railway coming into the City from Crossrail and there are issues of overcrowding occasioned at present in this ticket hall. Approximately once a month, because of overcrowding operational issues, that ticket hall has to close, the gates are pulled across, so you either cannot get into or out of the Underground station. That is because there are too many people for that certain circumstance for that ticket hall to operate in a safe manner. The rail operators have set procedures and these are triggered through certain operational levels. We would not wish to see in the future any design which even gave a hint of the fact that regular occurrences due to overcrowding might take place because of a rather slim provision.

529. You heard me tell the Committee in opening that on Crossrail's figures the total number of people using ticket hall B as a result of Crossrail, entering or leaving, was not substantially different than it was on CLRL's figures immediately before Crossrail opened. Why should Crossrail make itself responsible for curing a problem that might already be existing quite independently of Crossrail?

*(Mr Weiss)* I think in the provision of a brand new railway that all aspects of its operation, even sharing a ticket hall with an existing operator, who over time might have had a degree of overcrowding in there, that sharing, I believe, should not permit a lower standard to the new provision that one would expect for this 21<sup>st</sup> century railway. The quality of service one would expect from Crossrail, for example at a new dedicated ticket hall elsewhere, I would think as a minimum should be replicated where a shared ticket hall might take place with London Underground.

530. Let us turn to a swift overview of the relevant transport policies, your local transport policies which you want to tell the Committee about, please.

*(Mr Weiss)* Certainly. I will start off at 3.2.1. The City of London Corporation has been a constant supporter for Crossrail for many years. Mr Rees has mentioned in his evidence why are we such a supporter of railways as a local authority? Because out of our 312,000-plus strong workforce, some 82% commute to the City by rail. This is a much higher proportion than seen anywhere else in London, in fact any other city in the United Kingdom. The health of the rail service into the City has got to be important and supporting the health and well-being of a workforce which, you have heard, we expect to grow significantly in the future. There is little scope, as we see it, for access capacity enhancement to the City by bus or coach, not unless there are major policy changes by the Mayor for London to reallocate road space. I am not aware of any of this. We go back to adequate provision by rail, of which Crossrail is a prime supplier. We have, within our Unitary Development Plan—and it was touched on yesterday—policies that we seek to ensure safeguarding of Crossrail but we go beyond that. If I might, I would like to quote from UDP policy. It states “The Corporation will seek to ensure, in consultation with the operators, that the lay-out of the new stations at Liverpool Street/Moorgate and Farringdon/Barbican, and their connections to street level in the City will provide for the efficient, convenient and safe movement of passengers”.

531. I think the Corporation has also formally adopted a rail strategy, has it not?

*(Mr Weiss)* Yes. Being a small geographical area in the centre of London, perhaps rather like a cartwheel, we are at the hub, all of the rail services coming through, not just Crossrail, are to a degree important to the City. We have necessarily adopted a rail strategy which has formally gone through the local government process, so it has got political approval. We recognise the importance of Crossrail as a scheme, the principle supported very strongly for the east-west link. The Corporation recognises the affordability of such a scheme. If I might quote from what we said in our rail policy. We say “Concerns remain over the affordability of an extensive scheme built in one stage which meant that the Department for Transport's expert panel concluded there is difficulty with that approach. The Corporation's preference is for a limited and phased scheme that can realistically attract partnership interests”.

532. I asked you about your transport policies with a particular local emphasis, and skipped over the London-wide aspects of those transport policies. Can you consider what you would like to say to the Committee about that before going on to deal with the strategic rail context at paragraph five? You can maybe pick out, having regard to the evidence Mr Rees has already given, what you think is particularly helpful from the first of those two matters.

*(Mr Weiss)* Certainly. The Mayor for London has produced a Mayor's transport strategy and the Greater London Authority is the strategic transport

---

**The Petition of London with British Land plc**

---

body for London. It is a volume the size of a telephone directory but there are some interesting and quite supportive statements in there for Crossrail and I would just like to mention one or two. It was seen “as a critical long-term project” and that is referenced on page 165 of the Mayor’s transport strategy. That strategy goes on to say that Crossrail would meet “the urgent demands of the City and business supporting London’s world City role”. I think that supports what Mr Rees said yesterday. The Mayor is also anxious in his policies that schemes—and they quote Thameslink 2000, Crossrail Line 1 and Crossrail Line 2—“are implemented as quickly as possible”.

533. That is a reference to something he said in 2001? *(Mr Weiss)* That is correct. It is page 321 of the Mayor’s published transport strategy.

534. Just selecting from the remaining quotes that you have got, and keeping it as brief as you may, is there anything else in that section that you want to have on the record?

*(Mr Weiss)* I would like to put the Prime Minister on the record. He says in the foreword to the Department for Transport’s own Government White Paper he wants “. . . to see Crossrail in London because it makes economic sense and is realistic environmentally”.

535. That is a quote from something he said in the paper, *The Future of Transport 2004* at page five?

*(Mr Weiss)* That is correct.

536. With that as a background, will you turn to the Strategic Rail context, and again you will need to be supplementing a little bit something of what Mr Rees has said.

*(Mr Weiss)* Certainly. The Strategic Rail, going outside the City context, is that in Central London at the moment I think we are all familiar that most of the major rail termini are operating at or near capacity. We are expecting to see a significant growth in employment in the City, that growth upwards of 85,000 by 2016. We see it, perhaps, as a 27% increase on our employment base at the moment.

537. Just so the Committee can have the relevant numbers, if not in mind on the record when they look at the transcript, the 2001 census figure for employment in the City as a whole is 312,000, is it not?

*(Mr Weiss)* According to the Government’s own 2001 census, yes that is correct.

538. If you take that GLA figure of growth of a total of another 85,000 jobs in the City as a whole by 2016, the resulting figure would be 397,000, is that right?

*(Mr Weiss)* That is not a City figure, that is a figure produced by the GLA specifically on a London administrative area. The ratio of 397,000 over 312,000 produces this increasing growth. We are taking a third party’s assessment of what the City

might have rather than what we feel might be appropriate to us. I think it a reasonable figure under the circumstances.

539. Mr Weiss, turning to the remainder of what you have to say on the subject of Strategic Rail context, with the UDP in mind in particular, what do you want to say to the Committee?

*(Mr Weiss)* To cater for this growth, the Corporation strategically would like to support a series of rail improvements in London, not just Crossrail, there is of course Thameslink 2000. The strategic benefits to an international business and financial centre, apart from the congestion relief of overground and underground rail lines, is direct access between the City and Heathrow Airport, West London and Berkshire and of course to North Kent. Crossrail will provide, for the first time, a dedicated link from North Kent via East London to the City. That, of course, gives two sets of benefits. It allows those people in areas not previously so directly accessed to the City an opportunity to go for a job there and vice versa, the City as a broader catchment area from which to draw its skills base.

540. Given that, as we have heard, I think, the new Crossrail station has been designed to be able to handle very large numbers of passengers, what do you see as being important in relation to the provision and design of what I might call the new station? Maybe you will begin by telling the Committee what you understand by the term “the new station” in this context? What is “the new station”?

*(Mr Weiss)* The only new part of the station, in my understanding so far, as regards Liverpool Street, is the addition of more passengers into an existing facility. I see no evidence of enlarged ticket hall, enlarged provision for gates, anything whatsoever to take these extra numbers of people redistributed, which was one of the reasons Crossrail came to Liverpool, to get to street level, to distribute to Bishopsgate, to Octagon Parade, to exit one. Crossrail will take a significant element of people who presently arrive in the mainline ticket hall and go into the Underground. They will perhaps stay on Crossrail and go elsewhere into central London and that is a good thing because you reduce the interchange. This new facility will not crowd the present concourse. But, as has been mentioned beforehand, the numbers of people expected in the concourse, notwithstanding Crossrail, continues to grow. The pressure to use that space, for which there are no plans to increase, have also grown.

541. What I was going to ask you to do in relation to the next bit of your evidence, where I think you set out a number of aspects to your reservations about whether the station as currently proposed to be constructed will be sufficient or not—I think you have set out a few—may I suggest you take perhaps the third and fourth ones as being illustrative of what you want the Committee to know you are apprehensive about?

---

 The Petition of London with British Land plc
 

---

*(Mr Weiss)* Certainly. I have about six areas. One area that we are particularly interested in is that the exiting Crossrail and Underground passengers are seen to be in conflict within both the paid area booking hall and also the main station concourse. I think exhibit B gave an idea of the numbers of people involved. With two-way flow—it is all very well if everyone is streaming in one direction—the efficiencies of space drop off quite dramatically because are not very well disciplined, they tend not to just keep to the left when walking. We see an issue there with the additional passengers conflicting between Crossrail and the existing Underground in a space that is not enlarged.

542. The other aspect?

*(Mr Weiss)* The other point is the congestion to the busy mainline concourse. Some of the pictures we have seen in exhibit B. We note that the concourse is operating close to the capacity in some peak periods. It is a real world out there where I think the railway term is perturbations take place—these are cancellations, wires down, guards and drivers not rolling up—which will inevitably lead to passengers having to stay in that concourse rather than pass through to get on their intended train. If the space is tight and perturbations take place, that space is going to be quite well subscribed: an escalator might break down, somebody might lose an umbrella or jump on the track or something daft which causes systems to stop for short periods of time. It is a realism, it is a real world. If the planned system is particularly tight, the ability to cope with the real life scenarios becomes more difficult over time, something I am sure the Promoter is aware of and one which we would expect not to be designed into a project, so we could expect a situation where regular closures take place. Such regular closures do take place at another mainline station in London, Victoria.

543. Mr Weiss, contradicting what I said was going to be the order that I thought would be convenient, let us deal at the end with the subject of the evolution of the scheme and what you did and did not know about it and so on and so forth to stay on the concerns which you have currently been exploring. Perhaps the easiest thing would be to give the Committee an outline of what it is you are about to do by turning back in your brief, please, to 4.4. I think there are three main points that you there identify in that section of the evidence which you propose to give to indicate what is the way in which you can try and help the Committee to judge whether it can place reliance on this split between exiting passengers at Moorgate and Liverpool Street, as put forward by the Promoter, or not?

*(Mr Weiss)* We have taken the Promoter's own assumptions for both ridership and where people would wish to get out, in other words whether they would get out at Liverpool Street or Moorgate for 2016.

544. I am sorry to interrupt you but just so the Chairman and Members of the Committee can be put into the context of what we are talking about here, it is table 11, CLRL 2016 forecast with Crossrail. I think there are two lines there in table 11 which you are particularly going to want to examine Mr Weiss, are there not, lines three and five, the exiting flows at Liverpool Street and Moorgate in 2016 with Crossrail.

*(Mr Weiss)* Yes, if I might perhaps expand on that. If we go to table 11, why lines three and five? Essentially these are the east-west passengers. In line three it is the sub-surface lines, that is the Metropolitan and Circle line. They actually have a choice. They can get out at Moorgate now and in the future and they can get out at Liverpool Street now. In Crossrail, where in the future, 2016, a similar situation occurs. Those two sets of flows, in coming to Liverpool Street for below and Moorgate or Liverpool Street above, can make realistic decisions as to which station they would like to get out from. What we have done is we have stepped back and said "Well people do not ride for the pleasure of it". Certainly in the morning peak in the City the majority are coming to work, they are coming to work and walking to a place of employment in the City. We know very well where people work in the City so we have taken lines three and five and redistributed these flows in accordance with where the actual jobs are. We get a slightly different split, quite significant in as much as the impact it has on Liverpool Street, from that which Crossrail has put forward.

545. Let us take it in stage which involves going ahead to deal with the first of those various aspects of that exercise at paragraph eight in your proof. You told the Committee that you have investigated an alternative analysis of current passenger flow against those predictions and have done so with regard to the location of office space and reallocation of pedestrian flows. Is there any exhibit which you want to ask the Committee to look at in this connection?

*(Mr Weiss)* Can I ask you to turn to exhibit C.

546. **Mr Liddell-Grainger:** What tab?

547. **Mr Laurence:** Tab 18. What is this, Mr Weiss?<sup>6</sup>

*(Mr Weiss)* When the City surveyed where its workforce were for electoral purposes we went and visited each and every office that would let us in and asked the relevant questions. We are able, on a geographical basis, to plot where the jobs are and the size of those jobs. This comes out of a computer base. This is a representation. There are two different coloured blobs. The pink ones are the actual, those where people were visited, we know them to be; the blue ones are in the construction and planning pipeline, as it states there, under construction and permitted. Not physically there in 2003 but likely to be there some time in the future. We have taken walk circles, these are the green on the right and pink on the left, this ripple that you see.

---

<sup>6</sup> Committee Ref: A2, Crossrail Station Entrance—Employment Distribution (LONDLB-26-007).

---

**The Petition of London with British Land plc**

---

We have centred them on where the Promoter showed, on the Environmental Statement diagrams, where Crossrail Liverpool Street station would meet the street. On the right, the green circles are centred on where Crossrail passengers are expected to meet the street, and on the left it is centred at the Moorgate exit of the Crossrail station. How far does somebody walk to work? Well, it depends on their job, their fitness, whether they have got a bus pass, whether it is a rainy day and so forth. We have taken three different test walk distances. These concentric circles are set at 400, 600 and 800 metres. Not from the blobs but from the computer underlying the database we can then, within each partial circle—because there is a common area—work out the numbers of jobs, actual jobs, closer to a particular exit from the Crossrail Liverpool Street station.

548. Part of the process which you are describing involves converting, does it not, the amount of floor space which you anticipate being available to increases in employment. What is the result of your carrying out that exercise, perhaps judged against the numbers that you have mentioned earlier of 312,000 jobs in the City in 2001 anticipated and the GLA figure of 397,000 jobs in the City in 2016? Would it be helpful to look at your exhibit D for those purposes? Tab 19 in the Committee's bundle.<sup>7</sup> Take it slowly, first of all, what is the top left hand corner telling us of the first page of the three pages in exhibit D?

*(Mr Weiss)* We had the three analytical zones: 400, 600 or 800 metres. The first page of exhibit D is taking the 400 metre radius zone. What we have done is starting from the known validated census base at 2001 312,000 people. The measured 2003 City occupiers survey, we have heard about the proportions of financial and business services that are a portion of the City employment base and we have heard also about the expected growth rates. We are now apportioning. Taking a notional growth rate of 1½%—

549. Before you do that, tell us what is the significance of these other two numbers under 312,000, the numbers 29,892 and 63,376?

*(Mr Weiss)* Those are very key numbers because these translate to columns three and four on this exhibit. This is a 400 metre zone so the first number 29,892 actually determines the numbers of people within that 400 metre ring for the Moorgate buffer zone, that is the pink, if you go back to the pink circles on exhibit C. 63,376, the green circles, is the buffer zone around Liverpool Street.

550. The total?

*(Mr Weiss)* The total comes to 93,268.

551. I noticed you have not got the year 2001 in the columns below but if we were to put 2001 in, perhaps a little inconveniently, Sir, above the word "year" and fill in the appropriate numbers from the ones

you have just been talking about, Mr Weiss, in column two we would be putting 312,000, would we not?

*(Mr Weiss)* Were it to be 2001 there, yes.

552. In column three, would this be right, what is the number we would be putting there?

*(Mr Weiss)* I have not got my calculator.

553. Is it not right in saying you just put 29,892, that is the 2001 figure for Moorgate?

*(Mr Weiss)* I see where you are coming from, yes.

554. Is that right?

*(Mr Weiss)* Yes.

555. What about column four?

*(Mr Weiss)* You carry through the 63,376, with the column five obviously carrying the total.

556. In order to see how one arrives at the 2016 figure under column two, the increase in total employment, does that involve addition at a certain growth rate?

*(Mr Weiss)* Yes, it does. We have taken the lower of the three possible growth rates we look forward to the future. Mr Rees explained that the likely growth rate is 1¼% for financial and business services. I do not want to overstress the point, we have not taken that growth rate, we have taken one slightly lower at 1½%.

557. Does it matter, for the purposes of the exercise, which you take?

*(Mr Weiss)* Not really. If one looks at the notes at the bottom of the page, predominately under column 2, this growth rate assumes purely to the financial and business services element. There is a constant factor of 60,000-odd which are non financial employment in the City. This could be anything from the person operating the print services in one of the commercial bureaux, to somebody in a coffee shop serving there. The no growth rate is applied to that, so a flat 60,000 on to which the main growth that is given is 1½%. We can project forward then each and every year, and I think for the purpose of the exercise we need to go to 2016. This takes forward the relativity, because we are looking at relative numbers here rather than quantum, because I cannot say—let us take buffer zone B, Liverpool Street—of the 63,376 exactly how many are going to come by railway; nor can one say the same for that from Moorgate. What one can say is given an equal choice for both, given the same opportunities to get out of the railway station at one location or catch the bus or walk or whatever, we can have the relative attractiveness based on numbers of jobs. So the line that is drawn on the sheet of 2016 shows the relative numbers of people to Crossrail exit at Moorgate and Crossrail exit at Liverpool Street.

558. If you took a growth rate of 1.75% or even 2% that relative proportion would remain just the same, would it not?

<sup>7</sup> Committee Ref: A2, British Land plc—Employment within 400m of the stations (LONDLB-26-009).

---

The Petition of London with British Land plc

---

*(Mr Weiss)* Almost the same, you have this constant factor which lies underneath.

559. So the Committee can be concentrating on the numbers which are material to your new exhibit J, which you are going to be handing in in a moment, are the numbers that they need to concentrate on the 2016 numbers in exhibit D, at your table 19. The 2016 figure under columns three and four expressed as a proportion of the total at column five of 112,118? Just as a matter of arithmetic, Mr Weiss, if you add the 2016 figure under column three, to the 2016 figure under column four, you get the 2016 figure under column five?

*(Mr Weiss)* I should hope so, yes, Sir.

What are the relative proportions that you arrive at in that way? First of all for Moorgate, I think your exhibit J will tell you if you have forgotten? We will hand that round now.<sup>8</sup> While it is being handed around, perhaps you can mention what the proportions are?

*(Mr Weiss)*: The proportions showed an interestingly different split from that which was assumed by the Promoter, which was 32% of people wished to exit from Moorgate and 68% from Liverpool Street. I say exit, these are the numbers of jobs closer to Moorgate as against closer to Liverpool Street.

560. If the Committee would find it convenient, could they write next to column three for 2016, the number of 35,933, 32%, and write next to the column four number of 76,184, 68%.

*(Mr Weiss)*: That is correct.

561. Without doing the same exercise for each of the other two, although perhaps it will not take long to do, by my arithmetic, the second sheet, which is the 600 metre zone, the relevant percentages for those two equivalent numbers would be 36% and 64%.

*(Mr Weiss)*: Not very different but the trend is the same, namely that Liverpool Street seems to be particularly more attractive in terms of proximity to jobs than Moorgate based on a measurement of where we know the jobs to be.

562. The percentages for the third of the three, please, at 800 metres?

*(Mr Weiss)*: This is a similar relationship but a slightly reduced percentage for Liverpool Street.

563. Would you accept from me that the number works out at 40% and 60%?

*(Mr Weiss)*: Yes.

564. With that as a background, if the Committee have got what I hope they are now coming to regard as their helpful tables in one hand, they ought also to have exhibit J in the other hand. Can we concentrate on the first part of that exhibit, please, Mr Weiss? What is the first bit of that table inviting the Committee to do?

*(Mr Weiss)*: It is inviting the Committee to apply these proportions which we have got, and I have taken the 400 metre radius because yesterday we heard the debate about what happens in the white area outside the City. The 400 metres is an area with which we can speak a lot more certainly. There is a lot more measurement proportionately of the areas at 400 metres than there would be at 800 metres. Furthermore, whilst it might be acceptable for a sprightly person a rainy day perhaps to go 800 metres, the same is not necessarily the case for somebody who is not quite so active. 400 metres is a strong likelihood that if an office is closer to one end of a long station to want to go out of the appropriate exit at that handy end of the station.

565. Deal with the first bit of the table first, where does that come from?

*(Mr Weiss)*: If we look at exhibit J, columns B and C put by end of the station the flows taken from the Cross-London Rail Link's 2016 own figures, those which came from the sub-surface lines and those which came from Crossrail.

566. I think your footnote one against the total in column D of 20,600 for the sub-surface lines tells you that these totals are extracted from table 11 at lines three and five, is that correct?

*(Mr Weiss)*: That is correct. We wish to stress that we are starting with the assumed Promoters' own figures. These are the numbers of people who arrive by both the sub-surface lines and Crossrail to this station.

567. So the only bit of the top bit of this table that is not in table 11 are the totals in columns B, C and D of 17,900, 17,200 and 35,100?

*(Mr Weiss)*: That is correct.

568. What have you done with the resulting figure of 35,100?

*(Mr Weiss)*: Going back to the proportional relationship of jobs, for which we have the 68%, 32%, we have applied that preference in terms of where a job goes to the entrance and put it to both the sub-surface lines and the Crossrail figures in the lower table. It shows for the sub-surface lines at Liverpool Street some 14,000 now whereas the Promoter is suggesting 12,600, and at Moorgate a figure of 6,600, the Promoter is suggesting 8,000. Similarly, for Crossrail we see a higher figure for Liverpool Street and a lower figure for Moorgate. The net result is the same number of passengers exiting the station, the bottom right-hand corner of both tables, 35,100, but—this is the important point—at column B some 23,900 we see as now wishing to exit at Liverpool Street as against the significantly lower Promoters' figure of 17,900.

569. There is a reason why you have gone through this whole exercise and a way of summarising what the reason is, is perhaps to consider the tables again in table 15 where we have got some figures in relation to what the heading tells us is "The Liverpool Street Underground Ticket Hall B Gate Line Requirement

---

<sup>8</sup> Committee Ref: A8, Exhibit J from Mr Weiss.

---

**The Petition of London with British Land plc**

---

in 2016 with Crossrail". First of all, tell the Committee what you get out of this table, perhaps concentrating on line seven first.

**(Mr Weiss):** This shows using the Crossrail assumptions on distribution, the number of gates needed to meet current standards is 16; 16 being the existing number of gates as presently provided.

570. Why does six and eight in line six add up to 16 in line seven?

**(Mr Weiss):** Because the standard, which is the exhibit I have as exhibit E, tab 20.

571. I hope you are not going to ask the Committee to—Go on.

**(Mr Weiss):** I do not think I dare ask the Committee to even get into some of these formulae. It was mentioned in your opening statement that you add together the entry flow requirement in terms of gates rounded up, the exit flow requirement in terms of gates rounded up, and then above a certain number of gates, I think the number is 10 from memory, you add a further two. This is why the arithmetic, which was also mentioned by Mr Laurence in his opening statement, means that figure of six plus eight plus two comes to 16.

572. For those who are assiduous and want to find the formula, it is at paragraph 3.3.2.4 on page four of 37 of that exhibit, is it not, exhibit E?<sup>9</sup>

**(Mr Weiss):** It is.

573. That is the first of the table I was asking you about. What happens in the second bit of the table to produce the number 20 in line ten?

**(Mr Weiss):** It is all very well just meeting the threshold at the day of opening the scheme but I think we have got to look to the future. The scale, size and reason this scheme is being build, to alleviate gross overcrowding, to facilitate growth, to help with jobs, has got to go some way into the future. A test is applied to see what might happen towards the future. There are two ways of taking the test. If you know exactly what is going to happen and, to be fair, who does between 2016 and the future, if you have perfect and very good knowledge, you can put an inspired guess but generally a 35% uplift is applied to test the scheme for resilience, perhaps for a 60 year period. If that 35% uplift is put into the formula—I will not go through it with you—there seems to be a requirement now of 20 gates. That is 20 gates on Crossrail's own figures.

574. I am not quite sure why footnote tells us it is footnote eight when it appears to be footnote four against total gate requirement, that may just be a mistake. Is the footnote helpful as an encapsulation of what you have just said?

**(Mr Weiss):** Yes, it is. I am sure even if you buy a house and you have got kids on the way, you do not buy a house with the minimum number of bedrooms for the people before the kids, one always looks to the future. In transportation modelling one takes a

robust view that certainly in a booming economy you are likely to get growth, so a 35% factor is applied. It is not unrealistic because the City itself has carried out some studies. This is another exhibit, shall I do it now?

575. Yes, by all means.

**(Mr Weiss):** Bear with me. This is exhibit F.<sup>10</sup> In July of 2005—

576. That is the document, *Commuter Flows in London and the Wider South East 2001 to 2016/21*, Final Report submitted to the Corporation of London and Partners by Messrs Cambridge Econometrics?

**(Mr Weiss):** That is right. Mindful of the deposit in February 2005 of the Crossrail Bill, in parallel the City with several very important partners—the Government Office for London, the Strategic Rail Authority, the Eastern Regional Assembly, the South Eastern Regional Assembly, regional offices associated with those bodies, the Greater London Authority—wanted to examine the sub-regional impacts of what might happen towards commuting, the propensity towards commuting. It took a long forward view. Without going into too much detail that is in the report, there was a variety of growth scenarios across each of the regions depending upon their policies and how they saw it forward. What I can say, and this is where I came in earlier that it is very difficult to forecast the future with any degree of accuracy, is the combined area of the regions involved—these are the regions served by Crossrail—saw very likely a prospect of real growth of 35% taking place beyond 2016. This resilience test as I see it is not just a theoretical mathematical exercise, it is a test as to what those who are charged to look for and to set the policies for these areas might actually see in their administrative places of interest.

577. Mr Weiss, that is very helpful. We were going back to the table at table 15 and reminding ourselves if the Committee is persuaded that the application of a 35% resilience test as you have described it is appropriate, you end up with 20 gates. That is on the basis of the split, is it not, that we saw earlier between Moorgate and Liverpool Street on the sub-surface lines and Crossrail at table 11?

**(Mr Weiss):** That is correct.

578. If you are right about what that split ought to be in very rough terms, what does it mean in relation to the gateline requirement?

**(Mr Weiss):** I see a prospect of some 22 gates being required. If I might add the corollary that, like all formulae and everything else, they take assumptions on everything working like clockwork. Liverpool Street is not necessarily a station that you can predict as working like clockwork. Because it deals with an airport and a mainline station there are people with luggage and particularly those who are perhaps not familiar with the English language arriving at an

---

<sup>9</sup> Committee Ref: A2, LUL, Station Planning, 3.3 Ticket Hall (LONDLB-26-017).

<sup>10</sup> Committee Ref: A2, Commuter Flows in London and Wider South East 2001 to 2016/21 (LONDLB-26-052).

---

The Petition of London with British Land plc

---

interchange station may well take a longer time to go through the ticket gates than those assumed in the formula. Certainly with the growth of Stansted airport, the growth of people with luggage being expected to enter the Underground may well make the gate requirement rise above the theory. If I might further add that the gateline is the average requirement—I do not want to go through the standard—seen to cope with the average situation with all the caveats and bells and whistles attached to it, but the flow at Liverpool Street station is not a constant average. I think you will hear later in the evidence by Mr Tim Spencer that the surveys done at Liverpool Street have seen significant variation between various days of the week in the flow. If I can remind myself, the difference between a flow taken on a Monday and a flow taken on Tuesday was some 28%. Like all flows there are snapshots of a particular point in time but we can expect to see fluctuations above the 35% for which in gateline the design of the ticket hall ought to be appropriate. I would not like to see every Monday, for example, the ticket hall having to close because it cannot take the extra—let us take half of that—14% of passengers. In my view, there has got to be not only realistically future proofing but an understanding—

579. Sorry. Future proofing?

*(Mr Weiss):* Future proofing.

580. Is that a special term you have used? Maybe it is obvious.

*(Mr Weiss):* The scheme has to have the ability to cope with not only the unknowns but some of the predictable expectations of the future, namely more passengers and the need of those passengers for gates.

581. Mr Weiss, you have taken us on a helter-skelter tour into section 11 where there are some risk scenarios you want to tell the Committee about. You have mentioned the one about passengers coming from Stansted airport and so on and so forth. Give yourself a moment just to scan section 11 of your proof, have a sip of water and just see what else it is you would like to tell the Committee about under that general heading, please.

*(Mr Weiss):* I do not think one can design a ticket hall on the basis that future technology is going to sort it all out, everyone is going to use a Super Oyster card or something. We have to work from the premise that we have the technology and the standards that apply in 2006. Given the potential overload of this gateline and concourse that I have set out for you, what might the reasonable railway operator do? Generally, the safety rules, particularly with Underground stations, are you want to get people up rather than in, and that happens at Victoria on a regular basis where when there is an overloading to the access to the Victoria line they close the gates there, sometimes the gates to the entrance to the Victoria line but very often—I put a phone call through—they say once a day sometimes

between the mainline concourse and the Underground concourse. This for Ticket Hall B is likely to occur at point E on exhibit A.<sup>11</sup>

582. Point E on exhibit A.

*(Mr Weiss):* Point E on exhibit A. Today's flows are some 22% less than as forecast by CLRL for 2016. This occurrence takes place about once a month, so if Crossrail does not take place I do not think it unreasonable to suggest that this occurrence is likely to increase. How would you manage the station if you did not have enough gates or enough space to cope with these flows? You could turn off the escalators. Could we go to exhibit A. You might turn off the escalators from Crossrail leading to point M, which would not be very helpful to the City because then Crossrail would not have a Liverpool Street exit. You might turn the escalators off at P to allow Crossrail to come through but there is then a tremendous risk of overloading the other exit from the Central line. If you look at the isometric diagram at the top left, all of the Central line exiting passengers would then have to go through the relatively narrow passageways and exit via points F and G.

583. So you are postulating that passengers entering the Central line would continue to be able to go down the escalators at point P but those wishing to exit the Central line would need to use the different exits on to the mainline concourse shown at your points F and G?

*(Mr Weiss):* That is correct.

584. Why would that not work as a solution?

*(Mr Weiss):* At the moment in the morning peak about a similar number go through concourse C, which are points F and G to the concourse, as the eastern ticket hall which comes through point E. One is intensifying the flow which by choice the passengers—passengers here have a choice—have decided to split between the two concourses in almost equal quantities. It is robbing Peter to pay Paul. One now puts the stress on the Central line concourse.

585. These are perhaps really questions for cross-examination, but let me just ask you this: has anybody from London Underground or anywhere else suggested to you that this is something that they would or should or could do?

*(Mr Weiss):* Yes, in as much as the normal discussions we have with London Underground about the operations of other stations have raised questions of what happens if a station becomes overloaded, what are your preferred scenarios? The preferred scenario, which is quite commonsense for safety, is if you are running out of capacity you stop people going in and encourage people to go out. This was why I started from the premise that if one started to get an overload at this ticket hall the natural reaction would be to stop people coming in. I think we heard earlier on that a significant number, almost

---

<sup>11</sup> Committee Ref: A2, Liverpool Street Station Plans—Exhibit A (LONDLB-26-003).

---

**The Petition of London with British Land plc**

---

half of the mainline passengers, in the future expected to come to Liverpool Street station, not from Crossrail but from mainline trains, seeking access to the Underground. To deny them that point destroys Liverpool Street as the important interchange it is.

586. Taking your conclusion at 11.15 on this risk scenario and the following paragraphs, what is it that you want to say to the Committee on this general subject?

**(Mr Weiss):** There are two points to highlight. If the quantum of flows predicted by Crossrail are correct and the design only just meets standards in 2016 the matter is significantly worse if the flows are redistributed, as I have demonstrated by taking account of where the jobs are. However, if the quantum of flows on Crossrail are under-estimated, by then going forward and applying a 35% resilience test we have a situation which is considerably worse in the future beyond 2016.

587. Is there anything else under that section that you would like to add, Mr Weiss?

**(Mr Weiss):** I am conscious of the fact that the Committee are not London MPs. I do not know whether they have ever experienced a closure in seeking the Underground, if I might describe one to you.

**Mr Liddell-Grainger:** I think the Committee have experienced it.

588. **Mr Laurence:** Have you had the experience yourself, Mr Weiss?

**(Mr Weiss):** Yes, I have, at Victoria. I have a season ticket which takes me either to the City or to Victoria. It happens as a regular occurrence that one leaves the mainline train seeking access to the Underground, you then have a gridded gate pulled in front of you, you have a klaxon chucking out 85/90 decibels probably five feet above your head and bright lights. What is frightening is that you have a constant stream of people leaving trains packing in behind you, all anxious because they are going to be late to work or missing appointments, and you cannot turn around and go elsewhere. It is not a pleasant experience and not one I personally would wish to see for any future scheme, however mild the opportunity might be, and it is certainly one that would detract from the City as a place to do business for financial and international services and one that wishes to retain its title as World City.

589. Before I ask you to come to your conclusions, can I now invite you to step back a bit and deal with a topic I said I would come to which is really the evolution of the Crossrail Scheme. For that purpose we have produced a little bundle of documents which we invite the Committee to add to their existing bundle as new exhibit K. I have not got the index to that bundle, the index that is being handed out is in my handwriting at the moment but a typed copy will be produced tomorrow. (Same handed) I am going to be asking you about this, if I may. Could you also have your appendices A and B to hand in

case you need to remind yourself of particular dates that are material. Let us start with your appendix A. Mr Weiss's appendix A is part of his proof of evidence which is not before the Committee so you do not need to trouble about it. Just give us the background starting in the 1990s if you would please, Mr Weiss?

**(Mr Weiss):** Certainly. In the 1990s the east-west safeguarding directions and route of Crossrail was defined pretty much the same as it is. Particularly for Liverpool Street it determined quite positively the need for a two concourse station. The concourse at the Liverpool Street end was known then as the Arcade site. The Arcade site was intended to be a new construction above the sub-surface lines. This is the commercial area to the south of Liverpool Street and to the east of Blomfield Street. I think you went through it on your walk this morning. If you go to exhibit A again, the isometric.

590. **Mrs James:** Is that the Metropolitan Arcade?

**(Mr Weiss):** That is the Metropolitan line, yes. The whole area was to be demolished, a cap put over the operating railway lines and then a double exit dedicated to the street exit station would be provided there both for the Metropolitan and Circle lines and the future Crossrail.

591. **Mr Laurence:** If we then take the next part of the chronology. That was in the early 1990s. Did anything else material happen? I genuinely do not know the answer to this question myself. Did anything else material happen after the Crossrail Bill was dismissed by the Opposed Bill Committee in 1994?

**(Mr Weiss):** Not really with regard to the type and size of station needed at Liverpool Street, in other words a two concourse station.

592. There came a time when the project was, as it were, revived again sometime just after the Millennium. When was that approximately?

**(Mr Weiss):** The Strategic Rail Authority did some tests on Crossrail, detailed design, economic and patronage, operating and which railway lines and which routes might be used. Essentially with the creation of the Greater London Authority the Promoter for Crossrail then was a joint company of equal influence called the Fifty-Fifty Deadlock Company of Transport for London and the Strategic Rail Authority. Design started moving into details and discussions up to and through 2003 and 2004 have always included a two concourse station at Liverpool Street.

593. Let us just go back to the first of those two dates, 2003. That is because at your new exhibit K we have a note of a meeting on 3 December 2003 made by somebody from Crossrail, have we not?

**(Mr Weiss):** Yes. They very kindly raised the fact that the City has been talking positively of this project with the Promoter for a number of years. I think the point was made that in 2003 Richard Davies, who was the design manager for this part of Crossrail—if we look at 2.6, the underlined text

---

 The Petition of London with British Land plc
 

---

there—“Richard Davies advised that the Arcade ticket hall did not currently appear to be justified in terms of the business case.” If I may, I would like to just comment. That was an old Crossrail scheme. To be very clear about that, that Crossrail scheme followed different routes to the west. It went to Richmond and to Twickenham, it did not go to some of the places it does at the moment. We were discussing a project which was different from the one on the table today.

594. Jumping ahead in your exhibit K to page three, at the bottom of the page encircled, what do we have there?

*(Mr Weiss):* The Secretary of State for Transport put in Adrian Montague to produce a report called the Montague Report to examine Crossrail and report back to the Secretary of State as soon as possible.

595. I have put in my manuscript index here that this was a ministerial statement in July 2004. I based that on the date stamp at the top of page three. Do you know was it, in fact, July 2004?

*(Mr Weiss):* From my notes, Alastair Darling, Secretary of State, made this statement on 20 July 2004.

596. I see the date July 2004 in the bottom right-hand corner of page eight, so the index is right. What is material about this statement? Which paragraph do the Committee want to look at?

*(Mr Weiss):* If we look in paragraph 10 there is the business about he sees a particular weakness in that scheme about the Richmond-Kingston branch and has suggested a change which duly took place. The comment on the previous submission mentioned a weakness of the business case. If you are strengthening the business case by taking out a weak element, by inference that must change any views regarding interests in the business case at the eastern ticket hall at Liverpool Street.

597. At all events, if we turn on to page nine and also have your exhibit G to hand at tab 22.<sup>12</sup>

*(Mr Weiss):* If I can draw the Committee’s attention first of all to table 22, exhibit G. The second round of consultation was carried out by the Promoter in September and October of 2004. What was handed out to the public and others—I count myself in the others as a stakeholder from a local authority—was an artist’s impression of this Arcade Ticket Hall. The lower picture gives an impression of the scale and size, and number of ticket gates, which in August 2004 the Promoter thought as necessary for this station. This was further detailed on page nine of exhibit K, you will see the same outside view. At the bottom schematic

it very clearly shows just about where the nine is circled, “Liverpool Street Eastern Ticket Hall at Street Level”.

598. Is there some text also on this page nine that you would draw the Committee’s attention to?

*(Mr Weiss):* Yes, if I could. It is three paragraphs in: “At the eastern end, a new ticket hall would be built over the London Underground Circle line platforms replacing the Liverpool Street Arcade at street level.”

599. Then it goes on: “This new ticket hall would replace the London Underground ticket hall currently on the corner of Old Broad Street and Liverpool Street”.

*(Mr Weiss):* That is correct. In the autumn of 2004 to me, and I think to the public, there appeared the Promoter’s firm intention to provide a dedicated eastern ticket hall at Liverpool Street.

600. Is that then reflected in the, is it an internal City of London Planning and Transportation Committee Report on Crossrail Round 2 Consultation, which we have at page 10 in the Bundle?

*(Mr Weiss):* It is. It is a public report where I was informing members what was happening on Crossrail. If you look at paragraph three, which is page 10 of exhibit K we mention the second round of consultation lasting between 5 August and 27 October 2004. If I run you to paragraph 15 of my report, which is on page 11 of the exhibit, it describes the eastern ticket hall as word for word put out in the publicity by the Promoter.

601. **Mr Laurence:** That is the passage I read to you yesterday in the course of my opening, sir. The next relevant events happen in rapid succession and you will see from my index that in my haste we got the bundle in the wrong order, so you need to skip to 21 February, which is the date—

602. **Mr Liddell-Grainger:** Mr Laurence, I am going to now suspend the sitting until Tuesday. Please remember, everybody involved, we are in Committee Room 5 on Tuesday. Would the learned gentlemen please take their papers across to Committee Room 5. It will be open if you want to do it now.

603. **Mr Laurence:** That is very helpful, sir, thank you.

604. **Mr Liddell-Grainger:** I call the Committee to order.

---

<sup>12</sup> Committee Ref: A2, Proposed Eastern Ticket Hall (Arcade Site) (LONDLB-26-059).

---

**Tuesday 24 January 2006**

Before:

Mr Brian Binley  
Mr Philip Hollobone  
Mrs Siân C James  
Mr Ian Liddell-Granger

Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

*In the absence of the Chairman, Sir Peter Soulsby was called to the Chair.*

Ordered: that Counsel and Parties be called in.

605. **Sir Peter Soulsby:** Welcome to the Select Committee on the Crossrail Bill in committee room 5 on what many of us over the weeks may come to see as our second home. I am taking the Chair today in the absence of the Chairman. It would be helpful for the Committee to make two opening remarks. Reflecting upon the evidence that we were receiving last week, we have two comments. The first is to say that the Committee are likely to be more interested in the impact of the increased pedestrian traffic in Liverpool Street rather than the precise numbers of those who might be passing through Liverpool Street, and I would ask counsel for the Promoter and the Petitioners to bear that in mind as they present their witnesses and evidence. Secondly, again reflecting on the evidence last week, the Committee are likely to be much more interested in the strength of the arguments being put in front of us at this stage rather than a history of how the positions being presented to us were arrived at. Again, I would ask

that counsel for the Promoter and the Petitioners might bear that in mind as they present their evidence.

606. **Sir Peter Soulsby:** The third and final point I make in opening is to suggest that the very helpful models that have been prepared for us to aid our deliberations might be more conveniently located out in the corridor. That is not because we are not interested in them; quite the contrary, because we do want to see them, but in this very crowded committee room it is very difficult to get round to see them properly and it would be easier for us to see them out there and, if necessary, if points need to be made by reference to them, for us to go out and have a look at them there. We can now return to the evidence that we were receiving on Thursday of last week and can I on behalf of the Committee, Mr Laurence, invite you to recommence.

607. **Mr Laurence:** Thank you very much, sir. Mr Weiss, would you resume your place please?

---

*Mr Joe Weiss, recalled*

*Re-examined by Mr Laurence.*

608. **Mr Laurence:** Sir, you will be glad to know that it is no longer the practice to spend 15 or 20 minutes making elaborate corrections of the transcript. There are, however, two corrections which I would like to draw to your attention from the transcript of Mr Weiss's evidence last time. The first is at paragraph 573 where, towards the end of his answer, Mr Weiss is recorded as referring to a 16-year period when he plainly means a 60-year period. The sentence should read: "If you know exactly what is going to happen and, to be fair, who does between 2016 and the future, if you have a perfect and very good knowledge, you can put an inspired guess but generally a 35% uplift is applied to test the scheme for resilience, perhaps for a 60-year period." That is the first of the two corrections that it is worth making. The second is at paragraph 583 where Mr Weiss did refer to the correct point, point P for Peter, but on the transcript we have a reference to point B. In fact, it was my question where I am sure I did refer to point P but we have a reference to B and so the question should have read as follows: "So you are postulating that

passengers entering the Central line would continue to be able to go down the escalators at point P but those wishing to exit the Central line would need to use the different exits on to the mainline concourse shown at your points F and G".

609. Mr Weiss, we were at the stage last Thursday of looking at the events just as the Environmental Statement and the Bill were about to be published in February 2005. In the light of the guidance that the Chairman has just given this morning I propose to take very quickly indeed the history of what occurred round about that time. You have put in a bundle of documents to remind the Committee which the Committee might like to refer to. That is your exhibit K, and I am happy to hand in, sir, a typed version of the index to that exhibit. Pages 15 and 16, Mr Weiss, of that document are a note of a meeting at 50 Broadway, SW1, and I think that is CLRL's offices, on 21 February, the date before the Bill was published, That is nearly a year ago, is it not, but can I just quickly ask you some things about the meeting that took place on that day?

---

**The Petition of Corporation of London with British Land plc**

---

First of all, the note which has been handed in and is now part of your exhibit, had you seen that note before Mr Elvin made it available the other day?

*(Mr Weiss)* No, I had not.

610. Secondly, do you recall the meeting nevertheless?

*(Mr Weiss)* Yes, I certainly recall the meeting.

611. Messrs Haste and Anderson and Mantey of CLRL were there, were they not?

*(Mr Weiss)* That is right.

612. And you have now had a chance to read the note?

*(Mr Weiss)* Yes. The Bill was deposited the next day, I believe, 22 February. Therefore, the context of the meeting was before one had any chance whatsoever to look through 40kg worth of documents.

613. It is right that you had not seen the Environmental Statement until the following day?

*(Mr Weiss)* I had seen some of the documents because they were put through beforehand but the sheer quantity—to put it into context, it is 17,300 pages of written text.

614. You make reference to that. Taking it very shortly indeed, did you fully appreciate in February 2005 that the original proposal for an eastern ticket hall at Liverpool Street for Crossrail had been dropped?

*(Mr Weiss)* Sort of. That is a qualified answer. Something as major as this one would have considered would have been discussed or at least explained in advance. Under page 16 of this exhibit K, paragraph 1.14, I am attributed as saying I was pleased the arcade was no longer included, et cetera. I think the context of that discussion is the fact that the earlier proposals had put forward a construction site totally across the face of both Liverpool Street station and the south side of Broadgate, namely, going from Bishopsgate in the east to Blomfield Street in the west. The Bill proposals had halved that site. The western side only, from Great Broad Street, which is where the Metropolitan Arcade comes out, west to Blomfield Street, as far as the City was concerned was a good thing, namely, that the potential for severance from all these people we described at the last meeting would be considerably reduced.

615. Jumping ahead, just tell the Committee as briefly as you may when it was in 2005 that the Corporation began to be actively and acutely concerned with the issue that we are here about today.

*(Mr Weiss)* It was July 2005 when British Land drew to our attention areas which we as a local authority would not normally get involved with, that is, the actual workings within the railway itself, namely, that the shared ticket hall, ticket hall B, seemed to be operationally close to what might be considered a tight situation. I then contacted Cross

London Rail Links, who were helpful, but it was not until the end of August that any flows were given to us describing what happened within the station. From then onward, sir, we looked in considerable detail, raised concerns and then attempted to have discussions with the Promoter to perhaps reinstate an eastern ticket hall or have an enlarged or better position. I am afraid it did not reach conclusion, which is why we are here today.

616. I would now like to ask you to turn to your conclusions please, paragraph 12 of your proof. You have given evidence, have you not, that as you see things in 2016 the existing eastern concourse at Liverpool Street will be under strain?

*(Mr Weiss)* That is correct.

617. In a nutshell, what is it that you ask the Committee to direct the Promoter to do by way of a response given that Crossrail might by then be operational?

*(Mr Weiss)* Given that the vast majority of people that are exiting the station at Liverpool Street by all modes are seeking a walk-to destination in the City, in other words, we see them as City employees, we believe that there should not be a situation in the very near future after opening of the project that this facility is in any way substandard. We believe that the operational capability of the shared ticket hall is at or close to its limit in 2016. We have heard that the situation with growth pushes it into a very much tighter risky scenario. Currently Liverpool Street station, both Underground and mainline, is operating as a very tight scenario with twice the visitors as a place like Heathrow airport in a confined space. Everything has to work to the optimum to ensure that disruptions do not occur. The efficiency of the City of London as the world's leading business and financial centre we would expect to be mirrored in the provision for a new railway such as Crossrail. To conclude, we would therefore seek that the provision at Liverpool Street be done to a standard that permits both foreseen and to a degree the unforeseen growth situations that are likely to occur at this mainline railway station from the outset. Whether it is through an expanded existing facility, the Central line ticket hall, or through the creation of a dedicated second concourse, upon the location of which we have no particular preferences, we do not mind. What we would wish to see is from the outset this project provided adequacy.

618. You have said in the course of your evidence that you believe that the Corporation and British Land should be involved in the process of deciding what the best solution is for Liverpool Street. Is that right?

*(Mr Weiss)* That is right. I think it is fair for me to say that as a local authority officer one has to get political permissions but the Corporation is a very strong supporter of this project. We want to work positively with the Promoter to seek the right location, whether it is public highway, whether it is for the acquisition of buildings or for whatever

---

**The Petition of Corporation of London with British Land plc**

---

management is needed to ensure, for example, if we have to close a street or make a one-way system, that a solution can be obtained within the public realm or shared public realm and using private sites.

619. If the Committee were to be satisfied on the capacity case which is being put forward by the Petitioners, and were to direct the Promoter to take appropriate action, you recognise, I think, that that action might require yet further evaluation of the figures to take place as well as further work to take place on which is the best option?

*(Mr Weiss)* That is right.

620. Others will be giving evidence as to how long that process may take. I said in opening, sir, you will recall, on instructions, that it ought to be capable of being done within a few months. Mr Weiss, I do not especially want you to comment on that estimate of time unless you feel able to do so, but I do want to ask you this. If there is no agreement at the end of that period of a few months as to which option should be pursued, would the Corporation favour asking the Committee to resolve the resulting dispute?

*(Mr Weiss)* Yes, I think we are at a position where we believe at present what is being put forward by the Promoter does not appear to cope adequately for the future. Options are to be presented with later Petitioners but certainly the present situation we see does not fulfil both the reasonable expectation and

where certainly we see the employment growth likely to take place in the City at a level that befits both the quality of service to be provided by the rest of the railway or the quality of service expected in the City of London.

621. It follows, I think, from the evidence that you have given that nothing that the Corporation has put forward by way of evidence to this Committee detracts in any way at all from its essential enthusiastic support for the Crossrail project?

*(Mr Weiss)* I should hope not, no. I beg forgiveness of the Promoter if I unintentionally said so.

622. **Mr Laurence:** Thank you, Mr Weiss.

623. **Sir Peter Soulsby:** Mr Weiss, you have clearly put forward the Corporation's project and you have clearly explained your concerns about the perceived pedestrian capacity of Liverpool Street. Can you clarify whether at this stage the Corporation has considered the second alternative? You mentioned the Central line ticket hall and the concourse. Have you considered which of those alternatives you would prefer to have in practice?

*(Mr Weiss)* We have, sir. It is either. There is no stated preference. The answer which you are seeking, and I think I gave it in the conclusion, is that the present scheme seems to be under-provided. Extra provision is necessary, the choice of which has yet to be tested.

---

*Cross-examined by Ms Lieven*

624. Good morning, Mr Weiss. Can I start with the very last matter you have covered with Mr Laurence, the City's enthusiasm for Crossrail? I just want to ask you about that in the context of Mr Rees's evidence. Mr Rees placed great stress on the danger that financial firms in the City would flee the City for New York, Chicago or Frankfurt if there were problems with public transport at Liverpool Street. Can we put those concerns in context? You in your evidence in chief described Crossrail as "this wonderful railway". Crossrail brings massively increased capacity on rail networks to the City. It provides a brand new ticket hall at Moorgate, it provides a brand new ticket hall at what I would call Farringdon East, which lies just within the City, so looking at it overall, but before we come to the detail, there can be no doubt, can there, that Crossrail significantly improves public transport to the City of London?

*(Mr Weiss)* If I might answer yes, capacity increase, but where? I used to talk to the younger engineers and say that one of the mysteries of transportation engineering can be brushed aside. It is not as clever as you think. It is exactly like plumbing. What is the point of a big pipe leading into a small pipe because it is the small pipe which determines capacity? We have exactly that situation with Liverpool Street. What is the point of this big pipe of Crossrail bringing tens of thousands of extra people into the system if they cannot get out in the City, which is one of the places we see growth?

625. Can we then move on to effectively the small pipe argument? The first area I want to cover with you is problems at Liverpool Street at the moment. Can I ask you to have a look at the Transport for London investment programme which contains the congestion relief schemes in the current TfL five-year investment programme?<sup>1</sup> I am not going to read it all the way through that because it would be exceedingly tedious, but what is clear from that page, and I am sure it is a document you are familiar with in generality, is that it is not at the moment a station which TfL places within its congestion relief programme, is it?

*(Mr Weiss)* I would not find that surprising. If I might qualify that, it is not a station owned or operated by Transport for London. It is a station operated by Network Rail. I do not see, unless there is a new partnership arrangement coming into place, that Transport for London would be putting such into their programme.

626. I am sorry, Mr Weiss. I do not think that is a very good point. I have not copied the page but the top priority for TfL in terms of congestion relief is actually Victoria. It is within the TfL managed parts of the Network Rail/TfL network.

---

<sup>1</sup> Committee Ref: P11, Five Year Investment Programme, Transport for London.

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Weiss)* Let us be very clear. That is the Underground as against mainline rail.

627. Just focusing on the Underground, what is plain from this page is that in terms of the Underground station TfL does not presently see Liverpool Street as being a priority in congestion relief?

*(Mr Weiss)* I was not party to how and why they produced this priority list but that is as demonstrated there, and one cannot argue against that.

628. In terms of how severe the problems are at Liverpool Street at the moment, and we are talking now about Liverpool Street, the London Underground station, because that is what you are asking for further works to, you referred in evidence in chief to closures of once a month. I think you have now been sent the log book from Liverpool Street LUL operations and what that shows is that the Underground station has only actually been closed once since September 2005 and that was for five minutes on 10 October.

*(Mr Weiss)* That is an interesting interpretation because the log book which I have seen covering three months has shown closures of something like 14 per month, all right, only for a few minutes, most of them in ticket hall C, but what jumps out at me immediately from such a process is that managed closures, whatever the duration, having to take place shows a station under stress.

629. Let us be clear about this. My instructions are, and I will check the ticket hall C point, that certainly in respect of ticket hall B it has been closed once since September 2005 for five minutes. Are you going to produce evidence that that is not right?

*(Mr Weiss)* No, but, as we have heard in the evidence given previously, all these ticket halls are inter-related. Would it help you, sir, if we referred to our original exhibit A, which was tab 16?<sup>2</sup>

630. **Sir Peter Soulsby:** If you could get up on the screen it would be very helpful.

*(Mr Weiss)* We need to look at tab 16, the top left hand corner, the isometric. If you go to the top left hand corner, the exit from the Central line, you have a choice of two options. You have two escalators feeding to the top ticket hall, which is ticket hall C, and one escalator bank, leading to ticket hall B. Any closure, any blockage, any constriction at ticket hall C under managed circumstances would translate normally to excess or increased demand at ticket hall B so, despite B having fewer closures, the effect on B is still associated with C having to close under today's patronage levels.

631. **Ms Lieven:** Can you understand why there is any station management going on at Liverpool Street? That is because when there are problems on the Central line, say, that there is supposed to be a two-minute service and there is some problem and the service stops for maybe five or ten minutes, you

cannot have too many people on the platforms of the Central line, can you, because it all becomes unsafe? What happens in those circumstances is that people are stopped from going down the Central line escalators, whether it be ticket hall B or C?

*(Mr Weiss)* Yes, I think I referred to that in my evidence.

632. **Ms Lieven:** And that is what is happening when ticket hall C people are prevented from going through the gates. It is because they are not being allowed on to the platforms for safety reasons. It is nothing to do with congestion in ticket hall C or indeed ticket hall B. It is to do with the safety on Central line platforms.

*(Mr Weiss)* I have noted what you said.

633. That is a matter, problems on the Central line, as to whether or not there is a two-minute service or a five-minute service, which has nothing whatsoever to do with Crossrail, has it?

*(Mr Weiss)* I disagree with that. If you go back to the flows involved, and I am sorry, Chairman, but it means going to the table of flows which you said you did not like, I will not go into the detail but the exit flows, the number of people wishing to leave these same Central line trains, will pass through the same congested ticket hall that people are going to is considerably larger than the number entering.

634. If you just stick to the question, Mr Weiss, what the material from London Underground shows is that people are being stopped from going down the escalators at both tickets hall B and C because of what are known in the trade as perturbations on the Central line.

*(Mr Weiss)* Yes.

635. Those perturbations on the Central line are not affected by Crossrail in one way or the other, are they? Crossrail is completely separate from the Central line?

*(Mr Weiss)* We have a situation in which you are suggesting that a perturbation on the Central line, because of the shared access at ticket hall B, would then, following your logic, also prevent access to Crossrail for the tens of thousands of people wishing to change onto either the Underground or Crossrail from mainline trains, so yes, were these self-same ticket halls closed for the Central line it would affect access to Crossrail as well.

636. Mr Weiss, the Committee saw on the morning site visit what was happening, which was people being stopped from going down the Central line escalators. That is the normal station management measure at Liverpool Street when there are problems on the Central line, is it not?

*(Mr Weiss)* Yes. If we go back to the exhibit there, they would have been stopped at point M, which is where the Crossrail connection is due to join through. Because of the operating vagaries of the Central line the access to Crossrail for anybody wishing to enter or leave Crossrail—and the important thing for us is leave—to enter the City

<sup>2</sup> Committee Ref: A2, Liverpool Street Station Plans—Exhibit A (LONDLB-26-003).

---

**The Petition of Corporation of London with British Land plc**

---

would be blocked by a swelling mass of people who are being denied access to the Central line, not something I think we would positively wish to see for the start of the new railway.

637. But, Mr Weiss, I would suggest to you again that is not a very good point because we know from the bottom plan in exhibit A that what that does not show is that the station's operation room, which possibly Mr Bennett will be able to point out, the oval shape, is being removed, so even if there were people stopped at the top of the Central line escalators there would be plenty of room for people to go round and go down the Crossrail passage, would there not?

*(Mr Weiss)* I cannot even make comment on that. What is shown there is what is existing. What was proposed, which, I will be completely open about, was quite difficult to find, was a series of broken lines around some of those areas. We have a new, multi-billion pound railway. I think you are suggesting to me that people wishing to leave this railway to enter the City, this prime employment location, have to find their way through a large mass of people in a space perhaps a little bit bigger than existing but they still have to find their way through a football crowd type of space because the rate at which these people are leaving the mainline trains and coming through is quite significant.

638. We will come to the detail of what is called the pedroute modelling a bit later but are you contesting that the station operation room is going to be moved? You have seen it on the plans, have you not?

*(Mr Weiss)* I have seen it on a plan marked "Draft" which was sent to me. The plan was not part of the Environmental Statement. I have it in front of me. It is in a broken line; therefore I presume it to be removed. I have searched the text. I have found one reference to it—and I am searching for the right word that was used in the text; I think the word was "modified" or "adjustment to"—in volume 2, paragraph 8.9.19, and the bullet point I will quote: "The existing London Underground Liverpool Street ticket hall will be reconfigured". I presume you mean by that "reconfigured". Yes, it might be reconfigured but you still bring our Crossrail people in and out through a lot of people being denied access to the Central line in this reconfigured area. It is not free-flow. This is people wanting to go into the street.

639. Mr Weiss, I really do not want to waste time on matters which should not be in issue. Can you accept that that station operations room is going to be removed, yes or no?

*(Mr Weiss)* If you say it I will accept it.

640. Can I move to a general question? Before we look at the figures, just to get some idea of what is going on with this railway, how likely it is that Crossrail will make the existing situation at Liverpool Street significantly worse, or indeed any worse at all? I will come to the figures in a moment but can I have a route plan put up please? We try and

understand what Crossrail is doing to flows at Liverpool Street. The first thing it is doing, if one takes the north east segment, is that at the moment there is what is called Great Eastern slow lines coming from Shenfield into Liverpool Street.

*(Mr Weiss)* Yes.

641. If you are on any of those stations from Shenfield through to Stratford and you use the GE slows and you want to go west of Liverpool Street, say you work in the West End, you have to get off the GE slow at Liverpool Street, walk across the concourse, down into the LUL concourse and on to the Central line?

*(Mr Weiss)* Right.

642. Crossrail takes over the GE slow lines.

*(Mr Weiss)* Yes.

643. So all those people on that line who want to go west of Liverpool Street and at the moment interchange through the LUL and the Network Rail concourse will now simply sit on their Crossrail train and whizz straight through to their destination.

*(Mr Weiss)* Those that choose to do so, yes.

644. So that is one cohort of people who will be taken out of the existing Liverpool Street station?

*(Mr Weiss)* Yes.

645. The second cohort of people is those, whether on the GE slows or the Great Eastern fast lines, who currently go to Liverpool Street, go out of the station and walk west towards Moorgate?

*(Mr Weiss)* Yes, there may be a few.

646. We will come to how many there are in a few moments. Equally, people on the Central line who work around Moorgate, a proportion of them, will at the moment get out of the Central line at Liverpool Street and walk through the LUL concourse, through the Network Rail concourse and out to walk west to Moorgate?

*(Mr Weiss)* Yes.

647. All those people who transfer on to Crossrail will now not come out of Liverpool Street entrance at all but will walk through the Crossrail platform and will come to the isometric in a minute, and go straight out of the Moorgate entrance, will they not?

*(Mr Weiss)* If that is the preferred destination.

648. Of course, but that is another cohort of people who are being taken out of the existing congestion at Liverpool Street.

*(Mr Weiss)* Yes. You say "cohorts" but I think we will come to the numbers, regrettably.

649. We will, indeed. Can we then have a look very briefly, in the light of the Chairman's very understandable comments about figures, at your passenger movement figures and just see how that is reflected in the figures? Can we flip up that passenger movement table, as I call it and have a look at table

---

The Petition of Corporation of London with British Land plc

---

1?<sup>3</sup> First of all, what that shows is total exits from Liverpool Street in 2001 in the three-hour peak of 68,300.

*(Mr Weiss)* Yes.

650. Turn on to table 6, if you would, and what that shows is that at 2016 without Crossrail (a crucial point) that goes up on our figures to 77,700.<sup>4</sup>

*(Mr Weiss)* Yes.

651. That growth has got nothing to do with Crossrail. That is simply business growth in the City.

*(Mr Weiss)* Yes.

652. Then go if you would to table 11, and what that shows is that the total exits from Liverpool Street go down to 73,300 in 2016 with Crossrail.<sup>5</sup>

*(Mr Weiss)* Yes.

653. I appreciate that you dispute the figures, and we only got your new figures last night so I am not in a position to cross-examine you on them, so just do this on our figures if you would. What those three tables show is that on our figures, far from Crossrail increasing the use of Liverpool Street station in 2016, it actually decreases the use. There is growth from 2001 but that is growth from business development, not growth from Crossrail. That is what the figures show, is it not, Mr Weiss?

*(Mr Weiss)* Your figures include an overwhelming number, and by that I mean more than half of those exiting National Rail, because if you go to table 6, the one up there, station passenger exit flows without Crossrail, of your 77,700—and I am sorry, Chairman, I have to go to the figures—46,500 are National Rail. These are not Crossrail people. These are people coming through the 18 gates of National Rail. I think what we should be concentrating on is the Underground, including Crossrail, the Central line and subsurface line and Crossrail. You have a much smaller total to consider. The differences are very much more marked.

654. First of all, a few minutes ago you seemed to be concerned about the Network Rail concourse and the LUL concourse, so I put these figures to you in order to see overall impact on Liverpool Street. Are you now saying no, let us just focus on the LUL?

*(Mr Weiss)* No, I am not saying that at all. What I am saying is that yes, the whole of the Liverpool Street station complex following both the growth on the existing lines and the provision provided by Crossrail receives more people, but the point of our concern at Liverpool Street is concentrated because it is not our *locus* to look at the Network Rail area of interest. Our concern is about the adequacy of exit, primarily in the morning peak, into ticket hall B for people we see as almost exclusively wishing to come to walk-to work in the City.

655. That is extremely helpful, Mr Weiss, because that allows me to concentrate on what is happening at the gateline in ticket hall B. That is your real concern, is it not?

*(Mr Weiss)* It is indeed.

656. Brilliant. Then we can focus on that issue alone. Let us look at table 10, which is focused precisely on this point: ticket hall B gate line requirement in 2016 without Crossrail, yes?<sup>6</sup>

*(Mr Weiss)* Yes.

657. What we see is that at 2016 without Crossrail there is a requirement for 15 gates.

*(Mr Weiss)* Yes.

658. And if you do the plus 35%, and we will come to the appropriateness or not of that later but let us assume it for the moment, without Crossrail instead a requirement of 20 gates, yes?

*(Mr Weiss)* Correct.

659. Look at the position with Crossrail, table 15, so this is just focusing on the flows you are bothered about, what we see is that with Crossrail it goes up in 2016 to a requirement of 16 gates; that is the number of gates we have at the moment.<sup>7</sup>

*(Mr Weiss)* I am with you all the way here.

660. And the in-future year, so plus 35% on those figures, gives a requirement of 20 gates.

*(Mr Weiss)* That is what is stated here.

661. What you can see from comparing table 10 and table 15 is that Crossrail has only a very marginal effect, from 15 to 16 gates, in 2016 and no change at all in 2016 plus 35% in terms of the gate requirement.

*(Mr Weiss)* I hear what you say but, Chairman, what I would like to stress here is that it is not a marginal effect. It is marginal effect at a gateline which is seen to be at the limit. We have this completely new provision which does nothing to take something at the limit to make it—and I will use the word again—future-proof. I would not consider it unreasonable that where you have a new facility it does not keep the bad just about ready to fall over according to the standard situation but seeks to improve it. In the present situation it does not.

662. I will come to that in a moment if I may. First of all, 20 gates. Certainly my instructions from LUL are that if you put in what are called slim line gates you can get 20 gates in ticket hall B as it is at present. Do you have any reason to disbelieve that?

*(Mr Weiss)* I do not consider myself a gate expert.

663. Coming back to your principal point, what these two tables show, that is, table 10 and table 15, is that the increased requirement for gates is not a

---

<sup>3</sup> Committee Ref: A3, Passenger movements in 2001 (LONDLB-2604-032).

<sup>4</sup> Committee Ref: A3, CLRL 2016 Forecasts without Crossrail (LONDLB-2604-034).

<sup>5</sup> Committee Ref: A3, CLRL 2016 Forecasts with Crossrail (LONDLB-2604-036).

<sup>6</sup> Committee Ref: A3, Liverpool Street Underground Ticket Hall B Gateline Requirement in 2016 without Crossrail (LONDLB-2604-035).

<sup>7</sup> Committee Ref: A3, Liverpool Street Underground Ticket Hall B Gateline Requirement in 2016 with Crossrail (LONDLB-2604-037).

---

 The Petition of Corporation of London with British Land plc
 

---

consequence of Crossrail, is it? It is a consequence of growth in the City. Crossrail does not increase the gate line requirement. What increases the gateline requirement is business growth in the City of London.

*(Mr Weiss)* What has increased the gateline requirement is a combination of business growth in the City and a redistribution of flows between the various rail modes at Liverpool Street station.

664. What these figures suggest, I put to you, is that what the City and British Land are trying to do here is get Crossrail to pay for the expenses that follow from unconstrained business growth in the City of London, and you have not asked the Minerva Tower or the Heron Tower or any of these massive new developments to make financial contributions to a new ticket hall at Liverpool Street, have you?

*(Mr Weiss)* I am not too sure where this line of questioning is going. Chairman, we have, as with all local authorities, formal policies which decide how and where we go forward to the future and the context in which we give planning permissions. When Mr Elvin cross-questioned Mr Peter Rees he raised a similar question about our unitary development plan. That was produced in 2002 and it was done in the context of both the Mayor for London GLA's published transport strategy and the developing London Plan, and it was tested by a government inspector and passed because both of those documents set out a timetable by others for creation of public transport within London, namely, Crossrail, Thameslink 2000, various tram schemes and so forth. In reply to your questioning about cause and effect, we are following the Government approved policies as determined in our unitary development plan in the context under the larger umbrella for London. I see no problem with that.

665. Can we just come back to the point, Mr Weiss? What the figures are showing, can we agree, is that it is not Crossrail which is producing the need for more gates at Liverpool Street; it is business development? Would you agree that? The consequences of that we will come to in a second.

*(Mr Weiss)* The opportunity provided by Crossrail to bring to a more comfortable situation was thereby coming to Liverpool Street. Were it not to have come to Liverpool Street, on the tables you have referenced, which is table 11, forecasts in 2016 without Crossrail, it would have shown a tight situation. No doubt the TfL business plan might then have introduced Liverpool Street as a station to be actioned, but with Crossrail coming along there is the opportunity, with all this expenditure on new railways, to rectify something which is building up to a situation needing action. Crossrail can do that.

666. That is brilliant. That is just where I wanted to get to. There are two parts to that. We are agreeing, because you have referred to table 11, that Liverpool Street would be under that stress with or without Crossrail.

*(Mr Weiss)* Yes.

667. And we are going on to say, and can I paraphrase it, that Crossrail is an opportunity. You are coming to Liverpool Street, you are as it were wiping the fairy dust of Crossrail on Liverpool Street and so use this opportunity to sort out the problems at Liverpool Street?

*(Mr Weiss)* I think Crossrail is doing that itself. I think we have heard that the ability to have mobility impaired access has been a benefit that Crossrail brings in. Railways operate in two different scenarios. They run under what are known as grandfather rights, in other words, something put in in Victorian times and are horribly expensive to do, but if you come in and produce a new provision you are expected to meet all the latest codes, all the latest practices. Of course, we expect to do that at Liverpool Street.

668. Okay. I just want to see where that gets us, if we may, remembering that we on this side cannot simply be concerned with the City of London. We have to look at Crossrail as a whole. You said in your evidence that the City was concerned about Crossrail being delivered quickly and affordably. I am paraphrasing.

*(Mr Weiss)* I will run with that.

669. It follows, as night follows day, does it not, Mr Weiss, that if Crossrail becomes heaped with too much additional cost, too much additional time and too many additional problems, the chances of it being delivered quickly, let alone affordably, go down?

*(Mr Weiss)* That is a very broad topic upon which you are seeking comment. The original Crossrail, going back—and I know you do not want the history—the very much more slim-line Crossrail, the Crossrail picked up by the Strategic Rail Authority was a very much more slim-line Crossrail; it only went to the Shenfield branch. This new Crossrail is double the length of tunnelling, double the sort of catchment to the east, it has examined, had rejected and reconfigured areas to the west—the scheme has grown enormously. I believe, notwithstanding what happens in the centre, the whole purpose of Crossrail is to actually create pressure relief on the existing railway network and give new opportunities. What is provided and what is provided in the busiest areas, which I think is the City—probably Tottenham Court Road Station is the busiest—should be fit for purpose. By purpose I mean being able to cope with the future at the beginning. We do not want—I am sorry, Chairman, if I can just make the point—a sticking plaster and string approach which just meets the process which is going to have to be addressed in five or ten years' time; it is the core of an extremely busy area; there is an awful lot of very high worth, highly important businesses to UK plc that do not want to see the area dug up for another five or six years because what was put in, to save money at the outset, has not been fit to see it through for the growth we are seeing.

---

 The Petition of Corporation of London with British Land plc
 

---

670. Mr Weiss, can I come back to the question: if you heap too much cost on Crossrail you inevitably decrease the chances of it happening quickly. Do you not?

*(Mr Weiss)* I think cost and adequacy and fit for purpose and safety are all areas we can put in the axonometric and decide what comes out. Crossrail is being built to seek a series of public transport improvements. To not improve the situation, known and foreseen, I think, on our figures, to be tight in the future—it is not a matter of cost, it is a matter putting cost in the right areas. I believe it is an area with a cost that should take place because not only of the large numbers of people that would benefit but because of the large numbers of people that will be relieved as a result of Crossrail coming through. In fact, it is a double-whammy; it is a double value for money. It does what Crossrail ought to have done in the first place; it also relieves the situation on London Underground.

671. Can I have one more go, Mr Weiss? Can we agree that if you place significant additional costs on the Crossrail scheme you diminish the likelihood of it going ahead quickly? Just say yes or no.

*(Mr Weiss)* I consider it a necessary cost, not an additional cost.

672. We will come back to cost a bit later. I just want to look at this idea of Crossrail bringing its fairy dust, to use its opportunity, to improve. You are presumably aware that there are six other subsurface stations served by Crossrail?

*(Mr Weiss)* I am indeed.

673. With the possible exception of the Isle of Dogs, all of them have existing congestion issues. We can run through them if you want: Farringdon, Tottenham Court Road, Bond Street, Paddington—*(Mr Weiss)* Which is one of the reasons I believe the Government has so strongly decided to back Crossrail, because of the need to give pressure relief across the existing Underground system.

674. And Whitechapel. Each of those has existing problems. Does it not?

*(Mr Weiss)* If you say so.

675. In each of those it is likely that this Committee will hear evidence from Petitioners suggesting that further works should be done.

*(Mr Weiss)* I cannot foresee what other Petitioners might do in a particular area, but I can say that, in the area we are concerned about, which is the busiest railway station in the United Kingdom, we believe work should be done, even at an extra expense, to bring this up to standard.

676. **Sir Peter Soulsby:** I think that the Committee, as you know, will be looking at these areas at a later stage. I think, if you would not mind, at this stage just focusing on the question of Liverpool Street. I would say, also, that I do not think it is necessary for Mr Weiss to look at the wider cost benefits—that will be a matter for the Committee to decide at a later

stage—but what we do need to hear are the arguments for and against the particular Petitioner's proposals for Liverpool Street.

677. **Ms Lieven:** I understand that completely, sir, I just seek to get the Committee to know that there is a precedent-style argument here, but I am more than happy—

678. **Sir Peter Soulsby:** I think we have taken that point.

679. **Ms Lieven:** Could I move on, Mr Weiss, to the question of the likelihood of people using Moorgate over Liverpool Street? Can I have put up at this stage the axonometric of the entire station?<sup>8</sup> I do not know whether the Committee had copies of this as well, or want them. Perhaps, at least, Mr Laurence can be given a hard copy.

680. **Sir Peter Soulsby:** If we can have hard copies of this. I think we can make do for now with what we have in front of us on our screens, but if we do not already have hard copies I am sure they can easily be provided.

681. **Ms Lieven:** Yes. I think, sir, it would be fair to say there is a little teething problem as to what degree we have paper-free and to what degree we have copies, and we will make sure that from now on—

682. **Sir Peter Soulsby:** It is the detailed plans we have in front of us. I do not recall having seen this particular drawing which shows both the Moorgate and Liverpool Street end on paper. Perhaps if we could have that, but until then we will make do.

683. **Ms Lieven:** You are quite right, you have not seen this before and it is not a document in the Environmental Statement. I want to use this as a mechanism, Mr Weiss (I am sorry to do this via you), to explain a little bit of what is going on in this station. Can we take a midpoint on the Crossrail platforms? Just to orient ourselves, the Crossrail platforms are in green, running left to right. Just above them, in pinky-yellow, are the Metropolitan and Circle line tunnels. Do you have those, Mr Weiss?

*(Mr Weiss)* I do.

684. We have in red, running top to bottom on the right-hand side, the Central line tunnel platforms. If we can all walk through together in order to explain how this works, if we take the central point on one of the Crossrail platforms, if a person wants to leave—I will call it the Liverpool Street Station but that, of course, incorporates both the Moorgate and the Liverpool Street end—if they want to leave at the Liverpool Street end, the eastern end, they walk along the platform to the central passage, they then go up the escalators, they then walk along another passage which goes underneath the Circle and Met

---

<sup>8</sup> Crossrail Ref: P2, Liverpool Street Station 30 axonometric view (LONDLB-2604-022).

---

**The Petition of Corporation of London with British Land plc**

---

Lines, they go up another set of escalators, they then walk along another passage, and come into what we have learnt to call Point M in ticket hall B.

*(Mr Weiss)* I am with you.

685. They then go through ticket hall B and they then have a choice as to whether they go left through the gateline of ticket hall B and up into the main station concourse, and then from the main station concourse out to the street by one of the three or four street entrances at Liverpool Street Station.

*(Mr Weiss)* Yes.

686. I said they had a choice. The alternative is when they come up from the Crossrail passage they can turn right and go into ticket hall A, which is quite difficult to see on this complicated drawing. One can just see on the south side, the bottom side, of the yellow for the Circle line. Now, going back to the midpoint of the Crossrail platform, if you would, I want to do a similar exercise for leaving via the Moorgate exit. The person walks along the platform to the west, goes into the central passage, up the escalators, one long flight of escalators up into the ticket hall, then through the gateline, which is just to the left. It is quite difficult to see on the computer and I apologise for that. Then round the corner and up what looks like a ski ramp but is actually a set of escalators up to the street.

*(Mr Weiss)* Yes.

687. Just one point, because I do not think it was very clear from your evidence-in-chief; it is a brand new ticket hall at Moorgate. Is it not?

*(Mr Weiss)* It is.

688. What that shows—I will put the figures to you and we have sent them to you already—is that walk from the centre of the Crossrail platform to street at Moorgate is a great deal more direct than the walk to the street at Liverpool Street.

*(Mr Weiss)* That is notable.

689. The difference in time, taking an average walk time, is three-and-a-half minutes from centre of platform to street at Moorgate and five-and-a-half minutes from centre of platform to street at Liverpool Street.

*(Mr Weiss)* I will not contest that.

690. **Ms Lieven:** We sent you those figures some months ago. Can I just interject here in the cross-examination, I was going to go through the mobility impaired routes at this stage, but perhaps as Mr Binley is not here today, and he has shown a particular interest in this, we might save that for another occasion.

691. **Sir Peter Soulsby:** I am sure that might be helpful. Would you mind, very briefly, just pointing to us where the lifts are?

692. **Ms Lieven:** Can I have them flashed up quickly?<sup>9</sup> We have got two axonometrics because it was so difficult to show it on these big ones. If we can have the Liverpool Street end, we have shown the MIP access in the little orange dots. So what you do is come off the end of the platform on the cross-passage, there is then a lift going up there to parallel with the Circle line. The Committee may remember from the site visit we saw where that is going to have a passage along the Circle line and then there is another lift there up into the arcade ticket hall. To do the same exercise at the Moorgate end, again, it is the red dots.<sup>10</sup> You come out of the end of the platforms underneath the Northern line (the black is the Northern line there) go up in a lift to the ticket hall, then go round and through the gateline (because, of course, you have to go through the gateline) and then there is another lift up to the street.

693. **Sir Peter Soulsby:** That is very clear, thank you.

694. **Mrs James:** It is not just Mr Binley who is very interested in this. What no one seems to be telling us is how much additional walking, or travel, is included. So the distance would be very helpful from the disabled point of view and time point of view.

695. **Ms Lieven:** Can I have a note drawn up on that?

696. **Sir Peter Soulsby:** I think it would be very helpful to have the times that you referred to a little earlier on, about the journey on to the street and the distances along the platform, the distances on the surface between the new Moorgate and the Liverpool Street and, again, the walking times estimated between those two. It would be helpful to have that.

697. **Ms Lieven:** We will do that.

698. **Mr Laurence:** It would also help, if the Promoters know the answer, to indicate what difference our option one, the one that Mr Chapman proposes, of direct access to the corner of Blomfield Street and Eldon Street, that I described to you, would make to the walking time.

699. **Sir Peter Soulsby:** I am sure it would be very helpful to have that as well and to be able to compare the difference in walking times, both below the ground and above the ground.

700. **Ms Lieven:** We were going to produce such a note when we produce evidence-in-chief, but we will try and do it before that if we can. Coming back to the cross-examination, Mr Weiss (I am sorry to have used you as rather a tool there), where all that gets us is that in what is called free-flow conditions—so with no congestion—somebody can get from the

<sup>9</sup> Crossrail Ref: P2, Liverpool Street Station, 30 Axonometric View—Liverpool Street Ticket Hall (LONDLB-2604-023).

<sup>10</sup> Crossrail Ref: P2, Liverpool Street Station, 30 Axonometric View—Moorgate Ticket Hall (LONDLB-2604-024).

---

The Petition of Corporation of London with British Land plc

---

middle of platform to the fresh air of the outside world at Moorgate two minutes quicker than they can at Liverpool Street. If there is congestion in Liverpool Street, and I do not think there is any issue (and we will see this from the pedroute) that there will be more congestion in Liverpool Street than in Moorgate ticket hall, then that two minute additional walk time will become even longer. Will it not?

*(Mr Weiss)* Yes, but if I might make a comment on this two minutes in comparators, we have got to actually get it in the context. One of the triggers for the passenger is distance time and choice of route. The two minutes jumps out at me. I must make this observation: we have a brand new railway station, the location of which is sited two minutes away from its prime point of access than it might have been. In other words, reversing your argument, we have a larger number of people wishing to exit at Liverpool Street and your station design gives them a longer walk than the minor exit at Moorgate.

701. Let us just look at that, Mr Weiss, in general terms. Mr Berryman will give evidence on this, but the primary reason why there is a longer walk to Liverpool Street than to Moorgate is because the platforms are directly underneath the Moorgate Station, whereas they fall to the west of Liverpool Street.

*(Mr Weiss)* Absolutely right. That is the point. If the platforms are moved closer to Liverpool Street, which is where we see the majority of people wishing to exit, that would not be the case.

702. Are you suggesting that we should have shifted the entire platforms east to Liverpool Street? Is that something Mr Berryman needs to deal with?

*(Mr Weiss)* I am not in the business of redesign of the major railway. My observation is that the design as presented here, as made from your notional midpoint—and I would like to comment on that—has made an unnecessary two minutes walk for people wanting to get out to the areas they most seek.

703. I will make a note for Mr Berryman to deal with why you cannot shift the platforms east. For the moment, let us take the station we have designed.

704. **Mr Laurence:** We do not suggest that one of the issues you are going to need to deal with is whether the platforms be moved.

705. **Sir Peter Soulsby:** I do not think anybody is seriously suggesting that the platforms should be moved to anywhere other than where they are at the moment. Let us take that as accepted by the Promoters and the Petitioners and move on.

706. **Ms Lieven:** Can we just see what that additional two-minute walk time means in reality? Can I ask you to turn up the City's bundle, Tab 18, please?<sup>11</sup> This is the spots. When you introduced this

yesterday you described this as walk circles from the midpoint between Liverpool Street entrance and the Moorgate entrance. Yes?

*(Mr Weiss)* Yes.

707. The walk circles you have drawn here, one can see from the key, are entirely based on distance.

*(Mr Weiss)* Yes.

708. If we were going to take into account the fact that it is much quicker from the platform to the street at the Moorgate end, then in terms of dividing between who is going to walk from Moorgate and who is going to walk from Liverpool Street, you should extend the Moorgate circle. If you are trying to do a five-minute walk time you extend the Moorgate circle at the expense of the Liverpool Street circle. Do you not?

*(Mr Weiss)* With respect, I completely disagree with that as a valid analysis. If you wish, I will explain later. I believe—and I have got four examples to illustrate it—that the choice is made from, as you put it, the place where fresh air is first met.

709. Most people, I would suggest to you, Mr Weiss, look at it quite the other way round: they would rather walk in the fresh air than underground, save for the worst of the weather. So, actually, people will prefer to use the Moorgate end quite apart from the time saving because they will get out there quicker to fresh air.

*(Mr Weiss)* May I beg to disagree? I have prepared to give you four examples where it shows very clearly that people will walk towards where they want to go to and that the two minutes—I can take that down to a very much shorter time—becomes very, very much less of a consideration.

710. Can we take one specific example? Doubtless the Committee will use its own knowledge of these things. Let us take one your spots, which is on the boundary. Of course, these will all go into the figures that are produced as to where people will walk from. There is a big blue spot just below the 400 metre buffer distance on the Liverpool Street side of the line. We think that that is the proposed redevelopment of the London Stock Exchange.

*(Mr Weiss)* Yes.

711. If you take a walk time—just one example—from Moorgate to Liverpool Street rather than a distance line, then that spot comes closer to Moorgate than to Liverpool Street. Does it not?

*(Mr Weiss)* I would not know. This is not a spot or number that I included in the calculations. You are back to the key on that diagram. The blue spots are those under construction. Admitted, we did the analysis of what we measured in 2003, which were the pink spots.

712. **Ms Lieven:** Mr Weiss, I do not think that is a wildly good point. Can we go back—

713. **Sir Peter Soulsby:** It is for the Committee to decide whether that is a good point.

<sup>11</sup> Committee Ref: A2, Crossrail Station Entrance—Employment Distribution (LONDLB-26-007).

---

The Petition of Corporation of London with British Land plc

---

714. **Ms Lieven:** I do apologise. Can we go back a stage? If you are going to have a saving of something like one to two minutes, you can walk something between 100 and 200 metres in that time. Is that right?

**(Mr Weiss)** Yes. I would like you to finish that but I believe, and I would wish to demonstrate, that these notional one to two minutes actually drop back to a situation where the choice does not put that into how it is made.

715. Can we just establish the fact and then I will ask you about how you think the choice is made. If you extend the walk distance from Moorgate by a distance equivalent to the extra one or two minutes that you get from the shorter walk from the platforms, then, for example, the pink and blue spots at the point of the London Stock Exchange fall within the Moorgate walking area and not the Liverpool Street walking area. Do they not?

**(Mr Weiss)** Because the exit at Liverpool Street does not go to street. We are talking about people going to street destinations, if you can call an office that. It goes via an underground concourse, a mainline concourse and back on itself. One of the things that the later Petitioners will wish to address is that very point: the very people wanting to go to these spots, pink or blue, want to go to the street, not to an underground concourse, which could be and I believe will be particularly busy in the future.

716. They can get to that particular spot, the London Stock Exchange, by using the Moorgate end of the Crossrail station more quickly than if they use the Liverpool Street end. Is that right?

**(Mr Weiss)** From the exit of the station, and if you add your—what is the word—handicap to the exit from the station I agree with that analysis—the method of the analysis, not the logic behind it.

717. Tell us why you think the logic does not work.

**(Mr Weiss)** Double-ended stations have signs within them that do not say: “Fresh Air One Minute” or “Five Minutes” or “Three Minutes”; they will have, in the first example, which is the Piccadilly line, “Knightsbridge”. On a visit to Knightsbridge, at one end is Harrods, at the other end is Harvey Nichols. If you are going to Harrods, it does not matter whether you are at the far end of the platform and fresh air is one minute at the Harvey Nichols end, people will and have been seen—and I can speak from family and personal observation—walk along the platform, crowded though it may be, a longer distance to get out of the entrance to which they are directed by the signing. I believe, as far as Mr Laurence’s Livergate is concerned, on the platform will be a sign saying: “Liverpool Street” to the east and “Moorgate” to the west, and people will then take the direction, Liverpool Street or Moorgate, according to their destination from the fresh air exit point of that particular station exit. That is the theory, what actually happens in practice?

718. We have a hard example in the City, Bank railway station. Bank is connected to the Docklands Light Railway, the Northern line and the Central line and, also, by a long passageway, connected to Monument station. A similar argument applies there: how much longer does it take to get off the platform to the surface at one end of the station versus the other? We have had considerable dialogue with Docklands Light Railway over their recent decision to double the length of trains and double the number of passengers into a situation which is quite tight at sub-basement level. It takes, during the peak period in the morning, probably one-and-a-half minutes—and we are talking about similar length of time to the walk distance—to actually physically get and queue to the start escalator to bring you up at the Bank end. Those one-and-a-half minutes could be used to get to fresh air at the Monument end and, following your argument, to walk back. People choose to queue—to actually shuffle along a corridor at almost no speed—to go towards their intended distance. Time-wise it is longer.

719. The third argument we have is another example, probably very parallel to Crossrail, in the City of London. There is a station called City Thameslink. Thameslink is a north-south route that joins King’s Cross through to London Bridge and Blackfriars. It is another double-ended station called City Thameslink. The southern end goes towards Ludgate Circus, the northern end goes towards Holburn. Exactly like Livergate, it is a 12-car-length designed station, and exactly like Livergate, the trains that enter City Thameslink are of a shorter length than the actual station to which it is designed. Curiously, at City Thameslink, four and eight-car trains stop at a twelve-car platform with the rear end of the train at the Ludgate end. Two exits (and I have measured this): you can get to the surface in just less than one minute, if you go to the Ludgate Circus end, from the midpoint of an eight-car train, and slightly less from the mid-car of a four-car train. It takes an extra two minutes, almost identical to this situation, to go to the other exit which is signposted as “Holborn”. Yet people get out of this train and walk two minutes’ extra to get to fresh air at the Holborn end because it is from that exit they seek their offices. That happens. It is not theory, it is not transportation planning fantasy; people get out and walk the longer distance because it is in the general direction, regardless of time to fresh air.

720. The fourth example (I might, perhaps, be interpreting things a different way), is, I believe, that your own clients’ transportation entries have said exactly what I have said in a document—I do not want to lay things on the table—in a response to what we said is a document called *Liverpool Street: Station Demand and Capacity*, with an executive summary, written for, I think, your clients’ people. Paragraph 6.4 says, and I will quote—

721. **Sir Peter Soulsby:** If you are referring to a document we do need to have sight of it.

---

The Petition of Corporation of London with British Land plc

---

(*Mr Weiss*) I am sorry. It is the Promoter's own document.

722. It is a document we have sight of?

723. **Ms Lieven:** No, sir. I think I know what it is, sir.

724. **Sir Peter Soulsby:** Would you like to identify it more clearly, Mr Weiss?

(*Mr Weiss*) It is called *Liverpool Street Station: Demand and Capacity*. The reference is B3 010106.doc (which, I presume, is where it is held on the Promoter's computer).

725. **Sir Peter Soulsby:** Would you like to read it out and we can note what you say and then take a view as to whether we need the document.

(*Mr Weiss*) I will gallop through, Chairman. The heading of this section is called "Liverpool Street/Moorgate Station split"—germane to our discussion. There is a paragraph 6.4 within it.

726. **Sir Peter Soulsby:** We now have the paragraph 6.4 in front of us. That is very helpful, thank you. If you would like to quote.<sup>12</sup>

(*Mr Weiss*) If I can draw your attention to the very last sentence, just to save time here. "This methodology ignores the fact that Crossrail passengers will choose their exit based solely on the distance from that exit to their final destination on the surface."

727. **Sir Peter Soulsby:** And those words are whose?

728. **Mr Laurence:** Sir, that is my copy of the document. I believe the author was a Mr John Landells of Cross London Rail Links Limited, as would appear from the last page of it. Cross London Rail Links Transport Planning, January 2006. It is a document that was given to us during January as a response to, I think, a paper that had been put up by Messrs Steer, Davies & Gleave.

729. **Ms Lieven:** Can I ask a couple of questions on those four points, Mr Weiss?

730. **Kelvin Hopkins:** Just on this general point, I use the Thameslink every day and I travel through City Thameslink. If the concentric circles on the diagram are based upon distance from the surface exits, if we have another diagram based upon the walking distance from the notional middle of the platforms, one could get some different concentric circles which would shift to the east of the intersection of the concentric circles and get a better picture of walking distances, taking account of Mr Weiss's point about walking distances, even if one was not concerned about meeting fresh air as soon as possible, and it would tend to suggest there would be something of a shift of passengers towards Moorgate rather than Liverpool Street, other things being equal.

731. **Ms Lieven:** That is the point I am seeking to make. When one puts it in terms of time or walk distance, we get to your point, with respect, sir. What we will do is a reworked version of Tab 18 to show where the extra time saving distance would be drawn as a circle.

732. **Sir Peter Soulsby:** I think it might be useful to illustrate your point in that way, but I would just go back to the remarks I made at the outset of today's session. I think the Committee are not likely to be particularly concerned about the precise numbers or precise proportions between one end and the other. The general principle that is being explored here is perhaps of considerable importance to us but I do not think absolute precision is called for here.

733. **Ms Lieven:** None of these things would ever be more than indicative, because people will make individual choices, but we can do it as an indicative plan. Just one point on that, Mr Weiss: the vast majority of people who are going, for instance, to the London Stock Exchange will be people who go regularly. They are not tourists who will be in this station once and will simply follow the signs; they will know perfectly well what the quickest and pleasantest route to their job is.

(*Mr Weiss*) I think that is a very important point. These are experienced commuters, but I must say that we are talking—and I understand the Chairman's point—we have shown 20 ticket gates on your figures, so whether the circles move one way or the other the overload is seen to be, on your figures. If you use the redistributed split that we have put forward, I think it rises to 22. The argument is still there. Even not contesting the split, we see the tight situation at this ticket hall.

734. Let us move on, Mr Weiss, to see what we actually need at Liverpool Street, on your figures and our figures? So we are coming, really, to the Chair's question about where is the impact. First of all, the LUL standard, if we may. You rely on the April 2005 standard which appeared in City bundle of documents, Tab 20, to show a calculation for what I would call the static gate number. Just to remind the Committee (I do not want to spend too long on it), paragraph 3.3.2.2 has a formula for how many gates you need depending on the number of people in the station at that particular instance, that five minutes. I will call it, for ease of reference, a passive static gate calculation figure. We have already seen—I do not want to go back to it—from your Table 15 that, on our figures, you need 16 gates with Crossrail in 2016 and 20 if you do the plus 35 figure. Just before we come on to whether the plus 35 is appropriate or not, you are presumably perfectly well aware that these LUL standards are subject to a concession process by which, if the standards cannot be met but it is not felt that it is necessary to meet it, there is an internal process within LUL by which they put forward a safety case and a concession can be granted. I understand you say we should not be going down that route, but just so the Committee know, that is the LUL process.

---

<sup>12</sup> Committee Ref: A10, *Liverpool Street Station: Demand and Capacity*, Para 6.4.

---

 The Petition of Corporation of London with British Land plc
 

---

735. **Mr Laurence:** Is that referred to in this document?

736. **Ms Lieven:** No. Maybe Mr Weiss does not know—

737. **Mr Laurence:** Could I see it if it is being referred to?

738. **Sir Peter Soulsby:** It is important that the Petitioners see that document if it is being referred to.

739. **Ms Lieven:** We can produce that.  
**(Mr Weiss)** You say “concession”. It is an interesting word for a new scheme.

740. Let us leave that (I just wanted to put it on the table) and move on to whether we need to go down that route at all. In terms of checking out whether or not a new station will work at higher demand flows, the way of doing that is routinely done by something called pedroute modelling. Is it not?  
**(Mr Weiss)** Yes.

741. You rely on the need for what you call future-proofing at plus 35%.  
**(Mr Weiss)** I do not think just us; I think it is regarded as good practice within most transportation planning projects.

742. I do not think you produced this document in your evidence but it was referred to in Mr Laurence’s opening. That plus 35% comes out of a document called the *LUL Station Demand Modelling*, which I hope Mr Bennett is going to flash up.<sup>13</sup> It is not in your evidence but you obviously know about it because Mr Laurence quoted extensively from it in opening. I think our copy originally, at some point, came from Mr Laurence. Can I ask you to look at 2.1.4, which is where the 35% comes from? We can see: “Future year (scheme design) refers to the demand level for a future year on which scheme architectural design is to be based. The demand level that should be tested is: Railplan network scenario. . . . And a margin of 35% for long term growth”. Do you see that? That document does not tell you how to test for 35% growth. It does not say to do it by static gateline calculations or pedroute; it leaves it up to the designer as to how they test. You agree, do you not, that pedroute modelling (and I am afraid the Committee is about to become familiar with pedroute modelling) is a standard way that LUL tests whether a station works or does not work at 35%.

**(Mr Weiss)** I cannot speak for LUL. pedroute is one of an armoury of tools that designers would use. There are a variety of tests about the numbers of escalators that seem to be appropriate, the number

of gates that seem to be appropriate, whether people can get off the platforms, and so forth. pedroute is one of an armoury; it is not the only way.

743. Let us look at pedroute and how it works.<sup>14</sup> I am very sorry to the Committee, but I am going to have to give a short pedroute teaching here. What one does, Mr Weiss, and tell me if I have got this wrong, is you divide the station—and we have here the Liverpool Street end of the station—into blocks. You then run various numbers of people, having made various assumptions in the model, through those blocks and you can see here, on the left-hand side in the key, that the blocks at this stage are defined by their uses within the station. If we just run through this. You can see, right at the top, is where the Central line would be, then the thin blue lines are the escalators coming up from the Central line. Then we come up to point M on your exhibit A. We have got the Crossrail passage going off to the left. Yes?  
**(Mr Weiss)** I am with you.

744. On the right we go into the main section of ticket hall B and then, below that, we go into the ticket hall A, the arcade ticket hall, and you can see the Met and Circle line platforms running at the bottom of the page. Then, going up again, we have got the gateline and then we get into what is called the unpaid side of ticket hall B. Then we go up into the station concourse.  
**(Mr Weiss)** That is a fair description.

745. You are going to see a number of different pedroutes models, but that is the core one for ticket hall B. What then happens is that you run the numbers of people through the various parts of the station, and if we go to the next pedroute drawing, which is the key assumptions, what happens next, Mr Weiss, is that when you run those predicted numbers through the blocks come up in different colours. So it is, basically, the hotter the colour the worse the situation. If it is blue you have got absolutely no congestion whatsoever, and you work your way up to purple (or, in some plans, it comes out as red) which is overloaded. That is what is going on there. Before we turn up the first set of the pedroute models, I am doing this exercise in order to check what happens in the future-proofing—the plus 35%. Can we just see the context of that before we see what happens to the models? When one considers plus 35%, you have to realise that that plus 35% is on growth to 2016. So you have got the 2016 growth, which in various different scenarios varies between 15, 20 and 25%—  
**(Mr Weiss)** We accept that.

746. And then you have plus 35% on top. So when you look at plus 35%, what you are really looking at is something in the region of 50 or 60% on today’s usage?  
**(Mr Weiss)** It is growth on 2016. I cannot give exact figures.

<sup>13</sup> Crossrail Ref: P12, *Part One, Introduction, Station Rebuilding, Journey Time, Stations, Marketing & Planning, Station Demand Modelling, Guideline Document*, London Underground Limited.

<sup>14</sup> Crossrail Ref: P2, Ticket Hall B layout (Crossrail) (LONDLB-2604-025).

---

 The Petition of Corporation of London with British Land plc
 

---

747. Let us assume a figure of a total growth from today of plus 50%. I just want to think about what we are going to see. You are talking about increasing the usage of Liverpool Street by 50% of what is happening today.

*(Mr Weiss)* I will run with the 50%. I cannot comment at the moment.

748. It is important to remember that there may be some parts of the LUL network that simply could not operate at 50%. For instance, I do not know whether you are familiar with the Central line at peak hours?

*(Mr Weiss)* I am.

749. I think we can all agree that it is simply inconceivable that you can get 50% more people onto the Central line at peak hour.

*(Mr Weiss)* It is, but commenting on that, this is going back to the pipeline. It is not inconceivable—Crossrail parallels the Central line quite significantly through central London—that vast increases of flows that would like to have gone on the Central line now jump on to Crossrail.

750. A perfectly fair point, Mr Weiss. Can I put a better one to you? The Northern line. The Northern line, I think, is the only Underground line that Crossrail does nothing to relieve congestion on. Is that right?

*(Mr Weiss)* It does slightly, but I take the point; it is north-south as against east-west.

751. Again, it is absolutely inconceivable that you could get 50% more people on the Northern line.

*(Mr Weiss)* It would not be comfortable, putting it mildly, but I am not too sure that it is inconceivable.

752. **Sir Peter Soulsby:** I think the Committee gets the point. Let us see the pictures.

753. **Ms Lieven:** Can I just introduce them before I look at the first? What I am going to show you, sir, and explain to Mr Weiss, is two sets of pictures. The first set is the pedroute modelling based on our figures, which are produced in the passenger movements in 2001, and then moving on. So that is what we are going to see first. We will then look at pedroute modelling using something closer to your figures.

754. **Mr Laurence:** Before this begins, can I just be clear that I am not quite clear whether we have seen everything that is about to be shown, sir. We, obviously, would like an opportunity to consider it other than just by reference to a fleeting image on the screen.

755. **Sir Peter Soulsby:** I understand that.

756. **Ms Lieven:** Let us put up the first set, which are the ones you have seen.<sup>15</sup> These are based on figures that we got in your passenger movements document.

What we start with, Mr Weiss, is called 2016 A and B. So that is being used as a base, but it is without Crossrail but it is adding 35% demand. What we see on that—can we just orientate ourselves—is only the Liverpool Street end of the station (we have left Moorgate off for simplicity), and running north to south we see the Central line platforms, then we see the Central line escalators are the three green lines and then they run up to point M—because, of course, Crossrail is not on here at the moment—and then they run into ticket hall B. To put it crudely here, what one can see is that one of the Central line platforms is highly congested—yellow—the arcade ticket hall, ticket hall A, is highly congested and there is a certain amount of congestion within ticket hall B. Yes.

*(Mr Weiss)* That is fair.

757. Flick over, if you would, to see what happens if you add Crossrail to that.<sup>16</sup> This is a moment when it is really easier to have the paper copies. Just to talk it through on the same points we were on before, we can see that the Central line platform congestion has got better—unsurprisingly, because Crossrail is relieving the Central line—the ticket hall B is pretty similar (the blocks have shifted around a tiny bit) but it is very much of the same order of magnitude. The arcade ticket hall has got a good deal better and what has got a lot better is the Met and Circle line platforms, which I did not highlight before but where quite a lot of yellow has turned to blue. Do you see that?

*(Mr Weiss)* I do.

758. So can we agree, first of all in terms of the conclusion that there is not much difference between the two, that is very much the point that we started off with on the figures, that is what follows from the tables in the pedestrian movement plan; yes?

*(Mr Weiss)* Yes. What I see here is that looking at the yellow, which is from ticket hall A to the back of where the gateline would be, we have the last but one poor operating criteria at the station and, as you say, there has been an improvement, which is not unexpected because the new facility of Crossrail has caused the relief of the Central line which has created particularly, as you have said, westbound platforms which have gone from yellow predominantly to blue, or yellow to some of it green.

759. There are two points I want to draw out of this, Mr Weiss. Firstly, in terms of with and without Crossrail, it does not make a huge amount of difference in ticket hall B, does it, it is a very similar picture? One does not want to take any of this as gospel because there is a bit of shifting around but it is a very similar arrangement?

*(Mr Weiss)* For this method of analysis there is not a particular difference, no.

760. And the other point to make is that what we see on this model in front of us is that even on 35% demand, it is in broad terms a ticket hall that works;

<sup>15</sup> Crossrail Ref: P2, 2016 AM Peak without Crossrail (+ 35% Demand) (LONDLB-2604-083).

<sup>16</sup> Crossrail Ref: P2, 2016 AM Peak with Crossrail (+ 35% Demand) (LONDLB-2604-085).

---

 The Petition of Corporation of London with British Land plc
 

---

is it not? Do you remember Mr Rees set himself a test of a station which is unable to operate? Now on this pedestrian route model, even at plus 35%, ticket hall B is not a station that is unable to operate, is it?

*(Mr Weiss)* You are saying that. Our evidence is based on the proper operating requirements of the gateline. I think you said in your question to me that when you test the gateline you look at the peak five minutes. The heading there is “2016 AM Peak with Crossrail”. Perhaps you might like to clarify whether this is an average over one hour, a three-hour period or the same five minutes that we have been testing in gateline?

761. These are, as I understand it, 15-minute flows.

*(Mr Weiss)* The five minutes against which the gateline is tested is necessarily more severe because when you refer to the Underground standard against which it is tested, this is paragraph 3.1.1 of the evidence that we have before you, it says “space for normal operation of stations shall be planned to i) minimise congestion and ii) be resilient to surges in demand and train service disruption.” It is that surges in demand element which makes the gateline requirement more severe. To go back to the five minutes, it is the worst five minutes in the worst quarter of an hour in the peak one hour of the peak period of three hours. So we are looking at something here which is a more diluted interpretation than that which is applied to the gateline.

762. Yes, two points on that, Mr Weiss. First of all, and I think we have already been through this, the station planning standard which refers to the gateline static calculation does not itself require to be tested at 35%. There is nothing in there that says test that gateline at 35%?

*(Mr Weiss)* I am not familiar enough with the standard to make comment. What I can say is I think it would be inconceivable that somebody in planning a railway would not be able to get its passengers out through the very points of control, namely the gateline. I think it is a commonsense test. If you are planning for 35% growth, going back to the plumbing episode, you make sure that that tap was big enough to get them out. It does not require—

763. **Sir Peter Soulsby:** Mr Weiss, can we just get it clear, you are arguing that there are other issues about surges and about gateline, but just in the pictures that we have in front of us you are not doubting that pedroute modelling is an appropriate modelling to apply to this sort of situation and you are not arguing that it has not been applied in an appropriate way? What you are arguing is that there are other ways of looking at the situation?

*(Mr Weiss)* That is right.

764. You are not fundamentally disputing the pictures we have in front of us?

*(Mr Weiss)* No, not at all.

765. **Sir Peter Soulsby:** That is very helpful.

766. **Ms Lieven:** Thank you very much, sir. I made the point about standards but now in terms of surges in demand, Mr Weiss, let us look at really whether it is better to test against the gateline static calculation of 35% or pedroute. Can I put a scenario to you to explain how pedroute works. The surge in demand that you get will be where you get—just looking at the LUL position because that is what we have got in front of us—a big block of people getting off a train and charging towards a gateline. That is a surge in demand, is it not?

*(Mr Weiss)* Yes.

767. So the classic surge in demand at Liverpool Street LUL station will be two Central line trains arriving at the same time on the platforms and everybody pouring out, that will be your biggest surge in demand, will it not?

*(Mr Weiss)* Yes.

768. If that happens, they will all charge out of the trains onto the platform and they will get stuck at the bottom of the escalator, and what you will get (we are all familiar with it on London Underground) is a queue at the bottom of the escalator, that is how it works in reality, so by the time those people have queued to get up the escalator, which is working as a funnel here, when they get to the gateline, there will have been, as it were, a delay on the surge and the surge will be spread out, will it not?

*(Mr Weiss)* It is normal behaviour that people walk at different speeds.

769. So you will not get the scenario where you get the massive surge of people coming off the Central line and charging through the gates because the escalator is slowing them down? The capacity of the escalator slows down the number at the gates, does it not?

*(Mr Weiss)* For the Central line, yes, but for the Metropolitan and Circle line, no. The numbers of people exiting from your figures, I am sorry, Chairman, back to table 11, there are a comparable number of people wishing to exit Liverpool Street from the sub-surface lines as the Central line.<sup>17</sup> Those sub-surface lines at Liverpool Street only have one ticket hall from which to get exit primarily from A but they can then walk through to B. Those on the Central line get out of either end of the train and then they have got a decision to go through, as you have shown up here in the top right-hand corner, ticket hall C or go up via ticket hall B. The large numbers, equal-ish, I do not want to throw the exact figures, of people using the Metropolitan and Circle lines which are seeking either to reach the street directly or reach the street via ticket hall B have created that yellow which is evident there. That yellow will have an impact on those wishing to reach the City from Crossrail.

---

<sup>17</sup> Committee Ref: A3, CLRL 2016 forecasts with Crossrail (LONDLB-2604-036).

---

The Petition of Corporation of London with British Land plc

---

770. Take that stage-by-stage, we have dealt with Central Line people, the yellow block of people coming out of ticket hall A—if Mr Bennett can point to it—is people getting across the passage from ticket hall A into ticket hall B, so there is a fairly narrow passage where you have to go up stairs and down stairs. For everybody who is familiar with pedroute modelling you always get more congestion on stairs because people slow down; yes?

*(Mr Weiss)* Yes.

771. That is what that congestion is there, people coming to and from the Met line up and down those stairs; yes?

*(Mr Weiss)* Yes.

772. As far as Crossrail surges are concerned, you are not going to get any surges from Crossrail into the gateline at ticket hall B for the simple reason that because the Crossrail platforms are so far away people will not be walking in one massive surge, they will become spread out as they carry on down the walkway, will they not, that is the way it works?

*(Mr Weiss)* I think this is a relativity. If we go back to the diagram you have shown here, it is axonometric so the scales would change with distance but the spread for that surge to dilute on Crossrail is that crank handle to the left. The surge for the Central line passengers is up an escalator, curve round on yourself and then along another passageway. The capacity of the Crossrail trains is significantly higher than the Underground trains so that were two Crossrail trains, as you alluded to for the Central line, to come into Livergate and create a surge, the size of it would be significantly larger than that on Central Line, so the relatively long passage may well dilute it a bit but I think the effect will be equally as onerous on that ticket hall.

773. There is not the slightest evidence on that pedroute model that a surge from Crossrail at the point will cause any problem whatsoever at the point where it enters ticket hall B. There is no evidence, you have got blue coming up the passage and then slightly lighter blue at that point.

*(Mr Weiss)* This does not show surges. This, as you advise me, is a 15-minute examination; it is not a surge examination.

774. Before we leave this one and look at the next one, can we just confirm that on ticket hall C to the north it is showing with Crossrail plus 35% virtually no congestion whatsoever?

*(Mr Weiss)* For a 15-minute period, agreed.

775. **Ms Lieven:** For a 15-minute period.

776. **Kelvin Hopkins:** It seems the only real hot-spot is at the southern end in the small ticket hall which was presumably originally for the old Circle and Metropolitan line, the axis of which is on the south of Liverpool Street, which is not affected by the introduction of Crossrail at all, it seems, because it is more or less the same colour on both diagrams.

777. **Ms Lieven:** That is right, sir.

778. **Kelvin Hopkins:** So it is something to do with the inadequacy of that access and exit now and that ticket hall now and not the addition of Crossrail? The addition of Crossrail makes no difference whatsoever?

779. **Sir Peter Soulsby:** Perhaps, Mr Weiss, you would like to come back?

*(Mr Weiss)* If I can perhaps help here, sir, this very area which is now seen to be distressed through Crossrail abandoning the eastern ticket hall is where the arcade site, which we referred to earlier, would have been. Were this arcade site to have been constructed—and I am presuming because I have got no process—the pedroute for this would have been very much more beneficial. Having not redone the site for the Metropolitan and Circle lines this is the result.

780. **Mrs James:** Is that where we saw the queuing taking place? Is it not the same?

*(Mr Weiss)* No.

781. **Ms Lieven:** If I can help, the arcade ticket hall is the one next to the Circle line where we were told the MIP lift was coming up and we stood for some time.

782. **Sir Peter Soulsby:** Can I also check just looking at this particular plan we have here, am I right this one shows the existing station control centre still in place? Is that right or am I misreading it?

783. **Ms Lieven:** It does, sir, yes, I think there was a mistake on the model.

784. **Sir Peter Soulsby:** Which would perhaps significantly alter the pedroute assessment in that particular part of the station complex, would it not?

785. **Ms Lieven:** Yes.

786. **Sir Peter Soulsby:** It was made clear to us earlier that it was part of the Promoter's clear proposal that that would be taken out.

787. **Ms Lieven:** What that shows, sir, is this is very much a worst case at that point. The model was then updated and on the one I am going to show you it has been taken out. It is that oval section.

788. **Sir Peter Soulsby:** It is the white immediately behind the blue.

789. **Ms Lieven:** Can I then move on to the next set of pedroute figures. Sir, I should make entirely clear the City have not yet seen this. We have all been swapping information very late and these were only produced literally this morning, so I am not asking Mr Weiss to confirm their accuracy but—

---

**The Petition of Corporation of London with British Land plc**

---

790. **Sir Peter Soulsby:** We take the point that Mr Laurence made earlier on if something is produced they will need an opportunity to respond to it.

791. **Ms Lieven:** Sir, I do not want to get into a tit-for-tat argument but we got a new set of their figures last night. Mr Weiss, I will take this fairly slowly so you can see what is going on. Can I have put up first the description table so we can see the figures. Now what we have down here, Mr Weiss, is four tests and we have sought to take a higher figure which is partially based on your suggested flows.

*(Mr Weiss)* Okay.

792. **Ms Lieven:** I think you are one step ahead of me, sir, in that I hope you have been handed out some paper exhibits. This ought to be page 12, I am told, hot off the press.

793. **Sir Peter Soulsby:** Yes, we have it.

794. **Ms Lieven:** Just so we understand where we are at, Mr Weiss, you can see on Test 1 we have taken without Crossrail 2016 two-way flow at 40,950.<sup>18</sup> Do you see that?

*(Mr Weiss)* I do. What is meant by “plus new gate equipment”? I thought—

795. I am going to come to that in a second, can we take it line-by-line please. The 40,950 should be referred back to the first set of tests where the comparable figure was 33,300 which comes from table 14 in the passenger movements.

*(Mr Weiss)* I support the figure. It is table 14, B2 and B3, for the record.

796. Exits and entries through ticket hall B, 33,300.

*(Mr Weiss)* Agreed.

797. So what we have done is we have uplifted, and I have relied on somebody else’s maths, by 24%.

*(Mr Weiss)* If you say so.

798. **Sir Peter Soulsby:** I think we understand the process.

799. **Ms Lieven:** Then we have done Test 1, this is without Crossrail plus 35% and we have put in what we describe as “new gate equipment”, that is 20 slimline gates, so there is a change.<sup>19</sup> Test 3 is comparable analysis but with Crossrail, so we have taken the 24% uplift and we have put in Crossrail.<sup>20</sup> And Test 4 is the same plus 35%.<sup>21</sup>

800. **Sir Peter Soulsby:** Mr Weiss, are you comfortable with how those figures have been arrived at?

*(Mr Weiss)* Yes and no, Chairman. Part of my evidence previously was that I do not think people carrying luggage are exactly slimline customers nor is the growth we have seen from Stansted, and I would find it very helpful if we could have a diagram to show how these 20 gates could fit into a very tight space. I am not doubting that maybe they can but it would be very interesting to see how they cope with the known patronage that is going to take place from an international airport to a busy rail exchange. I am not taking it that you could fit 20 gates in there.

801. **Ms Lieven:** We will certainly produce a diagram.

802. **Sir Peter Soulsby:** Ms Lieven, Mr Weiss is being taken through material that he has not yet had an opportunity to look at and to respond to and I am aware the Committee has now sat for the best part of two hours, so I wonder if this might be an appropriate time to take ten minutes, for him to have an opportunity to look at the figures and the Committee to have an opportunity to stretch our legs. We will reconvene in ten minutes from now.

*After a short break*

803. **Sir Peter Soulsby:** You were in the process of some questions of Mr Weiss, please proceed.

804. **Ms Lieven:** Mr Weiss, we were just about to go through the most recent pedroute diagrams. Can I put one relatively small point to you before we look at the pictures which is my instructions are that the slimline gates involve slimming down the gate machinery. The space for the person to pass through is no smaller so it will not be any greater problem than at the moment for people with suitcases or who for whatever reason are larger going through the gates. It is only the machinery that gets slimmer.

*(Mr Weiss)* That I appreciate but it is the extra, the non-gate element, which takes away from the width which is where pushchairs have to go through or mobility impaired go through with the swing gate and the slip-throughs for suitcases and luggage. I think I suggested that whilst those were the gates that some of that space where you might otherwise have put a gate might well be taken up by these other operation units.

805. **Ms Lieven:** We will draw up a plan showing the gates rather than having an argument about luggage.

806. **Sir Peter Soulsby:** I think that would be very helpful.

807. **Ms Lieven:** Can we go through relatively quickly, Mr Weiss, because it is materially in front of the Committee. What we start with is Test 1 on the 23% uplift, exhibit 14.

<sup>18</sup> Crossrail Ref: P2, Liverpool Street Station without Crossrail (Base) 0845-0900 (LONDLB-2604-014).

<sup>19</sup> Crossrail Ref: P2, without Crossrail (Base +35%) + new gateline equipment 0845-0900 (LONDLB-2604-016).

<sup>20</sup> Crossrail Ref: P2, with Crossrail (Base) 0845-0900 (LONDLB-2604-018).

<sup>21</sup> Crossrail Ref: P2, with Crossrail (Base +35%) + new gateline equipment 0845-0900 (LONDLB-2604-020).

---

The Petition of Corporation of London with British Land plc

---

808. **Sir Peter Soulsby:** That was one of the things I was going to ask and I will say it now: if all Counsel would refer to the numbers of the exhibit it is of considerable help to those who have to try and make sense of what it is we are talking about.

809. **Ms Lieven:** I understand, sir, the exhibit corresponds with the page number that you have got and the documents you have got. I hope I am right in saying I only need to read out the last three digits?

810. **Sir Peter Soulsby:** I think that is the case, yes.

811. **Ms Lieven:** So if we look at exhibit 14, that is without Crossrail on the 23% uplift, have you got that, Mr Weiss?

*(Mr Weiss)* I see it, yes.

812. Test 2 is without Crossrail plus 35%, exhibit 16, with 20 slimline gates; do you see that?

*(Mr Weiss)* Yes.

813. And what we see there is very extensive congestion on the Central line platforms.

*(Mr Weiss)* Yes, that is obvious.

814. And quite a lot of congestion on the Met and Circle line platforms. Coming back to the point that we were discussing earlier, you can see on the escalator coming up from the Central line that one of those is fairly congested so that is acting as, as it were, a constraint on people getting up into the ticket hall, is it not, at that point?

*(Mr Weiss)* Yes, there is also that yellow zigzag which is the paid area behind the gateline and ticket hall B.

815. Yes and then if we look at Test 3, exhibit 18, that is the same base, with Crossrail, yes, and we can see very substantial improvements really throughout Liverpool Street station?

*(Mr Weiss)* I see the level of service improving, yes.

816. Yes, a bit grudging but we got there, Mr Weiss! And then Test 4 which is exhibit 20 which is with Crossrail plus 35% and so—and it is difficult to do it on the computer—if one could look at Test 2 and Test 4 together what we see is substantial relief to the Central line and Central line escalators and a better position in the ticket hall, but I am quite happy to describe it as being roughly comparable; yes?

*(Mr Weiss)* For the moment. I would like to comment later, yes.

817. **Sir Peter Soulsby:** Sorry, Mr Weiss, it is rather awkward you having to face both ways, it is awkward for you and difficult for us to hear.

*(Mr Weiss)* What I see—and this is probably what you are trying to draw out of me—as Crossrail comes along because of the new relationship between the inter-change which now takes place because of Crossrail and was not taking place on the 2016 scenario when Crossrail was not there,

there is for this 15-minute period a change in the level of service, I agree with that. However, I would like to say that I am a local government officer and I am not an expert at pedroute and I am certainly not an expert at doing this kind of modelling. I would suggest that a cross-examination of this detail is far better suited to a later petitioner, I think it is Mr Tim Spencer who is a consultant who is extremely familiar with the nuances, the relevances and the locations and implications of these changes in level of service. I can agree with you that the colours change but for other implications I am not best suited to comment on that.

818. **Ms Lieven:** You are promoting a case to this Committee that they should require Crossrail to bring forward as one option an alternative ticket hall which will cost a very great deal of public money—and we will come to that in a moment—presumably checked that your case is well-founded before you came before this Committee?

*(Mr Weiss)* There were a lot of barbs in that one. What we are putting forward, and this comes out—

819. **Sir Peter Soulsby:** I am going to have to stop you. Members of the Committee cannot with this present configuration of the room hear clearly what you are saying. I am not quite sure what the answer to that is. Certainly in the longer term we are going to have a better arrangement.

820. **Mr Laurence:** Sir, the old-fashioned method was to have the witness with their back to the advocates and, quite frankly, with amplification and as long as you do not mind our occasionally saying we did not follow, it might be better if Mr Weiss sat here with his back to me.

821. **Sir Peter Soulsby:** Can we spend two minutes now enabling Mr Weiss to turn to face us.

*(After a short pause)*

822. **Ms Lieven:** Can I just say for the moment that is fine and of course I will proceed in this way, but perhaps we could all work towards a better long-term solution because trying to question let alone cross-question somebody only seeing the back of their heads is difficult. Perhaps if we could move back at some stage to having the note takers over there.

823. **Sir Peter Soulsby:** We will make do for this morning and see if we can have some informal discussions over lunch.

824. **Ms Lieven:** Mr Weiss, let us not get into an argy-bargy about how much you do or do not know about Pedroutes. The fact is you have seen the earlier pedroute modelling plans I assume?

---

**The Petition of Corporation of London with British Land plc**

---

*(Mr Weiss)* Yes, and these are based of course on Crossrail figures where we have an issue that perhaps they are significantly under-estimating for the number that would be coming through here plus the 35% on that route.

825. To the degree that the Committee wants to know about individual blocks and gates and so on, we can ask Steer, Davies & Glebe about that. Can I just ask one broad question. Looking at O20 which is the Crossrail base plus 35%, applying Mr Rees' test, can we agree that this shows a station which is capable of operating?

*(Mr Weiss)* A station capable of operating—I could not disagree with that.

826. Could I then show you—and I do not think any of us have seen this before—the pedroute plan for Victoria. I think Victoria is a station that you are familiar with, Mr Weiss?

*(Mr Weiss)* I am indeed.

827. And it is a station that most Londoners know has extreme congestion problems at the moment; yes?

*(Mr Weiss)* Correct.

828. I think it is top of LUL's congestion relief list. Can I apologise in that we have literally got this this morning and one of the team has scribbled on the lines to try and orientate us. Can we call it document 86.<sup>22</sup> The Victoria line is running top to bottom, do you see that?

*(Mr Weiss)* Yes, I do.

829. The District and Circle line is running left to right.

*(Mr Weiss)* Yes.

830. And the main Victoria line ticket hall is the big spodge towards the bottom.

*(Mr Weiss)* Yes.

831. Sorry, that is not a very technical way of describing it! My recollection of Victoria is that the Network Rail concourse is off the bottom of the page!

*(Mr Weiss)* If you say so.

832. During the evidence-in-chief you gave a few days ago about being stopped at the entrances and the shutters coming down and the klaxon goes off, that is right at the bottom of the page.

*(Mr Weiss)* I see where you are coming from, this yellow as against blue or green.

833. **Sir Peter Soulsby:** It is somewhat difficult for members of the Committee. Could you take us through the colour scheme for this.

834. **Ms Lieven:** It is not coming out very well.

835. **Sir Peter Soulsby:** A lot of it is coming out as dark, is the best I can describe it.

836. **Ms Lieven:** Can I put myself in the Committee's hands on this. We do have copies but not enough copies for everyone. Of course we can undertake to do so over lunch.

837. **Sir Peter Soulsby:** I think what you are trying to do here is provide us with some broad comparison and context for what we were talking about earlier on. I think you can probably do that if you just tell us what the colours are and we will get to the impression that I am sure you are trying to give.

838. **Ms Lieven:** If we go to the middle of the Victoria line ticket hall concourse, Mr Weiss—and perhaps Mr Bennett can put his pointer on it—we see a dark patch that is dark purple and that is the highest level of congestion. To the right, so I am not misleading anyone, there is a route down which is an alternative route to the street and that is blue, that is completely uncongested. Mr Bennett, thank you very much. Then the passage through between the Victoria line and the District line, which is a very notable passage at Victoria, is yellow and the two central blocks are blue and green.

*(Mr Weiss)* I see that.

839. Then if we go down the escalators to the Victoria line on the right—Mr Bennett there, that is it—those are yellow, and at the bottom of those escalators there is a combination of purple and yellow.

*(Mr Weiss)* Yes, I am with you.

840. Just applying Mr Rees' test, can we agree that this is a station that is virtually unable to operate at peak times at the moment?

*(Mr Weiss)* This is a station which I am familiar with as a user but this is a station I am not familiar with as an operator. It is a station which London Underground, as I believe, has put as high if not the highest priority for improvement. I do note that this is a station in yellow having to have a large sum of money spent on it as a remedial—

841. **Sir Peter Soulsby:** I do not think it is fair on this witness to expect him to comment in any detail on something which is clearly well outside his area of responsibility. I think it is interesting for the Committee to have this comparison but that is probably as far as it is reasonable to take this.

842. **Ms Lieven:** I am quite happy to leave it there.

843. **Sir Peter Soulsby:** Just for the record I am told that this particular plan does have a number already, it is SCN-20060124-002.

---

<sup>22</sup> Committee Ref: A11, *Victoria Line 2001 Demand (0845-0900) Pedroute (SCN-20060124-002)*.

---

 The Petition of Corporation of London with British Land plc
 

---

844. **Ms Lieven:** I am grateful, sir.

845. **Sir Peter Soulsby:** I think we have understood the point that is being made, that there are congested stations and it is possible to make comparisons with them.

846. **Ms Lieven:** Can we then come to the last area, Mr Weiss, which is what should happen if the Committee thinks there is some degree of congestion at Liverpool Street. First of all, just go through, I do not understand the City now to be arguing that Crossrail should revert to the arcade scheme for a new ticket hall.

*(Mr Weiss)* We are not saying that it should revert to the arcade scheme. What we are saying is that, as we see it, there is insufficient space within the present design of ticket hall B that dedicated provision be made to street level for those people on Crossrail in particular wishing to come to the City to work. In other words, rather than shuffle them through the existing, as we see it by 2016 and certainly beyond, crowded ticket hall which the Central line uses, some of the passengers on the Circle line really do not want to go into the mainline station concourse at Liverpool Street; they want to go to the street. They can only do that by going through the Central line concourse B, through the gateline into the mainline concourse and mixing with all the people who come out of the mainline trains. What we are seeing is a dedicated street exit.

847. The arcade scheme involved people going into ticket hall B, did it not, and turning to the right to get up into the arcade?

*(Mr Weiss)* It did partially, but going back to the relationship between the arcade scheme, or ticket hall A, which becomes the arcade scheme, or ticket hall B, where there would be issues is imagine yourself coming up from Crossrail on the escalator, you go along the passageway and you can only go left out of ticket hall B if there was congestion at that gateline within the mainline concourse. There was an option there of exiting ticket hall A, now arcade scheme, but you could do that at the moment and at the moment there are considerably less gates in ticket hall A than there would have been in the arcade scheme.

848. **Ms Lieven:** Did you see the modelling which showed that new arcade scheme?

849. **Sir Peter Soulsby:** Ms Lieven, I am going to stop you again. I did ask Mr Weiss earlier on whether the Corporation at this stage was putting forward an alternative and he did respond very clearly that it was not. Indeed, he was saying that there were alternatives available. I think at this stage it would be much more useful for us to look at arguments for and against the particular proposals put forward by the Promoter.

850. **Ms Lieven:** Sir, can I ask one question about the Ove Arup scheme, if I may?

851. **Sir Peter Soulsby:** Yes, but do not press it too long, please.

852. **Ms Lieven:** I will keep it to one. Mr Weiss, my instructions are that the Ove Arup scheme, the alternative ticket hall on Blomfield Street, would be highly likely to lead to a closure of the Met and Circle lines for a period of weeks, if not months, probably something in the region of two to three months, and highly likely to lead to speed restrictions on Met and Circle lines for a large number of weeks thereafter, talking in the region of 40 weeks. I am not asking you to comment as to whether that is right or not but, given the function that those lines serve in bringing people to the City, presumably those kinds of impacts are ones that the City Corporation would be concerned about?

*(Mr Weiss)* I would like to comment on that. The City of London Corporation takes a pragmatic medium and long-term view. That is not a throwaway line. The Central line, or rather the Waterloo and City line, which is a spur of the Central line linking Waterloo station with Bank, will be closed for an improvement of the line for a period of five months. I believe it starts in April this year. Really it is the prime access to the City for those coming from Surrey, Berkshire, the south west etc. The City has considered this certainly in the circumstance of a very, very heavily used piece of Underground infrastructure and is quite prepared to take a five month closure so that the medium and long-term picture is improved.

853. So far as the British Land proposal is concerned, what cost estimate does the City understand that to have?

*(Mr Weiss)* I have no knowledge of that, I think it is better directed towards the Promoter of that particular scheme.

854. Have you not asked that question at all?

*(Mr Weiss)* I am aware of it but it is not one that I would like to answer with certainty.

855. **Sir Peter Soulsby:** Can you just clarify that, you are asking the costs of what?

856. **Ms Lieven:** Of the British Land alternative ticket hall, Sir. Let me explain why. I am not asking Mr Weiss to cost it. My instructions are—it is in very broad terms at this stage—it is likely to cost somewhere between £40 million and £80 million.

857. **Sir Peter Soulsby:** I think that is perhaps something that may come out at a later stage. As has been made clear, Mr Weiss is pointing out to us the difficulties with the Promoter's scheme as it is proposed at the moment. I do not think you need to go into the costs of alternatives, he has made it quite clear he is not pressing any particular alternative, he is just saying there are difficulties with the present proposal and alternatives would be preferable.

---

The Petition of Corporation of London with British Land plc

---

(*Mr Weiss*) That is correct, Sir.

858. **Sir Peter Soulsby:** I think that is as far as he needs to take his evidence at this stage.

859. **Ms Lieven:** All I want to put, Sir, is obviously, given we are talking about substantial public expenditure, it is sensible to look at whether there are other ways to overcome the problem that you perceive in ticket hall B.

860. **Sir Peter Soulsby:** I do not think at any point he has said there are cheap or easy alternatives. He has said that there are problems with the existing proposal and that alternatives ought to be examined.

861. **Ms Lieven:** I just want to put three cheap and easy alternatives if I may, Mr Weiss. First of all, as we have seen from pedroute modelling, you can increase the number of gates in ticket hall B which very substantially reduces the problem. pedroute modelling shows increasing the gates to 20 and very little congestion in the ticket hall: cheap, simple, easy.

(*Mr Weiss*) If the space exists.

862. The second one is you can tolerate a degree of congestion at a gateline. We all live with a degree of congestion at gatelines across the LUL network. It is not a major inconvenience to have to wait for 20 seconds to go through a gateline, is it?

(*Mr Weiss*) No, but it is a concession, it is a compromise to the standards, and it is a lesser output than one would expect from a very expensive, highly disruptive scheme, six to seven years of disruption, to have something not quite up to what it could be.

863. I want to put a third cheap and easy solution to you, and for this purpose can we bring up the last of the axonometrics. I think this is exhibit 20, with Crossrail on your higher base plus 35%.<sup>23</sup> This is the worst case that we have modelled in pedroute terms. We have focused on ticket halls A and B so far but there is, of course, a third LUL ticket hall at Liverpool Street, and that is ticket hall C, which Mr Bennett is now marking up. That is a ticket hall that serves the Central line.

(*Mr Weiss*) Yes.

864. All the pedroute models we have shown show that there is very substantial spare capacity in that ticket hall, is there not?

(*Mr Weiss*) Yes.

865. I think it has got 16 gates. I am not expecting you to know off by heart the number of gates but it is a big, modern ticket hall, is it not?

(*Mr Weiss*) I know. It has 16 gates.

866. Before we get to signing from the Underground, can we agree that it is extremely poorly signed or shown at the Network Rail concourse level. Unless you know it is there it does not exactly leap out at you, does it?

(*Mr Weiss*) It is a difficult one and I could go into it if you wish me to go further. It is about two-way flow and the width of passageways. I think when I last gave evidence I alluded to the fact that some of the scenarios to try and redirect people via other ticket halls were—I used the expression—robbing Peter to pay Paul, to pass an issue away from concourse B on to concourse C.

867. Looking at this pedroute model, that does show that there is no congestion in ticket hall C and it also shows that there is no congestion in the two passageways serving ticket hall C, does it not?

(*Mr Weiss*) Under those specific conditions. Let us go back to the levels of service. You did show on your document—I cannot remember the number—that Victoria station was yellow and we have yellow on this diagram and considerable swathes of green, particularly in ticket hall B. If you look at the index at the top-left, that green is only one level of service below the yellow which you said clearly highlighted requiring such drastic action at Victoria.

868. It is very, very plain from exhibit 20, is it not, that there is scope for a much greater level of use of ticket hall C?

(*Mr Weiss*) Yes, I agree with that.

869. One could achieve a much greater level of use by things such as improved signing, improved layout of the concourse and, if absolutely necessary, station measures directing people to use that ticket hall, could one not?

(*Mr Weiss*) Possibly. I am not avoiding the question here. Those passageways in the mornings have surges. The figures are in table 1 anyway. Those passageways have surges of people leaving the Central line going up the two escalators from either ends of the train, walking along the passageways and going up to the steps. With increased use of the mainline I would consider it particularly uncomfortable for somebody to try and walk against that flow in any large number. Whilst the signing might be there, I would suggest that people would find it considerably more acceptable, comfortable, the chance of somebody bumping into somebody much less, by going, as they do at the moment to use the mainline platform, to walk straight ahead to ticket hall B. To go in the face of large numbers of people walking up steps in particular I think is a discouragement.

870. Just two points finally on this. First of all, in terms of surges, of course these passageways you are concerned with are at concourse level so the surge, if there is a surge, has been constrained by the escalators as we went through before, has it

---

<sup>23</sup> Crossrail Ref: P2, with Crossrail (Base +35%) + new gateline equipment 0845-0900 (LONDLB-2604-020).

---

**The Petition of Corporation of London with British Land plc**

---

not? These passages are not places where people are charging off a train and going straight down the passages, are they?

**(Mr Weiss)** These are passageways which are considerably narrower than concourse C. If you look at the shape of concourse C with its 16 gates you have got people coming up the escalators at the bottom left and top right as you are orientated, from the Central line, and they then go through a wide 16 gate concourse area which then narrows as it turns back on itself to the bottom of the picture and then narrows again to passageways. They might not be collectively surging but when you concentrate people into narrower and narrower passageways they tend to fill up.

871. You describe them as narrower and narrower passageways, Mr Weiss, but what this exhibit 20 shows is that even on the enhanced base plus 35%,

so something like over 50% of what is happening at the moment, there is no indication on these plans of any problem in those passageways whatsoever, is there?

**(Mr Weiss)** On that base over a quarter of an hour period that is what it shows.

872. **Ms Lieven:** Thank you very much. Those are my questions, Sir.

873. **Sir Peter Soulsby:** Thank you very much.

874. **Mr Laurence:** Sir, could you just give a moment please, Sir, in these constrained conditions.

875. **Sir Peter Soulsby:** Yes, of course, Mr Laurence.

---

*Re-examined by Mr Laurence*

876. **Mr Laurence:** Mr Weiss, there are just a few matters I would like to question you about in re-examination if I may. You will intend no discourtesy to me, I am sure, if you face the Committee and I will try to speak sufficiently clearly to ensure that you do not have to watch my lips, as it were, to follow. The station's operations room, Ms Lieven put to you, we could assume will definitely be removed.

**(Mr Weiss)** I am content with that.

877. You agreed with that. Can you just assist the Committee as to whether you have been told of whether there is, in fact, a firm agreement between the Promoter and presumably London Underground Limited in relation to where the substitute station's operations room would go?

**(Mr Weiss)** I have absolutely no knowledge of that, nor has any suggestion of that been put to me by the Promoter.

878. Are you able to assist the Committee yourself, and if not I will ask Mr Spencer about this, as to where a reasonable position for that station's operations room might be if it were to be removed?

**(Mr Weiss)** Speaking as a user and amateur, and I am sure Mr Spencer will give a more structured argument, the whole point about a station's operations room is it has to be within sight and proximity of the very areas it is looking out to—it is no good somewhere down the end of a corridor at the end of a fibre optic cable—so that they can react to problems. We go back to point M, which is where the Crossrail connection is made to the ticket hall, and point P, which is the top of the escalator from the Central line, and to know whether to stop that escalator you have really got to have somebody looking at it to see whether somebody has fallen over. To answer your question, an operations room would be somewhere in the vicinity. You are in a basement below an operating station with a Grade I listed building on

one side and a bus station on the other. I am not at all sure where that might be provided without significant adjustment—we are talking major construction here—to that ticket hall.

879. If it did turn out to be the case that there really were very considerable problems about moving that station's operations room, is that one of the matters which the Committee would necessarily have to consider should it accept our case on capacity when it came to considering what the best option to solve the problem would be?

**(Mr Weiss)** Without question.

880. The second matter I want to ask you about is this: Ms Lieven tells you that her instructions are that you can get 20 gates into the existing space where there are 16 gates. We have no reason to doubt that is so. We also see, I think from exhibit A which was up on the screen a moment ago which you put in, that in the ticket hall there are what appear to be a number of pillars. I see the screen is now showing the lower part of that diagram. Let me just ask you firstly whether the angle at which the existing 16 gates have been placed is a coincidence or is there a particular reason for having three banks of gates in the way that we see on the screen?

**(Mr Weiss)** I believe that not to be an accident. If you have a concourse of this kind of shape and you want to put your ticket gates in a line, you would get less in there than if you staggered them, had them in echelon. That has been done, and is self-evident from the drawing, but there is a limit to where you can put them in echelon because of these pillars which support the substantive structure above.

881. Assuming that it were possible to fit an extra gate into each of the four sections that we see on the screen making a total, therefore, of 20 gates rather than 16, what do you say to the Committee

---

The Petition of Corporation of London with British Land plc

---

is the relevance, if any, of the fact that to the north and south of those gates there are the pillars that we see on the diagram?

*(Mr Weiss)* Those pillars will add to obstruction in the area. Under cross-examination from Ms Lieven on the pedroute—I have not had the chance to read the description of the pedroute—I am not too sure whether the presence of these physical obstructions has had a material impact. I think that is something to come back to if we see it as significant. Certainly nobody can walk through a pillar, and in walking around a pillar this free flow, this ease of movement, is going to be very different in a situation where the pillar is there as against a theoretical situation where the pillar is not. I know from using this ticket hall on occasion that they do get in the way of people. They are also used to lean against by a variety of people, to park luggage while they get tickets. Those pillars cause blockages in their own right.

882. Mr Weiss, thank you. The third matter I want to ask you about—I will avoid asking you to turn up tables or numbers—is it is right to recall, is it not, the projections as to the situation in 2016 with Crossrail that will result in a need for 20 gates are based purely on the addition of the 35% design year test, are they not?

*(Mr Weiss)* That is correct.

883. To take your own evidence as an example, if the split which Crossrail envisage as between Moorgate and Liverpool Street so far as concerns Crossrail passengers turned out to be incorrect in the judgment of the Committee, you have already said that there would need to be more than the 20 gates illustrated on the relevant table, have you not?

*(Mr Weiss)* That is right.

884. If assumptions about future growth, about which I do not think you have given any evidence in detail at all really, but about which Mr Spencer will be speaking, the Committee believes prove to be too conservative so far, that would be liable to increase the requirement for gates too, would it not?

*(Mr Weiss)* Yes. In addition, something I did raise—I am sorry to repeat again—all of these are assuming average flows, uniform movement and everything else. These surveys carried out have shown considerable fluctuations, particularly on a Monday—these things are snapshots—with an extra 26% of people coming through the gateline on a Monday. In my view, the test should not stop at 35%, on top of that it should add a reasonable measured fluctuation because we cannot have this gateline failing every Monday because it has not been taken into account.

885. Thank you. The fourth matter on which I will venture just one question in the light of the guidance given by Sir Peter earlier this morning, but it is a serious question, is would the City be petitioning in this House if it genuinely believed

that the addition of a suitable enhanced eastern ticket hall for Liverpool Street station would be liable to imperil the whole project?

*(Mr Weiss)* No, it would not. It believes it to be a reasonable, normal provision to take into account access to, I think it is, the busiest station in terms of exits in the morning peak of the railway to a standard that befits a 21st Century provision.

886. Fifthly, Mr Weiss, this will be a matter no doubt for submission in due course. While I was listening to my learned friend, Ms Lieven, it did at one stage seem to me that the line of her cross-examination was to suggest that what the City was trying to do here was just to take advantage of the fact that the City of London had shown extremely good growth over recent years and was liable to do so in future and designed to improperly, as I understood her questions, try to foist on CLRL—the Promoter—the consequences of that success. Perhaps you would just like to comment on that first of all to say whether you feel I have fairly encapsulated what she was putting to you and, if I have, what you want to say to the Committee about that.

*(Mr Weiss)* I think the evidence given by Mr Peter Rees was very clear that we, the City of London Corporation, are not planning for or scheming for growth at the expense of anybody. The Mayor of London's strategy both for transport and planning—respectively he has produced the Mayor's Transport Strategy and the London Plan—very clearly lay out preferred scenarios for the future. Those preferred scenarios for employment are very clear that they seek to achieve substantive growth, and there are figures in a variety of tables, predominantly in the financial and business services sectors. There is only one place in London really where there is the greatest concentration in terms of hundreds of thousands of people in the financial and business service sectors, and that is the City. That has got to be the first place where such growth takes place. Also, as we heard, Docklands is where these concentrations occur. Those are two of the areas to be linked by Crossrail. Crossrail, in meeting its stated objectives, is serving that growth.

887. The last matter I would like to ask you about is simply this: again, it is perhaps as much a matter for comment as a question for the witness, Sir, but perhaps you will allow me to put it. Plainly, anybody concerned to try and solve this problem would want, if they possibly could, to see whether there were ways of solving it, short of spending what Ms Lieven told the Committee could involve, say, £40 million to £80 million putting in place the Ove Arup scheme, and I have no doubt a very substantial sum of money if the ticket hall had to be massively enlarged. Plainly one would want to see whether there were cheaper effective alternatives to that, and that is why Ms Lieven was asking you, I suspect, about matters such as whether the problem could be solved with different signage, a different layout and, in the last analysis, taking

---

The Petition of Corporation of London with British Land plc

---

measures at the station itself to try to guide people in the direction that you want. My question is simply to ask you in relation to those matters—I know you have been talking to London Underground very briefly in recent days—have you had the impression that these proposed ways of addressing the problem have been discussed in any detail with London Underground over the months that have preceded the decision not to have a dedicated eastern ticket hall at Liverpool Street for Crossrail?

*(Mr Weiss)* No, Sir. It would have been comforting were somebody from London Underground to perhaps put in writing or have a particular meeting to say, “We, London Underground, the owners of ticket hall B, have a position with regard to it”. This is complicated by the bureaucracy of the Promoter. London Underground is part of the—GLA family who own Transport for London who are a co-Promoter and, therefore, have a conflict of interest. I am sorry if it is a bit convoluted. London Underground, as I view it, are deemed to be the Promoter, albeit indirectly. The issue is, is Liverpool Street station at the moment operating all hunky dory and there are no problems with heaps of resilience? We have had a discussion, we have had difference of viewpoints but certainly

the operational logs, which very kindly have been sent to me showing three months, have shown that even now there are significant numbers of closures, not in ticket hall B but in ticket hall C. It was attributed by Ms Lieven to be as a result of the Central line. We have a station now with today’s flows, 26, and there are ten years to go yet where some 14 times or so each and every month intervention has to take place because of issues in the existing design, in other words whether it is perturbations, whether it is size, management action has to take place to make the station operate in a safe and proper manner. To finally answer your question, I do not believe any of these compromises by better signposting, entry only, exit only, a variety of scenarios, is a solution to a new railway to serve the busiest railway station in the UK and take it forward without such compromises in the 21st Century.

888. **Mr Laurence:** Mr Weiss, thank you. I have deliberately left eight minutes in case the Committee had any final questions for the witness before one o’clock. Those are my questions for you in re-examination.

889. **Sir Peter Soulsby:** Thank you very much indeed, Mr Laurence. I have a couple of remarks.

---

Examined by The Committee

890. **Kelvin Hopkins:** The difference of view between you and Ms Lieven about the number of stoppages, number of perturbations or whatever, was not quite resolved in your conversations. That is one point. The other is on the 35% estimate on top, there are still only one or two possible hotspots at the peak hours, which suggests there is a bit more scope than you suggest and it is not quite as difficult as you would suggest. Are they fair points?

*(Mr Weiss)* I accept your observations. We would like to be encouraged to see that there is a solution to this. I am one of these people who like to see outcomes: how can we make it work. We have yet to see something that has made it work. We have not seen the gateline, we have not seen what happens if this expanding gateline takes place. Remember, I would like to add the measured perturbation, which is the Monday mornings on top of the 35%, which is not unreasonable, if it works under that scenario it would be comforting to know that this situation will seemingly it take forward in the future. As regards the cost of putting it through, I am not too sure of the figure that was put forward for the British Land proposal but I would suggest very strongly that it is but a fraction of what was saved by abandoning the arcade ticket hall.

891. **Ms Lieven:** Sir, can I raise a point in relation to Mr Hopkins’ question? We could put in a note on closures of the LUL station. The reason it was not resolved is that it cannot really be resolved as you have not got the documents in front of you. We

could quite easily get a note from LUL setting out the factual position on closures. I was also wondering whether it would be helpful to have a note from LUL on proposals for the station’s operations room. I do not understand it to be solely about Crossrail. If it would be helpful we could deal with that by way of a written note.

892. **Sir Peter Soulsby:** I think it would be very helpful to have a note about the current number of causes of perturbations and stoppages within the Liverpool Street complex and also to have, as you suggest, from LUL, or whatever source is appropriate, a clear note about their intentions with regard to the operations room, indeed the Promoter’s intentions with regard to the operations room. I think it would also be very helpful to have some further exploration of the issues raised about the physical capacity to get 20 gates in and the effect of having the pillars there. It would be useful to have an illustration of how that might be resolved if it can be.

893. **Ms Lieven:** I have got that on my list anyway. Certainly I will do that.

894. **Mr Liddell-Grainger:** I have two points. If there is to be a control centre, the idea is that the control centre is somewhere in that concourse, is that correct?

---

**The Petition of Corporation of London with British Land plc**

---

(*Mr Weiss*) That is my understanding.

895. **Mr Liddell-Grainger:** Where would you suggest it would go?

(*Mr Weiss*) I am afraid I cannot answer that.

896. **Mr Liddell-Grainger:** Fine, that was what I expected the answer to be. The second is on the design of the actual concourse itself, have you looked at whether there is any capacity to expand the corridors, the main ticket hall itself? Is it all concrete, is it all support? Do you have any idea on that?

(*Mr Weiss*) I can surmise but it is not based on anything other than a broad understanding.

897. **Mr Liddell-Grainger:** I understand that.

(*Mr Weiss*) I believe there may well be scope to enlarge the ticket hall, by that I mean in width, so we can get more gatelines in and so forth. It would require extensive investigation. You have got the Great Eastern Hotel on one side and the approach steps and the bus station on the other. It might not be rocket science but certainly it is an option that was not tested by the Promoter. I have a reference, but I do not think we need to go into it. They tested three options: keep the ticket hall; do nothing; or join through. It was an option that was not tested which might well bear merit.

898. **Sir Peter Soulsby:** All we can do at this stage is note that you have not been party to any exploration of that and I think it is for the Promoter to demonstrate whether that has been explored and whether any of those approaches might be realistic.

899. **Mr Laurence:** Sir, may I just remind you that in my opening I drew attention to the fact that on 22 December Mr Ben Wilson of CLRL wrote to Mr Chapman of Ove Arup producing in draft a critique, a quite detailed critique, of the Ove Arup scheme and indicated that in early January we would have the benefit of his company's reflections on possible alternative solutions to the problem. For reasons that I frankly just do not understand, we understand that is not being done any longer but it seems to us, with respect, that it is highly desirable that it should be, no doubt without prejudice to the contention of the Promoter that it is not necessary. The sooner, if the Committee feels able to do so, it gives a steer to that process being resumed in order that we can get to the stage of making a proper comparison between the realistic alternatives, the better for the entire project, we say.

900. **Sir Peter Soulsby:** Mr Laurence, I think we hear what you say on that. I do not think it would be appropriate for us to take a view on it at this stage. Are there any other questions from Members of the Committee? If not, I have a couple of remarks to make.

901. **Kelvin Hopkins:** Very, very briefly. I wonder if it would be possible to produce that concentric circle map about distance from the platform to offices.

902. **Ms Lieven:** We have got that on the list. We will try and do that by tomorrow.

903. **Kelvin Hopkins:** The point from the centre of the platforms rather than the exits.

904. **Ms Lieven:** Absolutely, Sir.

905. **Sir Peter Soulsby:** Before we conclude for lunch, I have a couple of remarks to make. During the morning we have had a number of new pieces of material put in front of us and while I am sure the Committee would not want to prevent anything of relevance being put in front of us, it would be very helpful indeed if counsel, both for the Promoter and Petitioners, could be sure of exchanging documents in advance, preferably the night before but earlier if possible, and certainly depositing them with our clerks the night before. I am sure the Committee would not want to prevent papers of relevance being brought in front of us but it would be very, very helpful to have that done in advance. Do you want to comment on that, Ms Lieven?

906. **Ms Lieven:** If I could, Sir. With respect, I could not agree more and it would be enormously helpful for everybody, I would have thought, if there was more advance exchange of information. What we had hoped, and Mr Elvin referred to this earlier, was perhaps unusually the Committee might encourage both the Promoter and the Petitioners to produce some kind of summary or short statement of what their evidence is going to be. The difficulty is that if we do not know the evidence—this goes for both sides—until it is given orally, it is absolutely inevitable that there will be lots of rushing around and producing documents at the last minute. We will do our utmost to exchange information with the Petitioners but obviously that depends on co-operation from both sides and ultimately it depends on the degree to which we know what the Petitioners are going to say. The Petitioners know pretty much what we are going to say because we have produced those long and detailed petition response documents, but in some cases we have little idea what the Petitioners are going to say. That is why we hoped to go down the line of producing some sort of short summary of evidence in advance. Even without that we are more than happy for an indication from the Committee that both sides should be exchanging whatever material they can at least 24 hours in advance.

907. **Sir Peter Soulsby:** Mr Laurence?

908. **Mr Laurence:** Sir, of course it is consistent with the way things are done these days in court for there to be cards on the table, maximum disclosure on both sides, point one. Point two, what Ms Lieven has just elegantly done is to try and cause you to reverse a ruling that you made last week, and I am not suggesting that she should not try and do that. We are neutral on the subject. Point three, it is really unacceptable for her to contend, if she is meaning to include us, that we have somehow

---

**The Petition of Corporation of London with British Land plc**

---

known what the Promoter was going to be saying as a result of reading her response document. There have been lots of detail and lots of responses but this one has been pretty short. Having said that, let me make it absolutely clear that I find this an extraordinarily complex subject matter and although you have quite understandably directed that the Committee do not want to be troubled with underlying figures, except where it is absolutely necessary, which I take as implicit in what you said, the truth is unless you grapple with the underlying figures you cannot put an intellectually coherent and honest case to the Committee. That is a process which has been going on over the last weeks between the Promoter and us and it is going to carry on going on, and it is in everybody's interests that we try and achieve as much convergence as we can in relation to agreeing numbers. Whether directing the parties to summarise their cases and put stuff in in time beforehand is going to achieve that objective, I do not know. All I know is we want the best project if possible and we see co-operation with the Promoter as being absolutely essential to that and will continue to do so, Sir.

909. **Sir Peter Soulsby:** At this stage, I do not think I would wish on behalf of the Committee to make any direct ruling, I would simply say it would be very helpful indeed if you can adopt a principle of being as open as possible with each other and doing your very best to ensure that anything that is going to be put in front of us is deposited the night before, exchanged the night before, and is available to the Committee in good time. It may be that the issue of presenting summaries to us is something we can return to. Perhaps the general message of openness and timeliness is one that I would want to emphasise at this stage. It is now beyond one o'clock. I am aware that we do reconvene at 2.30. I think, Mr

Weiss, it would be appropriate before closing to thank you very much indeed for your evidence, it has been very helpful. Thank you.

*The witness withdrew*

*After a short adjournment*

910. **Sir Peter Soulsby:** Mr Cameron?

911. **Mr Cameron:** Sir, I am going to call Adrian Penfold as our first witness. Just before introducing him can I explain that Mr Penfold works for British Land so he is the first British Land witness. Sir, by combining the two cases we hope to reduce the amount of evidence you have to hear. We hope to avoid duplication but Mr Penfold gives planning policy and other evidence and there may be a slight overlap with Mr Rees's evidence but we are going to try and avoid that if we possibly can. Can I also indicate which documents we are going to rely on, and I am going to ask for them to be circulated now so that everybody has them before we start. You are going to be handed shortly, sir, one bundle of documents which will look like that (indicating) and one bundle of exhibits which is A3 size. Sir, I will be adding on further documents which we will hand out when we get to them and I have given a copy of that to Mr Mould, admittedly only within the last few moments, but he has got it. There is only one other document that I will be referring to and that is volume 4a of the Environmental Statement. Sir, it looks as though you have got the additional document. I will call that document 69.

912. **Sir Peter Soulsby:** I am advised that it would be helpful if we refer to the documents as A12, A13 and the larger format document as A14.<sup>24, 25, 26</sup>

---

<sup>24</sup> Committee Ref: A12, Capacity of Liverpool Street Station.

<sup>25</sup> Committee Ref: A13, Report of the City Planning Officer: Planning and Transportation Committee—26 July 2005.

<sup>26</sup> Committee Ref: A14, Capacity of Liverpool Street Station.

---

**Mr Adrian Penfold, sworn**

*Examined by Mr Cameron*

913. You are Adrian Penfold, is that right?  
(**Mr Penfold**) It is.

914. And you are Head of Planning and Environment at British Land; is that right?  
(**Mr Penfold**) I am, yes.

915. You are a Member of the Royal Town Planning Institute. I think you are going to tell us something about British Land and I will just lead you on this part. British Land is a FTSE 100 company with significant assets valued at over £14 billion; is that right?  
(**Mr Penfold**) It is.

916. And your land holding includes some four million square feet of office floor space in the Broadgate complex at Liverpool Street station in the City of London?

(**Mr Penfold**) It does. I should probably add that there is a fair bit of retail—a health club and an ice rink, which is fairly well known—and that four million square feet comprises just over 20% of the company's overall assets.

917. Those are not your only land holdings in the City of London and in particular around Liverpool Street station. Can we go to A14 and exhibit 1 please? What does that show us?

(**Mr Penfold**) This shows us the company's land ownership interests in this part of the City. There are one or two other rather smaller interests further to

---

 The Petition of Corporation of London with British Land plc
 

---

the west which are also in the City of London. We have marked the standing assets, if you like, the existing buildings, in blue, which has come out as purple on the screen. We have two sites under construction at the moment, one at 201 Bishopsgate, which is in the top right hand corner of the ownership interests, and we have marked that in yellow and it has come out as orange on the screen, and the other one is at 51 Lime Street, which is another yellow/orange site shown on the screen. The second one, 51 Lime Street, is being built for an insurance company, Willis, and 201 Bishopsgate and Broadgate Tower, which are the two buildings you can see, are being built speculatively and we do not have a pre-let at this point. The construction has only just commenced. As I say, that is a further 1.23 million square feet of property in the City of London. Those are the blue sites; they are not part of Broadgate, and those two sites under construction that I have referred to amount to something like 1.9 million square feet, mainly offices but again a fair bit of retail at ground floor level. We also have planning consent for the erection of a tower building at 122 Leadenhall Street, and that is just at 11 o'clock from the Lime Street building that I have described.

918. Turning to Crossrail, are British Land supporters of the Crossrail project?

**(Mr Penfold)** Very much. We have significant ownership interests which will benefit from the line. We have a strong commitment to London, particularly the City of London, so beyond the specific ownership interests. Obviously, we wish to see London, and particularly the City, and indeed Canary Wharf where we also have ownership interests, prosper, and believe that Crossrail will make a significant contribution to London's economic growth.

919. Now the scope of your evidence. I am not going to ask you to repeat things later but can you set out, so that the Committee understand how your evidence fits in with the evidence of others who give evidence on behalf of British Land, what you are aiming to cover?

**(Mr Penfold)** I am trying to explain the extent to which my company, British Land, understands and relies on policies set out by national government, the Mayor of London, the City Corporation, in their planning policy and other documents in reaching decisions regarding investment, in this case in the City of London, and other parts of London are affected in a similar way. Inevitably, those policies affect our ability to gain planning consent for the developments we wish to undertake but also tell us a lot more about what else is planned for the area and particularly the transport infrastructure that is planned in the coming years. I am going particularly to focus on policies which identify the City of London and the fringe areas surrounding it as locations for major intensive office development in support of the financial and business services cluster and London's role as a world city, and policies supporting that on the upgrading of public transport. I will explain British Land's concerns

regarding the proposed Liverpool Street Crossrail station, much of which you have heard already, and I will reiterate that without duplicating too much. They focus on the impact on an already congested station, the opportunity to provide an appropriate, well designed station at Liverpool Street for Crossrail and the important relationship between new public transport infrastructure and the City of London's role as a world class financial centre. I will finally consider the potential impact of the proposed design that stands at the moment on existing and potential major tenants' perceptions of the area around Liverpool Street as a competitive location in which to operate.

920. As far as Liverpool Street is concerned and the surrounding area, the Committee have heard from Mr Rees and also from Mr Weiss about the transport infrastructure, but what I would like you to do please is tell the Committee something about the types of occupiers who occupy the buildings owned by your company and others in the immediate vicinity of Liverpool Street station.

**(Mr Penfold)** There are some of the world's largest and most important financial companies. They often have their European headquarters located in this area, either at Broadgate or, as Mr Cameron has said, in the surrounding area. Examples would be the Union Bank of Switzerland, known as UBS, who are our largest tenants at Broadgate and occupy something over a million square feet; AG Henderson Global Investors, the Royal Bank of Scotland, Deutsche Bank, ABN Amro and ING Group, and I could go on but I think that gives you a feel for the scale of the companies which are located in that area. In 2001 the census of employment/annual employment survey estimated that some three-quarters of London's international, financial and business services activity takes place within the City of London.

921. I would like to turn now to the focus of the Committee's attention so far, which is Liverpool Street eastern ticket hall. I would like you to explain to the Committee why it is that British Land are sufficiently interested in and concerned about the lack of provision for the dedicated eastern ticket hall to come along and petition Parliament.

**(Mr Penfold)** Perhaps I can go back a little way as to why we got interested in the issue at all. We are aware, clearly, as the owners of Broadgate Estate, of the number of pedestrians who do use the pedestrian thoroughfares, the streets, the public squares and the routes between public squares in and around Broadgate. We are aware of the employment growth which is planned for the area and we are also aware of Liverpool Street's role as a focal point, a node, if you like, where the M11 corridor, which I think was referred to by Mr Elvin in opening, also one of the growth areas, and Thames Gateway, another of the growth areas, meet the transport infrastructure. We did not know there was a problem or whether there would be a problem with the proposed Crossrail link into Liverpool Street and the pedestrian facilities for Liverpool Street but we knew it was already a

---

**The Petition of Corporation of London with British Land plc**

---

congested area and it was something that we wanted to look at. We therefore commissioned transport consultants Steer Davies Gleave particularly to look at Crossrail. That was back at the beginning of July last year. They have been doing work for us looking at the future of Broadgate more generally, but we gave them a specific commission on Crossrail to undertake an independent assessment of passenger flow forecasts at Crossrail and at Liverpool Street station. The early figures that came through made it clear that the CLRL forecasts underestimated the number of Crossrail passengers wishing to enter and leave the Liverpool Street Crossrail station at its Liverpool Street end. If this analysis is correct there is a serious risk of the project's objectives, stated both in the relevant policy documents, which have been referred to, along with some 30 additional ones, and in Crossrail's own Environmental Statement, not being achieved. Instead of relieving congestion at Liverpool Street station it will add to it and the range of national, London-wide and local policies promoting intensive mainly office development in the City of London and the areas on its fringe will be compromised.

922. So you commissioned Steer Davies Gleave, and I think we are due to hear from Mr Spencer of Steer Davies Gleave immediately after you complete your evidence; is that right?

*(Mr Penfold)* That is correct.

923. In addition, after you had received Mr Spencer's advice on likely passenger demand, did you go on to commission some work on the issue of how any congestion at Liverpool Street might be overcome?

*(Mr Penfold)* We did. We appointed Mr Chapman of Ove Arup to look at some options for providing an increased capacity for pedestrians wishing to exit the Liverpool Street end of the station. The brief was to look at options and hopefully to come up with one or maybe more options which could then be taken forward. It was done in a spirit of co-operation with Cross London Rail Links. We were not seeking to promote our own Crossrail, I do not think that is our business, but we did want to be constructive; we did not want just to criticise what was being put in front of us. Our aim was to open up, which for a while was successful, a constructive dialogue with the Promoter about what particular option might be the right way forward.

924. I think I am right in saying that Mr Chapman of Ove Arup did come up with a solution which was put to Cross London Rail Links; is that right?

*(Mr Penfold)* That is right, yes. That was the dedicated street level access at the corner of Blomfield Street and Eldon Street. That seemed to Mr Chapman at the time to be the best prospect of providing dedicated street level access and increased capacity.

925. If we turn to exhibit 2 in your A3 bundle, which is document A14, we have Mr Chapman's plans, do we not? I am not going to ask you to explain them. That will be for him to do.

*(Mr Penfold)* I am grateful for that!

926. You referred to access. If this scheme was implemented where would passengers exit to the street?

*(Mr Penfold)* It is difficult to explain on the plan. On my diagram it is the green spur which is heading northwards. You can just about see the escalator bank within the new entrance hall that would be provided. That would be within the street and obviously we have had conversations with the City Corporation about the option because it would involve closing Blomfield Street at that point, but it would, as I say, provide a dedicated access.

927. **Sir Peter Soulsby:** Mr Cameron, if it helps, when the Committee made its visit last week we did have an opportunity of walking through that area and did have it pointed out to us where the exit would be. We did not look at it very closely but we had a general impression.

*(Mr Penfold)* What might be worth adding, sir, is that immediately to the north of there, although one has the Octagon and the Richard Serra sculpture, was the area where we probably did most work improving the pedestrian capacity within Broadgate itself about three years ago. We took out what was a very narrow entrance up to the level of the ice rink and put in steps which sweep up to the ice rink which work much better.

928. **Mr Cameron:** Mr Chapman is going to explain that in detail. As far as British Land are concerned, are British Land sold on any one particular solution to the problem, namely this solution, or would others be acceptable to British Land?

*(Mr Penfold)* We are not sold on any particular solution. We wanted and, as I said, for a while had a dialogue with the Promoter about, a range of options. There was some discussion about improvements and enlargements of the existing Underground ticket hall B with the potential also to provide dedicated street access from that ticket hall up into Liverpool Street, but that option work was stopped by the Promoter, not by us, I suppose about two weeks ago, maybe more.

929. I would like now to ask you what consequences do you see for your company, and indeed for your tenants and other occupiers in the vicinity of Liverpool Street station, if adequate capacity is not provided?

*(Mr Penfold)* Broadgate in particular, which is our main ownership in the area, is a prestigious office estate. It is probably one of the best known and best regarded office estates in Europe; I was going to say in London and the UK but I think that is true. People come from far afield to look round and to admire it. It is also a location, as I have said, for significant tenants who are used to operating on a global level and have offices all over the world and

---

**The Petition of Corporation of London with British Land plc**

---

they expect, I think reasonably enough, to be located somewhere where decent public transport access is provided. The estate in that area relies on its public transport accessibility. My concern would be that the benefits of one of the objectives envisaged for the Crossrail scheme are related to London's role as a world city. I am not sure what those sorts of tenants would make of a Crossrail scheme (which many are looking forward to) which did not provide appropriate and adequate access for them close to their place of work. It is not something I think they would expect to see in any other major city in the world.

930. I am going to turn to what I think you describe as the policy background. I do not want to ask you to go over ground that has already been gone over by Mr Rees, but I would like you to explain from the perspective of a landowner and developer how you respond to the policy, and I am also going to ask you about the planning policies for the area surrounding the City of London so that the Committee can understand the type of growth that is likely to take place in those areas. I can ask you first of all to turn to your bundle of documents and the A4 bundle A12, and here you have extracts from a large number of policies but in each case, to save me and the Committee trouble, you have highlighted the relevant parts with red lines.

**(Mr Penfold)** That is right.

931. Can we start with tab 1 please? I am sure the Committee will not thank either of us if we go through every page in this bundle, so can you take us very quickly through, explaining the relevance of this policy information for people like you who own and develop buildings around the City of London?

**(Mr Penfold)** This is a fairly recently published document. It is the overarching statement of the Government's objectives for the planning system, so it is important and it does particularly refer to the aims for sustainable development and that is the maintenance of high and stable levels of economic growth but also ensuring that the infrastructure and services are provided to support new and existing economic development and housing. That is documents 1 and 2, without reading out the whole of the references. Document 3 goes back to the general approach to delivering sustainable development and particularly refers to the need to reduce the need to travel and encourage accessible public transport provision to secure more sustainable patterns of transport development, and it says that planning should actively manage patterns of urban growth to make the fullest use of public transport and focus development in existing centres and near to major public transport interchanges. That makes the point about the link between development and public transport as being key to delivering the Government's objectives.

932. Turning to the next document at tab 2, which I think is the Government's policy on planning policy and transport, again, give us the main points which you would like the Committee to take into account from this policy.

**(Mr Penfold)** It restates the importance of the integration of planning and transport at national, regional, strategic and local level, and the promotion of accessibility to jobs by public transport. Document 4 states that local authorities should focus land uses which are major generators of travel demand in city, town and district centres and near to major transport interchanges. Document 5 deals with key sites and says that local authorities should seek to maximise the use of the most accessible sites, such as those in town centres and others which are or will be close to major transport interchanges. These opportunities may be scarce, and local authorities should be proactive in promoting intensive development in these areas and on such sites, and then it goes on to talk about the way in which those sites should be allocated or reallocated, where the allocation is not appropriate, in order to ensure this strategy. These are the Government's stated policy guidelines which are then picked up by the London Plan and by the City of London's UDP and by the City fringe planning policy document as well, which I will refer to later on.

933. Can we go on to the London Plan, which is in effect the next tier down, and Mr Rees has referred to this. I think it is your tab 3. What are the particular aspects of this you would like to draw the Committee's attention to?

**(Mr Penfold)** This is the spatial development strategy for London and it sets the context for the UDP's and local development policies. The objectives specifically refer to the role of defined opportunity areas for development to intensify and accommodate much of the growth in jobs which is envisaged for London and the London Plan is very much a plan which promotes and seeks to accommodate both employment and housing growth. It again states London's importance as a world city with very distinctive strategic needs, and that is at document 7. The plan goes on to highlight the importance of facilitating the continuing attractiveness to world business of the supply of appropriate floor space for international business activities and specialist services to supply them. The central activities zone, which includes the City of London and covers the whole of central London's commercial and retail centre, is identified as a general area which has a particularly important role in achieving this objective, and that is at exhibit 3.

934. This central activity zone, exhibit 3, is the part of the plan coloured brownish-orange, is it?

**(Mr Penfold)** That is right.

935. If we go to Liverpool Street we can see to the east is an area which is not shown as being in the central activity zone. Is there any particular policy which covers that area?

---

 The Petition of Corporation of London with British Land plc
 

---

**(Mr Penfold)** There is. That is covered by policies relating to something called the City fringe, and I will come back to that later on.

936. While we have got that, and you say that you will come back to it later on, if we turn over the next page to exhibit 4, does that show the City fringe and opportunity areas?

**(Mr Penfold)** It does, yes. It shows the City fringe and two opportunity areas, Bishopsgate/South Shoreditch opportunity area and the Whitechapel/Aldgate opportunity area, both of which are in fairly close proximity to Liverpool Street station.

937. If we go back to your document bundle, while still having exhibit 4 open, and go on to document 8 at page 15, do we find a policy relating to opportunity areas?

**(Mr Penfold)** We do. Perhaps I should read that policy because it is an important one. “As part of the process of producing Sub-Regional Development Frameworks, the Mayor will work with strategic partners to prepare planning frameworks for Opportunity Areas as shown on map 2A 1, or to build on frameworks already developed. These frameworks will set out a sustainable development programme for each Opportunity Area to be reflected in UDPs, so as to contribute to the overall strategy of the London Plan: to seek to exceed the minimum guidelines for housing and to have regard to indicative estimates for employment set out in the sub-regional tables; to maximise access by public transport, and to promote social inclusion and relate development to any nearby Areas for Regeneration.”

938. If you go on to document 11, page 18, still dealing with opportunity areas (and we looked at this with Mr Rees) you have got Bishopsgate/South Shoreditch 16,000 new jobs anticipated to 2016, and Whitechapel/Aldgate 14,000 new jobs to 2016. I think both those areas are shown on the plan at your exhibit 4.

**(Mr Penfold)** Those are the two areas, yes.

939. As far as Crossrail stations are concerned, which stations are likely to give access to those opportunity areas?

**(Mr Penfold)** The Liverpool Street end of the Liverpool Street/Crossrail station, I would say, for the most part; certainly, for the western end of the Whitechapel/Aldgate opportunity area, although some are served by the Whitechapel Crossrail station at its eastern end. Certainly Liverpool Street/Shoreditch sites which are located within the Bishopsgate/South Shoreditch opportunity area, which I will come to describe later, will be served by Liverpool Street Crossrail station. I am sorry, the Liverpool Street end of the Liverpool Street Crossrail station.

940. If we go back to your document 11, I am not going to ask you to read it out, but you have put a red box round the reference to the eastern City fringe. Is that right?

**(Mr Penfold)** I have, yes.

941. In terms of the number of jobs anticipated by the Mayor of London, is there any indication—I think I have skipped a page, so go back to page 17—as to the number of office-based jobs which are anticipated in London for the period to 2016?

**(Mr Penfold)** The London Plan, where you can see for yourselves on page 17, refers to the potential capacity to accommodate around 560,000 office-based jobs by 2016. It might be worth saying as well that those two figures, 14,000 jobs in the Whitechapel/Aldgate opportunity area and 16,000 in the Bishopsgate/South Shoreditch area, if you put those together that is about the number of people who work at Broadgate today—about 30,000 people.

942. Is there any other part of the London Plan that you wish to look at at this stage, or can we turn on to Tab 4 of the Mayor’s Transport Strategy?

**(Mr Penfold)** I am happy to move on.

943. In terms of the Mayor’s Transport Strategy, you have got document 12, page 21, the critical issues identified by the Mayor. Are any of those critical issues relevant to this Committee’s deliberations?

**(Mr Penfold)** The first two bullets are: meeting the challenge of economic and demographic growth by investing to deliver the necessary additional public transport capacity and reliability. That goes back to the London Plan and the growth that has been identified in the London Plan, both for housing and employment. The second bullet is meeting the challenge of supporting London’s world city functions which are key to its continuing economic growth, by tackling traffic congestion, improving public transport and improving the City’s international links.

944. If we turn over to page 22, document 13, we can see the Mayor’s encouragement to supporting London’s world city functions. In terms of the Mayor of London, and indeed businesses like yours, seeking to attract tenants, who are you competing with? Other international cities or other cities in the UK?

**(Mr Penfold)** The sorts of occupiers I was talking about at the beginning of my proof are really the sorts of occupiers that will locate in London in one or two, possibly three, locations in London or else not at all in the UK—their headquarters. They may go into other cities in the UK, other types of offices, more backroom-type functions, but their main function will be located here in London in the City, possibly Canary Wharf, and that is about it. Otherwise they will look to other major European cities, the two key ones being Paris and Frankfurt.

945. I would like to skip on a few pages in this document. The Committee has it before them. Can we go on to document 16 on page 28. At first glance, the paragraph you have highlighted would not

---

 The Petition of Corporation of London with British Land plc
 

---

appear to be relevant in that it refers to “redevelopment of national railway stations”. Why have you highlighted 4E.40?

**(Mr Penfold)** I think the criteria should be appropriate. The Committee will make up their own minds on this, but it seems to me that they are sensible criteria. This is not a redevelopment but it is the adding on of a new railway station to an existing railway station. I do not see much reason why the criteria should be any different. So that “reducing overcrowding, improving safety, passenger movements and interchange, achieve integration between rail and other modes and improve access to the stations”—those seem to me to be good tests for any major proposals for change to an existing or building a new railway station in London.

946. Turning to Crossrail in particular, if you go to document 17, page 29—it goes on to page 30—what is it that the Mayor of London envisages that Crossrail will provide for areas such as the City, City fringe, the area around Liverpool Street station?

**(Mr Penfold)** It will significantly reduce overcrowding on several Underground lines and, also, reduce congestion to a number of busy stations. This is set in the context of meeting the urgent demands of the City, and business and supporting London’s world city role.

947. In the light of the policy that you agree, as British Land, with the Mayor’s approach, would Crossrail have received so much support from you and others if it had thought that the approach was: “If a particular station suffers from a degree of congestion that is something that people will have to live with, or measures can be taken like changing signage, and the like”, as was discussed this morning. Is that what you were envisaging from Crossrail?

**(Mr Penfold)** No, it is not, and I think anyone reading those policies, and indeed reading the objectives of the Crossrail project itself, would be expecting rather more than that. I think, if one looks at the public transport infrastructure that has been provided in London recently, particularly the Jubilee line stations, you get a sense of something which is important to London and which people care about and want to make work. I do not think that one could describe the proposals that are presently in front of us as fulfilling that role.

948. If you go on to page 31 in your bundle, document 18, you have put your red box round paragraph 4Q.13. Why is it, as far as you understand, that the Mayor draws attention to the fact that Crossrail will serve Liverpool Street, and there is a specific reference to Bishopsgate Goods Yard? What indication does that give to you?

**(Mr Penfold)** It suggests to me that it is seen as important to the delivery of those opportunity areas, particularly that Bishopsgate/South Shoreditch opportunity area. The Bishopsgate Goods Yard is by far the largest and most important site in that

opportunity area and it will depend for its success on a very good public transport infrastructure, and that is, I believe, recognised in paragraph 4Q.13.

949. So the line of questioning that was put by Ms Lieven this morning, that certain elements were not attributable to Crossrail but to business growth, in terms of your understanding of the Mayor’s policy, what is Crossrail’s role in relation to business growth in opportunity areas such as Bishopsgate Goods Yard?

**(Mr Penfold)** It has a direct role in facilitating that business growth. The two are completely—to my mind anyway—interconnected and it is one of the key objectives of Crossrail to serve that business growth.

950. Turning on from the Mayor’s Transport Strategy, I think we go to your tab 5 and we come across further extracts from the London Plan. If you go to document 19 at page 35, you have highlighted part at the top. What does the Mayor, in the London Plan, see as the policy towards improving public transport capacity, particularly in relation to the central activity zone and opportunity areas?

**(Mr Penfold)** The policy states that the Mayor will work with Transport for London, the Strategic Rail Authority, government boroughs and other partners to ensure the integration of transport . . . by “encouraging patterns and forms of development that reduce the need to travel, especially by car . . . ” I will not read it all but it then goes on to then draw the link between public transport capacity and accessibility and those growth areas, Thames Gateway, in this case, the central activity zone and the opportunity areas—areas for intensification, which is another policy allocation, which is not directly relevant to this area, although there is an area of intensification further to the west, at Farringdon. Town centres it refers to as well.

951. If we turn on to tab 6 we have yet another policy document produced by the Mayor. This is the draft sub-regional development framework for East London. Without wishing to over-burden the Committee with all these policy documents, what I would like you to identify is what indication these documents give to developers and others wishing to provide opportunities for job-creating development to take place? Where is it being directed to—this development? If you go to document 22—I am sorry, I am taking it rather quickly than anticipated.

**(Mr Penfold)** This covers a wider area of East London. The City of London is incorporated into that East London area, along with nine London boroughs. It refers, at paragraph 47, which is on your document 22, to employment growth in East London of 249,000 in the London Plan; 90% of those jobs expected to be in the office sector; almost all of them in the City, the City fringe and the Isle of Dogs. The figure of 93,000 for the City has been derived from that. I heard Mr Rees speak of that in his evidence.

---

**The Petition of Corporation of London with British Land plc**

---

952. The approach to opportunity areas?  
**(Mr Penfold)** It draws a distinction at page 44.

953. I think that may be one of the few pages we have not put in. Perhaps you could—

**(Mr Penfold)** In paragraphs 135 and 137 (and perhaps we could have those circulated afterwards), the approach to the opportunity areas is refined by drawing a distinction between those which are seen as being integral parts of the central London office market and those which are not. It is quite clear that the City fringe opportunity areas that I have already spoken about are identified as playing an important role in the provision of office space.

954. As one might expect, if we go on to tab 7, we have another document from the Mayor of London.

955. **Sir Peter Soulsby:** If I might interject for a moment, I think it is very helpful to the Committee to understand the planning policy framework in which we are considering this particular scheme, and it was also helpful earlier to be reminded of the importance of the City in the wider context of London. I think it is going to be of more interest to the Committee to focus on precisely why British Land feels the need to Petition against the Bill rather than, perhaps, as much detail as you are providing us with at the moment of the planning framework within which we are operating here. If I can encourage you, perhaps, to move on to what I hope is the main issue.

956. **Mr Cameron:** Thank you, sir, for that helpful steer. I think what I would like to do, please, Mr Penfold, is take this more quickly. Sir, I hope that I am not departing from the guidance you have just given me if I ask Mr Penfold about the approach taken by the neighbouring authorities. When you heard from Mr Rees, you heard from him about the development taking place in the City but his evidence stopped at the City boundaries. Unless you tell me, sir, that you are not going to find it helpful, I would like, not going through all the policies—

957. **Sir Peter Soulsby:** That is fine, Mr Cameron. This was the issue you raised in questions last week and, briefly, yes, by all means, take us through this.

958. **Mr Cameron:** What I am going to do, Mr Penfold, if I can, is to take you to your exhibit 5 in the A3 bundle. On exhibit 5 you have marked out the local authority boundaries. Then if you go to your exhibit 10, you have got policy allocations. Those are policy allocations outside the City of London. Is that right?

**(Mr Penfold)** They are, yes.

959. In terms of the signals that those boroughs are giving to developers, without going to the specific policies, can you just take us to the number of opportunities that arise in Islington, then Hackney and then Tower Hamlets, and their relationship with Liverpool Street station. Hopefully, that will—

960. **Mr Binley:** May I just interject. I am trying to work out if this is yards or metres. There is a scale at the bottom.

961. **Mr Cameron:** There is a scale at the bottom and I suspect it is in metres, but I will ask Mr Penfold to confirm that.

**(Mr Penfold)** Thank you for that.

962. **Sir Peter Soulsby:** I suspect it is metres.

963. **Mr Cameron:** We have both ducked the question, Mr Penfold, so we had better move on.

964. **Sir Peter Soulsby:** I am sure you will let us know.

965. **Mr Binley:** If I may say, I am used to running 100 yards, not 100 metres. I am old, so I need that—

966. **Mr Cameron:** Certainly, it is those few left over yards or feet at the end of the 100 yards when you go to 100 metres that really counts. Mr Penfold, going back to exhibit 10, without going into the detail of the policies, can you explain to us what opportunities there are for further development in Islington and then Hackney and then Tower Hamlets by reference to exhibit 10?

**(Mr Penfold)** Islington UDP, which was adopted in 2002, before the London Plan, does recognise the large new office developments built close to the City, but also that areas of the borough close to those developments still suffer a high level of deprivation. So it seeks to secure local employment benefits from new commercial developments. It carries forward opportunities which have been identified earlier in Strategic Guidance for 1996, including the recognition of the City fringe as a key margin opportunity. It therefore identifies, at policy E12, which is at document 50, the City fringe/Finsbury as a priority area of regeneration, where the council will, among other things, seek to secure employment opportunities for local residents and attract and assist new economic sectors. It identifies a number of sites for employment development adjacent to those identified in the Hackney UDP, and those sites are actually shown on exhibit 10. They are referred to at page 90 of the documents.

967. That is Islington.

**(Mr Penfold)** Yes.

968. On page 90 do you draw attention to Ropemaker Place as a possible major office development as a new scheme in the pipeline. Is that closer to Moorgate than Liverpool Street?

**(Mr Penfold)** Yes, it is.

969. Anything else on Islington, or can we move to Hackney?

**(Mr Penfold)** No, we can move on to Hackney. Its UDP was adopted in 1998, again, prior to the London Plan. It has produced a third options paper, another policy document, in 2005, so it is moving its policy on. The UDP identifies the protection of

---

 The Petition of Corporation of London with British Land plc
 

---

further development of London's role as an international, national and regional centre of commerce by fostering a range of appropriate activities. That is a strategic objective, and that is at document 53, tab 13.

970. Then if you go on in that there is a schedule of commitments and proposals, but it is probably more useful to the Committee to look at exhibit 10. As far as the Hackney allocations are concerned, are they closer to Liverpool Street or Moorgate?

**(Mr Penfold):** For the most part—

971. **Sir Peter Soulsby:** I think, Mr Cameron—I am sorry to interrupt again—the Committee are already persuaded of the fact that a lot of people work in the area, persuaded of the fact that a lot more people would do so in future and persuaded of the fact that it is important to make provision for those people in future, and that with additional employment the area is likely to put further strain on already strained public services, particularly on the transport infrastructure. I think, perhaps, if we could accept that we might be able to move forward to some of the rather more significant issues.

972. **Mr Cameron:** Certainly, sir. (After a short pause) Sir, what Mr Laurence has suggested to me, and I have adopted it, is to make a request of you that perhaps we could just have a few minutes, only two or three minutes, so that we can, if you will permit me and if my learned friends do not object, to pare down the evidence to make sure that Mr Penfold knows where we are going, I know where we are going, and we can then concentrate on the issues which you want us to deal with. I am equally happy, sir, to press on.

973. **Sir Peter Soulsby:** Mr Cameron, we can take five minutes.

*After a short break*

974. **Sir Peter Soulsby:** Mr Cameron?

975. **Mr Cameron:** Thank you, sir. I think we can cut out a lot of what you may have heard. Mr Penfold, I would like to ask you about one particular point about Tower Hamlets and its approach to new development. The reason I am going to ask you about that is because Mr Rees was asked about it expressly in cross-examination and he did not deal with it because it lay outside the City boundaries. If you could go to your exhibit 7 please and at the same time as having exhibit 7 if you can turn up the extract from volume 4a of the Environmental Statement and map 7(i). Do you have both those documents in front of you?

**(Mr Penfold)** I do.

976. During the course of Mr Rees' cross-examination, and for anybody who wishes it it is paragraph 398 of Day Two, the point was put to him there were not as many opportunities for redevelopment in the Tower Hamlets city fringe

because of the presence of conservation areas and from the Tower Hamlets document you have at exhibit 7, do they see the presence of conservation area as a barrier to office development?

**(Mr Penfold)** No, the city fringe area action plan, which is a consultation document so it has not yet been adopted, nonetheless does show on the eastern boundary next to Liverpool Street, in blue, an area which is labelled "Bishopsgate Area Location for Major Office Development", and my reading of those two plans is that a pretty significant part or at least a part of that blue area is actually identified as a conservation area in the Crossrail Environmental Statement. So it would seem that Tower Hamlets see no reason in principle why a conservation area cannot be included in an area for major office development.

977. Thank you. Moving on from that point, the next point might be called the development pipeline. Can we go to your exhibit 8 please. Mr Rees has already provided the Committee with information on the amount of development proposals coming forward. Can you just tell us in exhibit 8 how you have chosen the schemes over 21,000 square metres for inclusion?

**(Mr Penfold)** I have chosen 21,000 square metres, which probably seems like a rather odd threshold, because it brings into the equation one of our own developments, including 10 Exchange Square at Broadgate, which I am intending to refer to later, in terms of the way in which we market this floor space to prospective tenants and the importance of transport, so I thought it useful that we include it in the schedule rather than bring it in fresh at that point and it had to provide a cut-off somewhere. These are schemes within 800 metres of Liverpool Street station and, as you can see, they are categorised by their status, "constructed", "under construction", "planning permissions" and "planning applications". I should say that there are no "under discussion" sites here, which is a term Mr Rees used, because of course those sites he is involved in discussion on, if British Land has no ownership interest, I have no knowledge of those discussions, but I have at the bottom included the allocated sites that you saw on the previous exhibit.

978. For the purposes of modelling future passenger demand, various assumptions have to be made about office growth and assumptions can be made on the basis of planning policies about named developments. Just as an example, if one takes the period 2001–2002, a period when the London Plan was being prepared and therefore assumptions were being made as to growth, which as we understand it, were fed into the demand modelling, would all these developments have been known about at that time?

**(Mr Penfold)** It depends who you mean would know but certainly if we mean the market or policymakers, the answer would be no. Our planning application on 122 Leadenhall Street, which is in the planning permissions section of the schedule, was not submitted until spring of 2004. The Stone House and Staple Hall proposal I do not

---

 The Petition of Corporation of London with British Land plc
 

---

think would have been known about in 2001–2002 and the DIFA planning application under planning applications, the first one Bishopsgate Towers was certainly not known about in 2002 by the policymakers and nor was 133 Houndsditch, which again is one of ours.

979. Why is it that you, taking the British Land example, have come forward with those proposals, I think you gave a date of 2004 for 122 Leadenhall Street, what has encouraged you to bring those proposals forward?

**(Mr Penfold)** Particularly on Leadenhall Street it was that change in policy, the adoption of the cluster policy by the City Corporation and the Mayor's approach to tall buildings in his policy document that suggested to us that there was an opportunity at 122 Leadenhall Street for a tall building, which indeed there is, and we now have planning permission and we are taking the project forward by securing vacant possession of the existing building so that we can commence development early next year. The same would apply to 51 Lime Street, which is a much less tall development but nonetheless still tall at 26 storeys. That was really enabled by a change in policy so it is very important to us that we are aware of where policy is moving.

980. Thank you. I would like to ask you about a different point but it is also one of your own developments that you might be able to help the Committee on. I think 201 Bishopsgate and Broadgate Towers are your developments; is that right?

**(Mr Penfold)** It is all one site and it is our development and it is on site at the moment, as I explained earlier.

981. And you explained when you referred to your exhibit 1 where it is. It is north of Liverpool Street station; is that right?

**(Mr Penfold)** It is. In many ways it is the final part of the equation of Broadgate, if you like.

982. And during the course of Mr Rees' cross-examination he was asked whether the City Corporation requires developers of buildings like that to make a contribution to public transport infrastructure and he was asked specifically about contributions towards Liverpool Street station. Do you remember those questions?

**(Mr Penfold)** I do.

983. And what happened when you were put forward this proposal on 201 Bishopsgate, were you expected to make any contribution toward transport infrastructure? Perhaps you would like to take up, sir, document A13.

**(Mr Penfold)** We were and it was not particularly Mr Rees' or the City Corporation's instigation, it came from the Greater London Authority, who did require and put very strongly to us that we ought to make a contribution to Liverpool Street Underground station because of issues of congestion that are there now and as a result of that

the section 106 agreement, which is an agreement between ourselves and the City Corporation and Network Rail who are the freeholders of the site, includes provision of that £2 million which are payable towards improvements to Liverpool Street Underground station, and that is payable at a particular point in time which is likely to be within the next two months, so we will have to pay £2 million to the City Corporation in about two months' time, which we are assured will be spent on improving Liverpool Street Underground station.

984. So if you look at this document and if we start at the back—we are not going to trawl through every page of it, I can assure you, sir—unfortunately it is not numbered pages but four pages in from the back you will find a deed of planning obligation and then on page 7 on the numbered pages is an entry for transport improvements and the £2 million that is there expressed as being for what purposes?

**(Mr Penfold)** “. . . to improve passenger movement within the Underground Station and connectivity between the Underground Station, Liverpool Street Mainline Station and adjoining developments in the City of London proximate to Liverpool Street Station, with particular reference to the Broadgate Estate.”

985. And if there was no concern about passenger movements in Liverpool Street Underground station, would you expect to be asked for a contribution towards improvements relating to passenger movement within the Underground station?

**(Mr Penfold)** No I would not, and the letter from the Greater London Authority dated 30 June 2005 makes it clear that there was concern at that point, particularly if one goes to page 9 of that letter, which I think is another two pages in on your to document, sir, paragraph 56, where it states that: “The developer has offered £2 million to be spent on improvements to Liverpool Street Underground Station. TfL welcomes this. London Underground is currently undertaking feasibility work for enhancement schemes for this station, which will be complete this autumn.” It then goes on to talk about the road network.

986. Thank you. We will put that document to one side, A13, and can I ask you to go back to your exhibits bundle and go to exhibit number 11 and there there is an extract from a marketing brochure. Is this one of your schemes?

**(Mr Penfold)** This is the 10 Exchange Square scheme that I mentioned just now.

987. And why have you put this extract in?

**(Mr Penfold)** It is just one of the marketing brochures that we produce for our development in the City and elsewhere and it shows, I think, how important we regard public transport, and in this case particularly rail and Underground accessibility, in the marketing of our buildings. Of course, we regard it as important because we think our tenants do when we are looking to rent space to our tenants.

---

**The Petition of Corporation of London with British Land plc**

---

So we draw attention to the accessibility and that is the intention of that. It is a two-page spread within the marketing document.

988. And if you look at that document you can see where the development is in relation to Liverpool Street station but in your summary of transport accessibility in the top right-hand corner you mention Moorgate and Bank as well. No doubt it may be said to you well you would not mention Moorgate if it was not considered to provide access to this area. What is your view on that issue?

**(Mr Penfold)** Moorgate provides Northern line accessibility which Liverpool Street does not. It provides heavy rail accessibility through Thameslink and another provider and it does also provide some of the range of services that Liverpool Street provides. We draw attention to Bank again because it provides Waterloo and City and Northern Line and DLR access to Canary Wharf so we are drawing prospective tenants' attention to the range of transport that there is in the area.

989. I would like to come back from those exhibits to your particular concerns about Liverpool Street station and the Crossrail proposals. You say that you have taken advice from SDG and Mr Spencer, you have taken advice from Ove Arup as to a potential solution but you are not sold on any one solution. You have also said that you have spent time engaging with Cross London Rail Links in order to seek a solution. Have I correctly understood your position?

**(Mr Penfold)** That is correct.

990. Can you go to tab 17 in your bundle of documents please, document number 68, and what is this document here?

**(Mr Penfold)** This is a report produced by Crossrail CLRL giving a detailed technical response to the Arup option proposal which is the Eldon Street/Blomfield Street proposal.

991. So this is a detailed response and you have highlighted part, page 129. What is the particular point you want the Committee to draw from that part of the document?

**(Mr Penfold)** Mott MacDonald who undertook this work had knowledge that if our figures are correct or more correct, let me read it. "If the assumption is correct that the substantially higher forecast figures of passenger movements presented by BLC (that is British Land) are realistic then an extra concourse might be necessary."

992. And if Cross London Rail Links are convinced by your figures or if indeed the Committee are convinced that further work needs to be done, will British Land continue to engage with Cross London Rail Links and to co-operate in that work?

**(Mr Penfold)** We would be happy to.

993. And if that work suggests that there is a solution other than the one that you have promoted through Mr Chapman and Arup, would you still pursue and co-operate in that work?

**(Mr Penfold)** That depends on what the solution is and what it delivers, but we are not attached to the Arup scheme. As I have said earlier, there have been discussions about other options which Arup have been involved with with CLRL and we are happy to pursue those discussions and work co-operatively with the City Corporation as well to achieve a solution which fits the bill.

994. And just before I sit down and let Mr Mould ask you questions, why is it that British Land are so concerned to achieve better access at Liverpool Street at the eastern ticket hall?

**(Mr Penfold)** Because it is such an important location. Clearly it is an important location for us because of the level of investment that we have there, but we believe it is also an important location for the City of London and what has been referred to as UK plc, and that the second-best solution is really not acceptable here. The proposals that have been put forward for all the other central London deep stations involve two dedicated ticket halls, as I understand it, and I find it impossible to understand why Liverpool Street should be the only exception to that rule.

995. Is there anything else you wish to add before cross-examination?

**(Mr Penfold)** No.

996. **Mr Cameron:** Thank you.

997. **Mr Binley:** I would like just to clarify two things. These may have been talked about this morning for which I apologise, and you may tell me that. From your discourse this afternoon, I am still not quite sure how many extra people over and above those we have already been told about as a Committee will come from the fringe areas outside the Corporation boundaries. I am also not sure what you paid the extra £2 million for in actuality in terms of Liverpool Street. Can I have an explanation of those two questions because that would help me?

**(Mr Penfold)** The first question I think is probably much better answered by Mr Spencer. He is the technical expert.

998. **Sir Peter Soulsby:** We will bear that in mind.

**(Mr Penfold)** The second question we do not know. All we know is that Transport for London through the GLA expressed serious concerns about the capacity of that station in terms of our planning application at 201 Bishopsgate and wanted that amount of money, £2 million, to improve the capacity—I cannot say capacity—but to improve that station. I assume it is capacity but it was never specific, just that there were real problems with the station and they wanted a contribution to it.

---

**The Petition of Corporation of London with British Land plc**

---

999. **Mr Binley:** Just to clarify you handed over £2 million without really knowing why you were doing so?

**(Mr Penfold)** We handed over £2 million and insisted on provisions within the agreement that there be discussions and we would be involved in the discussions about improvements to the station. The context for this is probably worth understanding. The Mayor of London has power to directly refuse planning applications where he is not satisfied. He

was clearly referring to his London Plan policies which link development to the capacity of the transport infrastructure to cope with that development. If you ask me do I believe that the strong technical case was made, I would have to agree, no, I do not think it was but we were put in a difficult position.

1000. **Sir Peter Soulsby:** I do not think it is for us to explore that right at this stage. Mr Mould?

---

*Cross-examined by Mr Mould*

1001. **Mr Mould:** Mr Penfold, may we just stay with 201 Bishopsgate for a moment and just take up, if you would please, document A13, which is the bundle of documentation in relation to that development. We may at least I think by glancing at one or two paragraphs just pinpoint exactly what we do not know, as it were, in answer to Mr Binley's question. If you turn to the third page of the bundle at the clip, we have page 180 and you have that at the bottom of the page and I believe—correct me if I am wrong—that this is an extract from the report prepared by the City Planning Officer in relation to this proposal; is that right.

**(Mr Penfold)** That is right.

1002. And if you look at paragraph 172 it touches a little on the £2 million. What it says is “A development of this scale is subject to the planning obligations considerations set out in the UDP and Supplementary Planning Guidance agreed by your Committee on 8 June 2004.” I think Mr Wynne Rees touched on those when he gave evidence last week to the Committee. Then we see this: “This is an unusual case as effectively the application site has been created by rafting over the railway lines. Accordingly, measures are sought to mitigate the impact of the entire new building as well as improvements in the area to ensure a satisfactory development and local enhancement. The applicants are willing to make the following financial contributions:” and then there are number of financial contributions set out including £2 million on improvements to Liverpool Street Underground station. So it does appear, does it not, that this was a case that was seen as having unusual characteristics? There is mention there specifically of rafting over the station and it does appear that that was a key driver in the feeling on the part of the planning authorities that a substantial contribution was justified and the willingness of the developer (yourselves) to make that contribution as part of the overall development control process in this case. Is that right?

**(Mr Penfold)** Perhaps I should explain why it is an unusual case. The City of London Supplementary Planning Guidance on section 106 agreements, contributions resulting from planning applications, adopts a tariff which is payable on the uplift of office space, so that if you have a building of, say, 100,000 square metres on your site today and you want to demolish it and put a building of 200,000 square

metres on your site, the uplift is 100,000 square metres and the tariff which is £70 per square metre is applied to that 100,000 square metres, not to the full 200,000 square metres. This is an unusual case and probably even a unique case in the City of London because this site has nothing on it at all. It has been built over a railway line. We built a steel raft over the railway line so it is a completely clear site, so every inch of office floor space that goes on to that site is uplift, and we are putting something like 100,000 square metres of office floor space onto that site so that involves a payment of something like £7 million in total. The City of London SPG then breaks up that £70 per square metre into component parts so 50% of that will go towards environmental improvements, 30% towards affordable housing, 15% towards transport and 5% towards employment and training. The Mayor of London is not entirely happy with the 15% toward transport. He believes it should be more because of the great transport needs in London and that is where the disagreement comes and that is where the pressure came for the £2 million contribution to Liverpool Street Underground station.

1003. I do not want to labour this particular point but just turn on, if you would please, two or three pages on, we have internal page 9 of the Greater London Authority report, paragraph 56, which records the offer of £2 million. Do you have that?

**(Mr Penfold)** I have.

1004. And we can see that it is to be spent on improvements to Liverpool Street Underground station which is welcomed by Transport for London and then there is reference to “London Underground is currently undertaking feasibility work for enhancement schemes for this station, which will be complete this autumn. In addition Transport for London may be seeking a financial contribution to mitigate transport impacts of the TLRN once it is able to assess the impact.” One sees finally, turning on to the obligation itself, two pages further on, paragraph 3.1 of the obligation, the reference to the £2 million being “for the purpose of carrying out improvements to Liverpool Street Underground Station, such works and improvements to be determined following full consultation by the Corporation with, and taking due account of representations from, the Developer.” It does seem to be in connection with enhancements with the station

---

 The Petition of Corporation of London with British Land plc
 

---

rather than being focused on any particular transport capacity issues. Is that a fair summary of the information that we do have from this documentation, Mr Penfold?

*(Mr Penfold)* I think it is not clear what the money would be spent on. We did have some conversations about that and there were some conversations about ticket hall build but I have no documentation of that and cannot be specific. So that was the intention of the full consultation and taking due account of the representations from the developer because of course we are interested in the functioning and in the way in which that Underground station and mainline station because of its effect on our tenants and our development.

1005. I am not sure we can make much further progress in relation to that point. Can we just come to one or two questions that I have for you. First of all, to make clear some points that I am not going to raise with you. First of all, I am not going to debate with you the merits or otherwise of the scheme that is to be spoken to by a later witness which you have produced as exhibit 2 of document A14. That is the illustrative proposal for additional dedicated access to Liverpool Street station. The only point one might just note is this: you did say in evidence-in-chief you were asked the question what the consequences for British Land's tenants and other occupiers would be if adequate capacity was not provided for at Liverpool Street station in conjunction with the Crossrail scheme and your answer was confined, I think, to Broadgate, was it not? You referred to that as a prestigious office estate and you explained some concerns you had about existing congestion and overcrowding and so on. It is a fact that the illustrative scheme that you have put forward would to a significant extent in practice operate almost as a dedicated pedestrian access to the Broadgate estate, would it not?

*(Mr Penfold)* No, I do not think so. I think it would serve a much wider area than just the Broadgate Estate. If one were to look at the choice that somebody might have arriving at the tunnel through to ticket hall B or going up into the street and moving on from there, there is a wide area around Broadgate which would also benefit from that new dedicated street access. It certainly was not our intention to provide a dedicated Broadgate access. I am sure Mr Chapman will explain the constraints and the process that led him to him selecting this as his favoured option at that particular time. It was not direction from us to achieve a Broadgate ticket hall.

1006. **Kelvin Hopkins:** Could I ask how many other businesses in the area have come in behind your suggestion strongly in support of the additional entrance?

*(Mr Penfold)* I think, if you go back to my exhibit 1 and look at where that entrance would be, it is just to the north of the kink in the upper green line, if you are with me on exhibit 1. And you could see, I think, that the immediate area around the corner of Eldon Street and Blomfield Street, which is what we are talking about, to the south and to the south east would

benefit, and I believe that a lot of people to the east of Bishopsgate would use that route rather than having to go into ticket hall B, which would be their other option, and into the main Network Rail concourse and battle their way through there. I suspect they would prefer to work their way up into Exchange Square, which is the square immediately to the north of Liverpool Street, and that would lead through into Bishopsgate and into Northgate and that major opportunity area that I talked about.

1007. **Kelvin Hopkins:** I appreciate that many companies in the area could stand to benefit in the same way that your company could, but how many have come in behind you and said "We are strongly with you"?

*(Mr Penfold)* Hammerson have petitioned on the same point. Hammerson are the developers of the Bishopsgate Goods Yard and the area immediately to the south. I have to take you to the exhibits. We are on exhibit 10. The whole of that red area, within the red hatched area, Hammerson is the development company who are promoting the planning applications and taking forward the development of that area. As I say, they have separately petitioned on the point and left us to appear before you but are strongly supportive. Our key tenant, who has probably been most involved in discussions about Crossrail because they are so close to the proposed new station, is UBS, our major tenant at Broadgate, who are supportive of our position and have said as much in conversation. Because I anticipated I might be asked this question we have obtained a letter from them to that effect and I am quite happy to have that letter circulated.

1008. **Mr Mould:** Another matter I am not going to ask you about is figures and modelling, that is a matter which I think is going to be addressed by Mr Spencer later on. It begs the question perhaps what you and I can usefully talk about, but perhaps we can cover one or two points. You have very helpfully provided the Committee with an extensive survey of national strategic and local planning policy documentation in relation to the City and the City fringes. You have also gone to the trouble of examining draft policy documentation which is in preparation for the Borough of Tower Hamlets and so forth. One thing that is clear from this survey is this, is it not: nowhere do we find an expression of policy which identifies Liverpool Street station as a station that requires additional provision to be made in order to address existing or projected capacity difficulties during the lifetime of the current London plan?

*(Mr Penfold)* I think that is probably true. I cannot think of any policy document that would do that, that would specifically refer to capacity difficulties at a particular station. I think the commitment in policy to Crossrail, which is very strong, is based on the assumption that it will improve. This is in the context of Liverpool Street station because I am referring to a number of policy documents that refer to Crossrail in that context, particularly the City of

---

 The Petition of Corporation of London with British Land plc
 

---

London UDP. The assumption there is that Crossrail will provide better accessibility to Liverpool Street, to the area and will relieve congestion.

1009. If we turn back to a document to which you did refer briefly. This is in Bundle A12, divider four, which is a series of extracts of pages from the Mayor's transport strategy. If we turn to page 31 of that you will recall that you referred us to this page which deals with the Mayor's commentary in the context of his strategy on Crossrail and his commentary on what it will deliver in terms of benefits. We can see what he identifies as being the advantage in relation to Liverpool Street station in 4Q.11, can we not? He says: "Crossrail will significantly reduce overcrowding on several Underground lines and also reduce congestion at a number of busy stations. Many passengers will no longer need to interchange to and from National Rail services at Paddington and Liverpool Street". That is the express change that Crossrail will achieve in relation to Liverpool Street according to the Mayor in promulgating his transport strategy. It is the advantage that was spoken to earlier of removing from the total number of passengers interchanging at Liverpool Street at the present time and in the future and in advance of Crossrail being constructed, who will, once Crossrail has come into operation, be able to travel straight through.

*(Mr Penfold)* That is one of the aspects but it also refers to reducing congestion at a number of busy stations, and I assume Liverpool Street would be one of those stations, and it refers to a direct link from the City to Heathrow Airport, which is important, as referred to elsewhere in the policy document, meeting the urgent demands of the City and business in supporting London's World City role. I cannot see how that would happen with somebody arriving at a Crossrail station where they had to take five and a half minutes to get from the platform to the station, to the ticket hall, and then battle their way through a congested ticket hall and a congested mainline concourse. Perhaps it is a matter of perception and a subjective assessment of what is being provided, but I find there is a tension between those two things.

1010. You there touched upon perceived impacts which your colleagues are going to be dealing with in terms of the degree to which there will be additional congestion in 2016 and beyond. My point is a rather more modest one. The Mayor has identified a general advantage flowing from Crossrail in relation to the Underground and that is it will reduce overcrowding and also reduce congestion at a number of busy stations, and in that respect the particular advantage that he has identified in relation to Liverpool Street is the reduction of the need for passengers to interchange. We can agree on that, can we?

*(Mr Penfold)* No. The reduction in interchange I entirely accept but I do not think that automatically leads you to the conclusion that there is a reduction in congestion.

1011. I did not put that. I am simply asking you to agree that the Mayor has identified that particular advantage in relation to Liverpool Street station.

*(Mr Penfold)* Yes. That is one of the things the Mayor has identified but he has also identified a number of other aspects. I think anyone reading that would expect a reduction in congestion at Liverpool Street underground station and also significantly improved accessibility from Heathrow which presumably would have an arrival point which was of an appropriate standard for a World City.

1012. **Sir Peter Soulsby:** Mr Mould, I think the Committee has got the point. Perhaps we can move on.

1013. **Mr Mould:** I am very grateful, Sir. Perhaps if I will be permitted just to move down the page to 4Q.13 and again it is a short point. Mr Penfold, this deals specifically with the opportunity areas on the City fringe, does it not?

*(Mr Penfold)* It does.

1014. Again, just to make good the point I put to you earlier, Crossrail is seen as having advantages in the regeneration process but there is no mention there of any particular constraints that would need to be resolved in relation to Liverpool Street station either in advance of or following the construction or operation of Crossrail.

*(Mr Penfold)* No, but it is not unusual for a policy to set the context and then the detailed assessment work to analyse whether or not there is an acceptable impact from the proposed development on the existing network, in this case on the existing station. I think that was what I was referring to in chief when I was talking about the criteria that should be applied to new or redeveloped railway stations being appropriate to assessing this proposal.

1015. Just touching on another point you raised in evidence which arises in relation document A14, exhibit 8. This is the list of planning permissions and applications and so forth. We just need to remind ourselves of this, do we not, that in promulgating the London Plan and the Transport strategy, which is founded upon the policies of the London Plan, the Mayor makes assumptions as to the scale of business and employment development that will take place during the course of the London Plan period.

*(Mr Penfold)* Yes.

1016. His policy for transport infrastructure, and in particular the needs for new and improved transport infrastructure to serve the needs of businesses both now and in the future, is based upon those assumptions.

*(Mr Penfold)* That is right.

1017. Thank you. Your company, as you told us at the start of your evidence-in-chief, is a strong supporter of Crossrail and sees significant advantages to business in the City and thereabouts flowing from its introduction and operation.

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Penfold)* We do.

1018. We need to bear in mind that whilst Crossrail is indeed an important improvement to the existing infrastructure, or it will be when it comes into operation, it is not a panacea for the City's and City Fringes' transport needs, is it?

*(Mr Penfold)* No, not a panacea but I would regard it as being a significant improvement, a significant uplift in the transport quality and capacity for the City.

1019. It is part of an integrated transport strategy as you pointed out with reference to policy documents earlier.

*(Mr Penfold)* Yes, but in terms of new provision it is by far and away the largest part of what is likely to be provided over the next 15–20 years, as I think you heard from Mr Weiss.

1020. I do not think there is anything between us of any significance on that. The development industry, in which you are an important player, expects to make its own contribution towards transport infrastructure and services under current established government planning policy and regional and local planning policy, does it not?

*(Mr Penfold)* Yes, indeed.

1021. It does so through contributions in the form of planning obligations and we saw an example of one a little earlier in relation to the Bishopsgate site.

*(Mr Penfold)* Yes, it does.

1022. **Mr Mould:** We can see that process being provided for in strategic policy in the Mayor's plan. This is an extract from the plan that was circulated earlier. I think it is number 099.<sup>24</sup> Just to set the scene, Mr Penfold, we see that the Mayor's policy for opportunity areas in East London, policy 5C.2 is referenced.

1023. **Sir Peter Soulsby:** Sorry to interrupt you but I interrupted Mr Cameron earlier on perhaps a similar point. I just have to say, and I am sure other Members of the Committee would agree, while it is important we understand the planning framework, it is not absolutely central to the issues that are going to concern us when we come to deliberate on the evidence put in front of us. I wonder if you might pass through it very quickly.

1024. **Mr Mould:** Sir, I intend to. I note the time and I do not intend to be on my feet cross-examining Mr Penfold any longer than the next five or six minutes, if that is helpful. Mr Penfold, the point I want to draw to your attention is simply this: the opportunity areas policy in the London Plan sees a particular role for planning obligations, does it not? You can see that from policy 5C.2, the penultimate sentence.

*(Mr Penfold)* Yes.

1025. And would apply to the City fringe areas that you highlighted in your evidence.

*(Mr Penfold)* Yes, it would.

1026. If we turn on to the third page of this little extract, we can see a policy 6A.<sup>425</sup> which deals with priorities in planning obligations and we can see that the Mayor sets out, amongst other things, public transport improvements as being one of those aspects of provision that requires the highest importance to be given to it in the context of the development process. Do you see that?

*(Mr Penfold)* I do. That was reflected in the letter that we saw on 201 Bishopsgate.

1027. Indeed so. If we turn over the page we see in paragraph 6.22 the point is restated and reference to the need for this to be a policy which is applied consistently throughout London and repeated reference to its role in overcoming constraints on the public transport system.

*(Mr Penfold)* Yes.

1028. The point is this, is it not, yourself and other players in the development industry who, as you said, are developing schemes, planning for future developments in accordance with the planning policy framework, including the London Plan, expect to play your part under this policy framework in contributing to transport infrastructure needs and transport service needs in the planning control context?

*(Mr Penfold)* We expect to and we already do. 210 Bishopsgate is one example. I could quote a number of others where we have made significant contributions to public transport infrastructure.

1029. We can see that is particularly the case in the City fringe areas that you have mentioned and highlighted in your evidence.

*(Mr Penfold)* Yes.

1030. **Mr Mould:** Thank you very much indeed.

1031. **Sir Peter Soulsby:** Mr Cameron, before asking you whether you want to ask any further questions, do you have any indication of how long you might take?

1032. **Mr Cameron:** I have got two questions and I am very conscious, Sir, that the guillotine will come down at half past four.

1033. **Sir Peter Soulsby:** It will. I would like a few minutes before then, if you are able, in order to make a few remarks.

---

<sup>24</sup> Crossrail Ref: P2, The London Plan—Spatial Development Strategy, Policy 5C.2 (LONDLB-2604-099).

---

<sup>25</sup> Crossrail Ref: P2, The London Plan—Spatial Development Strategy, Policy 6A.4 (LONDLB-2604-101 and 102).

---

**The Petition of Corporation of London with British Land plc**

---

*Re-examined by Mr Cameron*

1034. **Mr Cameron:** Of course, Sir. I have two questions and I hope they will be very brief. First question: Mr Penfold, you said you had a letter from UBS. Can I ask that letter be produced?<sup>26</sup> It was in answer to Mr Hopkins' question who asked do you have support from other businesses. While that is going in, can I ask the second question and then come back to the letter to save some time. You gave an answer in which you referred to the direct link from the City to Heathrow Airport which will be provided by Crossrail. Do you remember that?

*(Mr Penfold)* I did, yes.

1035. **Mr Cameron:** You said perhaps it is a matter of perception but that the entrance arrangements at Liverpool Street were important.

*(Mr Penfold)* I did, yes.

1036. **Mr Cameron:** Mr Mould then said to you: "You referred to perceived impacts which other colleagues will be dealing with and I would like to ask you about this perception point". Whose perception were you referring to?

*(Mr Penfold)* I was referring to the perception of the people who work at Broadgate now and in particular the perception of potential Broadgate and the wider City area. Apart from our broader commitment to the City, we have a number of other specific interests in the City which I have explained, but particularly to the perception of potential future investors in the City and future tenants in the City of London. I think that is important to the City's role in the future as the heart of the World City of London, as the financial centre of Europe and one of three World Cities. I think that perception is something I particularly have in mind.

1037. **Mr Cameron:** What difference, if any, will be made to that perception if access to Liverpool Street is provided through the existing ticket hall B as opposed to through either a changed ticket hall B or a dedicated access?

*(Mr Penfold)* I think I used the word "extraordinary". That is not a word I would use lightly. They would find it extraordinary. These are people who operate all over the world and see new public transport infrastructure being introduced into major cities in other parts of the world and are used to it being provided to the highest standard, and in fact we are used to that in London now. The new public transport infrastructure that has been provided in London is to a very high standard. If I were to take you to Westminster Jubilee line station, or any of the Jubilee line stations, and say, "This is what we have provided on our Jubilee Line Extension" and then say, "This is what we are going to provide as the main City entrance to our new £10 billion Crossrail project", I think anybody would be surprised and would find that extraordinary.

1038. **Mr Cameron:** I am going to finish on that note. I will leave you and your Committee, Sir, to look at the UBS letter. I hope I have not trespassed on your two minutes.

*The witness withdrew*

1039. **Sir Peter Soulsby:** Thank you very much. I thought it might be useful to make these remarks this evening rather than to leave them until tomorrow morning. I am sure my colleagues on the Committee will correct me if I have misinterpreted their feelings on this matter. I do feel that today we have spent some considerable time on the planning framework and we have spent some considerable time on predictions for the future and new development proposals. I hope that is now an area that we have explored quite fully, or sufficiently fully. I would not want us to be going over ground that is already well ploughed.

1040. It leaves me to perhaps suggest that of course there is no question about the desirability of Crossrail, we would not be here had not the Commons already accepted the desirability of Crossrail and the desirability of it as a matter of principle. I would suggest that beyond that there are some other things that the Committee are unlikely to need to be convinced of that. I think we are unlikely to need to be convinced of that, the importance of the continued viability of the City. I hope it goes without saying that is something that is shared by all Members of the Committee as it is by both the Promoter and the Petitioners.

1041. I think it is also unlikely that we will need any persuasion at all of the need for it to remain an attractive place in which to work. I am sure that is accepted by both the Promoter and Petitioners. Indeed, arising from that, there is no need for us either to be persuaded of the need for it to continue to be perceived as an attractive place in which to invest. I do not think we will need to have further demonstrated to us that there are a wide range of ambitious planning policies to ensure that it continues to remain such an attractive place to work and such an attractive place to invest.

1042. I do not think we will need any further convincing either that there is a reasonable hope and expectation of continued significant investment in the City and that arising from that continued and significant investment in the City there is likely to be a continuation of significant growth of numbers employed in the area of the City. I think those are things that we, as a Committee, are likely to accept very readily if we have not done so already.

1043. I do not think the Committee, having seen Liverpool Street and many of us having travelled through it on many occasions, is likely to need to be convinced that there is, in more general terms, desirability for significant improvement of the Liverpool Street complex.

---

<sup>26</sup> Committee Ref: A15, Letter from UBS AG to Mr Adrian Penfold, dated 18 January 2006.

---

**The Petition of Corporation of London with British Land plc**

---

1044. I think what is interesting to us and what we are charged with looking at is the impact of Crossrail in general, but most particularly when we are looking at this Petition the impact of Crossrail on the Liverpool Street complex.

1045. Secondly, I am sure we want to direct our attention to what is necessary in terms of modification to the Liverpool Street complex as a result of the impact of Crossrail on the station.

1046. It is also my understanding of what we are charged with doing on behalf of the Commons, the Commons having accepted the principle of the Crossrail Bill and supported it in principle, is to look on their behalf at what alternatives are necessary, what alternatives are possible and what alternatives are reasonable to the proposals put forward by the Petitioners, in this particular context to the Liverpool Street complex.

1047. I hope those remarks are helpful. I hope that counsel, both for the Petitioners and for the Promoter, will bear them in mind as they prepare for the evidence in the remainder of this week and, indeed, the time to come.

1048. **Mr Laurence:** Sir, the first thing to say is that is extremely helpful, it really is. The second thing is to ask you something that I would have asked even if you had not said what you have just done. Mr Spencer, who is due to arrive at any minute with, I hope, copies of his exhibits—

1049. **Sir Peter Soulsby:** Right on cue!

1050. **Mr Laurence:** You are obviously assuming that nobody had tipped me off that he was walking down the corridor, Sir. Mr Spencer has a proof of evidence which does go, amongst other things, into the numbers in some considerable detail. I pointed out before that it is the case that in order that there should be an intellectually coherent and honest presentation of the position. There is no escaping that there is some degree of grappling with the numbers. Mr Weiss has taken that process only halfway; Mr Spencer is going to complete the process, with your leave, tomorrow.

1051. The practical suggestion that I was about to make to you, Sir, and I am not necessarily asking for a ruling on it now, is simply this: provided Mr Spencer is happy to do so, and I think he probably is, would it help the Committee if we were to put not merely his exhibits in front of you but also his proof of evidence and for me to issue to the Committee an invitation I have issued in the past, and been given an affirmative answer to, which is

that the Committee would be prepared to treat that evidence as having been given although it would not have been uttered orally.

1052. **Sir Peter Soulsby:** I am very attracted by the idea, Mr Laurence, but I am advised that of course it may be that in some way that disadvantages other counsel who may wish to cross-examine. Would you like to comment on that, Mr Elvin?

1053. **Mr Elvin:** As long as we get a copy of it, it cannot disadvantage us to see in advance what we would be hearing orally in any event.

1054. **Sir Peter Soulsby:** It sounds like a note of agreement.

1055. **Mr Elvin:** I hope we are all quids in if that happens because this allows us to focus on the main points and (a) we do not have to go through it in enormous detail orally, which I am sure we would all be glad of, and (b) you may find the cross-examination of Mr Spencer is rather narrower than you may be fearing. I have been looking through his new figures which we were given this morning and we have already tested on figures higher than his new figures.

1056. **Mr Laurence:** I hope Mr Elvin will keep his remarks of a forensic nature for when it is his turn to make them! I had thought the party towards whom you might be solicitation was not Mr Elvin, who can look after himself, but to those of my witnesses who have not so far had the same opportunity, eg—I do not know what he would say to the question—r Penfold himself who may feel that it would be desirable that the Committee see what it was that he would have said had Mr Cameron had the opportunity to ask him in full. I am sure Mr Weiss would be happy with his evidence as it is because it reads so attractively. I am not sure what Mr Rees' position would be. Can we just make our own inquiries about this overnight, Sir, and ask you tomorrow if we think that the same facility should be accorded to those other witnesses?

1057. **Sir Peter Soulsby:** I think that would be very sensible for us to give some consideration to what has been suggested to us overnight and come to a view on this in the morning.

1058. **Mr Elvin:** Sir, before you do so can I just say one thing about you receiving material from witnesses who have already spoken. We have had no opportunity to cross-examine on it, we have not seen it, and I would therefore resist that suggestion. If you want me to expand on it, I will do it tomorrow morning.

1059. **Sir Peter Soulsby:** I would have anticipated that response. Thank you very much indeed.

---

Wednesday 25 January 2006

Before:

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone  
Kelvin Hopkins  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

*In the absence of the Chairman, Sir Peter Soulsby was called to the Chair.*

Ordered: that Counsel and Parties be called in.

1060. **Sir Peter Soulsby:** The Committee has given some consideration to the evidence we received yesterday and to the directions that we might usefully give to counsel and Petitioners in the light of our experience so far. There are two things I would like to say on behalf of the Committee, first of all that we are agreed that it would be improper to receive written evidence which the Committee have not heard during the meeting. Such papers would have no status before the Committee and counsel would have no formal rights to reply and the Committee is unlikely to read such papers given the large amount of work before it. The second is that the Committee is directed to hear the objections raised in petitions and will hear arguments which support these objections. However, the Committee does not wish to hear extensive historical policy decisions or to be referred to public policy documents. Inevitably such will be referred to incidentally in other evidence but I think, in the light of what I said at the end of yesterday's session, you will understand the point that we are trying to summarise in that direction. I hope that is clear.

1061. **Mr Laurence:** Sir, I thought Mr Cameron would be more on the ball than I am in this, as in other respects. I did not entirely follow whether you were saying that you would not on reflection be prepared to receive, eg, Mr Spencer's proof of evidence.

1062. **Sir Peter Soulsby:** Yes, I am advised that any written document that has not been discussed in front of the Committee will not be received.

1063. **Mr Laurence:** Sir, could I just pursue this for a moment because in the light of what Mr Elvin said by way of response to that yesterday there is plainly a good deal of common ground between counsel as to the desirability of placing before the Committee material which would enable the witness not to have to address the Committee on at great length on difficult subjects. (After a pause) If I could finish the point, as you know, sir, there is not only no objection to the production of material by way of exhibits but the Promoter for his part is frequently putting in papers giving the Committee information about material matters which is in many cases indistinguishable from evidence and objectionable in a sense on the ground that there is not even necessarily anybody there to be cross-examined in relation to material of that sort. We are suggesting

what one would have thought was a totally unexceptionable method of shortening the proceedings before the Committee by giving you as an additional exhibit, if you like, the evidence which the witness would have wished to give if he had been able to do so *in extenso*, and I am bound to say that as a method of enabling you not merely to listen to the witness but also to follow on the printed page what it is that the witness is wanting to say to you it is an enormous aid to comprehension. I would add that I see no difficulties purely as an advocate about getting my witness to adduce his evidence in the normal way and without this aid to the Committee but I wonder, sir, whether, with the aid of your Clerk, it would not be helpful for you just to consider whether you would not in the end be assisted by the process which we briefly discussed yesterday and which, I think I understood, Mr Elvin might enthusiastically endorse. I have certainly done it before over the last 20 years and I would suggest, sir, as a method of avoiding any suggestion that the Committee has treated itself as having received evidence which it has not really received, that perhaps the Chairman could direct the Committee to concentrate primarily on that which emerges as a result of the ordinary process, feeling free at the same time to have a look and see what the witness would have wished to say, bearing in mind that the document is one upon which the Promoter will have the opportunity to cross-examine and, of course, vice versa if we proceed in that way. I can tell you, sir, that I have done it before, not only without objection from the Chairmen of various committees that I have been in front of over the last 20 years, but with positive enthusiasm given the potential of that way of proceeding to assist the Committee in its deliberations. I am in your hands, sir.

1064. **Sir Peter Soulsby:** Thank you, Mr Laurence; that was very helpful. I have to stress that, of course, the purpose of giving the direction that I was issuing on behalf of the Committee earlier on is not to shorten our hearings. It is to enable us to focus on the issues that are of most significance to the Petitioners and to the Promoters and to enable us to ensure that matters that are perhaps already accepted or somewhat extraneous do not cloud our considerations. It is also, I think, of considerable importance to the Committee if we are able effectively to listen to the arguments, to focus on those issues but also to ensure that issues are properly explored here and that counsel have the

---

**The Petition of Corporation of London with British Land plc**

---

opportunity to explore the evidence that is put in front of us. As I said in giving that direction on behalf of the Committee, I am very keen to avoid further mountains of paper coming to members of the Committee that we are not really able to delve into. Mr Laurence, having heard what you have said, we will proceed with your witness this morning and perhaps see whether, when the Committee has an opportunity later on to discuss this matter in private, there is anything further we may wish to add to what has already been said. I hope that we can proceed with the witness this morning in the light of the direction that has already been given and perhaps return to the issue if necessary at a later stage.

1065. **Mr Laurence:** Thank you for that indication for the matter to remain potentially under continuing review, sir. Could I just ask Mr Cameron to begin by making one suggested amendment to the transcript from yesterday for those members of the Committee who have had an opportunity to read it at some point? I have noticed numbers of grammatical and other minor infelicities of the sort that are obviously inevitable, but I am not going to trouble you with any suggested amendments today, sir. The context makes it clear what has been said.

1066. **Sir Peter Soulsby:** If I could just remark on that final point about grammatical and other minor errors, I think it is possible for those just to be fed

through administratively as it were and for them to be taken account of without the need for them to be drawn to the attention of the Committee.

1067. **Mr Cameron:** Sir, this is not a grammatical error but at paragraph 1004, page 58, Mr Penfold, giving an answer about the two million pound contribution which was required on the development of 201 Bishopsgate, in the second line of his answer he says, beginning at the first line, “We did have some conversations about that and there were some conversations about ticket hall”—and it says “build” and it should say “B”. It is a substantive point, sir.

1068. **Sir Peter Soulsby:** Thank you. Mr Laurence?

1069. **Mr Laurence:** In the light of the guidance that you gave, sir, I need to begin by asking that Mr Spencer’s exhibits alone be now circulated to the Committee, that is to say, his technical annex to his proof and also the document headed “Exhibits to the Proof of Evidence of Mr Tim Spencer”.<sup>1</sup> The technical annex which is being handed round at the moment, you will recognise from tables 1-15, is the same as the tables which you were previously shown. There is, however, additional material at tables 16-30.<sup>2</sup>

1070. **Sir Peter Soulsby:** For the record, these documents will be A16 and A17.

---

<sup>1</sup> Committee Ref: A16, Exhibits to the Proof of Evidence of Mr Tim Spencer, Steer Davies Gleave.

<sup>2</sup> Committee Ref: A17, Technical Annex to the Proof of Evidence of Mr Tim Spencer, Steer Davies Gleave.

---

**Mr Timothy John Spencer**, sworn

*Examined by Mr Laurence*

1071. Mr Spencer, are you Tim Spencer and a Director of Steer Davies Gleave, independent transport consultants and advisers to British Land Company plc?

*(Mr Spencer)* I am.

1072. The Committee do not in the event have the advantage of seeing set out in detail your experience and relevant qualifications. I think the sensible thing to do is to summarise those in any event and to tell the Committee, if you would please, what you really think would be necessary and interesting for them to know in the light of the evidence you are going to give today.

*(Mr Spencer)* I have been a consultant for 25 years and have probably worked on hundreds of projects but I will only touch on three or four in giving my first introduction to myself. I joined my present company in 1988, which is 16 years ago. Prior to that my last major project for my preceding employer was actually work related to the redevelopment and remodelling of Liverpool Street station which occurred in the late 1980s in association with the

construction of the Broadgate development which both sat on top of and surrounded Liverpool Street station. I did that work on behalf of the British Rail Property Board, not for the developer, so it was for the owner of the station and it did relate to addressing a range of capacity issues at Liverpool Street station in terms of the main concourse predominantly but also in terms of the construction of the mezzanine and the connections between the main concourse and the upper level within the station. Having touched on the detail for the first time, the model is outside and the model is the very best way to understand it. I have a whole series of figures in my exhibits which to me are capable of being understood but they are complicated maps and drawings and if I can assist in any respect in explaining any further details to you using the model I would be absolutely delighted to do that, but obviously we cannot be walking in and out all the time.

1073. **Sir Peter Soulsby:** Thank you very much for that offer, Mr Spencer. I entirely take the point that you are making. It may be that at some stage it would be helpful for us to be talking with the model

---

**The Petition of Corporation of London with British Land plc**

---

in front of us but I can assure you that members have had the chance to have a look at the model and have visited Liverpool Street and seen some of the issues on the ground as it were. If need be at some later stage we will go and have a look at the model.

1074. **Mr Laurence:** What I have in mind, sir, is that if Mr Spencer himself finds it possible not to have to invite the Committee to go out into the corridor there may come a time when Mr Chapman, the next witness, would in effect be conducting the same sort of acceptable, non-evidential tour in the corridor as was previously conducted when you went to Liverpool Street itself simply by pointing out features shown on the model equivalent to features on the ground. I think that probably would be helpful before Mr Chapman gave his evidence.

1075. **Sir Peter Soulsby:** That may well be the case.

1076. **Mr Laurence:** It will not be evidence as such.

1077. **Sir Peter Soulsby:** No, but it will be enough for us to understand the inter-relationship of the various areas within Liverpool Street station.

1078. **Mr Laurence:** I am sorry to have interrupted you, Mr Spencer. Was there something more about your qualifications that you would like to say?

**(Mr Spencer)** Yes, there are there other points I would like to make finishing off the Liverpool Street station point. The station that was constructed at that time implicitly had something in the region of 100 per cent future-proofing. The level of demand at Liverpool Street station today as against the late eighties is broadly speaking twice the level that there was at that time. As you have seen on the site visit, the station on the whole is still operating within its design capacity but clearly there is congestion which is becoming increasingly prevalent within the station. The next point is that I worked for a solid seven years on the Canary Wharf project in Docklands. I played an instrumental role in the uplift of the planning consent at Canary Wharf to add the best part of an extra ten million square feet of office accommodation, which is sufficient to accommodate some 50,000 employees. I was also heavily involved and my company was heavily involved in the initiation of the Jubilee line extension to Canary Wharf and my company was also involved in the demand forecasting appraisal design of Canary Wharf station which is the highest capacity ticket hall within London and is a cathedral to London transport. It is an absolutely magnificent building which has been extraordinarily successful. The third point is that in my spare time I design exit systems for stadiums. I am on the Wembley National Stadium project team and you will see my latest major project which is the new Arsenal Football Club. I have worked on dozens and dozens of stadium projects and my expertise relates to understanding what is required in terms of stadium exit systems and satisfying the green guide code of practice for safety at sports grounds. That might seem somewhat unrelated to Liverpool Street

station but fundamentally the challenge that I have to satisfy in doing that work is that I have to move 10,000 people a minute. In this instance we are talking about something like 10,000 in three hours, so I think you can understand that the level of my knowledge in these matters is quite considerable but not predominantly related to stations. It is much more to do with stadium projects.

1079. **Mr Spencer,** I am going to ask you the first of what will no doubt be a number of questions to which I do not know the answer but this is going to be a proper debate in front of the Committee and so I am going to risk asking the question. You made reference to the green guide a moment ago and I have seen in some note or other in a document that the green guide and the 35 per cent design life criteria are in some way linked with each other, and I think you mentioned that implicit in the planning for the 1980 Liverpool Street station development was a higher degree of future-proofing than has been discussed in these proceedings up to now. I would just like you to comment as to whether there are any green guide implications that the Committee ought to be aware of in approaching the whole question of what proper design life for this project ought to be contemplated.

**(Mr Spencer)** The matters that are dealt with in stadium design and station design are exactly the same but the people are totally different. There is a big difference between football spectators or rugby spectators and City commuters. It may be that most of them are the same—it is their day job and their weekend leisure. The issues do relate to the basic principles of how you design exit systems and how you appraise exit systems. In terms of a stadium it is absolutely inconceivable that I would tolerate any contra-flow movements within a stadium exit system. In stations clearly because the complexity of the stations is on a small scale it is inevitable that there are significant contra-flow movements. It is extremely difficult to judge the significance and impact of those contra flows that exist within stations and the pedroute model, which has been discussed already and which I will touch on in my evidence, is an aid to understanding how these things are operated. It is not in any sense the means by which you assess; it is the means of assisting the assessment of what future situation will be. Clearly, what drive pedroutes are the same sorts of things that drive my assessments of stadium exit systems in terms of the ability of people to move through spaces at certain speeds and the significance of information that you provide for the stewarding. I do not know if I have answered your question.

1080. It was the green guide and the implications of the green guide that you were addressing.

**(Mr Spencer)** The green guide drives emergency evacuation as the critical assessment, and no doubt in this case there is another level above pedroute which is actually a statutory appraisal of the emergency evacuation capacity of the station. We have not got to that level of detail yet because the work Crossrail has done to date has not taken them

---

 The Petition of Corporation of London with British Land plc
 

---

to sufficient detail to be able to undertake that kind of work. It is something that will be necessary further down the line.

1081. **Sir Peter Soulsby:** Can you explain the status of the green guide and its origins?

**(Mr Spencer)** The green guide is a statutory code which flowed from the Taylor report which flowed from the Hillsborough disaster. It has been updated on a couple of occasions through the years. The Taylor report was a superb piece of work and underlying the Taylor report was some very detailed technical analysis. What that leads you to is a guide that is pretty much mandatory and the compliance with that guide leads to the issue of a safety certificate for a building and once that certificate is issued by the football licensing authority then it is a matter for the local authority to continue to ensure that the building satisfies the requirements. Just before I go into my evidence can I touch on a couple of points to assist you as best I can? First of all, I have no history of this project. I have had no involvement personally with Crossrail although my company has done significant work for Cross London Rail Links, and I have never worked for British Land before and, other than Liverpool Street station I have never had anything to do with these issues, so I do come to this exercise with a clean slate. I have also only been working on it for six months and if I am taken to the history of it I have a good understanding of it but I am not going to say anything about it. I am not going to say anything about planning policy; I will rely on the evidence.

1082. **Sir Peter Soulsby:** I can hear sighs of relief from members!

**(Mr Spencer)** I totally rely on the evidence that has been given by Mr Penfold and Mr Peter Wynne Rees. I will do my damndest to avoid numbers but numbers are bread and butter for me. Basically I am a planner-cum-economist-cum-technical appraiser and as such all those require numerical analysis and I will have to share some of that numerical analysis with you. The third point in introduction is that I do adopt the evidence in cross-examination of Mr Joe Weiss. He took the case to a certain point and I will seek as best I can to launch from that point but clearly there will be occasions when I will be touching on things that he has already dealt with. I am certainly content with the cross-examination answers that he gave. My fourth point, which is quite significant, is that the Crossrail project is an extremely expensive undertaking. I do not personally know what it is going to cost. I believe it is somewhere in the realm of £12-13 billion. The Crossrail project has a very positive cost benefit ratio, I am sure you were told in introduction. It has a cost benefit ratio of 1.8 which is extremely good for a project of this nature. That means that the benefits outweigh the costs by 80 per cent and 80 per cent of £12-13 billion is a very significant sum of money. A significant part of the benefit analysis relates to something called agglomeration benefits. They are valued at in excess of three billion pounds. A substantial part of that agglomeration benefit relates

to the employment growth within London and how Crossrail will—and it will; I am a great supporter of Crossrail—will make a step change in terms of how central London operates, partly by the relief of the existing congested Tube systems but also a major step change in terms of quality, which has only been seen in terms of the Jubilee line in London. The agglomeration benefits of three billion pounds flow to financial and business services, the efficiency of financial and business services. I am not giving policy evidence here. It is my interpretation of the case and that significantly relates to Liverpool Street and the City of London. It also significantly relates to Canary Wharf, the best possible connection between the two most significant financial services locations, not in London, not in the UK but in the whole of Europe. Each of them judged individually is of enormous significance, clearly a situation where we believe and I fundamentally believe that there is an under-provision in terms of capacity at Liverpool Street and its connection given the superb station they have had put in at the Canary Wharf end of this link. I believe that that should be an area of great concern but also it does mean that we should seek to capture the three billion worth of benefits. That is what Crossrail is seeking to do. When it comes to the fact of the solution we have put forward being slightly more expensive in the round at £12 billion of rail money then I think the Committee should see that as a highly desirable investment. It is not going to undermine the business case of Crossrail. It has been tested by the Treasury, it has been scrutinised by the Montague Committee and it has stood the test which led to the Secretary of State to bring the hybrid Bill before Parliament.

1083. **Mr Laurence:** Mr Spencer, the other preliminary point you wanted to say something about, so that the Committee have a flavour of this, is what has been going on in recent weeks in particular between you and those who are advising the Promoter in an attempt to achieve what I think you refer to as convergence of relevant numbers.

**(Mr Spencer)** Absolutely. Clearly, given the process we are engaged in, there have been certain stages during the last six months. There was a kind of purdah stage once the petitions went in while the Promoter had to deal with the processing of all the petitions which meant that for a period of time in the autumn there was very little communication and access to Cross London Rail Links. They were very busy doing other things. In the last six or eight weeks there has been a re-engagement of dialogue that took place during the summer and I do not at all criticise any process that we have gone through with Cross London Rail Links. They have always been willing to talk to us, they have always been willing to openly reveal their analysis and share their analysis with us. In the last two weeks or so we have made substantial strides in terms of common agreement on a number of significant issues relating to their case and these are areas where Crossrail is broadly speaking accepting my case and feeding it through into their analysis. This means that they have significantly increased the demand forecast for access to

---

The Petition of Corporation of London with British Land plc

---

Liverpool Street station by way of Crossrail by some 60 per cent in the testing we have done to date. They have also adopted within that assessment all of the employment forecasts that my company has prepared so that the reason that there is a big difference between what was driving the initial appraisal and what they are currently using to do those demand forecasts is that they have adopted my analysis. They have gone through them over the last week which has then led to the increased demand forecasts. They have also done a considerable amount of work using the pedroute model which I am not presenting in evidence to you because, one, I only received it last night and, two, it is not my work; it is for them to put it before you. I will have to comment on it but I would emphasise that it is merely an aid to judgment in terms of a future situation. There is a lot more work to be done in terms of City of London and British Rail and associated developers and Cross London Rail Links continuing to explore what is an extremely complex but incredibly important issue with regard to the Crossrail project.

1084. **Mr Laurence:** Mr Spencer, I think the way we should proceed in relation to this new pedroute analysis which you only received last night is to see whether you are in fact cross-examined on it. You ought to be. If you are not I shall make an application to the Chairman to allow you to comment on it under re-examination, of course, with the opportunity for the Promoter to ask questions by way of cross-examination at that stage. It is entirely right that it is not your work and on the face of it you should therefore be asked to comment on it by the Promoter which you no doubt will be. Before you go to your overview of the function of Liverpool Street station, which is I think your main first topic, is there something you want to say about the debate that has gone on in front of this Committee hitherto about what we might call gateline B and the value of an analysis of the requirements of that gateline in aiding the Committee to come to a conclusion on the matters that concern it?

(**Mr Spencer**) What I would say is that there is a near-forensic calculation that is done following very specific methodology equation. It is a mandatory obligation on the part of LUL and anyone that does anything of significance to one of their stations to achieve the gateline requirement that is thrown up by the calculation and the pedroute analysis is not a substitute for that calculation. It deals with a different time frame, it is dealing with a totally different type of analysis, so the only show in town basically is that forensic test. That forensic test does not relate to other aspects of how stations will operate. There is no forensic test that says you have to have 200 square metres of space available to do X, Y and Z; that simply does not exist. However, you can take it that where there is a requirement to move from, say, 16 gates to 27 gates, which is the case that I have put before you, implicitly that is saying we need 70 per cent more space within the station. It is not just a question of providing gates. If you cannot get to them and get away from them you have got

convergence of flows, not dispersal of flows. You have got a very complicated scenario. It is not just a question of putting on a belt to basically hold up the trousers. The trousers have got to fit and the jacket has got to fit. We drive our analysis in this annex very much on the basis of that forensic test but whenever I am using it it is a direct proxy for an inadequacy of space *per se* within an environment. In starting my evidence I would just like to say a couple of things with regard to tables and exhibits. First of all I would like to turn to table 16 in my annex. I am sorry; I am not entirely following the script.<sup>1</sup>

1085. **Mr Laurence:** That is your technical annex, page 7, table 16, “Arrivals at Liverpool Street and Moorgate stations”.

(**Mr Spencer**) I did this table effectively about two days into the project, late June, early July, and this is what got me going on this issue. If you look at column E of this table you will see a combination of who turns up on the trains, how many stay on the trains, how many get off the trains, how many want to be in Liverpool Street going to Liverpool Street buildings. If you look at National Rail—

1086. **Mr Laurence:** Before you go on, we are talking about 2001 numbers based on CLRL’s demand matrices; is that right?

(**Mr Spencer**) Apart from the Crossrail forecast, which is 2016, which is the last line. Sixty-five per cent of people that turn up on trains at Liverpool Street station go to the street. No other station in London operates in that fashion. My station is Waterloo. I doubt very much if it is even 35 per cent egress at Waterloo. At Victoria it is more commercial but still substantially the majority of passengers, from my appreciation of the statistics, make access to the Underground system. You can work your way all the way round London. At King’s Cross hardly anyone gets out, nor at London Bridge. This is an exceptional relationship between Liverpool Street station and the City of London and the development around that area. The three of them are so inexorably interlinked. You do not see that anywhere else in London. The second point on working row by row is I have got two figures in column E, 15,000 and 10,000. These are the number of people who come to the Liverpool Street area using the Central line and sub-surface lines at present. The Central line has benefited from significant upgrade in recent years and is not quite the misery line it used to be. It brings 15,000 people to the local area, but those people are travelling on what is a very congested railway. Sub-surface lines, which is by far the most antiquated set of lines in London, very complicated lines, and I am sure many of you have used them on a regular basis—the Circle line, Hammersmith & City line and Metropolitan line—bring 10,000 people to Liverpool Street. When I saw the first demand forecast for Crossrail and it basically said that it would bring 5,000 people to the Liverpool Street area, it just did not stack up. That

---

<sup>1</sup> Committee Ref: A16, Arrivals at Liverpool Street and Moorgate Stations (SCN-20060125-001).

---

 The Petition of Corporation of London with British Land plc
 

---

is the simplest way of putting it. If you look at the percentages, 65 per cent of National Rail passengers go to street, 25 per cent of people in Central line trains go to street 29 per cent of people on sub-surface lines go to street, so why on earth do only seven per cent of people on Crossrail go to Liverpool Street? Where are they going? I cannot answer that question but that is what I am investigating through this proof of evidence. I am trying to get to a higher level of understanding.

1087. So that this process has some structure to it, what you have done, very helpfully, is to summarise for me at all events the bits of your evidence that you want to concentrate on and the Committee will be happy to hear as a result of that attempt you believe you will be able to shorten it very considerably, is that right, Mr Spencer?

*(Mr Spencer)* I will do my very best. Clearly it will take me slightly longer to give you this evidence without you having the proof than if you had the proof, which is what my counsel has said. I have got a lot to get through here. I will do it as quickly as I possibly can but there are certain things that have not been presented to you previously in introduction, which is probably why I am labouring it a little bit before I get to the crux of it. I can go through the crux of it very quickly. I would like to touch next on the very last page of my exhibits, which is volume 8A.

1088. Just for the record, so that people reading the transcript can follow, this is an extract from the Crossrail Environmental Statement volume 8A and the very last page is the extract from 8A you have just mentioned at paragraphs 2.30 onwards on page ten.<sup>2</sup>

*(Mr Spencer)* First of all, I would just like to touch on how Crossrail have done their appraisal because I do not believe anyone has explained how they have generated their numbers. I am not going to do it in any great detail. It uses a model called Railplan and you have heard a bit about it already and I am sure you will hear a little bit more and I am sure there will be some cross-examination on it. Railplan is a ginormous undertaking. It seeks to simulate every single rail journey, public transport journey, in the South East of England. There are millions of them. There are thousands of zones where people begin their journeys, and a zone is a district in a city centre or a suburb in Brentwood or wherever. There are thousands of destinations. This model puts them altogether as well as having what London has, an immensely comprehensive public transport system in terms of the Underground and rail services that operate in London. It is a Herculean task that Railplan is being asked to perform. Quite clearly, in setting this explanation in place Cross London Rail Links recognises that Railplan is a strategic model and that it has to be used with a great deal of caution. What they set out here is something called a post-model adjustment, which is basically saying do not take the numbers on face value, you have got to look

at them and scrutinise them; the strategic model cannot be expected to accurately predict the use of individual stations, as an example. We are talking about an individual station here; in fact, we are talking about half an individual station. There is work that needs to be done. The opportunity to do that work for some reason or another at certain points in time has been clouded because the demand forecasts were only produced in December 2004, the Bill was lodged in early 2005 and the Environmental Statement had to be written. There is an awful lot of stuff that has been going on. My fundamental case is that the level of scrutiny you need to apply for the Liverpool Street area means that you need to have a much more detailed understanding of the operation of the station and the function of the station and what it is there to achieve in the future. That is an area of work which we have begun with Cross London Rail Links because we have got convergence on the employment case and we have dealt with a major component of Railplan but there is still an awful lot of work that would be needed before you would have complete confidence in the demand forecasts that are being used to justify the station design.

1089. Without being at all, as it were, confrontational, is it the position that you wrote a letter about this paragraph that we see at the end of your exhibits, 2.37, asking questions as to whether appropriate post-model adjustments had been done at Liverpool Street, to which you have not had a formal reply at any rate?

1090. *(Mr Spencer)* I have had no reply whatsoever. We have had discussions on a regular basis but it was a formal submission to Crossrail and I have not received anything from them.

1091. Is their position that they have done, and did do, the relevant post-model adjustments or not?

*(Mr Spencer)* It has not been stated one way or the other. Just moving on from Railplan a little bit, clearly it is the only show in town as far as assessing a project like Crossrail is concerned. We have made significant progress with Cross London Rail Links in the course of the last ten days in using Railplan to improve the demand forecasting, but that is not the end of the day. The demand forecasts that I am putting to you today show substantial convergence in terms of my previous view and the view that is now currently being expressed by Crossrail.

1092. Mr Spencer, I think you have just summarised very effectively one reason why this has been a roller coaster ride for me at any rate as well.

*(Mr Spencer)* And me!

1093. If you are happy to, let us now go to your overview of the function of Liverpool Street station concentrating just on two or three paragraphs in your proof.

<sup>2</sup> Committee Ref: A16, Environmental Statement Volume 8, para 2.30 (SCN-20060125-002).

---

 The Petition of Corporation of London with British Land plc
 

---

(*Mr Spencer*) Sure.

1094. Is it convenient for the Committee to have any statistics to hand, perhaps your exhibits three and four while you give this evidence?

(*Mr Spencer*) I think I am more concerned with numbers rather than the layout issue. Probably the most helpful exhibits to get out would be exhibits 18 and 19.

1095. Mr Spencer, do you think it would be helpful if you began by just telling the Committee how many visitors per annum Liverpool Street station serves?

(*Mr Spencer*) Yes. It is 141 million visitors per annum, of which 80 per cent, which is over 110 million, are rail passengers. Actually it is a significant attraction for people to come in and out, to buy their lunch and go to Boots. The City is not well endowed with retail facilities and Liverpool Station is probably the largest retail facility in the City of London, certainly for convenience goods. It has got a huge number of coffee outlets that is for sure, about 30 of them.

1096. It is the busiest station, is it the busiest anything else?

(*Mr Spencer*) It is the busiest station in the country and it is the busiest building in the country. Mr Weiss talked about Heathrow Airport combining four terminals together and coming up with a number significantly less. I have not done that sum so I could not endorse it or otherwise. What you do in the AM peak is you do the equivalent of filling Wembley Stadium in three hours, 100,000 people go through the station, and these are enormous numbers. An equivalent department store like Selfridges would struggle to get more than about 15 or 20 million people, and these are big buildings. Harrods is an example, or any other major department store that you are familiar with. There would be an order of magnitude probably a tenth below what is happening in this building on an annual basis.

1097. You mentioned that figure of 141 million. Does that represent growth over the last even very few years?

(*Mr Spencer*) Yes. It is 15 per cent higher than at the Millennium. As I said previously, it is the best part of 100 per cent up on the level of throughput through the late 1980s, early 1990s. I have photographic evidence in here which you can see and that is very much reflective of the time that you went to see the station, which was the AM peak hour. I have done the AM peak hour because you can see what is happening. Mr Weiss put in lots of photographic evidence from the PM peak hour and you cannot see the wood for the trees. In the PM peak hour the main concourse gets very congested because people are waiting to find out where their trains are going to depart from. You can see in the AM peak hour that large parts of the exit system are clearly overloaded. The stairs and the escalators up to Bishop's Bridge from the east end of the concourse is routinely congested. The stairs to

Liverpool Street and the escalators to Liverpool Street on the south side of the station are routinely congested. As you can see in the PM peak hour on the opposite route, which is the retail arcade route up to the statue at Broadgate, is extremely busy and regularly congested. What Liverpool Street is dealing with is people who know what they are doing. These are experienced commuters, they have all worked it out. They come through here 225 times a year in the morning and 225 times in the evening. There are ruts in Liverpool Street. There are certain routes that people follow. We have done a raft of research as you can see from this exhibit and the following eight or nine exhibits. We have tried to understand exactly what is going on here. We have got data from a whole variety of different sources. London Underground has very comprehensive data as to what its passengers are doing. I have tried to put it altogether to take a view on where things stand at the moment. My view is that the station is approaching a point where routinely capacity would be insufficient to deal with the routine demand. It has not quite reached that point at this moment in time but it is basically on a knife edge. It is a hotchpotch: there are three LUL ticket halls, two levels to the railway station and the railway station is ten feet below where you want to be, which is up on the street. There are all sorts of compromises that have been built into Liverpool Street. With work that has been done 20 years ago we have added more complexity to it and in moving forward no doubt even more complexity gets put into the equation and at some point in time it will fall over because it just becomes totally and utterly dysfunctional. At the moment it is highly functional.

1098. Mr Spencer, I have to say when I looked at this drawing my eyes glazed over. I thought the colours were horrible for a start in that it was difficult to tell which the AM peak number is and which the PM peak number is and, secondly, I did not know which numbers to concentrate on. Are you going to tell the Committee a number which perhaps they ought to look at on exhibit 18 to illustrate as vividly as any can the complexity of the station that you have been talking about?<sup>3</sup>

(*Mr Spencer*) I was using this because there is some order of magnitude for the movements that exist. I would like to just walk around Liverpool Street station in two minutes just to run through how you get out of the station because I believe you have got to understand how this building operates so that you can then view how it is going to operate in the future and *per se* how many people would come through the eastern end of Crossrail through this interchange in future years. The best way for me to start is dealing with the bits that are in the Railplan model. On the right-hand side there is a figure of 18,751 which is the number of people who go up these stairs and escalators to go to Bishopsgate.

---

<sup>3</sup> Committee Ref: A16, Liverpool Street Station Survey Data: Crossrail-Mezzanine Level AM Peak (0700-1000) (SCN-20060125-004.

---

 The Petition of Corporation of London with British Land plc
 

---

1099. That was Mr Weiss' exit two, I think.

*(Mr Spencer)* That is clearly a substantial number of people. If you go to the bottom left-hand corner you will see two figures of 8,000 and 7,000, just about 16,000, but very substantial numbers again, those are the people who go to Liverpool Street.

1100. Those are Mr Weiss' 3A and 3B, I think.

*(Mr Spencer)* Then we have another number which is another huge flow, which is going to the Octagon Arcade. Funnily enough, quite a lot of those people are going to shop and then they come back, so the number of people who actually reach the end of the arcade is only 15,000, so there is a 5,000 turnaround that happens in there which is just one of many bits of detail that I detect. Those are the headlines, but below that there is a below grade underpass which goes into Bishop's Bridge which avoids the need to cross Bishop's Bridge as a road, which is highly beneficial. That is the bottom right corner. At the top left there is a new arcade that has recently been constructed in partnership between National Rail and British Land which takes you via a short cut to the northern buildings in Broadgate, Exchange Square. The question on those kinds of details is does Railplan know that those exist, and the answer is probably not. Clearly there are connections which are highly relevant because they provide easier ways of getting in and out of the station without any level change which need to be taken into account. If you could turn to the next page very briefly.

1101. This is a Liverpool Street station survey.

*(Mr Spencer)* Exhibit 19.<sup>4</sup>

1102. Mezzanine level AM peak.

*(Mr Spencer)* You have been to the station and you have seen that there is a world above the main concourse. That world above the main concourse connects into lots of useful places. There is another direct route on top of Broadgate. There is an escalator connection in the top right-hand corner which takes you round the back of the Broadgate buildings on Bishopsgate, which is highly beneficial and makes it a lot easier for people to make the journey into and out of the station. Clearly somewhere along the line there is a capping out in terms of the congestion and I am saying there is lots of complexity and detail which means the station operates in an extremely efficient fashion at present.

1103. **Mr Laurence:** Did you want to go to the photographs next?

1104. **Sir Peter Soulsby:** Just before you go on, so we are keeping up with the changes of colours we have here, just talk us through the different colours there. Obviously we have got the green added. It would be helpful to have it made clear to us what each set of numbers represents.

*(Mr Spencer)* The pink—if it does come out as pink, it is pink on mine—is a whole raft of information that was given to us by Network Rail. They did a huge survey at Liverpool Street station in April because we were not on the job in April. That was the survey that led to the calculation of 141 million. They gave us that information and we then supplemented it with our own surveys which took place on 27 September. There are two different types of movements. There are exit movements and there are internal movements. They are just shown in slightly different colours for no particular reason. Our objective on the survey was to find everything that goes in and out of Liverpool Street station but also to understand as best we can the things that happen within the station.

1105. So the green is people who are effectively moving along the passageway while the red are those who are exiting.

*(Mr Spencer)* Yes, so they would be double-counted effectively.

1106. **Mr Laurence:** I mentioned the photographs, are you happy to go to those next?

*(Mr Spencer)* Sure. They start at exhibit 14.

1107. Could I suggest that you start at 12 so that the Committee can orientate themselves and see where the photographs were taken from, 12 and 13, letters A to M.<sup>5</sup>

*(Mr Spencer)* We do get to M. It is a great place to take photographs. The mezzanine is a great vantage point because you are above everything that is happening below you. A significant number of the photos that we present here were taken at the mezzanine level. The bulk of them are taken at eye level within the main concourse. This shows you where they are and if there is a particular photograph that needs any explanation I suggest if you turn back to the key it will tell you.

1108. **Mr Laurence:** I wish you had taken one of the actual gates we have been talking about.

1109. **Mr Binley:** Just to orientate myself, the hole in the wall famously alluded to earlier, can I ask whether I am right in thinking that comes into the concourse just below Octagon Arcade, Broadgate on 12?

*(Mr Spencer)* Yes, it does. The Sun Street passage is shown on the plan.

1110. **Sir Peter Soulsby:** I think Mr Binley is asking about the proposed Crossrail entrance into the complex, which is on the level below, I think I am right in saying.

*(Mr Spencer)* It is on exhibit 12. It would be where "ticket hall" is referred to on exhibit 12. "Ticket hall" refers to ticket hall B which is the sub-surface line ticket hall. It does not show you exactly where

---

<sup>4</sup> Committee Ref: A16, Liverpool Street Station Survey Data: Crossrail-Mezzanine Level AM Peak (0700-1000) (SCN-20060125-004).

---

<sup>5</sup> Committee Ref: A16, Liverpool Street Station Photographs—Concourse level Field of Vision Plan (SCN-20060125-005).

---

The Petition of Corporation of London with British Land plc

---

the connection would be, there are other figures that show you where the hole in the wall would be that are earlier in this proof. You have been shown that by Mr Weiss before.

1111. **Mr Binley:** I just needed that for orientation. *(Mr Spencer)* Absolutely. Moving to the pictures, I apologise if I digress occasionally but you pick things up on a daily basis when you travel around London.<sup>6</sup> The first picture shows you what is a pretty miniscule connection to the Central line. This is the connection, I am pretty certain, the western—

1112. **Mr Laurence:** I think that is entrance F on Mr Weiss' plan.

*(Mr Spencer)* Yes. You then see the escalators up to street level which are crowded. You then see the kinds of flows you get out of National Rail, this is platforms four and five disgorging trains, and you can see the people coming out in the sorts of numbers that we are referring to. This is a key escalator which is running up towards Bishopsgate, which is an escalator and stairs, and no-one uses the stairs, everyone gets on the escalator. I observed that superbly this morning. Clearly that is very congested. A lot of the major train services into Liverpool Street, the really busy services, do come into platforms 11-18, which is the very congested part of the station.

1113. **Mr Laurence:** Take that a little slowly so the Committee can orientate themselves by reference to exhibit 12 to see where the direction is.

1114. **Sir Peter Soulsby:** We will look at the photos on the screens and Members can turn back to exhibit 12 without having to keep switching back to it on the screen.

1115. **Mr Laurence:** Mr Spencer, I think it would aid elucidation if when you were dealing with a photograph you just mentioned whether the indicative letter was on exhibit 12 or 13.

*(Mr Spencer)* As I said, the majority of them are on 12 at main concourse level. Certainly photograph E is the same image as photograph D except it is a few seconds later basically, about eight minutes later. Clearly that escalator and those stairs are inundated when a major service comes into that end of Liverpool Street. The other photograph I would point out is H which is showing you what should be two-way stairs, in other words one up and one down, but is almost exclusively used to go up, and it is possible even that they prevent people coming down the stairs. It is so busy going up the stairs that it is virtually impossible for anyone to come down.

1116. For those who are just a bit behind, exhibit 13 shows the position from which photograph H was taken in a broadly westerly direction downwards on to the main concourse, is that correct?

*(Mr Spencer)* That is correct.

1117. What about M for Mary?

*(Mr Spencer)* We were not allowed in the LUL world so we had to take a picture of the concourse which is not very helpful, I am afraid. That was as close as we could get to it so we could not show any congestion at the gatelines, we could not go into the Central line because LUL would not permit us access whereas National Rail were perfectly happy for us to be doing photography on their main concourse.

1118. You see some of the pillars anyway, do you not?

*(Mr Spencer)* You do, yes. In the long distance there is the gateline. It is not really telling you a great deal at all. I would point out photograph L which is the gateline, turning back to the photograph reference in figure 12, at the very eastern side of the entrance to ticket hall B. That is one of these rutted areas. This is where people go. If you see the two next to each other, L and M, they are basically side by side. Everybody is a crow's flight walk through from L into ticket hall east. They are all concentrated in a very tight flow of people which continues through to the gateline.

1119. What are those gates that one can see on the left-hand side of photograph L?

*(Mr Spencer)* They are shutters, so when they close the station those are shut.

1120. Why are they seemingly half closed or half open?

*(Mr Spencer)* I could not tell you.

1121. **Mr Laurence:** If the Committee are happy to pass on from the photographs—

1122. **Sir Peter Soulsby:** I think we will pass on from the photographs but just to remark, Mr Spencer, when the Committee made its visit we did have the chance to see firsthand the gateline that you were not able to get any photographs of and quite a few of us are familiar with it having been passengers to Liverpool Street at one time or another. I understand that there are limitations to what you were able to photograph.

*(Mr Spencer)* Just to sum up on that, the majority of passengers who pass through Liverpool Street in the AM peak use the station every day and they are very experienced at choosing the simplest and most direct route through the station complex. Many of the choices they make appear illogical on the face of it but experience dictates otherwise. This does create an image of efficiency but the reality is that the smooth operation of the station is running on a knife edge which could easily be disrupted by thoughtless intervention, such as the connection of Crossrail to ticket hall B. There is a very fine margin for error today, let alone in ten years' time.

---

<sup>6</sup> Committee Ref: A16, Liverpool Street Station Photographs—(SCN-20060125-006).

---

 The Petition of Corporation of London with British Land plc
 

---

1123. **Mr Laurence:** You have skipped over quite a lot of stuff, I see, Mr Spencer. That is advisedly, is it? We are on to future conditions at the station.

*(Mr Spencer)* Clearly Members can stop me and ask me questions at any point in time.

1124. **Mr Binley:** You alluded to when everything is going well and flowing well, but are there any photographs at all on these really rather congested areas and congested points where flows are disrupted either through human error or any other problems?

*(Mr Spencer)* I will give you an example. In the morning peak hour people come off the trains, National Rail trains, and they want to go to the Central line. The Central line is underneath their train basically. There are two entrances to the Central line immediately adjacent to where they come off their platforms but they do not use them. They go all the way through ticket hall B to use an escalator which is then taking them directly to the platform on the Central line. About 4,000 people do that and likewise a similar number of people do it in the opposite direction. That is broadly speaking about three times the distance of using the main station. The reason they do not do it is because if they were to use the stairs, which are very substandard, they would walk into a wall of people coming the other way because both sides of the stairs are taken by people coming out of the station. Those people are following a very circuitous route specifically to avoid the conflict. The thing about the station is everyone has got experience of it so they know where a conflict could arise, and if everyone who was going to the Central line was forced to use the Central line concourse that could cause real problems. People do not like bumping into people or tripping over or being abused or whatever, so they try to find a much simpler way of doing things and that takes you right past the proposed point of connection of Crossrail into ticket hall B. Thousands of people are doing that.

1125. **Mr Binley:** Forgive me for prolonging this but when we visited we saw an occasion when the escalator by the entrance, the hole in the wall for Crossrail, was stopped and it was stopped because of a problem somewhere.

*(Mr Spencer)* Yes.

1126. **Mr Binley:** The queue quickly grew. There must be some record of incidents of that kind. Certainly there ought to be an accident book of some kind to give us some idea of when these flows, which we all consider to happen beautifully and smoothly, are disrupted and how often that happens.

*(Mr Spencer)* Personally, I am not sure that would be regarded as a sufficient incident to be recorded. The reason it has happened is because the Central line platforms way below are congested and the operator has decided not to let any more people down there. The reason they are congested is the Central lines come in very, very busy. Certain numbers of people get off and certain numbers of people get on, there is a churn that happens at

Liverpool Street station. Whenever they are concerned as to the safe operation of the station, and what you tend to get with escalators is they bring large numbers of people down to the end of the platform and it is difficult to get those people to spread all the way along the Central line platform, consequently they act to close the escalator. That would not be a major incident. If they did it because someone had fallen in front of a train or something like that, clearly that would be regarded as an extremely serious incident. They know when the next train is going to come, they know what the congestion is and that would mean they would close that escalator to stop people going down.

1127. **Mr Laurence:** Mr Spencer, were you in the room yesterday when reference was made to the LUL logbook which I think I am right in recalling showed 14 incidents in relation to ticket hall C but only one in relation to ticket hall B? By “incident” I may be using the wrong word there. There were 14 occasions when—

*(Mr Spencer)* I think those related to when they have closed the ticket hall, which is a major intervention.

1128. **Mr Laurence:** Just so the Committee has a convenient plan to hand which you have not so far referred to, exhibit 10 will give some flavour of the type of problem that you have just provided by way of example in answer to Mr Binley’s question, would it not?

*(Mr Spencer)* Yes.

1129. It is not an axonometric that has yet been shown but it is very similar to one produced by the Promoter yesterday.<sup>7</sup> Future conditions at the station: would it be useful to have your technical annexes to hand, and table 10 in particular, for this part of your evidence?<sup>8</sup>

*(Mr Spencer)* Yes.

1130. This is page four. The heading to table 10 is “Liverpool Street Underground Ticket Hall Bill. Gate Requirement in 2016 without Crossrail”.

*(Mr Spencer)* I have prepared my evidence on the basis that—

1131. **Sir Peter Soulsby:** Just for the benefit of those who are trying to provide it on the screen, could you give us the reference to the page again?

1132. **Mr Laurence:** It is table 10 on page four of your technical annex. What I think you are needing to do in this table, Mr Spencer, is this, is it not: to introduce into table 10 two numbers at the top of

<sup>7</sup> Committee Ref: A16, Liverpool Street Axonometric (SCN-20060125-008).

<sup>8</sup> Committee Ref: A16, Liverpool Street Underground Ticket Hall B Gate Requirement in 2016 without Crossrail (SCN-20060125-009).

---

The Petition of Corporation of London with British Land plc

---

columns B and C, namely 11,000 and 22,100, which you find replicated in columns B and C of the preceding table, table 9, which is on the same page? *(Mr Spencer)* In essence this was where Mr Weiss stopped and where I start. I have managed to avoid numbers substantially so far but I cannot avoid numbers any further, and I apologise for that.

1133. **Sir Peter Soulsby:** Fortunately you are building on the evidence already given by Mr Weiss. *(Mr Spencer)* Absolutely, and what a good platform. I do not believe I need to take you through the blow by blow construction of numbers, I do not believe you are interested in that or that I would be cross-examined on any mathematical calculation I have presented before you, but I clearly need to get across the key messages. I have already explained the purpose of the gateline calculation is mandatory and it is also a good proxy for what we believe the conditions will be in those stations at that point in time but it is not a forensic test. pedroute helps but, as I said before, other aspects need to be considered, such as emergency evacuation. Clearly, what is shown in table 10 is that the gateline requirement in 2016 without Crossrail is 15. There are quite clearly 16 gates at Liverpool Street Station, so given that most of the time at least one of them is broken that is basically saying that the 2016 gateline is running at capacity. I have then done what is really a hypothetical test because you have to do works to justify 35 per cent; if you have not done the works, why test 35 per cent, but I have applied the 35 test to everything, if you like. That would basically say if you did go in there and move something like a station operations room or something like, that would trigger the need, because that would be major works, to increase the provision of gatelines. Without Crossrail you need 20 gates. That is where this came from and is taking me to date.

1134. **Mr Laurence:** Can I just interrupt on a little point in case a hawk-eyed Member of the Committee sees the point and wonders how it arises? If you look at table 15 and keep table 10 open in front of you at the same time, table 15 gives you, at line 7 in column C, a total gate requirement, with Crossrail, in 2016 of 16 gates.

*(Mr Spencer)* Correct.

1135. Which, when you add in the factor for design year flows, produces a total number of gates of 20.

*(Mr Spencer)* Yes.

1136. Whereas, at table 10, your base number of gates is 15, also producing 20. Is that just a quirk of the formula?

*(Mr Spencer)* Yes, it is an extremely complex calculation which is done quite differently for entry and exit. We have just followed exactly what the requirement calculation is. It does produce results where there is no relativity between the numbers and the gate requirements because there are certain assumptions which are meaning that it is not a linear relationship. I will not go into it any more than that,

but all I can say is trust me, we have followed the rule book basically, and these are the answers that are produced by that analysis.

1137. There is a slight bias in favour of exiting passengers, is there not?

*(Mr Spencer)* Yes, when in doubt it gives a bias towards exiting.

1138. There are somewhat more exiting passengers on Crossrail's own numbers with Crossrail as opposed to without Crossrail.

*(Mr Spencer)* Sure.

1139. Is there anything more, then, on table 10 and the general subject of future conditions at the station which you want to say before you go on to your overview of the Crossrail proposals?

*(Mr Spencer)* I think the only point I would make is that there is already something happening in the mathematics of the assessment of 2020 without Crossrail, in that the growth in Liverpool Street station passenger numbers is significantly less than the growth in employment in the Liverpool Street catchment area. I cannot explain that because I do not know what the models do, but somewhere along the line we have kind of resolved most of the employment scenario because we have convergence on that point, and we have continued to test Crossrail, but we have not gone back and looked at the non-Crossrail scenario. There does seem to be a sort of capping out of the use of Liverpool Street station running up to 2016, particularly in terms of the national rail services into Liverpool Street station, which I think is fundamentally because the trains are just absolutely stuffed full and you cannot get any more people on them. I think that is the gist of it, but I have not been able to work it out. Interestingly, there is very little that can be done to provide extra capacity in that respect. While we are on that point, I would like to touch on what is happening in London Underground. You all know about the PPP—highly controversial—but it does exist and it has been going for two years. It does lead to major investment in capacity enhancement and reliability within London Underground. The unfortunate thing about PPP is that all the lines, as far as Liverpool Street is concerned, which have had big increases in capacity do not go to Liverpool Street, and all the lines that go to Liverpool Street do not get big increases in passengers. The Central line has already had its fill, subsurface it is not going to improve significantly. So that an issue here which is, really, even more pressing with regard to Liverpool Street station, is that whereas there will be major benefits on the Victoria line, there have already seen to be benefits on the Jubilee line, Bakerloo line and Northern line, but there is not much on the horizon for Liverpool Street station in terms of capacity enhancing, hence why Crossrail is such a significant project for Liverpool Street.

1140. Did you hear Ms Lieven's question yesterday of Mr Weiss about congestion at Liverpool Street not being a priority for Transport for London?

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* Clearly, Victoria is everything that they are worried about at the moment. There is an enormous amount of work going on to relieve and redefine the Victoria interchange. Nothing else is on their radar as things currently stand. The congestion relief schemes that are in place are invariably things which should have been done 20 or 30 years ago where there is a need to remodel the station. Clearly, there is a whole long period of time on London Underground when there was no investment whatsoever and, basically, the congestion relief is picking up the Covent Gardens of this world, where you know, if you go there, that the station is often closed and you cannot get into Camden Market; Camden Town is often shut. It is those kinds of things which, if they are not the central priority (because that is Victoria), are secondary priorities. They are much cheaper, doable schemes. Liverpool Street is not on the radar as being necessary in the current five-year plan.

1141. So to bring this section of your evidence to a close, would you like to turn to page 16 where you have got your conclusions in your proof, and just consider whether to say any of what is there, or can we pass on to the next subject?

*(Mr Spencer)* I have already summarised it. By 2016 there is virtually no spare gateline capacity in ticket hall B. Looking forward, there is a requirement for another four gates, just on the basis of the no Crossrail scenario.

1142. Let us look at the Crossrail proposals at Livergate.

1143. **Kelvin Hopkins:** Can I clarify a point? You were saying that without Crossrail there will come a time when there are more jobs in the City than can possibly be supplied by passenger trains going to Liverpool Street, and that they will either have to come from somewhere else, some other route. That is one question. Then you went on to say that the constraint will be the number of trains and people getting off trains rather than the station itself.

*(Mr Spencer)* No, that was a supposition—the second point. I am very bad at remembering questions. Could you remind me of the first part?

1144. **Kelvin Hopkins:** The first point is that you were suggesting without Crossrail, I think, that Liverpool Street would just be getting to the point where it could not cope with any more passengers, and therefore there would be more jobs in the City and the people that would come via those routes would not be able to take those jobs. That is one point.

*(Mr Spencer)* There are two possibilities. One is that they are not using Liverpool Street and finding their way in by using a longer route or using a line which has got more capacity in it. That kind of response to congestion is a fact of life in London. There are a lot more jobs in London today than there were ten years ago, and ten years ago the Tube was congested. What people do is they amend their travel times; they might slightly change their routes just so that they can still get to work broadly at the time they

want to, but they might avoid the 8-9 period and seek to travel slightly outside that. That is where there has been considerable growth in London in the last few years. Previously, upwards of 55 per cent of people would have travelled between 8 and 9 o'clock. That figure is coming down on a regular basis, it is now significantly less than 50 per cent. So the growth is satisfied by people travelling at half-past seven in the morning or quarter-past nine in the morning as opposed to trying to get through the Underground system at half-past eight when it is extremely difficult. That does not mean to say that you cannot operate in the Liverpool Street area, it means that is the constraint of that operation, which is the difficulty of travelling at the peak hour.

1145. **Mr Binley:** Just a couple of points of clarification. You, first of all, talked about your perception of the cost of Crossrail, and you talked about 30 or 13 billion.

*(Mr Spencer)* Thirty billion.

1146. Were you talking about core costs or were you talking about the whole project? To my mind, as I understand it, the amount of money involved is sizeably more than that.

*(Mr Spencer)* That is my understanding of the construction cost of Crossrail.

1147. Then you define it and that helps me. The second area of clarification is when you were talking about table 16. You talked about a near forensic calculation, first of all, and then you went on to change that phrase to a forensic calculation. I just want to understand whether there is any difference in that meaning, whether there is more supposition in one or the other or whether you mean the same thing.

*(Mr Spencer)* The gateline test is a forensic calculation. Apologies if I—

1148. That simply ties that up.

1149. **Mr Laurence:** Mr Spencer, to be fair to me and my learned friends, to describe a calculation as a forensic calculation, I hope you are not suggesting that means it is in some way an unhelpful calculation.

*(Mr Spencer)* Not in the slightest. It is crystal clear. It does not need any interpretation, other than to recognise the answer.

1150. **Sir Peter Soulsby:** I think we understand what it means in this context.

1151. **Mr Laurence:** You are going to turn to an overview of the Crossrail proposals at Liverpool Street?

*(Mr Spencer)* Yes. I have made this point but I do really want to say it once again, which is that the objectives of Crossrail, I will say (it will take me 30 seconds) is to support the continued development of London as a world city and its role as the financial centre of Europe and the UK. Secondly, to support the economic growth of London and its regeneration

---

**The Petition of Corporation of London with British Land plc**

---

areas by tackling congestion and the lack of capacity on the existing rail network, and, third, to improve rail link access into and within London. Clearly, those objectives are very consistent with the kind of issues that I have been talking about this morning. We totally support the objectives. I will stop there.

1152. There is other stuff of the kind that would bring you perilously close, I think, to getting into policy material again, which perhaps you will skip. There are, however, a few points of detail, one of which I have a note to ask you about. That is that, coming from your standpoint, are you able to add anything to what Mr Weiss told the Committee yesterday relating to the circumstances in which the eastern ticket hall proposal was dropped, bearing in mind that the Chairman gave a very clear indication that the Committee is not really interested in the history, they now want to look forward to what are the best responses to the problem which confronts them.

*(Mr Spencer)* Only very briefly and very anecdotally. The Environmental Statement states quite clearly the reason that it was dropped was because, fundamentally, lack of demand. The lack of demand did not justify it. Anecdotally, there was definitely an issue of a property development sat on top of ticket hall A which, at one point, it was decided might have been highly profitable but certainly when it was looked at again it was looking as though it was not going to make any material contribution to funding. The third point is it is an incredibly difficult scheme to build—the arcade scheme. Engineering wise, going over existing, very antiquated tracks, having to drop columns down and knocking holes up through the roof of the existing ticket hall so you can get to the street, is an extremely challenging undertaking. I would also add, again, anecdotally, the fact that the Crossrail trains shrunk in length sometime ago—it used to be 12 cars and it became 10 cars. What happens at Livergate, as my counsel refers to it, is that it shrunk to the west, so that it all moved away from Liverpool Street. I believe the platforms were shortened by, perhaps, 50 metres. Then it became 50 metres more distant from Liverpool Street station, which probably is a related factor in terms of the reduction in the demand for passenger movements to use Liverpool Street station. I will say no more than that.

1153. Mr Spencer, the other thing I wanted to ask you about I can do by reference to Ms Lieven's cross-examination yesterday in relation to the station operations room. It would be sensible to get an axonometric, perhaps, of exhibit 10, which enables the Committee to focus on where that station's operations room is.<sup>9</sup>

*(Mr Spencer)* Sure.

1154. It is just by the letter Q on that exhibit 10. Is it not?

*(Mr Spencer)* Yes.

1155. I will ask you to assist the Committee, if you can, by reference to what I understood Ms Lieven to put yesterday to Mr Weiss. What she put, as if it were a fact—no doubt on instructions—is that this Committee can take it that the station's operations room is going.

*(Mr Spencer)* Okay.

1156. Is it going? What do you know about that subject?

*(Mr Spencer)* Well, if she says it is going then I believe her. It was certainly not the case in the summer of this year that it was categorical that the station operations room was going to be relocated. We have talked about numbers a little bit, prices; it is not a simple exercise to move it. It could potentially cost £10 million to £20 million to relocate that facility. It is, clearly, at Liverpool Street, ticket hall B, not state-of-the-art. If you want to see a state-of-the-art station operations room, just go down to Westminster Station underneath Portcullis House. There is only one man in there but you have got an awful lot of stuff in terms of monitoring and videoing and enumeration of what is going on in the station. That is the kind of facility that modern LUL standards would say that you should provide. I cannot see anywhere that you could do it.

1157. Does this link at all with London Underground's aspirations to improve provision for mobility impaired persons at Liverpool Street station?

*(Mr Spencer)* As a related point, because I am struggling to understand what the modification is to the eastern ticket hall, and we have touched on the SOR, but there is also an MIP point which is that whereas Liverpool Street station has not been prioritised for congestion relief it has been prioritised to become fully mobility accessible, to something in the region of £25 million within the Mayor's current five-year plan, which would bring forward, effectively, lift access from the platform for the subsurface line station at the very least—I should also hope it would do it for the Central line, but I have to say I have not the faintest idea where you put the escalators. What is clearly important is that there is complete complementarity between the Crossrail proposals and the proposals that LUL will be bringing forward to make certainly the existing subsurface line fully mobility accessible. I have seen no demonstration of that whatsoever, and it is quite possible that there is actually a conflict between the Crossrail proposals and making Liverpool Street station fully MIP accessible. It is one of the priority stations in the whole of London; it is in the first tranche of what the Mayor seeks to achieve in the next 15 years, that 20-25 per cent of all stations should be fully MIP accessible.

1158. Just so there should be no misunderstanding about this, yesterday the Chairman gave a steer to Petitioners and the Promoter to concentrate on, amongst other things, the realistic and reasonable

---

<sup>9</sup> Committee Ref: A16, Liverpool Street Axonometric (SCN-20060125-008).

---

 The Petition of Corporation of London with British Land plc
 

---

alternatives to what we have at the moment, as part of the evidence. If the ticket hall were to be massively enhanced (in the phrase that I used in my opening) in an appropriate way, would it be possible as part of that massive enhancement to ensure that the station's operations room was satisfactorily located and not in peril of London Underground's aspirations relating to mobility impaired persons?

**(Mr Spencer)** As much as I would like to assist, I cannot answer that question because I do not see before me, and I am not able to appraise, an alternative scheme that does all the things which are suggested can happen with regard to the relocation of the SOR, with regard to MIP access and with regard to a substantial increase in the provision of gatelines. These things are all taking space and unless there is a demonstration of a viable means by which there can be a substantial increase in the size of ticket hall B—and as you referred to yesterday, I do not believe that is actually being currently explored by Cross London Rail Links—I cannot say one way or the other whether it is feasible or not. I would also add that what is clearly also required is more facilities to get people to street as soon as you possibly can. An obvious place to put additional level change facilities is in ticket hall B because they are congested in ticket hall A and there really ought to be an opportunity there to do that as well. All these things take space and I have not seen a demonstration that there is a sufficiency of space to be able to come up with a solution that I would be able to recommend to my client.

1159. Would it be fair to ask whether you, nevertheless, remain open-minded about it being possible to solve these various problems that you have just mentioned with a massively enhanced eastern ticket hall?

**(Mr Spencer)** Entirely so.

1160. Just to complete this line of questioning, you know, of course, that Ove Arup have put forward a proposal of their own, which Mr Chapman is going to be speaking about. How does the subject that we have been talking about, relating to the status of the operations room and provision for the mobility impaired, link with that possible solution to the problem?

**(Mr Spencer)** It spectacularly changes the level of demand that you would be putting through ticket hall B, so that it means that, one, you would not need to relocate the SOR and, two, opportunities to make the ticket hall operate more efficiently would be much easier to achieve.

1161. Would Central line passengers, for example, emerging at point P have a choice as to whether to use the connecting tunnel that we have seen in the Ove Arup scheme in order to exit at Eldon Street instead of exiting through ticket hall B?

**(Mr Spencer)** Yes. Crossrail has its own concourses but it also has all the interchange functions. They are designed as Crossrail concourses; they have a Crossrail ticket line, effectively, but they are completely integrated with London Underground in

virtually every instance. So if we were to build a tunnel link we would still connect to ticket hall B, albeit that the primary way in and out of Crossrail would be by direct escalators up to Eldon Street. Certainly those people coming out of the Central line, could go up the escalators and turn right, walk down the corridor and could go out in Eldon Street. That would not be a difficulty at all. We have built that into the design of the Ove Arup scheme—the possibility that there is still a significant number of people wanting to go from Crossrail to LUL, and we bring them through the project.

1162. **Sir Peter Soulsby:** Mr Spencer, taking the point you made earlier about the reluctance to go against the flow, is your understanding of the design of that tunnel, its width particularly, that it will be sufficient to take two-way flows to get the sort of effect that you are describing?

**(Mr Spencer)** Yes. It is a generous design. The Cross London Rail Links design and the Arup design, the width of the tunnels is not a major constraint. The constraints are much more significant when you come to the number of escalators and the gateline requirements in terms of getting people to and from. There should not be an issue related to the width of the corridors.

1163. **Mr Laurence:** Just while you are on the escalators, there has been a suggestion, I know, by the Promoter in considering with us whether the Ove Arup scheme could be modified in a way to make it easier to build, that the number of escalators proposed by Mr Chapman be reduced from four to three. Would you mind saying a word about that without trespassing on the technical aspects which Mr Chapman himself will be dealing with?

**(Mr Spencer)** As our case currently sits, it is a marginal judgment call on whether there should be three or four escalators within the Arup scheme. We need to do more work to sharpen the demand forecast before we can actually reach a conclusion as to whether it should be a three or four escalator scheme down to the Crossrail platforms. Crossrail currently has three, the Ove Arup scheme currently has four escalators in those instances.

1164. **Mr Binley:** One of your aspirations, which seemed immensely sensible to me, is that because the users of Liverpool Street are, in the main, very regular users, their knowledge of where they are going and traffic flow, and so forth, eases the problems already existing at the station. If we project forward to Crossrail coming in, with a sizeable number of additional passengers, some of those will not be regular users of the station, will they? Does that impact upon that rather smooth flow at the station, or is it not a significant factor?

**(Mr Spencer)** No. I will give you an example. On a Monday morning, Network Rail trains are at their busiest at the beginning of the week and, basically, the demand tends to fall off during the course of the week. On a Monday morning, as well as all the employees that work locally, all the people who live out in Essex, or whose parents live out in Essex,

---

 The Petition of Corporation of London with British Land plc
 

---

come back into town. Thousands of students, people that have been staying with friends, people that have been staying in hotels—whatever—come back into London on a Monday morning. If you see the Monday morning situation, it does not work like clockwork, as you would have seen on a Wednesday or a Thursday, because the whole population of people in there do not really know what they are doing, and it does cause problems on occasions. There is this elite commuter that is prevalent—you have seen them in operation—but there are times when the station is subjected to congestion because there are large numbers of people that are not anything like as familiar with how they should be using the station.

1165. Let me be more specific about the projections for 2016 in that respect, and whether the Crossrail customer base using Liverpool Street is going to be less commuter as a percentage than the present users might be? I am trying to see if Crossrail will add to the difficulties of movement because of that lack of knowledge.

*(Mr Spencer)* I would see Crossrail as a business railway. It is very much led by dealing with journey-to-work patterns. It clearly will be used recreationally, but services that are going in it are not really recreational services; they are very business-orientated and it goes to very business places—Canary Wharf, Liverpool Street and Paddington. So I think it would be increasingly in that respect.

1166. I am grateful to you.

1167. **Mr Hollobone:** Are you also seeing an increase in airport related traffic with the link to Stansted? If Crossrail is coming, would there be non-elite commuters wanting to make use of that service of Crossrail?

*(Mr Spencer)* They will not be coming to Crossrail but they will be coming to Liverpool Street. Basically, what Crossrail does will allow a higher level of service from Stansted Airport to Liverpool Street. They are not trains that would end up in Crossrail because they do not follow that route. I think everybody's objective is to significantly increase the role of the Stansted Express and have it bring significantly more air passengers into Liverpool Street station, but they would not be on Crossrail. The message I suppose I am getting to is that what is not on Crossrail becomes, possibly, increasingly people with bags and in bigger groups. All these commuters are not very sociable people; they are all on their own. That would be the case with the operation of the concourse in future, as opposed to at present.

1168. My point, Chairman, is that having used Liverpool Street myself a lot in the past, and with the growth in users travelling to Stansted, would you not accept that a lot of people coming on to Crossrail, to get on the Stansted Express at Liverpool Street, would then get in the way of commuters?

*(Mr Spencer)* I would. I would not doubt that for one second. That is where there is a kind of disconnect, which I have kind of taken you to in my evidence. My expectation of what Crossrail does is of an order of magnitude different from what Cross London Rail Links say it does, and a significant part of that is actually to do with people using Crossrail travelling from the west to Liverpool Street—which I would see as a massive opportunity because it has got a good interchange and it goes to some interesting places. I know that with things like Stansted Express, it will bring people to that location, just like the Gatwick Express takes tens of thousands of people to Victoria. It does not seem to appear. I think, possibly, the reason is that the appraisal is very much a peak-hour appraisal. It does not really tell you the story about what happens at other times of the day, which is when most of these people would be making their journeys. It is a missing dimension, perhaps.

1169. **Mr Laurence:** Mr Spencer, I should just say that Mr Elvin has passed me a note saying that Stansted growth is factored into the figures. I do not know exactly what that means but that does not mean that Mr Elvin does not know what it means! I am sure you will be able to comment on it for the assistance of the Committee.

*(Mr Spencer)* It is completely in line with what I have just said. The opportunity is there for a significant enhancement of Stansted services, and I am utterly convinced that they will be a lot busier. I have never for one second doubted the fact that it is taken account of in the Cross London Rail Links' AM peak model.

1170. **Sir Peter Soulsby:** Mr Laurence, before you proceed, can I just remind you, and indeed others, that we intend to adjourn today at twelve, to enable Members to go elsewhere and take the pulse of the Commons.

1171. **Mr Laurence:** And to return at 2.30, sir?

1172. **Sir Peter Soulsby:** We will be returning at 2.30. I am not suggesting we wind up now but perhaps if it were possible to find a convenient moment just before 12.

1173. **Mr Laurence:** Mr Spencer had about three or four pages in his Chapter 5, which he has reduced to five lines on my road map. Would you like to talk about future conditions with Crossrail, Mr Spencer, in the next two minutes, say?

*(Mr Spencer)* Yes. As an introduction to something I will talk about more when we come back. Basically, I think I am really jumping in at 5.17, 5.18. What Cross London Rail Links forecasts show is that only 3,600 passengers will access Crossrail at Liverpool Street and that only 5,300 passengers will exit to street at the station. The forecasts suggest that Crossrail will play a relatively insignificant role in supporting growth in areas around Liverpool Street.

---

 The Petition of Corporation of London with British Land plc
 

---

The decision to abandon the eastern ticket hall plans is closely aligned to this assessment, which is based on several false premises.

1174. There are three drivers?

**(Mr Spencer)** There are three drivers of the demand for Crossrail services at Liverpool Street: the distribution of existing and future employment in the areas around the Liverpool Street and Moorgate station exits and, thus, the choice of exit used by Crossrail passengers arriving at Liverpool Street.

1175. That gives rise to a debate about what we have come to call the question of the split between Moorgate and Liverpool Street. Is that right?

**(Mr Spencer)** Yes.

1176. Secondly?

**(Mr Spencer)** Secondly is, actually, the growth in employment and thus rail trips to Liverpool Street and Moorgate. So it is the distribution point and then it is the scale of growth point. Now, the third point, which a lot of my evidence has been touching on, is the market share of Crossrail services and, thus, the proportion of employees arriving at Liverpool Street using this mode. In terms of points one and two, we have substantial convergence between ourselves and Cross London Rail Links, which is why we can reduce significantly the evidence that I need to put before you, because we set a proposition that there should be more people going via Liverpool Street and that there should be more trips because of the scale of employment growth at Liverpool Street. Both of those propositions have been accepted by Cross London Rail Links and they have put forward two demand forecasts. One is, in essence, a manual assessment, which looks at both those points, and the second one is a full Railplan assessment. We have also taken our own view, which as you would probably expect is slightly higher, but the degree of disagreement between ourselves and Crossrail is really quite modest in those respects. We are talking about a range from 8,400, which is something in the region of a 60 per cent increase in Crossrail passengers, to our own figures which are about 9,600. So I can spare you an awful lot of numerical analysis, looking at all of those points. That is only the first stage of the exercise. I think, having made that point, we have also agreed with Cross London Rail Links about the pedroute assessments that they should do on those demand forecasts. They have done that work and I received it yesterday. Beyond that, I still have a significant number of other points related to aspects of demand forecasting which, I still believe, need to be reviewed in detail and then subjected to Railplan testing. I will stop there. I can keep going if you are happy. I will tell you what the following part of my evidence will be. The following part of my evidence examines the distribution of current future employment opportunities in the Liverpool Street area. This should be a key pointer of demand for the eastern ticket hall and I will show you that the original assumptions made by Cross London Rail Links are incorrectly biased towards the Moorgate exit and

underestimated the scale of employment in 2016. We can now put that point to rest but that is the area that was being examined between ourselves and Cross London Rail Links. I think probably my next point would be related to what are the consequential gateline requirements with regard to those agreed numbers. Then I go to the pedroute assessment of what the situation would be like within Liverpool Street station, on the basis of what are agreed numbers. Then I will consider the risks associated with not being correct with regard to a number of other considerations which I think you need to factor into your considerations as to what direction you give to the Promoter with regard to this issue. That would be my evidence this afternoon.

1177. **Sir Peter Soulsby:** Mr Spencer, thank you very much indeed for that. I think this is a convenient time for us to adjourn until 2.30 this afternoon.

*After a short adjournment*

1178. **Sir Peter Soulsby:** Before we adjourned, Mr Spencer had very helpfully given us a flavour of what is to come this afternoon.

1179. **Mr Laurence:** You indicated this morning that you would give further consideration, with the benefit of your clerk, to the question whether the Committee felt it could properly receive the proof of evidence of Mr Spencer. I understand from your clerk that that is a matter that you have had an opportunity to give further consideration to. Before I resume, it may therefore be appropriate for me to ask you whether you are in a position to give a direction about that or not.

1180. **Sir Peter Soulsby:** Yes. Having given further consideration to that, the Committee has come to the conclusion that it would be appropriate for us to receive it in the way which has been suggested. This will be A18.<sup>10</sup>

1181. **Mr Laurence:** Immediately before the lunch adjournment, you were seeking to summarise for the Committee the salient points which you deal with in section five of your evidence under the heading, "Future Conditions with Crossrail" as well as giving the Committee an indication of where the remainder of your evidence this afternoon is going to be directed. We can continue with the next topic, "Existing and Future Employment". Is there anything further you want to add to what you were saying immediately before we adjourned?

**(Mr Spencer)** There are a couple of points. The first point is to be absolutely clear that British Land and the City of London have absolutely nothing against Moorgate station. We have a kind of quasi-competitive situation between Liverpool Street and Moorgate. We wholeheartedly endorse the proposals that are put forward for Moorgate station and do not see them in any way as being something that we should trade on as far as upgrading

<sup>10</sup> Committee Ref: A18, Proof of Evidence of Mr Tim Spencer.

---

**The Petition of Corporation of London with British Land plc**

---

Liverpool Street station. Relating to Moorgate, I will move into the employment story which I can now summarise much more quickly as you have the proof and then I will close the case off with the examination of the sensitivity testing and my conclusions. Firstly, I would like to go to exhibit one, a press release in the front of my exhibits. The second page is a series of artist's impressions. This press release is attempting to get across the quality of the Crossrail scheme and the environment that is going to be created. It sets three criteria which I would like to present to you because I think you should be constantly judging what I am concluding against what Crossrail have promised to deliver. The first of these promises relates to the fact that the stations will be more spacious than existing stations. An overall design consideration is to create a feeling of spaciousness. The general aim is to create light, bright space. Ticket halls will utilise natural light whenever possible. The third point is that central stations will have two ticket halls, one at either end of the platform, thus more people are given a chance to easily access Crossrail. Moving to table 16, which is not my favourite table, this led me to this case.<sup>11</sup> Rather than looking at the Liverpool Street side of the story I would like to look at the Moorgate side of the story which I did not touch on previously. Starting on the National Rail to Liverpool Street as against Moorgate, there is a ten fold factor, 42,000 for Liverpool Street and 4,000 for Moorgate, for access to the street. As far as the other comparable statistic relates to subsurface lines, there was a factor of 10,800 to 4,800, so more than two thirds of people who currently have a choice to use subsurface or Moorgate or Liverpool Street are choosing to use Liverpool Street. Something like 15,000 people are using the Central line to access Liverpool Street, whereas there are fewer than 8,000 people who use the Northern line to access Moorgate. The net effect is that the numbers using Liverpool Street at present are something in the region of three times the numbers that use Moorgate. If you look at the numbers for Moorgate and you see the Crossrail use forecast in the last row, it is the most significant means by which passengers will in the future access Moorgate. Crossrail is the least significant contributor to access to Liverpool Street station.

1182. **Kelvin Hopkins:** The Moorgate National Rail is Thameslink?

**(Mr Spencer)** It is Thameslink and Great Northern. The bulk are Great Northern services from Hertfordshire which terminate at Moorgate as opposed to the other route which goes to King's Cross.

1183. You know the plan is in time to get rid of Moorgate National Rail station and have Thameslink going straight through and not coming to Moorgate?

**(Mr Spencer)** Yes. I am not familiar with the detail of Thameslink 2000 but it is a very large project and that may well be part of it. The Great Northern part

also becomes part of Thameslink in the refranchising which has recently been announced and which comes into operation in about three months' time.

1184. **Mr Laurence:** Is there another preliminary point before we kick off on section six?

**(Mr Spencer)** I can give references to paragraphs as far as the issues relating to Moorgate are concerned: paragraphs 2.34, 2.37, 2.38 and 2.39. I can draw your attention to anything more you want to understand with regard to the Moorgate issue. We now move to the employment story at chapter six. I would like to start in summary with the exercise I have gone through, for you to understand that and then demonstrate that it does satisfy the kind of questions that were asked a couple of days ago with Peter Rees and Mr Weiss. Cross London Rail Link has assumed a distribution of employees working in the City in 2016. The location of this assumed employment thus determines which station these passengers will use to access their place of work. I believe that the assumed distribution is incorrectly skewed towards areas to the west of Liverpool Street and that this results in an over-estimation of trips exiting Crossrail at Moorgate.

1185. For the record, you are reading paragraph 6.3.

**(Mr Spencer)** Correct. I would also follow with a reference to 6.4 but I will not read it out. 6.7: On page 24 of the LUL Station Demand Modelling Guidelines, which have been put to you already I believe, it is stated that "when developing forecasts for an access and egress, it is necessary to consult local authorities to find out if any changes are expected in local employment patterns, or other key traffic generators such as leisure centres; or the local street layout. This is particularly important if changes to the location of station entrances are proposed." Crossrail is a new project. It is not a change. This consultation clearly did not happen in this instance. I would like to turn to tables 22, 23 and 24 which present the employment assumptions and exhibit 30.

1186. Which is the one that is going to be more useful to have on the screen while you are dealing with it?

**(Mr Spencer)** Probably exhibit 30.

1187. That is the exhibit titled "Employment Zones". In my bundle you will find it immediately before exhibit 29. The tables are at page ten of your technical annex.<sup>12</sup>

**(Mr Spencer)** Part of the information that you see here in terms of the gist of the information but not the detail is the evidence that was put forward by Mr Rees and Mr Weiss. They drew you some concentric circles based on Liverpool Street and Moorgate stations and they told you the number of jobs within those concentric circles flowing from their 2003 employment survey. Using Geographic Information Systems analysis, GIS for short, I have taken that

<sup>11</sup> Committee Ref: A16, Arrivals at Liverpool Street and Moorgate Stations (SCN-20060125-011).

<sup>12</sup> Committee Ref: A16, Employment Zones (SCN-20060125-012).

---

 The Petition of Corporation of London with British Land plc
 

---

same information and put it into the very structure that Cross London Rail Link use to drive the Railplan model. I have put it into their zoning system. All the information that the City collated is spatially referenced so I am able to very precisely allocate all the buildings within and outside the City of London to the appropriate zones within areas of catchment for the two stations. Moorgate is shown in green. Liverpool Street is shown in red. I do not need to take you through all of the calculations provided that you are comfortable with them. For one where we did not have City of London data we have adopted the Cross London Rail Link data which are the areas to the north and east. The zoning system is not based on concentric circles but invariably it is to do with subdivisions of water. There are lots of odd shaped zones. This model does not assume, because it is green, it goes to Moorgate. It is indicating where Moorgate is the priority as opposed to where Liverpool Street would be the first preference. Looking at table 24, second column, 2016 employment forecasts, you will see that there is a figure of 74.2 per cent. In other words, the analysis that we have done which is presented in table 23 shows a forecast in the Moorgate catchment of 30,400 jobs fewer than was used in the Cross London Rail Link's appraisal. The population within the Liverpool Street side of the equation is 146 per cent of what was used in Cross London Rail Link's appraisal. There are 57,100 more jobs in the Liverpool Street catchment than there are said to be in the primary Railplan assessment.

1188. Is the figure that you have just mentioned one that appears in either of those two tables?

*(Mr Spencer)* No. In table 23 you see the Liverpool Street figure of 178,335 in the centre. I am merely subtracting the same figure that you get in table 22, 121,202, the difference between their forecast and our forecast.

1189. **Kelvin Hopkins:** These green and red zones are meant to indicate the stations to which people who work in those areas would walk if they were using the train?

*(Mr Spencer)* They would indicate the first preference, not necessarily where they would go. Not everybody in any particular zone would exclusively go to any particular station. It is an output from the model from Cross London Rail Link which is saying this is the zone of influence of Moorgate station as against the zone of influence of Liverpool Street station.

1190. Given that the platforms for Crossrail are closer to the Moorgate exit than to the Liverpool Street exit, it would suggest that that dividing line between the green and red would be closer to the Liverpool Street end because one tends to take the shortest walking distance which would mean some of the people in the red square marked 8.3.1 would almost certainly use Moorgate rather than Liverpool Street.

*(Mr Spencer)* I have given a very superficial explanation of Railtrack in introduction today. This is not describing what the model should do. This is an output from the model which is indicating the conclusions it has reached. In 8.3.1, which is the east side of Finsbury Square, the model will dictate that you will use Moorgate if it is the quickest, most effective way of doing it, depending on which way you are travelling. There will be a number of variables but the model does not assume that 100 per cent of people do the same thing. It spreads the people according to the document options that are available to them. It is very complex.

1191. **Mr Laurence:** Without getting into the complexity which I imagine you would be addressing if you thought it was worth doing, is the effect of what you are telling the Committee that exhibit 30 is attempting to be and is faithful to the Railplan process, as opposed to being something you have made up for the purposes of your separate evidence?

*(Mr Spencer)* Absolutely. I have fitted my data into Cross London Rail Link's methodology. What they have done is rerun their demand forecasting models on the basis of the new information which is a better picture of employment distribution flows in 2001 and more significantly in 2016. Not surprisingly, this is one of our convergence points. The result that is producing is much closer to our suggestion as to what the correct forecast should be as opposed to their previous forecast which was 5,300 trips to Liverpool Street station. As a total digression, there was mention of the redevelopment of the London Stock Exchange. That does fall in this analysis in the Moorgate catchment, not within the Liverpool Street catchment. That was a point made in cross-examination yesterday. The location of that building errs more towards Moorgate than to Liverpool Street, just as a minor detail.

1192. Do we now come to exhibits 31 and 32?

*(Mr Spencer)* If we turn very briefly to exhibit 31, this is a very detailed audit of the known major development schemes in the vicinity of the Crossrail Liverpool Street station.<sup>13</sup> This information has been brought together from a huge variety of sources and is set in the context of the City of London's employment survey in 2003. It deals with buildings that have recently been completed where planning permissions are granted, where buildings are under construction or where a formal application has been submitted to the City of London or Islington Council or Tower Hamlets or Hackney Council. It has been a major piece of work to put them together. Then, we attribute all of these new developments back into the Cross London Rail Link's zoning system so that we have forecast employment change for each of these developments. This is what is driving the analysis in tables 22, 23 and 24, compiling all that information together.

---

<sup>13</sup> Committee Ref: A16, Development Schemes in the vicinity of Liverpool Street Station (SCN-20060125-013).

---

The Petition of Corporation of London with British Land plc

---

1193. Can we jump to 6.21?

*(Mr Spencer)* Absolutely. My analysis illustrates the extent to which future growth will be concentrated in areas directly accessible from the eastern Liverpool Street Crossrail exit. It shows that employment totals were overstated for Moorgate by 26 per cent and underestimated for Liverpool Street by 46 per cent. The difference of 57,100 jobs in the Liverpool Street area in 2016 is equivalent to the entire City centre employment of a small city.

1194. Do you want to read the conclusions as well?

*(Mr Spencer)* No. I am happy to start with 7.3.

1195. This you head “Reappraisal of Crossrail Eastern Ticket Hall”. In terms of the tables that the Committee might need to look at, is there any particular table which they ought to have open while you go through this?

*(Mr Spencer)* We probably can rely on tables 27 to 30, albeit that I start with the amended forecasts so we should probably do the amended one first.

1196. That is your section D, page eight. “CLRL amended 2016 forecasts with Crossrail”, tables 17 to 21 inclusive?

*(Mr Spencer)* Correct. I will shy away from taking you through not a complicated analysis but there are an awful lot of numbers on these pages. I do not need you to refer to any of the particular numbers. In each instance, what we set out is a picture of what is happening on the basis of the demand forecast in question in terms of Moorgate and Liverpool Street, with who is going to street, who is interchanging, what the movements between the various underground lines are. It is a very simple expression of what is going on in Liverpool Street station or Moorgate station in this instance.

1197. You are doing a little more than that because the key wording in the heading at the top of page eight is “Amended”, is it not? The contrast is with the unamended forecasts in section C, page five. What is this amendment that you are referring to in the heading to section D on page eight?

*(Mr Spencer)* On about 9 January we received a note from Cross London Rail Link which was attempting to sum up the position as we set it out in October of last year, but also attempting to summarise some of the discussions that had gone on in the intervening time. It was very much prompted by the desire to try and converge the analysis between my company and Cross London Rail Link prior to this presentation.

1198. That is the document from which an extract was provided for the benefit of the Committee because Mr Weiss referred to paragraph 6.4 of that document and I said I thought the author of the document was a Mr Landells, incorrectly spelt in yesterday’s transcript “Glandells.”

*(Mr Spencer)* The point I will come to later is that they produced an alternative demand forecast for Liverpool Street station. It took account of two aspects. One is the increased propensity for people to

leave by the east via Liverpool Street rather than the west via Moorgate. The second thing it sought to do was to take account of the increased employment within the vicinity of Liverpool Street station in 2016.

1199. If the Committee look at page five of the table, the unamended forecast, the original forecast, table 11, line five, the figures for Crossrail under the headings of Liverpool Street and Moorgate are respectively 5,300 and 9,200. Tell the Committee how those undergo change, please, in table 17.

*(Mr Spencer)* The Liverpool Street forecast increases to 8,850 and the Moorgate forecast decreases to 7,250.

1200. In percentage terms, the original split was 36 per cent Liverpool Street; 64 per cent Moorgate, by my arithmetic. I have not worked out what the percentage split is on these amended forecasts but it looks to be about 55/45.

*(Mr Spencer)* I would have said exactly the same. I have not calculated it either. It is quite a significant shift in terms of the movement. There have been even further developments from that. We have done a ticket gate assessment on the basis of their revised forecast which I will come to later. In the last few days only this week, rather than doing a sensitivity test which is a manual test, they have done a full assessment in Railplan using the employment distribution as we have calculated it. It produces a very similar result of 8,400 journeys to Liverpool Street station. The increase in terms of the demand forecast is 67 per cent in the number of passengers seeking to access street level from Crossrail by way of ticket hall B. The two analyses they have done I will come to later because they closely reflect our first two sensitivity tests of the demand forecasting. We have two further analyses which are remarkably similar. We can then move to do further analysis of those. I have dealt with two of the four points in my criticism of the results that led to my forecasting so I do not need to dwell on the third and fourth points.

1201. Now we can go to table 27, can we not, because you have said that that and table 30 were the tables we would need to refer to?

*(Mr Spencer)* Yes.

1202. What is table 27 telling us?

*(Mr Spencer)* Table 27 presents three sensitivity tests of the base Cross London Rail Links’ demand forecast. We start with the Cross London Rail Links’ demand forecast which in column F you will see shows a demand forecast of 5,300.

1203. Table 27 falls to be contrasted, does it not, with table 28 in that table 27 is talking about station passenger exit forecast sensitivity tests; table 28 is station passenger entry forecast sensitivity tests?

*(Mr Spencer)* Correct.

1204. Exiting passengers first, table 27: are you dealing with 5,300 in column F1?

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* That is the starting position. That is the demand forecast that Crossrail produced. In test one, we test a 65 per cent exit via Liverpool Street and a 35 per cent exit via Moorgate which increases the demand forecast to 9,400.

1205. Column F, line two?

*(Mr Spencer)* Correct. In test two we test additional passenger growth related to the level of employment at Liverpool Street being higher than assessed in the original Cross London Rail Link Railplan model which takes us to 9,700.

1206. That was column C, lines two and three, producing the result at column F3 of 9,700?

*(Mr Spencer)* Correct. The third one is related to what we believe the market share of Crossrail will be, the proportion of trips to Liverpool Street station that would be via Crossrail as opposed to via the other, alternative means of accessing the local area. That sets us with an SDG test three which is an exit flow of 14,500.

1207. Reflecting the results of the percentages in column D at lines three and four?

*(Mr Spencer)* Correct, moving from 13.3 per cent to 20 per cent. In the next table, we have test four where we questioned whether the demand forecast related to how passengers arriving at Liverpool Street by National Rail, not wishing to go to the Liverpool Street area but wishing to head on predominantly into the West End of London, made that journey. In the first instance, Crossrail's forecast is that of the 24,600 people that make that movement only 15 per cent would use Crossrail. We have looked at this in some detail and we feel that it does not appear to fit with our understanding of what you can do with Crossrail in terms of the journeys that can be made, the quality and speed of the service. Taking, for example, the journey to Paddington which is a major development area within London, Crossrail has numerous advantages over the other routes, the subsurface line routes, using the Central line and changing somewhere else in town, as well as the connection into the heart of the West End to Oxford Street, picking up close to Oxford Circus. I know these are AM peak hour forecasts and that not everyone will be shopping between seven and ten in the morning but what we have tested here is a one third market share for Crossrail as opposed to a 14.6 per cent market share. That increases the reverse of all of our analyses of people coming out of Crossrail. This puts a significant number of additional passengers trying to get into Crossrail through ticket hall B.

1208. So that the Committee are anchored in the approach of these tables 27 and 28, tests one, two and three are applicable to exiting Crossrail passengers. Test four is applicable to passengers entering the system?

*(Mr Spencer)* Correct.

1209. Do you then seek to summarise that in table 30?

*(Mr Spencer)* Yes. What we then have to take account of is that not all of these people cross the gatelines. A lot of people change movements and go through different gatelines. Also, in some instances, the assumptions that we are making about who are regularly going through gatelines mean something else so we have to take that out of the equation. In table 30 we get to a presentation of all of the future year scenarios. I will take you through each of the six calculations as to the result that is produced. I will also touch on the fact that our tests one and two compared to the amended Crossrail forecast give identical results in terms of the gateline requirement which is quite important because those are the main means by which we are testing these things. I have already done the original Crossrail scheme. It needs 16 gates on opening and should be provided with 20 to deal with future proofing. With the amended scheme, the demand forecast for ticket gates increases to 18 and there would need to be a provision of 23 for future proofing. I compare that to the fourth of the results that were presented in these tables, our SDG tests one and two, which also say that there should be 18 gatelines with 23 for future provision. Finally, I introduced our assessment of the belief that the market share using Crossrail will be higher. That leads to an opening day requirement of 20 gates and a future proofing of 26 gates. Finally, I have the combination of the increased entry and exit gates which leads to a gate requirement of 21 gates with a future proofing of 27 gates, which is a 70 per cent increase in the provision of gateline capacity at ticket hall B. I also reaffirm that this test, which is a forensic test, means that the equivalent space allocations within the station would need to be enhanced by a similar proportion, 70 per cent, were it possible to find a way of putting 27 gates in the station. You would need 70 per cent more space broadly speaking to be able to effectively use those gates, which would flow to a proposal for what Mr Laurence has referred to as a massively expanded ticket hall.

1210. I suggested that you go from tables 27 and 28 straight to 30 but would you go back to table 29, "Station Passenger Entry and Exit Gateline Flows Ticket Hall B" and talk the Committee very briefly through that so that they can follow how you get your translation from the tables on this sheet through to table 30 by a different method—that is to say, by looking at the figures in table 29?

*(Mr Spencer)* The purpose of table 29 is to clearly set out the calculations that we do in a progressive, step by step function and to be aware of how the Crossrail forecast, crossing the gateline, fits with all of the other things that happen within Liverpool Street station in terms of the entries and exits, not to reach Crossrail but to reach the Central line or all the subsurface lines, and the movements in the opposite direction. It is a summary of a series of calculations.

It allows us then to restrict gate-line exit and entry flows in columns B and C of table 30 which allows us then to do the calculation of what the future requirement would be.

---

The Petition of Corporation of London with British Land plc

---

1211. Again I am conscious that only some, if any, of the members of the Committee may have time to carry out the exercise which I carried out to try and understand what is going on here, but, Mr Spencer, could I clarify whether the numbers in column C of table 29, starting with 13,500 and going down to 22,700, are all of them reflected in table 30 over the page in the appropriate lines of column B?

*(Mr Spencer)* Correct.

1212. And, similarly, the numbers in column D of table 29, starting with 19,800 and going down to the number 21,100, are all of them reflected in column C of table 30, starting with C2, I think?

*(Mr Spencer)* Yes. In summarising the results, I would simply say that the convergence we have got so far of Crossrail has identified a minimum gate requirement of 23 gates. That is on the basis of our sensitivity tests one and two, it is on the basis of their RAILPLAN modelling and it is on the basis of the other sensitivity tests that they provided a week or so ago.

1213. **Sir Peter Soulsby:** It may be that it is not something that can be done, but is it possible to take us back to identify whether we may be able to see from these figures the numbers using Liverpool Street for interchange purposes rather than exit purposes? Is it possible to see that please?

*(Mr Spencer)* Good question. It is effectively retained in the earlier analysis that we did in these tables where we set out within sections A, B, C and D what the interchange movements are.

1214. **Sir Peter Soulsby:** I realise they are there, but it does not summarise, as far as I can see, any related points.

1215. **Mr Laurence:** Sir, I would like to ask Mr Spencer whether he thinks it might be useful to look at tables 4, 9 and 14, in each case column D, to give you a flavour of the Promoter's estimates of interchange numbers respectively in 2001 and 2016 without Crossrail and 2016 with Crossrail. Would table 4 be a convenient table just to begin with because that is more or less the present position, is it not?

*(Mr Spencer)* Yes, that identifies entry and exit flows for the three ticket halls and the interchange movement that is relevant to the assessment of ticket hall B in terms of numbers of people going through ticket hall B.

1216. **Sir Peter Soulsby:** That is 2001?

*(Mr Spencer)* Yes, and the same for table 14.

1217. **Mr Laurence:** At 5, first of all, table 9, 2016 without Crossrail, column D, line 2, the interchange number, the previous number of 4,200 is estimated to increase by 2,000 to 6,000.

*(Mr Spencer)* And then with Crossrail to 5,400. We have actually not done any sensitivity testing at this point in time on the predicted level of interchange by Cross London Rail Links; we simply adopted their numbers.

1218. Is that good or bad for your argument?

*(Mr Spencer)* I would say it is entirely neutral because I have not the faintest idea and I have not explored it in any great detail. Our focus has been very much on the numbers of people coming out of Liverpool Street station via the Crossrail scheme were there to be much higher levels of interchange where we have obviously addressed the issue of interchange specifically related to national rail levels going into Crossrail, but that is the only number, apart from the exit flows, that we have sought to question at this stage.

1219. For my own interest, you see what the heading is to each of tables 4, 9 and 14, "Liverpool Street Underground Ticket Hall Flows" in the respective years, but is column D interchange at variance with that heading in that it is adding something additional or does that involve the gate-lines?

*(Mr Spencer)* Well, it invariably does not involve the gate-lines. It would be done from within the station, but on occasions there will be people that will come out of the Central line, walk across the main concourse and then go on to the District line, but it would happen very rarely.

1220. **Sir Peter Soulsby:** My reason for asking is that you made comparisons between the numbers using Moorgate and Liverpool Street and I was trying to get some flavour of what proportion of those numbers you are suggesting to us there might be between those two stations if they had absolutely no alternative, but to use the Liverpool Street interchange. Whilst you have taken us back to the Promoter's original figures, the 2001 figures, I have not quite got a flavour of what you think.

*(Mr Spencer)* Well, to be honest, I have to say that I have only addressed the one interchange point which is national rail to Crossrail. I have not explored any of the other aspects with regard to Liverpool Street station, but I am quite happy, because I have looked at the forecasts, to adopt the forecasts which have been presented by Cross London Rail Links in that respect.

1221. **Kelvin Hopkins:** Obviously passenger forecasts are crucial and you are suggesting that the estimates, the Promoter's estimates, of passengers who use Crossrail are rather understated and could be significantly higher?

*(Mr Spencer)* Yes.

1222. Yes, and I understand the importance of comfort, speed and so on, so has some estimate been made of how many people might target Crossrail to avoid, say, the Central line which runs parallel for some of its length for that reason? Might there be some kind of significant shift from other routes to Crossrail and has that been taken into account? Is that a case for a further exit for Crossrail and, on the other hand, might it not reduce Central line passengers at the Liverpool Street end? There are all these factors which might have a significant bearing on your case.

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* The Cross London Rail Links' assessment has taken account of substantial changes in routes in journeys after 2016, certainly substantial transfers off the Central line into Crossrail, substantial transfers from national rail into Crossrail, substantial transfers off, I think, virtually all, or not necessarily substantial, but transfers off all the railway lines in London, apart from those which patently go in opposite directions, like the Northern line which will not get great relief from Crossrail, but the interchange opportunities may themselves create different journeys for people using them in London. A lot of people make very complicated journeys because they choose a route where they know the interchange is good and avoid other ones. There will be an enormous number of changes as a result of this project; it is an enormous project.

1223. **Sir Peter Soulsby:** We did see one way of looking at the changes in the predictions for the Central line when we saw the head routes yesterday and, acknowledging what has been said about the limitations of that way of illustrating it, it nonetheless was quite dramatic.

*(Mr Spencer)* Yes, and I am going to show you some dramatic head routes myself now.

1224. Please do.

*(Mr Spencer)* If we could turn to exhibit 34 and, in my text, I am back to my introduction, it is something where I put in a different position as far as the evidence is concerned.

1225. **Mr Laurence:** Where are you in your text?

*(Mr Spencer)* Paragraph 1.25. This is another key plank of the case that we put together when we discussed with Cross London Rail Links before we submitted our Petition because clearly we needed to know that the proposition we were putting forward, which is an Eldon Street exit external to Liverpool Street station, was likely to generate a significant resolution to the problems that we perceive at ticket hall B with regard to Crossrail. That is the only reference in my evidence to pedroutes and it related to a preliminary test that was undertaken by me to assess the relative situations with or without a dedicated eastern ticket hall connected directly to street level. This test presented in exhibit 34 shows the relative performance of the proposed Cross London Rail Links' ticket solution (ticket hall B) and the British Land Company alternative of a street-level access at Eldon Street. This analysis shows quite conclusively that the Eldon Street scheme would overcome most, if not all, of the pedestrian capacity problems that we have identified with respect to the ticket hall B 'piggy-back' alternative.

1226. There you are reading from paragraph 1.25 of your proof?

*(Mr Spencer)* Yes, that is correct. Essentially what I did, and I am not claiming any enormous science to this—

1227. Would it be useful to have exhibit 34 on the screen?

*(Mr Spencer)* Yes, it would be useful. I will be taking you through lots of pages, so it will probably close down if we put too much up. The purpose was to do a like-for-like assessment of Cross London Rail Links' proposal as against the British Land Ove Arup's proposal on the basis of an additional 15,000 people seeking to leave Crossrail to reach street in the am peak hour. I still hold on to that as being a realistic view of what the future demand will be. There could be 20,000 people as opposed to 5,000 people and that sounds like an extraordinary range to contemplate, but we have already got significant convergence in terms of aspects of my case and we still have a long way to go to test other parts of the case. Now, what I present to you here are three snapshots for each scenario.

1228. Which page does the Committee need?

*(Mr Spencer)* We are on the second page.<sup>14</sup>

1229. It is the second one after the cover sheet—is that right?

*(Mr Spencer)* Correct, which shows in the bottom right-hand corner that this is a pedroute analysis of Liverpool Street station with the Cross London Rail Links' demand forecast which is 5,300 trips exiting via Liverpool Street. I am not going to go into an in-depth analysis of aspects of how the station is performing; this is very much a test of broad conclusions about what could Eldon Street actually deliver as a project. What we then do, therefore, if we turn over the page, on the left-hand side you see the two later time periods as far as the Eldon Street project is concerned and on the right-hand side you see the situation as predicted with an extra 15,000 people going through Liverpool Street station.<sup>15</sup> Now, what I am seeking to do here is, one, trying to understand what is the tipping point for Liverpool Street station, in other words, when does it fail. The second thing I am trying to do with this test is to find out whether the direct street-level access at Eldon Street, the Ove Arup scheme, actually helps to solve that problem. Now, what the bottom right-hand graphic shows, the 8.45 to 9.00 am time period, is extremely severe congestion, by definition, solid. I will use NVA's definition—they call it 'overloaded', overloaded being worse than continuous congestion. What you are actually faced with is a whole pile of people at best shuffling and in all probability stationary within the ticket hall for sustained periods of time. Now, that basically puts the escalators into a total crisis situation because we cannot have a situation where you have an operating escalator if you cannot be certain you are going to be able to get off at the top. Otherwise, you are just loading people into a space by the mechanism of the

<sup>14</sup> Committee Ref: A16, Base Model 2016 (0830–0845) (SCN-20060125-023).

<sup>15</sup> Committee Ref: A16, Base Model + 15000 Crossrail to Liverpool Street (SCN-20060125-024).

---

**The Petition of Corporation of London with British Land plc**

---

escalator. What I also show here is that the congestion at the approach from Crossrail into ticket hall B is so bad that it is backed up through a corridor of over 100 metres and it is actually blocking into the next set of escalators to the extent that their operation would be completely compromised. Now, this is not to say that this is my view of how the Crossrail station would be in the future scenario because we are still converging on what we believe the demand forecast is, but the point of this exercise is to show, for that level of demand, if you turn to the next page, what would be the benefit of the Eldon Street option.<sup>16</sup> Now, what the Eldon Street option entails is that as well as all the benefits of reductions of flows of all the other lines because there are less people going on the Central line and on the sub-surface line, what we need to do here is, broadly speaking, take 75 per cent of the people that were going to go into ticket hall B direct to street at Eldon Street and it completely and utterly solves all the problems compared to the equivalent scenario which is that level of demand going through ticket hall B.

1230. In case any member of the Committee is as slow on the uptake as I am on these matters, Mr Spencer, there are four pedroute analyses on the page we are looking at, three of which are relevant, are they not, to what you call the 'Eldon Street option'?

*(Mr Spencer)* Yes, which Mr Chapman will present to you tomorrow.

1231. That is to say, bottom left, top right and bottom right.

*(Mr Spencer)* Yes, and it is shown here simply as a funnel going out in the top-middle of the page to Eldon Street.

1232. **Sir Peter Soulsby:** Can I just clarify, Mr Spencer, that the pedroutes we are looking at, the early ones without the option on it, are illustrated with the station operating centre still in place?

*(Mr Spencer)* That is correct.

1233. Obviously that is very crucially located in the areas of greatest congestion?

*(Mr Spencer)* Yes.

1234. Have these been run without the operating centre in place?

*(Mr Spencer)* I am not entirely sure. You would have to ask Crossrail that, to be honest. They have tested a number of scenarios where they have removed the SOR.

1235. I know that there are issues about whether or not there is a firm commitment to move the operating centre, but I just think we perhaps ought to know that the ones we have in front of us here show the operating centre still in place.

*(Mr Spencer)* That is correct, yes. I cannot draw any more conclusions than that. It is still in situ. I hope that this conveys the message of relativity between the two scenarios and I do not seek to reach any further conclusions from this pedroute analysis, whereas I would for the control pedroute analysis which has been done in the last week or so because it can be subjected to much more thorough analysis because it is not being used as a mechanism to make a choice between two alternatives, but it is actually being used as an important assessment of the level of service for what the ticket hall will be like in future years.

1236. **Mr Laurence:** Mr Spencer, if you would turn over though, I see you deal with another matter in the bottom right-hand corner of the next sheet, Eldon Street option 2016 plus 35 per cent.<sup>17</sup>

*(Mr Spencer)* That is right. I have not sought to do a 35 per cent test with the plus 15,000 which I am showing through to the ticket hall. There is no point in doing the 35 per cent test; it has already failed. What I have done here, to be consistent, is I have done a 35 per cent test on the Eldon Street scheme which still indicates that there is a lot of work to be done in actually perfecting that as well as better understanding the demand forecasts to understand if there are issues at stake because clearly the 35 per cent test is showing some congestion issues at Liverpool Street station. The reason it is showing that is because this is a massive increase over and above what we have in the existing situation which we already know to be close to congestion, so clearly Crossrail is not a panacea. It does not solve all the problems as far as Liverpool Street station is concerned and there still needs to be work done to the LUL station and there would potentially still be works needed to be done to the mainline Network Rail station, but this is, if you like, the early stage of work in progress of trying to find something which can cater for very, very high levels of demand, broadly speaking, five or six times what the Promoter is assessing in terms of the demand forecast which is not my case for 2016, but may well be the proposition that would exist in 2026/2030, that kind of time period.

1237. If you turn back two pages to the page whose heading on the right-hand side is 'Base Model plus 15,000 Crossrail to Liverpool Street', does that heading then inform the treatment of the Eldon Street option over the page as well as the Eldon Street option a page further on where you get the heading, "Eldon Street Option 2016 plus 35 per cent"?

*(Mr Spencer)* Yes, they are all on the basis of plus 15,000.

1238. Of plus 15,000?

*(Mr Spencer)* Correct. The titles should be much clearer.

---

<sup>16</sup> Committee Ref: A16, Eldon Street option (SCN-20060125-025).

<sup>17</sup> Committee Ref: A16, Eldon Street option 2016, + 35% (SCN-20060125-026).

---

 The Petition of Corporation of London with British Land plc
 

---

1239. Sir, I am putting that on one side now.

1240. **Kelvin Hopkins:** Just before you do that, these forecasts, we are only interested in the 35 per cent Eldon Street option for 2016, the bottom right-hand corner?

1241. **Mr Laurence:** Yes.

1242. **Kelvin Hopkins:** Even that shows a fair degree of congestion on the escalators leading up to Eldon Street, but can I confirm that that is based upon a particular assumption about the split between Moorgate and Liverpool Street, the people exiting from Crossrail?

**(Mr Spencer)** Yes, it is assuming that everything additional is coming out via Liverpool Street. Clearly what you would have, Crossrail's initial proposition was predominantly Moorgate and by the time I had built this sensitivity test, assuming that the Moorgate demands remained the same if extra flows were related to employment, we would be 75/80 per cent Liverpool Street on the basis of this test. Now, clearly that is not going to happen. A proportion of these people in all probability would actually be more people using Crossrail, but to a degree using Moorgate as the alternative, but what you actually have with this is that all of the imbalance between Moorgate and Liverpool Street is eliminated by the Eldon Street exit. Instead of there being an extra two minutes to get to ticket hall B, from ticket hall B you have still got to get to street which can take another minute or so, so at least three and a half minutes. This actually makes the two broadly equivalent which clearly makes the Liverpool Street entrance more attractive than going to ticket hall B and then having to make your way out of the mainline station, so there is an enormous benefit associated with it.

1243. **Mr Laurence:** So just following on from Mr Hopkins' question, Mr Spencer, it is important that the Committee do not read more into this analysis of the Eldon Street option 2016 plus 35 per cent than is warranted, and I think you have confirmed first of all that that is based on the assumption of 15,000 exiting—

**(Mr Spencer)** Plus 15,000.

1244.—Crossrail passengers and then adding 35 per cent to that on top.

**(Mr Spencer)** And to everything else, yes.

1245. You stress that that is not the actual evidence that you are giving, but it is just that you are testing it against that future possible scenario?

**(Mr Spencer)** Well, the evidence I am giving is not to say that the scenario we are presenting here is the solution. There is clearly more work to be done in terms of understanding the demand and the split back to Moorgate as well as more work to be done to understand how you would future-proof Liverpool Street station in its entirety for a 35 per cent increase in demand over and above the existing situation. The solution to that is not just Crossrail, but that there

still will be a need to do works at Liverpool Street station to increase the capacity for people to move from the main ticket hall up to street.

1246. Is there any reason why, with a fair wind and maximum collaboration on all sides, that work could not be done within a few weeks from now, if the Committee were otherwise persuaded of your case?

**(Mr Spencer)** Well, clearly we have a substantial amount of information at our disposal which would allow us to continue to work with Cross London Rail Links in terms of a further refinement of RAILPLAN, but also in terms of assessing station proposals.

1247. What is the answer in terms of how long you reckon it needs to take because it could be relevant to what the Chairman indicated yesterday? In closing yesterday, he indicated a number of concerns to the Committee, one of which was the reasonableness of possible alternatives and we need to be ready to deal with that in our closing submissions to the Committee on this occasion, so I just want to get a feel for what you think is involved in coming up with the kinds of numbers that would enable two realistic options to be properly compared with each other, if necessary, with the Committee's assistance if the parties cannot agree.

**(Mr Spencer)** It certainly is not a few weeks. It is a longer time period than that because not only is there a need to do more demand forecasting work, but there is also a need to do further appraisal work and to do design. We have a fairly well worked-out design for the Eldon Street option and clearly a lot of my evidence today turns on what is a realistic scheme for an upgrade of the eastern ticket hall, and I have said on several occasions today that I just do not know what that is. Clearly there are considerable resources that can be deployed to examine these issues. It is not unreasonable to have converged a design costing appraisal/demand forecast exercise in a matter of a couple of months, something like that.

1248. Is there any reason, Mr Spencer, why the attempt to achieve convergence on the numbers could not to some considerable extent be carried out concurrently with further work on looking in more detail at the two options which have been mentioned in these proceedings so far?

**(Mr Spencer)** No, of course they will happen in parallel.

1249. Good, that is important. I have taken more time on that than I was going to, so where are we please?

**(Mr Spencer)** I think it is time to wrap up. It is now really the conclusions in paragraph 8.9 to the end of the proof.

1250. Perhaps you would go through that for us.

**(Mr Spencer)** Sure. It is only seven paragraphs, starting at paragraph 8.9 through to 8.18. It is clear from my analysis of the operation of Liverpool Street station with Crossrail that it would fail

---

 The Petition of Corporation of London with British Land plc
 

---

comprehensively to support the overall objectives of the scheme or to improve accessibility to the main areas of the City of London and adjacent City-fringe-area employment growth. The key issue to address at this stage is what is the appropriate level of future-proofing that should be provided for the new eastern ticket hall at Liverpool Street station. My initial conclusion is that the LUL station demand forecasting design year test at 35 per cent is not sufficient in this situation. It is not appropriate to design the Crossrail eastern ticket hall down to a level of demand that fails to provide operational flexibility to meet fluctuations in flow and provide a level of passenger amenity consistent with Crossrail's objectives. When Liverpool Street station was comprehensively improved in the late 1980s, the implicit future-proofing was equivalent to at least 100 per cent of the year of opening demand and this capacity has been fully consumed in less than 20 years. Given the clear indication of extensive employment growth in the near horizon prior to 2016, it would seem appropriate to plan for a similar level of future growth in the context of the Crossrail connection to Liverpool Street station once again. I am not suggesting that we should assume that the other things happening at Liverpool Street station should be above the 35 per cent level, but really, given the significance of Crossrail and the opportunities that it will create, I do not believe that that is necessarily sufficient in this case. The Cross London Rail Links' 'in-train' demand forecasts for 2016 utilise less than 50 per cent on average of the actual train capacity. It is thus reasonable to expect that there will be considerable growth in Crossrail patronage in subsequent years. I have an analogy here, that you have the Underground system that is in effect full and if you take some of the demand out of that Underground system and put it into Crossrail, the cup is still close to being full. You then have growth year on year on year, you fill up the Underground part of the cup and you have nowhere to go but the saucer and the saucer has plenty more capacity. It means that year on year the propensity to use Crossrail as a travel alternative will get bigger because it becomes increasingly more attractive because the capacity which has been freed up in London Underground will have been consumed and it can only be used once because there is not the equivalent spare capacity on other routes into the City of London. Consequently, the station planning should allow for well above average growth in future demand for Crossrail, well above the 35 per cent required by LUL. One of the many curiosities, this

is to me, being a professional in this respect and I do not imagine anyone else would find it such, of the Cross London Rail Links appraisal is that there has been no assessment of a future year beyond 2016, for example, the 15th year, which would be 2031. The point of this assessment would be that, given that Crossrail will have much more spare capacity in 2016 than any other travel alternative, it would be expected that year on year after that time a larger proportion of the new journeys generated by further employment growth in the local area would be attracted to use the system. This important point is inevitably missed because there is not any assessment beyond the year of opening, as far as I am aware. British Land has investigated an alternative means of access to Crossrail and other witnesses will describe these in detail, namely Mr Chapman who will follow me tomorrow. A purpose-built and dedicated ticket hall on Eldon Street would meet all of British Land's objectives. We have tested this scheme, as I have showed you with pedroute, and I am satisfied that a ticket hall in this location would provide adequate capacity. Equally importantly, it provides an opportunity to create a 'front door' to Crossrail, which is something which is clearly not provided by accessing Crossrail by ticket hall B because it would remain an LUL ticket hall. There is a significant potential to improve the existing ticket hall B to provide more passenger space, a bigger gate-line and escalators direct to street level. I am not in a position, until further design work is completed, to confirm or otherwise if such a solution would be sufficient to meet British Land's objectives, but it should be considered alongside Eldon Street as an option. In summary, my position is that an eastern ticket hall is required to serve Crossrail that provides sufficiently greater capacity and amenity than is currently being promoted. The current proposals are totally inadequate to meet the aspirations of travellers and developers expecting Crossrail to support improvements in accessibility in the Liverpool Street area. What the City of London and British Land Company request respectfully is that the Promoter should be directed to stop designing demand out of the Crossrail connection to Liverpool Street station and start designing in the necessary future year capacity. The Promoter should start delivering the agglomeration benefits that it outlines rather than the opposite—deliver the promise. The sooner that Cross London Rail Links start to do this, the better for everyone.

1251. Thank you, Mr Spencer.

---

 Cross-examined by Mr Elvin

1252. **Mr Elvin:** Mr Spencer, can we just clarify a couple of points first. The point of concern, so far as British Land is concerned as with the City of London, is ticket hall B—is that correct?

**(Mr Spencer)** The principal point of concern is ticket hall B, but it is not the only concern.

1253. And the main, but not the only, concern is the gate-line at ticket hall B and its capacity?

**(Mr Spencer)** Not at all. It is a general concern over every aspect of the layout of the future scheme.

1254. So your concern, British Land's concern, spreads far wider than that of Mr Weiss's whose concern was with the gate-line?

---

**The Petition of Corporation of London with British Land plc**

---

*(Mr Spencer)* Mr Weiss did not look beyond Crossrail's demand forecasts in his evidence, whereas I have looked beyond Crossrail's demand forecasts.

1255. Well, we will look at the key aspects of that in order to assist the Committee to understand our relative position so that they can examine them later. Can I also establish what I think is common ground, that you are not suggesting, if the Committee considers that further work is required, that the ticket hall in Eldon Street is the only solution?

*(Mr Spencer)* No, I am saying that there should be further work on the massively expanded ticket hall B. I do not actually rule out the possibility that there is another scheme out there somewhere, but we have explored it with Ove Arup and British Land and the Eldon Street option appeared to us to be a do-able scheme at a relatively early stage and, as such, we then focused on the detail of that scheme to convince ourselves that it was a viable option. That is not to say that other minds would not find other locations which could provide a new eastern ticket hall outside the vicinity of Liverpool Street station.

1256. So the answer to my question is yes?

*(Mr Spencer)* There could be other options, yes.

1257. And you are not saying that, just because the construction of Crossrail would necessarily preclude the Eldon Street scheme, there would not be other schemes available to deal with problems if they were to arise because, for example, demand forecasts became clearer during the progress of scheme design after Royal Assent, for example?

*(Mr Spencer)* I am not sure if I have actually caught the first part of your question. It is accepted, I believe, that the construction of the connection to ticket hall B precludes the Eldon Street scheme.

1258. But the mere fact that that is a point does not mean that there are not other options that could not be utilised to obtain capacity if it were discovered that there were a need to do so when detailed design on the scheme was continued following Royal Assent?

*(Mr Spencer)* As far as I would be concerned, the Bill should pass when everyone is comfortable with the fact that the Bill deals with the problems. I do not think something should be left to another day. I am not ruling out the possibility that there are other solutions which could be bolted on, if you like, to a ticket hall B solution or that there are entirely different solutions, but clearly they cannot be delivered by way of the powers within this Bill.

1259. Would you accept that what the Committee may wish to satisfy itself of, and of course the Committee will decide itself what it wants to be satisfied of, is that there are solutions should these problems arise within the Bill powers?

*(Mr Spencer)* No, because that in itself is excluding Eldon Street because Eldon Street is not within the Bill powers, but Eldon Street needs additional provisions.

1260. That is why I asked the question to start with, that there may be other solutions and, therefore, we need not worry if Eldon Street is precluded by the Bill when it passes into law.

*(Mr Spencer)* I think you might be getting confused here, but I do not think I agree with you.

1261. I suspect the Committee understands the point I am making, Mr Spencer, so I think we will move on. Can we just establish as a matter of fact that your position is that Liverpool Street is the busiest station in the UK?

*(Mr Spencer)* Correct.

1262. And we know from the figures you have put forward, though I do not know whether they were read into the record, but you are saying it carries 30 million passengers per annum more than Victoria?

*(Mr Spencer)* That would be on the record and it is in the exhibits.

1263. So, as a means for the Committee to test the analogy Mr Weiss was drawing between Victoria and Liverpool Street, the Committee can have a look at the situation at Victoria and compare it with the function at Liverpool Street and the analyses which have been carried out of the two to compare them?

*(Mr Spencer)* Well, they are entirely different stations with entirely different constraints. I personally do not really understand what anyone can glean from looking at Victoria. We are not here to talk about Victoria, but we are here to talk about Liverpool Street.

1264. I see there is an area of agreement emerging, thank you. Can I ask then a brief question about Moorgate. I think there is common ground between us that the ticket hall at Moorgate's design for Crossrail will function more than adequately, there will be ample capacity and there should not be congestion at Moorgate, at the new ticket hall?

*(Mr Spencer)* Personally I have not investigated it in that much detail.

1265. It is not an issue British Land takes?

*(Mr Spencer)* It is not an issue we are taking at all. I am trusting the fact that the proposals that are coming forward, which are entirely new proposals, will have all of the amenity, capacity and quality that is indicated by Cross London Rail Links.

1266. Again I would anticipate that you do not disagree with the fact that the route from the centre of the proposed Crossrail platform through Moorgate would be a simple and direct route straight off the platform, up the escalators to the ticket hall and then up the escalators to street level, a very straightforward route?

*(Mr Spencer)* Yes, I agree.

1267. And to those people who would be using the route who, as you say, would largely be business, that is a route that they could quickly discover and soon become accustomed to?

---

 The Petition of Corporation of London with British Land plc
 

---

(*Mr Spencer*) It depends where they are going to. People would become accustomed to it and they would no doubt use it, but it does not mean that it becomes an appropriate solution for people who do not want to be at Moorgate.

1268. I am not going to trade insults over whether they will or will not, but the Committee will make their own judgment as to the ease of route and they will use their own experience of the site visit and the plans to determine that issue.

1269. **Sir Peter Soulsby:** Thank you for reminding the Committee but I think the Committee did get that point yesterday.

1270. **Mr Elvin:** Exactly. Can I then move, please, to the question of the gateline in ticket hall B? Insofar as the Committee are being asked to pay attention to the gateline calculations, there are what is called a static calculation, a calculation carried out at one point in time as to the number of passengers that the gateline can accommodate and how many gates are, therefore, required.

(*Mr Spencer*) The gateline calculation is based on the derivation of a peak five minute flow.

1271. It does not tell you what is going on elsewhere in the station, does it?

(*Mr Spencer*) It is not designed to do that. It simply is there to tell you, for people to pass through this cordon, if you like, how many gates you need to get a certain number of people through on the basis of whether they are entering or exiting and, also, on the basis of the train that they have arrived from.

1272. If there are constraints elsewhere in the station a hypothetical gateline calculation may not assist you, because if there are constraints elsewhere in the station simply to produce a gateline in accordance with a hypothetical calculation may, in fact, provide over-capacity, if the flows are being constrained elsewhere within the concourse.

(*Mr Spencer*) It is just as likely to be the opposite. I think you have got to take it at face value. It is a mandatory calculation following a very prescriptive means of analysis. I can think of hypothetical situations where 27 gates might well be inadequate. I do not see any point in hypothecating about what might be happening somewhere else, because I can have another scenario which I can present to you which would be worse than that.

1273. Let us go to reality and something the Committee has had an opportunity to observe, which is the entry into ticket hall B from the Central line up the escalators. That is a constraint at the moment. Is it not? We know there are moments of congestion when people are trying to get out of the Central line up to ticket hall B.

1274. (*Mr Spencer*) No, congestion is the other way; the congestion is when they are trying to come through ticket hall B to reach the Central line. That is what requires closure of the escalators. But when people come up from the Central line—

1275. Do not worry. If that is the point of congestion. I just want to take it as an example. That is a question of congestion to do with constraints as to the accessibility of the Central line. Providing capacity at the gateline will not make any difference to that; that problem arises for different reasons.

(*Mr Spencer*) The reason for providing the gates is because those people are seeking to leave ticket hall B. Central line passengers are choosing to leave the Underground network by way of ticket hall B. So you have to provide the capacity to do that.

1276. But, if there are constraints within the concourse that slow down the passengers and that cause congestion somewhere else within the system, then simply using the calculation may lead to over-capacity.

(*Mr Spencer*) No, I would not accept that at all.

1277. Okay, we will move on. So far as the gateline standard that you relied on and put to the Committee, and it is in your appendices, there is no reference in the standard to requiring it to be tested by 35 per cent future-proofing, is there?

(*Mr Spencer*) No, the requirement for 35 per cent future-proofing establishes the passenger demand forecast that should be used to appraise station facilities. The gateline calculation is part of that appraisal.

1278. The 35 per cent, however, is looking at the capacity at the station as a whole, and the gateline capacity is to be based on one of two factors, is it not? Either observed flows, or forecasts based on observed flows, or it is to be based on actual flows plus 120 per cent. There is no reference to further inflating the figures by 35 per cent.

(*Mr Spencer*) What they are giving you is the means by which you go from a demand forecast to the five minute figure that you then use to do the gateline calculation. The two things are quite separate but, obviously, related because we are dealing here with a new station facility that needs to be appraised for its future-proofing. So, clearly, the gatelines need to be appraised for their future-proofing.

1279. What the standard says is that if you have not got the demand forecast—I just want to test the degree to which you are being fairly rigorous and the degree to which you are being over-rigorous in your sensitivity testing—the standard says “add 20 per cent to observed flows”.

(*Mr Spencer*) I can accept that.

1280. That is a long way from 35 per cent future-proofing based on forecast demand, is it not?

(*Mr Spencer*) There are two situations here, really. When you are doing major works, if you are simply asking are there enough gates at Station X when you

---

**The Petition of Corporation of London with British Land plc**

---

are not intending to do anything at Station X, then you will have a certainty of what demand is going to be, because the only thing you are changing is the number of ticket gates. When you are actually doing substantial works to a station which is going to change how it operates, LUL dictate that you provide 35 per cent future-proofing for every aspect of that station building. That is what we are following. I do not believe there is a significant difference between 20 and 35. I am afraid that the rationale is because there is greater uncertainty because it is a high level of intervention because there are more works in this situation.

1281. There is an obvious difference if you are applying 20 per cent on top of observed flows to a situation such as here where we have forecast demand for 2016, so we are not simply looking at observed flows we are applying growth and the reassigning of passengers and growth of passengers throughout the network. We are not doing that at all, are we?

*(Mr Spencer)* The rationale is that because you are doing major work you have got to be certain that those major works are going to have a benefit over a sustained period of time. Sixty years is the evaluation period. Putting gates in and taking them out of the existing station where you have got 20 per cent is, basically, saying: "Well, this is a short-term investment". It pays for itself in, maybe, five years, six years or ten years, but clearly you do not need to assess it over 60 years. In 60 years' time the situation will be completely different.

1282. Mr Spencer, it is the standard you are applying. I am not going to spend any more time on it. The Members of the Committee have heard your view.

1283. **Sir Peter Soulsby:** I think the Committee did understand, from the evidence given by Mr Spencer earlier on the nature of the figures being put in front of us, which were projections and predictions and which were looking at eventualities that may be some distance in the future. We have understood the nature of the figures.

1284. **Mr Elvin:** Just to be absolutely sure, Mr Spencer, what you have done is applied 35 per cent at the gateline as well as everywhere else. Is that right?  
*(Mr Spencer)* Well, the only test we are doing of future capacity ourselves is gateline testing. The 35 per cent has also been applied by you in terms of the pedroute analysis that you have done.

1285. That is what I wanted to come on to.

1286. **Mr Laurence:** Before he does, the exhibit is exhibit E to Mr Weiss, which contains the relevant standard which the witness is being asked to comment on. I wonder, sir, if Mr Elvin would just give the witness an opportunity to look at the actual bit of the relevant standard that refers to this 20 per

cent, in case there is anything that he would like to add. He has had to do it without having the relevant passage of the standard drawn to his attention.

1287. **Mr Elvin:** I am very grateful to Mr Laurence, but he will have his opportunity to re-examine.

1288. **Sir Peter Soulsby:** I am sure he will. Nonetheless, I think if we can illustrate it on the screen while we are talking about it, it would be helpful.

1289. **Mr Elvin:** It is page A1 of document A16.<sup>18</sup> In case there is any doubt, Mr Spencer, the paragraph I am referring to is the one that follows the three bullet points.

*(Mr Spencer)* Sure.

1290. **Sir Peter Soulsby:** Thank you very much for reminding us of that, Mr Elvin.

*(Mr Spencer)* I have got nothing to add. You are not putting anything to me, are you?

1291. **Mr Elvin:** No. It was not my intervention.

1292. **Sir Peter Soulsby:** Mr Elvin, do continue.

1293. **Mr Elvin:** Mr Spencer, of course what pedroute does—and as you say there are later design stages that will have to be followed, but we are not there yet—is gives you a good, general overview of how the station will work on a wider basis rather than simply looking at the gateline. It may not be perfect, it may not incorporate all the detailed design that will take place before construction, but it gives you a good, general view of the overall picture. Does it not?

*(Mr Spencer)* pedroute is a very valuable aid to detailed design of a station. It is not a means by which you verify or otherwise the adequacy of a facility, it is a very, very helpful design tool.

1294. It gives you a broad picture of the overall station.

*(Mr Spencer)* It gives you a feel for as it is defined; it tells you what the level of service is: is it a nice place to be or a nasty place to be? That is what pedroute tells you.

1295. Can I just then come, with those preliminary remarks, to where there are areas of difference? I do not think we need to discuss technicalities to try and understand how those areas of difference arise. As I understand it, you have taken, effectively, the base position that CRLR has looked at and made four major adjustments before applying the 35 per cent. Is that right?

*(Mr Spencer)* Absolutely, because they are all future year forecasts, so all of them should be subjected to future-proofing.

---

<sup>18</sup> Committee Ref: A16, Station Planning Standard Extract (SCN-20060125-030).

---

The Petition of Corporation of London with British Land plc

---

1296. Let us run through them briefly and then test the ones that need testing. On the first one, you have assigned 65 per cent of the passengers to Liverpool Street, 35 per cent to Moorgate.

*(Mr Spencer)* We have done that, yes.

1297. The second one is an increase in passenger growth by 4 per cent.

*(Mr Spencer)* Three point three per cent.

1298. Can I tell the Committee I am not going to bother with that because it makes a difference of just 300 passengers, so we will forget number two. Number three is you then increase the market share of passengers using Crossrail from 13.3 per cent to 20 per cent.

*(Mr Spencer)* Correct.

1299. That increases the numbers by about 50 per cent. Another 5,000.

*(Mr Spencer)* Four thousand eight hundred, so about 50 per cent.

1300. Almost 50 per cent. Then, on top of that, you increase the entry flows to Crossrail from 3,600 to 8,210. That is a 128 per cent increase.

*(Mr Spencer)* Correct.

1301. Then you add 35 per cent.

*(Mr Spencer)* Correct.

1302. Under those conditions you say the station fails.

*(Mr Spencer)* The pedroute analysis of test four has not been done. We have not requested you to do test four.

1303. The first we knew about test four was when we saw your proof last night.

*(Mr Spencer)* I am sure we have discussed it with some of your staff members as a concern.

1304. I am afraid not. Never mind. It does not matter. I will deal with it. The Committee have got the material before them.

*(Mr Spencer)* The pedroute analysis takes us up to the 14,500 exit flow from Crossrail.

1305. Ms Lieven showed the Committee yesterday tests three and four of our pedroute analysis. Sir, for the record, they were exhibits 17, 18, 19 and 20 yesterday. They showed the station functioning perfectly adequately, not significantly worse than it would do without Crossrail.

*(Mr Spencer)* These are tests one to four which were with and without Crossrail, 35 per cent and the new gate equipment. I do not think it is really appropriate to put questions of a general nature when the pedroute assessment is as detailed as it is. I would not draw a general conclusion beyond the kind of test which I put to you in evidence, which I did for a very specific reason. It is not a question of ticking a box or saying "That is okay; that is not okay"; there is a lot of judgment that is involved. If something is identical then I will tell you it is the

same, but if it is not identical then I will not tell you it is the same. Clearly, the situations that you are asking me to go to are generalisations because the results are not identical.

1306. I thought you were willing to give value judgements because you gave value judgments of your own pedroutes to the Committee 20 minutes ago. If you do not want to—

*(Mr Spencer)* Only on the basis—

1307. Let me finish the question first, Mr Spencer. I am quite happy to leave value judgments to the Committee, having got the information and the information about how pedroute operates.

*(Mr Spencer)* I am not averse to you doing that. I am happy to give my view on scenarios as to whether they pass or fail, if you like, but I think to give a relative comparison to say that scenario X is similar to scenario Y, I think, is too a complicated a question because it is too much judgement.

1308. Mr Spencer, the station will still work under tests three and four. Will it not? It will still pass under three and four.

*(Mr Spencer)* In the evidence submitted yesterday, I would not regard the test four base 35 per cent as being acceptable.

1309. Perhaps exhibit 20 from yesterday can be put up on the screen.<sup>19</sup>

1310. **Sir Peter Soulsby:** Just to be clear, we are looking at the same plan, Mr Elvin.

1311. **Mr Elvin:** It is Crossrail plus 35 per cent.

*(Mr Spencer)* I am just checking but I believe it is identical. Correct.

1312. This shows green and blue, bar a few small patches of yellow, throughout the Crossrail complex, coming up to ticket hall B, green and blue, other than a few yellow blocks at various parts of the gateline. No red at all in ticket hall B, no red at all on Crossrail, no red at all on the Central line.

*(Mr Spencer)* The sight of red does not indicate success or failure.

1313. In terms of relative congestion. No signs of major congestion.

*(Mr Spencer)* Green is the level of service factor two to three, shown in green, and then above, as shown in yellow, service factor three to four, has a degree of congestion. You have then got to look at the locations and understand what is the cause of that congestion, what is the outcome of that congestion, and what people would do in those situations.

1314. I am going to resist the temptation to go through this in detail, because I think the Committee are just going to have to take their own view on it, Mr Spencer. Unless we are going to spend hours on it.

---

<sup>19</sup> Committee Ref: P2, with Crossrail (Base + 35%) to new gateline equipment, 0845-0900 (LONDLB-2604-020).

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* Absolutely. I personally would probably have a very high standard that I would apply to what I would regard as being acceptable or otherwise. That would be my personal view. You can disagree with that, if you see fit, and who am I to—

1315. **Sir Peter Soulsby:** Mr Elvin, if I may, can we just turn to an observation earlier on? I note that the one we have here on the screen has the operating centre taken out.

*(Mr Spencer)* It does, yes.

1316. Would you like to comment on that?

1317. *(Mr Spencer)* It is difficult because what you have here is a single test which is taking account of a variety of different things happening. It has got Moorgate lines, it has got the SOR taken out, it has got comments about gateline capacity. It is difficult to know what it is driving what. So, really, what you have to do is one test at a time, making one change at a time. From what I see on this drawing, the removal of the gateline is not being utilised—the space is not being heavily utilised. It is dark blue which means it is extremely low density, which means there are very, very few people in or passing through that space. That is not to say that it is not the right thing to do because it would be a great asset in terms of safe management for there to be that reserve space that is available should there be congestion. That would seem to be the driver for taking it out. This test does not say that there is a big rationale for removing that SOR, because it has not been utilised in the operation of the station because no one is in it. So it has become a void, basically.

1318. **Mr Elvin:** Might I run with that point for a little, Chairman? Can I ask you to pick up your own pedroute. I want to look at the base in a moment, back to test two. Can I just pick up your own pedroute in your appendix 34 in document A17? These are based on runs we have not seen, so I can only comment in general.

*(Mr Spencer)* This was provided to Cross London Rail Links about four months ago.

1319. Go to page 2 of the diagrams, please. “Base Model + 15000 XR to Liverpool Street”.<sup>20</sup> I think this also picks up the point that Mr Hopkins made earlier. With the SOR where it is, if we look at the 8.30 to 8.45 and the 8.45 to 9.00, we have a pinch point at point M where, on your analysis, and your various sensitivity tests, the Crossrail passengers are causing congestion where they meet the flows of the Central line passengers. It is as they emerge from the Crossrail tunnel at point M, they are blocking back into the Crossrail tunnel and they are causing congestion both in the ticket hall and back down the escalators to the Central line.

*(Mr Spencer)* The best I can do is say that that is a very likely interpretation. I have not been inside the detail to actually conclude that that is what is driving it, but it is a quite likely conclusion.

1320. So we are all in as good a position as everybody else to make a judgment. That is nice to know.

*(Mr Spencer)* I have seen it before.

1321. Mr Spencer, this is on the basis that the operations room remains in place.

*(Mr Spencer)* Correct.

1322. The operations room is at the point of congestion, is it not, where the tunnel emerges into the main concourse?

*(Mr Spencer)* It is immediately adjacent to that space.

1323. So if you were to compare our test four with your test here, one of the critical differences is instead of having blocks of yellow and red by the point M, the SOR, in fact you get blue and green because it has freed up the space and freed up the flows.

*(Mr Spencer)* You cannot compare the two tests because the level of demand is completely different. I do not believe you can make a conclusion, short of rerunning this test here and putting the SOR back in. That is the only way you can actually say what is the benefit of putting it in or taking it out, which is clearly something that you are going to need to do in the fullness of time, because no one is going to make you knock it down because someone decided that it should be knocked down. The case would have to be made and it would be at considerable expense.

1324. I am going to ask you a question about that in a moment. Can we, please, look at some new exhibits? I want to look at the last three of the little bundle that has just been distributed. If they have numbers, they are exhibits 106, 107 and 108. It is the last three pages, sir.<sup>21</sup>

1325. **Sir Peter Soulsby:** This will become A19.

1326. **Mr Elvin:** You had in your request two further pedroutes supplied, did you not, Mr Spencer, yesterday, which were tests five and six? We are not accepting your hypothesis but what we have done is added in 14,500 (you have rounded it up to 15,000) to Crossrail rather than the lower figures that we have been using earlier.

*(Mr Spencer)* Can I just interrupt you to say that you are not correct that that is the new stuff. Tests three, four, five and six are all new. Tests one and two are from the previous package.

1327. I meant new to the Committee. We have seen three and four; we saw it yesterday.

---

<sup>20</sup> Committee Ref: A16, Base Model + 15000 Crossrail to Liverpool Street (SCN-20060125-024).

---

<sup>21</sup> Crossrail Ref: P17, Crossrail Design for link with existing ticket hall at Liverpool St Station (LONDLB-2604-088 to 089 & 103 to 108).

---

 The Petition of Corporation of London with British Land plc
 

---

(*Mr Spencer*) No, you did not. It is a different three and four. Three and four relate to 8,850 as the level of demand.

1328. I do apologise. In any event, we are only producing five or six from this one. I think you have been sent a set. In any event, can I ask you, please, to look at 107 and 108? You said you would have to run it with the same flows, so we have run it with your higher flows, but with the absence of the SOR.  
(*Mr Spencer*) Correct.

1329. What we can see at 107, and compare that with 108, which is then growth going up by 35 per cent, although things get a little more congested, if you add the 35 per cent in, the position without the SOR is still preferable and far freer in terms of pedestrian movements than appears to be indicated on your plus 1500 35 per cent.  
(*Mr Spencer*) Because the demand forecasts are not the same. This is a demand forecast for an exit flow of 14,500. The one that I tested with the SOR was the demand forecast of 20,300.

1330. I am sorry. I am looking at your document that you told us was plus 15,000.  
(*Mr Spencer*) I am sorry. I am misleading you slightly there. Obviously, you have got 35 per cent in this test as well.

1331. No, 35 per cent is in 108. 107 is adding in your passenger flows from Crossrail.  
(*Mr Spencer*) Correct.

1332. And it shows a picture which is far different from the picture you are showing for the same time period—8.45 to 9.00 in the morning—and it shows it with the SOR removed.  
(*Mr Spencer*) Correct.

1333. Which leads, I think, to a reasonable conclusion that the removal of the SOR removes the sort of problem you have identified on your own pedroute analysis.  
(*Mr Spencer*) It is driven by the demand forecast. The difference between the two results. It is not the SOR. If you have a space that is occupied by a building and you take it out, clearly you are making more space available for pedestrian circulation. The point between the two tests is that I have gone beyond the tipping point when I have assessed Crossrail disgorging 20,300 people. What you are showing me here with Crossrail disgorging 14,500 is that it is approaching tipping point.

1334. I thought your pedroute was 15,000.  
(*Mr Spencer*) Fifteen thousand plus. Twenty thousand three hundred. This is 14,500.

1335. Why does it say “Base Model + 15000”?  
(*Mr Spencer*) Because the Crossrail base model is 5,300.

1336. In that case, if we look at the 35 per cent, which gives us an approximate indication, which is 108—  
(*Mr Spencer*) What that is getting—

1337. The two-way Crossrail flow at this point is about just under 40,000.  
(*Mr Spencer*) The exit flow is 20,000 and the entry flow would be about 5,000. So it would be about 25,000 two-way. So the two runs, which are dealing with broadly equivalent levels of demand, but I could not comment beyond that. We are of the same order of magnitude.

1338. If I can just ask you one question, because it is nearly 4.30. I have not quite finished, we will have a little more tomorrow but we are a substantial way through it. Taking this approach is, as you suggested yourself, effectively testing the system to destruction. We are loading on it additional sensitivity after additional sensitivity and then adding another 35 per cent. We are really testing this to destruction. Are we not?  
(*Mr Spencer*) No, not in the slightest. What we have had to do here is we have had to set out incrementally and progressively our assumptions. We could have simply had one sensitivity test and said we are going to deal with three things here. But for the Committee to understand the significance of each part of that process we have identified in separate tests. That is not over-burdening. I could define 100 sensitivity tests on Crossrail demand forecasting, if I thought for one second it would assist the Committee.

1339. Can I just trespass on your patience for one question more? If we want to compare this with the base, ie the position without Crossrail, we look at test two, which is exhibit 16 from yesterday. So the Committee, if it wishes to do a comparison, has test two with Crossrail stripped out.  
(*Mr Spencer*) Test two has got the gatelines.

1340. New gatelines. So we have improved the gateline and we have added 35 per cent to see what the just comparison is.  
(*Mr Spencer*) I am sorry, can you repeat the question?

1341. Yes, if the Committee want a point of comparison without Crossrail—that is to say, take the same year with the 35 per cent that we are using to test Crossrail—to get a like-for-like comparison they can look at this pedroute.  
(*Mr Spencer*) Yes, that is the case.

1342. **Mr Elvin:** Is that a convenient point?

1343. **Sir Peter Soulsby:** I think it probably is a convenient point to finish, in which case we will be reconvening here tomorrow morning at 10.00 am.

---

---

**Thursday 26 January 2006**

Before:

Mr Brian Binley  
Mr Philip Hollobone  
Kelvin Hopkins  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

*In the absence of the Chairman, Sir Peter Soulsby was called to the Chair.*

Ordered: that Counsel and Parties be called in.

1344. **Sir Peter Soulsby:** Order, order. I have a couple of announcements before we make a start and turn to cross-examination. It has been suggested to me that it might be helpful if I announce for the record our revised programme for next week. It is our hope that we will have concluded dealing with this petition today, but, if not, we will have to return to that at a later stage. It is our intention, therefore, on Tuesday morning to deal with petitions from the Corporation of London (Markets), to continue that in the afternoon of Tuesday, together with that relating to the London Fish Merchants, but on Wednesday we will deal with that from Robert McCracken, from the Covent Garden Community Association, and then the afternoon of Wednesday 1 February we will have an introduction on noise and settlement issues, which I understand has been organised by the Crossrail Counsel. It is not our intention to meet on Thursday 2 February if we can avoid doing so. Just for clarification, with regards to a document that was put in front of us yesterday which we numbered at the time A19, as was pointed out at the time, and correctly pointed out, it does have a reference number. It is 088. Therefore, the document that is being put round this morning, this further pedroute illustration, will become A19.<sup>1</sup> I hope that is clear.

1345. **Mr Laurence:** Was the earlier one, therefore, therefore 18, sir?

1346. **Sir Peter Soulsby:** No, the earlier one already had a number: 088.<sup>2</sup>

1347. **Mr Laurence:** It is only one sheet that has that number. You are treating the opening sheet of the little bundle as being the number of the total bundle.

1348. **Sir Peter Soulsby:** I have not got it in front of me. Apparently that was the first sheet and that number refers to the whole document. As I say, the one presented this morning, two sheets, further pedroutes, will be A19. Mr Elvin, would you like to continue with your cross-examination?

1349. **Mr Elvin:** Can I start with a couple of matters before resuming. One relates to a matter put by Mr Binley yesterday relating to the cost of Crossrail, and there was a debate with Mr Spencer at paragraph 1145 of yesterday's transcript. Can I give the figures which the Secretary of State has given, for the record. The total scheme costs are 10.29 billion at 2002 prices, and the figure which the Secretary of State quoted at second reading is up to 16 billion in the money of the day, which of course is a different measure, but those are the two figures that have been given by the Secretary of State. Sir, there should also be available shortly for distribution one of the items the Committee requested, which is the amendment of the concentric circles plan in relation to development, which we will give you a revised version of to show walk times from the platform rather than the assumptions made by the City of London. I hope that will be available during the course of the morning. Sir, there are issues to address on timetabling, but could I address you on those later on this morning?

1350. **Sir Peter Soulsby:** Yes, certainly.

---

**Mr Timothy John Spencer, recalled**

*Re-examined by Mr Elvin.*

1351. **Mr Elvin:** Mr Spencer, good morning. If we can resume where we left off yesterday. Have you been supplied with the new document, the two pedroutes, this morning, A19?

*(Mr Spencer)* I have about a minute ago.

1352. You will appreciate we have been working with the figures that we got in your evidence the other day. What we have sought to do is to model your extreme scenario, which is your sensitivities one plus two plus three plus four, and then add the 35 per cent to it so the Committee could get a feel, using the Crossrail model, of what that came up with. We had the first page of A19 showing your cumulative sensitivities one to four, and then on the second page of that those cumulative sensitivities plus 35 per cent, and they show a position very little different from that on the pedroutes we looked at yesterday for the cumulative sensitivities one to three plus 35

---

<sup>1</sup> Committee Ref: A19, Liverpool Street Station: with Crossrail (SDG Test 1-14) Pedroutes.

<sup>2</sup> Crossrail Ref: P17, Crossrail Design for link with existing ticket hall at Liverpool St Station (LONDLB-2604-088 to 089 & 103 to 108).

---

 The Petition of Corporation of London with British Land plc
 

---

per cent. If the Committee would take up the document that used to be numbered A19, if I could ask you to look at exhibit 107 and 108, the last two pages in that document. Page 107 is the equivalent of the first page of A19, is it not, Mr Spencer, only it is test one to three without the 35 per cent?

*(Mr Spencer)* Correct.

1353. So we can do a comparison, or the Committee can do a comparison, based on that, and then, if we go to document 108 that we looked at yesterday, that is tests one to three plus 35 per cent, we can compare that with page two of A19, and, again, it shows very little difference, does it not?

*(Mr Spencer)* The most recent information you have given me shows a situation slightly worse than the information that you put to me yesterday.

1354. It is not vastly different qualitatively though, is it?

*(Mr Spencer)* The numbers are quite similar because what we have done is redistributed the movement from National Rail to the Central line and the sub-service line and we have put it to Crossrail; so the number of movements going through ticket hall B are only slightly increased with the sensitivity test, but what it does do, obviously, is put a lot more passengers into Crossrail.

1355. Along with the questions I asked yesterday, I am going to leave those to the Committee to form its own views knowing that the Committee now has an idea of how pedroute operates. What it does not show is the severe position which, as indicated by your pedroutes, would show large areas of red appearing on the Crossrail route, on the Central line escalators and in ticket hall B, does it?

*(Mr Spencer)* They are different tests for different assumptions. If it would assist the Committee, I have obviously had a little bit more time to review the information that you put to me yesterday. If you would like me to do that, I would be happy to do it.

1356. You declined to answer the question in detail yesterday.

*(Mr Spencer)* I had not had the opportunity yesterday to review it in any great detail, and clearly I was not willing to give an interpretation on the basis of a superficial view.

1357. You had had the material supplied to you at least 24 hours before hand, had you not?

1358. **Sir Peter Soulsby:** I think it does not need to be explored as to whether or not Mr Spencer had the information earlier. What matters is perhaps to hear what he might now want to comment on on what has been supplied to him.

1359. **Mr Elvin:** Mr Spencer, go ahead.

*(Mr Spencer)* As long as everyone is happy. The comparison that I am making is between the without Crossrail scenario with 35 per cent demand increased and the with Crossrail with 14,500, as

opposed to 5,300, which is our test three. I can equally talk about test four, but, as we have said, there is not a great deal of difference between the two, again, with the 35 per cent uplift. There are two basic things that I would like to comment on. The first is that in the without Crossrail situation the substantial congestion is outside the gateline, in other words in the concourse. It is not within the operational areas of the station. The gateline is, obviously, once you have gone through the ticketing system. In the with Crossrail scenario, with the test that Crossrail have done using our information, the congestion moves into the gateline. This is a first stage sensitivity test, and clearly what Crossrail could do is look at reallocating gates to try and balance this out, but, on the face of it, the issue has become more serious to the extent that the congestion is within the operational area of the station as opposed to outside the operational area of station. The second point I would like to make is that I perhaps have an advantage over Mr Elvin in the sense that the information that I have received from Cross London Rail Links is actually a little bit more detailed than he has presented here in his evidence, because what that information tells me is the exact calculation of the level of service for each of the blocks within the pedroute analysis, whereas what you have got, you are simply told what range it is in. The key location, as we all know, is the conflict between the exit from Crossrail and the entrance and exit from the Central line. That result in the pedroute analysis is actually at the very high end of the yellow grade to the result of 3.7, whereas if it had been four it would be shown as red. The interpretation of pedroute, as I have said, is complex and I would prefer not to go any further as to categorising the success or otherwise of this test, other than to say that it does not show a satisfactory outcome.

1360. That is very helpful, Mr Spencer. Can you keep open sheet two of A19 from this morning and can we look at the base scenario that we are looking to compare it with, that is to say the base plus 35 per cent, which is document 16 in the bundle produced two days ago. There is no Crossrail in document 16, but clearly there is already substantial congestion at around the gateline on the base, plus 35 per cent. We can see in fact there is a red block by the gateline, is there not?

*(Mr Spencer)* Which is due to a column constraint.

1361. Which does not exist with Crossrail?

*(Mr Spencer)* As I have said, the detailed analysis has to go beyond yellow and red. It has to look at the location and it has to look at the detailed results, as I have led you already to a detailed result. Often it is quite marginal as to whether it is yellow or red.

1362. Let us just stick with the broad indications which we agreed yesterday, because if we are going to get into the details of each block the Committee will lose interest after about 10 seconds, I should think, if that long?

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* I have no intention—

1363. Mr Spencer, I understand your position, but forgive me if I am not seduced down that route?

*(Mr Spencer)* Absolutely.

1364. Can we also look at the broad brush position? We can see that even with your extreme modelling plus 35 per cent, there is still massive improvement with the Central line. If we look at the Central line and the base plus 35 per cent, one of the platforms is almost exclusively yellow, one of the escalators is yellow. That position is clearly much improved by Crossrail, because, of course, one of the things that Crossrail does is divert passengers from the Central line on to Crossrail because of the common east-west movement of those two systems.

*(Mr Spencer)* I am absolutely content to agree with you that Crossrail results in significant reductions on passenger movements within the Central line. The Central line in the AM peak hour, if anyone has the misfortune to use it, is absolutely jam-packed. There are more than a thousand passengers per train coming into Liverpool Street heading into the West End. What happens in Liverpool street is a large number of people get off the trains and almost an exact and equal number try and get on the trains, and we are talking about hundreds of people doing it on every single train. If there is any delay, and the Central line has been resignalled so it is a lot more efficient than it used to be five years ago, but if there is any hiccup in the service operated—if a train is missed out if you like—that doubles. That then means you have got up to 3-400 people on the platforms and another 400 people trying to get off the trains, which basically, for an instant, puts 800 people on the platforms. That is why this shows very severe congestion, and that is with normal operation—that is without needing to clear a train—which is why the operators, London Underground, turn off the escalators from ticket hall B from which about half the entry flow to the Central line comes through, and they close ticket hall C to prevent people getting down to the platforms. That is a routine intervention by LUL to prevent overcrowding of the platforms because they know very large numbers of people are going to try and get off the trains.

1365. Coming back to Crossrail, what all of this shows is that, even under the extreme testing of your scenario one, two and three accumulated plus 35 per cent. Crossrail is still performing and providing one of its major benefits, which is relieving the Central line?

*(Mr Spencer)* First of all, I do not regard it as extreme testing, and I need to say no more than that. These are our views on the future demand forecast. The second thing is, as I have already agreed with you, Crossrail provides substantial benefits to the Central line.

1366. Can I remind the Committee, we have done your exercise in these latest pedroutes—whether you call them extreme or not we will have to differ on—

but this is your accumulated one to four plus 35 per cent. Can we just be sure as to what you have produced in your own pedroute, today's A19. You will recall these from yesterday: exhibit 34 within A17. It is the base model plus 1500 out of Liverpool Street. What I want to get clear is this. This not your accumulated plus one, plus two, plus three, plus four, plus 35 per cent, is it? This is something worse than that. What you have done is you have not just applied your accumulation, you have added 1,500 onto the Crossrail base of 5,000 odd, have you not, so it is actually worse than the accumulated scenarios plus 35 per cent?

*(Mr Spencer)* I have actually added 15,000, not 1,500.

1367. I am sorry, 15,000?

*(Mr Spencer)* It is very difficult to comment really, because what we have in the two models is different assumptions about the level of demands, and we also have different assumptions about the facilities within ticket hall B. So, clearly, as you have led me to already in the test that you most recently put to me, you have got 20 exit gates, in the test that you have most recently put to me you have the removal of the stations operations room and also in the test that you have just put to me you have a different basis for the demand, and, clearly, the work that we have done latterly—this is a piece of work that was done in September to assist us with understanding what the relative benefit of Eldon Street might be—it is not putting evidence as to my view of the future operation of ticket hall B; it is under the scenarios that we have later presented.

1368. Certainly I got the impression yesterday it was slightly confusing. So the Committee can effectively shut this page. This is not what you are now saying?

*(Mr Spencer)* I was absolutely clear about that yesterday, that it was a comparative analysis at an early stage to understand that the scheme that we were beginning to develop was likely to yield substantial benefits. That is exactly what I said in evidence yesterday.

1369. **Sir Peter Soulsby:** I think the Committee have a clear impression as to what this is.

1370. **Mr Elvin:** I think we can leave it.

1371. **Mrs James:** I want to move back a few steps. You mentioned re-routing, and perhaps this is a very simplistic question, but what happens in these pressure areas that you have identified if there were an emergency situation?

*(Mr Spencer)* What you have, whether it is yellow or red, is very large numbers of people within constrained spaces. The block that we are focused on—the head of the escalators and the opening of the tunnel—even in yellow would have perhaps 200 people in them. That would be a very high density: there would be perhaps two or three people per square meter in parts of that block. In an emergency evacuation the station operation commander, the person who runs the station, will basically throw

---

**The Petition of Corporation of London with British Land plc**

---

open the gates. They will just open up. That basically means that you have twice the capacity to actually move through the gateline. With the gates in operation it is reported to be 25 people per minute; when they are open and clear you can put 50 people a minute through there, but what you have actually got to do—I would say that LUL are rather expert at it these days—is you have got to tell people the scenario, you have to explain to them that you are evacuating the station. You will always have people that do not understand, but most people do understand. Clearly, because it is already congested and because it is very complicated, basically everybody is going to turn around and try and head back towards the gates. There are a lot of people in that area, and they should be able to clear relatively quickly, but I would have to say pedroute, as I have said, is a design tool. Her Majesty's Railway Inspectorate would not accept pedroute as a justification for a scheme design and would want to see much more thorough and sophisticated analysis, and they will dictate precise evacuation scenarios which flow to evacuating the trains as well as evacuating buildings, because, as happened on July 7, the entire inner London Transport system was evacuated in a very short period of time. What the railway inspectorate will want to be assured of is that all aspects of the new scheme are capable of fitting into an evacuation strategy, but that clearly that is in the level of design and approval beyond that which Crossrail are currently at.

1372. **Mr Elvin:** I wonder if Mrs James would find helpful if Crossrail were to prepare at some stage during the next few weeks of committee hearings a general note on how evacuation procedures are handled.

1373. **Mrs James:** Yes, please.

1374. **Mr Elvin:** It will not be in the specific context of Liverpool Street, but we will produce a general note so that you have a better idea of how it operates, if that is helpful.

1375. **Sir Peter Soulsby:** I am sure that will be very helpful to the Committee.

1376. **Mr Elvin:** Before we leave pedroutes, Mr Spencer, can we look at your Eldon Street option, which is two pages on in A17? I appreciate all your reservations about pedroute—we can take those as read, I am sure—but if we look at your sensitivity testing with 35 per cent, which is our only point of comparison in pedroutes for your Eldon Street option, with the Crossrail plus 35 per cent and all your scenarios, we do actually see in fact significant amounts of yellow within your exit, and in fact the three up escalators are yellow all the way through. All three sets of escalators up to Eldon Street on your exit are yellow, are they not?

**(Mr Spencer)** This test is showing that the connection from Crossrail to Eldon Street is running at the yellow level of service. They are congested.

1377. So if the Committee is trying to do a point of comparison with the British land alternative, you are swapping one scheme with a degree of congestion for another scheme with a degree of congestion?

**(Mr Spencer)** This is, as I have said, a relatively simplistic assessment of a particular scenario that we used to help us understand the relative benefits of Eldon Street. I have not even bothered, and excuse the phrase, but there was no merit in me doing the 35 per cent test of the 15,000 with ticket hall B as an entrance route. I have not done that in this analysis. If I had done, it would show a far worse situation than what I am showing with the Eldon Street scheme. I did not need to go there because it already patently failed; so I have not got a side by side comparison.

1378. This is the only test that has been run at Eldon Street, Mr Spencer. I am going to leave it to the Committee to do their own comparisons in terms of the levels of service. Can I add one point? You are assuming you can get four escalators in this modelling, are you not?

**(Mr Spencer)** At this point in time we were assessing a scheme with four escalators.

1379. It may only be possible to accommodate three, in which case the position would be worse?

**(Mr Spencer)** As I have said, this is a tool that you use iteratively going through a design process.

1380. I am not asking about the nature of pedroute. I am saying, if you had three escalators, if you could only accommodate three rather than four, it would be bound to be worse?

**(Mr Spencer)** I think you can see that in the test of the—. Do I have enough information? If we go to the initial test of Crossrail plus 15,000, you will see that with three escalators with the Crossrail scheme we go to red with this scenario.

1381. Yes, but for your scenario you have assumed four escalators going up to Eldon Street?

**(Mr Spencer)** And it goes to yellow.

1382. Even on four. So, if Eldon Street can only accommodate three, coming back to what I thought was a very simple question, the situation is bound to be worse for Eldon Street?

**(Mr Spencer)** It would not be worse because the escalators carry exactly the same numbers of people in both tests; so it would only be the same if you had two escalators.

1383. There would be fewer escalators and therefore less capacity to carry the same number of people?

**(Mr Spencer)** You are asking me if you have three escalators in the Crossrail scheme and three escalators in the Eldon Street scheme.

1384. No, Mr Spencer, I am asking you a perfectly simple question. Your Eldon Street entrance shows four escalators?

---

 The Petition of Corporation of London with British Land plc
 

---

(*Mr Spencer*) Correct.

1385. I am saying, if it did not prove possible to get four escalators in your Eldon Street exit as a matter of engineering and it could only have three in your scheme, the situation you have shown would be even worse?

(*Mr Spencer*) It would be the same as the test that I have done on the Crossrail scheme, which would be worse than what I am showing here.

1386. Thank you. Let us move on.

1387. **Mr Binley:** I am a simple country boy.

(*Mr Spencer*) So am I.

1388. And I am going to lose out a bit. It seems to me that we are here with a new project and yet that is showing yellow, red, pink, purple or green. It is showing that it is not satisfactory as a new project. How fine are the differences, in technical terms, between making it okay, recognising we are looking forward and recognising that we have never yet done a calculation about traffic on roads? How fine is the technical difference which makes this okay rather than not okay in terms of those projections?

(*Mr Spencer*) In terms of pedroute, year of opening, you would expect the entire station and the entire exit system to be either dark blue or light blue. That would be a way of putting it. What we are seeing here, and I would speculate here that there is no other facility within Crossrail that is showing a level of congestion above light blue. That is the design parameter, basically, for the Crossrail stations, and Mr Elvin may correct me here, but that is what Crossrail are clearly seeking to aspire to in terms of how they have expressed the design objectives for the project. In this scenario we are clearly seeing routine congestion, not with extreme tests but with perfectly realistic tests, which says to me that another solution is required if it is to be of consistent quality and consistent operational capacity and consistent future proofing with the whole of the rest of the project.

1389. Let me follow that up, because I want this exactly in my mind. In a normal scenario would the fine differentials between the colours have a line there which would say: this makes this acceptable and this does not? That is a very crude question, but you are an expert and I would like your view on that question and I recognise there will be others?

1390. (*Mr Spencer*) I think basically for a 2016 test of what is in effect a new station, is deemed to be a new station by London Underground, you would expect it to show nothing beyond the pale blue definition, which, to explain exactly how Crossrail interpret that, their characterisation of that in very simple terms is basically that they characterise that as occasionally congested. The green they characterise as regularly congested. We then move to yellow within the appraisal of the eastern ticket hall proposal, which is continuous congestion for a 15-minute period. Ideally, you would have no

congestion, and certainly if you went and looked at the Jubilee line on the day of opening there was no congestion. There is congestion subsequently because the demand has increased, but in a constrained environment like Euston, were there to be agreement to it being the access facility to Liverpool Street, you would expect it to be no more than occasionally congested and at a low level of occasional congestion, because clearly if there is a range you want to be at the bottom end of the range, not at the top end of the range where it could easily flick into the regularly congested.

1391. Thank you. I now have that answered.

1392. **Mr Elvin:** Of course, Mr Binley will recall, our pedroutes are not testing what we think the situation will be.

1393. **Mr Binley:** I understand that too.

1394. **Mr Elvin:** Can we look back at document 18. This is test three that we were looking at slightly earlier. This is Crossrail with an inflated base to take account of some of your sensitivity testing. I am going to go through just three of your points in a moment, but if you are wrong in your sensitivity testing—if we look at page 17—this is the total trips to Crossrail of 10,500, so it is higher than the Crossrail base, but even on that reduced number of sensitivity testing we see, in fact, the situation is significantly better—it is largely blue—and we can compare that with document 14, which is test one, without Crossrail, and we can see the relief that it has caused to the Central line which we were discussing earlier?

(*Mr Spencer*) Because I have got a more detailed output, I am struggling to actually find exactly the test that you are asking me to compare it to.

1395. They are on the screen.

(*Mr Spencer*) I can only see one on the screen at a time. It is the with Crossrail base.

1396. With the Crossrail base?

(*Mr Spencer*) With low growth.

1397. It is page 80 of 81 in the outputs you originally got, I think, if that helps.

(*Mr Spencer*) I think I am looking at the right one. I need to be certain I am looking at the right one. I was looking at the correct drawing.

1398. I appreciate you do not agree with this and you say, no, it needs a lot more sensitivities building in, but, even if you strip out some of your sensitivities, and this includes at least some of them, you get a massively better picture?

(*Mr Spencer*) If you stripped out every single one of my sensitivities.

1399. We have added additional flows into Crossrail?

---

The Petition of Corporation of London with British Land plc

---

*(Mr Spencer)* Where?

1400. You have had the documents. This is test three. It is two-way trips to the ticket hall 39,150, total trips from Crossrail 10,500, not 5,300?

*(Mr Spencer)* You have misunderstood the document. The 5,300 is a one-way flow, the 10,050 is your base forecast. So you have not got anything in here.

1401. Mr Spencer, just wait. This assumes only 16 gates. It assumes no improvement in the gateline?

*(Mr Spencer)* I refer to what I said previously where you disagreed with me, and you are wrong, that this includes none of our tests.

1402. Let us then come to the tests. A lot of the information the Committee will be familiar with and I am not going to spend a lot of time on it, but let us just look.

1403. **Sir Peter Soulsby:** For those of us who may not yet be seeing it in front of them, let me re-emphasise the fact that these all make the assumption that the control room has been moved?

1404. **Mr Elvin:** That is correct, and that is the first point I am going to touch on. I just want to look at each of your sensitivities. The first point I want to put is the point that Sir Peter has just raised, which is the SOR. We are going to put in a position statement from LUL at some point today which says that the SOR is planned to be removed in any event. You are not in any position to disagree with that, are you, Mr Spencer?

*(Mr Spencer)* No, not at all. If LUL say they are going to move it, then they are going to move it.

1405. There will, I hope, be a statement this morning at some point from LUL to assist the Committee on a number of the issues that the Committee there has heard, so you have got LUL's views on it?

*(Mr Spencer)* Can you help by telling me when, because it is not in the five year expenditure plan for TFL?

1406. **Mr Elvin:** Let me check my notes.

1407. **Sir Peter Soulsby:** Perhaps all we need to do at this stage as a committee is to note that the question when they are going to move it will be of interest to us.

1408. **Mr Elvin:** Absolutely. I hope that work is planned to be started later this year.

1409. **Sir Peter Soulsby:** We will wait until we see the note.

*(Mr Spencer)* I can only say that there is no funding for that in the five-year plan that was published about six months ago.

1410. **Mr Elvin:** We will just take it from LUL, Mr Spencer, if you will forgive me.

*(Mr Spencer)* To be frank the funding is an important dimension.

1411. **Sir Peter Soulsby:** No doubt. We do take the point. We will look very carefully at what the commitment is and the data that is against it.

*(Mr Spencer)* Thank you.

1412. **Mr Elvin:** The four increments plus the 35 per cent that you add, the first one is the one the Committee is very familiar with by now, which is the split of passengers between Liverpool Street and Moorgate—those choosing to come out at one entrance rather than another. I do not want to add a great deal to this debate because I am sure the Committee has probably heard more than it wants to on this issue, but your assumption is that the split in favour of Liverpool Street is something in the order of 65 or 70 per cent to Liverpool Street and 35 to 30 per cent in favour of Moorgate, in general terms?

*(Mr Spencer)* It is not general, it is 65 per cent 35 per cent specifically.

1413. You will forgive me for putting it the way I did. The position that Crossrail expects is 55 per cent for Moorgate, 45 per cent for Liverpool Street. Is that right?

*(Mr Spencer)* No, it is not correct. You have got 5,300 or 14,500, which is—

1414. **Mr Laurence:** 36:64.

1415. **Mr Elvin:** Yes, 36 per cent Liverpool Street, 64 percent Moorgate.

1416. **Sir Peter Soulsby:** Can you repeat those two sets of figures, just get them quite the clear.

1417. **Mr Elvin:** 45:55.

1418. **Mr Laurence:** You need to look at table 11.

1419. **Mr Elvin:** With respect to Mr Laurence, as Mr Spencer knows, Crossrail has agreed to adjust its position in the light of the city employment forecasts which were provided to us shortly before the Committee hearing started, so that split was revised.

*(Mr Spencer)* Yes, but you were not clear about that. There has been actually two revisions which you have made. The first one, which I am aware of is, is the 50:50 split, the second one I am not aware of, because I did not know the Moorgate figures within the rail plan analysis, I was only told that the Liverpool Street end had gone up to 8,400. I was not told what the figure for Moorgate was. You are now saying the split is 55:45 in favour of Liverpool Street.

1420. No, in favour of Moorgate: 55 per cent to Moorgate, 45 to Liverpool street, on the basis of the figures that were received just before the hearing started?

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* The figures that I received.

1421. No, no, no. This is not a blame passing exercise. I am saying that the exercise was only done later because the city provided the employment forecast on 12 January to us. Do you remember?

*(Mr Spencer)* We provided the City forecast.

1422. It does not matter. I am only trying to explain?

1423. **Sir Peter Soulsby:** What he needs to know is what Crossrail's prediction is of the split and what Mr Spencer's prediction of the split is. What is Crossrail's?

1424. **Mr Elvin:** Fifty-five percent to Moorgate, 45 percent to Liverpool Street?

1425. **Sir Peter Soulsby:** Mr Spencer, you are suggesting to us that it would be different.

*(Mr Spencer)* I am, although what I have tested specifically, because I have only tested the Liverpool Street end, is 65 per cent at Liverpool Street.

1426. You have tested what would happen if 65 per cent of passengers used the Liverpool Street line.

*(Mr Spencer)* Correct, and our test, as I have said, is specifically related to gateline capacity. It has subsequently been put through pedroutes.

1427. Of course we will be coming back to the question of walk times and these other issues, which will enable us to make a view as to which is the more realistic.

*(Mr Spencer)* Absolutely. It is a combination of the accessibility of the station location as well.

1428. I understand that. Mr Laurence.

1429. **Mr Laurence:** Yesterday Mr Elvin rebuked me for rising effectively to complain that a relevant document, namely the gateline standard telling you what you had to do in certain scenarios if future demand figures were unavailable, you had to add 120 per cent—he rebuked me for suggesting that it would be appropriate to put in front of the witness the relevant passage from the relevant standard, and I, duly rebuked, remained seated and said no more. I am getting up now because I think it is only fair to the witness if the figures 55 and 45 per cent appear somewhere in written form that they should be put in front of the witness so that he can see exactly what the provenance is of those numbers. In trying to assist a moment ago, I suggested to Mr Mould that one of our tables was possibly going to be helpful in that regard. Mr Elvin heard my remark and said those are your tables, not ours. My point is a simple one, sir. If the Committee is to be assisted and if fairness to the witness is to be maintained, if numbers are being quoted that are relevant for him to comment on they should be put in front of him; that is all.

1430. **Sir Peter Soulsby:** The Committee is very clear what Mr Spencer's assumptions are and why his reasoning has led him to adopt those particular assumptions. I think that is all we need to know at this stage and I do not think we need to go back at this stage to how Crossrail came to their different assumptions. At the moment it is Mr Spencer's assumptions that we are exploring. It has been pointed out to me that obviously we would not want Mr Spencer cross-examined on the detailed Crossrail assumptions. It is his assumptions we are exploring and we understand that.

1431. **Mr Elvin:** The fact is that what Crossrail have used is the Railplan, have they not?

*(Mr Spencer)* They certainly have.

1432. And what Crossrail have done is run the new employment figures through Railplan.

*(Mr Spencer)* They have.

1433. I am afraid you will have to take it from me on instructions but we cannot get to your figure of 65 per cent for Liverpool Street. You have been told that, have you not?

*(Mr Spencer)* No, I have not been told that because I was only told what the Liverpool Street prediction was. I was not told what the Moorgate prediction was so I could not know what the split was. The Railplan modelling for that that has been done to date has only taken on board the first significant part of our evidence, which is the employment rate. There are other equally important aspects of the Railplan model which still need to be amended and I would like to run through them quickly so that the Committee understands that we have only got to stage one here. If the origin pattern at Liverpool Street is so incorrect what confidence can we have that Crossrail understands where these people are coming from if it does not know where they are going to? We had superior information, up to date information, which could equally be put into the Railplan and I am confident that that would provide a higher level of certainty that what Railplan is saying is robust. I could not tell you what the outcome would be. The other thing which I have said repeatedly in my evidence is that what is required is a much more sophisticated understanding and a micro model of what goes on at Liverpool Street station. Railplan is not a model which should be used to provide station demand forecasts and that is in our evidence.

1434. Railplan is able to make strategic divisions between passengers. It does the big picture such as the splits, major destination share and those sorts of issues, precisely the sort of issue we are looking at at the moment.

*(Mr Spencer)* No, I disagree. Railplan will tell you how many passengers are going to be on Crossrail broadly speaking and it will give you a broad indication of what their requirements would be for ingress and egress from the individual stations. When you ask Railplan to differentiate between Moorgate and Liverpool Street a whole range of

---

**The Petition of Corporation of London with British Land plc**

---

relevant bits of information which are only superficially included within the Railplan model, like walk times, like destinations, it is not going to provide the correct answer. The only way to get the correct answer is if you have sufficient detail to put into the model which is being used. To do that Railplan can be made more detailed. It is a big area.

1435. Mr Spencer, if you were being remotely fair to Crossrail you would acknowledge that Railplan had taken account of local constraints, observed flows and the specific local circumstances. It says so in the Environmental Statement and, of course, Crossrail has had the benefit of many years to consider this specific issue. Perhaps we can look at the Environmental Statement, and I will give the references for the record: volume 8a, paragraph 2.37, "Forecasts are always thoroughly checked and where necessary adjusted. They draw on actual passenger accounts that are available using a statistical goodness of fit technique developed totally by London Underground and Transport for London", and in the same volume, paragraph 3.24, "Modes of access and egress also look at the local situation based on an assessment of the local situation and reflecting the local issues and constraints". It is not simply using the computer model without adjusting it to have regard to the various sensitivities you mentioned. It does do that and Crossrail has done that and has been looking at this issue for a significant period of time. It has not taken the rather simplistic approach which you appear to think is the case. That is right, is it not?

*(Mr Spencer)* It is somewhere between the two, I would say. The amount of time which existed between the publication of the Railplan demand forecasts in December 2004 and the publication of the Environmental Statement in February 2005 and the immense complexity of the project would lead me to conclude that there was not the opportunity to do any detailed post-model adjustment of the demand forecasts. The employment data in the base is so patently wrong that whatever adjustments and statistical goodness of fit you do it is not going to rectify what is an enormous error in the understanding of the employment distribution in the City of London.

1436. Mr Spencer, we do not accept your characterisation. Adjustments have been made and when the City produced the employment forecasts they were fed into the model to produce the split that I have put to you.

*(Mr Spencer)* My contention is that there is a lot more work to be done.

1437. Let us just get this position clear. You have not done any better modelling. You have used the same techniques in your approach. We have not got a position where we have moved on to some other method of forecasting. You have used the same broad approach that has been adopted by Crossrail. *(Mr Spencer)* As I said in my evidence yesterday, it is the only show in town.

1438. Thank you. Coming back to the Moorgate/Liverpool Street split, in terms of the question of the five minutes from the platform or the three minutes, whatever the position is, and we will give the note round when it is available, you suggest that there is some degree of attraction in terms of shops for those coming out of Crossrail.

*(Mr Spencer)* I think that is self-apparent at Liverpool Street.

1439. Yes, and at Moorgate. At Liverpool Street, which the Committee has seen, the Octagon Arcade has a Boots but it has also got things which are perhaps less generally attractive—pen shops, glass shops, and I think you can buy scented candles if you have an overwhelming desire for that. There is a Maxwell and Kennedy specialist chocolate shop. Close to Moorgate on the other hand I think there is not only a Boots in Moorfields; there is a Dixons and there is a Marks & Spencer and a Gap close to Moorgate Station, which is precisely the sort of thing people are looking at on a more general basis rather than scented candles and glass. Is that right?

*(Mr Spencer)* I do not know how to answer that question.

1440. **Sir Peter Soulsby:** I think the Committee gets the point and in fact members know both ends very well indeed. Some of us are regular patrons of shops at both ends.

*(Mr Spencer)* The retail units at Liverpool Street Station are there because people want to buy what they sell. If they did not want to buy what they sell they would not be there. Why people buy scented candles on the way to work in the morning is only idle speculation.

1441. **Mr Elvin:** Mr Spencer, I was only trying to make you smile.

1442. **Sir Peter Soulsby:** You have succeeded in making us all smile.

1443. **Mr Elvin:** The only point, and the Committee has got the point, is that there are shopping attractions very close to Moorgate as well.

*(Mr Spencer)* There clearly are shops near Moorgate but they are different types of shops.

1444. Marks & Spencer, Boots, Dixons and the like. *(Mr Spencer)* There is a huge Marks & Spencer just up the road.

1445. **Sir Peter Soulsby:** Mr Spencer, I am absolutely sure you do not need to go into this. Members of the Committee know both ends very well indeed.

1446. **Mr Binley:** I buy candles every week.

1447. **Mr Elvin:** Increment 2, which was your demand growth to 2016: I said I would not take that up because it makes practically no difference. I think it adds 300 passengers so we will not spend time on that.

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Spencer)* Well—

1448. I am sorry. I am not spending time on it, Mr Spencer. I am not asking you questions on it.

*(Mr Spencer)* I will not give an answer to a non-existent question.

1449. That is what evidence in chief is for. Increment 3 is the Crossrail market share and there the difference is between the Crossrail 13.3 per cent and your 20 per cent.

*(Mr Spencer)* Correct.

1450. And the basis of your approach is some sort of spreadsheet analysis which I do not think we have seen. Is that right?

*(Mr Spencer)* We have come to a view that we feel that the Crossrail market share should be 20 per cent. That is informed by a whole variety of pieces of information. That assumption has to be judged on the basis of the related evidence that is in my proof of evidence and exhibits and is supported by a continuing effort on our part to understand what Crossrail's estimate is of Liverpool Street. It is an assumption but it would not be fair to say that we have plucked the number out of the air.

1451. But it is based on data that no-one has had an opportunity to verify?

*(Mr Spencer)* That is not correct.

1452. We have not seen your spreadsheets, have we?

*(Mr Spencer)* We have clearly shared significant amounts of information.

1453. It is a simple question: we have not been provided with them.

*(Mr Spencer)* I am not sure that is correct. I think the information we gave to you in October included some analysis which did give spreadsheets which showed at that stage a view that the market share would be 23 per cent and it was quite a detailed spreadsheet. It was given to Mr Landells in our forecasting note of that. I think it was 29 October we gave it to Crossrail. Subsequently we have taken the view that as far as the evidence we have put before the Select Committee is concerned, we would adopt a market share of 20 per cent.

1454. I am not going to pursue that point any further because we take a different view. Can I understand this? One of the things that Railplan does is help to model market share, does it not? That is a strategic issue which it is perfectly capable of doing.

*(Mr Spencer)* At the strategic level it is perfectly capable of doing it. What I think is clear is that there are detailed aspects when dealing with a location such as the City of London and Liverpool Street which means that you have to infill Railplan with sufficient understanding to be confident that Railplan is giving an appropriate answer. As an

example, we talk about two minutes' difference in walk times. That is taking you to the eastern ticket hall. It is not taking you to Broadgate. It is not taking you to Bishopsgate. It is not taking you to the Gherkin.

1455. We are talking about market share. We have left the first point.

*(Mr Spencer)* I agree at the strategic level it is sufficient. At detailed level I think it needs more information than it currently has available to be able to give an accurate prediction.

1456. If I simply put to you that we have tested different destination distributions and we have looked at your data, such as we have, and we come up with the figure that we do, then all I can say to you is that we think you have exaggerated the market share.

*(Mr Spencer)* I can only rely on the evidence I have put before you. You clearly think I have exaggerated it. I think it is a forecast that the Select Committee should be mindful of and take seriously.

1457. **Sir Peter Soulsby:** I think we have understood what assumptions have been made in order to reach the picture that has been presented to us.

1458. **Mr Elvin:** And, Mr Spencer, you understand that we have put such data as we have had from you through Railplan, adjusted it to take account of the conditions as they are to produce our market share, so it is not as if we have disregarded what you have come up with.

*(Mr Spencer)* I can only repeat what I have said previously. We have made significant progress but there is still a fair way to go.

1459. Increment 4 only materialised this week; is that right? You asked us to run pedroutes to test your increments 1, 2 and 3 that we have just talked about, but the first we knew of increment 4 was when we received your evidence. Is it something that is a later thought?

*(Mr Spencer)* No, not at all. Obviously, we have had informal discussions with the staff at Cross London Rail Links and their consultants, and we have certainly in the past raised the point that we felt that the forecast for interchange between National Rail and Crossrail did not reflect what Crossrail would deliver as far as quality of accessibility for movements into the heart of the West End was concerned.

1460. You understand that our modelling accepts and takes into account that there are people going west of Crossrail and going into the West End and where the difference lies is not because we consider that there are no such interchanges but we do not

---

The Petition of Corporation of London with British Land plc

---

think that at quarter to nine in the morning there are likely to be that many people desperate to go shopping in the West End.

*(Mr Spencer)* People work in the West end.

1461. I appreciate that.

*(Mr Spencer)* Very substantial numbers of people work in the West End. It is not about the shopping area. The view that Crossrail takes, and we must be specific about numbers, is that more than 9,000 will use the Central Line, nearly 12,000 will use the subsurface lines and less than 4,000 will use Crossrail.

1462. At quarter to nine in the morning?

*(Mr Spencer)* It is within the period seven till ten.

1463. Is the assumption you have made simply a judgment that you have applied or is there specific modelling that has been done?

*(Mr Spencer)* It clearly is the judgment I have applied in terms of looking at the opportunities and understanding what Crossrail told us. I have got a pretty good understanding of where Crossrail goes and what it does, as do the team which assist me at my company. I have also read the Environmental Statement which says that this is what Crossrail does, and then I see this figure that Crossrail does not do. Clearly I see that in the same light that I see some of your forecasts for Liverpool Street are not typical.

1464. Railplan of course takes account of journey times, travel distances, walking distances and models of rail journeys in the south east. It is not just looking at a microcosm, is it?

*(Mr Spencer)* Absolutely.

1465. What you were saying to the Committee in effect is that you have simply applied your own views and taken a figure based on your own views rather than run a different model or different model assumptions.

*(Mr Spencer)* I think the Committee, on the face of it, already does completely understand what goes on at Liverpool Street Station.

1466. I am sorry, Mr Spencer. I am just trying to hope that you will give the Committee an answer to my question, which is that this is just a figure that you have adopted as a matter of judgment. It is not based on any detailed modelling. In other words, the Committee can apply their own judgment and decide whether you are right or not.

*(Mr Spencer)* Which is exactly what I was going to say.

1467. So the answer to my question is yes. Good. We will move on then. We have dealt with the SLR. If we look at your table 27 at page 13 and table 28 of document A16, and the Committee will be relieved to hear that I am not going to analyse the figures; I just want to look at the sequence, we see there that

table 27 adds your various increments 1, 2 and 3.<sup>3</sup> Increment 1 adds the Liverpool Street and Moorgate split you have assumed. Increment 2 adds the passenger growth. Increment 3 adds the market share and table 28 adds these extra passengers you have assumed travelling west.

*(Mr Spencer)* Yes.

1468. We have modelled all of those now with pedroute so the Committee have our pedroutes to represent those various increments.

*(Mr Spencer)* You have supplied the Committee with that information.

1469. The Committee has also had the 35 per cent on top of your scenario before today?

*(Mr Spencer)* They have got 35 per cent on top of every scenario, even without Crossrail.

1470. So the Committee can take the view that we have modelled what appears in these tables so that the Committee can then apply its own judgment to these various items that have been added and if the Committee thinks that Crossrail is more likely to be right on those issues than you, then, of course, it makes the judgment as to whether those increments that have been added are right or not. The fewer of those increments that are added or if the Committee is sceptical that they should be added to the extent you say they should, the better the position will be in comparison with the pedroutes which have been produced.

*(Mr Spencer)* Our assessment and that of the City of London is that on the basis of your own assessment the outcome is unsatisfactory. We have then tested a number of scenarios which increasingly become unsatisfactory.

1471. The answer to my question is yes, that the more you retreat from your assumptions the better the position gets?

*(Mr Spencer)* The less unsatisfactory the position gets.

1472. That is terminology and I am not going to worry the Committee with that. What it comes down to in bald terms is what is the position with the Moorgate/Liverpool Street split, what is the position on market share and what is the position on simply taking a figure and expanding the Crossrail figure based on their modelling of travelling passengers and then the 35 per cent. That is what all of this comes down to, does it not, because that is what those increments are involved in? That is the issue.

*(Mr Spencer)* My view is quite clearly set out in our evidence. My evidence is to assist the Committee in reaching a conclusion. It is quite clear what I have

---

<sup>3</sup> Committee Ref: A16, Station Passenger Entry Exit Forecast Sensitivity Tests (SCN-20060126-003).

---

**The Petition of Corporation of London with British Land plc**

---

done and so I agree with you: that is what I have done.

1473. **Mr Elvin:** Mr Spencer, thank you very much.

1474. **Sir Peter Soulsby:** Mr Laurence, just before you come back can I remark on behalf of the Committee that this session has been very helpful to us in that I am very sure—and this may help you in what you are now about to ask the witness—that the Committee does now have quite a clear view of how the Promoter and the Petitioners have arrived at their particular forecasts and the assumptions that they have made in arriving at them. We have also got a fairly clear view now of both the strengths and the weaknesses of the modelling approach that has been used and the various techniques that have been used.

1475. **Mr Laurence:** It is of great help, sir. I learned from Mr Ryan some years ago, who was a famous practitioner in front of Parliament, Sir Gerard Ryan, to use the following form of words. Mr Spencer, I intend no discourtesy to you in indicating that I have no questions for you in re-examination. I had plenty prepared at one o'clock this morning, sir, but not only in the light of what you have just said but also in the light of what Mr Spencer has said, it seems to me that I do not have to ask questions in re-examination. Can I just mention one matter of information? Mr Sowerby sitting behind me, who is of the same firm to which Mr Spencer belongs and which is responsible for a great deal of the backroom work in this case, and to whom tribute is due, incidentally, tells me that it was in November 2005 that CLRL requested spreadsheets with 6,000 origins of City employees used to derive market share and it was at the end of that month that that information was provided. I think Mr Spencer's recollection is correct. He was struggling but that is the position. Sir, with your leave, I will give Mr Spencer a moment to clear his papers away unless the Committee has some further questions.

1476. **Sir Peter Soulsby:** Just bear with me for a moment (pause for advice). You may recall that I mentioned yesterday that it would be useful for us to have an opportunity to another look at the model out there while Mr Spencer is with us. I was in any case going to adjourn for about 10 minutes at a convenient time this morning. What I would like to suggest is that we do now adjourn for 10 minutes to enable members to stretch their legs and also take the opportunity while Mr Spencer is with us to informally look at the model after that. I am sure that both counsel will want to keep a close watch over us to make sure we do not say or hear anything we ought not to. I suggest we adjourn now until about 25 minutes past 11 and then go into the corridor.

1477. **Mr Laurence:** I have just one further suggestion, sir. Would it be helpful if Mr Chapman was present at the same time since he is about to be called and a great deal of what he has to say is relevant?

1478. **Sir Peter Soulsby:** I am sure that would be helpful to us.

*After a short break*

1479. **Sir Peter Soulsby:** For the record, during the short adjournment we had an opportunity to look at the models provided by the Promoters and Petitioners and were very helpfully talked through the inter-relation of the various parts of the Liverpool Street and Moorgate Stations as they are and as they are proposed to be. Mr Elvin?

1480. **Mr Elvin:** Sir, I know you were expecting to see Mr Laurence on his feet. The only reason I am here is that I understand one of the documents that the Committee requested from us was circulated and I had not realised it had been, which is what I am going to call A20.

1481. **Sir Peter Soulsby:** It does not need to be A20. It already has a number at the top, which is 109 and that is how we will note it.<sup>4</sup>

1482. **Mr Elvin:** Sir, can I just introduce it? It is the plan that was produced and that Mr Hopkins requested two days ago. It is our version of the walk times from the platform rather than from the ticket halls. This gives you two sets of concentric circles in blue of the five and 10 minute walk times from Liverpool Street coming from the platform and in red the five and 10 minute walk times from Moorgate coming from the Crossrail platform.

1483. **Sir Peter Soulsby:** And this is from the platform centre?

1484. **Mr Elvin:** I think it is from the appropriate ends of the Crossrail platform. I do not think it is from the centre. I think it is from the points at each end of the platform.

1485. **Sir Peter Soulsby:** I cannot recall what was said. Were we going to see some figures arising from applying this?

1486. **Mr Elvin:** The reason I was surprised to find it circulated is that I was only going to circulate it when the figures had come as well.

1487. **Sir Peter Soulsby:** I note that it does say on the bottom "Page 1 of 3" so it may be that pages 2 and 3 are the ones that we are waiting for. Mr Laurence?

1488. **Mr Laurence:** I will call Mr Chapman.

---

<sup>4</sup> Crossrail Ref: P18, Amended City of London Plan to show 5 and 10 minutes walk time from proposed Liverpool St and Moorgate Crossrail platforms. (LONDLB-2604-109)

---

The Petition of Corporation of London with British Land plc

---

**Mr Tim Chapman**, sworn

Examined by **Mr Laurence**

1489. Are you Tim Chapman and a professional civil engineer specialised in geotechnical engineering?

**(Mr Chapman)** I am.

1490. Would you tell the Committee briefly of your relevant experience for the purposes of the evidence you are intending to give today?

**(Mr Chapman)** Certainly. I have degrees in civil engineering and soil mechanics. Most of my career has been focused on major buildings in the London area, designing foundations, deep basements and assessing the effects of new buildings on existing tunnels and new tunnels on existing buildings. I have chartered engineer status in both the UK and Ireland and am a Fellow of the Institution of Civil Engineers. Additionally I am a member of the British Geotechnical Association, the British Tunnelling Society, the Institution of Engineers of Ireland, the Geotechnical Society of Ireland and the International Society for Soil Mechanics and Geotechnical Engineering. I have written more than 20 refereed papers, a book on retaining wall design and am frequently invited to speak on geotechnical matters to professional audiences.

1491. You have been employed by Arup since September 1987 and are now a director of that company.

**(Mr Chapman)** Correct.

1492. Tell the Committee something of your knowledge of basements, substructures and things of that kind.

**(Mr Chapman)** Throughout my career I have worked on deep basements and substructures for major buildings, mainly in London but also in a number of overseas locations. I have been responsible for the foundations and basements of the Royal Opera House, the Swiss Re tower and large buildings at Canary Wharf as well as many others. I have a lot of experience assessing the effects of new buildings on tunnels and new tunnels on buildings, including sometimes working for the infrastructure protection team who safeguard the Victoria, Bakerloo and Central Lines. I should say "I" am not just me; I am giving evidence on behalf of a team of people in Arup who have got major experience of designing facilities for LUL and other standards for stations including Kings Cross, Victoria and those connected with the Channel Tunnel Rail Link and other Underground station locations in the UK and also internationally.

1493. It is right, is it not, that you have had some involvement over the years with the Crossrail scheme itself?

**(Mr Chapman)** Correct. In 1992 I was seconded into the Crossrail project team as one of the key staff for the execution and interpretation of the central area site investigation, which included bore holes carried out in the area around Liverpool Street. In 1993 for

the previous scheme I was lead geotechnical designer for the scheme's two ticket hall boxes at Tottenham Court Road and since then I have liaised several times with the Crossrail team about new building developments over its route.

1494. Tell the Committee if you would what Arup was employed by the British Land Company plc to advise about.

**(Mr Chapman)** British Land initially, in February 2005, engaged us to provide technical advice in relation to their petition on the Crossrail Bill for their affected properties. I have directed Arup's work under this commission. More recently British Land also engaged Steer Davies Gleave's Mr Spencer to advise on transport modelling issues. He explained his belief about what was happening to the passengers around Liverpool Street Station and we were then asked to assist in coming up with solutions that could help mitigate the problems. One of the suggestions at that time was that a bigger ticket hall was not possible. Summarise if you would what the intention and purpose of the evidence you are about to give to the Committee is.

**(Mr Chapman)** The intention of what I am about to say is to demonstrate that creating increased capacity to deal with the extra passenger flows predicted for the eastern end of Liverpool Street Station is feasible at likely affordable cost. Two options exist: one that creates a new facility, the Eldon Street ticket hall, which would enable Crossrail passengers destined for the street to do so much more quickly than under the current scheme and avoid a conflict with interchanging passengers in the existing station. The second one is one that was suggested by the Promoter which massively expands the existing ticket hall B where the congestion would otherwise occur. Those have been termed options 1 and 6, ironically based on our discussions with the Promoter. Option 1 is the Eldon Street scheme and option 6 is the massively expanded ticket hall B.

1495. Options 2, 3, 4 and 5 are not going to be the subject of any evidence in detail by you today but there have been other options under discussion in the last few months, have there not, which means that you have not chosen the number 6 by accident for the massively enhanced ticket hall scheme?

**(Mr Chapman)** No. We had a meeting with the Promoters before Christmas where we went through the options and our suggestion, the Eldon Street scheme, was option 1 and the Promoter at that stage indicated that there were some other options which were options 2 to 5, all of which had a number of issues connected with them which meant that they were less favourable and then Richard Davies, who is the station designer for Liverpool Street, who had worked for London Underground on the station, suggested option 6 and both sides thought that option 6 was an excellent idea and could be made to work.

---

 The Petition of Corporation of London with British Land plc
 

---

1496. I circulated at a very early stage of these proceedings a bundle, sir, which, if you remember, included Mr Weiss's appendix A and then there were two figures, A and B, together with figures 1 to 6. If you cannot easily put your hand on those maybe I could ask for you to be provided with spare copies.

*(Mr Chapman)* It would be helpful, Mr Laurence, for figures 1 to 6 to be made available because I will be using them in my presentation.

1497. In addition, Mr Chapman, I have as a separate document some tables, 1, 2 and 3. Are those separately available to be handed to the Committee?

*(Mr Chapman)* They are.

1498. Perhaps we could have figure 1 on the screen.

*(Mr Chapman)* I can use figure A.

1499. Sir Peter Soulsby: For clarity I will number this A20. That is the evidence of Mr Tim Chapman.<sup>5</sup>

1500. **Mr Laurence:** You say you are very happy to deal with things by reference to figure A.

*(Mr Chapman)* Yes.

1501. **Mr Laurence:** Some of this you have already drawn to the Committee's attention outside in the corridor but what would you like to say about this figure numbering? To assist the Committee you have put some letters on to your figures at various points that I am bound to say I cannot see as clearly on the screen as I can on my own paper copy. Would you say something about the figure we are now looking at?

*(Mr Chapman)* If the Committee are happy I have a laser pen and I can point at the big screen to indicate locations. The visit outside was very useful because you saw the model in three dimensions and paper can never really replicate that properly. The Crossrail scheme is the light green/khaki colour which goes along between the platforms here (indicating) to the ticket hall at point M here.

1502. For the record you have indicated a route starting with the letter F at Livergate eastern end and proceeding towards what we have come to call point F.

*(Mr Chapman)* Correct. The important thing to recognise is that there are two banks of escalators. There is a lower bank of escalators from platform 2 at intermediate level and there is a higher bank here on Liverpool Street. The reason for two banks of escalators, the strange dog-leg shape, is because the passengers have to pass beneath the Metropolitan Line which was very clear when we saw that on the model.

1503. Your escalators are being shown between the positions letters M and G, that is the deeper set, and E2 or H and J?

*(Mr Chapman)* Correct. The point M is the critical point in the station where the existing ticket hall meets Crossrail.

1504. **Sir Peter Soulsby:** A point we have become very familiar with.

*(Mr Chapman)* Initially, as part of our work for British Land, before the capacity issue arose, we were asked to consider alternatives to the underground passageway proposed for Liverpool Street. We looked at many alternative routes for connecting to Crossrail station platforms right up to street level and to the ticket hall B, and we agreed with Crossrail at that stage that the route that they had shown was optimal. We could not find a better route for going from Crossrail platforms to ticket hall B.

1505. We can take this section of your evidence very quickly. You are not here, obviously, to give evidence about figures to the Committee. Is it right though that you have informed yourself what it is that SDG through Mr Spencer are predicting and have accordingly worked on and sought to improve your option 1 in the light of those predictions?

*(Mr Chapman)* That is correct. We have been working with SDG very closely for quite a long period of time going through their figures to understand how best we can find a way of processing the people and getting people from Crossrail to the street.

1506. Have you been able as a result of those discussions to form a view as to where the critical points are and where the existing station potentially has insufficient capacity?

*(Mr Chapman)* Yes, I have. It is worth while emphasising very quickly the areas where the particular figures I am using to base the design of the station on. I understand the origin of the figures SDG have presented and I have heard the evidence today. I am not here to talk about numbers today. I do not have the knowledge to do so. I am a civil engineer who designs facilities. SDG have given us numbers. We went through the numbers with SDG. I understand the origin of them, I understand the implication of station design but I am not here to give evidence on the numbers, so I will very briefly summarise what I understand the issues are that SDG have predicted over and above the original Crossrail figures. There are basically two critical lines. There is a passageway from the platform level up to point M and that has got a certain flow in it. With the Crossrail scheme people can leave from an adjoining passageway, a long way, for obvious reasons, so if they start at the bottom they are assumed to come out at the top and vice versa. SDG's figures basically show an increase of 9,200 in a three hour peak leaving the platforms coming up to point M and roughly 4,000 extra people going along that tunnel. The difference is basically 9,200 people which is roughly equivalent to one escalator full or four gates full, in terms of issues you have had

---

<sup>5</sup> Committee Ref: A20, Crossrail at Liverpool Street Station—Current Crossrail Proposals (SCN-20060126-004).

---

**The Petition of Corporation of London with British Land plc**

---

explained to you so far, coming out and 4,000 people going out which is roughly a half or a third of an escalator full and just over one gate.

1507. **Sir Peter Soulsby:** A useful rule of thumb.

1508. **Mr Laurence:** Mr Chapman, scrutinising the figures as you have, you have been able to arrive at an approximation of the number of passengers passing point M on Mr Spencer's predictions and have accordingly been able to identify the critical points where the existing station has insufficient capacity. If I can ask you to summarise that by reference to paragraph 10 of your proof, please.

**(Mr Chapman)** There is an issue on the number of escalators that are provided along the passageway, and I will touch on that later because that is quite a subtle point. Three or four have been mentioned and strictly we agreed that three may work but four becomes important from an operational point of view, but I will explain that later on, if I may. In terms of the ticket hall, there are three principal areas of conflict. There is the conflict with the Central Line area, around about here.

1509. M and P, for the record.

**(Mr Chapman)** Yes. There is the gateline running across here, the process for getting people through the ticket barriers. The third point is getting them to street level. Of the 15,600 people that SDG predict leave Crossrail at the station in a three-hourly peak, 14,500 of them are destined for street level to go to the offices in the area, and only 1,100 interchange to other lines. Of the extra Crossrail people coming through along here, the 9,000 extra, most of them want to get to street level. Once they come into the ticket hall level B, there is still more or less a concourse level for the main Liverpool Street Station which is of course one level underground. To get to street level there is an additional requirement to get people to where they want to go to, it is called vertical circulation.

1510. If the Committee are satisfied at the end of the day, having heard the evidence of Mr Weiss and Mr Spencer, that there are unacceptable risks that the current Underground ticket hall B will be able to cope with the flows predicted by those witnesses, then they are going to want help with what the practical solution in the circumstances is. I think it was with that possibility in mind that you were commissioned to devise this new facility, of which we have already heard something so far?

**(Mr Chapman)** That is correct.

1511. What was the challenge, and I hope that word is one that one can use advisedly.

**(Mr Chapman)** Absolutely; we wanted to find a new location that would fulfil the criteria given in my table 1.

1512. Your table, for the record, is headed Table 1 "Aims for New Eastern Ticket Hall Serving Crossrail Liverpool Street Station".<sup>6</sup> It is divided into two sections, under two columns, Aim and Rationale. Section one has seven paragraphs, section two has paragraphs eight to ten. Do you want to say something in summary about what table 1 is seeking to tell the Committee.

**(Mr Chapman)** Certainly. Table 1 is our aims, the loose aims that we chose to try and produce a design of a ticket hall to serve Crossrail's Liverpool Street Station. We have not explicitly agreed these aims with the Promoter but we discussed them in meetings and I believe they are shared aims. I do not believe they are controversial.

1513. Just give an example of some of them so that anyone reading the transcript can have the benefit of knowing what you think should be the aims here?

**(Mr Chapman)** It is basically permitting passengers to directly enter and exit Crossrail Station to or from street without major conflict with other users. To have a ticket hall, passageway and escalators of sufficient size for demand and to minimise the Underground walking route from platform to street. I had not seen the figure that has just been circulated by Mr Elvin but I was interested, that has a very small circle around Liverpool Street which is a function of the very long route that it takes to get from platform to street. The other solution would shorten that route quite considerably. Basically we have also tried to minimise the effect on existing buildings, because it is obviously in a very expensive area, with some concern for public cost. There is a desire to buy a building or some buildings to produce a ticket hall and that could be very expensive. We wanted to locate it only in the vicinity of Crossrail's passage to street because that has already been provided. You could do other escalators going to other places in the City but that would massively increase the cost, providing a lot more tunnelling, a lot more escalators, a lot more running costs and that did not seem to prudent to us if there was an option that would avoid that. We wanted to provide interchange with other Underground lines and, of course, provide total accessibility. I speak as the father of twin infants so although I am reasonably able-bodied, frequently travelling on public transport, I find it incredibly difficult. They are now five so our days of push-chairs are just coming to an end. It is incredibly difficult to get around London on public transport with small children. Thankfully I am able-bodied but I do know what it is like to try and use public transport. Mr Berryman outside explained his work on the DLR and I would pay tribute to the DLR it is much easier for someone who is mobility impaired to use the DLR than London Underground.

1514. **Sir Peter Soulsby:** This was a point made earlier on looking at the model. Of course it is important to provide access for wheelchair users but

---

<sup>6</sup> Committee Ref: A20, Aims for New Eastern Ticket Hall serving Crossrail (SCN-20060126-005).

---

**The Petition of Corporation of London with British Land plc**

---

a significant number of these users of these facilities are others, as you yourself have experienced, like parents with children.

*(Mr Chapman)* The last three points we suggested are a little bit presumptuous of us. They are points the Committee may think otherwise on. They were issues we chose to try and simplify the approval process when it was provided. We are trying to produce a solution that minimises the need to change the Promoters current scheme and develop solutions which can be developed in parallel with us and not increase costs significantly.

1515. **Mr Laurence:** Is there anything under the heading “Rationale” for any of these 10 aims you have mentioned, Mr Chapman, that you would particularly wish to mention to the Committee now or do they more or less speak for themselves?

*(Mr Chapman)* I think they speak for themselves. If I can mention point two and point seven for clarity. Point two is I have worked on a number of schemes across London. Victoria has been discussed yesterday and the day before as an example of what happens with a station which is built with insufficient capacity. There has been some talk about the project to upgrade capacity at Victoria. I would observe that the cost of doing so at Victoria I believe cost £500 million, according to TfL’s press release, to provide extra escalators down to serve the Victoria Line. If these facilities are provided later, in addition to the disruption, the cost of doing so can be horrendous.

1516. The time to do it is now and the way to do it is properly.

*(Mr Chapman)* I do not think anybody in this room would disagree with that statement.

1517. What do you want to say about point seven?

*(Mr Chapman)* Point seven is the accessibility issue again. Obviously the DDA puts an onus on the need to overcome physical barriers to entry. I will touch on this point later on but just to raise the point that the current scheme connects street level to the platforms. Later on I will explain about connecting the Liverpool Street concourse to street level because as we have described a lot of the people who are mobility impaired are people who have taken the Stansted Express, a large number of people who come in by train to Liverpool Street. We have discussed already that it is the busiest station in the UK. There are an awful lot of people who wish to use Crossrail and wish to do so from Liverpool Street mainline station, Stansted and other passengers rather than just people entering from street.

1518. Go back to your proof, if you would, at paragraph 13. You have told us there are two options which as far as you are aware are seriously potentially in the frame, options one and six. What is your present understanding as to the position of CLRL in connection with those two options? Which one do they appear to favour?

*(Mr Chapman)* In a meeting with the Promoters and the Department for Transport two to three weeks ago they indicated very strongly that they would

seek to choose option six. They prefer the option of expanding ticket hall B to produce whatever capacity is required rather than choosing an alternative solution. To my mind that is a little bit premature at the moment to make a decision because I think both solutions offer advantages. I agree totally their idea of increasing the size of ticket hall B could offer advantages over option one but equally there are a number of advantages and costs which need to be understood before I would make that decision.

1519. Let us come to that in a moment. It goes without saying, in the light of what you have just said, perhaps I should just say it anyway because otherwise Mr Elvin might, any discussions you have been having about alternative options with those who advise the Promoters, while they have not been without prejudice, they have certainly been without prejudice to the Promoters’ position before this Committee that nothing needs to be done?

*(Mr Chapman)* Yes. That was made very clear by the Promoters. They entered into discussions with us in the spirit of trying to be helpful and a what if scenario. They were very clear at that stage that they did not accept the figures but they were happy to consider what might come next.

1520. **Sir Peter Soulsby:** We draw no conclusions from the fact that they are still talking.

1521. **Mr Laurence:** Could you say something about the constraints, further to what you mentioned in the corridor but could not be taken as evidence, Mr Chapman.

*(Mr Chapman)* I will do. Can I have figure 2 please.<sup>7</sup> I should preface, a general point about our figures is that we have used available information to us to produce our figures. We have not had electronic copies of information from the Promoters. Our figures we believe are accurate, probably to within about a metre, but they are based on scans and images that we have had to collect from previous work we have done ourselves in the area and information available in the public domain from CLRL; they are not based on the Promoters’ information. If there is an instruction to work later, I would hope we can improve these figures somewhat but I believe they are accurate for the purposes that we have, I believe they are accurate to about a metre.

1522. With that qualification, what are the constraints you want to draw to the Committee’s attention?

*(Mr Chapman)* The area we are talking about is from the top of the upper bank of escalators heading eastwards. It is from this point here towards point M Anywhere west of that coming this way, Crossrail’s route is deep underground and is heavily constrained by buildings. Based on Crossrail’s

---

<sup>7</sup> Committee Ref: A20, Crossrail at Liverpool Street Station—Obstructions/Constraints (LONDLB-EXH03-004).

---

 The Petition of Corporation of London with British Land plc
 

---

chosen route from the platforms coming up to the point at the top of the escalators, without demolishing a building, on the face of it, there is not a very easy position for a new ticket hall to be provided. We have looked at many options, as have the Promoters, as I said, to arrive at options one and six. To the best of my knowledge, and in all of the discussions I have had with them, no-one has come up with an option that is better than those two. The main reason for that is because this area below street level is full of underground restrictions.

1523. Sorry if I am interrupting you, the area we are talking about, by reference to your figure 1, which perhaps the Committee can have to hand, is the area at and to the immediate east of point J.  
(*Mr Chapman*) Figure A, yes.

1524. I am sorry, on your figure A, yes.  
(*Mr Chapman*) Correct.

1525. Can you bear that in mind, for the record, as you go through, Mr Chapman. It is very helpful if you can indicate on the screen, but particularly for those Members of the Committee who are not here to hear what you are saying in order that they can follow the transcript and if you use letters by reference to figure A.  
(*Mr Chapman*) Okay. Mrs James cannot see the screen very well at her angle.

1526. **Mrs James:** I have just gone back to figure A. You mentioned a letter and I missed the letter?  
(*Mr Chapman*) It is letter J. Basically letter J corresponds to the line I have drawn on figure 2 which shows shallow depth heading eastwards from letter J. This stretch of the Metropolitan Line was built in the early 1870s I believe and was a forerunner to Crossrail. There was an Underground link from Liverpool Street to Paddington provided by our very ambitious forefathers, part of the remnant of which is called the Queen Victoria Curve which is this tunnel here. There was a connection from the Metropolitan Line to all the other mainline stations, so there could be through running of trains along the Metropolitan Line. The Queen Victoria Curve allowed trains coming to Liverpool Street from the North to feed down on to the Metropolitan Line and head across to King's Cross Station, Paddington Station and on to the Great Western Line going westwards out of London. The Queen Victoria Curve still exists although it has been used very heavily by London Underground over the years. We have not had the option to go into the Queen Victoria Curve, although I understand the Promoter has, and I believe it is very full of sensitive electronic equipment, some of which has been very recently installed, which will cost many millions of pounds if they have to be moved. The Queen Victoria Curve is a major Victorian Underground railway tunnel which now has an awful lot of modern equipment. The first constraint we have is on the southern side of the Promoters' passageway, we have this piece of Victorian engineering. We have, also, the Railway Tavern Public House, which is known to some

people in the room, which is a grade two listed building on the south side of the passageway. The passageway passes 100 metres away from its front door. Obviously one of the aims of the Promoters is to limit the effect on listed buildings. On the north side the situation becomes even more interesting, there is a large concrete box which I believe was built in the 1910s as a London Underground ticket hall serving Broadgate Station. I do not know that exactly, I have been trying to find out more information. The Promoters may have better information than I do about that.

1527. What sort of box did you say it was?  
(*Mr Chapman*) It is a large concrete box. Basically it was an old ticket hall facility for Broadgate Station which is now full of EDF traction control equipment, I believe.

1528. I am just looking to see on your figure 2 if you have labelled it as anything?  
(*Mr Chapman*) I have. I have labelled it as the EDF power transformer. It is traction control, I understand, for the current sub-surface lines. Again, the Promoters may have better information than I do on these points. I am not here as a historian.

1529. **Sir Peter Soulsby:** I do not think we need to go into any more detail. We can see what constraint it provides.  
(*Mr Chapman*) Yes. Basically, the passageway that the Promoters are providing, which we would advocate needs to be provided, cuts through Victoria Curve and is hemmed in by the Railway Tavern to the south and by the EDF power transformer and a number of shafts. I believe these two tunnels running to the west are escalator tunnels heading down to the old Central Line which are now defunct. To the north of it there are a number of shafts and other facilities going underneath the foundations of Liverpool Street. The building at 100 Liverpool Street, UBS's headquarters, has been built taking those into account.

1530. **Mr Laurence:** Mr Chapman, can we turn to the heading of your evidence, Suggested Solutions. We told the Committee there was a particular area on which your research was concentrated. Can you say something about that area and what kind of ticket hall you were contemplating would need to be fitted into the area you were searching?  
(*Mr Chapman*) Certainly. The hunt for a position started off at point M and headed westwards. Very quickly we realised the space in front of 100 Liverpool Street would be very, very expensive to provide a facility because not only would we have to demolish current large elements of reinforced concrete and shafts but we would have to relocate traction control for the sub-surface lines. We went into that room to see if it was possibly defunct or whether it was approaching the end of its life. A colleague of mine who is an electrical engineer visited it in August of last year and found a large amount of fully functioning equipment filling the

---

 The Petition of Corporation of London with British Land plc
 

---

room. I do not know if the Promoters have further information on that but if they do they have not shared it with us.

1531. Your search immediately to the west of point M suggested that you needed to go further west?

*(Mr Chapman)* Further west, so we went to point J. The ticket hall is quite a large element. I think you have had a lot of evidence about the size of ticket hall requirements, basically it is required to run off new gates and gatelines and other things like that. It is not a small box.

1532. Before you go further, you referred to point J, I was wondering if the Committee might be assisted, as I certainly was, to see your figure B, as you describe the search going further west. Could that be put up on the screen. Just for the assistance of the Committee, what I suggested to Mr Chapman he do was to prepare a version to indicate what the Promoters' scheme involved by reference to figure B.<sup>8</sup>

*(Mr Chapman)* This is the same area, the same scheme as shown on the model and shown on my other drawings but based at street level. The grey is existing buildings and between 100 Liverpool Street and the Railway Tavern is Liverpool Street, the southern area of it, and there is British Land's forecourt area in front of Liverpool Street which stretches out to a line in blue. That has been designated by the Promoters as parcel 116. The property line runs along the blue line but basically the area to the north of the point J is full of equipment. It is only as you go further west towards the junction of Eldon Street and Blomfield Street that we start to find sufficient space where we could put a facility. We have had a number of useful discussions with Mr Weiss and the Corporation indicated that this was a sufficiently severe problem for them, that they would be happy to have discussions about remodelling Eldon Street and Blomfield Street so that a ticket hall could be provided at a location in that area. With that information it enabled us to find a location along Blomfield Street terminating at the point I am showing here, unfortunately it does not have a letter, it is the northern end of what the Promoters call parcel 113.

1533. Where Blomfield Street becomes Eldon Street?  
*(Mr Chapman)* Correct.

1534. Is that more or less right?  
*(Mr Chapman)* Yes.

1535. That is the solution that you have termed option 1 or the Ove Arup option. Would it be useful to look quickly at figures 3 and 4 in order to see that illustrated in two different ways, starting from figure 3?

*(Mr Chapman)* Figure 3 is a helpful figure because it shows a plan of the area.<sup>9</sup> You can see this better on your screen in front of you than you can on the big screen. There are orange and brown dashed lines which show the Promoters' scheme and superimposed on that we put a green scheme which is the alternative scheme, option 1 of what has been called the Arup scheme. As I mentioned before, there are two elements of it, one is the new ticket hall facility here which is underground and reaches overground here at, excuse the expression, the arm-pit of Eldon Street and Blomfield Street, just where the two roads join. It feeds into the surrounding street network and in discussion with Mr Weiss he would be happy, on the Corporation's behalf, to consider remodelling the pavements to facilitate a large number of people who would be coming out of this exit. The number of people we have exiting here is of the order of 14,500 people coming from Crossrail to street. There number of people we have interchanging is quite small, it is 1,100 people. We have been able to make this passageway considerably narrower than the Promoters' scheme.

1536. **Sir Peter Soulsby:** Can you give us those figures again. I asked yesterday about the numbers at this interchange.

*(Mr Chapman)* My understanding of Mr Spencer's figures is there are 15,600 people leaving Crossrail, of whom 1,100 want to interchange and 14,500 want to go to street.

1537. This is designed with those proportions in mind?

*(Mr Chapman)* Correct.

1538. **Mrs James:** Bear with me, we have been and had a look at the model outside. Is the grey shaded building on the top left hand side the UBS building?  
*(Mr Chapman)* This is UBS here.

1539. Yes.

*(Mr Chapman)* What is not shown here is the Octagon and the Richard Serra statue which you saw on your visit. It feeds up into the area just before the levels go into Broadgate Circle.

1540. **Mr Binley:** Can you remind us again of how many people are employed in that building?  
*(Mr Chapman)* I am afraid I have no idea.

1541. **Mr Binley:** Maybe you can find out and let us know.

1542. **Mr Laurence:** In the UBS building, yes. You have mentioned the proposed option one ticket hall shown on your figure three there, Mr Chapman, as being situated almost exactly under Blomfield Street, is that right?

<sup>8</sup> Committee Ref: A20, Crossrail at Liverpool Street Station—Current Crossrail Proposals (SCN-20060126-006).

<sup>9</sup> Committee Ref: A20, Suggested Alternative Layout (LONDLB-EXH03-005).

---

The Petition of Corporation of London with British Land plc

---

*(Mr Chapman)* That is correct.

1543. You have mentioned that. Have you prepared a table which is before the Committee, table 2, which sets out to identify some objectives relevant to your thinking about that ticket hall?<sup>10</sup>

*(Mr Chapman)* Yes. Table 2 shows the basic design criteria that we used for the ticket hall.

1544. For the record its heading is functional capacity required from the new eastern ticket hall serving Crossrail Liverpool Street Station.

*(Mr Chapman)* The numbers are derived from the 14,500 people who are exiting Crossrail. I cannot remember the exact numbers, I think it is about two or three thousand people who are entering and factored up by the 35 per cent factor that has been discussed so far. The 25,000 people is intended to be the SDG predicted capacity plus 35 per cent.

1545. Is there anything in table 2 that you would want particularly to draw to the Committee's attention?

*(Mr Chapman)* I think they have had enough numbers for today.

1546. Very good. I asked Mr Bennett to put up on the screen a moment ago figure 3, I wonder if you would be good enough to put up also figure 4, which is the other figure relevant to the Ove Arup option 1 scheme that you want to draw attention to.

*(Mr Chapman)* Can I just make one or two more points on figure 3 please?

1547. Please do. If you go back to figure 3.

*(Mr Chapman)* There has been discussion about three or four escalators, I imagine that is something which either the Committee will direct or which will be agreed in time between the two sides. I would just like to make the point that the number of escalators from platform level to this point here which is point J is a separate issue, I believe, to the ticket hall issue because there will be predictions about the number of people who will go from Crossrail to street and at some stage there will be an agreement or a direction as to what the right number should be. There are two elements, one is bringing them from the platform to street, and that is a function of escalators, the second is how you process them and get them out of the station which is a ticket hall issue. The Arup scheme, if the direction is that flows are sufficiently low to accommodate three escalators' worth of people then that could be three or four escalators, but I think there are two separate questions and it is worthwhile just disaggregating them from the Committee's mind if that is acceptable.

1548. Would you be happy, Mr Chapman, if Mr Bennett puts up figure 4 now?<sup>11</sup>

*(Mr Chapman)* Yes.

1549. For the record, what that is is a figure headed "Suggested Alternative Lay-Out Section along Eldon Street with Crossrail scheme dashed".

*(Mr Chapman)* That is correct.

1550. What do we get from this figure?

*(Mr Chapman)* This basically is a section, as you have said, along Blomfield Street, which takes you from platform level up to street level. At the right hand side of the figure we have the canopy which is the street level manifestation of the station. It is a bit like the new station at King's Cross or the various stations on the Paris Underground where you have a direct discharge to street not through a building, as people more commonly expect on the London Underground. It feeds down under Blomfield Street to a ticket hall facility that we saw on figure 3 and then comes from that level downwards by two flights of escalators down to platform level. We have had some initial discussions with the Promoter about these issues. They are concerned, as are we, about the proximity of the escalator to the Metropolitan Line because we are tunnelling underneath an existing London Underground line. That is causing a lot of attention.

1551. Take that slowly, if you would, because potentially it is of considerable importance, if not to the Committee's deliberations at this stage, to its potential future deliberations as to which is the best option if the Petitioners satisfy the Committee on their demand case. Say something more about the suggested disadvantage of your option 1 please?

*(Mr Chapman)* The main disadvantage of option 1 is that Crossrail—this is probably easier having seen the model—took the passageway between the Post Office Railway and the Metropolitan line as a flat passageway with a reasonable clearance below the Metropolitan Line, about seven metres.

1552. Crossrail was able to do that because the CLRL scheme does not require that you get to shallow level until you get somewhere about half way along Liverpool Street whereas your scheme requires that you get to shallow level rather sooner, does it not?

*(Mr Chapman)* That is absolutely correct, Mr Laurence.

1553. No problem then with the CLRL Promoters' scheme. What do you say about the problem that has been floated in relation to your scheme on this particular point?

*(Mr Chapman)* The main issue is that you have to fit the escalators between two existing tunnels. The Metropolitan Line is obviously the most important of those tunnels because it is a fully functioning railway. There are a number of issues with that: making sure the trains do not derail, which is obviously fundamental to the safety of any railway, so any work that would need to be done under the Metropolitan Line would need to be done with great care. We have shown our drawings to the Promoters.

<sup>10</sup> Committee Ref: A20, Functional capacity required from new eastern ticket hall (SCN-20060126-007).

<sup>11</sup> Committee Ref: A20, Suggested Alternative Layout—Section along Eldon Street with Crossrail Scheme (dashed) (LONDLB-EXH03-006).

---

 The Petition of Corporation of London with British Land plc
 

---

The Promoters engaged Mott MacDonald to look at them and make comments on them. I believe Mott MacDonald show the distance on the Metropolitan Line to the crown of our tunnels to be about two metres. We had a number slightly bigger than that, we had about four metres clearance between the two sets of tunnels. It does not really matter the fact that we disagree slightly. The Promoters' figures are based on more accurate information than we have available to us because we do not have their information. In principle, two metres to four metres, in either case it needs to be done with extreme care. It is not something that any engineer would dismiss lightly but in both cases it needs to be done incredibly carefully.

1554. Mr Bennett is kindly zooming in on the particular area that we are talking about. This is the bit that interests me. What does an engineer say when he is told that it is going to be difficult to create a bank of escalators under an existing railway line, difficult if not impossible if you have four banks of escalators rather than three? What do you say?

*(Mr Chapman)* I would say it is difficult but not impossible. The reference to impossible came from Mott MacDonald's report which we were given on 23 December. That was very helpful in many regards. The information that was not available to Mott MacDonald was Mr Weiss's agreement which we discussed with him previously, that if needed his corporation would be prepared to consider closing the Metropolitan Line for a short period of time to allow this very critical piece of infrastructure to be built, taking a long term view.

1555. You probably were not in the room when Ms Lieven was cross-examining Mr Weiss about this. I was looking for the reference but could not find it on day four. She put to him that there would have to be a period, possibly running into months, during which the Metropolitan Line would have to be closed or at any event there would have to be speed restrictions while the work was being done. He cited the example of the Waterloo and City Line having to be closed for five months, from recollection.

*(Mr Chapman)* Ironically this morning I came here via Green Park Station and on the barriers coming out there was a weekend closure of the Metropolitan, Circle and City Line between Baker Street and Liverpool Street, so it does happen.

1556. Mr Cameron reminds me that it was at paragraph 852 on day four when Ms Lieven was putting to Mr Weiss on instructions that with your scheme, Mr Chapman, it would be very likely to lead to a closure of the Metropolitan and Circle Lines for a period of weeks, if not months, probably something in the region of two to three months, and it was highly likely to lead to speed restrictions on the Metropolitan and Circle Lines for a large number of weeks thereafter, in the region of 14 weeks. It was in response to that question that Mr Weiss said he would like to comment and did so by reference to the proposed closure of the Waterloo and City Line which he said would be closed for

improvement for a period of five months. What about whether it is precedented to do something as tricky as this? Has it been done before?

*(Mr Chapman)* Yes. I travelled here yesterday via Westminster Station. At Westminster, you have a major box, a deep excavation for the Jubilee Line that goes underneath the District Line. In that particular location the District Line was temporarily closed. A bridge was built over the area and the entire ground underneath was completely undermined. The District Line now runs over the hole that was underneath. That was done as a huge excavation, not by a tunnel. By reference to those figures, I believe track level on the Metropolitan Line, using the Promoters' figures is about +106.6 or about +6.6 metres ordnance datum to the rest of the world. At that level there are two boreholes the Promoters put down in the street which I was involved in doing in 1992. They show the London clay level at about that level, so we are tunnelling about two to three metres below the top of the London clay. It is good tunnelling material to tunnel through which helps stability.

1557. **Mr Binley:** Might I ask the percentage difference between the prices of the two exercises?

*(Mr Chapman)* Do you mean option one to option six?

1558. Yes.

*(Mr Chapman)* I do not have access to the Promoters' figures. I believe a couple of days ago the Promoters' price option one was mentioned to be 40 to 80 million. I had some pricing done of the two options but at the moment I would caveat the figures very, very heavily because there are a lot of unknowns, things that nobody knows yet and things that we do not know yet that the Promoters know. My guess for option one was about 52 million and my guess for option six was about 70 million.

1559. **Mr Binley:** As a politician, I am very aware of spending money.

1560. **Mr Laurence:** Of course. I want to pass from the difficulty of constructing three or four banks of escalators underneath the Metropolitan Line as shown on your figure four to the topic which I know you have already touched on relating to the Disability Discrimination Act legislation. Is there something more you want to say about that that you have not already said in relation to your scheme? Do we need to see figure three on the screen again?

*(Mr Chapman)* Figure 5, if I may.<sup>12</sup>

1561. This is "Crossrail and Liverpool Street Station Possible Alternative Layout, MIP Access".

*(Mr Chapman)* One of the issues that was raised by the Promoters to us was whether, if we produced a completely new ticket hall, it would need to better comply with the DDA legislation. The current arrangements involve people going from street level, through the arcade ticket hall via a lift down to the

---

<sup>12</sup> Committee Ref: A20, Possible Alternative Layout MIP Access (LONDLB-EXH03-007).

---

 The Petition of Corporation of London with British Land plc
 

---

westbound Metropolitan Line, along that platform and to a new lift at the western end of the westbound platform, Metropolitan Line, via their fire fighting shaft down to track level. It provides access from the street but it does not necessarily provide access from other locations. The Promoters raised that as one of their concerns about option one so we decided to see if we could improve on that and provide extra facilities to make option more user friendly by making a totally accessible station to everybody as required by the Act. We have the canopy for the Eldon Street ticket hall at the northern end, at the very western side of Liverpool Street. In addition, at street level, as happens in many modern metros around the world, we provide a couple of lifts going down from street level to ticket hall level, very simply. You are already doing an excavation here, what is called cut and cover, where you create a big hole and put a lid on it at the end. You could use the same technique very successfully to produce a couple of lifts that go from street level down to ticket hall level. The next challenge is to get mobility impaired people, not just people in wheelchairs, down to ticket hall level. What we were suggesting was, partially within this cut and cover box, a lift shaft could be sunk to put another passageway underneath the Metropolitan Line connecting to the lift that the Promoters have already shown. To be honest, this is not a feature unique to option one. It would be difficult but it could be done with the Promoters' current scheme as well, which would significantly improve accessibility. Once you have this set of lifts here which gets people through the gateline and down to platforms, very simply, which is a very short distance, because you have this passageway underground connecting to ticket hall B, with a slight level change between ticket hall B to the concourse, it would facilitate the over 70,000 people who come into Liverpool Street Station and all the people who come from Stansted who might want to go to Heathrow or elsewhere, everybody on Liverpool Street Station trains, to access Crossrail.

1562. **Mr Binley:** I apologise for labouring these points but this is an important alternative and we need to understand it. It seems to me that the aesthetic nature is going to be affected by the impact of what you are doing in an area which had some attractions in terms of the way it looked and felt, the ambience of the place. Are we able at some stage to see how that impact at the surface might affect that, because it looks to me like the distance between Broadgate and your canopy is going to be quite limited.

*(Mr Chapman)* You are absolutely right. It would need the area in Broadgate to be reworked. British Land have told me they would be very happy to rework it. If Crossrail came here discharging 14,500 people into the street, it would have to be done. Both the Corporation and British Land would have to remodel the area. It is quite a big area and the level change would need to be improved.

1563. The nice thing about the way people look is that it belongs to all of us. In that regard I still would like some understanding of what that might look like.

*(Mr Chapman)* It is not part of my evidence.

1564. Not now. I am perfectly happy to have it over the coming days.

*(Mr Chapman)* I might have an image of what the canopy might look like but it is a very architectural plan.

1565. **Sir Peter Soulsby:** We have an artist's impression looking back down Blomfield Street?

*(Mr Chapman)* That is correct. It is showing how the three escalators come to street level. The manifestation of street level is quite subdued but I am sure, with good architectural modelling, it could be made a very attractive feature.

1566. It does give us an idea of the scale.

1567. **Mr Binley:** I would like a greater understanding between Broadgate and the canopy and how that might feel. Do not do it at this moment but if you could help us in that respect I personally would be very grateful.

1568. **Sir Peter Soulsby:** This is A21.<sup>13</sup>

1569. **Mr Laurence:** I think at paragraph 21 of your proof you can now draw the threads together and seek to summarise for the Committee, before you go on to option six, if you turn out to be right about that very broad cost estimate, what are the factors that lead to it being as affordable as that and not costing, say, double that sum.

*(Mr Chapman)* In terms of cost, the Victoria Station upgrade cost, as a matter of record from TFL, is £500 million. I do not dispute the Promoters' estimate of that figure. It accords with our estimate of 40 to 80 million. I also agree with the range. There are so many uncertainties for both of us at the moment in costing that it would be unwise to be any more accurate than the Promoters have been so far. It is that affordable because it is a bolt on to an existing scheme. It minimises changes to the scheme. We slightly reorientate this escalator, although the Promoters believe we should not and that it should be kept close to the original alignment. We substitute one escalator bank that was here at Liverpool Street to under Blomfield Street and, once you make those changes, apart from the effect on the Metropolitan Line which is a major effect, the only additional change is a very shallow ticket hall. The ticket hall is at basement level, one level down, not two or three levels down. It means a bit of disruption in the area temporarily but it does hopefully address the problem of how you get people into and out of the expanding office blocks in the area for a very long time. Additionally, it gives much better access from the street level to Crossrail. Looking at the Promoters' figures that they showed before,

<sup>13</sup> Committee Ref: A21, Street Level View of proposed exit on Eldon Street (SGN-200601216-008).

---

 The Petition of Corporation of London with British Land plc
 

---

commenting on Mr Spencer's and Mr Weiss's evidence, I was very struck by how small the five minute circle was from Liverpool Street. It cannot be right to have a station where you have such a long walk to get to the street. This facilitates much more rapid access. You have heard about ticket hall A, the arcade ticket hall, and ticket hall C, the Central Line ticket hall. Each of the Underground lines serving Liverpool Street has an interchange ticket hall, ticket hall B, and its own dedicated ticket hall, ticket hall A, C and there could be a ticket hall D over here. If any line is out of operation it provides a very resilient solution. If ticket hall B is overcrowded, Crossrail passengers do not have to funnel back down on the escalators and go along to Moorgate. They have direct access to the street. It disconnects all the problems that could occur on the station and makes it a very robust situation.

1570. I would like you to turn to deal with the so-called option six.

*(Mr Chapman)* Figure 6, coincidentally.<sup>14</sup>

1571. The figure is headed "Crossrail and Liverpool Street Station Current Crossrail Layout/Upgrade Existing Ticket Hall".

*(Mr Chapman)* I should preface this by saying that this a suggestion that has come from the Promoters. As of two or three weeks ago, they had no drawings of it. It was suggested by their station design manager, Richard Davies, who had the advantage of having worked in this area for London Underground and knows the station very well, in one of our discussions before Christmas, that one of the reasons why the ticket hall is so narrow is because it is avoiding Post Office shafts that connect down to the Post Office railway. The Post Office railway was closed in the middle of 2003 but I believe the station was closed many years earlier. I do not know when. I will go back a stage. The red dashed line that you can see on your screen shows the existing ticket hall, ticket hall B. The ticket hall is very narrow. It has 16 gates which, to put it into context, is only one gate more than Westminster Station has. It is a very busy station. Three problems have been identified that everyone is trying to address. The first is the problem at the top of the Central Line escalators at point M. The second problem is the gateline. The third problem is vertical circulation. This is one of a number of suggestions we have come up with to provide the level of gates that SDG predicted would be required and to provide probably the level of capacity that is needed. I should caution that this station has not been pedrouted; nor has any more sophisticated analysis been carried out. This is on rules of thumb and general sizing principles. It is very preliminary. It comes from a suggestion from the Promoters. To the best of my knowledge, I have seen no drawings from anybody else. We thought it helpful to show how it could work and to prove that their option six could be made to work in this context. The first point is that we flare out the passageway to the south.

1572. You have widened point M very considerably. Is that the effect of that?

*(Mr Chapman)* That is correct. That borrows from the previous Crossrail scheme for this area which had a tunnel going under the Metropolitan Line on a skew before it went down here. This piece of street here is one of the few pieces of street that we understand does not have major infrastructure under it. I believe if the SOR is to be removed, the flaring of the passageway south of point M will give a much bigger angle of attack and avoid a lot of conflict with the Central Line passengers. Our alternative option does not need the SOR to be removed. The cross flows coming back and forth are very small, 1,100 people in the AM peak coming this way and 500 people predicted by SDG to come this way. If the alternative scheme is built, there is no need to move the SOR. Moving a station operations room, because of the equipment, costs tens of millions of pounds. If it is removed for good reason and therefore it is a different cost on the public purse, it is not an issue. Option one does not need the SOR to be removed so if there was a way that money could be saved then option one would allow it to be. In terms of option six, it does involve removing the SOR and slightly enlarging particularly the passageway that joins the main ticket hall. It involves building over the Post Office railway shafts which are here and better connection from ticket hall to street level. We move the bank of three escalators from the ticket hall that were up here at Eldon Street to over here, to bring them from the ticket hall heading westward to the area in front of Liverpool Street Station. We have not modelled the area exactly but the corresponding escalators that go down from the street are here. We are allowing some space for people to flow round. I emphasise this is a very quickly worked up model to illustrate that the Promoters' scheme, the massively expanded ticket hall, can be made to work if that was preferred.

1573. You have nevertheless been asked to give some careful thought—this has relevance to the Bill process—to how long it ought to take in order to do the work that would enable an informed view to be expressed about the do-ability of option six. Can you assist the Committee with an estimate as to the time that would be involved?

*(Mr Chapman)* I have not spoken to the Promoters about the amount of time. With sufficient resources being made available and if we treat it with urgency, there are quite a few issues to look at. The first is to discuss with the Post Office. I do not know who owns this space here. In principle, I would hope that within three months a large amount of progress could be made in assessing options one and six to help reach the point where the costs can be assessed and the relative merits can be assessed sufficiently.

1574. Can you say something briefly about yet other alternatives, section G of your proof?

*(Mr Chapman)* Can I go back to figure two? There are not many other options.<sup>15</sup>

---

<sup>14</sup> Committee Ref: A20, Current Crossrail layout/Upgrade existing ticket hall (LONDLB-EXH03-008).

<sup>15</sup> Committee Ref: A20, Obstructions/Constraints (LONDLB-EXH03-004).

---

**The Petition of Corporation of London with British Land plc**

---

1575. You have said a fair bit about this already so take it in summary form.

*(Mr Chapman)* We have looked at this in great detail and we have spotted two options which are feasible, options one and six. The Promoters have suggested four other options to us which we have also considered in very great detail. Both of us looked at taking over the old Broad Street ticket hall, removing all the traction equipment to a place yet to be decided and doing something in here. Both of us concluded that the cost of doing that would not be worthwhile. The Promoters looked at two alternative options, one of which involved demolishing The Railway Tavern, a listed building, and the other possibly other buildings along Liverpool Street or skewing the passageway so that it comes up in this vicinity over here, both of which would not provide a direct interchange to the current London Underground scheme. On the face of it, I believe both we and the Promoters felt that those schemes, whilst interesting alternatives, were not ones that had the attractions of options one and six.

1576. Is there any reason why, if any of those other options is an option that has not yet been finally rejected, a decision on that could not be reached within that same three month time frame that you were mentioning earlier?

*(Mr Chapman)* Not at all. There are various stages of design uncertainty that you get. Mr Binley rightly asked about costs. The thing that tends to happen as public schemes go through is that costs tend to increase as people know more about what they are doing. People start off by being more optimistic than they should be and, when the bill comes in, they know where they are. The process must be done properly. A three month period, I believe, is sufficient for options to be looked at, for all of the issues to be well understood and examined and the implications talked through so that we can work out with reasonable accuracy the costs.

1577. **Sir Peter Soulsby:** This is a convenient time for us to adjourn for lunch.

*After a short adjournment*

1578. **Sir Peter Soulsby:** Before we return to the examination of the witness, so that all concerned can be properly prepared, I am advised that the custom of the House is that it is the Petitioner who will make the final submission to the Committee when we have our closing submissions. Mr Laurence, back to you and the witness.

1579. **Mr Laurence:** Could I mention that Mr Cameron would like to deal with one or two matters of housekeeping raised by the Committee before I continue with Mr Chapman.

1580. **Mr Cameron:** There was a question this morning, I think from Mr Binley, about the number of people working in the UBS building?

1581. **Sir Peter Soulsby:** That question was asked, yes.

1582. **Mr Cameron:** We took that to be the number of people working at 100 Liverpool Street, but we were not entirely sure because the letter that Mr Penfold handed in from UBS gives a total of 9,260 staff working in Broadgate. We cannot at the moment provide the figure for 100 Liverpool Street. Mr Binley is not here so he cannot help us, but we would welcome an indication from the Committee as to whether it is the number in 100 Liverpool Street. If it is, we will find it out, but we cannot give it to you now.

1583. **Sir Peter Soulsby:** I am sure that the information you have given us is fine, but if Mr Binley wants to bother to check, he can read the transcript.

1584. **Mr Cameron:** The second point—again one of Mr Binley's points—he asked about whether it would be possible to have an indication of the aesthetic appearance of any exit to Eldon Street. Mr Chapman put in a document with a view of a canopy, so we will be able to provide some kind of indication of what it might look like in Eldon Street, but we cannot do it today. It is going to take us a few days to do that, and so we would like your indulgence to be able to put that in in a few days time.

1585. **Sir Peter Soulsby:** We will wait until we see that. In fact the model we had does give some impression of how it would look in terms of the scale of the street. I think that is probably enough information to be aware of its impact at this stage.

1586. **Mr Cameron:** Thank you, sir. Sir, on Day 4—and for the note, it is paragraph 964 in the transcript—both Mr Penfold and I were asked about the scale on Mr Penfold's exhibits, and you, sir, are noted as saying that you were sure we would get back to you on that, so that is what we are doing. It is meters not yards, but further investigation reveals that the symbol on the bottom right-hand corner of the document does not show the scale accurately; so, without wishing to burden you with even more of these documents which probably you have seen enough of and so that there is an accurate representation, I am going to ask that you be given A4 copies of Mr Penfold's exhibits with the right scale at the bottom right-hand corner. I apologise, sir, at even more documents. I do not know whether those are to hand. I had understood that they were.

1587. **Sir Peter Soulsby:** We are checking the original numbers that were given to those.

1588. **Mr Cameron:** I think I can help on that, sir. It is A14, sir?

1589. **Sir Peter Soulsby:** So, I would guess, this one will be A14A.

---

 The Petition of Corporation of London with British Land plc
 

---

1590. **Mr Cameron:** Thank you, sir. The final housekeeping matter is just to warn you of one further document you will be receiving from us, and that is a copy of the station log at Liverpool Street underground station, indicating when various pieces of equipment or parts of the station have been closed. I cannot give you copies of that at the moment, but it will be handed in.

1591. **Sir Peter Soulsby:** Thank you.

1592. **Mr Elvin:** With regard to closing submissions, can I respectfully raise that issue? My understanding of the custom of the House is that in a hybrid bill the Promoter normally does not close until the very end of the process, and, you will recall, I adverted to that in opening on the first day. What we had suggested was that it might be easier for the Committee to take it in digestible lumps and to some extent easier for us, because we can deal with it as we go along, to present individual closings after each group of petitions. That, of course, is not something which is within the normal convention of the House because it was a suggestion coming from me. Sir, given the position, if we are going to revert to the position where the Petitioner has the last word, I would prefer to revert to the convention of the House and to close right at the end of the proceedings.

1593. **Sir Peter Soulsby:** I think we will advise you on that at the end of this afternoon. Obviously there are others here who are more versed in the practices of the House than I am. I see they have a large tome with them at the moment, and you have one open in front of you. Fortunately, I do not have one. Do you want to make reference to the particular section?

1594. **Mr Elvin:** Can I just say that one should not caveat the matter. If one looks at page 646 of *Erskine May* one sees that it is subject to the requirements of each individual Bill. What I would suggest is that, since the over-arching principle is that the Promoter has the last say, that should be carried through if the Committee decides that, due to the exigencies of Crossrail and given the length of the process, it is suitable to have mini closings at each stage. It should, nonetheless, be the Promoter who has the last word, because that accords with the general procedure.

1595. **Sir Peter Soulsby:** I will take some more advice on this, as you understand, but thank you for making that point. It may well make difference to the way in which we take things, but I will come back to it later.

1596. **Mr Elvin:** Can I also say, we had circulated a number of documents. I am not sure that they will have reached the Committee yet, but I will speak to them to the extent necessary later. There is a note from LUL that has come in which Mr Laurence and his team have got, with a plan attached showing the revised gateline. There is a statement of position in relation to the promoters, in relation to our position on Liverpool Street. We have come to the

conclusion, subject to any strong views of the Committee, that we will not call oral evidence in this case. We have taken very much on board what the Committee had to say to us about not going over old ground when matters are very clear to the Committee, so what we have done is produced a position paper which sets out issues which the Committee will be familiar with having heard them in cross-examination and seen them in the documents. We have also provided to the Petitioner something which I will have circulated later, which is a proposed undertaking effectively to keep under review the situation at Liverpool Street. It goes rather further than that, but I will introduce that formally at a later stage.

1597. **Sir Peter Soulsby:** Thank you very much indeed for that.

1598. **Mr Laurence:** There is a lot going on, sir, I can tell you, but we will let it all work out in its own good time! In the meantime, Mr Chapman, let us turn to a lovely subject, the subject of escalators, please. What do you want to tell the Committee about escalators?

**(Mr Chapman)** Could I make one correction to this morning? Would it be possible if I could go to figure 3, please? I made one error this morning, which I apologise for, which is the passage way for the Eldon Street ticket hall scheme, I said the flows through this passageway would be quite small, say about 1100 people coming out and 500 hundred people going in, but that was on the London Underground interchange figures. What I omitted to mention was the figures would be slightly higher because of people interfacing with Network Rail; so there would be a few more people using that passageway. The drawing as it stands is designed to reflect sufficient capacity, but I gave the wrong impression this morning, for which I apologise.

1599. **Sir Peter Soulsby:** I think it would be quite useful for the Committee to have some figure for the numbers that are expected for interchange and the various different scenarios through that route. Clearly, there people have no alternative but to use it, and a 2,000 difference might be significant.

**(Mr Chapman)** I can tell you I think the passageway is four and a half thousand, so it is 4.5 meters wide, which is more capacity than is required even under the composite figures. The Promoters' passageway, I think, is 7.5 meters wide.

1600. **Kelvin Hopkins:** I think numbers are very difficult to calculate, but Crossrail will generate all sorts of extra traffic. People who might have gone to East Anglia by car might now go by Crossrail rather than the main line from Liverpool Street. That would generate more traffic through this tunnel. Have all those kinds of calculations been done, or is it really not something too far ahead?

**(Mr Chapman)** That is probably Mr Spencer's field. I am a nuts and bolts Man, I design the physical infrastructure, but I believe if put to Mr Spencer, he had modelled the likely increase in capacity for 2016

---

The Petition of Corporation of London with British Land plc

---

which would involve, I guess, a certain amount of trip generation, but I honestly cannot answer that question, I am afraid.

1601. **Sir Peter Soulsby:** I think we did get the impression, or the clear understanding, that that had been factored in.

*(Mr Chapman)* Yes.

1602. **Mr Laurence:** Mr Chapman, I was asking you if you would revert to the subject of escalators and perhaps the three slash four escalator question in particular?

*(Mr Chapman)* Okay.

1603. There has been some discussion about the number of escalators required. The Promoters' scheme has numbers—I want to get this right, so I will look up the numbers. Within the passageway and the tunnel the Promoters' scheme, I believe, has 6,400 people in the passageway exiting and 4,100 people in passageway entering. As I said before, and there is a bit of a debate, an escalator is about equal to 9-12,000 people per three-hour period, so the Promoter's numbers show one escalator within each bank is required and one other spare escalator if one is taken out of service. SDG's figures, as have been discussed earlier, are substantially bigger. The 6,400 is incremented by 9,200, so multiplied by three more or less, to be 15,600 people, which corresponds to about one and a half escalators, and the 4,100 people entering more or less doubles to 8,700. So, very roughly, SDG's figures require two escalators out and one escalator in, which is three escalators. I believe there is no proper standard for the amount of redundancies required on escalators, but from most people's experience of London Underground, you will find that from time to time escalators do go out of service, in which case SDG's figures would overwhelm the one remaining escalator. We have discussed this with the Promoter and they have indicated that what they would do in those circumstances is go for a tidal flow system whereby the passageway becomes a rush-hour only system, and two escalators, which would be definitely required, both operating either outwards in the morning or inwards in the evening peak.

1604. Let us take that slowly. We are postulating a situation where there are three escalators, one of which has broken down. We are in the morning peak when the principal flow is of passengers coming off the Crossrail platforms at Livergate and a proportion of them are electing to exit at Liverpool Street?

*(Mr Chapman)* Correct.

1605. You are telling the Committee that your understanding of what the Promoter would then do in that situation is what?

*(Mr Chapman)* They would up two escalators. The numbers coming off the trains would be too high for one escalator alone by any calculation, if SDG's figures are correct, and I know that is in dispute; but if SDG's figures are accepted as correct, the 15,600

people exiting would need two escalators, and the Promoter has told us in meetings that if those figures are correct they would continue to provide three escalators but would operate a tidal flow so that you could not enter Crossrail from Liverpool Street station in the morning peak until the escalator is fixed. It is also worthwhile pointing out that there are two banks of escalators and, obviously, as there are no other entry or exit points along the passageway, if one escalator in either bank is out, there is no point having one escalator working in the other direction because you end up going nowhere. Therefore one escalator out of six failing to function would trigger a need to have a tidal flow with SDG's figures.

1606. On a point of correction, Mr Spencer has handed me a note saying to the numbers that Mr Chapman has been mentioning you would need to add 35 per cent to the 2016 flows?

*(Mr Chapman)* Yes.

1607. But that is not an issue that you are particularly concerned with. What I am anxious to get your conclusion on is whether what you have just been saying bears on the question whether one should have three or four escalators and in what way?

*(Mr Chapman)* I do not feel that it is for me to say, but I would observe that from a pure capacity point of view three escalators needs all three escalators to be working from day one for ever more for there to be two-way flow at both rush hours into the station.

1608. So that if the view was taken that in order to cater for the, I would say, certainty that from time to time at least one escalator would be out of operation, it would be better to have four escalators than three in each bank, Mr Chapman?

*(Mr Chapman)* And the original Crossrail scheme up until last year had four escalators connecting down, and you could also observe that the current Crossrail figures have three escalators for their current flows, and three escalators provides a spare escalator on their current flows. So, using Crossrail's flows and Crossrail's ability to provide a spare escalator, but if you accepted the correctness of the increased number that Mr Spencer suggested, then you would need a fourth escalator to provide the same margin of safety as the current situation proposed by the Promoter.

1609. And that could technically be done, could it not, with the Promoters' scheme?

*(Mr Chapman)* If you go back to figure 1, which is the Promoter's scheme, both flights of escalators are in zones where there is not the potential for conflict with other aspects. So the tunnel could be increased in diameter from about eight and a half to eleven and a half meters for the first tunnel, and the second tunnel is actually done by cut and cover, so there is no reason why the extra two and a half meters width could not be provided in both flights. I believe in previous evidence there has been a quotation from Mott Macdonald that a flight of four escalators is

---

**The Petition of Corporation of London with British Land plc**

---

impossible with the option one scheme. I have sympathy with the suggestion that it is very difficult. I do not believe it is impossible. I would observe that Mott Macdonald made the point that they were concerned about the Metropolitan line and at that stage Mott Macdonald were not aware of the Corporation of London's viewpoint that they would be prepared to consider a short closure of the Metropolitan line which would mean that a proper site ought to be built; so floor space is possible with either scheme, but they are much easier with the option six scheme, the scheme that the Promoters indicated they would favour.

1610. **Mr Chapman**, before I ask you to turn to your last two sections, the first of which is as to whether a decision has to be taken and when it should be taken on this issue, before I ask you to do that, have you had an opportunity to study yourself the note from London Underground which was produced during the lunch hour?

**(Mr Chapman)** I am afraid I did not see it until five minutes ago, but I have read it very quickly in that time.

1611. Do you see that there is something at the end which suggests how extra gates could be accommodated, or have you not seen that version of the document?

**(Mr Chapman)** I skim-read it.

1612. You see the one that contains a diagram at the end?

1613. **Sir Peter Soulsby**: Mr Laurence, can I stop you for a moment. The log that you have, and it has been marked A22, we do not seem to have the final page. **(Mr Chapman)** I do not have a final page either.

1614. **Mr Laurence**: It is a different document. It is one of the documents Mr Elvin referred to a moment ago as not yet having been circulated to the Committee. I merely wanted to make sure that the witness had even had a chance to look at it before troubling the Committee with it, but it would seem to be desirable, now that I have referred to it, if Mr Chapman is able to comment at all on it that the Committee have it in front of them at the time.

1615. **Sir Peter Soulsby**: While Mr Chapman has a chance to look at it we will have it circulated. So that it is clear what we have, we now have two new documents in front of us. The first is marked "Liverpool Street Station Control", which is extracts from a log from September to December, and that is the one marked A22,<sup>16</sup> and we are now receiving a document marked "The Operation of Liverpool Street Station and the Use of the pedroute Model" and that will be A23.<sup>17</sup>

1616. **Mr Laurence**: Sir, that should have a diagram at the end. Will you check that you have that?

1617. **Sir Peter Soulsby**: Indeed, yes.

1618. **Mr Laurence**: I have been handed a note. Mr Chapman, just for the record, and I am going to another matter now, I believe you are looking at the draft log from the report which accompanies Mr Ben Wilson's letter of 22 December. Have you checked whether they have described the four escalator options as being impossible or just very difficult? **(Mr Chapman)** From memory I think it is "impossible" but I would need to check the word to see if that is correct.

1619. Can you just check it for me? It is only a draft anyway.

**(Mr Chapman)** "Not feasible" I think are the words he used.

1620. **Mr Elvin**: I can help Mr Laurence, sir. It is "not feasible".

1621. **Mr Laurence**: It is paragraph 6.1. The expression used is "not feasible".

1622. **Sir Peter Soulsby**: I am terribly sorry about this but there is a division in the House.

*The Committee suspended from 3.05 pm to 3.15 pm  
for a division in the House*

1623. **Sir Peter Soulsby**: Before we adjourned we had been considering the question of the order in which proceedings would be made at the end of our consideration of this petition. I have taken some advice on this and it is indeed the case that the Committee has considerable discretion in the way in which we handle this matter. Following consultation the Committee has decided to order the following, that at the end of the presentation of evidence from both sides for the petition the Promoter shall, to help the Committee, make a closing statement relating to this petition. The Petitioner will have the right to make the final statement. This in no way, of course, affects the right of the Promoter to make the closing statement at the end of our consideration of the Bill. I hope that is clear and that that will be seen to be fair to all parties.

1624. **Mr Laurence**: Could I just say, sir, that it is entirely consistent with where the burden of proof lies because these proceedings are proceedings where the principle of the Bill has been established by the measure being read a second time in this House and accordingly any Petitioner who comes along to ask for any sort of redress has to persuade your Committee that that redress is appropriate.

1625. **Sir Peter Soulsby**: Mr Laurence, if I may interject, that is precisely what we had in mind when we came to that conclusion.

1626. **Mr Laurence**: I am sorry, sir, even to point it out, but the reason that the Committee are going to be assisted by the ruling is that the Petitioner will have the opportunity in having the last word to

<sup>16</sup> Committee Ref: A22, Liverpool Street Station Control.

<sup>17</sup> Committee Ref: A23, The Operation of Liverpool Street Station and the use of the pedroute model.

---

The Petition of Corporation of London with British Land plc

---

know what the case is that he or she is meeting. I venture to suggest that that is exactly what will occur in this case and we are obviously very glad about it.

1627. **Sir Peter Soulsby:** I think you are saying the same thing as I did. Thank you, Mr Laurence, that is very helpful.

1628. **Mr Laurence:** Sir, I do not know what I would have done if you had gone the other way.

1629. **Mr Elvin:** I think Mr Laurence is trying to snatch defeat from the jaws of victory!

1630. **Mr Laurence:** What I was asking Mr Chapman about just before the enforced adjournment was whether he had had an opportunity to look at what is now document A23. I do not want you to try and comment in any detail at all, Mr Chapman, but we do see at the end of this document that it has been suggested that there is a way in which 20 gates could be fitted in where currently there are 16. Is there anything at all that you want to say by way of comment on that?

*(Mr Chapman)* The adjournment, sir, very helpfully gave me a chance to read the document. I do not have the advantage of a scaled up measure of what is shown here. I can reach 19.3 gates by doing sums and I can accept that they might get to 20. I think paragraph 2.5 gets 22 gates on the value added. I think 20 sounds like the upper bound. Without seeing anything else I think they would struggle without compromising the station's value to get more than 20 gates on the line. As I say, this is something that I would normally do with Mr Spencer, go through and assess. Doing the sums, they say in paragraph 2.3 that they could get one extra gate in because they can take that part of the gateline north of the pillars. I can see how they have got one gate in there on the figure at the end. I have done the sums using their figures and their figures are correct. They will be slimline gates hopefully but it is never easy, and multiplying 16 gates times the current gate width of 887mm gives you 14,192. Dividing that by the new gate width gives you 18.3, so I can get one gate from paragraph 2.3 and two gates from paragraph 2.4 and so by a bit of judicious rearranging you can get to a 22nd gate. The figure shows quite clearly that it would be a very difficult to get more than 20.

1631. **Mr Laurence:** Mr Chapman, if the Chairman would be assisted to have a more considered response to this paper than you have had an opportunity to provide on the hoof now, is that something which you would be happy to try and assist with if we do not finish today?

1632. **Sir Peter Soulsby:** I am very reluctant to ask for that because clearly it would require oral evidence at some stage and we have not yet established what programme might or might not be necessary to receive it.

1633. **Mr Laurence:** Sir, could I perhaps assist with what was behind the question? You will have noticed that I have not jumped up and down to complain about documents that have been tendered before you. In fact, what has been tendered before you in relation to gates and in relation to other issues that are touched on in that paper and in the so-called position paper, is to a large extent indistinguishable from evidence. A Committee in the position of your Committee, sir, has always got to decide in cases of this kind how much weight they can properly give to documents of this sort where the maker of a statement has not been tendered to give the evidence orally and has not been cross-examined, where the contents of the documents have not been made known in advance to the other side which could therefore comment on them in their own evidence, et cetera.

1634. **Sir Peter Soulsby:** It may be that the Committee will want to ask some further questions and as far as I am concerned it is evident, looking at this plan, that is what is being illustrated here is something that is, if I can put it like this, very tight in there and may have other problems associated with it. That is immediately evident to us and perhaps it is not something that needs to be laboured extensively.

1635. **Mr Laurence:** The reason I have put it tentatively to Mr Chapman as to whether he would be able to assist the Committee if you wanted him to is that often in these cases it is not clear at the end of the day what is going to make the difference to the Committee's decision-making process.

1636. **Sir Peter Soulsby:** Unless any of my colleagues feel differently I am sure the Committee will find it clear from that drawing that it is not easy, it is tight, there are problems associated with it.

1637. **Mr Laurence:** Sir, shall I finally get back to Mr Chapman's evidence? Mr Chapman, it is right, is it not, that what you have done is provide for the Committee details to a layman's eyes to some considerable extent of your option one, not very many details at all about what has been called option six, and you have not been particularly enthusiastic about the possibility that there is any other serious option while not ruling it out altogether? Your evidence would be completely unnecessary, would it not, if you already knew that the Committee had decided to reject the case that Mr Weiss and Mr Spencer have been advancing on predicted demand for extra capacity at Liverpool Street?

*(Mr Chapman)* that is correct.

1638. You are here because you apprehend that it is possible that the outcome of these proceedings will

---

 The Petition of Corporation of London with British Land plc
 

---

be that the Committee will feel there is a problem about which something has to be done; is that right? *(Mr Chapman)* That is correct.

1639. Can I therefore ask you, on the hypothesis that that turns out to be the case, is it your judgment that a decision how to deal with the resulting problem can be deferred?

*(Mr Chapman)* Deferring the solution means that you have the problem of coming back at a later date to solve the problem and there are many examples of how that works badly in London at the moment. Solving a problem properly on day one is the right way to do things. Take motorway widening. It costs the same amount of money to build a new three or four lane motorway as it does to put one extra lane on the edge, so in terms of long term public money being used wisely, getting it right first time is the cheapest option. Upgrading progressively by patching as things happen is the most expensive way of fixing something.

1640. Stay with that point and, always making the assumption that we may not in the event be entitled to make, that the Committee will accept our evidence on demand, what is it that needs to be done now rather than be left to another day?

*(Mr Chapman)* To the best of my knowledge there are two options that are considered feasible in a station which we have called option one and option six. In both official and unofficial discussions with people working for the Promoters no-one has seriously suggested another option as viable and solving the key issues that need to be addressed. Therefore, the critical thing, I believe, now is that a decision is reached, accepting the point that SDG's figures are shown to be correct, or something in that area, that if people accept that the current ticket hall B is inadequate to cope with the possible increase in demand something needs to be done. Both option one and option six are viable. Option one becomes precluded if the current scheme is continued. Could we go please to figure 1?<sup>18</sup> If the Promoters' scheme is built and someone decides to bolt on a ticket hall on Eldon Street corner there are two problems. First of all the point here before going north is too deep so the ticket hall will actually end up right over in Broadgate and discharging people not necessarily where they want to go. The amount that the Eldon Street corner is discharging people where they want to go in the area and the ticket hall that comes in here from this depth is such that it would serve Broadgate and points through Broadgate but would not serve the area quite so well. The second point is that there are mandatory regulations for how far you can have a new passage journey from an escalator run-off. You can tell, if I go back into the point M type of argument here to try and create a passageway going north, that there is going to be conflict with passengers coming up the escalators not quite sure where they want to go so that would be another problem. The Promoters' current scheme precludes option one being built.

1641. If the Promoters' current scheme is built a decision could not later be made to incorporate option one even if by then the view had been taken that that was far and away the best scheme?

*(Mr Chapman)* You would have to come off the passageway under this building in some strange way to come back over here to avoid conflicting at the bottom of the escalators. It is a very Heath Robinson-ish scheme that comes under the buildings and under Broadgate Circus and heads over in that direction. It would not work nearly as well as the current scheme or the proposed option one.

1642. We have just learned, Mr Chapman, that the Promoters' counsel is intending to give a series of undertakings of which the second is, and I will read it out and maybe a copy could be given to you to read as I am going along. The second proposed undertaking is that the Secretary of State will also require the nominated undertaker to construct the Crossrail works at and around Liverpool Street Station so as not to preclude or render impracticable the expansion of ticket hall capacity at a later date without disruption to the completed Crossrail works. What that means, if I can put it to you in my lay language, is that what the Secretary of State is proposing to do is give an undertaking to look at options other than your option one at some future time should that prove to be desirable and it is implicit in the paragraph two undertaking that the Secretary of State is rejecting at this stage your option one and saying to the Committee that what he will be prepared to do is look at other options in the future if that becomes necessary. Is that something that would be satisfactory to those whom you represent?

*(Mr Chapman)* I have spoken about this to British Land quite a lot and to the Corporation and they are not fixated on any particular scheme. They just want to have sufficient capacity at Liverpool Street. If the current scheme is maintained I believe the only option that could be built following from that is option six. I cannot conceive of another option on any information that is available to me apart from option six that would fit in with that. There is one way round that. If they built option one escalator here and the second set of escalators here to come under the Metropolitan Line and then came shallow along here, then they could bolt on a scheme that could be done up here later. If they followed the option one escalator route that achieves the objective and then the ticket hall could be done at a later stage but that would involve massive disruption a second time to this part of the City of London which I understand from the Corporation they would not welcome.

1643. Is it something you would recommend as an engineer?

*(Mr Chapman)* The reason why option one is relatively cheap—and I know it is an awful lot of money—compared to what is happening elsewhere in London for a similar level of capacity is that it is done at the same time. All the street works would be done at the same time, the box is open at the same

---

<sup>18</sup> Committee Ref: A20, Current Crossrail Proposals (SCN-20060126-004).

---

 The Petition of Corporation of London with British Land plc
 

---

time, the cut and cover box is put in at the same time. There is extra work involved in all this and it is going to cost more but if you do it at the same time it will be substantially cheaper than doing it later on as well as substantially less disruptive.

1644. **Kelvin Hopkins:** Could I just confirm whether other possibilities were considered at the sketch stage but were rejected as being impossible or were not sensible and that option one is really the only one that is sensible in engineering terms?

1645. **Sir Peter Soulsby:** Option one and option six. We were told this morning that there were options in between.

1646. **Mr Laurence:** Option six is not yet at the stage where it can properly be appraised and it is that which I am now going to ask Mr Chapman to deal with.

1647. **Sir Peter Soulsby:** That would be very helpful because he did present it to us and did acknowledge at the time that it was not well worked out but there are other aspects of it that I hope you will explore with him now.

1648. **Mr Laurence:** This is particularly one of the matters that you yourself indicated that you wanted to address, sir. You are at paragraph 29. Would you remind yourself of the text and tell the Committee what your conclusions are on this issue?

**(Mr Chapman)** Given the need to substantially increase capacity at this station, which I have had a chance of working on with Mr Spencer for several months now, and I have gone through his figures and I have a lot of confidence in them, and given the need to expand the ticket hall to provide the extra flows that Mr Spencer described, that has led to two options to meet the design objectives. The option that we see as having the best advantages overall is the one that reaches the surface at the junction of Eldon Street and Blomfield Street, option one, because it gets people from platform to street as quickly as possible. There is another option which we acknowledge as entirely valid, which is CLRL's preferred option, to massively expand ticket hall B and so-called option six. I would caution slightly that although it appears to be feasible from the preliminary work that we have done, and I have seen no drawings they have produced, we have a couple of options and we believe, as I said before, that we can get the ticket hall to work well. Just to refresh memories can I have figure 6 please?<sup>19</sup> As I said before, figure 6 is the Promoters' scheme; it is not our scheme. We have seen no plans for this and so we wanted to make sure that it would work. I do not know if the Promoters have got figures showing what they would do. There are three elements. The first one is expanding the entrance through here and the idea for this was inspired by the Crossrail previous scheme which was abandoned in 2004/2005 because it used some of the pavement space here for

the escalator stem. That avoids that problem and, as I said before, we really believe it would work although, as I said before, we have not modelled it to see if it works. The second is that what we achieved was fairly straight lines like you get on the modern Jubilee Line extension station or at the new King's Cross. You achieve 27 gates going across in a way that works well and gives you full run-off on either side around the pillars and the third element of it is increasing vertical separation from the ticket hall here to street where they want to go to, not just pumping them into the already hard-worked Network Rail concourse.

1649. If the Committee take the view that the demand capacity case that we have put forward is broadly correct and it requires something to be done, you have already said that your view is that it would be best to do it at the beginning as part of the project. How do we get to the point where, in the event that there is a disagreement between the Petitioners and the Promoters as to what is the better of these two solutions, something is done within a reasonable short timescale?

**(Mr Chapman)** Option one has been looked at in quite a lot of detail by us and by Mott MacDonald on behalf of the Promoters and I think there is a reasonably strong understanding of the issues and I fully agree with the Promoters that it will cost in the region of £80 million extra so there is extra work required on that to give you slightly more reassurance on that factor of 100 per cent on cost. In terms of option six, there are quite a number of issues which need to be explored.

1650. Without going into those issues again, because I think you have dealt with them, your evidence is that if there is a will that could be done in how long? **(Mr Chapman)** I believe that with proper resourcing and a proper will two months would be reasonable although I acknowledge that Crossrail are very busy on a number of other points so far. This to me seems a fairly fundamental issue. There are five central area stations and this appears from all the evidence that I have heard to be the most critical one. Solving this station so that people are happy and it works is critical to the scheme.

1651. I am not asking you something you have written down an answer to and I may not get the answer I want. I do not know if we can rely on the Promoters to co-operate fully with us in trying to examine properly option six if the Committee indicates to them that something has to be done about the capacity problem at Liverpool Street Station. We have to hear from Mr Elvin in due course what exactly the Promoters' attitude will be if we are successful on what I call issue one. Could Ove Arup if need arose and it was provided with proper information, do the work necessary properly to appraise option six absent co-operation from CLRL?

**(Mr Chapman)** It could do the work but we would need co-operation from CLRL and the Post Office Railway and there are a lot of issues that the

<sup>19</sup> Committee Ref: A20, Current Crossrail Layout/Upgrade Existing Ticket Hall (LONDLB-EXH03-008).

---

 The Petition of Corporation of London with British Land plc
 

---

Promoter of the scheme should be in on. I think it would be very difficult to do it in isolation if the Promoter was not willing to co-operate or help. Think that is pretty fundamental. For instance, the Post Office Railway would not necessarily talk to a third party, I would imagine. I would have trouble conceiving of a situation where a third party would have the level of authority to negotiate with Network Rail who own the building above. This area here is actually under a Grade II listed building owned by Network Rail and currently occupied by McDonald's and it is, of course, Post Office Railway shafts, so it would be difficult to find the right solution. That is where the Committee's help and the Promoters' help would be necessary.

1652. If you look at your last page do you see if there is anything else that you want to say before I sit down?

*(Mr Chapman)* I think I have made the point.

1653. **Mr Laurence:** In that case, fine.

*(Mr Chapman)* Thank you.

1654. **Sir Peter Soulsby:** Mr Chapman, before I invite Mr Elvin to cross-examine, can I ask you about this option 6. I think the Committee has understood it is one that is not as well developed as option 1. To ask you what you do know about the obstructions in that area and whether that is part of the exploration you have been able to make so far, particularly what you know about the obstructions that would be necessary to enable the widening of the passage as it joins the existing ticket hall and what you know about the obstructions of the large section which would have to come out on the eastern side?

*(Mr Chapman)* Dealing with points first, the flare of point M I believe is reasonably free of obstructions in the macro sense, although every street in London is not completely free of services. When we did the site investigation through the middle of London for Crossrail, with the best will and doing our utmost, we hit a number of buried services because it was incredibly difficult to find streets that were not full of services. There would be a few more service diversions but a lot of them run in a north-south direction anyway. Changing this shape slightly will probably affect a few more but not an awful lot more. In crude terms, that is probably of the order of a million pounds' worth of work, maybe, it might be less than that because you already have a retaining wall coming along here. It is a little bit of extra work required to do it. I know in the Environmental Statement Crossrail are very concerned about reinstating bus access in the north-south way as quickly as possible, and a bit of extra work would not help that. In crude terms, that is probably quite a small amount of money to address in the scheme of things. I understand that the Promoters are considering that issue already as quite an easy way of trying to resolve some of the problems at the top of the escalators.

1655. **Mr Elvin:** If it helps the Committee there is no dispute with Mr Chapman on that point.

*(Mr Chapman)* That is a relatively quick and cheap win for the scheme overall. The second issue, which releases the large amount of gates here, is being able to build over the Post Office shafts here. Currently there is a ticket hall at the northern end of this red lump. When you come off Liverpool Street concourse, following the line of my pen, if you come here, this is where you buy your tickets. My concern is between this line here and this line here are the foundations of a listed building. I was not sure how much space is there so without full access and permission to go and talk to people, we have been buying tickets there surreptitiously trying to see the ticket hall at the back. We believe it is about three metres distance and then the door at the far side of the ticket hall which leads me to believe this space here under the listed building is probably free. One of my biggest concerns is trying to undermine a listed building. Like I say, from not having proper data but doing our best to collect it in an objective way, we believe this space here can be free. Coming south of the listed building, coming south of the MacDonald's line into Liverpool Street itself, there are these shafts which rise in the pavement and come out under the pavement in front. In extremis, if there is a structure here which cannot be sensibly excluded from the site, one could excavate the street here directly and access them. Possibly the Promoters will have better information on this than we do. Without getting access to that zone, going into proper London Underground facilities, we do not know that.

1656. **Sir Peter Soulsby:** I think we realise you have not explored beyond the accessible in that area. We do have, in A23, the gate point we were referred to earlier on. It happens that also shows the outlines of some of the structures you have been referring to, I think?

*(Mr Chapman)* That is correct, yes.

1657. **Sir Peter Soulsby:** Could you, if you are able, give us an interpretation of those bits of the structure there?

*(Mr Chapman)* Okay. Again, using the main screen and my laser, these are shafts which connect down to the Post Office Railway. I will show you in a few seconds how those inter-relate. These structures here I infer are pavement vaults from the listed Network Rail building which is to the north of where MacDonald's is. I would infer, I do not know, that this space here is free air at basement level, ticket hall level. I have walked along here, I know this wall well, I am ashamed to say, rather too well for comfort! This wall is an ordinary solid wall. Passengers have free access—speaking as a passenger with my Oyster card—to walk along this wall as much as they want to. Fortunately it is one of the few bits of the station that is free, there are few people loitering in this area. This is a wall at basement level; this is an old vault wall at basement level and is probably the front of the vaults that were from the building. This space here I suspect might be soil or whatever else, I

---

 The Petition of Corporation of London with British Land plc
 

---

honestly do not know. I suspect this is free, I expect this is free, I know this is free, this must be free because it previously connected the Post Office shafts to the old station level, this area here I believe is the current LUL facilities. I believe most of this space could be expanded to free up the 27 point gateline. I would hazard one bit of caution which is that all of this work to create the long gateline, there needs to be work for circulation now, there is no point having enough capacity to get people through here, through the gateline and then coming to a very constrained space. It is vitally important we get people to street level and currently I believe there are only two or three escalators to serve the whole of Network Rail coming off the Network Rail concourse to street, one up one down roughly here. I am not sure, I think there are two on the very eastern side of the station, two and two, I am not sure. Currently, if we discharge everybody to this zone, there needs to be a means of getting them to street level.

1658. **Sir Peter Soulsby:** Right. Mr Elvin?

1659. **Mr Elvin:** Mr Chapman, I am not going to ask you the names of other walls you have befriended in the last few days. I am glad you are on good terms with this wall. You have to laugh sometimes, Mr Chapman! Can I understand this, Mr Chapman, I think there is a good deal of common ground between us, particularly as to aspects of option 6. Your position is quite straight forward, your clients, the petitioners whom you represent, are not wedded to one option or another, what they want is an appropriate increase in capacity?

**(Mr Chapman)** Absolutely correct.

1660. **Mr Elvin:** To put the matter colloquially, there is more than one way to skin a cat?

**(Mr Chapman)** Two ways, correct.

1661. **Mr Elvin:** I have four cats. I will not go into that. There are a number of options. I am going to seek to persuade you in a moment that there are more than options 1 and 6 but let us come to that in a second. This issue only becomes absolutely critical if that was only option 1 because it would be precluded by the scheme, as you say?

**(Mr Chapman)** Option 1 would be precluded by the scheme and option 6 at the moment I think is relatively unproven and is a bit of a gamble, but I would very much hope that option 6 could be proven to work as well.

1662. Can I suggest to you gently that you have been in a number of discussions with Crossrail. You have a good relationship with them. Indeed I think your firm is bidding for the contract work in due course?

**(Mr Chapman)** Correct.

1663. In other words you have had many discussions with them about the scheme?

**(Mr Chapman)** I have not been involved in discussions seeking extra work but I have had many discussions with the team who are designing

Liverpool Street Station. We had a two month period when we raised the issue where we had very good discussions and went through things honestly and openly on both sides.

1664. Can I explore with you, firstly, before coming on to look at those other matters, briefly, the implications of the Eldon Street scheme. Would you agree, as a matter of generality, that it is a scheme which will add quite a significant amount of disruption in terms of what it will do in Eldon Street and Blomfield Street in terms of the area of excavation to pedestrians and the like, over and above the disruption which will occur in any event? **(Mr Chapman)** You are absolutely correct, there will be an increased amount of disruption. There will be increased disruption. If you are having the street dug up to do one scheme, there is very little difference between the two schemes. If you are digging one hole, a bigger hole is not necessarily more difficult.

1665. We have got some pictures of the comparative holes. Could we look at our document 103.<sup>20</sup> 103 is the extent of—putting it colloquially—the size of the hole with the Crossrail scheme?

**(Mr Chapman)** That is correct.

1666. Absolutely. We do not need to go to the wall over the absolute position but that is what we think it is. If we go to 104 we have tried to represent the size of the hole of the Crossrail plus Eldon Street.<sup>21</sup> You have a narrowing in the width of the excavation in Liverpool Street because your tunnel is narrower but you have much more disruption in Eldon Street and Blomfield Street?

**(Mr Chapman)** That is Mott MacDonald's drawing. Our drawing shows less disruption.

1667. It is of that order, is it not?

**(Mr Chapman)** Can I go through the extra elements of it, the bits which are agreed and maybe just show the Committee which are not?

1668. Yes.

**(Mr Chapman)** Although we have a slightly narrower hole, again a hole is a hole so a slightly narrower hole is not that much less disruption. Our scheme is slightly less in this area but not significantly. This area again is common to both schemes. This area here is only the subject of Mott's report on 22 December, that is not part of the suggestion that we put forward. The stretch going from here up to here is agreed but it is probably done in two stages because, as you rightly point out, Mr Elvin, if you did this in one go you would almost totally preclude east-west passenger flow and, therefore, this would be done in two stages. You would have one hole, deck over it and then do the other hole.

<sup>20</sup> Crossrail Ref: P2, Crossrail design for link to existing ticket hall—extent of surface works (LONDLB-2604-103).

<sup>21</sup> Crossrail Ref: P2, British Land proposed ticket hall—extent of surface works (LONDLB-2604-104).

---

 The Petition of Corporation of London with British Land plc
 

---

1669. There is an issue both with pedestrians and, for example, buses, if you take up a hole of this size?

*(Mr Chapman)* There are not that many. Again, the more walls I have stood beside over this last month, the bus flows in this area are not huge. The main bus flow is up this access here. There is one route which runs around here but not very frequently.

1670. There will be constraints on pedestrian flows and the like, and indeed there will be constraints on pedestrian flows in the final version which will require significant amendments to the street which will require, as I understand it, land from private owners, such as British Land?

*(Mr Chapman)* It does not necessarily require land from British Land, what it requires is for this area here to be remodelled, and it involves the street here to be remodelled. I believe the Corporation and British Land have been discussing that and have a scheme which could work.

1671. Yes, but it requires both public highway and private land in order to do the remodelling.

*(Mr Chapman)* Both of whom are willing to help, yes.

1672. Can we look please at 105 which is our cross-section of the two schemes.<sup>22</sup> It is in the small bundle of documents we handed out yesterday. Here we have tried to be more accurate in terms of the relative position. It is a drawing, I suspect, you are familiar with?

*(Mr Chapman)* It is, yes.

1673. We have simplified it by taking off some of the features and increased the font size so you can read it. What this shows, much more accurately than your diagrammatic representation, is the profile of the Metropolitan, Hammersmith and Circle Line.

*(Mr Chapman)* Correct.

1674. It is more a squashed oval than a rectangular box, is it not?

*(Mr Chapman)* Yes.

1675. It shows the distance at the narrowest point between the escalator in your version of the scheme and the closest part of the lining of the tunnel?

*(Mr Chapman)* Yes, which is two metres according to Mott's drawings.

1676. 1.946 I think.

*(Mr Chapman)* That is the hypotenuse; it is not the vertical distance. Gravity acts downwards, it is not the vertical distance.

1677. It is a point at which you have to take precautions with regard to the Metropolitan, Hammersmith and City Lines?

*(Mr Chapman)* Absolutely. As I said earlier on, two metres and four metres, the number will be arrived at properly. Whatever the distance is, it is close and therefore needs to be examined in great detail.

1678. Because you are tunnelling up to two metres from the Hammersmith and City Line, because of the depth of the settlement which would be caused by your tunnelling, because it is coming up much closer to the line, the settlement impacts on the Hammersmith and City and Circle Line would be much greater and it is that, and the need to safeguard that line, which requires the line to be closed and its operation to be modified while the works are being done?

*(Mr Chapman)* Not quite correct. You are half right. Good for engineering! The settlement effects are significant and they would need to be taken into account. Fortunately that stretch of line is a ballasted line. You can lift the track and get rid of the settlement effect on a regular basis.

1679. I am sure somebody understands this.

*(Mr Chapman)* The settlement effects I do not think are the reasons why you would close the line. I do not believe you would need to close the line for settlement effects. Can I finish the point Mr Elvin?

1680. I am sorry, I thought you had finished.

*(Mr Chapman)* In terms of settlement effects, I do not see a need to close the line because once a week you could put through a train which would lift the track and fettle it so that settlement effects are reduced. The reason why you might close the line would be if there is a risk of a catastrophic ground hole forming, some really extreme tunnelling event. For that reason, if people could not be absolutely confident that the line could be maintained you would close it temporarily. There are techniques you could do, so from the end of the box that Mott MacDonald are showing here, you could do what is called an extreme form of tunnelling fore-poling. You put a canopy or an umbrella over the tunnel permanently so you make sure the risk of failure is reduced.

1681. I am told that is a solution LUL would not accept.

*(Mr Chapman)* LUL did accept the Channel Tunnel Rail Link passing under the Central Line with a four metre clearance with a large tunnel boring machine. They have accepted similar solutions although with much discussion.

1682. That is a tunnel boring machine which is an entirely different situation. You cannot use a tunnel boring machine here, can you?

*(Mr Chapman)* You cannot use one but there are techniques to protect the tunnel and you do a great degree of accuracy. They would be fore-poling this anyway so all you are doing is leaving the temporary works in place.

1683. The position is this, is it not, absent a tunnel boring machine and the techniques which can be used with that, it would be difficult to fit it into that space, I have to say.

---

<sup>22</sup> Crossrail Ref: P2, Blomfield Street Section HBDR and British Land proposal compared (LONDLB-2604-105).

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Chapman)* Absolutely.

1684. The likelihood is that (a) London Underground would not accept your position and (b) the line would have to be closed either for safety reasons or to ensure appropriate measures could be taken so far as settlement is concerned? That is the likelihood, is it not?

*(Mr Chapman)* I do not disagree that at the end of the day there may be a need to close the line temporarily but I think there is a difference in magnitude between a few weeks and a few months, as was suggested a couple of days ago in evidence. Your colleague suggested it could be a few weeks and then it became a month and then it became several months.

1685. No, it was nine weeks, which is two and a half months.

1686. **Mr Binley:** A quarter.

1687. **Mr Elvin:** I will not split the difference.

*(Mr Chapman)* I totally agree protective works are required and may lead to temporary line closure.

1688. All I want to understand, that is something which we would look to avoid if we could. We would not do it out of choice.

*(Mr Chapman)* Absolutely.

1689. Just so we understand the magnitude of the comparisons being made, someone—I think it was Mr Weiss and you picked this point up or Mr Laurence did—referred to the closure of the Waterloo and City Line for a number of months?

*(Mr Chapman)* Yes.

1690. Would you accept that the number of passengers using that line is a significantly smaller number than used this combined Hammersmith and City, Circle and Metropolitan Line. If I can give you the figures, roughly speaking, Waterloo and City, 40,000 passengers per day, this line approximately 205,000 passengers a day, in the order of five times as many?

*(Mr Chapman)* If you say so.

1691. The disruptions to this line would be proportionately greater in terms of those wishing to travel?

*(Mr Chapman)* I live in Southgate on the Piccadilly Line and I thought there would be no way of commuting after 7 July, after it closed for a month, but I was very surprised how resilient the whole network was in terms of moving people. The Piccadilly Line is a hugely busy line.

1692. Not only would one have to bear in mind when asking the question is this option worth considering, in view of its additional disruption, we would have to look at the cost, and you have already given your views on the position. In addition to that cost there would be the cost of the closure of the existing Tube

lines, the Hammersmith and Metropolitan and City Lines, they would have to be closed as well, and that would have a cost, would it not?

*(Mr Chapman)* I am sure that is included in the Promoters' figure. I am sure they would not give a figure which did not include that.

1693. The cost of that, I am instructed—whether it is an element of the overall cost, I will just clarify (after taking instructions)—a cost which is not in the £40-80 million estimate, is of the order of £40 million for the closure of the line in the order of nine weeks and then with restricted speeds after that. That is an additional figure.

*(Mr Chapman)* I was not aware that the Promoters' costs did not include all the costs of doing the scheme. It was included in my estimate.

1694. The £80 million, just so you are absolutely sure, is the cost of acquisition, the property costs, the costs of carrying out the work, it does not include the cost of disruption to the existing Tube lines?

*(Mr Chapman)* There are obviously two ways Tube line closures are costed. One is if someone causes it to be closed on an emergency basis and the other one is if it is part of planned maintenance. I would imagine this would be done in a planned way in liaison between the CLRL team and London Underground.

1695. What it all comes back to, Mr Chapman, I do not think we need to go into vast amounts of detail on this, is the Eldon Street/Blomfield Street option is going to be disruptive and expensive and one would not go down this line—forgive the pun—unless it was absolutely necessary?

*(Mr Chapman)* I disagree because there are a large number of risks attached to the option 6 scheme as well. It is worthwhile putting both sets of risks into perspective. Option 6 involves capping over some 100 year old shafts in the middle of an operational station. It is possible when you are capping over those shafts you would close ticket hall B for a number of weeks as well. There are a number of issues which need to be thought about on both options and all we are suggesting is that needs to be thought about and the best solution arrived at. It may well be option 6 proves itself to be cheaper for many reasons but I have not seen a comparison yet.

1696. If the Committee feels they cannot simply accept the Petitioners' position on the numbers as they stand, whichever version of Mr Spencer's iterations of sensitivity they wish to choose, then what one should not do is rush to a view that one should take this option simply because it is precluded by Crossrail if Crossrail goes ahead. What one should do is carry out a continuing monitoring exercise over numbers and as the detailed design works are drawn up and design it at that stage. You would look at it, you would see figures as they continue to develop over the design period and you would make a decision at that point. You would not jump into option 1 at this stage without seeing how detailed designs started to work up?

---

 The Petition of Corporation of London with British Land plc
 

---

*(Mr Chapman)* I agree with you entirely. I do not think I have ever suggested we should jump into option 1. I said both options should be seen together in context. All the issues should be coming together and the most economical and cheapest solution should be arrived at. It may be option 1, it may be option 6, I would not like to hazard a guess as to which one is better at this stage.

1697. Can I ask you to look at one of the plans you have produced. Could you pick up your figure 2.<sup>23</sup> I did want just to pick you up on the options which have been discussed. One of the possibilities that has been raised in discussions is the possibility of using the EDF power transformer box, is it not?

*(Mr Chapman)* That is correct.

1698. This is an existing box which can be accessed directly from the proposed Crossrail passenger tunnel. It already shows a little doorway just to the right of your 117.

*(Mr Chapman)* Yes.

1699. I am not suggesting one should use that door. That presents an opportunity, if it became clear that another means of obtaining capacity was required, and the ticket hall option 6 was not appropriate, it would be possible to take a direct access from the existing Crossrail proposals into that area and to take an entrance then up to Liverpool Street roughly at point 116. You would not have massive excavations; you would have some but because you were using an existing box. The excavation is already there, is it not?

*(Mr Chapman)* There are two points. I have a plan showing what the front looked like in 1984.<sup>24</sup> This is Broad Street Station before it closed where 100 Liverpool Street is now. The box Mr Elvin is referring to is the one under this beautiful structure here.

1700. This is not as it appears today.

*(Mr Chapman)* This was before Broadgate was created. The ticket hall is under this box here. There are two reasons why it was dismissed. The first one is I believe the ticket hall was built in 1913 to serve quite a small station so the capacity of the box is very small. You are right. There is a box there and there is some space in it but I would imagine the Promoters, if they wished to build a new ticket hall, would build a substantially larger facility than to process the people we have spoken about. Secondly, currently it is full of EDF equipment. We visited it and it is full of fully functioning electronic transformers.

1701. You have spoken to Mr Berryman about that, have you not?

*(Mr Chapman)* I know he has a view but I have seen no evidence about it.

1702. We have looked into it and, as I understand the position, the equipment is close to the end of its operational life. Something is going to have to be done in any event and it can be moved.

*(Mr Chapman)* Where would it be moved to?

1703. I am told that a location could be found to move it to.

*(Mr Chapman)* I know how constrained the area is. In time over the three month period Mr Laurence suggests we would be very happy to look through that.

1704. Unless directed otherwise by the Committee, we are not offering any undertakings about three months. The undertakings we are offering are over the designing of the scheme which will take place over the period until the scheme starts work.

*(Mr Chapman)* Okay.

1705. Assuming the equipment can be relocated, you could have an entrance onto the street in much the same way as you are proposing in Eldon Street.

*(Mr Chapman)* There are land purchase rights because the land is owned by a private individual.

1706. As indeed is the land that is required in order to carry out the Eldon Street works.

*(Mr Chapman)* Not correct. The Eldon Street land is wholly on the public highway. It involves remodelling of the private land. It is under private land.

1707. The subsurface of public highways is vested in the adjoining land owner, is it not?

*(Mr Chapman)* You are probably right.

1708. You would require the cooperation of private land owners, as you would, coming up through the EDF box. The EDF box is at least comparable in scale, if not larger than, the ticket hall you are proposing on the Eldon Street proposals.

*(Mr Chapman)* I have not scaled it but I do not believe it is. You need a long straight to process passengers. If you overlay the ticket hall, I do not think it would fit. You would need a new facility. It is a 1913 ticket hall, not one that people would like to use.

1709. We are not suggesting there should not be any change. We are saying that there is an option to create a new street entrance with a new ticket hall which would not involve disruption to the existing Crossrail project because it could be bolted on to it, which would be available for exploration should it be found necessary at some stage as the project is being designed in detail over the coming years, so that there are options other than option one and option six which remain open to be explored should it become necessary.

1710. **Sir Peter Soulsby:** If the Promoters are suggesting that there is an option around the EDF power transformer box as it now is, we perhaps need to know more about it than what is being said now

<sup>23</sup> Committee Ref: A20, Obstructions/constraints (LONDLB-EXH03-004).

<sup>24</sup> Committee Ref: A24, Picture of Broad Street Station, 1984.

---

The Petition of Corporation of London with British Land plc

---

in your cross-examination of this particular witness. Is this part of something the Promoters are putting in front of us?

1711. **Mr Elvin:** No. I am exploring this witness's evidence which we only heard for the first time before lunch.

1712. **Sir Peter Soulsby:** I think you are going beyond that. You are suggesting that there might be at some stage an option to develop an entrance on that site. That is a little beyond exploring the witness's evidence.

1713. **Mr Elvin:** With respect, the witness says there are only two options that were discussed. That is not correct.

1714. **Sir Peter Soulsby:** He said it was not an option. You are now telling us that it might be an option.

1715. **Mr Elvin:** I am suggesting it might be an option.

1716. **Sir Peter Soulsby:** It might be quite significant for the Committee were there to be a serious suggestion from the Promoters that there was an option around in that area. It goes further than simply exploring the evidence of the witness.

1717. **Mr Elvin:** The witness is not surprised at my putting these questions to him because this is something that was discussed, was it not, Mr Chapman?

**(Mr Chapman)** It was an option that we considered initially before we spoke to CLRL, but because of the cost of moving the power equipment and finding a new location for it we dismissed it. CLRL at the time dismissed it because they felt the cost of moving the power equipment would be too high. The important thing is to get the capacity in a way that is advantageous for the scheme.

1718. **Mr Elvin:** Can I ask what the Committee would find helpful rather than putting questions which you may find less than helpful?

1719. **Sir Peter Soulsby:** I am finding it a little frustrating that it is being suggested to us very late in our consideration of the options around the Liverpool Street end of this station that there is a third possibility here that we are not going to get an opportunity of exploring and that, as I understand it, the Promoters are not going to put in front of us.

1720. **Mr Laurence:** Procedurally, Mr Elvin is completely out of line in putting forward questions in cross-examination that such and such is the fact when he has already told you that he is not going to be calling evidence to support that. I am not objecting to that. It just means that, as was inevitable at this stage of the proceedings, the Committee cannot form anything like a concluded view on which of the possibly three, possibly two options that are realistically before you you should choose.

The relevance of this line of cross-examination is and is only in case Mr Chapman, having heard the cross-examination, says, "On reflection I am willing to say that my option one should be rejected now." Apart from that, it is not relevant to anything that you have to decide now because that is for another day, as I made clear in my opening. If we are successful in persuading the Committee that there is a problem with capacity, we do not suggest that the issue of what to do about it can or should be resolved by this Committee now. There needs to be further work done on the possible options.

1721. **Mr Elvin:** I know that is Mr Laurence's position. The Committee knows that is not our position. Would it help if I gave the Committee a copy of the undertaking I am proposing to give on behalf of the Secretary of State so that I can put it in context?

1722. **Sir Peter Soulsby:** It might.

1723. **Mr Binley:** You will know better than I that this is not a court of law. It operates with slightly different sets of parameters. We are bound to report to the House our considerations in terms of options in this respect. If we are minded to take the view that Mr Laurence and his witnesses are proposing—I am not saying we are going to take that view—it is vital that we understand genuinely what the real options are, rather than simply saying that Mr Chapman's options are not limited to just two. You are in no man's land and we want to be on more sure ground than that—at least I do. From my perspective, I would like to know if this is a real option or not. If it is, it impacts upon my thinking. If it is not, equally it impacts upon my thinking but I need to be clear in that respect.

1724. **Mrs James:** Are you now saying that there has been another space identified for the electronic power transformer equipment and that it is within the realms of possibility that it can be transferred to that place?

1725. **Mr Elvin:** Can I take instructions on how to deal with this, given the Committee's concerns?

1726. **Sir Peter Soulsby:** Yes, of course.

1727. **Mr Elvin:** (After taking instructions) I hope this is not as unhelpful as it may sound.

1728. **Sir Peter Soulsby:** If it is, I shall comment.

1729. **Mr Elvin:** All I wish to suggest at this stage is not that there are any worked up proposals but that there are possibilities and you have one which is in more concrete form, which is option six. I do not want to take that any further, other than to suggest that there may be possibilities not precluded by Crossrail which could be pursued in the future. I am not suggesting there is a worked up option, any plans or details I can provide to the Committee, which is why I wanted to take the Committee to the

---

**The Petition of Corporation of London with British Land plc**

---

undertakings which the Secretary of State proposes to give in accordance with the document, which is to keep the matter under review, to look at the gateline. You are going to tell me that it is just an undertaking to consider something.

1730. **Mr Binley:** I have not said a word yet.

1731. **Mr Elvin:** The position is a genuine one because if we think about the development of a major project it goes to a detailed design stage after the basic designs have been resolved and the design becomes increasingly more certain as the process continues. This is an issue which can be dealt with as part of that process, which is what the undertaking is targeted towards.

1732. **Sir Peter Soulsby:** It is helpful to have this in front of us and the Committee will want to read it very carefully and reflect on what the Secretary of State is undertaking to do and when he is undertaking to do it.<sup>25</sup> We will not be able to respond immediately as to whether this will make any difference to our deliberations.

1733. **Mr Elvin:** I was not intending to bounce it on the Committee at this stage. Mr Laurence has raised it and, since the issue has arisen, I thought you ought to see it.

1734. **Sir Peter Soulsby:** If I can come back to your exploration of the EDF power transformer area as a possible further option, I think the Committee would perhaps consider it unfair to continue to press the witness about whether or not it is an option when it is not something that you on behalf of the Promoters have put in front of us as an option.

1735. **Mr Elvin:** We are not suggesting you should pursue any options at all.

1736. **Sir Peter Soulsby:** It is a bit unfair on the witness who, quite reasonably, told us that they have found two options that they think are possible for you then to criticise him for not having found a third which you yourselves have not found.

1737. **Mr Elvin:** It is not a criticism of the witness. I was simply exploring with him whether this was a possibility. When the Committee is looking at these undertakings, can I remind the Committee that even on the Petitioners' case the problem arises not because of the design year of 2016 but the future proofing for 60 years hence. This is not a problem that arises immediately; it is a problem for the long term. It then becomes necessary to put into context whether one has to rush to judgment to do something now or whether you need simply to be satisfied that there are appropriate steps that can be taken, within the context of the Crossrail works, should it become clear, rather than the arguments on the basis of modelling and the hypothesis at the moment, that works are required in the future.

1738. **Sir Peter Soulsby:** I understand that point entirely and I am sure Mr Laurence and his witness will at a later stage remind us of the point Mr Chapman made about the additional costs of retrofitting to deal with this problem in the future.

1739. **Mr Elvin:** Can I come to option six, please, Mr Chapman, which is part of your evidence? It is figure six. The possibility of widening point M is probably going to be incorporated in the design in any event so we need not continue with that. The SOR is dealt with in the London Underground note. London Underground propose to remove it in any event. Can I ask about the escalators to the street because there are a number of possibilities focusing around option six which may involve variations on option six, are there not?

**(Mr Chapman)** Absolutely. Option six is our understanding of what the Promoters might suggest. We wanted to make sure that it was an option we could advocate but although it was the Promoters' suggestion I have seen no drawings from the Promoters of what they would wish to do.

1740. For example, an expensive element of doing this might be the escalators up to street level shown half way up ticket hall B on the left.

**(Mr Chapman)** Not very. An escalator I believe is about just over £1 million. It is an element of cost. It might be £5 million.

1741. The escalators are beyond the gateline, are they not?

**(Mr Chapman)** Correct.

1742. The assessments of capacity that SDG have been looking at relate, as Mr Spencer made clear yesterday, to gateline calculations.

**(Mr Chapman)** Mr Spencer has made many calculations some of which relate to the gateline. Overall, he is talking about the capacity of the station, not the capacity of the gateline.

1743. We have seen where the pedroute showed issues. It may or may not be necessary to have escalators there.

**(Mr Chapman)** The flows are substantially more, an extra 9,200 people coming off Crossrail wanting to go to street. That is an escalator full purely from Crossrail in the year it opens, not allowing for future growth. Connectivity between ticket hall B and the street is a major element of concern in terms of capacity of the station.

1744. You disowned giving evidence on capacity right at the beginning because you did not want to go into the figures. I am not going to pick up capacity issues with you. The Committee has had the evidence from SDG on capacity so you will forgive me if I park that question and say it is a matter for submission based on the evidence. The escalators are one element. There may be a number of variations to the remodelling of the structure of the ticket hall on the right hand side, may there not?

---

<sup>25</sup> Committee Ref: A25, Liverpool Street Station Undertakings.

---

The Petition of Corporation of London with British Land plc

---

(*Mr Chapman*) Correct.

1745. I do not think there is any issue between us. Those are vaults under the street, under the Post Office shafts, and they are empty?

(*Mr Chapman*) I do not know if they are empty. I have never seen them.

1746. If works were to be done to ticket hall B, whenever they were done they would cause disruption at least in part to the passengers coming through the ticket hall.

(*Mr Chapman*) That solution does not require a lot of disruption because a lot of the work can be done behind walls that are currently walls.

1747. The only effect Crossrail at the moment has on ticket hall B is when the breakthrough of the wall comes at point M.

(*Mr Chapman*) The effect of Crossrail is to funnel—

1748. I am talking about construction works. The only physical works that impinge on ticket hall B at the moment are coming through at point M.

(*Mr Chapman*) Yes. Crossrail powers will stop at point M because it is not part of the power sought for Crossrail.

1749. I am looking at the question about whether future works are necessarily going to be more expensive and more disruptive if they are done at the same time or in the future. Works to option six are effectively going to be the same whether or not they are done as part of the Crossrail works or whether they are reserved to see whether they are needed at some stage in the future. The disruption will be the same whether they are done with Crossrail or later. They can be done, as you suggest, behind walls. There is no reason why the cost should be any different. They are independent works of Crossrail.

(*Mr Chapman*) Not quite. I understand where you are coming from but in terms of the residents of the area two major phases of construction in the area they would view as two major phases of disruption in the area.

1750. I suggest the extent of disruption is not going to be major in that sense. We are dealing with works to the ticket hall possibly, though not necessarily creating a separate entrance up to street level. That does not need to be included. The extent of disruption does not have to be that great.

(*Mr Chapman*) At the moment, without knowing what is proposed, how it would be done and what the issues are, I suspect you might be right but I do not know. There is a lot of work to be done over the Post Office shafts.

*Re-examined by Mr Laurence*

1751. **Mr Laurence:** You have said several times that you have not had the benefit of seeing any plans that enable you to comment comprehensively on option six.

(*Mr Chapman*) That is correct. We wanted to show something of how we felt it would work, just to make sure it would work, and help the Committee, but it is our guess of what is required.

1752. If the Promoters, no doubt reluctantly, made the assumption that the kind of demand which Mr Spencer has spoken about and which has motivated you in preparing option one was something that they should have underlying the preparation of plans for option six, how long would it take them to prepare some plans that would enable you to comment more comprehensively than you have been able to do?

(*Mr Chapman*) It depends how much information is already in their possession. If they have already started talking to the Post Office to get proper, accurate plans of the shafts, it may be relatively rapid.

1753. If they have not? Still just a matter of weeks, presumably?

(*Mr Chapman*) I have done buildings over the Post Office railway before and they are well equipped normally to provide information so I would hope the information could be gained quite quickly.

1754. If necessary, through the Committee, a steer was given to the Promoters to get on with the preparation of plans that gave some flesh to the option six idea, is that something which would enable you to prepare a more detailed appraisal of option six than you have so far been able to do?

(*Mr Chapman*) Absolutely, yes.

1755. As a result of Mr Elvin's cross-examination this afternoon, it seemed to me he was trying to persuade you that on reflection you should abandon option one because of the disruption in Eldon Street and so on. On reflection, are you prepared to abandon option one at this stage?

(*Mr Chapman*) Mr Elvin very perceptively identified some of the major issues but they are issues that we have been through, understand and have discussed with CLRL's consultants, so I did not learn anything new.

1756. In so far as the Secretary of State's proposed undertaking, *ex hypothesi*, involves the abandonment now of option one, what comment have you on the proposed undertaking?

(*Mr Chapman*) Personally, I would only abandon option one or even Mr Elvin's option two if I knew that option six worked, if option six is proven to work and to provide the capacity that might happen. There are advantages to option one, I fully acknowledge, but I would only abandon an option that I know will work if I knew the other option would work.

1757. Sir, are you going to say something about when we are coming back?

1758. **Sir Peter Soulsby:** Yes, at 10 on Tuesday, with the expectation that we will be hearing your closing submissions.

---

The Petition of Corporation of London with British Land plc

---

1759. **Mr Laurence:** On this case?

1760. **Sir Peter Soulsby:** Yes.

1761. **Mr Elvin:** I am not sure about whether I will be the leader for the closing speech on Tuesday. Is it the intention of the Committee to deal with the market straight after that?

1762. **Sir Peter Soulsby:** It is.

1763. **Mr Elvin:** It means you get the petitioner hearing finished as quickly as possible. You have had the position statement, the proposed undertaking and the London Underground note with the gate plan. You have also had the walk time plan. I do not know whether it has been circulated

but there was shoved under my nose at some point this afternoon the text for relative walk distances both for the ordinary passenger and the M IP passenger.

1764. **Sir Peter Soulsby:** I do not think we have had that.<sup>26</sup> Does this give us the information we are expecting, expanded beyond the map?

1765. **Mr Elvin:** Yes. It is a note that the Committee asked for earlier in the week.

1766. **Sir Peter Soulsby:** This will be A26.

*Adjourned until Tuesday next at 10.00 am*

---

<sup>26</sup> Committee Ref: A26, Amended Moorgate and Liverpool Street Walk Times.

---

**Tuesday 31 January 2006**

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone  
Kelvin Hopkins  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

*Ordered: that Counsel and Parties be called in.*

1768. **Mr Laurence:** There are a few matters of housekeeping to deal with before we begin. I know that Ms Lieven wants to put in two documents you have not previously seen. Might I just mention, whilst I am on my feet, that although there are numbers of errors in the transcript which we have identified in relation to Mr Chapman's evidence, which was given last time, there are just two that he would particularly like to correct for the record. One is where, according to the record, he is apparently assenting to the idea that what has been called option six would cost £80m, whereas he had earlier made clear his agreement with the Promoter's estimate that the cost would be likely to be between £40m and £80m. We can tell the shorthand writers later where the appropriate correction needs to be made, but that is the first correction.

1769. **Chairman:** Do we need to recall him?

1770. **Mr Laurence:** No, sir. The other material correction I would like to draw to your attention is that Mr Chapman was asked by me at question 1651, "Without going into those issues again, because I think you have dealt with them, your evidence is that if there is a will that could be done in how long?"—and we were talking about the process of the two proposals, the proposals that have been referred to as options one and six, so that they could be properly compared with each other—Mr Chapman is recorded as saying, "I believe that with proper resourcing and a proper Bill two months would be reasonable although I acknowledge that Crossrail are very busy on a number of other points so far." Mr Chapman tells me he does not recall whether he said two or three months but he said that he meant to say that, in his judgment, three months would be an appropriate time. So I think it is right, therefore, to draw that correction to your attention as well. Mr Mould reminds me that I myself have done something wrong in referring to option six first time around; I should have referred to option one, the costing for option one, the Eldon Street scheme, is said to have been between £40m and £80m.

1771. **Chairman:** On the previous point, about whether or not he said two or three months, I think the point has been made on the record now and there is no reason why it should be adjusted in the report; you have referred to it and I think we can accept that.

1772. **Ms Lieven:** Sir, it is now on the record. I think it is quite important that transcript errors are kept to literal errors or unpicking of evidence may proceed, but I am not concerned about it this morning; we understand the position. Sir, can I deal with a little housekeeping arising from last week? Is this an appropriate moment to do it?

1773. **Chairman:** Yes.

1774. **Ms Lieven:** Firstly, sir, there was reference made on Thursday of last week to the Promoter's position statement on the Liverpool Street eastern ticket hall. There is a little confusion I have to admit, on our side, as to whether this document was actually put in or not. Certainly the City saw it and I understand that there was reference to it, but I am not sure that the Committee was ever given a copy, and therefore it ever appeared on the record. It is a very important document because it is our relatively detailed response to a number of points that the City made, and so if I can ask for it now to be handed round and put on the record? Perhaps before I start my closing, which will be in a few minutes, I will just take you through this very briefly to explain factual points therein. I do not want to spend more than a couple of minutes on it; the City has seen it. Can I say, sir—and perhaps this is a matter for us all to consider—that I think there are lessons to be learned from the Liverpool Street experience as to how we present documents from now on because it is not wholly satisfactory, I suspect, from anybody's point of view, for documents to be coming in at the end like this. Equally, there may be scope to improve the way we present factually what it is we are intending to do at any particular site. So before we get into Petitioners' arguments as to what is wrong with it the Committee at least has an opportunity to see on axonometric what it is factually we are proposing. Perhaps we can leave that and have a discussion outside the Committee room about the best way to handle it? This document that you have just been handed should be A27, and I will come back to it when I come to the closing.<sup>1</sup>

---

<sup>1</sup> Committee Ref: A27, Promoter's Position Statement—Liverpool Street Eastern Ticket Hall.

---

 The Petition of Corporation of London with British Land plc
 

---

1775. The second document that I need to deal with is a document we put in last week that was called 109;<sup>2</sup> that was a note on walk distances and it included circles as to walk distances from Moorgate and Liverpool Street Station. Unfortunately, it turned out that there was an error in that note and drawing because, for reasons that the Committee does not need to be concerned about, we took three minutes as the differential walk time instead of two minutes. The Committee may remember that I put to Mr Weiss in cross-examination a difference of two minutes but by error the note and the drawing put a difference of three minutes between the centre of platform to Moorgate and the centre of platform to Liverpool Street. We have now drawn up an amended note and drawing, so if I can ask the Committee to substitute the document that is now being handed in, which has the number 112,<sup>3</sup> for the previous document that was 109. I can only apologise profusely for the confusion and say that we as Promoters are trying to get better with all this document management and we hope that this kind of thing will not happen too often.

1776. **Chairman:** I think that is perfectly reasonable and acceptable. Before you move on, Mr Laurence do you accept that you have actually received this document?

1777. **Mr Laurence:** Yes, sir, we accept that we received it. I received a copy without any accompanying drawing that went with it. We have commented on it, and with Ms Lieven's agreement—and I mentioned this to her—we would like to put in a short note of our own which we will put in at the appropriate time.

1778. **Ms Lieven:** I am happy with that, sir. We have not seen that note but that is no fault of Mr Laurence's. If there is anything that comes out of it there may have to be a further note, but hopefully there will not.

1779. Sir, the next thing on the agenda is my closing on behalf of the Promoter in respect of the Liverpool Street Station issues. I do not know whether the Committee and Mr Laurence is ready to move straight on to that now or if there is anything else that needs to be dealt with first?

1780. **Chairman:** Yes, we accept that.

1781. **Mr Laurence:** Sir, I am in your hands as to whether you would like us to circulate our document in reply on these walk times now, rather than giving them out in my closing.

1782. **Chairman:** When you are ready to give it to the clerks do circulate it and then we can return to it if we need to at a later time.

1783. **Mr Laurence:** Sir, I will wait until later.

1784. **Ms Lieven:** Sir, before I come to the closing itself can I deal with this Position Statement, A27, that has been handed in? If I can tell the Committee what is in it so that it can be used as an aide memoir later? It deals with a number of topics that had come up under this petition. First of all it sets out how Liverpool Street Station will work with Crossrail. These were all matters that were put to Mr Weiss in cross-examination, so there are no surprises in there; it is just the factual position in one document. Section two is how we have calculated the demand levels in Liverpool Street Station and reference to the modelling that has been carried out and the adjustments that have been carried out. So, in essence, we take a standard TfL model and then we adjust it to observe flows based on reality. We then deal with impact on Crossrail on ticket hall B—and again these are all matters with which the Committee are familiar from the last couple of weeks, so I do not need to go through that—reference back to the various tests. Then we deal with the British Land (SDG) tests and explain how each of those is worked, and effectively up to test three we have modelled on the basis of the British Land tests, the SDG tests. Test four, we say, is a step too far because the assumptions that are built into that lose all grip on reality, and I will come back to that in the closing. So we say the Committee should set aside test four.

1785. Then we deal with a number of points on the British Land for Blomfield Street/Eldon Street ticket hall, and these are matters which I understand Mr Elvin put to Mr Chapman on Thursday in terms of the difficulties of construction given the proximity of the Metropolitan, Circle and Hammersmith and City Line tunnel.

1786. Then over the page, problems with traffic and pedestrians during the construction, if it were to take place. Then a number of other issues such as, for instance, the very major utility works that would be necessary.

1787. Then in section six we refer to the capacity enhancement options that could be considered by the Promoter. In other words, increasing the number of gates or using ticket hall C. Again, that is a matter I will come back to in closing.

1788. So, sir, if we can put that on the record as a factual statement by the Promoter on those issues.

1789. Sir, can I turn to the closing itself? I have had copies typed out because sometimes it is rather easier to follow something if it is written out, but obviously I am going to read it as well. I have tried to keep it reasonably short to really deal with the issue that the Committee has to deal with. If that document could be handed out?<sup>4</sup> Can I start, before I start reading it,

<sup>2</sup> Crossrail Ref: P18, Amended City of London Plan to show 5 and 10 minutes walk time from proposed Liverpool St and Moorgate Crossrail platforms (LOND LB-2604-109).

<sup>3</sup> Crossrail Ref: P18, Further Amended City of London Plan to show 5 and 10 minutes walk time from proposed Liverpool St and Moorgate Crossrail platforms (LOND LB-2604-112).

<sup>4</sup> Committee Ref: A28, Promoter's Closing Statement.

---

**The Petition of Corporation of London with British Land plc**

---

by saying that I refer throughout to the “City” and I mean of course the City and British Land’s petitions, which have been heard together?

1790. We start by saying that the City’s case, supported by British Land, in essence has three limbs. The Promoter’s figures are wrong because we underestimated the growth in the City and got the split wrong between Liverpool Street and Moorgate entrances. Secondly, the existing station does not work and it will get worse. Thirdly, the City of London is very important and Crossrail should provide an entrance which reflects that importance.

1791. We reply with the simple point that the evidence shows that the impact of Crossrail on Liverpool Street has been modelled at very high levels of passenger flows and shown to be acceptable.

1792. The result of the City’s arguments is that because of congestion there needs to be further capacity supplied at the Liverpool Street end of the station. I would suggest that that leads to two main issues. First of all, whether Crossrail leads to a worsening of congestion at ticket hall B, which I refer to throughout as TH/B. Secondly, whether the situation in that ticket hall is acceptable.

1793. The City argues that Crossrail does not provide adequate space in the ticket hall because they say that the Promoter has got its assessment wrong, and it puts forward a series of alternative assessments of the numbers involved and urges the Committee to require the Promoter to carry out further detailed design work before the Committee can conclude its hearings or balance the issues with the many other issues.

1794. Before turning to the detail there are two points to make on the general approach of the City. Its argument is that if inadequate space is provided then this will have a negative impact on business development throughout the City. Firstly, it cannot be ignored that Crossrail is bringing a major improvement to public transport in the City. It will massively improve capacity into the City, both in terms of quantitative and qualitative capacity. There will be two entirely new ticket halls, a matter that the City rather washes over, at Moorgate and Farringdon East, and greatly enhanced links. Secondly, despite the City’s much vaunted concern about congestion at Liverpool Street there is no evidence that the City has either sought to limit development because of these problems, or sought financial contributions from major developments around Liverpool Street to contribute towards enhancements at the station. The City’s concerns about congestion at Liverpool Street are not reflected in the TfL Investment Programme or any other relevant transport planning document.

1795. On the assessment of the figures, to a great extent, happily, the Committee does not have to be too concerned because the real issue is the impact of the figures, not the numbers themselves. The impacts are shown by the Pedroute analysis and, as I will refer to in a moment, are perfectly acceptable.

1796. The starting point here is that Crossrail will remove large amounts of interchange traffic from Liverpool Street Station, both on LUL and Network Rail concourses. So Crossrail removes passengers who presently use the Great Eastern slow lines and interchange on to the Central Line at Liverpool Street, and it removes those people who currently exit Liverpool Street but whose destination are around Moorgate and who will, with Crossrail, leave the station by the Moorgate exit.

1797. The Promoter has reached its assessments by using the standard TfL model, RAILPLAN, which has been used on many other LUL schemes. The numbers have been taken from the London Transportation Study Model and then adjusted to local conditions, and there is no dispute that that is the correct approach. Indeed, the Environmental Statement makes it quite clear that the Promoter has looked at conditions as they exist and not just by the model without adjustment. Further, the Promoter has now adjusted its assessment to reflect the City and British Land’s figures for employment growth to 2016. Therefore in the Promoter’s and LUL’s view the figures and the analyses are robust.

1798. We say that there are a number of problems with Steer Davies Gleave’s figures. First of all, they have not taken into account the considerably shorter walk time and more direct route from the midpoint of the Crossrail platform to the street via Moorgate than the Liverpool Street entrance; and it is about two minutes. Secondly, their figures may well overstate the market share to Crossrail, which the Committee will remember already took account of the increased interchange to Crossrail. Thirdly, a series of other problems, including a failure to take into account many people’s preference to walk over ground rather than through a network of tunnels and the station.

1799. Finally, the SDG approach is to pile more and more assumptions on top of each other, with increasingly pessimistic figures, to a point where the station can no longer cope. It is our case that their figures begin to lose all realism. So SDG’s test four gives a total increase in flow through ticket hall B of 62 per cent over 2001. So that is 62 per cent between 2001 and 2016, rising to 118 per cent with a 35 per cent uplift. It is hard to see that as a realistic test and appears to us to be no more than an attempt to push the figures until they show that ticket hall B no longer works. Although, of course, it is necessary to plan for the future it is also necessary to bear in mind that conditions in 2050 are extremely difficult to predict, for reasons that perhaps have nothing to do with Crossrail.

1800. It should also be borne in mind that the view of the City Corporation, through Mr Rees, which presents perhaps the more objective approach of a public authority understanding the need to prioritise budgets, is that there is a balance to be struck between the overall benefits of Crossrail and the cost and extent of congestion. He agreed that the City’s concerns should only lead to further requirements if ticket hall B

---

**The Petition of Corporation of London with British Land plc**

---

was “effectively unable to operate”. It plainly will work except under such extreme conditions that many parts of the tube network would have failed long before that point had been reached. If one thinks of 118 per cent across almost any London Underground station the mind begins to boggle. Therefore the Promoter does not accept the SDG figures.

1801. However, the real issue is to determine the impact of Crossrail, taking realistic assumptions, and realistic growth. In order to test this question the Promoter has tested the station, both at 2016 and with 35 per cent growth, by the use of pedroute model. This is the model which has been used by LUL for many years, including for the Jubilee Line Extension and the underground works at Kings Cross under the Channel Tunnel Rail Link Act. Mr Spencer of SDG accepted that pedroute was an appropriate way of testing the operation of the station and accepted that he did not propose any alternative of additional means of doing so.

1802. The pedroute model shows that taking SDG figures in Table 30 (i.e. a growth of 32 per cent over the Promoters’ figures) that in 2016 ticket hall B shows accepted conditions. Perhaps that is the paragraph to highlight mentally.

1803. Pedroute also shows that in 2016 Crossrail does not make the position in ticket hall B any worse than without Crossrail. My exhibit numbers there are entirely wrong, Chairman. I do apologise. It should be A19.<sup>5</sup> In fact Crossrail produces significant improvements in congestion through the station, by relieving the Central Line and the Circle/Metropolitan Lines and providing substantial additional capacity. This confirms the overriding benefit to business which is central to Crossrail’s aims—i.e. additional capacity to relieve overcrowding.

1804. It is necessary then to test the station with a growth figure of 35 per cent in accordance with LUL’s standards. This has been done with pedroute. Again taking SDG’s “Test 3” figures this shows that the position with and without Crossrail is largely comparable in ticket hall B and significantly better on the Central and Circle Line platforms. Note that the LUL standards do not require that the number of gates be assessed at 35 per cent growth, for the obvious reason that there are likely to be constraints on the number of people getting to the gates elsewhere in the station, for instance at the bottom of the Central Line escalators.

1805. Therefore the conclusion is that there is no problem with capacity in ticket hall B; and that any congestion in ticket hall B needs to be seen in context of passenger growth at Liverpool Street Station as a whole rather than the impact of Crossrail. On this basis there is simply no ground for requiring a further ticket hall or any further work to be undertaken at this stage.

1806. That conclusion is compounded by: (1) the British Land option of Eldon Street ticket hall costing a considerable amount of public money, something in the order of £40-80m, or even more with additional payments to Infracore; (2) it would cause considerable disruption, both to LUL lines and the surrounding area through utility diversions and associated works; (3) it would serve a relatively limited catchment area, because it lies between Moorgate and the existing Liverpool Street Station, although it is of course very well placed for British Land’s development at Broadgate. It is therefore an alternative which has significant detriments, and as such should not be adopted unless the need for it is overwhelming.

1807. Very importantly there are a number of far more straightforward and cheaper solutions which would solve any problem that might possibly arise in the future: First of all, and most straightforwardly, a reconfigured gateline at ticket hall B to add gates and facilitate passenger throughput; secondly, a greater and more efficient use of ticket hall C through management measures and signage, which the pedroute modelling shows that that ticket hall is consistently congestion-free; and, thirdly, in the longer term, if necessary, engineering works to increase capacity at ticket hall B. and that is what Mr Chapman did call Option 6. Given that the concern is for a future date many years beyond 2016, it is appropriate to look for possible works to be provided as and when the need becomes clear rather than looking to provide a solution for many years hence, on the basis of possibly unrealistic assumptions, before the precise circumstances can be known. There is no reason why such future works should be more disruptive or cost more than if they were done in the future rather than as part of the Crossrail works.

1808. Both (1) and (2) are within Bill powers and LUL are prepared to accept them if justified. LUL make clear in their notes, and I would commend the Committee to look again at that note, that where the cost of making provision is disproportionate to the benefit gained they would look to other solutions, such as a concession, station management measures or accepting a degree of congestion, and that is all referred to in that LUL note. I would urge a degree of realism there on the part of the Committee in terms of remembering that money is not an unlimited resource, and for TfL there may well be other priorities.

1809. Other engineering solutions, such as Option 6, exist and can be carried out after Crossrail if necessary without entailing excessive cost. Therefore, there is no unacceptable impact from Crossrail; and, further, to the degree that there may be increased congestion in the future, there are a number of alternative ways of dealing with this if and when it arises.

1810. There are in truth, we would suggest, two ways the City puts their case. Firstly, on congestion and the need for further capacity, which we have answered conclusively above—and that is the ostensible case in the City’s opening. Secondly, and perhaps the true heart of their case although less clearly stated, that the

<sup>5</sup> Committee Ref: A19, Liverpool Street Station: with Crossrail (SDG Test 1-14) Pedroutes.

---

**The Petition of Corporation of London with British Land plc**

---

City should have a landmark dedicated entrance and ticket hall, perhaps a little bit like the Westminster new underground station down the road, to reflect the importance of the City and the importance of Crossrail.

1811. Chairman, we urge on you strongly the thought that Crossrail is designed to provide major new operational capacity across London at a cost which provides value for money and is affordable. It should be tested against those aims. If there is no operational requirement for a facility then it would be quite wrong to provide one as a “statement, entrance or landmark”. There are doubtless many enhancements to Crossrail which could in theory be provided to overcome historic problems with the London Underground network. However, if this course is taken then the result will be an unaffordable railway, which will either not be built or which will divert resources from operationally needed transport provision elsewhere. This is a considerable risk to take for a station which the evidence shows will work, to apply the approach taken by Mr Rees. Therefore, the Promoter asks the Committee to resist the temptation to provide a dedicated ticket hall at Liverpool Street as some form of fitting statement in the City for Crossrail.

1812. The City has asked the Committee to require us to go away and draw up detailed solutions. We say that that is not a justifiable use of the Promoter’s resources where the evidence shows there is no real problem, and the Committee has not yet been able to consider the issues arising on other petitions.

1813. Having said that, the Promoter acknowledges that forecasting always has an element of uncertainty, and it is essential to keep Crossrail under review. We have therefore offered a series of undertakings to the City and the Committee. These undertakings were handed in, as I understand, but I do not think anything very much was said about them.

1814. The first requires the Secretary of State to keep the layout of the ticket hall under active review and to carry out any reasonably necessary changes to the gateline. Major infrastructure projects such as Crossrail, I am sure the Committee knows, go through a number of design stages and when the detailed design is being worked up the matter can be looked at further and in detail. It is unrealistic, we say, of the Petitioners to demand what is, in effect, advance detailed design work to be provided ahead of other demands on time and resources. We give a commitment that we will continue to keep under review the layout of the ticket hall and any information that we receive as to how that should be amended.

1815. The second requires the Secretary of State to ensure that the works are carried out in such a way as not to preclude a future expansion of ticket hall capacity, if needed. In other words, take as an example Option 6, the works in the Bill will not prevent that going ahead. By not accepting the City’s case the Committee is not tying Crossrail forever to the layout or the physical form of ticket hall B as the present time.

1816. The third requires the Secretary of State to establish a scheme for monitoring passengers going through ticket hall B and with the City to keep under review the need for additional capacity, and then to work with the City and LUL you secure such implementation if works are needed.

1817. It is our view that those three undertakings are really sufficient to deal with the concerns that the City has raised, and we would therefore commend them to the Committee.

1818. **Sir Peter Soulsby:** I have one question, in the evidence we seem to note from London Underground with regard to their intentions for station control in ticket hall B, I recall they said it was their intention to move that during 2006?

1819. **Ms Lieven:** Yes.

1820. **Sir Peter Soulsby:** I wonder if you could just clarify what the Promoter’s intentions are, and whether they are able to give any commitment about removal of the use of that space?

1821. **Ms Lieven:** The moving of the control room as I understand it, absent Crossrail, is a matter for London Underground and its PPP partner at Liverpool Street. I think there is reference in the note to Infraco. I would be surprised if the Secretary of State could give any undertaking as to it being moved; but what I can do is seek further confirmation as to the plans on it and the level of certainty that it will be moved. I would need to take instructions on that.

1822. **Sir Peter Soulsby:** I raise that, Chairman, because pedroute’s evidence shows it as having been removed. Clearly, were it not to have been removed at the time of Crossrail it may make a significant difference to the way we look at this.

1823. **Ms Lieven:** I am sorry, I may have misunderstood the question. So far as Crossrail is concerned, it is Crossrail’s unequivocal intention that that station operation room will be moved. I need to take instructions, but I suspect we can give an undertaking that it will be moved. In reality, my understanding is it will have been moved many years before. I will take instructions on that point and come back to the Committee either this afternoon or tomorrow with an express position on that.

1824. **Mr Laurence:** Chairman, the main issue that confronts this Committee can be described in a number of ways, and in the course of what I have to say this morning I will no doubt use several formulations, but it can only be put like this: whether there is a sufficient problem with the Promoter’s proposed solution at Liverpool Street for this Committee to intervene and require the Promoter to do something about it; and it has principally been in connection with that first issue that you have heard evidence over the past five or six days.

---

**The Petition of Corporation of London with British Land plc**

---

1825. We respectfully submit that the Committee will not be assisted if I was to attempt a detailed review of the evidence relevant to that first and principal issue in the course of what I have to say, particularly as there is an equally important further matter that I want to spend some time on after my preliminary remarks on that first issue.

1826. The Promoter has chosen not to call any rebuttal evidence in this case. A strange omission if his view really is that there is no case to answer. Notes on this and so-called position statements on that are no substitute, Chairman, for hard evidence. The Promoter has plainly reflected on the evidence and, we would respectfully suggest, has decided that he cannot realistically hope to counter it in the usual way; that is to say, by calling evidence of his own and subjecting his witnesses to cross-examination.

1827. The decision to drop from the scheme an eastern ticket hall at Liverpool Street, the so-called arcade side scheme, was, so the environmental statement tells us at page 241, because the predicted passenger flows did not warrant a new ticket hall at the Liverpool Street end.

1828. The Promoter did not call evidence before you to defend those predictions; neither did he contradict your Petitioners' evidence that he no longer supported those predictions. Your Petitioners gave evidence summarised in Mr Spencer's Table 30 which showed that the Promoter had amended his predictions to produce a need for, on Mr Spencer's calculations, 18 plus five equals 23 gates in ticket hall B when you made allowance for the design year. The Promoter did not deny that his amended figure for 2016 with Crossrail produced a need for 18 gates, two more than there are now. Chairman, the common position reached was that summarised in Table 30 at columns D and G, lines 9 and 17.

1829. There was no realistic answer to what Mr Spencer had to say about that. The Promoter called no evidence to support the view that his amended Crossrail passenger exit flows, 67 per cent higher than his original ones, still did not warrant a new ticket hall. He left you to infer from cross-examination that that was his view. Chairman, that is in a way disgraceful really. Surely the Committee is entitled to assume that the Promoter would not have reached the decision to drop altogether an eastern ticket hall if he had known what he now knows and what the Committee now knows?

1830. What I am saying is this: the Crossrail proposal was going to include a proper eastern ticket hall; without notice, and very suddenly in February 2005, it was dropped. CLRL'S demand matrixes of December 2004 had predicted 5,300 exiting Crossrail passengers crossing Point M in the morning peak. In January of this year, just before these committee proceedings began, a document was produced entitled "Liverpool Street Station Demand and Capacity", an extract from which Mr Weiss produced, which showed the Promoter accepting on Mr Spencer's evidence that

that figure 5,300 Crossrail passengers passing Point M into the ticket hall had been underestimated by the percentage I mentioned earlier, 67 per cent. The figures should have been 8,850, not 5,300.

1831. The point here is not to convince with figures; if Mr Spencer has not already done that my advocacy is hardly going to do so. The point is rather to demonstrate this: the Crossrail passenger demand forecasts put forward by the Promoter, on which he based his decision to drop the eastern ticket hall, have been shown to be and accepted as being incorrect. The Promoter's answer to that has in effect been "So what?" The answer to "So what?" is, "So why haven't you reversed your decision to drop an eastern ticket hall by agreeing to provide one? The Committee was entitled to expect an answer to that question, which went beyond a mere position statement.

1832. When you look at the position statement, you will see several examples of what happens when a document is put before the Committee, author not attributed, which contains evidential matters that are highly contentious but are not subject to cross-examination.

1833. If I may, Chairman, I would just, taking this as briefly as I may, give you a few examples of what I am talking about.

1834. Without, I hope, breaking the direction of Sir Peter sitting as Chairman, not to trouble the Committee too much with precise numbers, there is a reference in, I think it was, document A16,<sup>6</sup> exhibits 11 to 21, which the Promoter discusses at paragraph 3.3 of the position statement. That, sir, for the record, reads: "The Promoter has placed before the Committee a series of pedroute modelling results for ticket hall B at Liverpool Street, exhibits 11 to 21. These pedroute results assess the morning peak operating conditions in ticket hall B at Liverpool Street Underground Station at 2016, both without and with Crossrail, under a realistic range of passenger growth assumptions, including an allowance for long-term future growth in accordance with paragraph 3.1 above." That is the opening of that paragraph.

1835. These exhibits referred to in that position statement, says the Promoter at 3.3, assess the morning peak operating conditions in ticket hall B at Liverpool Street Underground at 2016, both without and with Crossrail, under what the paper calls a realistic range of passenger growth assumptions, including an allowance for long-term future growth". Sir, I ask forensically, who says they were realistic? Where was our opportunity to cross-examine the witness who claimed that they were realistic? The results are said to show that the impact of Crossrail will not be to worsen expected morning peak operating conditions in ticket hall B in 2016 or the longer term but, on the contrary, are likely slightly to improve congestion in ticket hall B because Crossrail will offer some relief to the Central line and the subsurface lines.

---

<sup>6</sup> Committee Ref: A16, Exhibits to the Proof of Evidence of Mr Tim Spencer, Steer Davies Gleave.

---

The Petition of Corporation of London with British Land plc

---

1836. The document then goes on to criticise in detail the assumptions made by SDG. In particular, sir, firstly, the assumption in test three of an overall market share of 20 per cent instead of 13.3 per cent and the assumption that a further 4,610 passengers would interchange from national rail to Crossrail through ticket hall B in the peak. Sir, of the first of the assumptions that I have just mentioned the position paper asserts there is no explanation before the Committee for the significantly higher figure asserted by British Land SDG". But there is and there was. Mr Spencer's judgment, asserted by him in the teeth of a vigorous cross-examination from Mr Elvin (the references you will find at Day Six, pages 14 and 15, paragraphs 1449 to 1458). Sir, I ask again, very courteously, I hope, but forensically, where was our comparable opportunity to cross-examine the Promoter on his opposing judgment?

1837. The second assumption is criticised on the basis that the Promoter considers "the additional adjustment to be unrealistic." That is Mr Spencer's test four. Oh? Mr Spencer did not consider it unrealistic and appeared before you to defend it. Where was the Promoter's witness? When Mr Elvin said, at question 1466 on Day Six, referring to test four, and I quote: "In other words, the Committee can apply their own judgment and decide whether you are right or not", I respectfully suggest he should, in fairness, have added "taking care to disregard entirely the various bits of evidence I gave as counsel in the course of my cross-examination."

1838. Sir, my second example again involves the position statement. After describing the problems with the Petitioner's Eldon Street proposal, paragraph 5.3 of the position statement asserts as follows: it described various problems in paragraph 5.1 including, under the heading "Tunnels clearances; impediment of traffic and pedestrians during construction; permanent spatial problems at ground level; major utility services disruption and disruption to sewers", and it then went on, at 5.3 in my punctuation, to make two points. Firstly, "although many of these problems might be overcome if there were no alternative, the cost and disruption involved cannot be justified when alternative significantly lower cost and less disruptive options are available." Secondly, "in any event, it is said, the need for this new entrance is strongly disputed."

1839. At the final page of the statement, the maker of the statement goes on, 6.1: "The number of gates in the LUL ticket hall B could be increased (a) in the existing configuration by replacing existing gates with slim line gates, (b) by reconfiguring the existing gateline and using slim line gates this could include using the mezzanine area of the north-west corner of the ticket hall (see LUL note)." 6.2 refers to a greater use of ticket hall C facilitated by management controls and signage, and so on. Sir, we regard that paragraph 5.3, from which I have quoted, I hope fairly, as particularly objectionable.

1840. What the second part of the proposition at 5.3 is talking about is the assumption that the need for the new entrance will be rejected by the Committee. If that happens then, of course, the main case that we have been putting before you is not accepted by the Committee and that will be that. What the second proposition in 5.3 means is that the Promoter simply does not agree that we need a new station at all. That is the question for the Committee to resolve. However, the first part of the proposition in 5.3 is a comment to which we take exception. If the Committee rejects the present solution what are these "significantly lower cost and less disruptive options"? Option Six, the EDF option Ms Lieven's suggestions, at Day Four, 859 to 862, which amount to saying "increase the number of gates, live with congestion, make people on the Central line use ticket hall C", as set out in paragraph 6 of the paper? There is no evidence as to how these alternatives would work. Obviously, the Promoter would have been cross-examined uphill and down dale about them if he had turned up to try and explain how it is that he thought they properly addressed the problem.

1841. Sir, my third example involves very brief reference to the LUL document at A23,<sup>7</sup> the operation of the Liverpool Street station and use of the pedroute model. That is, likewise, full of statements of fact, many of which could be criticised; in particular the value and limitations of pedroute have only been able to be examined through Mr Spencer. Sir, my fourth and final example, is the one that would involve me putting in a paper of our own to deal with the revised paper on walk times. Perhaps I could just ask if that could now be circulated, sir, which is the answer that we make to that revised paper under the heading: "British Land Petition No. 205. Walk Time Isochrones for Liverpool Street Crossrail".<sup>8</sup>

1842. While that is being done, let me just say this: that under cross-examination Mr Weiss gave what you may think were four particularly powerful examples of why you do not just measure distances from the platform. That is, his examples were of how people actually choose their destinations. For the record, sir, please look at Day Four, 717 and following, on that subject.

1843. I now refer you, if I may, to the document that I referred to a moment ago, and just read it on to the record as follows: "CLRL tabled, on 26 January, a note entitled 'Amended Moorgate and Liverpool Street Walk Times' with an attached plan showing the areas that could be reached on foot within five and 10 minutes' walk via the Moorgate and Liverpool Street exits to Crossrail.

1844. The walk isochrones are based on times from the end of the Crossrail platforms closest to Moorgate and Liverpool Street respectively. The calculations referred to in the note indicated that the platform to street exit time at Moorgate would be 1.5 minutes and at Liverpool Street would be 4.5 minutes—a difference

<sup>7</sup> Committee Ref: A23, The Operation of Liverpool Street Station and the use of the pedroute model.

<sup>8</sup> Committee Ref: A29, British Land Company—Walk time isochrones for Liverpool Street Crossrail.

---

**The Petition of Corporation of London with British Land plc**

---

of 3 minutes. CLRL has since issued, on 31 January, a correction to the effect that these walk times should be 2 and 4 minutes respectively—a difference of 2 minutes.

1845. The corrected walk times to street have been used to re-plot the CLRL isochrones. However, two critical changes have been made: firstly, CLRL assumed a single exit point at Liverpool Street onto Liverpool Street whereas the revised plan incorporates walk routes via all possible exits (that is to say, Liverpool Street, Octagon Arcade, Sun Street Passage and Bishopsgate) and, secondly, walk time isochrones are plotted using actual walk times at street level and not simply crow-fly distances as used by CLRL.

1846. Then Mr Sarlby (I think it is his paper) says of the first attached plan, that that shows the five and 10 minute walk isochrones for Moorgate and Liverpool Street exits. Then it says, under the heading “Eldon Street Exit: The Eldon Street exit proposed by British Land would create a shorter walk route to street level at Liverpool Street. The exit time has been calculated as 2.25 minutes, or just 15 seconds longer than the Moorgate exit. The second attached plan compares the Moorgate and Eldon Street walk time isochrones.” Sir, I am not going to take time on plans, they are there for you to look at at such leisure as you may have to examine them.

1847. May I now just turn back to the beginning of what I was saying, with this comment on the document that I have just handed in, that it is a classic example of the sort of problem that you get when evidence is not led by the party putting in the original document. This is an answer to it—the paper I have just read from—and the Committee is simply going to have to do the best it can without the benefit of having cross-examination.

1848. Sir, with that very brief run through some of the main points that separate the parties, we want to express the hope that you will therefore decide that the Petitioners have discharged the onus which is on them and demonstrated convincingly that there will be a substantial capacity problem in 2016 and beyond, about which something must be done. What that something is is the second issue. It is important in this connection for the Committee to remind themselves that there has been no evidence from the Promoter on this issue either. What there has been is cross-examination of Mr Chapman based merely on matters put to him by Mr Elvin.

1849. Sir, there is nothing actually improper about proceeding in that way, so long as the tribunal remains alert to the fact that the matters put in cross-examination are not themselves evidence. Of course, the witness may accept the point put to him in cross-examination, in which case the cross-examiner has achieved by cross-examination what he would otherwise have needed evidence of his own to achieve. It also follows, however, that if the witness contradicts the cross-examiner, the cross-examiner is stuck with what the witness says in answer, having chosen to call

no evidence of his own to support the questions asked. All this is commonplace, and the Committee showed itself very well aware of the deficiencies of Mr Elvin’s method.

1850. The implications of this chosen method of proceeding do not require any very detailed analysis, but there is one point relevant to Mr Chapman’s evidence on which, with your leave, I will spend a moment or two. The point is this: Mr Chapman was called on a hypothesis (which I hope he and I have both made clear), the hypothesis being that the Committee would accept in due course that there would be a capacity problem at Liverpool Street station in the future. Your Petitioners could not know and, of course, still do not know, whether the Committee will decide that there will be such a problem. We have taken a view that you will not be assisted if we spend more time in the course of these closing remarks reviewing the evidence of Messrs Rees, Penfold, Weiss and Spencer in order to persuade you to regard that evidence as showing that there is a problem at Liverpool Street about which something must be done. If the evidence was insufficient to persuade you of that, as I mentioned earlier, my advocacy is hardly likely to swing the thing in our favour. If, on the other hand, the evidence has been sufficient to convince you, you need no more from me on that issue now.

1851. However, as we cannot know whether the committee has been convinced or not until you announce your decision, you will forgive me, sir, if I now address you on the supposition that we have. I refer to that supposition for ease of reference as the Petitioner’s First Proposition (or the PFP, for short). Let me say a little bit more about what the Petitioner’s First Proposition actually involves, because it is absolutely central to what we are going to ask you to do.

1852. The Promoter’s solution, described in the Environmental Statement at page 241 as option two, is to make “a connection into the existing London Underground ticket halls (in the plural)”. In fact, as you know, the proposal is to make a connection only into ticket hall B, but that is not here my point. My point is to elaborate on the Petitioner’s first proposition. It can be divided into three parts, and it is this: firstly, that the Promoter’s solution for the Crossrail station at Liverpool Street will not do and must be rejected. Secondly, the Promoter’s scheme must be rejected in favour of something much more radical. That is to say, no cheap and cheerful tinkering of the kind proposed by Ms Lieven in the course of her cross-examination of Mr Weiss.

1853. Sir, the third element of the Petitioner’s first proposition is this: the radical solution, once determined, must be incorporated at the outset in the provisions of the Bill itself. That brings me to a further point I wish to make about Mr Elvin’s chosen method of cross-examining Mr Chapman. As I believe I have made quite clear, his evidence is relevant and material to your deliberations if, and only if, you accept that something radical must be done at Liverpool Street in

---

**The Petition of Corporation of London with British Land plc**

---

place of the Promoter's scheme. Yet Mr Elvin's cross-examination, to some considerable extent, ignored that. So, for example, he tried to get Mr Chapman to agree that the Promoter could "wait and see" if there turned out to be a problem, and if so to do something about it. He put forward, on Day Six, three suggested undertakings which are all premised on the Petitioner's first proposition not being correct.

1854. Sir, obviously, if the Committee reject the PFP then we are happy to have the Secretary of State's undertaking, nevertheless, to keep the situation under review and to establish a monitoring scheme and so on, but none of that was relevant to what Mr Chapman was trying to help you with. What he was trying to help you with was the question how to determine what was the best alternative option to incorporate into the Bill in place of the Promoter's hole-in-the-wall scheme. This must have been a frustrating task for Mr Chapman because, try as he might, he has been unable to help you with the detail of any scheme to provide an adequate ticket hall for Crossrail at Liverpool Street station other than his own scheme, variously referred to as option one or the Ove Arup scheme or the Eldon Street scheme.

1855. The letter from Mr Wilson, to which I previously referred (if we have copies I would like to circulate, sir, now but otherwise I can just read it on to the record—I see Mr Walker does have copies for the Committee).<sup>9</sup> It is very short, you will be glad to hear. It is a letter dated 22 December 2005, addressed to Mr Chapman. It is from Mr Ben Wilson of Cross London Rail Links Limited and it says this, under the heading "Liverpool Street station": Further to our meeting on 9 December 2005 regarding the British Land Company Petition against the Crossrail Bill and your proposals for an additional ticket hall, please find enclosed the initial draft review of your proposal undertaken by our consultants. As discussed the draft report is provided to you for information only and is to be seen as 'work in progress'. Moreover, the draft report is not to be construed as a response in any way to the British Land Petition and is provided without prejudice to any negotiations with British Land regarding their petition."

1856. Then this: "As we advised at the meeting, this is the first element of the work we are undertaking on this issue, we hope to update the report with an assessment of other options for providing additional ticket hall provision early in January."

1857. You see that he refers in that last paragraph to "other options for providing an additional ticket hall provision". For reasons we really cannot understand, somebody must have told Mr Wilson to stop considering alternatives because the promised evaluation has not been forthcoming in early January or at all. Perhaps the Promoter feared that, if he continued to operate with us in appraising other alternative options, he would give the impression to the

Committee that he thought we had a case. Perhaps those who have been assisting with this aspect of the case have just been too busy, but common courtesy suggests that a letter explaining what was going on would not have been out of place and, sir, I have to say that, for all I know, work has still been going on on other options, perhaps without telling us, and, at all events, Mr Chapman has been unable to give you anything but the sketchiest information about Option 6 for he has not even seen any plans.

1858. If the Committee accept the Petitioners' first proposition, however, we respectfully say that there are only two choices: either the Secretary of State must volunteer to get on with producing a proper appraisal for Option 6; or, absent such a promise, we respectfully say that the Committee must order him to do so. I remind the Committee that Option 6 involves what I called in opening a 'massively enhanced ticket hall', a description adopted by our witnesses. There are only three bodies we have been able to discover with whom liaison will be necessary in relation to Option 6, that is to say, London Underground Limited, Network Rail and the Post Office. There should be no problem at all for the Promoter to secure their co-operation so that the necessary investigations can be carried out in order properly to appraise that option. Once those investigations have been carried out, further work will be necessary to bring the two options to the stage where they can be properly compared. I digress to say, sir, that I am referring to the 'two options' because, on the evidence you have heard, those are the only two options realistically on the table.

1859. Now, sir, there is of course no doubt that, if the Committee accept the Petitioners' first proposition and direct the Promoter promptly to carry out the necessary appraisal of Option 6, we can expect the co-operation of the Secretary of State on this issue. Mr Ben Wilson evidently thought, when he wrote his letter on 22 December 2005, that by early January it would be possible to provide proper information about Option 6. It was the Promoter's apparent decision to go back on that. The Committee, therefore, lack even a preliminary appraisal to permit an initial comparison of the schemes to be carried out. We say this without any rancour, but that is entirely the fault of the Promoter who could, and should, have continued to appraise Option 6 in just the way he has been willing to consider our figures.

1860. The evidence of Mr Spencer and Mr Chapman is that the necessary work can be carried out in two or three months and, after a hiccup, I corrected it and told you what it was that Mr Chapman was saying on that subject. He thought three months and Mr Spencer, I think, thought a couple of months, so perhaps he meant two, perhaps he meant three. Refer please to the transcript of Day Five for Mr Spencer, at page 37, questions 1247 and 1248, and Day Six for Mr Chapman, at page 45, question 1651, somewhat corrected by me this morning. Those time estimates have not been challenged as to how long it would take. There is considerable urgency because, as Messrs Weiss, Spencer and Chapman all in their different ways

<sup>9</sup> Committee Ref: A30, Corporation of London letter to Crossrail re: Liverpool Street Station, 22 December 2005 (SCN-20060131-004).

---

**The Petition of Corporation of London with British Land plc**

---

confirm, the new ticket hall is needed at opening and not at some later time. See, for example, Mr Chapman at Day Six, page 23, questions 1516 and 1517.

1861. To achieve that, the necessary amendments to the Bill, we say, must be made while the proceedings are in this House, so, always on the supposition that we have succeeded in persuading the Committee that the Petitioners' first proposition is correct, we shall be inviting you to direct the Promoter, in conjunction with the Corporation of London and British Land, to continue and complete the necessary appraisal of the options within three months of your decision in such a manner as to permit them to be compared and the best option chosen. Sir, I will come, with your leave, to the detail of the direction that I am going to be asking the Committee to make in a moment, but, first, I would just like to jump forward to the next stage.

1862. The next stage is: what happens if, at the end of the three-month period, the parties are either, firstly, all agreed on the way forward, or, secondly, cannot agree? In event one, the Promoter would want to inform the Committee, through your Clerk no doubt, what had been agreed, whereupon your Committee might wish to have the agreed way forward publicly confirmed before you and approved before setting in train the necessary procedural steps to permit the agreed solution to be incorporated into the Bill. In view of the importance of this issue, we think you may well wish to appoint a time for such an agreed solution to be publicly discussed. The Committee might, in other words, wish to be publicly informed of what amendments to the Bill were going to be necessary, what the procedural ramifications were of introducing them, and so on. The need for the matter to be urgently addressed is so that the agreed solution can be incorporated into the Bill and dealt with as part of the procedure on which you are currently embarked, as I have mentioned.

1863. The position becomes more difficult though if the parties have been unable, by the end of that three-month period, to agree which of Options 1 or 6 should be chosen, so would you mind taking this possible scenario: that the Promoter comes to the view that, on balance, Option 6 is the best because, although more expensive, it involves no disruption to the Metropolitan Line and is easier to do, whereas the Petitioners, on the other hand, come to the conclusion that Option 1 is preferable because that option is cheaper, though technically difficult, and because it is less likely to attract petitions in opposition to it which would, if upheld, threaten the progress of the Bill, or because it has other advantages which Option 6 lacks, such as quicker and easier access to the street.

1864. Now, sir, in that event, we would hope that the Committee would, and I respectfully submit that the Committee should, indicate that, in the event of such a dispute being unresolved within three months of the date on which the Committee announces its decision, either party should have the right to ask the Committee to do two things: one, to resume its consideration of the Liverpool Street eastern ticket hall issue by deciding;

and, two, to resolve the dispute as to which option to take itself. What we are going to ask the Committee to do is to incorporate in its decision, if otherwise favourable to us, a direction to that effect.

1865. Sir, on that hypothesis, the further dispute to be resolved would be an occasion for the Committee effectively itself to choose between the options which had by then been presented for the solution of the problem. In considering your decision on the first issue, you will obviously, therefore, need to consider, sir, not merely whether we have succeeded in persuading you of our first proposition. If we have succeeded, we will invite you to go on to indicate, in non-technical terms of course, what kind of Crossrail station at Liverpool Street the Committee envisages in place of the current proposal.

1866. Sir, I hope you will permit me, for ease of reference on the record, to suggest how you might frame a direction which would reflect the three elements of the Petitioners' first proposition and, at the same time, ensure that the process continued to a successful conclusion. I should make it clear that implicit in the direction we are inviting you to give is the rejection, firstly, of Ms Lieven's cheap and cheerful, easy alternatives, secondly, the rejection of any option not presented to you, such as the so-called 'EDF option', about which Mr Elvin declined, on instructions, to tell you any more when the Committee understandably became interested in hearing more about it, and, thirdly, rejection also of the Promoter's suggested undertakings, all of which are wholly inconsistent with acceptance of the proposition that Liverpool Street urgently requires incorporation into the Bill of a properly appraised, serious alternative to the Promoter's present hole-in-the-wall scheme.

1867. So, sir, recognising that what I am about to suggest will only be appropriate if the Committee have accepted our evidence, the direction I would invite you to give to the Promoter, in that event, is as follows, and there are nine short steps:

1. *The Promoter is to amend the Bill to make proper provision for an eastern ticket hall for Crossrail at Liverpool Street.*
2. *Discharging passengers through a hole in the wall at point M will not do.*
3. *A much more radical solution must be found.*
4. *There are two options for solving the problem which the Committee has heard about.*
5. *The Promoter must do further work on both of these in conjunction with Ove Arup and the City Corporation of London over the next 13 weeks (defined as 'the relevant period').*
6. *By the end of the relevant period, the Promoter must choose which option he favours and present the results in writing to the Petitioners and to the Committee.*
7. *If the Petitioners wish, the Committee will reconvene at the request of the Petitioners in order to hear and determine representations as to which option is best.*

---

The Petition of Corporation of London with British Land plc

---

8. *If such a hearing takes place, the Committee will decide on the best option. In that event, the Promoter will be required to amend the Bill as soon as possible thereafter in order to reflect the decision of the Committee.*

9. (a) *If the parties are agreed by the end of the relevant period what is the best option, they will present the results of their agreement to the Committee and the Committee will decide whether it wishes to be informed publicly as to the details.*

(b) *Thereafter, and subject to any direction the Committee may give, the Promoter will be required to amend the Bill as soon as possible in order to reflect the agreed option.*

1868. That, sir, closes the, I hope, only way in which we are respectfully suggesting the Committee might approach the giving of an appropriate direction if of course it is satisfied that the Petitioners have made out their first proposition.

1869. Sir, I turn almost lastly to the timing of the Committee's decision. We are conscious that it would be usual in a case like this to delay a decision until the end of the proceedings. There are very real objections, we would respectfully suggest, to that course and I wonder if I may just trespass on your time a little longer to make essentially two points about that in support of the desirability of making an early decision.

1870. The first point can be expressed like this: that the submission that you should make an early decision on our Petitions is not unprecedented. During the proceedings in 1995 on the Channel Tunnel Rail Link, numbers of Petitioners sought changes to the Bill. In two cases, the changes sought involved placing sections of the line in tunnel. These were the so-called 'mid-Kent tunnel' and the 'Barking long tunnel'. In the first case, the case of the mid-Kent tunnel, the case for the tunnel was heard on Days 6 to 9 in early March of 1995. The decision, as it happens adverse to the Petitioners, was announced eight days after the conclusion of their case on 22 March 1995. The second case, the case in favour of the Barking long tunnel, was heard on Days 37 to 39. I do not have the exact date, but I calculate that it would have been in about May or early June of 1995, and the decision was announced on Day 54 in late July of 1995. Again, I do not have the exact date. I mention these dates in order to introduce the second point that I want to make. I will again briefly give you, if I may, some relevant dates.

1871. In the proceedings on the Channel Tunnel Rail Link, the first Petition was unsuccessful. The second was successful. As a result of that success on the Barking long tunnel, in July 1995 and following the summer recess, the Bill was carried over on 1 November 1995 to the new session and an instruction passed in relation to a kind of additional provision. It is not strictly correct, I think, on a hybrid bill to refer to that, but everybody does. An instruction was passed in relation to an additional provision as to the amendments required *inter alia* as a result of the decision of the Committee in July that the Bill be amended to provide for the Barking long tunnel.

Petitions against the proposed amendments were deposited by the deadline of 6 December 1995 and hearings on them took place in that month and in January with decisions being announced on 31 January 1996.

1872. Sir, the second point I make is this: that the later the Committee reaches a decision which requires an amendment to the Bill, the more likely it is that final disposal of these present proceedings will be delayed. Had the decision on the Channel Tunnel Rail Link on the mid-Kent tunnel, announced on 22 March 1995, been in favour of the Petitioners, it is likely that the Bill could have been amended by way of additional provision in time for Petitions on those amendments to be heard and decisions thereon reached before the summer recess. I do not suggest that that would have enabled progress of the Bill through this House to be significantly speeded up because there were other matters to be attended to, but it must be right in principle, we suggest, to reach decisions on Petitions involving changes to the Bill early in the process even when there is no room for dispute about how the Committee's decision should be given effect to. In that case, there was no room. What the Petitioners were saying is that that which was currently due to go over the ground should go in tunnel under the ground.

1873. Here, however, it is not a simple case of arguing that part of an overground railway should be placed in a tunnel underground. If it were, it might not matter that much if there was some delay in your Committee announcing its decision on our Petitions. The present case is different because there plainly is room for dispute as to which is the best option for an eastern ticket hall at Liverpool Street. It is possible that, with the Promoter's full co-operation, we might have been able to place before you the two options sufficiently worked up to permit your Committee to adjudicate on which was the best in the event of dispute on this very occasion. By that, what I mean, and I have not put it terribly well, sir, is this: that had we been alert, and had the Promoter been alert, to the need to co-operate together two or three months ago on providing for the Committee two options which had been sufficiently appraised that they could be realistically compared, on this very occasion you might have been able to move on to the comparison between the two options and make a decision on them in the event of dispute between the parties. As it is, that has not been possible, and I blame nobody for it, but it is plainly possible that, if the Committee is of the view that the Promoter's present scheme is unsatisfactory, if it upholds the Petitioners' first proposition, an early decision to that effect, coupled with a direction to work up the alternatives in the 13-week period I have mentioned, or to leave time for any ensuing dispute as to which is the best option to be heard and determined by your Committee well before the summer recess.

1874. Sir, I am very grateful to you for permitting me to spend some time on these procedural matters, but, as has often been remarked, just outcomes to disputes frequently depend on the ability of the tribunal to devise fair and workable procedures for resolving them

---

 The Petition of Corporation of London with British Land plc
 

---

and it is with that in mind that I thought you might be assisted if I were to give you the benefit of our analysis of the way forward in the event that you accept the main case that we have been putting before you today.

1875. Sir, before I finally close, may I just ask whether there is anything the Committee would particularly like to raise with me arising out of those remarks?

1876. **Chairman:** On that matter, we will have to give some time to consider your request and we will shortly come back to you and give our decision on that. Please proceed.

1877. **Mr Laurence:** May I do so, sir. In concluding, may I begin, as I always do, by thanking you, sir, your Committee, your Clerk and the shorthandwriters for assisting us during the six days it has taken to hear our Petitions. I know that Mr Cameron, who cannot be here today, would want to be associated with those remarks. Then, sir, if you will allow me, without, I hope, setting any kind of precedent, may I, through you, say a personal thank you to our witnesses and all who have helped behind the scenes with the preparation of our case. These include, in addition to those names I have already mentioned, Irene Dicks of the Corporation, Alastair Lewis of Sharpe Pritchard, Angus Walker and Teresa Weeks of Bircham Dyson Bell, Miles Price of British Land and Sharon Daly, who has assisted throughout, of Steer Davies Gleave. Thank you very much, sir, and, subject to anything further you may wish to raise, those conclude my submissions to the Committee.

1878. **Chairman:** Perhaps you would like to move on.

1879. **Mr Laurence:** Is the Committee indicating that that is the end of these present proceedings now because I wonder whether, if so, you would consider just rising for five minutes while those who are not concerned with the next case that I am about to address you on, which is the Corporation of London/Markets' case, can leave the room, but I am entirely in your hands on that?

1880. **Chairman:** Mr Laurence, how long do you think it will be before we can proceed with yourself, the next case?

1881. **Mr Laurence:** Sir, I am ready to go on with the next case as soon as the Committee direct me to do so. My witnesses are here and, as I say, I am ready to begin as soon as may be convenient, but I am also conscious of the fact that the next case, which concerns, as I say, Smithfield Market and Billingsgate Market and some detailed matters concerning those two places, is not necessarily a case which will interest everybody in this room and you may just find it convenient to rise for five minutes while those who wish to leave the room do so, whereupon we can perhaps start on our separate case.

1882. **Chairman:** That is very helpful advice, but before we proceed I just want to ask members if there is any question they wanted to ask on the case which you have just presented.

1883. **Sir Peter Soulsby:** Just to respond to Mr Laurence's remarks about the Committee's interest in figures, which is something that he returned to again today, and just to clarify what I hope will not be the impression, but in case there is a mistaken impression that the Committee might have expressed an aversion to figures or might be disregarding the figures which have been put in front of us, I just want to make it clear that I am sure that, Chairman, through you, the Committee has been very grateful for the figures put in front of us on passenger numbers. It has been very clear, the implication of those figures, and it is understood, the different assumptions that have come from the Promoter and the Petitioners and the uncertainties surrounding some of the figures which have been presented to us. I think we have had an opportunity to explore them thoroughly and to look at their implications. The purpose of my remarks, as Mr Laurence inferred, was to express a view on behalf of the Committee that we were not necessarily interested always in absolute precision of numbers, but in the implications of the numbers. That is why, for example, the pedroute presentations that we had with all the detail that such modelling has, that is why those presentations, I am sure, were indeed helpful to the Committee. It is, as I say, not an aversion to figures, but it is a wish to have an understanding of the implications and the impact of those figures that I make these remarks.

1884. **Mr Liddell-Grainger:** One of the areas you have talked about was, as you put it, the 'aggressive questioning'. You intimated that you would like part of this deferred until the end of the whole proceedings, in other words, when we finish. Is that what you are actually trying to say? I will read the transcript back and obviously we have got a copy of what you have said.

1885. **Mr Laurence:** Sir, I have been careful obviously to preface everything that I have said by asking the Committee to forgive me for addressing you on the subject that we might have been successful on, the principal matter which has been debated in this Committee over the last five days. If we have been successful in that endeavour, the implication of it is that the Committee will have rejected the Promoter's present solution for an eastern ticket hall for Crossrail at Liverpool Street. The implication also will be, if our evidence has been accepted, that this Committee will have recognised that some, much more radical solution is called for.

1886. There has not been an opportunity to debate properly before the Committee precisely what form that radical solution might take, but there have been essentially two options which have been referred to in the proceedings as being realistic ones, Mr Chapman's Option 1 on the one hand, and the so-called 'Option 6' on the other, and that involves, on our evidence, a massively enhanced ticket hall and would involve very considerable works, very considerable disruption and so on. We have also been careful to stress that our

---

 The Petition of Corporation of London with British Land plc
 

---

minds are completely open as to the possibility that that latter option, Option 6, may turn out to be in fact the best solution to the problem.

1887. Where the Committee is potentially going to be required to be actively involved again, if a direction is given along the lines of the one italicised in the record, is not so much that we fear a lack of co-operation with the Promoter in the ensuing 13 weeks to work up Options 6 and 1 so that they can be properly prepared; we have no doubt that, if the Committee directed the Promoter to do that, they will find the time and the resources to do it and three months later what we will have, properly worked up, although obviously not to design stage detail, are two options, between which a choice can be made. We anticipate that at that stage the Promoter will say, "This is the option I favour" or, "That is the option I favour", and if there is disagreement between us and the Promoter on that issue, what we are saying is that we would want that matter then to be adjudicated on, subject of course to you, sir, by this Committee because it would then be a matter fit for adjudication by the Committee, and it is of course a very important issue indeed, if there are real differences of opinion as to which is the best option, that this Committee should have the opportunity to hear those differences of opinion expounded in detail by the Promoter, on the one hand, and by us, on the other, and then to be able to come to its own decision as to which is the right one. At that stage, it will be back of course to the Promoter to take the matter forward to detailed design, having made the appropriate amendments to the Bill.

1888. **Chairman:** Mr Laurence, you are fully aware, and you have no doubt experienced such matters as this, that the Select Committee can actually view all its options throughout the course of its hearings and at the end. It does not necessarily have to accept the proposition of any side and it can actually also come back and offer wisdom and an opportunity for all the sides to come together without interfering. I think one of the things about the time is that it gives the opportunity to both sides to see if they can find a solution themselves which they may at some point present to the Committee for acceptance or otherwise.

1889. I have to warn you that we will be deliberating on this in a moment in private, but I will also say to you that, if every single Petitioner came along with a suggestion like the one you have suggested to us today, select committees of this kind would go on *ad infinitum*, as they did nearly on one or two previous occasions when matters of this kind came before the House. We will deliberate and we will let you know.

1890. **Mr Laurence:** May I just respond to one thing that you have just said, sir, and that is that I am not here in a position to provide for you an analysis of what it is that other Petitioners in these very proceedings are trying to do, but I believe we can provide such an analysis during the time that I am suggesting the Committee might consider directing the Promoter in conjunction with us to look at the two available options in more detail. I believe that that analysis would show

that the risk to which you have just made reference in these particular proceedings is not a real risk. Not every Petitioner by any means is coming before you to raise as significant an issue as the Corporation and British Land have raised on their two Petitions.

1891. The consequence of that in any event is this: that it is a significant issue and fortunately the Committee has been seized of it right at the outset. My proposed direction, if you have the opportunity to look at it on the record, envisages a procedure that maximises the chance that we will not have to come and trouble the Committee again, but seeks to give to the Committee an appropriate role in the event that it does turn out to be necessary, in order to give proper guidance, to look at those two options once they have been properly appraised. All I can say, sir, is that, if the matter is left without any such direction being given, the Promoter has made it crystal clear that he has absolutely no intention of getting involved in the detail of what we have been calling 'Option 6' at this stage. He will not do that unless the Committee take the view that they want to know what Option 6 would involve.

1892. Therefore, the reason that I am just coming back on your point is so that the Committee should be in absolutely no doubt that some form of general exhortatory direction from the Committee for the parties to go away and do the best they can to think about the issue is not only not going to solve the problem that it has been the purpose of our evidence to highlight, but it is not going to lead to anything happening more on this Liverpool Street issue in this House at all. There may be an opportunity to raise the matter again in the other House, although that is an unusual thing to happen on a private bill, but, sir, we take the view respectfully that now is the time to grasp the nettle and to do so in a way which ensures that the matter is not just allowed to drift on inconsequentially, especially if, and I should not need to stress this, but, with respect, I do, especially if the Committee accept what I have defined as the Petitioners' first proposition and the three elements which I have identified as being contained within that proposition. If the Committee do accept that, then the inexorable logic of the acceptance of that position is that, I would respectfully say, some direction along the lines of the nine points that I identified will have to be given if the Committee's decision is to be given proper effect.

1893. **Chairman:** Thank you very much indeed, Mr Laurence. You have given us your analysis, it is there, and we will discuss it in private. It just leaves me to say that I think about a week and a half ago I gave a direction to the Promoter which actually stated that they should in no way infringe any of the ongoing negotiations with the Petitioners at any time, that they should not use this Committee to try and either stop negotiating or to use it against some kind of settlement before the end of our deliberations. I repeat that now for the record and we will take your request and consider it in private. I will break the Committee, because of that, until noon.

---

 The Petition of Corporation of London
 

---

*After a short break*

1894. **Chairman:** Mr Laurence, we have deliberated amongst ourselves on the request you made before we suspended the Committee for a short period of time, but one or two of our Members were not been present this morning and we are going to take the opportunity later today to have a chat with them and we will give you our decision in the morning.

1895. **Mr Laurence:** Sir, would you find it of assistance at all if I were to type out the direction in case you do not have it with you when you deliberate?

1896. **Chairman:** That is very, very kind of you but we have technical equipment here, and it is recorded and we will have all of that, and certainly we will be using that when we discuss it with our partners on the Committee.

1897. **Mr Laurence:** In that case I will proceed. Sir, as you know, I am instructed by the Corporation of London on behalf of the Corporation, to address you on a number of issues relating to Smithfield and Billingsgate Markets. Each of those markets, in its way, has a long and wonderful history, which I am sure under other circumstances the Committee would be delighted to have expounded to you at some length. I intend absolutely no disrespect either to the Committee or to the traders at those two markets if I say to you now, in the course of these brief opening remarks, that I do not think today is the right occasion to go into that history.

1898. The concerns of the traders at Smithfield and Billingsgate, as you would expect, are many and various as well, and they have been the subject of much discussion over preceding months between the Corporation and those who represent the Promoter. What I am going to say to you is that in many respects those concerns have not yet been fully addressed to the satisfaction of the traders and, more specifically, since it is our Petition, to the satisfaction of the Corporation of London. But in referring to the traders and the Corporation more or less interchangeably is not an accident because many of these petitioning points of the Corporation are, on analysis, points which concern the welfare of the traders as much as they concern the particular interests of the Corporation, and I hope the Committee will be just a little indulgent in permitting us to put points of that sort forward without making any particular attempt at distinguishing the precise interests of the Corporation as distinct from the precise interests of the traders at Smithfield and Billingsgate.

1899. With that background what I would say to you is that there are a number of concerns that have not yet been fully and finally addressed to the satisfaction of the Corporation. Sir, you will be pleased, I am sure, to hear that we intend to trouble the Committee in detail on only three matters, which we believe warrant taking our concerns to this Committee at this stage, and I will mention what those three matters are in a moment, if I may.

1900. The other matters of continuing concern we have reason to hope will be resolved—most of them—in the course of the discussions which have been going on and will go on in the months ahead. Those discussions of course are without prejudice to the Corporation having the right to petition in the other House, if by that time matters have not been brought to a satisfactory conclusion. So when Mr Smith, who is going to be in the event the second of my witnesses, comes before you to give his evidence I hope, with your leave, sir, you will permit him just to indicate briefly what these other concerns are that the Committee are not now going to be troubled with, for the record, as it were, and, having done that, what we will do is to proceed to the matters that we really want you to hear about today. I will now come to the three matters that I mentioned, subject to any direction from your clerk.

1901. **Chairman:** I am afraid it would not proper. We can only deal with the matters that are before us for the Petition. If there are other matters which are for other Petitions in other places they should be dealt with by that route.

1902. **Mr Laurence:** I quite understand, sir, but I did not make myself clear. All of these matters are petitioning matters, so all matters on which we have petitioned. It is just that we are not going to be troubling you with the vast majority of them.

1903. **Chairman:** In those circumstances that is okay.

1904. **Mr Laurence:** What I was asking for was a little indulgence to allow Mr Smith, when he comes on to give evidence, to mention briefly what those other concerns are without then going on to invite the Committee to take any action in relation to those matters on this occasion.

1905. **Chairman:** It does seem strange that we are going to have evidence put before us which we do not seem to have to think about because it will be sorted out at some later stage, but if you wish to do that presentation, albeit briefly, then so be it.

1906. **Mr Laurence:** Sir, I am very grateful. I will use my discretion and err on the side of keeping things very short wherever possible.

1907. I have said there were three matters and there are three witnesses who I am intending to call to deal with the three matters. One will involve Mr Joe Weiss, from whom you have heard before, telling you about a subject very close to his heart, which is that in the Corporation of London you do not need to have special places set aside for lorry holding: issue one.

1908. Mr Smith—the same Mr Smith I mentioned a moment ago—when he has finished telling you about the general matters, very briefly, with which you are not going to be concerned, does want to mention to you a concern on behalf of the Billingsgate traders about the parking situation at Billingsgate once the Promoter has taken, as a work site, the area of land that is contemplated being taken under the Bill. It is going to

---

**The Petition of Corporation of London**

---

reduce the amount of parking to an extent that it will threaten the retail market on a Saturday, we say, and you need to hear about that. I should say that last minute attempts are still being made to narrow the differences on that issue, but we have taken the view that we need to trouble you about it, if you do not mind, sir, and hopefully it can be done in a relatively short compass.

1909. Sir, the third witness is Mr Terry Pearman, who is a structural or civil engineer—I forget which. The concern there is the very delicate arrangements that are going to have to be made in order to carry out the construction that CLRL have in mind under the eastern end of the Smithfield market. It is a listed building, the construction process is exceedingly delicate and it has been the subject, up to now, of continuing discussions on what is called the Heritage Deed. Putting the matter I hope simply but still reasonably accurately, what the Heritage Deed is designed to do is to give the Corporation of London a qualified right of veto over the method adopted by the Promoter to carry out its work in relation to the listed building. By “qualified right of veto” what I mean is this: that the Corporation can only object to a proposed method for doing the work if it acts reasonably, and the draft Heritage Deed, which has been under discussion for many months now, and is still under discussion, is proposed to give to the Promoter that form of protection, along with others I think who have listed buildings within their ownership.

1910. The importance of mentioning the Heritage Deed in that context is by way of introduction to what the third matter is about with which we are concerned. We are not going to be asking this Committee to intervene in relation to the provisions of the Heritage Deed because that is one of the issues which we hope over the coming weeks and months will result in an agreement as to the terms of that Deed with which we can be satisfied. But the Heritage Deed is a good document to have as an example of the kind of thing we want in order to address our third concern. Our third concern is: what if the proposed method of work is one to which the Corporation does not feel able to object, acting reasonably, under the Heritage Deed, because it is satisfied that the proposed method of work will leave the structure intact, but the proposed method involves the building having to be vacated and perhaps the services that enable the building to operate at the

moment as a meat market to be suspended over what may run into numbers of weeks? In that case there is not the same qualified right of veto built into any document and no suggestion from the Promoter yet that he would regard it as appropriate that we should have the same right of veto in relation to what I might describe as a listed market trader, as we have in relation to the listed building. Our concern, on behalf of the Smithfield traders, is to make sure that their occupancy of the building remains uninterrupted throughout the whole process and what we seek, if the Committee is willing to direct the Promoter to provide it to us, is an undertaking that the Promoter will procure the nominated undertaker in due course, and not to carry out the work which involves the listed building without giving to the Corporation the opportunity, acting reasonably, to veto that proposed method of work should it affect the continued occupancy of the building or should it threaten to affect the continued availability of the services. The argument, sir, is simply this: that the traders cannot realistically bring claims of damages if they are out of occupation for a week or two, or three or four weeks; the loss they will inevitably suffer, even if it does not drive them to having to give up business altogether, is a loss that they simply cannot afford and cannot realistically make claims to be compensated for. So what we want this Committee to do, if it is prepared to do it, is to extract from the Promoter an undertaking which will give the maximum possible reasonable protection to those traders and of course to its landlord, the Corporation too in that respect, as can be done consistently with good and safe working practices.

1911. I should stress that if acting reasonably the Corporation was not able to veto a proposed method of doing the work, e.g. because it was going to cost another £10m in order to enable people to carry on working while the work was being done, then the qualified veto we seek would not kick in and so this Committee may, we hope, take the view that it is not an unreasonable thing we are asking for given that this Committee may be of the view, as we are, that the livelihood and protection of the market traders at Smithfield is in its way just as important as the integrity of a listed building in respect of which the Promoter is willing to give us that kind of protection.

1912. That is the background, sir, so may I begin with Mr Weiss, please?

1913. **Chairman:** Yes.

---

---

 The Petition of Corporation of London
 

---

**Mr Joe Weiss**, recalled

*Examined by Mr Laurence*

1914. **Mr Laurence:** Mr Weiss, it is not necessary to reintroduce you to the Committee. Just for the record, you are Joe Weiss and the Transportation and Projects Director for the City of London Corporation, are you not?

*(Mr Weiss)* That is correct.

1915. I think first time round, as it were, you gave the Committee the benefit of knowing what your relevant qualifications are. You must have left out some of the many so is there anything that they have not previously heard which is relevant to what you are about to say today?

*(Mr Weiss)* There is. My previous job in the Corporation was the Highways and Transportation Director and under that role I was responsible for managing what we considered in the Corporation to be our Considerate Contractor Scheme, which is very relevant to lorry holding.

1916. What are you here to do today, Mr Weiss?

*(Mr Weiss)* Essentially I would like to explain that in 1987—it is going back a long time ago—we decided that the best way to get on with heavy construction in the City is not to have—which is very commonplace in industry—an adversarial approach, but to try and gain a cooperative arrangement between those who have to get dirty, mucky jobs done in the environment and one with the high quality environment that we have in the City so that both sides can sit alongside each other. Therefore we launched the scheme, which was the first scheme in the country, and I think there is an exhibit.

1917. It is exhibit 17, the Considerate Contractor Scheme of the Corporation of London.

*(Mr Weiss)* This is basically a scheme free of charge to the major contractors that work in the City, explaining how we would like them to carry out their business within the square mile. But, most importantly, whilst the vast majority sign up and are part of it—and there are some pictures inside of a typically large construction—most importantly it engenders a spirit of pride. We have gone away from an adversarial approach to contractors actually and positively competing against each other to do their best, so much so that every year we have a competition where they all line up—and I do not want to go into too much detail, but some of these labourers, construction people—we are not talking about management, we are talking about the ones who create the mess and the damage—roll up to a ceremony probably in a suit that they last wore at their weddings, to feel really proud that they have done a good job, they have done better than a rival performer, and perhaps have the Lord Mayor shake their hand and have a photograph, and it means that the standards are willingly brought up to a high level.

1918. I want you to go into the detail of that in due course, but so that the Committee can have a feel for the outline of what your evidence is going to be, if you have

your proof to hand at paragraph 2.3, where does the Crossrail CLRL proposal come into what you have just been saying about the Considerate Contractor scheme? *(Mr Weiss)* Crossrail is proposing that there are dedicated lorry holding areas taken out of the public ground on the highway, specifically for the Crossrail construction sites. I am contending that these are unnecessary, that the scale of the operation of the Crossrail works are no larger than those we are actually seeing at the moment where present developers, albeit of building an underground railway, are actually creating more lorries than Crossrail predict themselves and are still found to be unnecessary.

1919. I interrupted you somewhat rudely while you were expanding on the scheme. Is there anything more in section 3 of your evidence that you would like to say about that?

*(Mr Weiss)* Yes. As part of the enjoyment of engendering friendly competition to do better we have guidance notes.

1920. Tab 18 of your evidence, and for the record the document is called “Guidance Notes for the Activities on the Public Highway in the City of London, Department of Technical Services, Corporation of London”.

*(Mr Weiss)* Correct. And it sets out a variety of how to do examples within it, and I draw your attention to paragraph 13.6. If I might read out for the record: “Streets within the City of London must not be used as holding areas for vehicles waiting to enter the site. When large numbers of vehicles are anticipated arrangements must be made outside the city and vehicles called in by radio, or mobile telephone.” That I can say from direct management of the scheme and my 15 years of working in the Corporation has not caused a problem for the size of site even larger than those proposed by Crossrail. Currently in the City we have something like four and a half million square feet of construction going on. It is three to four times the number of lorries Crossrail propose to put through. It is not causing problems. Therefore I contend that if construction on a scale larger than Crossrail can cope in the City without lorry holding areas, I believe Crossrail can do the same. I would invite their nominated undertakers to join our scheme.

1921. Let us just see from page 56 of the response what is actually being said on this issue by CLRL in case there is anything else you want to add to what you have just said. The Promoter’s response reads as follows: “The provision of lorry holding areas is a fundamental part of good worksite management for ensuring minimum disruption to traffic flow on local highways. Such areas accommodate peak lorry movements and allow vehicles to wait safely and in a manner which will enable control by the contractor prior to entering the worksites. Lorry holding areas

---

 The Petition of Corporation of London
 

---

are particularly necessary where worksite space is restricted, such as is the case in the majority of inner and central London Crossrail worksites. Holding areas will allow management of waiting rather than haphazard waiting in unsuitable locations. The proposed holding area is adjacent to a non-residential frontage and occupies an area which has been previously coned off for a worksite/lorry hold area”—that is the London Wall lorry holding area that, I see from the heading, they are talking about there—and on to similar effect, which you have no doubt read and considered, have you, Mr Weiss?

(*Mr Weiss*) I have. It is an interesting response. It is not what I see—and I speak as a civil engineer not unfamiliar with large constructions. It shows slight management rather than proper management. There is a term in industry called “logistics” which, very crudely, is programming. It is as simple as this: if you are doing a concrete pour at, say, one o’clock in the afternoon you do not have your lorries there from 11.30 churning around and blocking the streets. You plan these things; you programme them; and you bring them in. All of the developers in the City of the major sites, and we have got 23, are able to do it. It should not be a problem for Crossrail. We obviously have to be pragmatic because it is a real world out there; traffic delays and unforeseens come into play. Occasionally the lorry rolls up late or it rolls up early; it does not mean the end of the world. We have the ability to give waiting and loading dispensations on application at particular sites, and this allows a little bit of slack. Nowhere in the City in the past 15 years, as one to whom they would put their complaints, has anybody come to us to say, “We cannot operate the site”, or they found particular difficulty because we had not allowed lorry holding areas.

1922. Just so the Committee can get a feel for this: say I am the driver of a substantial vehicle of the sort that is going to need to access various worksites within the City and my place of operation is a yard in Edmonton, north London; what in practice do I do to ensure that working your scheme I do not end up having to wait in Upper Street, Islington in order not to find myself waiting on a street within the City’s area?

(*Mr Weiss*) Just to try and illustrate this: if the yard was, say, bringing concrete rings or something that was material to the construction of the site, certainly with the scale and complexity of the Crossrail site the time when the cranes, for example, to actually lift these down into a hole would have to be booked; therefore, anybody applying even basic site logistics would say, “Between 10 o’clock and 11 o’clock we’re lowering segmental rings down the hole”, and the site logistics would say, “Let’s have the lorry there for 10 to ten, an hour’s worth of operation and the next lorry comes in for however long it takes”. They would get on the radio to say, “Can you bring your lorry to the site for this prescribed time?” There is not a problem with that; we do not need a particular lorry holding area to hold a lorry underneath the crane because that is part of the normal operation on site. What we are not saying, and this I think is

behind your question, is that these lorries should lurk elsewhere on streets outside the City. No, that is not the application of site logistics. Site logistics is like programming a bus, a train or airplane. You bring the vehicle in when it is required; there is a little bit of flexibility one way or the other; and when it is not required we do not want it sitting in areas taken out of the public realm on City streets—City streets which are extremely busy with both motor vehicles and pedestrians, but also we are in an area where there is probably the most expensive office accommodation in the world. It is not necessary, as I see it, to have an industrial operation unnecessarily outside these buildings.

1923. Mr Weiss, is there a potential for what you would see as a precedent to be set about which you would like to say something to the Committee if CLRL was able to insist on its right to have lorry holding areas on this occasion?

(*Mr Weiss*) There is a tremendous danger that if the principle (of being able to operate in a properly managed, heavy construction environment and not to take out parts of the public realm for lorry holding) be broken on Crossrail the larger developers, whose sites (as we can demonstrate in another exhibit) are larger than Crossrail, would be seeking to impinge on the public realm because Crossrail may have set a precedent. There are two sides to it: one is that we believe, through hard experience and not theory, ordinary developers have achieved trouble-free operations within the City of London to sites in lorries on a scale exceeding those of Crossrail. Were that precedent to be breached through a relatively small developer—and I do not mean any diminution of the scale of the Crossrail project, but in terms of the needs for lorries—then the developers would challenge the process and, we believe, where we have achieved cooperation a positive approach for the benefit of the public realm would be severely undermined.

1924. Mr Weiss, just have a look at your proof and scan it and spend, if necessary 12 seconds doing it, and see if there is anything else before I sit down that you would like to say on this issue to the Committee?

(*Mr Weiss*) Just one thing, if I may. We did a hard survey and contacted all of the 12 sites in the City operating lorries. There are over 1,000 heavy lorries per day currently operating within the City; not one of them uses a lorry holding area.

1925. I am reminded just to remind you that CLRL draw attention to the fact that they are going to have to be operating on some sites that are very small and where, presumably, it is not reasonable to expect the vehicle in question to station itself on the site itself. Have I understood the point correctly?

(*Mr Weiss*) No trouble with that at all. It is quite common within many, many streets of the City. We essentially have a medieval street pattern, very narrow, where compromises take place quite regularly literally every month for sites like this. It is about management; it is about cooperation; it is

---

**The Petition of Corporation of London**

---

about working with rather than pushing against all the others who have competing demands in the public realm. I do not see a problem with that.

1926. **Mr Laurence:** Mr Weiss, with that as a background to what you want to say, I will invite Mr Mould now to ask you some questions in cross-examination if that is what he wants to do.

---

*Cross-examined by Mr Mould*

1927. **Mr Mould:** Mr Weiss, good afternoon to you. Just one or two points in relation to this issue, please. One of the propositions that has been mentioned more than once by those promoting this scheme to this Committee has been the desire to carry out the Crossrail project as efficiently as possible, not only in terms of its impact on the environment, but also in terms of the cost of carrying out that project. That is a proposition with which, as a matter of principle, the City would no doubt wholeheartedly agree?

*(Mr Weiss)* Yes.

1928. Crossrail is a scheme that proposes the construction of a railway across a city which has some of the most expensive real estate in the world. Is that a fair proposition?

*(Mr Weiss)* It does. I would like to comment at a later stage on the cost element.

1929. Not least within the Square Mile?

*(Mr Weiss)* Yes.

1930. It is for that reason alone sensibly, having regard to the aspirations of the principles I put to you moment ago, that the scheme should seek to keep the amount of land it takes for the purposes of constructing the railway to the reasonable minimum?

*(Mr Weiss)* A proposition I would support.

1931. And to drive down, as far as it reasonably can, the cost of proprietary acquisition for the purposes of providing operational worksites from which to construct the railway within not only the Square Mile but elsewhere along the route?

*(Mr Weiss)* Yes, but I would like to perhaps comment to help the Chairman that the cost of acquiring public highway is not actually a cost out of pocket to the Promoter. It is a cost imposed on the other people that might have used it.

1932. You misunderstand my point, Mr Weiss. The proposition is this: those, as you I think accept, legitimate, sensible and reasonable objectives on the part of the Promoter have led to the desire to keep the amount of worksite space, for want of a better term, within the City and elsewhere in central London to the minimum that is needed for the purposes of constructing the railway?

*(Mr Weiss)* Absolutely, and it is no different than any of the other developers in the City at present who really are constrained by the sites which they have acquired for redevelopment.

1933. You would accept, I think, that the consequence of that, in relation to Crossrail, is that there is within the worksites in the Square Mile no space available other than for actual loading and unloading?

*(Mr Weiss)* I do not think we can make a generalisation like that. Every site has its different capabilities which change over the course of the project, which change over time.

1934. Have you investigated that proposition, Mr Weiss?

*(Mr Weiss)* You have given me a broad proposition; I have given you a broad response; but you cannot make a generalisation.

1935. Have you looked into the point I have just put to you? My instructions are that that is the position. Are you able to say whether you have investigated that proposition to see whether you agree with it or not?

*(Mr Weiss)* Would you clearly spell out what you are seeking me to agree, because we have gone from a narrow proposition to a broad proposition and you are asking me to agree something specific. Could you perhaps clarify that?

1936. I am sure you are familiar with the worksites that are proposed to be operated within the City of London for the purposes of constructing Crossrail?

*(Mr Weiss)* I am indeed.

1937. The proposition I put to you is, that there is no space within those worksites other than for the actual loading and unloading of materials. Do you accept that?

*(Mr Weiss)* That is an interpretation.

1938. Are you able to say whether you have considered the points and take a contrary view?

*(Mr Weiss)* I do not think it is my role as a local authority engineer to actually redesign the operation of this Promoter's or any developer's worksite. Basically, when they operate within a public environment, or interface with a public environment, everybody produces a method of working which is compatible to all. There are many conflicting interests. We are talking about cooperation rather than confrontation. Therefore, I cannot come to a positive view or negative view against it. What we have from the Promoter is a proposal that lorry holding areas be set aside out of the public realm; and experience over time, and with countless numbers of developers, has shown that, regardless of the size of the worksite, everybody works out how

---

 The Petition of Corporation of London
 

---

they manage, utilise and allocate space within the worksite. The need for these lorry holding areas has not been necessary.

1939. As I understand it, your case today to the Committee is that there is no need for Crossrail to operate lorry holding areas within the highway within the City of London because it is possible for them effectively and efficiently to provide for the delivery and removal of materials by road without the need for such areas?

*(Mr Weiss)* Yes. There again, apart from the statement which Mr Laurence read out as the rebuttal to our view that it was needed, it has not been demonstrated to me in any detail whatsoever why these sites could not operate without a lorry holding area. I take it from the other viewpoint, with the management of a site—and it is about effective site management; it is about the timing of materials—that none of the developers, major developers in the City, have found it necessary. I believe a half-decent contractor working anywhere on Crossrail would find the same with the proper application of site logistics and management.

1940. As I understand the answers you have given, is it not your case to the Committee that what you see as the lack of any justification for operating lorry holding areas within the City is based upon your judgement that space is available within the worksites that are proposed to hold lorries waiting to deliver or remove materials from those sites?

*(Mr Weiss)* I am sorry did not say that. What I said was, I do not see Crossrail proving that they have to have these worksites. What is something that is so different about the Crossrail worksite to all the others in the City that requires them, unlike anybody else, to have lorry holding areas?

1941. The response document you referred to, which is the Petitioner's response document provided by the Promoter to the City in response to its Petition, you read out paragraph 4 of the response in relation to lorry holding which makes the very point I put to you, that the space available on worksites is indeed restricted?

*(Mr Weiss)* Yes, without question space is restricted on every worksite in the City.

1942. You have not, as I understand it, pursued that to investigate whether that restriction is nevertheless able to embrace the holding of lorries awaiting delivery of their load or removal of spoil and other disposable materials?

*(Mr Weiss)* No, and nor would I for any other developer's worksite. Having said that, if any developer, in the past or in the future, could demonstrate they had particular circumstances where they have looked at sensibly all situations and they cannot apply, of course we will take a pragmatic view. It is the City's encouragement both for Crossrail and other developers to make sure that things can take place properly in a pragmatic manner. We have obviously had developers' initial discussions having aspirations to do X, Y and Z. We

have sat down with them and have suggested this or that approach or timing of logistics, and in every case we have not found the need to have lorry holding on City streets.

1943. You mentioned and drew attention to two documents which the City has promulgated in relation to the performance of construction works within the Square Mile. One was the Considerate Contractor Scheme, at tab 17, and the other was the guidance notes document?

*(Mr Weiss)* Yes.

1944. So far as Crossrail is concerned, the Promoter is to put forward and require the nominated undertaker to comply with a comprehensive construction code, is he not?

*(Mr Weiss)* Yes.

1945. That code will perform the function and much more of the provisions in relation to construction works within the City alone, for which you make provision with those two documents?

*(Mr Weiss)* Yes, that is correct.

1946. Mr Weiss, Crossrail, as a project, is of a scale, geographical embrace and complexity which is unprecedented, I take it, in relation to any project which you have had professional involvement with during your many years with the Corporation?

*(Mr Weiss)* With the Corporation, yes, but, wearing other hats in the past, I have had, certainly, construction direct experience.

1947. You speak with your Corporation hat on today so I will not ask you about other matters. You spoke of the need to avoid setting an unfortunate precedent in relation to future construction schemes within the City. The sheer scale, complexity and geographical embrace of Crossrail, as a project, marks it apart from the kind of building scheme—albeit, no doubt, substantial in its own right—that give rise to your fears about setting that unfortunate precedent.

*(Mr Weiss)* I am afraid, with respect, I cannot agree with that premise. Just taking it in the context of lorry holding areas, if we quote the Environmental Statement, it gives for four sites the expected maximum number of lorries expected on those sites in the Crossrail project. I do not want to burden you with figures but it runs from 60 to 130 lorries per day. In many instances this is a 24-hour day, so the dilution is over the dark 12 hours as against the light 12 hours. One site in the City alone, today, is running at between 150 and 175 lorries a day quite successfully, quite capably and positively without the need for a lorry holding area. If I may, the word “cost” came into it. The City's not trying to impose costs on anybody, it is trying to impose tight, relevant management that is helpful to the public realm. I do not think in my years when I was—not “think” I can tell you absolutely—in my years when I was directly dealing with the Considerate Contractors' Scheme, not one major developer ever came to me on the issue “This is going to cost me a

---

 The Petition of Corporation of London
 

---

penny more". It is about proper management; management where the potential for disruption, the potential to break the very four C's we are looking for through the Considerate Contractors' Scheme, impact very badly on the public role.<sup>10</sup> Nobody ever came to me on cost. I really do not see—and I am quite open to being convinced otherwise—that not having a lorry holding area is anything to do with cost. It is about management.

1948. We have made it clear, have we not, that we will certainly seek to operate a just-in-time approach to delivery and removal of materials by lorry from worksites, so far as is reasonably practicable.

(*Mr Weiss*) We welcome that.

1949. So the existence of the use of lorry holding areas needs to be seen in that context.

(*Mr Weiss*) Why? If you apply just-in-time, if you apply a planned, logistical approach, there is no need for lorry holding areas. Particularly, in my introduction Mr Laurence elicited from me that yes, it is the real world and things do go wrong. We do use dispensations for parking tickets for lurking on yellow lines for an unreasonable period of time. It works. Years of experience tell us it works.

1950. If I may say so, Mr Weiss, the difference between us is the angle from which you approach the question. You are approaching it from a City central point of view; we are approaching it from a Crossrail perspective, and the difference is this: there is a substantial series of worksites which will serve the substantial construction works required for the railway, not only in the City but all across central London and beyond to the east and west. It will be necessary to co-ordinate deliveries, and the disposal of materials by road, where that is proposed, not only within the City but elsewhere along the route. It is for that reason that Crossrail is a special case in relation to the provision of lorry holding areas. It enables co-ordination of deliveries and of disposal, not only for the City but elsewhere along the route, and avoids unnecessary and damaging disruption to the construction programming process, which would be created if that facility is not available.

(*Mr Weiss*) Are you suggesting to me that the lorry holding areas in the City, then, might be used for all Crossrail construction needs in some other parts of the line?

1951. I am suggesting it is part of a wider aspect of the construction programme method and that when one views it from that perspective one sees the justification for a limited number of holding areas not only in the City but elsewhere.

(*Mr Weiss*) It is my understanding—and I do not claim to be completely conversant with a project of this scale to be broken up into 10 or 12 packages—that it is perfectly tenable for a contractor for, say, Farringdon, to be a completely different contractor from the one at Liverpool Street/Moorgate. Yes,

these contractors may well co-ordinate, but the way the construction industry works I see most of these sites being logistically, management-wise, stand-alone to a large degree. Obviously, there has to be co-ordination between, for example, mucking out where they go to the receiving end to make sure they are not over-burdened. But I still see nothing in that approach—the fact you have a lot of construction sites run by, I would suggest, at least a dozen different contractors—that changes the circumstances one little bit about needing lorry holding areas for those in the City.

1952. Our concern is that if one cedes to the special approach that the City seeks in relation to the provision of lorry holding areas in accordance with the guidance that you referred to, we create, for our part, an unfortunate precedent, and we set the precedent to promote the City to other local authorities along the route that this facility is not one which is required.

(*Mr Weiss*) When this came out in 1987 it was the first in the country. It has been followed through in 1990 by a code of practice which applies to the statutory undertakings which dig up the roads—water, gas and electricity—and it has actually been embraced by the contractors. If we were so out of sync, if we were so difficult in wanting something seen as special for the City, the sort of 19, coming up for 20 years', worth of experience in that would have had the construction industry coming up to us and saying, "Come on, guys. This really is not right; we do need these lorry holding areas, we do not want to keep the roads clear". They have not. This has been a co-operative between the industry and between those of us who are charged with looking after the public realm. It works, it continues to work and I am sure all of the nominated undertakers that Crossrail will bring on board are going to be world-class and will be able to get it to work in the City as well.

1953. Finally, because I am sure there is a limit to which we can maintain the interest in this topic, just focusing away from the debate on principles and going to particulars, initially three lorry holding areas were proposed. Is that right?

(*Mr Weiss*) That is right.

1954. That is to say, in London Wall, in Finsbury Circus and in Snow Hill, which would be a supplementary lorry holding area. The main lorry holding area in relation to the Farringdon work site is within the basement of Cardinal House.

(*Mr Weiss*) Yes, I am familiar with that.

1955. The Finsbury Circus lorry holding area has been converted to part of the worksite now, has it not?

(*Mr Weiss*) Yes.

1956. That is acceptable, as I understand it.

(*Mr Weiss*) We have worked positively with the Promoter and sought to meet their needs.

<sup>10</sup> Care, Clean, Considerate and Cooperative, from the Considerate Contractor Scheme code of good practice, City of London, <http://www.cityoflondon.gov.uk/Corporation>.

---

The Petition of Corporation of London

---

1957. So that particular problem has disappeared. In relation to the two remaining ones, in both cases—I can read this out without referring the Committee to the text—the assessment of the impact of the holding area on traffic was that the location of the holding area would not give rise to significant adverse impact on the free flow of traffic in the streets in question. Yes?

(*Mr Weiss*) That is what it says. That is not what I agree with. Take the Smithfield one, for example. The holding area is in the lower part of Snow Hill. Without going into too much detail, that is the area that the lorries leaving the Smithfield Market complex are going to have a narrow street. We are going to have lorries coming in and lorries coming out. I cannot agree with the contention that it will not have an adverse impact on traffic. We are dealing with these large container lorries, some of them with three axles

on the rear, and not particularly manoeuvrable, to narrowly squeeze in an area where demand is particularly high, mostly at night, and visibility and the capability of driver judgment is not an area that I would wish to see reduced. It is also, from my memory of the Environmental Statement, a spill-over lorry holding area. The basement of Cardinal House is the prime site within the Crossrail construction works where these lorries are held. That is within the site that is off-street. If that is managed effectively, which I am sure it will be, there is no need for this use of Snow Hill as a lorry holding area.

1958. I have said I am going to resist the temptation to prolong that debate. Thank you very much indeed, Mr Weiss.

(*Mr Weiss*) You are welcome.

---

Re-examined by Mr Laurence

1959. **Mr Laurence:** Just one or two questions. Mr Weiss, do you know whether the Promoter has carried out any kind of study of which you have had the benefit which shows that because the project is a very big project, ordinary management techniques are not likely to be successful or as successful?

(*Mr Weiss*) No. If they have they have certainly not come to us. I am perfectly prepared to sit down and talk to them about these special circumstances, but at this point in time I have not been approached to say “We cannot work in the normal way”.

1960. If the Committee were to take the view that it was broadly sympathetic to what you have been contending, would you be prepared to give any kind of undertaking to ensure that if exceptional circumstances warranted exceptional measures then they would be taken and provision made for, in effect, lorry holding to take place on an ad hoc basis?

(*Mr Weiss*) Yes, thank you, Mr Laurence, that is a very helpful suggestion. If Crossrail come to the City of London Corporation and convince us, quite reasonably, there is a case to be made because there is something exceptional, something specific, because we need to see this project helped through we will take a positive approach to it. What I do not want to do is

say, as a matter of course, without an examination taking place, a developer (in this case Crossrail) can have a lorry holding area, because that would set a precedent. If Crossrail came to us and showed a special case for lorry holding areas that kills the precedent case and we would be more than happy to see it through.

1961. My final question is just to ask you what is it that you would like the Committee to direct the Promoter to procure the nominated undertaker to do on this issue?

(*Mr Weiss*) To prove to the City of London Corporation that common practice as (I use the word) “enjoyed” by developers on a scale similar to Crossrail do not have a lorry holding area; if Crossrail came to us to state they had something particularly unique to the project that did require it, then in that particular case we would grant an exemption. We would like the Committee to instruct that we have a proven code, operated successfully for 19 years, with hundreds of major contractors, and we see Crossrail’s capabilities as no worse than those and that they do not need a lorry holding area in the City.

1962. **Mr Laurence:** Does the Committee have any questions for the witness, sir?

---

---

 The Petition of Corporation of London
 

---

*Examined by The Committee*

1963. **Kelvin Hopkins:** You talk about other projects not having the lorry holding areas within the City, within your purview. There are other big projects elsewhere in London—CTRL comes to mind. Do they have lorry waiting areas and do they use sites which are in their possession in any case to have lorries in lorry waiting areas within their own areas?

(*Mr Weiss*) That is a good question, sir. It varies from local authority to local authority. The temptation for sites, particularly in central and inner London, is for larger than necessary sites to be acquired which end up with a resident engineers' car park rather than the original intention for which it was put to. Parking charges are running at £4 an hour for central London. There is a tremendous temptation for people to loosely apply what is necessary and what is convenient. To answer the question directly, it does vary from borough to borough. I know that, certainly, Westminster is not quite as prescriptive as the City and it depends on how each particular site is sited, how important the road or particular part of the public role is seen from the other potential users.

1964. **Kelvin Hopkins:** The site being more cramped for space, narrow streets, and extremely valuable property, is it more difficult to make these arrangements in an area like the City of London than it would be in an area where there might be a bit more space?

(*Mr Weiss*) Thank you for leading me there, yes, sir. Just to put it in context, the City, looking at a map, is still a medieval road pattern. In a working day the City has something like 210,000 vehicles a day. In other words, it is around one-and-a-half times as busy as the busiest section of the M1 motorway, which we are trying to squeeze into something which was designed for the horse and cart. There is not much of it and we resist very strongly even small amounts going way because the effect on that network becomes quite extreme.

1965. **Mr Liddell-Grainger:** On the Smithfield Bill, which was a remarkable Bill in history, there was major refurbishment done at a cost of £70 million in the 1980s, a lot of it was to do with lorry access, to allow lorries to get in their sealed loading bays. How many lorries, at the moment, use that market? Do you know? I am talking about the amount of lorries going into and out of the market just to deliver, at the moment. Do you have any idea? It is a lot?

(*Mr Weiss*) It is a lot.

1966. I can find that information for Canary Wharf but it does not have it for the centre. It is used by a lot of lorries and it is an approved route in and out of the City. Would it be a great deal of difference given the amount of work that is going up and down on this route?

(*Mr Weiss*) Not if the lorries keep moving, but if the lorries want a physical piece of the highway which is used by the circulating traffic around Smithfield, particularly the piece on Snow Hill is where these lorries need to escape to get to Farringdon Road,

which is the main red route north to south. If you see the market as a large rectangle, the traffic circulates in a clockwise manner. If you get any blockage within that circulation it feels back around the whole of the complex. It goes back to the medieval street pattern and the lack of spare space to accommodate any slack. There are risks of unnecessarily taking away what very little space we have and applying this to something that we believe is unnecessary.

1967. Looking at this map, your work is going to be down under E. The access is underneath the bottom of the ramp going down West Smithfield. If that is the case, the majority of lorries are going to come out the other side.

(*Mr Weiss*) There are two sets of lorries which are going to mix here. There is the normal market operation—

1968. That is exactly what I am trying to get to. On the market side I can see it is all marked on the map. The other side is where you going to get access to the main works.

(*Mr Weiss*) No. You are correct, the lorry access around Smithfield Market impacts in three areas. You have got the western end towards Farringdon Street under Cardinal House, where the major works are taking place to do Farringdon station works. There is the spiral ramp down West of Smithfield, which will get to the basement of the east market building which will be used to create part of the access to the Lindsey Street concourse and the escalator ramp that comes up from the Crossrail station. Then there is, of course, the construction to the eastern side of Lindsey Street for the Lindsey Street ticket hall. The idea is keep all the streets as clear as we can so that vehicles can get out. By suggesting you have a holding area at the bottom of Snow Hill is one of the escape routes. Like all processes which interact, we expect a positive discussion with nominated undertakers on lorries and their timings. There is a rather fortunate process in that the operation of Smithfield Market tends to take place—with most of the lorries—from one in the morning to seven in the morning. Would it not be nice if the Crossrail lorry activity concentrated between, say, eight in the morning and midnight?

1969. **Chairman:** For the record, the references there were A32 and tab 5. I wonder, Mr Laurence, if you could provide us, perhaps through Mr Weiss, with a table of numbers for the throughput in Smithfield. If we could get that it would be very helpful.

1970. **Mr Laurence:** Did you follow what you were promising to do?

(*Mr Weiss*) Yes, I am sure we can do that.

1971. **Chairman:** We have got one minute to go. Is there anything else?

---

The Petition of the London Fish Merchants Association

---

1972. **Mr Laurence:** I was going to check with you whether I am right in understanding that there is going to be a statement made by some other Petitioner before we resume this afternoon.

1973. **Chairman:** We understand that is the case.

1974. **Mr Laurence:** Does that affect the time at which we need to be ready to continue with our case?

1975. **Chairman:** Two-thirty is when we start. We should be ready then.

1976. **Mr Laurence:** We will be, sir, thank you.

1977. **Chairman:** We will resume at two-thirty.

*After a short adjournment*

1978. **Chairman:** For the record, I note that Mr Laurence has agreed to move aside from his current timetable of speaking to us now because I understand that we have two new petitioners in front of us, Mr Brian Evans and Mr Anthony Lyons, who petition us from Billingsgate.

---

The Petition of the London Fish Merchants Association  
Mr Brian Evans and Mr Anthony Lyons appeared as Agent

1979. **Mr Evans:** Correct.

1980. **Chairman:** Can I say to both of you that I suspect you have never done this sort of thing before?

1981. **Mr Evans:** No, sir.

1982. **Chairman:** Join the club because I have never spoken to fishmongers before, particularly ones who started work in the early hours of this morning, I understand. So, again, for the record, we are all very, very grateful to you for taking the time, particularly in your present tired state, to come here and present a petition. So if you would like to do that we would be most grateful.

1983. **Mr Evans:** I am Brian Evans from London Fish Merchants' Association at Billingsgate Market. There are two major concerns that we have regarding the Crossrail situation. The first and really fundamental issue is the issue of the land take and the loss of parking that will ensue. It is fair to say that 10 years ago Billingsgate was primarily and predominantly a wholesale market, but as London has changed and the population of London has changed and the nature of our trade has changed far more people now wish to come to the market to buy their fish fresh because they wish to buy it fresh in a market and not to buy it from a shop. Over those 10 years, from Saturday being one of the quieter days of the week, for many merchants now it is probably the most important day of our trade, and that is simply because of the changing nature of our business.

1984. If we were to lose the parking spaces—and the space that has been required replaces some 150 parking spaces—within the total value of customers, which is something over 20 per cent and for a Saturday morning, that will have a very significant effect on our business. For many it is the icing on the cake but for some it is the bones of our business. The structure of the way that Billingsgate leases are organised is that the service charge is spread across the merchants that exist. Rather than saying it is so much per unit there is a service charge liability so that if 20 per cent is vacant then the 20 per cent load is put on top of the other businesses. If the space is lost and we lose that retail

trade then without a shadow of doubt we will lose a lot of our merchants, and if that happens the service charge pro rata becomes greater for the existing merchants and we have a spiral that we really cannot afford to get into, where ultimately if one or two merchants are left they will pay the entire service charge of the market.

1985. The loss of about 150 spaces represents something over a third, towards 20 per cent of the total parking spaces for our customers. That as a total means that the market as it stands, on its current retail trade, becomes a difficult situation for many. If the trend we are seeing continues, with obviously more and more people wishing to come in, that just becomes an impossible situation and it is something that has to be addressed. We cannot afford, as a market, to lose that degree of parking spaces.

1986. The secondary issue that is of concern to us is that clearly we are a food market; we have very, very stringent regulations that we have to abide by in terms of cleanliness and contamination, and the issue of contamination from this building work is of a major concern to us. We understand that on the site there will be some concrete batching facilities and that is of great concern, not only because of the possibility of contamination but also the perception of the customers coming to the market, a food market, producing the best fish in Britain, but right next door there is, at the very least, this eyesore if not a serious danger of contamination. So for the merchants up at Billingsgate they are our two major concerns, but the major one for the viability of many of the businesses and ultimately the potential viability of the market is the parking issue and to have that space still available or to have it replaced with something that is possibly suitable for the purposes.

1987. **Mr Lyons:** The market has changed so much in the last 15 years that, as Brian says, the population we have now in London, these people are not shop-orientated people, they are market people that will come to a market. What I do not want to see is a four or five mile queue outside Billingsgate because nobody can get in to park, and then people say, "We just cannot be bothered," because as Brian rightly says

---

 The Petition of the London Fish Merchants Association
 

---

there are least 15 to 20 businesses in Billingsgate Market at the moment that are solely reliant on the retail trade and if they go the market will cease to exist because we cannot afford to take up the rest of the reel, it is just impossible to do that.

1988. I would suggest to you that 15 years ago Saturday would have been our quietest day of the week and now we are looking at it probably being our second busiest, and that is what is keeping Billingsgate alive. It is not just keeping it alive at the moment; we are seeing a growth in Billingsgate that we have never seen for 20 years. Everyone has put us down, that Billingsgate is not going to survive, but we now are going forward and we are getting this in our lap. Is it going to stop us going forward or is it going to stop us even trading and will Billingsgate be here in five years if this goes on?

1989. I would use quite strong words. I do not see it as an eyesore, I see it as we are going to become part of a building site, and how we can run a fish market in the middle of a building site is beyond me, I just cannot see how the health people can stand for it. We have been doing our health and hygiene courses over the last year so that we can take it forward and we have the HASAF procedures in place and 30 or 40 yards from where our fish is stored we are going to have this building site, and I just do not understand it. I am sorry, I am not educated like you people but I just cannot see how we can get round it, you know?

1990. **Chairman:** You certainly know a lot more about fish than any of us, so please do not worry about it. Can I ask you two things because I am not going over to the professionals to question you because you have made a statement and I think that is where we will leave it? Some of the evidence we were given this morning was about the large amount of lorries which are already using the site, which is almost continuous, and would you ratify that that is the case?

1991. **Mr Lyons:** Certainly between the hours of eight o'clock in the evening when the fish is arriving until five o'clock the next morning containers are coming in and out all the time. But between the hours of five o'clock and nine o'clock or 9.30 is when the vehicles are leaving the site with produce that they are taking away. So really you are talking about from eight o'clock at night until 9.30 the next morning, it is just non-stop.

1992. **Chairman:** So if any further lorries came and parked up around to take stuff away it would be very, very difficult?

1993. **Mr Lyons:** Congestion, big time congestion. Ken Livingstone would want to get a few quid out of it.

1994. **Chairman:** He has left here, unfortunately. But there is another aspect of this, that as well as lorries going out we have noted lots of cars and of course

motor cyclists who are delivering, particularly to restaurants. Would it also impinge upon their ability to collect and deliver?

1995. **Mr Lyons:** I think more getting to the site. Once they are at the site then we have a system in place where we load the vehicles and they are away, but certainly when the vehicles are coming into the market obviously there are no customers there at that time, so that is not going to change that situation. Our big worry is that people might get to the area of Billingsgate Market and say, "I cannot be bothered," purely because of the traffic situation.

1996. **Chairman:** You have a regular customer base at the moment and sometimes when people stop using a particular route to buy their products they do not come back. Have you done any analysis of what that might be in the case of your business?

1997. **Mr Lyons:** Not really, no. As I say, the concern is that the people will not be able to get into the market to buy their goods; that is the big concern.

1998. **Mr Binley:** Can I ask a couple of questions? I would like to get a grip of how much the market has swung from wholesale to retail, and I noticed you said that 15 to 20 businesses now rely solely—to use a fish word—on the retail trade. How much of that is a percentage of the total number of traders? How many traders actually trade at Billingsgate?

1999. **Mr Lyons:** Forty-three.

2000. **Mr Binley:** So 40 per cent-ish rely solely on the retail trade. Can I ask you of the others because you intimated that the retail trade was important to you personally, whether there is a split with the others between wholesale and retail?

2001. **Mr Lyons:** Personally my business would be 60 per cent wholesale and retail 40 per cent.

2002. **Mr Binley:** So an important contribution.

2003. **Mr Lyons:** A huge contribution.

2004. **Mr Binley:** Of people coming to you to buy two Dover soles?

2005. **Mr Lyons:** No, I never serve less than a box of fish, personally.

2006. **Mr Binley:** They put them in the freezer?

2007. **Mr Lyons:** Absolutely; these people are going away with a box of fish. They are not going there to buy two Dover soles or a strip of cod or a strip of haddock, they come and buy boxes.

2008. **Mr Binley:** Then I understand your trade and I thank you for it.

---

 The Petition of the London Fish Merchants Association
 

---

2009. **Chairman:** Thank you very much indeed, gentlemen. You will be sent copies of the Hansard report of your evidence at the earliest opportunity and thank you for taking the time to come here.

2010. **Mr Mould:** Sir, with your leave could I briefly set out the Promoter's position in relation to the two matters raised by the Petitioners so that they can hear what we say in response to that? Can I say first of all that you appreciate we had provided written Petition responses to the Petitioners and the fish merchants are no different in that respect? I was not going to offer to burden you with yet further paper by providing you copies of that document, but it seems to me sensible if I simply refer you to one or two paragraphs which set out the answers to the particular points that have been raised.

2011. **Chairman:** Yes.

2012. **Mr Mould:** First of all, in relation to the question of hygiene, the particular concern that was raised in writing I think is reflected in what has been said today and was with the potential for contamination as a result of dust and other airborne contaminants, and what we say in relation to that—and for the record it is on page 9 of the response document, at paragraph 2—is: “The Crossrail Construction Code includes provisions for the control and management of dust on construction sites,” and it sets out a number of matters in relation to that. There has been a risk based approach in the Environmental Statement to identify construction sites with potential to generate significant quantities of dust near sensitive receptors and which require additional levels of control. There are three levels of control for dust effects, tiers one, two and three, the highest level of control being tier three. Then: “The Environmental Statement identified the construction works at the Billingsgate worksite,” that is the site we are concerned with today, “as a high dust generation risk and that a correspondingly high level of mitigation (tier 3) in the form of construction site management practices will be employed. Details of the mitigation measures are presented in Appendix B1 of Volume 6a of the Environmental Statement and in Chapter 6.3 of the Crossrail Construction Code. In addition to the mitigation provided for Tier 1 and Tier 2 sites, the highest standard of dust control reasonably achievable will be adopted for Tier 3 sites. This may include having personnel on site to monitor and manage dust emissions or techniques such as total enclosure of certain operations to protect vulnerable receptors. The measures taken at Tier 3 sites will be proportionate to the risk and will be site specific. With this mitigation in place, the Environmental Statement concluded that there would be no significant impact due to construction dust. Further clarification of how dust will be controlled and managed on construction sites can be found in the latest draft of the Crossrail Construction Code,” which is explained further in the Information Paper D1, which has that title. You have the file of Information Papers to hand, I believe, and if it helps the current draft of the Construction Code is attached to the Information Paper D1 and paragraph 6.3.8 of that document, which is headed, “Advanced

Dust Control Procedures on Sites with a High Risk of Dust Emissions for Tier 3 Sites” essentially repeats what I have read out from the response document, and I would emphasise that in relation to tier three sites that Billingsgate is clearly an example on the basis of our investigations. The highest standard of dust control reasonably achievable will be adopted, and that I think speaks for itself. That is all I want to say about the question of dust and airborne contamination.

2013. In relation to the car parking issue you will hear about that in a little while in the continuing presentation of the Corporation's petition; I think it is the next issue which is on their agenda today. It may just foreshadow that in this way: we the Promoters have been considering carefully how we may seek to meet the concerns of the Corporation in that respect and I apprehend, by the same token, I hope to go some way towards meeting the concerns of the fish merchants because they have essentially the same concern about the impact on trade of the loss of customer car parking. What I am instructed to say to you now, foreshadowing what I was going to say later on in any event, is that the Promoter gives this undertaking, that he will require the nominated undertaker to take reasonable endeavours to secure that provision is made so that there is no material impact upon the number of car parking spaces available to visitors during a Saturday morning opening of Billingsgate Market from land taken temporarily by the Crossrail project for construction purposes. This is subject to the City Corporation taking all reasonable endeavours to assist in securing such provision. There is something of a joint enterprise that we are anticipating, as you will see from that. The burden of that undertaking is that we are seeking to continue our investigation of measures, management and otherwise which may be available in order to secure that there is, as we say, no material impact upon the number of visitors' spaces available to serve Billingsgate Market and the retail operations that have been mentioned to you during the construction phase of the Crossrail work.

2014. **Chairman:** Those discussions are proceeding, are they?

2015. **Mr Mould:** They are indeed. We showed this to the Corporation during the luncheon adjournment and I believe that they have been considering it whilst we have been dealing with the current Petition.

2016. **Mr Binley:** I would like to know the legal standing of the Code of Dust Controls. Does it have any legal backing or is it simply a wish to be as kind as possible to people who are around or living in the market?

2017. **Mr Mould:** If your question relates to the general force that the Code has the position is this: the Code forms part of the environmental minimum requirements which we mentioned in opening the case which, to cut a long story short, will take effect as part of the undertakings that the Promoter gives to

---

 The Petition of Corporation of London
 

---

Parliament which will be entered on the register and will be in force through the process that applies in that way.

2018. **Mr Binley:** Secondly, as to the amount of car parking space, you talk about reasonable measures. One assumes that is about an agreement with the fish merchants. One assumes that there are ongoing negotiations and that you hope to come to some form of agreement which is seen as a reasonable measure from both parties points of view. Is that so?

2019. **Mr Mould:** We certainly hope to come to arrangements which are seen in that light, yes.

2020. **Mr Binley:** You give that undertaking, do you?

2021. **Mr Mould:** I give the undertaking that I have read out to you which is intended to enable continuing discussions to take place. We are dealing with it

principally through the Corporation who, of course, have any interest in essentially representing the interests of the traders.

2022. **Mrs Riordan:** Following on and talking to traders both about contamination and about parking, if you do not come to a reasonable agreement when will that be brought back to you and who will make the final decision?

2023. **Mr Mould:** As I say, we are looking to secure reasonable arrangements which will enable the purpose of the undertaking to be achieved; that is to say, no material impact on the number of parking spaces. That would be a matter that we would expect to be resolved between the parties. We would not expect, I think, to bring that back to this House. We would expect, in short, to fulfil the terms of the undertaking.

2024. **Chairman:** Thank you. Gentlemen, thank you very much indeed for your time. We will pass on to you the statement. Thank you very much.

**Mr David Smith, sworn**

*Examined by Mr Laurence*

2025. **Mr Laurence:** Mr Smith, good afternoon. You tell the Committee you are David Smith, Director of Markets for the Corporation, having overall responsibility for the management of the Corporation's three wholesale food markets: Billingsgate Market, the fish market at Canary Wharf; Smithfield, the meat market on the western boundary of the City; and New Spitalfields the fruit, vegetables and flowers market at Leyton, is that right?

*(Mr Smith)* That is correct, yes.

2026. **Mr Laurence:** It is the first two markets, is it not, that are directly affected by the Crossrail plans. I think what you have done for the assistance of the Committee—and it might just be worth asking you to turn these up and to explain them briefly—is to produce six exhibits numbers 1-6 in the index to your material. For the record an aerial photograph of Billingsgate Market at midday, photograph 1; photograph 2 is an aerial photograph of Billingsgate Market at 5.30am; photograph 3 is an outline map of Billingsgate Market and the Crossrail worksite; photograph 4 is an aerial photograph of Smithfield Market; photograph 5 is an outline map of that market; and, finally, photograph 6 drawings of the Smithfield Basement car park.<sup>11</sup> What I would like you to do, Mr Smith, is just refer to those in whatever way you think useful just to highlight for the Committee what it is that they should be focussing on. *(Mr Smith)* I would like to start, if I may with photograph 1 the Billingsgate aerial photograph, and I would point out that it is taken at midday which explains why there are very few cars in there. The area

that we have been talking about and the tenants of Billingsgate, whom you have just heard, were talking about—the area of land take they are very concerned about and we are joined with them in that—is area 2 on the lefthand side, which is used exclusively today for retail customer parking and is approximately 150 spaces.

2027. **Mr Laurence:** Would the Committee be assisted do you think by jumping straight ahead to tab 15 to see a map with four different colours on it indicating the various parking areas that are available?<sup>12</sup>

*(Mr Smith)* Yes. The yellow area at the bottom is one that we lose. If I can take you through the top green, that is what we call the domestic car park which is where the market workers park their cars. There are about 250 cars parked there every day, which leaves 120 for retail customers on a Saturday. I would point out that we are fundamentally talking about Saturdays and Bank Holiday periods, Easter and Christmas, as the major retail business days. The area in blue is what we call the lorry park which is where wholesale customers park. We do have a lot of wholesale trade on Saturdays as well as the other days. That is normally filled, as you might notice from tab 2, the aerial photograph at 5.30 in the morning, with white vans which are wholesale customers taking away the product they have bought in the market. You will notice there is a reasonable amount of space around the vehicles; that is because many of these people actually have to transport pallets so you have pallet lifters and forklift trucks operating. It is, by and

<sup>11</sup> Committee Ref: A31, City of London Exhibits.

<sup>12</sup> Committee Ref: A31, Assessed parking spaces from detailed layout design (SCN-20060131-011).

---

 The Petition of Corporation of London
 

---

large, not suitable for retail customer parking. We do occasionally use it but we have to be conscious of the health and safety aspects of ordinary retail customers mixed in with the wholesale activity. If I might turn you back to tab 15 and the red area on the righthand side, which has 70 spaces marked on it, that is what we normally refer to as our rough ground; it is unmade-up territory that is there in case we wanted to build another building on it. We use that as overflow retail parking on Saturdays and Bank Holidays. I think that is probably sufficient.

2028. **Mr Laurence:** Mr Smith, thank you for that. I did not want to interrupt you while you were in full flow, but it is my happy duty now to announce to the Committee that Irene Dick has just come in a moment ago to tell me that, subject to further negotiation as to the proper definition of “Christmas, Easter and Bank Holiday trading periods”, that the following amended undertaking has been agreed between the parties on this parking issue:

2029. “Car parking at Billingsgate Market—the Promoter will require the nominated undertaker to take all reasonable endeavours to secure that provision is made so that there is no change in availability of parking spaces available for visitors during the Saturday morning opening of Billingsgate Market from land taken temporarily by the Crossrail project for construction purposes. This is subject to the City Corporation taking all reasonable endeavours to assist in securing such provision”.

2030. I think it was probably Mr Mould’s mention of the fact that there were these discussions that must have, as it were, filtered its way through to the corridor, Chairman, and that is the result. The consequence is, Mr Smith, much as I am sure the Committee would be fascinated to hear the detail of the parking issue, with the leave of the Chairman, what I am going to ask you now to do is turn to those matters which I mentioned in the course of my opening you wanted to touch on briefly, so that the Committee could get a flavour of the full range of matters that do concern the Corporation which it is content not to ask for any relief from this Committee in relation to. Chairman, I know the Corporation is anxious not only for itself but also for the traders to be seen to have done what it can to bring its continuing concerns to the attention of this Committee.

2031. **Chairman:** I think we are content—particularly as it would give a chance for the various briefs to talk to each other so, yes, proceed.

2032. **Mr Laurence:** Thank you. Can I go back to your proof, Mr Smith. You have introduced the various photographs and plans which show the areas with which we are concerned, but would you like to say something more about the Smithfield area. In particular I think the Committee may be assisted, if they have not looked at them, to look at tabs 4 and 5. The bit we are concerned with is in tab 4, and of

particular concern is the area around the eastern end of the Smithfield Market, but we are by no means confined to that, are we?

(**Mr Smith**) No, there are a number of issues surrounding the work that is going to be undertaken by Crossrail around Lindsey Street which, looking at the aerial photograph, is on the extreme right of the photograph where, as you are well aware, they are going to be dealing with an escalator shaft beneath the market. You will hear after me a technical expert talking about the concerns we have there about the structural stability of the market. We have two particular concerns in terms of the operation of the market, regarding that particular part of the area. Firstly, in traffic in parking perhaps I could ask you to look at tab 5 which shows a plan view of the market.<sup>13</sup> Around the market there is largely a one-way system. If you look above the market buildings you will see Charterhouse Street, and that is a one-way system going from left to right. Traffic then goes down from the end of Charterhouse Street into Lindsey Street which, at the moment, is a two-lane road one-way; and it is going to become a one-way one-lane road which will, of course, cause major traffic constriction at busy times. Lorries and vans normally go down Lindsey Street and either turn left up Long Lane or right down Long Lane. Long Lane leads left up to Carthusian Street. At the moment, there are going to be a lot of vehicles that are going to be stacked up behind into Charterhouse Street and we have major concerns about our ability to manage the traffic flow. Of course, if we get gridlock in the area that will discourage customers; they will find somewhere else to go.

2033. That was one of two main matters you wanted to mention. What was the other?

(**Mr Smith**) The second one deals with airborne pollution and the potential for dust contamination around this entire worksite. The Promoter has informed us that the nominated undertaker will be mandated to encapsulate the basement working site and that is all very well, but we are concerned, nevertheless, about the amount of dust and airborne contamination that may arise out of the works on Lindsey Street or indeed the mere escape from the basement, because the market is, as indeed is Billingsgate (and you have heard the merchants from Billingsgate explain to you their concerns about a possible concrete batching plant on the area of land-take) we have similar concerns at Smithfield, because both markets are very heavily regulated under EU food hygiene regulations.

2034. I think you have included an extract with some relevant regulations which we need not turn up in exhibit 7. Have you not?

(**Mr Smith**) I have indeed, sir.

2035. Being constrained by those regulations, what is the position?

---

<sup>13</sup> Committee Ref: A31, Smithfield Markets—Masterplan (SCN-20060131-009).

---

The Petition of Corporation of London

---

*(Mr Smith)* Both markets have inspectors on site for the entire time and were we to be in a position where there was contamination that was above what the inspectors considered to be a fair level they have the power to remove the approval of the market as a trading space, which would force the closure of the market.

2036. If we were to go to your proof at paragraph 11, and perhaps invite the Committee to have open at the same time your exhibit in which you summarise your concerns both at Smithfield and at Billingsgate, which is at tab 8, sir, under the heading: “Market Issues under discussion with Promoters”. Would it be convenient just to stay with Smithfield for the moment and have regard to what you say in paragraph 11 of your proof, Mr Smith?

*(Mr Smith)* Yes. As I said just a minute ago, the regulations 853 2004 actually lay down the hygiene rules. The competent authority, which in the case of Smithfield is the Food Standards Agency, has to actually approve the market. In the Promoter’s response to our Petition they accept that this is a site of considerable sensitivity, they agree it needs to be managed as what is called a tier three site and they talk about consulting us. We believe that we need to have rather greater control over the process than merely being consulted. We believe there needs to be a system put in place that monitors the amount of potential dust and pollution coming from the various worksites, with agreed threshold levels, so that if they get close to those levels we can discuss with the undertaker how they can actually be reduced. If they actually breach the threshold we should have the right to stop those activities.

2037. Acting reasonably, of course.

*(Mr Smith)* Indeed. I do realise this gives the Promoter some difficulty.

2038. Mr Smith, it is right, is it not, that that is what you are hoping to achieve in discussions which are going on at the moment. You have not chosen to make this a Petition point for this Committee on this occasion—or indeed on any occasion in this House, sir, you will be glad to know—but the Corporation reserves its position in case those discussions are not brought to a satisfactory conclusion. Is that right?

*(Mr Smith)* That is correct, yes.

2039. Just looking, then, at your proof at paragraphs 11 and 12, is there anything else in those paragraphs, bearing in mind your summary of the issues at tab 8 of your exhibits, that you would like to mention? Take a moment or two to glance through it and see whether there is anything else you need to cover.

*(Mr Smith)* I think it might just be useful to have on the record that we are concerned about the demolition of the mezzanine floor in the east market which is about an 18-inch concrete floor and how that will be conducted, and the effects it may have. Similarly, with the various demolition works on the far side of Lindsey Street, as well as the transporting of the

various wastes away from the market and the delivery of materials such as concrete into the market. Cement dust is a real potential hazard for us.

2040. That is another matter where there are discussions going on that you hop will result in an agreement that is satisfactory to the Corporation.

*(Mr Smith)* We would hope so, sir.

2041. Mr Smith, we have heard about the parking issue, in particular, at Billingsgate. Is it right that those issues in relation to Smithfield but with the exception of the particular issue relating to the work that has to be done in the basement of the eastern market are, to a large extent, common at Billingsgate as well?

*(Mr Smith)* We have similar concerns at Smithfield, especially around the Lindsey Street area where we lose 30 parking spaces and we are in discussion with the Promoter about how this may be mitigated. It is, nevertheless, a serious problem.

2042. The answer is there are similar concerns at Billingsgate to those that you have described at Smithfield. Is that right?

*(Mr Smith)* Correct.

2043. If you turn to your conclusions at paragraph 53, I see you refer there to the regulations that you have already mentioned. Is there something that you want to say about the threat from noise and vibration at all?

*(Mr Smith)* Yes. If I could ask the Committee to turn to tab 8, where we have a list of subjects under discussion, we have raised this in our Petition and in the response to our Petition the Promoter indicated that they would be carrying out a site specific survey both at Billingsgate and at Smithfield and they would let us have the results for this Committee, and indeed we got them last night. So we now have them and just need a little bit of time to assess them. We have experience at Billingsgate—if I can start with Billingsgate—recently at the works across the water from the market where they are building Barclays Tower, within the market in sight of the building, the noise was very considerable and very disturbing to the people working there. The Crossrail site being inside the dock itself, where they are building the coffer dam and the island, will be that much closer and we believe that there is plenty of potential for that noise to become unbearable for the people working in those offices, and it is not just the administration staff we actually have a seafood school down in Billingsgate that operates every day of the week, both as a charity and as a commercial enterprise. We believe it may be necessary to have double or triple-glazing on the windows to make it bearable, and if so that means you would not be able to open the windows in the hot weather. So we may need to have air conditioning installed as well. Looking at Smithfield, not only do we have the offices above the trading floor but above those offices we have 16 commercial offices which operate during normal working hours. Those are for people who have nothing to do with the market, they are just ordinary commercial operations. The noise

---

The Petition of Corporation of London

---

and vibration from the work has the potential to make those offices untenable. We are in discussion with the Promoter on those matters.

2044. Thank you, Mr Smith. With that, subject to anything you want to say in conclusion in a moment, there is just one other matter I would like to ask you about, please. It is conveniently set out at tab 9 of your exhibits, under the description: "Issues of Concern to the Smithfield Meat Traders' Association". What that document, at tab 9, is is this, is it not, Mr Smith? It is a current draft of the undertakings sought by the SMTA as part of their Petition due to be heard, I think, in some weeks' time before this Committee. Is that right?

(*Mr Smith*) It is, sir, yes.

2045. You have had an opportunity, briefly, to consider that document, and I think you have agreed just to offer your observations in relation to those of the provisions in that draft document which the Corporation feels it can usefully comment on, of which the first is number four, under the heading "Highways". I suppose I should read the context, which is this: "SMTA seek, in addition to the undertakings offered in the Response to the Petition, the following amendments to the Bill or undertakings to the same effect from the Secretary of State or the Promoter:" (I am not proposing to go through all these, sir, because this is another Petitioner.) Under 4, the first of about five extracts I will be referring to: "That reasonable endeavours are used through negotiations with the Corporation of London or otherwise to secure the establishment of additional loading bays in substitution for any lost on Lindsey Street in the Rotunda or Carthusian Street." The Corporation has no difficulty with that, has it?

(*Mr Smith*) That seems reasonable.

2046. Eight: "Subject to the above and before exercising any of the powers conferred by Schedule 3, para 5(1) in relation to West Smithfield, Long Lane, Snow Hill, Charterhouse Street and Square, Carthusian Street or Lindsey Street, and for the purposes of any relevant traffic management plan the nominated undertaker will consult the highway authority and SMTA as stakeholder about the exercise of the powers and have regard to and in so far as is reasonably practicable adopt any proposals that better protect the operation of the market." Same comment?

(*Mr Smith*) Yes. One of our primary aims is to protect the operation of the market and we work very closely with the SMTA to do so.

2047. At 15, over the page: "That reasonable endeavours are used through negotiation with the Corporation of London or otherwise to ensure that: (a) the market's traders and customers have priority use of the basement car parks (the market is not the operator of the car parks) during the main hours of operation of the market (between 10pm and 10am)." So that is something the Corporation is happy with?

(*Mr Smith*) We can certainly live with that and it makes a lot of sense.

2048. I understand there is a qualification to (b), though, relating to whether you have powers under the Highways Act to do what is here sought, but I will read it out. "In so far as there is any excess demand for parking from the market's traders and customers they are provided with suitable alternative parking by the reallocation of existing kerbside spaces or otherwise." Is the position this: that subject to any constraints that may be imposed on you by the Act I have just mentioned a moment ago, the Corporation can see it's very clear to assisting with that too?

2049. (*Mr Smith*) That is true, though there may in reality be a conflict with four because there is only a limited amount of road space around that area. So if we are going to increase the number of loading bays we may not be able to increase commensurately the number of parking spaces.

2050. Finally, can I refer to page 5 under the heading "Structural Impacts"? I do not want to take time reading all of this out. Are you able to offer a sort of general comment on what it is that the Corporation would be saying about 22, 23 and 24. Perhaps 24 is the one I ought to read because I think we are looking for something rather stronger than that. "That the nominated undertaker will prepare a detailed design for the permanent relocation of the services currently situated in the market basement and detailed method statements for the relocation of all of those services including provision for full back up services to be provided until replacement plant is fully commissioned and operational, all in consultation with the Corporation of London and SMTA as stakeholder." That makes it look as if that is all that would have to happen as far as the Corporation is concerned. Is that, in fact, the position of the Corporation on that issue?

(*Mr Smith*) I would support paragraph 24, sir. We are actually in discussion with them at the moment about the replacement of the plant. They have undertaken in their response to the Petition to do so and I believe we will come to a sensible solution.

2051. Can I just check (because I am leading you, I know, but I hope in order to shorten things that will be acceptable) my understanding is that mere consultation is not something which the Corporation would be satisfied with on this particular issue.

(*Mr Smith*) Correct. If we are looking at this as a Corporation piece of paper, I would say we would wish to agree the plans and how they are going to do it.

2052. In order to shorten this still further, sir, can I just say, as regards number 23, we do not have any difficulty with that as I understand it, and as regards number 22, insofar as it is consistent with the Heritage Deed on which we are still in negotiation with the Promoter, that is the kind of thing one would expect to see. The role envisaged for the Corporation is one the Corporation would be happy with. I think once again the actual level of protection that the Corporation is going to be seeking goes beyond mere consultation, does it not, Mr Smith?

---

 The Petition of Corporation of London
 

---

*(Mr Smith)* That is correct. From our point of view, we wish to have a greater degree of say in the final solution.

2053. So it is right to say that we have reason to hope that that will result in agreement at the end of the day which is why we are not troubling your Committee any further with that and other issues that I have mentioned through Mr Smith. Mr Smith, there is still Mr Pearman to come who is going to be dealing with a specific issue to do with the eastern end of the market structure at Smithfield. For this Committee, is there

anything else that you would like to record before I tender you for such cross-examination as Mr Mould may feel is necessary and desirable?

*(Mr Smith)* Noting that you are going to be hearing from Mr Pearman about the structural issues, I think we have covered all the main points that we are concerned about. Our main concern is all the aspects of actually maintaining the continued, uninterrupted, hygienic and safe operation of these two markets.

2054. **Mr Laurence:** Thank you, Mr Smith.

2055. **Chairman:** Mr Mould?

---

 Cross-examined by Mr Mould

2056. **Mr Mould:** Mr Smith, I am not going to ask you any questions about that Billingsgate car park at this stage in the light of the exchanges which occurred a few moments ago and, given, as I understand it, Mr Pearman is going to deal with the other, if I may put it this way, matter which is at the business end of your Petition today, I do not think I am going to be thanked if I take too much time now asking you questions about matters which, as you say, happily are the subject of continuing discussions and negotiations between yourselves and the Promoter. However, it may be helpful just to give a flavour of the, I hope you will agree, essentially positive approach that the Promoter is taking towards the interests of Smithfield and indeed Billingsgate markets. You would accept that that is a fair way of characterising that?

*(Mr Smith)* I think a select committee has a wonderful way of focusing people's minds!

2057. I am not sure whether I ought to be provoked by that point! I will be self-effacing anyway and resist the temptation, but there it is! Perhaps, to give some sense of how we say, with respect, we are trying to be helpful whilst at the same time seeking to draw the right balance between the genuine and reasonable needs of the project, I could just invite Mr Fry to put up page 47 of the Petition response document to the Corporation. This is a response to the City's very concerns about the continued operation of the market and, Mr Smith, I think we can just look at two paragraphs here. Paragraph 1, in relation to vehicular access, the Promoter has stated that he will require the nominated undertaker to maintain vehicular access around the market at all times. There is an assurance which faces up to, without qualification, the first of the two particular points that you spoke of to my learned friend during the course of your evidence-in-chief, does it not?

*(Mr Smith)* Yes, it does.

2058. Now, how that is achieved of course may require some careful thought, but that is the assurance which the Secretary of State has given to the City and, through this response, to Parliament.

*(Mr Smith)* I think the only comment I can make is that yes, it is a statement of intent and it is the 'how' that matters.

2059. That is of course the matter which is the subject of continuing positive negotiation.

*(Mr Smith)* Indeed.

2060. Then paragraph 5, an acknowledgement that there will be a temporary loss of loading bays in Lindsey Street which is a point you alluded to, I think, but there you see again that "the Promoter accepts that the loss of the loading bay, if unmitigated, has the potential to cause a significant impact on the operation of the market". He is "committed to working with the Corporation to agree and implement appropriate mitigation", and that "this will involve an assessment of local parking and loading demands and, if necessary, the reprioritisation of kerbside space with priority given to the need to maintain market operation and resident spaces. Any such modification to parking, unloading operations and controls do not form part of the work authorised by the Bill. The Promoter will work with the local highway authority and stakeholders to bring about the necessary changes". Now, again plainly that is a matter that requires careful thought, but the commitment that the Secretary of State gives to the City is perfectly clear and unqualified, is it not?

*(Mr Smith)* Yes, and I think I acknowledged that in what I said earlier.

2061. That is just giving a flavour of the positive approach that the Secretary of State has taken with respect to the market. Then, finally, in this respect, without wishing to try the Committee's patience, but the other matter which you mentioned specifically was hygiene and dust. I will ask Mr Fry to take us on to page 50. Here we see that this response is to concerns about the impact on the operation of the market in relation to hygiene and so on. Essentially, to cut a long story short, were you here when I was explaining our response to the Billingsgate fish merchants?

*(Mr Smith)* Regrettably, I missed that because we were having a little negotiation in the corridor about the wording of the undertaking.

---

The Petition of Corporation of London

---

2062. If I may say so, you missed a delightful exchange! Paragraph 3 is essentially making the same point. Paragraph 2 gives reference to the Crossrail Construction Code and you will be familiar with that. Then paragraph 3 refers to the fact that, like Billingsgate, Smithfield has been identified as a Tier 3 site, a high dust generation risk, with a correspondingly high level of mitigation. You mentioned this in your evidence, but what you did not mention which merits the Committee's attention is the final sentence of that paragraph, "In addition", to the Tier 3 mitigation measures which the Committee knows about from what I read out in relation to Billingsgate, "the nominated undertaker will be required to put in place a total enclosure of the East Basement worksite and the western part of the Lindsey Street worksite". That is the degree of commitment that is being offered, having regard to the sensitivity of Smithfield and the various statutory and other obligation requirements that the meat trading has to meet.

(*Mr Smith*) I accept that and in fact I did comment that they had undertaken to do total enclosure. As you have raised that paragraph, if one looks half-way down, it talks about, "This may", and I emphasise, "may include having personnel on site to monitor", et cetera. I think our point is that we would like to have some degree of reassurance that we can have some form of not unreasonable agreement, and I think the expression is "not to be unreasonable", to withhold agreement to some of these plans. These sites, but particularly Smithfield, are highly sensitive to any form of pollution. I believe they are unique sites in terms of the space you are dealing with in Crossrail both in the complexity of their operations and the requirements of food hygiene. I believe that we need

something rather more concrete than just "may" or "consult" or "discuss" because we all know what can happen there.

2063. Well, the significance and the sensitivity of the sites in relation to potential airborne contamination, as you have acknowledged, has by no means been lost on the Promoter, but, in answer to your point, the previous sentence of this paragraph repeats what I read out earlier in the relevant paragraph, paragraph 6.3(8) of the current draft of the Construction Code which is a reference to achieving the highest standard of dust control reasonably achievable, if that is what is to be adopted. If that requires, entails or embraces within it the need for monitoring to take place on site, then no doubt that will be what is provided, but of course that is a matter that will need to be considered in relation to that overarching level of control and commitment.

(*Mr Smith*) I would not want to be either considered obtuse or difficult, but if this is to be achieved, then we would not unreasonably withhold our agreement.

2064. I think the Committee can see how far apart we are on matters of principle and I do not propose, on that basis, to take the matter any further. In relation to other matters which you have raised, those are very clearly matters which are subject to ongoing discussions and insofar as you have commented helpfully on the undertakings that are being proposed by the Smithfield Market Traders' Association, I leave that, if I may, to consideration when they come to present their Petition.

2065. **Chairman:** Mr Laurence?

2066. **Mr Laurence:** I have no re-examination, thank you, sir.

---

Examined by The Committee

2067. **Mr Binley:** I am slightly concerned about the way this situation is left because I am not sure I understand what will happen if reasonable agreement is not reached. It does seem to me that the Petitioners are about the status quo and the Promoter is about changing the status quo. In the respect, it would seem to me to be fair and reasonable that the Promoter meets any points of discomfort or concern that are reasonable from the point of view of the Petitioners. As you have said, you are having discussions that you hope will be reasonably resolved by agreement. Might I ask you whether you feel that they will be so reasonably resolved or whether you feel slightly vulnerable in that respect by the possibility of their not being reasonably resolved?

(*Mr Smith*) I wish, sir, that I had a crystal ball. We have begun the discussions with the Promoter, and I am an optimist by nature, but we are reserving the right to bring this back to the second House here if we cannot actually get agreement.

2068. **Kelvin Hopkins:** Can you explain to me what you mean by 'total enclosure' and what the nature of that total enclosure would be? Would it be walls, would it be the roof and how would it operate, how would it function? Would it really contain the dust?

(*Mr Smith*) I am not sure I am the right person to answer that question, sir. It is the Promoter who has offered this forward.

2069. **Kelvin Hopkins:** I rather thought Mr Mould might explain it.

2070. **Mr Mould:** I gather from Mr Laurence that Mr Pearman might be able to explain that and then we could respond as appropriate, if that is convenient to you.

2071. **Mr Laurence:** I hope I am not landing my witness in it, but what I was suggesting to Mr Mould is that, if Mr Pearman can help with what he

---

 The Petition of Corporation of London
 

---

understands must be met, speaking as an engineer, then those who instruct my learned friend can listen and no doubt they will be able to add something more if the description is inadequate. I am just trying to make use of the asset which is about to come to the witness chair for the assistance of the Committee, as far as I can.

2072. I wonder if I can just say something, sir, in the hope of assisting Mr Binley. The process that we are engaged on in these discussions is to try and arrive at a form of words which gives to the Corporation in appropriate areas what I have been referring to as a 'qualified right of veto'. The reason that the lawyers get involved is not only the drafting of an agreement along those lines, but in trying to arrive at a mechanism which means that there is a way of resolving a dispute as to whether the Corporation is acting reasonably or not in any particular case. It is not merely that one has to agree that one is in an area where the Corporation ought to be able, acting reasonably, to have a veto, but there may be disagreement about whether it should be given such a qualified right of veto or not, so that is the first part of the negotiation, to say that this is sufficiently important that we, the Corporation, should have a qualified right of veto. Once that is acknowledged, the next thing that has to be agreed is: what happens if the Corporation believe it is acting reasonably and the Promoter believes the Corporation is not acting reasonably? How do you resolve the resulting impasse? Answer: by some form of arbitration for which provision has to be made. If I am not trespassing on this morning's events, it is something similar to the mechanism where I was inviting the Committee to act as a kind of arbitrator in relation to Options 1 and 6 which I was discussing this morning.

2073. When Mr Smith says that the Corporation reserves the right to petition in the other House, what the Corporation is reserving the right to do is to ask the House of Lords to assist if our discussions on these various matters that require, we say, for there to be a qualified right of veto given to us with arbitration in the event of disagreement. If it proves impossible to secure the Promoter's agreement to that kind of protective provision being written into an actual binding agreement, then we would want to go and trouble their Lordships' House and, following Mr Binley's philosophy, if you like, that it is the Promoter who is changing things, we would hope to persuade their Lordships to direct the Promoter to enter into such an agreement with us on those unresolved issues. I have no reason to think though that, with a good bona fide approach on both sides, we will not resolve most of these issues, which I hope we will.

2074. **Chairman:** We must deal with it in this House first.

2075. **Mr Laurence:** Absolutely, sir. I understand that.

2076. **Chairman:** Do you conclude?

2077. **Mr Laurence:** Unless the Committee has any further questions.

2078. **Mr Mould:** Sir, just before Mr Smith withdraws, can I just make two short points. First of all, as you have just made clear, the Committee's concern is with matters brought before it for consideration and decision and nothing is more tedious to the Committee than to hear the parties, as it were, positioning themselves in relation to matters which ultimately are going to be decided in another place, if decided at all through these processes.

2079. I should make it clear, as we have made clear in the responses to the City and others, that we have a carefully thought-through framework of environmental control which you have had some flavour of in the opening submission of Mr Elvin and our negotiations with the City and others are made very clearly against the background of that framework. It is set out, for those who are interested in it, in the information papers, particularly information papers D1 and D2, which explain both the statutory and the extra-statutory elements of that regime. I should not want it to be thought that we are fluid in terms of handing over rights of qualified veto or whatever else you may consider it to be which fall inconsistently with that framework that we are seeking to apply consistently across the project.

2080. **Chairman:** We are very happy that the Petitioners and the Promoter are getting together and we are getting sensible courses of action which are satisfactory for both sides, but we are determined to deal with matters which are our concern in this place and that is the way we will proceed.

2081. **Mr Mould:** I am very grateful for that, and of course in the first instance it is for the Petitioners to place before the Committee those matters which they wish the Committee to address in that respect.

2082. Sir, the other matter was this and it relates to the question of Billingsgate: you were told very helpfully by Mr Laurence that some changes were being proposed to the undertaking I mentioned earlier and he did say very helpfully that the question of the exceptional usage of the car park at holiday times, Christmas and Easter, would need to be the subject of some consideration. I just want to make it clear that that is our position as well.

*The witness withdrew*

---

---

 The Petition of Corporation of London
 

---

Mr Terence Graham Hegan Pearman, sworn

*Examined by Mr Laurence*

2083. **Mr Laurence:** You are Terence Graham Hegan Pearman?

**(Mr Pearman)** That is correct, yes.

2084. Describe your qualifications, if you will.

**(Mr Pearman)** I have an Honours Degree in Civil Engineering, I am a chartered engineer, a Fellow of the Institute of Structural Engineers, a Fellow of the Association of Consultative Engineers and a Member of the Federation of European Engineers.

2085. In your capacity as Managing Director of Bunyan Meyer & Partners, a company of consulting civil and structural engineers, incorporated in, I think, 1974, what do you tell the Committee you have been retained to help the Corporation with?

**(Mr Pearman)** To help the Corporation to understand the effect the construction of Crossrail, the underground work, will have on the superstructure buildings, the effect of the settlement on to the buildings and how the buildings will react to that.

2086. With that in mind, I think you have prepared a quite detailed proof for the purposes of this afternoon which I think you believe you can summarise in order to concentrate on the particular issue that is material this afternoon. Is that right?

**(Mr Pearman)** Yes, that is correct.

2087. So that the Chairman will have the flavour of what it is that we will be seeking, perhaps you can begin by spelling that out in suitable lay language.

**(Mr Pearman)** Certainly. The City is seeking the power similar to that proposed under the Heritage Deed. The Heritage Deed will give the City the opportunity to refuse consent to any method of work proposed by the Promoter which could result in damage of a heritage building at Smithfield. The City would seek to have similar ability to refuse the agreement of the method of work which could jeopardise the continued functioning of the market.

2088. There are two points that I would immediately pick you up on there. In each case, acting reasonably, I take it, would be expressly spelled out?

**(Mr Pearman)** Indeed.

2089. Secondly, if somebody could hand to you the Petition response document, just to see where this comes in our response, it is on page 46 of 79 under the heading, "Issue raised—Smithfield Market continued operation". It may be, sir, I could just read it out because it is a very short passage. The context of what you are about to say comes in the very first line, does it not, Mr Pearman: "59. Securing the continuing operation of the market is your Petitioners' main concern".

**(Mr Pearman)** Correct.

2090. Make vivid, if you would, for the benefit of the Committee the kinds of circumstances in which it is possible that those working in the market at whatever level might find themselves as a result of what is proposed there under an instruction to cease operation with a possible consequence that the services that keep the meat cold and so on might also have to be temporarily shut down. Is there a way of making this vivid that you think would assist the Committee?

**(Mr Pearman)** Yes, I have prepared a series of sketches which, with your permission, I would like to go through to illustrate the points which may be pertinent to this.

2091. It is tab 13 in the bundle, "Sketches produced by Terry Pearman". It is not a paginated clip, sir, but I see that it runs to six pages. Do we need to look at each of these pages or is there a particular one which will help us with my question?

**(Mr Pearman)** Perhaps I could take you briefly through the six of them as it would help to paint a picture of what is actually happening. These sketches have been prepared after reviewing the report prepared by Alan Baxter & Associates which is also contained within the bundle.

2092. That is at tab 10.

**(Mr Pearman)** It illustrates a sketch method of undertaking the construction of the escalator box underneath the east market building. The first sketch that I have prepared, sketch number one, illustrates what we define as a structural layout of the market floor.<sup>14</sup> The beams running vertically, north to south, with black dots in the middle, they are the primary beams, the original beams within the construction of Smithfield, and the beams running across the building, the secondary beams, they take support from the primary beams. If I may take you on to the next sketch now, at the top there is a cross-section through the building to illustrate one of these primary beams, the original primary beams, and you see the secondary jack arch beams landing on top of it, so if you consider the cross-section of the beam, the large beams spanning across the drawing, then you can pick up the secondary beams which are supporting brick jack arches, on top of which is a concrete slab which is the market floor.<sup>15</sup> Underneath this primary beam is a series of six columns which support that primary beam and above it there is a series of columns coming down on top of that. The proposal, as illustrated in the Baxter report, illustrates removing four of those supporting columns underneath it, the ones marked with a cross. If I turn over to the next page—

<sup>14</sup> Committee Ref: A31, Idealised existing layout (SCN-20060131-022).

<sup>15</sup> Committee Ref: A31, Sections through idealised existing layout and showing columns to be removed (SCN-20060131-023).

---

 The Petition of Corporation of London
 

---

2093. The heading there is “Idealised existing layout showing location of new temporary beams, not to scale”.<sup>16</sup>

**(Mr Pearman)** Correct. The two cross-hatched beams spanning from north to south, we have called the ‘temporary beams’ which would be introduced into the underside of the market floor to pin up the secondary beams that support the jack arches. To do that, I believe they are proposing to bring in one either side of the original primary beams and these beams will span something like 16/17 metres, nearly 50 feet, across the excavation and they have put these beside each of the primary beams to take the load while they excavate underneath. The points that I would like to make, if I may turn over to sketch four, is that to pick up these jack arches, we would need to introduce some sort of jacking arrangement between the new, temporary steel beam and the jack arch beams to ensure there is positive load transfer between the jack arch and the new, temporary steel beam.<sup>17</sup> That will be quite capable of being done by single jack arches which would open up just like a car jack, a hydraulic jack, to take the load. However, hydraulic jacks, and we have something like 50 of these jacks around in the system through there, could be prone to failure. In the event of failure, we could get a sudden deflection of the floor slab which could then reflect through to the superstructure of the building, altering the line of the cast-iron columns and the wrought-iron beams thereafter, which could lead to failure of some of the cast-iron decorative work at high level, in the haunches of these beams. Also there is a glazing roof in this building which could, with the type of movements which could be involved, crack, dislodge, pop out, or indeed be pulled out on to the floor below. Therefore, what I have suggested here, under the Heritage Deed, is that we would have the right to agree a jacking system to protect the building. For the building to be fully operational, I would suggest that we would need some redundancies built into this system, such that if, in the event of a failure, there will be a failsafe method whereby the secondary system could lock in and take the additional load.

2094. Just pausing there for a moment, you have spoken about a secondary system. Do we see that illustrated under the heading “Secondary hydraulic pump” on your sketch?

**(Mr Pearman)** You do indeed. This is an example of the way it can be done relatively easily. It is just doubling up. It is identifying the vulnerable points in the system and doubling them up just to provide an extra degree of protection.

2095. At what kind of cost would secondary hydraulic pumps be able to be inserted? Have you done any kind of estimate of that or is that too difficult?

**(Mr Pearman)** It is difficult to do. I have tried to give an estimate of it, unfortunately unsuccessfully, but I would suggest it is maybe in the order of £50,000 to £100,000, something of that order.

2096. Let’s just bring that alive for the Committee then as to the issue that you are here to give evidence about. Do I understand that, if there is nobody in the market and no human beings had to be taken into account, then, under ordinary circumstances, a primary hydraulic pump alone would be sufficient to safeguard the integrity of the Listed building?

**(Mr Pearman)** I would suggest that would be a reasonable option because ultimately the Promoter has the right to maintain and repair the heritage building. The danger perceived is it could be items of materials dropping from the roof level and could provide a safety hazard to workers and trade and public.

2097. You have gone ahead to my second question. My second question is, if it is not just a listed building that one is thinking about but also a continued operation of the market and people working within the building, would it be enough just to have a single primary hydraulic pump system or would you need a secondary pump as well, in your judgment?

**(Mr Pearman)** It might be as well to have a secondary pump redundancy built into it, yes.

2098. If you express that view, as things currently stand, and the Promoter said, “No, we are simply going to have a primary hydraulic pump and clear the people out of the building because it is going to cost too much to have a secondary hydraulic pump as well,” then there would be nothing you could do about it, would there?

**(Mr Pearman)** That is my understanding of the situation; that is correct.

2099. So what is it that you are asking the Committee to do to enable the Promoter to secure continued operation of the market?

**(Mr Pearman)** I would like the Committee to give the City the power to approve the Method Statements of the Promoter bearing in mind the continued operation of the market to enable it to trade in the way it is trading at the moment.

2100. You say to approve, in fact to withhold approval providing you are acting reasonably?

**(Mr Pearman)** Correct.

2101. You mentioned glass falling onto somebody’s head. What does the next sheet show?<sup>18</sup>

**(Mr Pearman)** The next sheet is trying to give us a flavour of the escalator box that is going to be created under the buyers’ walk at the east end of the market. It is indicating to a above vertical scale the proportions of the building and indeed the proportions of the escalator box that is going to be formed underneath it.

---

<sup>16</sup> Committee Ref: A31, Idealised existing layout showing location of new temporary beams (SCN-20060131-024).

<sup>17</sup> Committee Ref: A31, load transfer jacks (SCN-20060131-025).

<sup>18</sup> Committee Ref: A31, Vertical Section through escalator box (SCN-20060131-026).

---

The Petition of Corporation of London

---

2102. It is quite a big box.

*(Mr Pearman)* Indeed.

2103. Over the page to the final page, at tab 13.<sup>19</sup>

*(Mr Pearman)* The purpose of this again is to illustrate that should there be movement in the temporary work, should the columns deflect and take up a new stance then we could be in danger of the glass falling out of the roof and we could have shattering of the cast iron work in there which could then come down through on to the floor below or on to the floors below because we have two floors of accommodation in here as well. I have indicated here on the line what I refer to as the “crash deck” which we have introduced to protect the occupiers from such an eventuality.

2104. Is that a possible additional level of protection to the secondary hydraulic pump or would it be a possible alternative to having that?

*(Mr Pearman)* I believe that this would be an additional process; I believe it would be a very sensible precaution, bearing in mind the level and degree of the works that are going on.

2105. So that if the Committee accept what it is that we are urging on them, is this another incidence of a case where the Corporation would wish to be able to say, “You do not have our approval to the way in which you are proposing to do the work if you are not proposing to install a crash deck to protect the people working below”?

*(Mr Pearman)* Indeed, yes.

2106. If the Promoter said, “That is easy, we will just make sure there are no people working below, we will call the operation entirely to a halt for a few weeks or a few months, however long it is going on,” what is the Corporation’s view then?

*(Mr Pearman)* That would be unacceptable to the Corporation.

2107. Mr Pearman, is there anything else that you would like to say to the Committee on the particular issue that we are dealing with here?

*(Mr Pearman)* If I may I would like to say that what is intrinsically wrong with this is the monitoring of the building. The way that the engineers will determine how the building is behaving in relation to the works happening underneath it will be by monitoring it and recording it. With the best will in the world we can do our numbers and determine theoretically how the building is likely to move, but the way it actually moves, with various other stiffness that it may have in there, has to be recorded and has to be understood. We are dealing with cast iron, which is very brittle and it will shatter with very low stresses—comparatively low stresses. We need to ensure that this does not happen and to do that we need to monitor it regularly. We cannot monitor it at the beginning of the month and then at the beginning of the next month to see what has happened—the pause is too long. During the exploration of these works, or construction of these works I would envisage continual monitoring, 24 hours a day, seven days a week, not only recording it on site but actually having somebody who is competent, who is reviewing the results of that. It is by looking at these results that we can determine how the building is moving and, hopefully, prevent any collapse or failure or even minor failure and that is, I believe, intrinsically within the Method Statement required.

2108. Is that something which you are mentioning as being an issue where we would expect to procure agreement from the Promoter, or is it something that you are asking this Committee to do something about?

*(Mr Pearman)* I understand that the need for monitoring is recognised but the details of the monitoring, the details of the instrumentation and how it is going to be applied to the building is yet to be agreed and it is that that we need to agree with the Promoters.

2109. I do not think you quite answered the question but I will leave it there. There has been an exchange of correspondence has there not, Mr Pearman, between Messrs. Winckworth Sherwood and the Corporation in relation to what it is we seek on this issue, at tab 11—and I mention that, sir, merely for the record—and is there anything else that you need to add before Mr Mould asks you some questions of his own?

*(Mr Pearman)* Nothing whatsoever.

---

<sup>19</sup> Committee Ref: A31, Section through Buyers Walk (SCN-20060131-027).

---

The Petition of Corporation of London

---

## Cross-examined by Mr Mould

2110. **Mr Mould:** Mr Pearman, so that we get the context of this, your concern is that the engineering works required in relation to the market buildings for the purposes of building the Crossrail scheme may embrace a residual number of activities which would not fall within the remit of the draft Heritage Deed, but would nevertheless give rise to genuine room for debate and discussion between engineers and that the City should have an approval role in relation to that in the interests of safeguarding the operation of the market?

(**Mr Pearman**) Correct.

2111. And you have put forward two examples of works that you say would be within that gap, as it were?

(**Mr Pearman**) Which could fall in that gap.

2112. One of those, as I understood it, was a concern about works that might give rise to the risk of collapse in the listed structure?

(**Mr Pearman**) Or partial collapse, yes.

2113. And the other one was that it might give rise to the risk of the sensitive parts of the listed structure, glazing, as I understood it, falling on to the floor below and potentially harming the occupants?

(**Mr Pearman**) Yes.

2114. In your tab 12 you have provided us with a copy of a version of the draft Heritage Deed.

(**Mr Pearman**) Yes.

2115. I believe this may be the last draft version of this because it was produced just before Christmas because were you aware that we have provided the City with an updated draft, following on discussions that took place in late December, I think by email yesterday evening?

(**Mr Pearman**) I heard this morning but I have not seen it.

2116. I merely mention that lest there be any misunderstanding. I think it is fair to say that it somewhat expands the embrace of the draft that we had before, and it is immaterial for present purposes. The structure of this deed is effectively this, is it not, that if we turn to the second page we have Appendix 1 and there we have the draft deed, which begins a couple of pages after that. In the definition section—and I am not going to take too much time on this because it is just to set the context—there is a definition of the carrying out of relevant construction works. We see that definition set out in relation to works that would affect the character of the listed building structures and also works which may be required to the property for mitigation of settlement, et cetera. Then provision is made for the carrying out of relevant construction works in clause two and the deed provides, amongst other things, for the provision of detailed Method Statements as to the works in question for prior consideration and approval by the City, which approval may be

withheld on reasonable grounds which, in practice, would mean that the City can come up with what they consider to be a better way of doing it, to put it colloquially?

(**Mr Pearman**) Yes.

2117. If we turn on then to the first schedule of the agreement—I am afraid it is a case of going through the pages to get to it. The first page has two parts on it, works specification and Method Statement details, and it is Method Statement details in which I am interested because this sets out in some detail the matters which the Method Statements are required to embrace. If you look at the bottom of the page, number three: “A Method Statement is to describe the sequencing of the works to construct the escalator and passageways to the platform tunnels, and will deal with,” and then they are set out, including (c) “The provision of appropriate protective barriers to the existing listed structure”; and (e) “The methods to be used to control the effects of the transfer of loads from permanent to temporary support systems and back again, as well as the effects of construction, including the monitoring techniques to be employed.”

2118. Is it not fair to say that viewing the matter, as we must at this stage, when we are, in so far as detail design and construction methodology is concerned, at the beginning of the process—do you agree with that?

(**Mr Pearman**) I do.

2119. That viewing it from that perspective this in practice, these requirements in so far as the content of the Method Statements are concerned, are going to embrace the sorts of matters that you have illustrated by your two examples today, are they not?

(**Mr Pearman**) They could do.

2120. And if they could do then they should do?

(**Mr Pearman**) That is additional spec. They may or they may not. I cannot tell if they were or not at this stage.

2121. If they could do, in other words a reasonable man or woman, expert in the discipline of engineering and carrying out works which might affect the characteristics of a listed building or listed structures, would consider that the concerns that you have raised and the potential means of dealing with them might, if not addressed properly, have potentially adverse effects on the structure of a listed building, then they clearly should form part of the Method Statement, should they not?

(**Mr Pearman**) I think the point is slightly different, if I may say. It is not the effect on the structure and the fabric of the building that I am saying here, it is the effect it may have should an unexpected occurrence occur, a failure of something or other. It would be or could be acceptable for the Promoter to vacate the building until such corrective action is taken to rectify that problem. The corrective nature

---

The Petition of Corporation of London

---

could be overcome by a different Method Statement at the beginning, in other words to incorporate further redundancies in the proposal or a different Method Statement initially, to even prevent that occurrence occurring.

2122. That is what you would like to see happening, is it not?

*(Mr Pearman)* I believe that would be the sensible provision.

2123. That is what the Heritage Deed is designed to secure, is it not?

*(Mr Pearman)* I believe that is for the buildings, not the operation of the market.

2124. The buildings are the structure within which the market takes place. If in matters such as avoiding the risk of collapse of parts of the structure or providing appropriate shoring-up temporarily of parts of the structure that requires to be interfered with, if that is needed in order to safeguard the fabric of the building then it will follow that it will secure the ability to continue to occupy the building whilst the work is carried out, that will be a consideration that will go logically to that question, will it not?

*(Mr Pearman)* Yes, the occupation of the building is paramount. The temporary works as proposed under the Heritage Deed are for the protection of the building. I do see there are two distinctions there.

2125. I heard what you said in answer to that question which was very helpful, if I may say so. We are agreed, to put it in a nutshell, that prevention is preferable to cure in relation to these matters?

*(Mr Pearman)* Absolutely.

2126. The appropriate means of prevention so as to safeguard the fabric of the listed structure, so that it continues to deliver a safe environment in which people can work whilst the works are going on, are essential to the operation of the Heritage Deed?

*(Mr Pearman)* I am not sure it is essential to the operation of the Heritage Deed. I believe the Heritage Deed is for the protection of the building.

2127. The reason for that in practice is not only to secure the physical fabric but to maintain its integrity as an occupied space. The two go hand-in-hand?

*(Mr Pearman)* May I put it this way. If the building is empty the temporary works provided could be different from that when it is occupied when there is no risk to life safety. Therefore additional measures, which I suggested earlier, would not be necessary. We do not have that case in this case, but have it fully occupied. I see the provision of this Heritage Deed relating to the fabric, which will not be applicable if the building is empty. The same Deed has been used if the building is fully occupied. That is the part I have difficulty with.

2128. It is a building that is fully occupied so the Heritage Deed must be operated on that basis?

*(Mr Pearman)* If that is the case and the wording of the Heritage Deed incorporates acceptance of full occupation then I would agree with that.

2129. We have never said, have we, that it is our intention for example to seek to cut costs by carrying out works which might affect the fabric of the listed building without any concern as to whether that requires the wholesale evacuation of Smithfield?

*(Mr Pearman)* I hope not, no.

2130. I have made it clear that certainly is not our position. Finally, so we see the corollary to this, I will refer to information in D15 which is concerned with implementation and staging, paragraphs 4.1 and 4.2. This is the context against which the concerns you are expressing have to be considered, I would put to you, Mr Pearman: "The size and complexity of Crossrail means that even if the whole scheme is built as a single project it will for certain practical purposes be brought into service in stages. The construction strategy proposed is for the running tunnels to be constructed from a number of sites simultaneously. The pattern of tunnel drives has been chosen to minimise the overall time duration and allow the earliest practical completion of the Crossrail scheme. It requires that construction work commences in all central locations including all subservice stations at around the same time to allow continuity of construction and the passage of the tunnel boring machines through the excavated subservice stations". Any consideration which the Committee gives to extending a prior approval regime which we quite unequivocally acknowledge is appropriate in relation to the safeguarding of heritage structures, would need to be considered carefully against the impact that it might have on that fundamental objective of a project which is seeking, as far as is reasonably practical, to drive down costs. Do you accept that?

*(Mr Pearman)* I see your point.

2131. Finally, in relation to monitoring, you describe the process of continuous monitoring that you wish to see in place. The details of the monitoring process are some way into the future, are they not?

*(Mr Pearman)* They are indeed.

2132. My instructions are that we are proposing, I am told, what is described as "real-time monitoring" in relation to Smithfield, which I think broadly corresponds to the process of monitoring you spoke to in your evidence?

*(Mr Pearman)* Yes.

2133. **Mr Mould:** Thank you very much.

2134. **Chairman:** Have you done surveys in this particular area before—settlement rates and variations?

---

The Petition of Corporation of London

---

(*Mr Pearman*) In terms of the tunnelling?

(*Mr Pearman*) Yes, indeed.

2135. There are quite a lot of new buildings and somewhat older ones where you can see building settlement. I am just wondering whether or not in your investigation you have done any examination of that?

(*Mr Pearman*) Certainly in my professional work, yes, I am involved in reviewing settlement causes.

2136. Is over-settlement a difficulty in that particular part of the City around this area?

(*Mr Pearman*) The settlement in this instance is going to be induced by the digging of tunnels and the excavation of boxes. The settlement which can occur particularly in north London where there is heavy clay is primarily to do with the seasonal variations rather than the work.

2137. There are also other forms of settlement which occur with other buildings which have been built in the area?

(*Mr Pearman*) Indeed, adjacent structures.

2138. So you have done examination of that?

(*Mr Pearman*) Yes, indeed.

2139. Because you have also got public works, what about major subsidence problems in the area around this construction?

(*Mr Pearman*) Subsidence as opposed to settlement—which again relates back to the seasonal variation in the clay—rather than settlement induced by the excavation.

2140. As I recall if you tunnel, for instance, or you build structures which have large underground areas, this can affect about half a mile and can cause subsidence to other buildings anywhere along fault-lines which may exist in rock formations?

(*Mr Pearman*) Yes. If I may say in this one, we are still working with the settlement curves and outlines produced by Crossrail, but they have estimated green field settlements around the site, and around this particular area.

2141. It is a generally held view by structural engineers that this is a problem in the area and different structures and foundations would be established, for instance, in new building, with raft formations in foundations and so on. Has any of that been done in here?

(*Mr Pearman*) I am not sure that has been done in the immediate vicinity of Smithfield. Certainly for Smithfield, the particular foundation at the top of the London clay would obviously be considered in the final movement when trying to assess the building and how the building will react to the construction of this escalator box.

2142. **Kelvin Hopkins:** Presumably similar problems have arisen around structures elsewhere in London, so there is a great deal of experience of supporting buildings whilst work goes on underneath?

2143. So there is a lot of experience, and what you are suggesting is the sort of practice adopted in other similar circumstances?

(*Mr Pearman*) Certainly it is the type of practice we would recommend to be adopted in those circumstances, yes.

2144. Is it the case also that because it is cast iron and glass it is better than in a house where you can take a few bricks out where very small movements make a difference?

(*Mr Pearman*) Very much so, yes.

2145. It is more difficult than, say, Westminster Station which was an enormous hole in the ground right next to Big Ben. I know there were worries about that. Is it any worse than that?

(*Mr Pearman*) Not any worse than that but it is of a similar level of magnitude.

2146. If I could just ask a question about the hydraulic jacks. Are they individually pumped so that if you get a failure you would have an auxiliary?

(*Mr Pearman*) It does depend how they are implemented, yes. I would imagine each individual pump would be capable of being logged off so if one failed it would not affect any more.

2147. One other question about the containment of underground works. What is that containment? Is it roofed in?

(*Mr Pearman*) I have not seen the Promoter's details on this, so I can only answer that which I would expect to see on such a site. We would be working in the basement so we would have the floor of the market area acting as a complete seal in itself, a horizontal seal above the works. What I would expect to see is a series of temporary hoardings and walls put round, the seal to the underside of the floor over and the basement slab. Access and ingress would be through an airlock and, therefore, you would have a positive pressure in an airlock to keep the dust from one side to the other side.

2148. **Mr Laurence:** I have no questions in re-examination. Thank you, Chairman. Those are the witnesses we are proposing to call.

The witness withdrew

2149. In accordance with a ruling given two days ago, it is now for Mr Mould, unless he is going to be calling evidence of his own which he has not told me he is, to address the Committee and then I will reply and I hope we can do it by 4.30.

2150. **Mr Mould:** I will focus what thoughts I have on lorry holding, which I am sure is a matter of enormous excitement to everybody; but I think I had better just deal with that because that is really where we are most at issue in relation to matters today.

---

 The Petition of Corporation of London
 

---

2151. Just to summarise what we say about this, this is a massive project; it is highly complicated and involves the deep level of construction of voids in a large number of locations across central London. The project has sought to minimise land-take to the point where lorry holding cannot be undertaken within the worksites themselves.

2152. Mr Weiss's conclusion, that lorry holding is not necessary, is not I think, as was clear from his evidence, based on any consideration by him of whether there is any available space within worksites in order to accommodate lorries other than at the precise point when they are delivering or removing materials.

2153. Other projects, as he told you in answer I think to Mr Hopkins' question, take more land which is required so as to incorporate lorry holding areas within the work sites. That is not the position in relation to this project.

2154. Lorry holding is essential to the project in our submission, so as to enable the efficient construction of the project and to minimise costs which, as you know, is an important consideration for the Promoter.

2155. I drew attention a few moments ago to the important objective of co-ordinating construction across the project in information paper D14. You had that reference. It is not appropriate in a project of this scale and complexity and geographical extent to have to limit the operation of these worksites, in our submission, in order to give effect to what is a local guidance policy applying to the site. And, sir, we drew attention to the worksites lorry holding areas that are home to the City, the area of London Wall and the essential supplementary emergency holding area at Snow Hill and we have considered those. They are dealt with in the relevant supplement to the Environmental Statement, the Transport Assessment 8(b) and our position is that the locations of those lorry holding areas will not have a significant adverse impact on the flow of traffic.

2156. You heard earlier this afternoon that in relation to Smithfield, in particular, we have made a commitment that we will save the circulation of traffic around the market and whilst that is no doubt a challenging commitment to live up to in practice, it is nevertheless one we have made and the City see that as a progressive commitment on our part.

2157. Sir, in relation to Billingsgate, I think I need say no more than you have an undertaking that has been given which we see as a fruitful basis for procuring an acceptable solution to the problem put forward during the course of proceedings today.

2158. In relation to the matter you have just been considering, my understanding of the position is this: that Mr Pearman acknowledged that in practice the Heritage Deed that is to be proposed would enable the concerns that he illustrated to you today to be

addressed within the embrace of that Deed but whether he accepted that or not, it is our strong submission to you that that is the position and that those passages I referred to in the material that the City placed before you illustrate that to be so.

2159. I also explained the position we expect to take in relation to the car park and as I understood his answer that was a position he considered to be acceptable. Unless there is anything I can assist the Committee with in relation to those three discrete matters, I shall say no more.

2160. **Mr Laurence:** Sir, I, too, will not detain you for more than four or five minutes. On lorry holding I merely observe that the Promoter was, once again, up to his tricks. He said, through Mr Mould, in his questioning to Mr Weiss that there is no space in any worksite available other than for loading and unloading. By contrast, page 39 of the Promoters Response Document says, in paragraph 4: "Lorry holding areas are particularly necessary where worksite space is restricted, such as is the case in the majority of inner and central London Crossrail worksites."

2161. No evidence has been called to support the question, phrased as it was by Mr Mould, that you are not entitled to assume that that accurately expressed the fact. Nor are you entitled to assume that what is said in paragraph 4 of the Response Document accurately expresses the fact either, come to think of it. Mr Mould suggested the two statements meant one and the same thing. They evidently do not. "Worksite space is restricted" is not necessarily one where there is only space to load or unload. The Promoter's Response Document is not, moreover saying that space is restricted in each of the worksites in the City, yet this is what Mr Mould said. I have absolutely no doubt, knowing Mr Mould as I do, that those were his instructions, but where was the witness? In any case, it does not matter. Mr Weiss would not have troubled the Committee on this issue if he had not genuinely believed that it should be left to the City.

2162. No other Petitioner has experience as long as that of the Corporation or considered quite as ancient as that of the City. So the Committee will be doing nothing untoward and will be causing no trouble for itself and for others minded to take the same point if it accedes to Mr Weiss's request.

2163. On car-parking at Billingsgate, I need only say that we have achieved a measure of agreement and it seems to me that the Committee has urged that all parties achieve that. I hope that the concerns expressed from where I am standing by representatives of the Billingsgate traders will be met by the agreement that has been reached, sir.

2164. Finally, as regards the issue which we have just been dealing with, we do not, with respect, agree that it follows that measures to protect the listed building are necessarily equivalent to measures which

---

**The Petition of Corporation of London**

---

promote the continued operation of the market. With respect to Mr Mould the transcript will show, when Mr Pearman was asked about that, that he dissented and he said "Not necessarily" or words to that effect. Sir, if that is the approach, the approach Mr Mould was urging, which the Promoter intends to bring to the construction of the Heritage Deed, once agreed, the traders will no doubt have nothing to fear.

2165. Just in case some lawyer at some time in the future advises that the Corporation is only entitled to concentrate on protecting the listed building while purporting to withhold his consent under the Heritage Deed, we still would like our protection, if the Committee is willing to give it to us. In the light of the way Mr Mould put it, I would have thought there could be no objection to its doing so, because all the Committee will be doing, if it accedes to what we have been asking for, is doing what Mr Mould says is a protection built in for our benefit to the Heritage Deed as matters stand. With the utmost

respect to him, he is wrong as a matter of construction about that. The contrary view is one put forward by his own agent in the bundle of correspondence which is included in your papers, which I will not trouble you with, and it is the right view: the writer of the letter more or less said the Heritage Deed is dealing with the integrity of the listed building, it is not dealing with the position of market traders and the continuing operation of the market. So the point stands, it is a very small point but it has potentially quite important consequences, and we would very much like the Committee, as I am sure you will, sir, to consider whether you are willing to accord to us what we seek on that front.

2166. It is 4.30, sir. Is there anything else I can assist you with?

2167. **Chairman:** It is 4.28, which is immaculate timing. You are ahead of yourself. Can I thank you both and all the witnesses today. The Committee resumes at 10 o'clock in the morning.  
Adjourned until 10 o'clock tomorrow morning.

Wednesday 1 February 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone  
Kelvin Hopkins  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Rioradan  
Sir Peter Soulsbys

---

*Ordered:* that Counsel and Parties be called in.

2168. **Chairman:** Before we begin the evidence today, might I read out the following statement in response to the questions put to the Committee by Mr Laurence yesterday: “The Committee has carefully listened to the request by Mr Laurence which he has made to the Committee to offer a judgment on the case before it. The view of the Committee is that it cannot offer such a judgment on this or any other Petitioner’s case. The Committee’s view is that it must listen to all the evidence before it makes any decisions. Nevertheless, the Promoters should not in any way interpret this decision as indicating that the Committee is rejecting the case that Mr Laurence has actually made. The Committee would encourage the Promoters to continue to negotiate with all Petitioners during the Committee’s sittings in an effort to find a suitable compromise between them. The Committee will take a view on all remaining issues before it at the conclusion of the Committee’s sittings.”

2169. Ms Lieven, do you now want to add something?

2170. **Ms Lieven:** Yes, sir. I wanted to deal with the issue of the station’s operations room which Sir Peter Soulsby raised yesterday for clarification and potentially an undertaking. Can I inform the Committee that the position is that London Underground Ltd have a PPP contract with Metronet which requires an enhanced station refurbishment at Liverpool Street, and that includes the provision of a station control room of proportions which cannot be provided in the existing location. So the PPP contract itself requires that change to take place, and the deadline for completion of that enhanced station refurbishment at Liverpool Street is 1 March 2008. The Committee can take total assurance from that position. If, for whatever reason—and totally unpredictable things can always happen in life—the station’s operation room is not relocated by Metronet under the PPC contract, then I am authorised, for the avoidance of doubt, to inform the Committee that, in any event, the nominated undertaking will be required by the Secretary of State to remove the station’s operation room from its present location. I hope that closes every potential problem on that.

2171. **Sir Peter Soulsby:** I think that is very helpful indeed. Can I take it that we are to understand from that that the space released by the removal of the station control centre would become part of the general circulation area within the station and would not be used for any purpose in the interim?

2172. **Ms Lieven:** That is my understanding.

2173. **Chairman:** Now can I ask Mr Robert McCracken to make the case for himself and also the Covent Garden Community Association. Mr Laurence?

2174. **Mr Laurence:** Sir, you have very kindly shown me a draft of the remarks you have just made. As I understood it, I was invited to have a look at a copy of that draft with a view to assisting you by my initial reaction to it in some way.

2175. **Chairman:** Albeit very briefly, Mr Laurence, yes. I thought it was the best way to proceed really.

2176. **Mr Laurence:** Sir, let me focus on the paragraph of your comments which immediately strikes me as calling for some further clarification. The paragraph reads as follows: “The Committee would encourage the Promoters to continue to negotiate with all Petitioners during the Committee sittings in an effort to find a suitable compromise between them. The Committee will take a view of all remaining issues before it at the conclusion of the Committee’s sittings.”

2177. What is not clear about that, Sir, and it may be that it has deliberately been left unclear, is the basis upon which we are entitled to approach the Promoter for the purposes of those continuing negotiations. Are we entitled to say to the Promoter: “You may very well have not succeeded in front of the Committee, although you do not know that yet”, or what? What I anticipate is that, when these negotiations get underway, the response of the Promoter will be to say, “You have not had a successful decision in your favour. You may well end up with a complete failure at the end of the day. Why should we negotiate with you on any basis that is at all meaningful?”, and in response to your kind invitation to tell you, what strikes me as potentially problematic about the words you have just uttered is that point, and I am being absolutely honest here—

---

**The Petition of Corporation of London with British Land plc**

---

it is my first reaction—but I do apprehend that, unless a slightly stronger steer is given to the Promoter, his attitude will be, “We are very busy, we have many other things on our mind and what you are asking for we simply cannot concede”, as was made clear before.

2178. **Chairman:** I understand the direction you are seeking to take, Mr Laurence, but let me repeat to you the gist of that particular paragraph. As I indicated yesterday, and as I indicated some two weeks ago, we will not interfere in any negotiations which are proceeding, and what we hope, where problems exist, is that all parties will continue to negotiate and not be inhibited by these proceedings themselves. At the end of the day we are charged with the Bill which the House likes and has insisted that it moves forward. Whatever you come up with yourselves and present to the Committee at whatever time, at the beginning, middle or end, we will take a view on all of that at the end rather than during the course, but we expect everybody to continue to do their very best to try and get a solution which the Committee itself will find acceptable but we are not going to interfere in that negotiation before we decide.

2179. **Mr Laurence:** Before my learned friend rises, we will certainly negotiate. I think what you have just said is making it clear what the Committee expects from everybody, and that, of course, includes the Promoter as well.

2180. **Chairman:** If they so wish to negotiate, if they so wish to find any problem, I would expect everybody to try to continue to get their case across, but we will not interfere in the negotiations.

2181. **Mr Laurence:** By “if they so wish” are you meaning to imply that if that you want to—

2182. **Chairman:** It may be, in the course of any negotiations on anything, maybe one side will say, “We do not agree with that”, and that is their prerogative, as, indeed, it is yours.

2183. **Ms Lieven:** Can I say something, sir, like Mr Laurence, trying to be as honest and clear as possible? We will continue to talk to all Petitioners in the hope of achieving settlement on their Petition. With many Petitioners and many issues, that can be done by agreement outside the Committee. Where something like the City’s Petition raises an issue that from the City’s point of view could only be solved by an additional provision—in other words it cannot be settled within the parameters of the Bill at the moment because we cannot provide an additional ticket hall within the grounds of the Bill, and we can negotiate about gateline re-jigging and resigning, all those kinds of things, within the parameters of the Bill, but where there is effectively a request for an additional provision—the Promoter will discuss with the Petitioners whether an additional provision is necessary or not, and we will go on discussing that with the City quite happily; but if, ultimately, the

conclusion is reached that there is no need for an additional provision—and this will come out across the room not just with the City—then the point will come when we will say, “We are not going to draw up an additional provision and discuss with you the precise parameters of it in circumstances where our view, based on a great deal of consideration, is that it is not necessary.” I am not saying that to say that we will not go on discussing with the City. We will, and we will discuss their capacity figures with them and whether we have got it wrong, but with an issue like that we will ultimately come to the choice: do we promote an additional provision? And the Committee will be aware we have already promoted one series and are in the course of drawing up another series, but Liverpool Street additional ticket hall is not in there because we do not think it is necessary. I do not want anybody to be under a misunderstanding that we are going to go away and draw up detailed engineering drawings for something that at the present time we do not think is necessary. We will go on discussing with the City whether it is necessary, but, if we continue of the view up to the end of this Committee that it is not necessary, then, until the Committee tells us to, we will not draw up that additional provision. I think it is important that the Committee understands that, as it were, there are two different things that can be negotiated over.

2184. **Chairman:** Ms Lieven, we are fully aware that you have agreed to agree on what you can agree on, but what we are saying is that the door is left ajar. It is left ajar because it may be found useful to both you and the Petitioners, but it also may be found very, very useful to this Committee because we may want to go through it ourselves at some point. That is where we are. That is the ruling. I hope that clarifies things a little bit more.

2185. **Mr Laurence:** You are indicating that the Committee may itself be assisted by being told at the end of the proceedings, “This has been the result of our continuing negotiations in the meantime.” I see Sir Peter nods assent to that way of putting it.

2186. **Sir Peter Soulsby:** I am sorry; I will do my best to keep my head still in future.

2187. **Chairman:** You should take from what I have already said that the door is actually ajar, and it is ajar for a number of reasons and purposes, and we would hope, when we get to the summaries of each of these sections, we will put all of those together and we may revisit them or not, as the case may be, but certainly we want all avenues to remain an opportunity to progress in the course of the sittings towards the Bill.

2188. **Mr Laurence:** I am gratified that you have found the time to provide that extra clarification.

2189. **Chairman:** I hope that was helpful to both of you.

---

The Petitions of Robert McCracken and Covent Garden Community Association

---

2190. **Ms Lieven:** Thank you very much, sir.

2191. **Chairman:** Can I call Robert McCracken to make the case for himself and also the Covent Garden Community Association, for whom he is acting as agent.

The Petition of Robert McCracken.

The Petition of the Covent Garden Community Association.

Mr Robert McCracken appeared as Agent.

2192. **Mr McCracken:** There are before the Committee two Petitions, my own Petition and that of the Community Association, and I hope that the Committee have copies of those in front of them.

2193. I should say at the outset that I am actually a practising barrister and I specialise in environmental law. Oddly enough, I am co-author of one of the leading works on statutory nuisance and I have been involved as leading counsel in some of the important cases on environmental assessment law in the Court of Appeal, the House of Lords and the European Court of Justice, oddly enough, often against Mr Elvin, but, obviously, I am not here today professionally. I shall make some submissions on the implication of environmental assessment directly for your Committee's deliberations and Parliament's decision, but what I am going to suggest is that it would be wise for the Committee to take some independent professional advice on that aspect of the matter. Obviously, the Promoters will make their submissions, but, in the nature of things, submissions made by a promoter naturally are coloured by the objectives which they want to achieve.

2194. **Chairman:** Can I assure you, Mr McCracken, that we have got independent advice and it is given to us on a regular basis.

2195. **Mr McCracken:** Excellent.

2196. I have been asked to speak for the Community Association. I have lived in Covent Garden for over 10 years, and during the previous 25 years, whenever I was working in my Chambers in London, I probably went into Covent Garden on almost a daily basis. I was a member of the Executive Committee of the Committee Association at the time that it decided to petition against this Bill, and then in September, after three years on the executive, I decided to stand down; so I am reasonably familiar with the thinking of the Community Association about the Crossrail Bill.

2197. There are really two sorts of objectives that we have today. The first is to seek the northern alignment rather than the alignment through Covent Garden, and the second is to seek various conditions or undertakings. Some ought not to be controversial. For example, we seek an undertaking that there should be no freight traffic in the tunnel.

That ought not to be controversial because the Promoters say that they have not designed it for freight and do not have any intentions to put freight through the tunnel, so it ought not to be controversial. We also seek an undertaking that during the core night-time hours there should only be maintenance traffic through the tunnel, and we seek an undertaking that there should be a floating track-bed through the Covent Garden area. We also seek that the standard for residential noise should not be 40 decibels but 30 decibels, and I will explain all of those in more detail later.

2198. Can I start by just saying something about Covent Garden and the Community Association, and it is really to this effect. It is important always, and I do not suppose the Committee really will be in any doubt about this, to remember that one has to be wary of what experts say and that experts need to be on tap and not on top. I can just give briefly some examples of where experts have got things very wrong and where ordinary people, such as those in the Covent Garden Community Association, have been right.

2199. The experts' predicted traffic-levels for the M25, for example, were hopeless underestimates because they did not take account of the fact that when you carry out a major infrastructure project you alter the pattern of life, and the critics of the M25 planning were proved to be right. I can think of examples from my own practice up and down the country where the experts, for example, said there was no way that the Albert Dock in Liverpool was going to be saved without filling in the dock; it is the only way to make it a viable scheme for the preservation of the Albert Dock. The commercial enterprise who said that persuaded the Secretary of State to permit him to fill in the dock, but, in fact, he went bankrupt, he was not quite so smart as he thought he was and, in the event, the scheme, which the community had wanted to have, proved to be viable and successful and the Royal Albert Dock is there to be seen today as a great success. This point is illustrated in Covent Garden as well.

2200. When I first used to know Covent Garden—it must be over 30 years ago now—it was obviously quite run down because the market was on the way out. There were lots of empty sites and there were lots of hard to let buildings, and that created a tremendous opportunity, but a lot of the experts simply wanted to replace those buildings with new office developments. The community resisted and, happily, they were successful and Covent Garden has been to a large extent preserved. The low-rent buildings initially provided opportunities for very creative people—glass blowers and so on—many of the activities which today are quite a draw in Covent Garden. As time has gone on, of course, the area has become very commercially attractive, and that has driven out some of the creative people such as the glass-blowers but we retain quite a lot of our creative activities, particularly in the media and technology areas, and so we have, for example, quite a lot of art

---

**The Petitions of Robert McCracken and Covent Garden Community Association**


---

studios and such like here; but one particular example of where the Community Association was right and the experts were wrong is in relation to the Floral Hall.

2201. The Royal Opera House wanted to demolish the Floral Hall and the whole scheme was to demolish it, and the figures, I am sure, were very persuasive, but the Community Association resisted and fought for it, and it has largely been saved as a result of those community efforts, and it is now quite amusing. If one goes to the Royal Opera House, it is astonishing how proud the Royal Opera House now is of the Floral Hall. Had it been left to them it would not be there, but it is there because of the efforts of the community and now is something that is an integral part of their enterprise.

2202. I noted that in opening Mr Elvin referred to the northern route as being promoted by the residents of Mayfair, and I think he may have been trying to imply that it is just rich, privileged people who are interested in the northern route; but certainly Covent Garden is not an area that is exclusively occupied by rich, privileged people. It used to have a rather narrow social mix, and when I first came to London it was mainly social housing. It is now a much more inclusive community. There are quite a number of owner-occupiers and private tenants but mainly it remains an area of social housing, including some very vulnerable people. The Community Association has to be very active to protect the things that are important, both to the community who live there and work there but also to the wider community who visit the area, because there are inevitably a lot of commercial pressures these days which are focused entirely on short-term profit and do not have any sense of the long-term. The long-term is important to everybody, whether they live or work there.

2203. We have been under a lot of pressure recently from, say, the Licensing Act 2003, which has led to our Chairman, for example, who is a market trader, over the last year probably—she told me last night—spending two to three days a week on dealing with the various applications for licensing, and so on, and our Vice Chairman, who is a mother in the area, has been doing amazing work on that, and it is for those reasons that, since I am here petitioning anyway, I have been asked to speak on behalf of the Association rather than that either the Chair or Vice Chair coming here. There is a limit to what those people, heroic though they were, can do.

2204. I do not know how well the Committee know Covent Garden, because obviously you are here precisely because you are not locals, as it were, but I imagine you probably have from time to time wandered there, and you may be surprised to know that something like 7,000 people live in Covent Garden. I think often when people visit the area they do not appreciate the extent to which there is a vibrant residential community. You may well not have noticed that there are two schools in the area—

St Joseph's Roman Catholic School and St Clement James Church of England School—but, although there is a stable residential community, it is under very considerable pressure, and I know quite a number of people with young children, and so on, who have in a sense been driven out of the area in recent years from the relentless commercial activity that has been taking place here. You can imagine some of the pressures that you can have in such an area from bars, from shops and from just literally the amount of rubbish that is in the street and various problems that Central London has, but it is generally recognised that it is a useful thing to have stable communities of people who live in the centre of our cities, and that is something which is worth keeping.

2205. I can think of a couple of examples in my own experience of the value of that in unexpected ways. I can think of an occasion when the commercial premises next to where I lived was smouldering on fire. The commercial company's security people were not interested, and it was only because of those who lived in the area that we were able to get the fire brigade out and stop perhaps what would have been a major conflagration. Again, in recent years I have woken up in the middle of the night, seen somebody carrying out a smash-and-grab opposite my flat and have been able to call the police and give the number of the vehicle as the smash-and-grab was taking place. There are all sorts of ways in which a stable community provides something which is important for society as a whole, including the commercial enterprises.

2206. The borough in which I live, Camden, is, unfortunately, one that feels itself to be under-resourced, has rather low morale and is therefore very ineffective in providing protection for the people who live in the area. To give an example, Camden environmental health officers will never come out at night to deal with noise nuisance from commercial premises; they simply say, "Sorry, we do not have the environmental health officers to do that." They just will not come. However, the noise team will come out to deal with noise from residential parties, but, as you can imagine, where we live it is likely to be noise from commercial premises rather than noise from residential premises that is of concern to us.

2207. The area of Covent Garden and the West End generally, Oxford Street and so on, has real difficulty in coping with the amount of activity that is currently undertaken there, and that is one of the reasons why both in Westminster and Camden the Licensing Act policies which they have established impose serious restrictions on additional drinking floor space. The Community Association has almost been overwhelmed by the amount of activity it has had to deal with there. In a strange way, although generally speaking retailers judge the attractiveness of their premises by the number of people who walk past—the football count—paradoxically, beyond a certain amount, the more people you get the less

---

**The Petitions of Robert McCracken and Covent Garden Community Association**

---

trade you do. It just becomes counter-productive. If you wander round Covent Garden or Oxford Street they are very much at that level: there are so many people wandering around that it has actually become counter-productive.

2208. There will be minimal benefit to the central area from the provision of Crossrail, but areas both to the north and south would benefit from the boost which Crossrail would provide and the variety of activities that would be provided in the emerging area, for example Kings Cross and to the north, would be considerable. The assessment of the relative merits of the northern alignment and the central alignment has, perhaps inevitably, been based upon rather assuming that things will continue, that present trends will continue, rather than accepting that a major infrastructure actually changes the pattern of the way in which people live; and areas do change over a period of time and something such as Crossrail could make an enormous difference to the northern area. I think if you just wander round the area around Kings Cross you readily see that it is an area that could do with a boost with an injection of activity. It is ironic, in a sense, that London is a world city which is a leader for Europe—we should not be ashamed of being leaders of the European Community—and a city that has a country with a government that is committed to many thoroughly desirable policies relating to sustainability, transport and inclusivity in communities and regeneration should be contemplating having Crossrail going through an area where it can only add to already unacceptable pressures and avoiding areas that would benefit from it. Perhaps one of the things that one reflects on, one of the lost opportunities if the northern line is not taken, is that Eurostar, at enormous expense, has been diverted from Waterloo to King's Cross St Pancras, and it makes no sense for Crossrail, the equivalent of RER (the Paris service) not to go close to the terminal of Eurostar.

2209. We are concerned about the kind of consultation that is taking place and feel that really what has happened has been a series of presentations, but we have had presentations. We have not really been consulted. We have been told what is going to happen and an attempt has been made using crude language to sell it to us, but in terms of what do we think in the sense of a real engagement, the Community Association does not feel that there has been an engagement in that sense, and, as will become apparent when I make some observations about the environmental statement, the information to which we were entitled as a matter of law has not been provided in the form in which the law requires it to be provided, but I will come on to that.

2210. You obviously will have heard a lot about the relative merits of the different alignments. I have no idea what view you are going to take about that in the light of the ruling that you made to Mr Laurence's request earlier. I guess your views on all

these matters will become apparent at the end of your deliberations rather than on an interim basis throughout. I also want to speak, and the Community Association also wants to speak, on the assumption that you may decide that the appropriate route is the central alignment, and there are some very important things that the Committee could achieve for us if it is to be the central alignment. I would like to turn to those now.

2211. Our concerns, or the things about which you can do something, particularly relate to nuisance from noise and vibration. The construction noise will be prolonged and quite severe for some people, and obviously it goes without saying that the people of Covent Garden should not be subject to that if a better alignment would provide overall more long-term benefits to the community, but I am not really going to say much about construction noise in the context of if it goes on central alignment, but there obviously will be serious construction noise nuisance for many people.

2212. I do note, and the Community Association is very pleased to note, that there is no proposal to use the Phoenix Garden for any part of the construction operations. Phoenix Gardens is the remaining community open-space in Covent Garden, and I actually commend to the Committee, any time they are in the Charing Cross Road, Shaftesbury Avenue area, a visit to the Phoenix Garden. It is a truly delightful place, and we are very lucky that a group of women who live nearby fought to protect that from the problems with which it was associated a few years ago; and now a committee has been established and a lot of work has been done by them to maintain that as the haven that it is.

2213. I want to talk about noise from operations, because that is something that really does cause us serious concern. The first thing to note, and it is very important, is that the tunnel will be very close to the surface in Covent Garden. On the whole most of the tunnels of the bored underground lines in London are quite deep, but in Covent Garden the tunnel will be very close to the surface. For example, in Neal's Yard it will be no more than 15 metres below the surface. It will only be 20 metres down to the running line. That is very different from almost anything else that there is at the moment in London, and it is actually much higher in the Covent Garden area than it will be elsewhere.

2214. The fact that the tunnel is so close to the surface does justify a different approach in Covent Garden to the approach that is taken elsewhere, because the risks in terms of noise and vibration are inevitably much greater when the tunnel is close to the surface; and I must apologise, in my Petition and that of the Community Association I think we suggested that the tunnel was only 25 metres from the surface. We were wrong. Unfortunately, that was not correct in the response document by the Promoters, but I did go and see them on Friday and ask certain questions, and, both from what they said

---

**The Petitions of Robert McCracken and Covent Garden Community Association**


---

and from my examination of various of the drawings, it is apparent that in the Neal's Yard area the top of the tunnel is 15 metres from the surface and the running lines are about 20 metres from the surface. That is a very important point of context. The second point of context is this. Noise from underground trains is very unsettling. It comes into your house through the walls and is then re-radiated through the walls; so it is not like noise in the street—you can close your window or you can install double-glazing or triple-glazing, you can draw the curtains, and so on—it is something that actually comes in; it is there in side your house and it is very unsettling. I can remember I used at one stage to spend a lot of time in West London and I remember in one place there that at night you could hear the trains going underneath, or two trains going underneath, and it was a very strange feeling to have the noise from a train not coming through the windows but actually through the building. This is really very much related to something that you will have to grapple with, and that is the weight you attach to the various quantitative measurement of noise. There is no doubt that Mr Thornely-Taylor, who has been a specialist adviser, or one of the specialist advisers on noise, is a leading man in the field, but all that he can do is tell you what he predicts on his computer model the noise measurements are going to be. He cannot tell you the tone of the noise or the quality of the noise. Noises of the same, as it were, energy level can be very different in terms of their effect, their terms of quality and how you experience them, and so the energy levels, which is effectively what you have in the various documents that set out the noise level in terms of decibels, DbA, is only part of the picture and needs to be qualified by an appreciation of the difference between noise that comes in, say, through the windows and through the street and noise that is actually coming up through your building and being radiated into your room. There are a variety of ways in which noise energy levels are measured, and the noise indexes (LAeq, the average energy level, or the LAmax, the maximum, the greatest noise that you get on single events), but one has to be cautious about all of those because various standards have been suggested by the World Health Organisation, for example, for maximum noise levels but, on the whole, the assumption is that those maximum noise levels will be relatively few events in number. Obviously with trains the maximum noise level is quite frequent. Here we have got 24 trains an hour; so the maximum noise level is not just Concorde flying over once a night, as it were, that maximum noise level is going to be something that people experience on quite a regular basis.

2215. A minor point but one nonetheless which is worth making: the way in which noise has been predicted and measured here is in the LAmax test, that is LAmax slow, but there is another way of measuring maximum noise, and that is LAmax F for fast—it depends how you set your instruments—but if you set your instruments to LAmax S you will get a reading that is one or two decibels lower than you

would if you set it to LAmax F. In other words, the index that has been chosen, the measure that has been chosen, gives you a slightly lower reading than you would get if you chose a different one. That is not the largest point in the case, but it is something to bear in mind, that an index has been chosen, a measure has been chosen that is slightly lower and gives you slightly lower readings than you would have got if you had chosen another one.

2216. Crossrail say that they can ensure that neighbouring buildings do not experience noise levels in excess of 25 decibels L Max, because they say that wherever buildings need to have a noise level that does not exceed 25 DbA LAmax, they will do that because there are certain buildings that they say should only have a noise level of 25—theatres, for example, they say should only have noise levels of 25—and they say they will achieve that; so there is no doubt that they can achieve noise levels as low as 25 decibels. It is not a case where we, the Petitioners, are saying that the noise levels should be lower and they are saying you cannot do that. If you want to have a railway you have to have noise levels in houses of 40 decibels. This is not that situation. They can achieve lower noise levels than they are proposing to seek to achieve. The difference, of course, between 25 decibels and 40 decibels is a more than doubling in the noise, because the decibel scale is a logarithmic scale, and so it is a rather greater difference than you might otherwise suppose.

2217. The first condition that we seek, and in a sense it is not a matter of concern to us as to how it is achieved, but we do want the reassurance of a prohibition on the matters in respect of which we seek undertakings or legally enforceable obligations, is in relation to freight trains. It only takes a moment's reflection to realise that freight trains are likely to be noisier than passenger trains. The nature of freight trains makes them noisier than passenger trains. If freight trains are introduced, it is likely to be at night because that is an obvious time to run freight trains, and a lot of freight on British Rail does run at night. It has not been assessed. Nowhere in the Environmental Statement do we see what the noise associated with freight would be and, indeed, there is an information paper on freight which at paragraph 4.1 says that they are not envisaging running freight, indeed the whole route has not been designed for freight, it is not something that they are planning to do.

2218. However, although I have asked for an undertaking that there should be no freight, the Promoter refuses to give it. I shall come on to the submissions I make about the Environmental Assessment Directive, but the submission I make is that it would be quite unlawful for Parliament to authorise Crossrail without a prohibition on freight because it has not been assessed and the Environmental Assessment Directive requires that the environmental effects should be assessed and, as

---

**The Petitions of Robert McCracken and Covent Garden Community Association**

---

I shall explain in a little while, European Community law requires that a precautionary approach is taken.

2219. So that is the first point and it ought not to be a very difficult thing for the Promoter to give because it is not something that could possibly have formed part of their commercial assessment because they say that it is not designed for freight. It is disappointing that that undertaking has not been given, but you can imagine the serious effects that the running of freight trains through the tunnels at night would have on our community.

2220. The second undertaking that we would seek is that there should be no trains other than maintenance trains during the core night hours. On the Underground at the moment, as you know, the service winds down late in the evening and then during the core night hours, between 1 o'clock and 6 o'clock, there are just maintenance trains, and of course one accepts that maintenance has to take place at times when the service is not otherwise operating and one recognises that.

2221. It seems to us that the standard that has been taken by the Promoter, which is set out in their response to our petitions—it is in information paper D1 on groundbourne noise and vibration, which is appended to our information papers—is that the level of noise that is acceptable for residential buildings, 40 dBA, and it is table 1, page 2. I think somebody needs to turn over to page 2. Thank you very much. You will see that for residential buildings the maximum noise level is 40 decibels, exactly the same as for offices, where for theatres it is 25 for concert halls it is 25, for studios it is 30, and so on. There is a world of difference between what you need in your office and what you need in your home—a world of difference. One inevitably accepts that at work, in here for example, there are going to be noises and one has different expectations, and different standards should apply, but at home one needs a higher standard. Really what this is saying is that the standard people can expect in their bedrooms at night is no higher than the standard that they could expect in their offices during the day, and that is wrong as a matter of principle. People ought to be able to expect in their bedrooms at night to have a better standard than they would have in their offices in the day. They are also saying that somebody in the theatre is entitled to a higher standard than somebody in bed at night; that cannot be right. So we would suggest that the Promoter should be expected to achieve a standard—and I am always a great one for being modest in my suggestions—of 30 decibels in houses.

2222. Now the next point is in relation to the method of track construction and there are various methods by which tracks can be laid, and one is called floating slab. We think that in Covent Garden, where the line is as high as it is, there should be a requirement that it should be floating slab. It is wrong to ask us to rely on standards because effectively what the

Promoter is doing is saying, “We are not going to tell you what we are going to do anywhere. We are simply going to invite Parliament to accept that we will work to a particular standard, the standard being 40 decibels in residences and so on, and we will decide as we are carrying out the project what is required in particular areas.” One does not have to be a cynic to see the problems of that approach from the point of view of the people who live in Covent Garden because how are we going to engage with the Promoter effectively to ensure that we get what they are saying they are going to give us, even if it were right in principle? It is a very dodgy way of proceeding, simply to say that we will meet these standards and it does not, for reasons I shall come on to, comply with the Environmental Assessment Directive. Obviously the undertaking should be “floating slab or better” because one accepts that as technology changes it may be that different and superior track methods may be available, so one recognises that it should be floating slab or better.

2223. I remember in opening Mr Elvin said, “Do not just keep imposing burdens on us because the accumulation of expense will be very considerable,” but if Crossrail is going to bring the benefits that the Promoter says it is going to bring—and of course that is not a matter, in a sense, for this Committee at the moment, that is a matter, I think, for the whole House—but if Crossrail is going to bring the benefits the Promoter says it is, then it is right that it should pay to ensure an adequate level of protection for the people who live in Covent Garden and who will have to experience the ill-effects of Crossrail on a day-by-day night-by-night basis for the whole of the rest of their existence. It is not something over which people will have any control. It is something that will continue forever. There are those of us like myself choose to live where we choose to live, and I see no reason why we should be driven out, but there are also many people in Covent Garden who do not really have a choice of where to live. The people in social housing do not really have the choice to move away if things do not work out, they are stuck there effectively.

2224. One of the odd things about the refusal of the Promoter to offer an undertaking to use floating slab track is if you look in the Environmental Statement, Volume 2, at paragraph 8.7.156 the Promoter says that they will be using floating slab track in our area, so we are not asking for something that they are saying will not be necessary. We are asking them for an undertaking that they do what they say they are going to do. I imagine that anybody looking at the Environmental Statement will say, “Oh great, there is going to be floating slab track in Covent Garden.” I nearly thought, “Half of what I want I do not need to bother to turn up to ask for,” but I thought I had better just check and ask for an undertaking, and I was a bit taken aback to be told that although the Environmental Statement says that we are going to have floating slab track that in fact the undertaking was not forthcoming.

---

 The Petitions of Robert McCracken and Covent Garden Community Association
 

---

2225. I was very grateful to the negotiating team whom I visited on Friday of last week for giving me a document which is not in the Environmental Statement and not in the public library and not therefore available to the generality of the public, and I shall come on this later, a document entitled "Crossrail Technical Report: Assessment of Noise and Vibration Impacts, Volume 8". I would like to go through with you, if I may, and the drawing entitled "Groundbourne Noise Contours Route Window C5: Tottenham Court Road Station". I do not know whether somebody could put that up on screen because I could illustrate the sensitivity of the uses in Covent Garden.<sup>1</sup> Covent Garden runs for these purposes, broadly speaking, from Charing Cross Road to Kingsway.

2226. **Ms Lieven:** We do have copies of this document because I was going to refer to it later. Would it be helpful for the Committee to have hard copies of it now? It is a bit easier to read, I suspect. It is much easier to follow with this. Can I ask whether the Committee's copies are colour copies?

2227. **Mr Taylor:** Yes, they are.

2228. **Mr McCracken:** If you look more or less in the centre of the plan you can see Tottenham Court Road and you see Charing Cross Road running north-south. Picking up the westbound tunnel you have got these contours, the green is 25 LAmx and then the blue is 30 LAmx. So if you take the area of Charing Cross Road the way this works, as I understand it, is you have got 25 as the outer green and then the next contour line presumably is 26, then 27 and 28, and so on. So as you move closer to the centre of the tunnel the noise level is increasing. I think that is the way this is intended to work.

2229. The westbound tunnel, looking at that first of all, first of all goes underneath the Phoenix Garden. If you just orientate yourself, Shaftsbury Avenue is not marked but Shaftsbury Avenue, if I can hold up mine, is the road that is run diagonally across the page like that, and between Charing Cross Road and Shaftsbury Avenue the westbound route is running underneath amongst other things the Phoenix Garden and then it goes across Shaftsbury Avenue. I should say there is a cinema just to the side of the route, there is a chapel to the side of route, and then it goes underneath the Covent Garden Hotel. That has in its basement, which is 10 metres deep, a screening room which is used almost every evening of the week for the showing of rushes or the showing of films and so on. It is a very fashionable hotel which is important to London as a world city in the media industry.

2230. I should add at this point that the assumption on which these noise contours are drawn is that basements are no more than two metres deep. So

that is the assumption, but the Covent Garden screening room is at a depth of 10 metres. It then goes through Neal's Yard probably the heart of Neal's Yard, which is the therapy rooms and meditation centre run amongst others by the internationally renowned Anya Saunders, and they have activities in the basement as well as high level. Those are the kind of activities where you can imagine quietness is actually quite important if you are practising or teaching meditation and offering therapy. That is really something that you need tranquillity for.

2231. It then goes across under Neal Street and then it goes across Endell Street and Endell Street is interesting because on the south side of Endell Street, more or less where the contour of 30 LAmx is shown, is the hospital which is no longer a hospital but is now a set of recording studios and a place which is reckoned to be important in the music industry. To the north of that is the Covent Garden Medical Centre which is the general practice for the area where all sorts of sensitive activities take place. Then the route swings under Drury Lane and starts to swing north and it goes by St Joseph's Roman Catholic School, underneath the alms houses, which are occupied by old people, and underneath the Dragon Hall, which is a new community hall, and then it joins the eastbound route, and when we reach New Oxford Street we have come to the end of the area that is of concern to the Covent Garden Community Association because our concern is from the area of Charing Cross Road to New Oxford Street. We simply say nothing about the area beyond that, either one way or the other.

2232. As I say, the assumptions behind this drawing are the basements are no more than two metres deep, and that was something I was told at the negotiating meeting by the negotiators on Friday and also something that Mr Thornely-Taylor was good enough to confirm to me. That assumption is not right but in a sense it does not matter because they are saying at paragraph 8.7.156 of the Environmental Statement that they are proposing floating track beds in the Covent Garden area.

2233. I want briefly to say something about the environmental assessment procedures that have been followed. The authorisation, whether it be by Parliament or by any other body for a development project such as this, is invalid if the requirements of the Directive have not been met. There is a duty upon all emanations of the state, courts and the like, to seek to nullify the unlawful consequences of any such invalid authorisation. That applies to a legislative approval such as this just as much as it applies to approval by a planning authority, either the national planning authority, the Secretary of State, or a local planning authority, the local authority. That is a principle established by the case of *Luxembourg v Linster*, see C287/98, particularly paragraphs 49 to 54. Where that procedure applies, the Promoter has got to produce an Environmental Statement that sets out the data necessary to identify

<sup>1</sup> Committee Ref: A32, Groundbourne Noise Contours Route Window C5: Tottenham Court Road Station (SCN-20060201-001).

---

The Petitions of Robert McCracken and Covent Garden Community Association

---

and assess the main effects which the project is likely to have. That is not only so that the decision-makers, yourselves in a sense, have that information but also, sir, the public who wish to participate in the discussion have that information themselves when they are participating in that discussion. The source of that is Schedule 4, part 2, paragraph 3 of the 1999 Regulation, which I think applies to these proceedings by virtue of Order 27A of the Standing Orders, or Article 5(3) of the Directive.

2234. In interpreting that requirement to give people the data to identify and assess the main effects, the Precautionary Principle applies because the Precautionary Principle is part of the European Treaty now. The European Court of Justice have held that it is necessary in interpreting environmental protection legislation to interpret it in a precautionary way so as to apply the precautionary approach. There is much authority for that but one case which establishes that is the *Palin Granit Oy* (Case C-9/00 [2002] ECR I-3533), at paragraph 23. An Environmental Statement has not only got to give you the data necessary to identify and assess the main effects, it has also got to describe the measures that are going to be used to prevent, reduce or offset adverse effects. It has got to describe the measures that are going to be taken. That includes the mitigation measures such as, for example, are we going to use floating track bed or not. That is something the Environmental Statement has got to tell you.

2235. The English Court of Appeal have held that the assessment has to take place before the project is authorised in principle and that the authorisation has got to impose conditions that require that the Promoter should do the things that he says he is going to do. In other words, they cannot just leave it at large. They have got to impose conditions to require the Promoter to do the things he said he is going to do, and authority for that is *Smith*, 2003, England and Wales Court of Appeal civil cases, 262, and the paragraphs that are particularly relevant to that are paragraphs 25, 27 and 33.

2236. So my submission is that you and Parliament have to ensure that the Promoter is legally obliged to do the things that he has said he is going to do. And it is rather worrying that the Promoter is refusing to give an undertaking to do the things that he has said in his Environmental Statement that he is going to do.

2237. I want very briefly just to summarise some key deficiencies in the environmental assessment process here. First, data that is obviously necessary to assess the environmental effects of this project is data relating to the noise that will be experienced by the properties that will be affected, so one obviously needs to know the information that is included in this document here, but this information was not in the Environmental Statement, nor did the Environmental Statement make any reference in its introduction to the existence of this document. So

the only way that one is able to get hold of this information is by being persistent. Now, I happen to be a lawyer and it just happens that environmental assessment is something that I have spent a lot of time on and I happen to spend a lot of time on planning inquiries and so on and to be reasonably capable of working out what there might be, and I went to see the Promoter and specifically asked for this information, but there is no way that this information could be said to have been made available in the way in which the Environmental Assessment Directive requires that this information should be made available. Indeed, in the *Berkeley* case, which is 2001-02 AC 603, the House of Lords held—and it was a case that Mr Elvin and I were both involved in—that it was no good requiring people affected by a project to go on a paper chase to find the information. In that case Mr Elvin for the Government argued that provided the information was in the public domain it did not matter that it was not part of a systemic assembly of information, but the House of Lords said, no, it is important that people are not required to go on a paper chase to find the information. This is a classic instance of information not being readily available as it should have been in the Environmental Statement and something that only a persistent and, in terms of these procedures, a relatively knowledgeable participant is able to get hold of.

2238. The second point is that throughout there is a theme on the part of the Promoter that they simply want to have a standard to keep to. They want really at the end of the day simply to be told: “You must meet the standard of 40 in residences and how you do it is up to you but that is the standard you have got to meet.” That is not what the Directive requires you to do. It requires you to know what is going to be done not simply to be told what standard is to be applied but to know what is going to be done. Couple that with the ruling of the Court of Appeal in *Smith* that you need to condition an authorisation so that the Promoter of the project does what he is saying he is going to do, and add that to 8.7.156 where floating track bed is said to be what is going to happen. That is something that should be a requirement.

2239. The third point—and I have already made it but I will make it just for the sake of completeness in relation to the Environmental Statement—the effects of freight traffic have not been assessed and therefore any authorisation must prohibit freight traffic. I will not weary you with the details of the next point, but quite a number of the plans that I have looked at are really quite misleading as to where the tunnels are going to be. For example, one of the plans I looked at in the Environmental Statement showed the tunnel as being, where I live, on the far side of me on Neal Street. I think I understand how that came to pass because I think probably what was being shown was something like a line that represented the midway point between the western and eastern tunnels. Okay, I could work that out but I very nearly went away when I looked at

---

**The Petitions of Robert McCracken and Covent Garden Community Association**

---

that and said to myself, “So far as I personally am concerned—leave aside the Community Association—I do not really have to worry about this,” but happily I was pretty convinced that that could not be right and checked it out further, but I think that people will have been potentially quite misled by that.

2240. I think you will have inevitably a transcript of what I have said and I will not seek to summarise what I have said, other than to invite you not only in relation to the matter of principle but also in relation to the matters of detailed protection, to protect not only myself but, more importantly, the community of Covent Garden from the problems that we foresee, and to ensure, both by appropriate standards but also by specific measures, that we do not suffer what we fear we might.

2241. **Chairman:** You have no witnesses?

2242. **Mr McCracken:** No, I am my own witness, as it were.

2243. **Chairman:** Ms Lieven?

2244. **Ms Lieven:** Sir, I have got a very few questions for Mr McCracken but before I ask them could I just explain our position and seek guidance on one point from you, sir. We have set out a petition response document to Mr McCracken that deals with all his issues. It is a relatively short document and I was simply going to seek to rely on that. I am not going to cross-examine him on issues that arise in that. They will arise in many other petitions and therefore would be very repetitious to go through with each petitioner. There are various points in the petition response document that I would like to highlight to the Committee. I do not know whether the Committee was intending—and it sounds a bit formalistic in such a short part of the hearing—to allow me to make a very brief closing just to highlight those paragraphs or whether it would be better to do it now. I am entirely in the Committee’s hands.

2245. **Chairman:** The object of this is that you make a case and then of course you would be allowed to make a statement and I would imagine you would incorporate that in either part of that and that would be very useful?

2246. **Ms Lieven:** In that case what I will do is ask Mr McCracken a very few specific questions and then I will make a short closing by reference to the petition response document, which of course Mr McCracken has had for a few weeks.

2247. Sir, I should make two other points before I ask the questions. One is on the Environmental Statement I think the Committee made clear on the first day that it certainly did not want us to be producing evidence on that, as it were. If necessary, at the end of the Committee hearings we will produce a further note on the legal position on the

Environmental Statement but I am certainly not going to be entering into an esoteric cross-examination on law with Mr McCracken about what he says or otherwise. I suspect that would not help the Committee very much. I could suspect wrong but I do not think it would.

2248. **Chairman:** I do not think it would.

2249. **Ms Lieven:** I am very grateful, sir. On noise, you will have a presentation on noise this afternoon and on the issue of groundborne noise specifically, that is noise from the trains passing to and fro, that is a matter that the London Borough of Camden are raising and are the lead borough on, so I am not going to cross-examine Mr McCracken on that because that will be dealt with next week by the London Borough of Camden and by our dealing with them. I hope that is acceptable.

2250. **Chairman:** It is certainly acceptable to us. I would add Mr McCracken quite rightly, as far as he is concerned, raised the matter of noise here and if you do not wish to cross-examine him on that but to leave it to a later witness, that is fine.

2251. **Ms Lieven:** Yes. So, Mr McCracken, that leaves very few issues that I do want to raise with you. You have raised a concern about the technical report not being accessible. You may not be aware of this but the technical reports are all on the Internet on the Crossrail site. Were you aware of that?

2252. **Mr McCracken:** I do not regard the availability of documents on the Internet as beginning to satisfy the requirements of the Environmental Assessment Directive, which is intended to enable ordinary people, who may not own computers or have the most up-to-date programmes or be able to use them, to access them. I could add to that in that I do have a computer and I do use the Internet and I communicated with the negotiating team. They sent through two documents to me which I could not open because my programme was in some way incompatible with theirs. So while I accept that these may be available on the Internet, I do not think that begins to satisfy the requirements of the Environmental Assessment Directive. I should add these documents were not available in the library although I was told that they were available in the library. The negotiating team said, “These are available in the library.” I went back to the library because I did not think that I had seen them there and they were not there in the library.

2253. **Ms Lieven:** Just for clarification; is that the local library you are talking about?

2254. **Mr McCracken:** Yes, I am talking about Westminster Reference Library.

2255. **Ms Lieven:** Obviously, sir, we can take that up and check out the true position and make sure the right documents are in the library.

---

The Petitions of Robert McCracken and Covent Garden Community Association

---

2256. **Mr McCracken:** Forgive me but that is the true position. I have told you what the true position is. If there is to be any suggestion that what I have said is not true I would want an opportunity to come back.

2257. **Chairman:** Mr McCracken, can I just come back on that. I think the Promoter has said they are going to check that out and report back to the Committee but we have got to give them the credit for doing that for the Committee. That is not to question yourself. It may be that maybe a member of staff at the library mislaid them or does not know about them, it could be any set circumstances, but I do not think the Promoter or their representatives are implying that you are telling untruths to the Committee.

2258. **Ms Lieven:** Absolutely not, sir, thank you. The next point, Mr McCracken, if we can just go back to the noise contour map just as a convenient map. In terms of the part of Covent Garden lying between Shaftsbury Avenue and Kingsway, the heart of Covent Garden (and I appreciate your definition was Charing Cross Road to Kingsway) but just to take the heart of it, Shaftsbury Avenue to Kingsway, there is no Crossrail construction activity within that area other than passage of tunnel boring machines cutting the tunnel. That is right as a matter of fact, is it not?

2259. **Mr McCracken:** I am quite happy to accept that.

2260. **Ms Lieven:** Thank you. And so far as groundborne noise is concerned, just looking at your individual position for a moment, Mr Fry helpfully has put a cross on where I think you live, just off Seven Dials; is that right?

2261. **Mr McCracken:** Yes, broadly speaking, that is right. It rather exaggerates the size of my flat but—

2262. **Ms Lieven:** Even as a very successful barrister I was not suggesting that you live in the entirety of that plot in Covent Garden! What we can see from that noise contour map is that on the noise assessment that we have carried out, where you live is actually outside the 25 L<sub>Amax</sub> contour, so the groundborne noise on your flat is assessed to be less than 25 L<sub>Amax</sub>, is it not.

2263. **Mr McCracken:** Actually that is not quite right because that is on the assumption that the basements are no more than two metres deep, but actually the building in which I live, which is quite a large complex, has a basement which is more than two metres. I just do not know really what it would be if one did the assessment with the basement at the depth that the basement actually is.

2264. **Ms Lieven:** We can ask Mr Thornely-Taylor this afternoon to try and get across to the Committee how noisy 25 L<sub>Amax</sub> is so I am not going to try and go through that with you. What floor of that building do you live on?

2265. **Mr McCracken:** I live on the third and fourth floor, I think, let me work it out. Yes, the third and fourth floor.

2266. **Ms Lieven:** I do not know whether you are aware of this but I am instructed that one would expect attenuation from groundborne noise of about 2 dB per floor. Does that accord with your understanding?

2267. **Mr McCracken:** I do not have any particular understanding of what the attenuation would be, but I do know that noise travels through the walls of that building from the basement to my flat and I have certainly experienced in other parts of London railway noise that has gone right up to—when I experienced rail noise in West London—the top of the building, and it did not seem to me that there was all that much attenuation between the bottom and top.

2268. **Ms Lieven:** Can you just tell me where in West London that was? I am not asking for the address.

2269. **Mr McCracken:** That was Kempsford Gardens, which is between Earl's Court Exhibition Centre and Earl's Court Station.

2270. **Ms Lieven:** That is what I suspected, Mr McCracken. The noise that you would have been hearing there would be the noise from the Circle and Districts Lines that run in cut and cover tunnels just underneath the pavement. One hears it all across West London, Notting Hill Gate—

2271. **Mr McCracken:** I am not sure about that because one only heard the noise in the middle of the night. One did not hear it during the time when the Circle Line was running normally. I think it is more likely to have been one of those little-used lines in that part of London which probably had occasional trains running late at night. The reason I do not think it can have been the Circle Line is because if it had it would have been something that I would have heard throughout the day. It was something you only heard at night on a regular basis. You heard it once or twice at night almost every night but you did not hear it, generally speaking, through the day.

2272. **Ms Lieven:** It would almost certainly have been a track-cleaning machine that would have gone up and down at night, but the important point is that it was going on not deep level Tube lines but would have been going either on the surface line that goes to Olympia or the sub-surface lines at Circle Line level?

---

The Petitions of Robert McCracken and Covent Garden Community Association

---

2273. **Mr McCracken:** I do not know the precise differences of alignment. What I do know is that the tunnel in Neal's Yard is very close to the ground and it is a lot closer to the ground than the generality of Underground lines in the centre of London.

2274. **Ms Lieven:** Just one final point, reverting back to the area of Covent Garden as a whole rather than necessarily your particular spot, when you talked us through it, you referred to a number of locations where there were cinemas, theatres, recording studios—

2275. **Mr McCracken:** Doctors' surgeries—

2276. **Ms Lieven:** — Places of worship—

2277. **Mr McCracken:** — And charity rooms and so on.

2278. **Ms Lieven:** Given the location of those uses in proximity to the route going through Covent Garden, the higher standards that are referred to in D10, standards of either 25 LAmax or 30, depending on precise use, will apply across Covent Garden, will they not?

2279. **Mr McCracken:** If you give the undertaking that I have asked, and that you have refused to give, they will apply. If you do not give that undertaking—and you have so far refused to give that undertaking—then I am by no means convinced that actually we will get it.

2280. **Ms Lieven:** Mr McCracken, that is not quite right, is it? What we have said in the Information Paper D10 on groundborne noise—and perhaps it is important that the Committee puts this up, paragraph 2.9—this is the undertaking we have given to Parliament: “The nominated undertaker will be required to design the permanent track support system so that the level of groundborne noise near the centre of any noise-sensitive room is predicted in all reasonably foreseeable circumstances not to exceed the levels in Table 1.” If one flashes back to Table 1 we can see the kind of uses you have been referring to in Covent Garden, those 25dB for theatres and 30dB for studios. So 2.9 is an undertaking to Parliament that in all the reasonably foreseeable circumstances those standards will be met. It is not an undertaking to you individually, but it is an undertaking to Parliament that can be enforced through the parliamentary mechanism, is it not?

2281. **Mr McCracken:** It is an undertaking that relates to standards, it is not an undertaking to do a particular thing in a particular area, and I do not agree with the standards. I do not think it is right that residences should be expected to have no better standard of protection than offices, because what you are saying is that the level of noise it is reasonable to expect in an office during the day is the

same as the level of noise it is reasonable to expect in your bedroom at night, and I just do not think that is right.

2282. **Ms Lieven:** Two points on that, Mr McCracken. So far as the residents of Covent Garden are concerned they are very unlikely to care what the form of the track is; what they will care about is the level of noise that emanates from the railway. They will not want an undertaking as to whether it is floating slab track or some utterly different kind of track; what they will be concerned about is to ensure that the noise does not go above the criteria.

2283. **Mr McCracken:** I do not agree with you, for this reason. We, as the residents of Covent Garden, have experienced over the years quite a number of problems. The more you rely on or have to rely upon environmental health officers or other experts getting involved and taking an interest in what you want to achieve—

2284. **Chairman:** Before we proceed, could one of our colleagues ask Mr McCracken a question because he has to leave, he is number two on Prime Minister's questions.

2285. **Kelvin Hopkins:** Thank you, Chairman. Presumably there is a simple formula relating to the depth of tunnel to the ground noise level and I wonder how much deeper the track would have to be to bring the noise levels down to a level acceptable to you; that is one question. Assuming that maximum use is made of all quiet track technology, floating slab and plastic fittings and all of that—we are not talking about jointed track, concreted to the ground and covering the surface, which is obviously very noisy—given that, could you not find a way forward or are you just simply insisting that the strategy is that the tunnels are made slightly lower and maximum use is made of the technology?

2286. **Mr McCracken:** I do not think in practice that the tunnels can be lower because what we have always been given to understand is that because of the configuration of existing tunnels at Tottenham Court Road this tunnel cannot go lower. I have always understood—perhaps wrongly—that it would have been lower had it been possible to do so. That is what I have always understood; I suspect Ms Lieven is going to give you a better answer than that. Of course we would be very pleased if the tunnel were lower and that would be an enormous boon, but we have always understood that the depth of the tunnel reflects the constraints of the existing power works underneath the surface in the vicinity of Tottenham Court Road. So while we would be very happy to have it deeper I have a feeling that the answer you will get from the engineers will be, “We would like to do that but we just cannot do it because of the way things are at Tottenham Court Road.” But certainly we would be very pleased to have it lower.

---

The Petitions of Robert McCracken and Covent Garden Community Association

---

2287. **Kelvin Hopkins:** What about the use of quiet track technology if every effort is made to minimise the track noise in that area?

2288. **Mr McCracken:** That is why we are asking for the undertaking for a floating track bed. You are quite right, this is not an all or nothing situation where either it goes on the northern alignment or we have lives of misery forever thereafter. It is not that situation, there are obviously gradations and so on, and what we want is a floating track bed. We are very concerned. If we are getting, which is what we are getting at the moment, an undertaking to achieve a standard, there are so many hurdles towards the practical realisation of that standard. Ms Lieven asked a very good question, she said what the people of Covent Garden want is a level of noise, not a floating track bed. But our experience is when we are given, for example, conditions imposed on a bar, that the noise level should not exceed a certain level then that is not much use to us because we do not walk around with noise meters in our hands; the Camden environmental health officers cannot be dragged out at night. So from our point of view something that you can readily see, such as doors closed, double-glazing, no amplified music and so on, something that you can measure and see is so much more practical and feasible than something that is just based upon a standard that requires the intervention and involvement of a whole series of experts. So a floating track bed, coupled with the standard as well is something that we definitely do want and would make a difference to us, but if we are simply given a standard, whatever that standard is, there is a long way between being told about the standard and being able to measure whether it is being met and enforce it.

2289. **Kelvin Hopkins:** Many thanks to you. I am sorry to interrupt your cross-examination.

2290. **Ms Lieven:** Not at all, sir, I was at the end of the cross-examination. Perhaps I can put in my two-pennyworth about answering Mr Hopkins' question, if I may, in case you are not here in the next few minutes when I close? Mr McCracken is right in terms of the vertical alignment with the track. With very small sensitivities it is effectively impossible to start moving the track up and down because there are so many other constraints up and down the route, and the last thing we want is a roller coaster ride of passengers going up and down at various locations. So I am afraid one has to assume that the track cannot just be lowered in order to solve any particular noise problem. I will ask Mr Thornely-Taylor this afternoon to answer the question as to how much it would need to be lowered, but in practice that is very, very unlikely to be a practicable solution.

2291. So far as the second part of your question is concerned, our position is that the way forward on this is to establish what is the appropriate level of noise for any receptor, including residents, and then for the Promoter to ensure that that level of noise

will be met. So at different locations there will be different solutions assumed, but also in the noise assessment of which we have seen the contours we have assumed floating slab track through Covent Garden because of these various sensitive receptors—not through the entirety of Covent Garden but through ... I am sorry, that is wrong. In the Environmental Statement we have referred to the view—and I need to be very careful about how I phrase this—that for some 632 metres eastbound twin-bore tunnel between Argyle Street, Endell Street, Smart's Place and Barbican, and 879 metres westbound through some other locations, there is likely to have to be floating slab track at the present time. But it might be that by the time Crossrail is built there are even better ways of doing it. We do not want to be tied to a particular construction methodology; we want to be tied to achieving a standard in the most efficient and effective way we can. To answer Mr McCracken's point, what we say is that it is very easy to enforce a standard like that; you go out with a noise meter and check in the appropriate manner. So there is not this great enforceability problem over setting a standard and then ensuring that the nominated undertaker keeps to that standard. That is the way we believe—and obviously we will hear much more about this over the coming months—it is appropriate to deal with groundborne noise rather than tying us down at this stage to a particular engineering solution at particular points. Can I also say—and, again, you will hear a lot more about this later—that that is the way it has been dealt with on other similar projects, such as the Jubilee Line extension, where very similar arguments were raised and the Committee had to consider very similar issues. We will come back to this, but that is to establish our position at the moment.

2292. **Chairman:** Once again, we apologise for this interruption, but he has to be down there because he is not only number two but he has to get a seat. Before we move on, Mr Hollobone wants to ask a short question.

2293. **Mr Hollobone:** Can I just confirm in this LAmox index on decibels that it is actually a logarithmic scale and not a linear scale?

2294. **Mr McCracken:** As I understand it, it is logarithmic, yes.

2295. **Mr Hollobone:** Therefore 40 decibels is massively bigger than 25 decibels?

2296. **Mr McCracken:** As I understand it, yes.

2297. **Ms Lieven:** Sir, I have no further questions.

2298. **Mr McCracken:** I wonder, sir, if I could re-examine myself because if I had been a witness I would have been re-examined? If I could just respond to a couple of points? So far as any possibility of confusion on the part of the librarian, if there was confusion on the part of the librarian—

---

**The Petitions of Robert McCracken and Covent Garden Community Association**

---

and I am pretty sure there was not because I asked for everything on two occasions and on two occasions I was given everything they had on Crossrail—that would just illustrate that they had not done what they were advised to do under the Directive, which was to have a systematic assembly, which is properly referenced. That is the first point.

2299. **Chairman:** There was no suggestion that a librarian was to blame, it is just that in everyday circumstances anything can happen on requests.

2300. **Mr McCracken:** I understand that and that is one of the reasons why I asked for everything because I am conscious that it is easy to make mistakes, so I did ask on two occasions, I am pretty sure. In any event, the key point is that the Environmental Statement describes itself and in its introduction says what it is, and it is a massive thing, including lots of very impressive looking figures on noise, which just do not happen to be the relevant figures on noise, the noise to which people are going to be subjected. This document here is not amongst the ones that were included in the index—unless there is a different one in the Westminster Library from here—and if you look through the Environment Statement it says what it contains, and it does not say it contains that.

2301. **Chairman:** Be assured, Mr McCracken, that we will pursue with the Promoters why this thing could not either be found or was not available, or was available.

2302. **Mr McCracken:** I want to be quite clear on one matter. We want floating slabs or better. We are not saying that it has to be stuck at floating slab because we do recognise that technology can change. But it does not follow that because technology can change and improve that we should not have at least the floating slab technology. That is quite important because I think what the Promoters will try to do is to say, “We might do something better so the Covent Garden people will be better off with our standard,” rather than what we would like to have which is a higher standard and a requirement it should be floating slabs or better.

2303. The final point about it being said that it is very easy to enforce, all you have to do is measure the noise. We do not have meters and we cannot get the Camden noise people out, so it is not easy actually; it is difficult. Thank you very much.

2304. **Ms Lieven:** Sir, all I am going to do is refer you to various information papers and key parts. The first of Mr McCracken’s points is that the correct route should be in the northern alignment rather than the Crossrail alignment between Paddington and Farringdon to conjoin Farringdon, as I understand it. Sir, in your pack for Mr McCracken, at the back of the Petition Response document there was an information paper, A1, which deals with the development of the Crossrail route. If I could just ask the Committee to focus on paragraph 4.3 of that

document? What comes out of the document is that we did assess the northern alignment on the same principles as we assessed the Crossrail route, and this document refers to the RAM alignment—the Members of the Committee may pick up that that is the Residents of Mayfair alignment; they are also promoting the northern alignment and we will come back in more detail to it with them. What 4.3 says is: “In comparison with the safeguarded route”—that is the one that is being promoted to this Committee—“the CLRL assessment has shown that the RAM alignment would: attract few passengers; have lower passenger benefits; have higher costs; give less improvement to accessibility in the key areas of the West End; necessitate more property demolition; and affect more areas of archaeological importance.” I am not going to seek to prove each of those at this point but we have assessed it and there is an unequivocal response that it is simply less good in transport terms, principally—if I can summarise the whole thing in one sentence—because it goes to the wrong place. It is getting people through the West End and the City that Crossrail is seeking to do and relieve the congestion on the Central Line, and running along Marylebone Road simply does not do that.

2305. The second issue is groundborne noise and the next document in the Committee’s pack is Information Paper D10, which is on groundborne noise and vibration. Mr Thornely-Taylor will deal with this in more detail this afternoon but on the second page of D10 there is a table there setting out the noise criteria, and if I can say to the Committee there are two points that come out of D10. One is that these criteria were applied on the Jubilee Line extension after consideration by a Parliamentary Committee and they have been applied on other infrastructure schemes in London as well; so they are very, very well precedented. It is our case—and one can assume it is Parliament’s case from the previous acceptance—and Mr Thornely-Taylor will explain why it is right that those criteria are wholly acceptable.

2306. So far as what we are undertaking I will ask the Committee again to note paragraph 2.9, but I am not going to be tedious and read it again because I read it to you a minute ago. That is the undertaking and it is in perfectly clear terms, and for the reasons I explored with Mr Hopkins it is our view that the correct way forward is to have an undertaking in respect of standards rather than an undertaking in respect of engineering solutions. Certainly, in my submission, that gives just as much protection, if indeed not more, to residents than would an engineering solution, and one of the dangers is that if you give an engineering solution and then there is something wrong with it you have lots of arguments about what is wrong and why there is noise coming out, whereas if you have a simple standard then whatever is right or wrong about the engineering solution if the standard is not met it needs to be sorted out. So in many ways it is a preferable way forward to that chosen by Mr McCracken. We will

---

 The Petitions of Robert McCracken and Covent Garden Community Association
 

---

come back to this issue in more detail, both with Mr Thornely-Taylor this afternoon but also with Camden's Petition next week, so I am not going to say any more about that now.

2307. Then there were two specific points on which Mr McCracken wanted undertakings, if the Committee remembers, of freight and night time use of the railway. At the present time there is no intention by the Promoters that either should take place. As far as freight is concerned the Information Paper on freight makes it clear that the tunnel and the track are not to be designed to take freight trains. This is a railway with 120-year life—and it is probably a theme the Committee will get very bored with—and 120 years is a long time to predict what is going to happen and we do not want to be tied by an undertaking to say that freight will never be taken on Crossrail in any circumstances when the future is the future and, by its nature, not possible to be entirely predictable. Similarly on night time use of the railway. The current intention, clearly stated, is that Crossrail will be used for ordinary operation for the same hours as the Underground is. But, again, 120 years or 50 years, whatever, is a difficult time to predict and we do not want to be straight jacketed by an undertaking at this stage that says forever more it will never be used at night by passengers. So that is why we are not prepared to give the undertakings on those two points. If the Committee is concerned about either of them either now or at a later stage in the proceedings we can obviously produce a note that deals with them in more detail. I suspect that Mr McCracken's response will be, "That may be all very good well and good sense but it does not comply with European environmental law." I will restrain myself from making a submission on that but, again, if the Committee has any concerns much the most appropriate way to deal with that is by detailed note that sets out the legal position. So if there are any concerns we will deal with that in that way. That is short, sir, but I hope it pulls together the principal points.

2308. **Chairman:** Mr Hollobone has one more question

2309. **Mr Hollobone:** Ms Lieven, looking at D10, groundborne noise and vibration, I do not profess to be an expert on noise but I cannot see anywhere in that note the decibel scale is logarithmic. To the average lay reader, if you saw a figure of 40 decibels and 20 decibels you would assume that 40 decibels is twice as much, but it is not twice as much; I do not know what the actual figure is, but it is way more than double.

2310. **Ms Lieven:** You are entirely right and Mr Thornely-Taylor will tell you how much more it is this afternoon. The Information Paper, I think it would be fair to say, assumed a certain level of knowledge, and it may be that in terms of informing the public we should have set out more of a basic position in the Information Paper. I think it is almost certainly in the Environmental Statement. It

is difficult with a project like this. There was so much information and it is difficult to know how to target a particular document at the right audience. So we will have a think about whether or not we should be putting out—and indeed we may have done it—more basic information about noise in a format that members of the public who do not realise about logarithmic scales are more likely to understand. But perhaps we can come back to you on that, sir? Mr Mould reminds me that Mr Thornely-Taylor is giving evidence this afternoon and will deal with this, and if there is a Committee concern perhaps we can think of ways to take it forward and explain it to other people.

2311. Sir, there is one last thing I should have dealt with because I got passed a note. In respect of this issue of the background documents and the Internet, I am instructed that the newspaper notices that went out relating to Crossrail did tell people that all those background documents were on the Internet. The weight that one puts that is entirely on the Committee, but it was in those newspaper notices. Thank you very much, sir.

2312. **Chairman:** Mr McCracken, what do you want to say?

2313. **Mr McCracken:** I do not want to say very much at all because I think what I have said is going to be fresh in your mind and I hope that what I have said has been persuasive both on behalf of myself and of course on behalf of the other people for whom I am speaking today. Above all else, just listening to what Ms Lieven said, I am conscious that she said that it would be a bad idea to have an undertaking to avoid that happening because if things do not work out then there will be a big dispute about why it has not worked out. It is not a very reassuring basis for the Promoter of this scheme to be inviting you to refrain from requiring a series of undertakings that would protect us, and I pray that in aid as a very good reason for the Committee to require the various safeguards that we have suggested.

2314. So far as the statement, "We have no intention at the present time", one does not have to have been in politics or public life for more than a week to know that those are words that strike terror into the heart of anybody who does not want a thing in respect of which there is no intention. If circumstances change and if in the future it is in the public interest there should be night time working then it is perfectly possible to come back to Parliament and get authorisation at that stage, and that is what should happen. What has been assessed has been assessed on one basis and that is how things should be improved. I can only say on behalf of the community that we are very grateful to you who represent communities in other parts of the country for the time you are taking over this and rely upon you as our guardians.

---

**An introduction to Groundborne Noise and Vibration**

---

2315. Can I ask for the clerk to arrange for me to be given a copy of the notices when the relevant bits of additional material are being presented, for example Ms Lieven suggested her questions on noise would be put to Camden later on, so I wonder if the clerk could let me know the relevant bits of Hansard to look for?

2316. **Chairman:** We will do that and we will also send you a copy of your evidence session today.

2317. **Mr McCracken:** I would be very grateful to you for that.

2318. **Chairman:** We are very grateful to you for appearing; thank you very much. Ladies and gentlemen, we are going to suspend ourselves until 2.30.

*After a short adjournment*

2319. **Chairman:** Mr Elvin, just before you start can I indicate to you that the Whips—who do not get everything right—have indicated to me today that

we may have a division between four and 4.15. If it is nearer to 4.15 we will cease today's proceedings. I just wanted to prepare you in case that happens. If it is at four or before four we will return until 4.30.

2320. **Mr Elvin:** It may well be we will be finished before then in any event. Sir, this afternoon the Committee has agreed to hear two presentations on noise and settlement issues, generic issues that the Committee will be hearing a good deal about in the coming weeks and indeed I was listening on the Internet this morning and I gather you had a foretaste of some of the issues from Mr McCracken in his presentation of the two Petitions this morning. I was proposing, unless the Committee has different wishes, to call Mr Thornely-Taylor first to give the noise presentation and then Professor Mair second, to give the settlement presentation. It is effectively a PowerPoint presentation but I hope that the Committee has had hard copies of it as well.

2321. **Chairman:** A33.<sup>2</sup> Before we start, as the clerk has reminded me, we have to swear in the witnesses, so we will take a moment or two to do that.

---

---

Mr Rupert Thornely-Taylor, Sworn

*Examined by Mr Elvin*

2322. **Mr Elvin:** If the Committee will allow Mr Thornely-Taylor to introduce himself and then I will ask him to give his presentation. I have asked him to touch on a number of the issues which the Committee asked questions on this morning, including issues relating reduction in noise by reducing depth of tunnel and matters such as that, and Mr Thornely-Taylor will touch on that, and I am sure it will come up in the context of fully contested Petitions in due course, but I appreciate there were some issues arranged on it this morning. Mr Thornely-Taylor, you are Rupert Thornely-Taylor and you are a founder Member of the Institute of Acoustics and you are a Fellow of it.  
*(Mr Thornely-Taylor)* That is right.

2323. You are a Member of the Institute of Noise Control Engineering of the USA, a Member of the National Institute of Acoustics and Vibration.  
*(Mr Thornely-Taylor)* That is right.

2324. You have specialised exclusively in the subject of noise, vibration and acoustics for more than 41 years and you have been an independent consultant in these subjects for the last 37 years and head your own practice?  
*(Mr Thornely-Taylor)* I do, yes.

2325. You were Chairman of the Association of Noise Consultants from 2003 until last year and for 10 years a Member of the Noise Advisory Council, chaired by the Secretary of State for the Environment; you were Chairman and Deputy Chairman of two of the Working Groups; you are a Member of the Scott Committee, which drafted the basis of the noise section in the Control of Pollution Act 1974; and your practice is currently under contract to Defra for a review of the use of noise abatement notices served under the Environmental Protection Act, for whom your practice recently completed a review of the existing codes of practice to minimise noise.  
*(Mr Thornely-Taylor)* That is right.

2326. You also head the consultancy division of Rupert Taylor Limited, and that specialises in the numerical modelling of the generation and propagation of vibration, and you have developed a computer package, known as Find Wave, which is being used for the prediction of vibration, reradiated noise and groundborne noise extensively over the past 12 years and that has been used in many countries around the world.  
*(Mr Thornely-Taylor)* I have, yes.

2327. Could you also explain to the Committee your experience in terms of noise and vibration in the context of rail projects, please?  
*(Mr Thornely-Taylor)* A large part of my work has been on vibration from railways. The list of railways that I have worked on is quite long, in particular the Channel Tunnel Rail Link, when it was in

Parliament I was an expert witness; the Jubilee Extension and the first version of Crossrail in the early 1990s. There have been many railway projects around the world that I am or have worked on—underground railways in Sweden and Australia, and I have done surveys on many systems in Hong Kong, Singapore, the United States, and I have done some work in China as well. There is a long list, which I will not go through, sir.

2328. Have you been involved in the design of infrastructure projects, that is to say giving noise and vibration advice in the context of designing infrastructure projects?  
*(Mr Thornely-Taylor)* Yes, I have. For the Jubilee Line Extension I was responsible for overseeing the technical design of the vibration isolation in the track support system, both the system-wide resilient base plate system and the floating slab track, which we heard about this morning.

2329. Finally, have you carried out research into the impact of rail infrastructure projects in terms of noise and vibration?  
*(Mr Thornely-Taylor)* That is right. When the Crossrail project was first promoted we commissioned a social survey and vibration measurement report to study in more detail people's reaction to groundborne noise that Mr McCracken was describing this morning.

2330. I am going to ask you at this point if you would, please, present your material to the Committee and if there are any matters which I would like you to raise additionally I will intervene at an appropriate point.  
*(Mr Thornely-Taylor)* As we can see from slide one I propose to outline the basics of noise vibration, first of all, and hopefully explain one or two things like, for example, the logarithmic scale, about which questions were asked this morning. Then I will explain what the standards are which are used for assessing noise and vibration, and finally I will explain the mitigation measurements that are used to achieve those standards wherever possible. So on slide two, I think everyone is familiar with the fact that noise is vibration, and most people have heard that it is measured using the decibel scale. We hear a lot about a thing called a dBA and the capital A means that the basic physical scale that is used, and is the same as decibels that you find in amplifiers and electronic instruments, has been specially adapted to make the measuring instrument a bit like a human ear, which is remarkably insensitive to low frequency noise and very high frequency noise. It is called A-weighted and in many, many cases we are going to see units called either dBA or sometimes expressed as a level, with a capital L, and the A appearing as a subscript to show that it has been weighted to match human response. If we move to slide three, this is the point which arose this morning about the logarithmic nature of the scale. Basically what logarithmic means is that the scale measures proportional changes rather than absolute changes. We are much more familiar with figures

---

<sup>2</sup> Committee Ref: A33, Noise and Vibration Document by Mr Rupert Thornely-Taylor (LINEWD-RTT01-001 to-031).

---

**An introduction to Groundborne Noise and Vibration**


---

that are financial or temperature scales which are linear in their approach. The decibel scale is very special in that it measures by how much something has increased, and since the most important thing is what sounds are like to the listener and we can begin by talking about loudness, which is obviously one of the most important features of it. As it shows on this slide the basic thing is that every 10dB increase sounds about like a doubling of loudness and, conversely, every 10dB decrease sounds about a halving of loudness, and that works all the way up the scale—70 is about twice as loud as 60, just as 40 is about twice as loud as 30. It is only an approximation because the ear is very complex, but it is a good rule of thumb, and there is a series of further rules of thumb one can see if we turn to slide four. Using that scale a change of one decibel, if it occurs as an instant step in a sound level, is virtually imperceptible. The human ear is not as good at discriminating changes in loudness as you would think from the change in the amount of energy in the sound. Slide five is an important one, often referred to in reports and evidence, that if there is a 3dB change in a sound level it is just noticeable. I do not know whether the Committee will take up the opportunity to go to a room that we have identified which does have groundborne noise from trains in it, which, quite conveniently, fall in a range in the mid to upper 30s with the noisiest being almost spot on 40. If the Committee does want to do that we can arrange it and you will hear trains passing which differ by 1dB and by 3dB and you will be able to hear what this is actually, and I think you will agree with these broad statements that one is almost impossible to detect and three is just noticeable. If we move to slide six it is common in all presentations like this to show—sometimes it is in the form of a thermometer, but this is a staircase—if you were to be in a room that was only about 20 dBA you would actually say it was silence. You can find places quieter than that—I believe the rim of the Grand Canyon on a still day is 14. Even 30 is very, very quiet. This room now, I would guess, when I stop talking is approaching 50, in the upper 40s. In an office it would be around about the 50 mark; inside a car, depending on the make in the 70s; 87 stereo music. That is actually a benign sound level; people with an iPod on are doing a great deal of more in their ears. 95 is a rather noisy factory, 115 would be quite close to a pneumatic drill, and you do not have to be on the runway, I think, to get 141 for an aeroplane, but it gives you some idea of where to pitch these numbers. Slide seven takes us on to one of the complications in measurement. We did hear from Mr McCracken this morning, mention of this scale called Leq. It is necessary to cope with the fact that although the dBA works quite well as a measure of loudness there are a lot of circumstances where noises do not stay steady, and of course passing trains are a very good example—there are relatively quiet periods and then the trains go by during which it is noisier. If you are not to express the noise environment as a complicated long series of numbers—for so much percentage of the time it is at this level, for so much percentage of the time it is at

that level, which is how we used to do it in the early days—it is much easier to use an index, which sums the total amount of noise energy that is generated and enters the ears of the listener over the period of interest. It is called Equivalent Continuous Sound Level—Leq for short, and it may have an A after it, to signify its dBA. It is not an average sound level, it is an average of the amount of energy in the sound. And one of the things which I have not yet mentioned is when I said the ear was rather bad at discriminating changes in sounds, I was referring to the fact that was touched on by Mr Hollobone this morning, that the nature of the scale is such that the actual energy in sound increases at a much greater rate at which you would think the rate at which the loudness goes up. When I said that a 10dBA increase sounds like twice the loudness the actual amount of energy in there—which is of academic interest only, we do not hear it but for calculation purposes—we need to be aware that when there is a 10dB increase there is a ten-fold increase in energy. What the Leq scale does is to average the energy and not the levels. The significance of that comes up in slide eight.

2331. It was alleged by an advocate at a public inquiry that those of us using LAeq were being misleading because we were averaging a very peaky noise history. The advocate said if you were to measure the height of the Lake District in LAeq, it would be flat. That prompted me to go away and take a section through the Lake District, a nice walk through West Water, Grasmere, up Scafell and Bow Fell, and it is not unlike a time series plot of sound levels. In fact, whereas the actual heights are on the left-hand side, I have put decibels on the right-hand side, and you can perfectly validly look at that as a time series of sound levels. You can see the effect of the point that I have just been making. LAeq is an average of the energy of sound and not an average of the levels. If it were an average of the levels there might have been some force in the argument that we were falsely representing the height of the Lake District because it would be that line roughly across the middle called the arithmetic average, but it is not that, it is the high one with LAeq against it, and you can see from that it is strongly influenced by the peaks because of the huge amount of energy they have in it, even though the ear is not very good at detecting that. That was what lay behind Mr Hollobone's question about it being a logarithmic scale, but it remains the case that a 10 dB change is a doubling of the loudness.

2332. If I move on slide to nine, I mentioned what happens with the 10 dB change. This is extending that a little bit on to a three dB change. This is one of the important pegs on the scale, whether you double the energy in the sound by putting two sources side-by-side, for example, whether you double the number of sources or whether you double the duration of the sound event. If it is a train that is twice as long, if a 12-car train goes by compared with

---

An introduction to Groundborne Noise and Vibration

---

a six-car train, the LAeq caused is three dB greater, and likewise if twice as many trains go by the LAeq scale shows a value of three dB greater.

2333. On slide ten, the same is true when it is 10 times instead of a doubling. Again anywhere on the scale, whether it is 60 to 70, or 50 to 60, it is always the same effect.

2334. The important thing is that these numbers actually have no intrinsic meaning. They do not tell us anything unless we can link them to research work that has set about discovering what people think about noise at various levels. That is what makes the numbers meaningful. All expert evidence, all technical reports, all Environmental Statements that report noise effects in decibels or in LAeq levels only mean something if somewhere along the line you can trace it back to a study that was done that showed what people thought of noise at what level.

2335. Just to give you one example of what we get from that kind of study, we move to slide 11. The studies consist of a mixture of people going out and measuring noise and more or less at the same time teams going out and conducting social surveys to discover what people think about the noise. It has become conventional to classify their responses in terms of their degree of annoyance, and for planning purposes clearly an important degree of annoyance is when people say they are “highly annoyed” and like most things in life people vary enormously in their responses. There are people who are completely unmoved by a very large amount of noise and there are people who are much disturbed by very low levels. What happens is—and just before I continue you may have noticed we have got something new at the bottom called Lden, that is LAeq but as adapted by the European Environmental Noise Directive to cover the whole 24-hour period by including evening and night with weightings for their extra sensitivity—for present purposes we can treat it as if it was natural LAeq, the principles are exactly the same.

2336. We can see, for example, if we take road traffic noise and we find that the LAeq was, say, 67 (which an awful lot of people experience outside their house facade) and we look along the bottom scale to the 67 point to the grid lines to the right of the 65 point and run our eye up that grid line to the blue line in the middle, that intersects a line which has a label on it at the left of 20. That means that if the LAeq outside the house facade is 67 you can expect to find 20 per cent of the population who would say they were highly annoyed by that traffic noise.

2337. I could show other slides for different levels of annoyance, but I think it is simpler to concentrate on this one. The interesting thing about this is if it was not a road, if you were around an airport and the LAeq level was precisely the same—67—30 per cent of people would say they were highly annoyed. They find aircraft noise, energy for energy, more annoying than road noise. The most interesting thing, given

that we are here promoting a railway bill, is that if it was not a road but it was a railway it would go the other way, and only 10 per cent of the population at 67 would say that they were highly annoyed. It is charts like this that are used for the basis of planning and political decisions about where noise levels should be pitched, whether one is in government or planning an infrastructure scheme or something of that nature.

2338. I am going to move on now from noise to vibration and slide 12 is the first vibration slide. A slightly different approach is used for quantifying vibration. You can use a decibel scale but in this country we use something called Vibration Dose Value. It has peculiar units but it is a totalling of the amount of vibration, again after weighting it heavily in favour of the peaks. Rather like LAeq, VDV is strongly driven by the maximum levels of vibration more than any of the other characteristics of the vibration.

2339. Then we go to slide 13, vibration also affects buildings with no people in them and the concern there is quite different. It is not how people respond to the vibration, it is not how annoyed they are, it is whether any damage is done to the building. It takes very, very much more vibration than annoying people to have any effect on a building whatsoever. When vibration is being enough to cause any damage to a building, there would be an outcry from people living and working in it. For engineering reasons, the best measure of vibration affecting buildings is called Peak Particle Velocity. It is known as PPV and it is the maximum speed any surface gets up to as it is vibrating.

2340. Now, if we move on to slide 14, we will start discussing the standards that are used. They are slightly different according to the circumstances and type of noise. It has become quite well-established in dealing with construction noise to use the index LAeq that I have described and to look at it in two lights. One is to see how it compares with what was there before the construction of the work started, known as the baseline noise level, to see how much the noise level is pushed up by the addition of the construction noise. Again, it is possible to arrange to visit a room right by a fairly meaty construction site and listen to what you get inside the room with the windows open and the windows closed and matters of that kind. It is also important to look at the LAeq level in its own right against what I call here trigger levels which have some significance in what we will come to in the next slide, slide 15.

2341. If the construction is taking place in an area where it is really very quiet to start with, where the baseline is very low, then we look at the left-hand side of this chart and we see first of all a black curve which has a flat bottom to it at 65 and if the noise level outside somebody's facade goes above 65, it is considered significant because if they had the windows open they would probably think, “I had better shut that window because of the construction

---

**An introduction to Groundborne Noise and Vibration**


---

noise and open one at the back of the house”, and things like that. They will have to do things to make the noise level in their house tolerable, but it is not so bad that they cannot do that. Once we get up to 75, we have reached a point where shutting a window and ventilating from the other side of the house and things like that is not available because the sound insulation of closed windows is not really enough, and that is the point at which the Crossrail noise insulation scheme starts to kick in. The red line is if it is 10 dB noisier still, and you will remember that these 10 dB steps are a doubling of loudness, so the red line is four times as loud as the black line on the left-hand side. That is when using a fairly generous assumption one says that the noise insulation will not be enough to cause acceptable noise levels in the house and that is when the temporary re-housing part of the Crossrail policy kicks in. The reason why we have got a graph here is because if it is an area that is already noisy, and there are lots of areas like that, then clearly you have to look and see what the influence of the pre-existing ambient is—and ambient is just a term covering all the noise that is going on from all sources—and if the base line ambient is higher than 65, then there needs to be a secondary check which is whether the effect of the new construction noise worsens the noise environment by five dB, and that is one of the tests that determines eligibility for either noise insulation or temporary re-housing.

2342. To move on to slide 16, this gives us the standards for construction vibration. I mentioned Vibration Dose Values, VDV, and it is rather curious units. They are there. It is very unusual for high vibration to occur except in particular circumstances close to construction activities. Those are the levels that have been used in environmental assessment.

2343. And on slide 17 we see the threshold of significant impacts for vibration when one is only concerned with possible damage to buildings, causing cracks and things like that due to vibration. At this point I should say that whenever anyone has done research work to try to establish the relationship between vibration and building damage it has always been very hard to find cases where there is any damage at all caused by vibration. What tends to happen is when there is something going on like construction work that may cause vibration that people can feel through their tactile sense, they start to worry and they start to look at all the plaster in their house, in every corner of every room, and I challenge anyone to go home and look at all the plaster in their house and not find hairline cracks due to ground heave, due to changes in the moisture content of the soil, and things like that. It is very rare for vibration to damage buildings.

2344. Slide 18 takes us to the standards for airborne noise, airborne meaning noise that comes straight from something like the train wheels through the air to the person listening. The three dB that I mentioned when I was describing the effect of the

decibel scale is important here. I said it was the smallest change that was normally noticeable and in considering whether noise from the surface railway is significant or not, the band between the increase of three to five is considered a slight increase but the formal label of significance is applied when the change is more than six. If it is more than 10 it is significant but it is described as a “substantial” increase.

2345. Slide 19—there is and has been for a number of years a statutory scheme entitling people to noise insulation when some conditions are satisfied relating to airborne railway noise. The daytime LAeq trigger is 68 and night-time it is 63 and there has to be a one dB increase caused by the railway, and that applies to all new railway developments as part of the noise insulation regulations.

2346. Slide 20, we were considering this morning the question of noise from underground railways and I think most people have experienced, even if they only visit London occasionally, the many places in London where you can hear the old Tube lines and trains passing underneath. Something between 50,000 and 60,000 people in London hear rumble from the old lines. By “old lines” I mean those constructed up to and including the first part of the Jubilee Line. And that kind of noise is measured in a slightly simpler way than the method used for both construction noise and airbourne noise from a surface railway. We use a measure called L<sub>Amax</sub>, which is the maximum sound level. It is the easiest of all the indices to understand. If one had a meter in front of one—and if we go to this demonstration room I mentioned we will have a noise meter there and we can see the levels as they change -all that L<sub>Amax</sub> is is the highest level that the meter indicates as it rises and falls as the train goes by as you hear the distant rumble of the train. The capital S after L<sub>Amax</sub> relates effectively to the damping of the meter. Some old meters used to have needles, like barometers, and you could see the needle moving about. When they were first designed there was both a slow and a fast characteristic, and when it was on fast the needle moved at that sort of speed, it moved rapidly, when it was on slow the needle was much more sluggish. There are uses for both weighting time constants. The advantage of L<sub>Amax</sub> S is that it is much more repeatable because of the damping of the excursions of the needle. I mentioned when I had finished introducing the decibel scale that all numbers, whether they be just dB or LAeq or L<sub>Amax</sub> only have meaning if they are linked to studies that have been carried out on the reaction of human beings to the noise, and all the information that we have about people’s reaction to the rumble of a train passing underground is based on their reaction to noise levels in L<sub>Amax</sub> S. We did have quite a debate about this in the Channel Tunnel Rail Link Committee, because one of the local authorities was very anxious that we should use the fast setting instead of the slow setting, but the outcome was we did all agree, experts from both sides, that for a modern railway good quality track, the difference

---

An introduction to Groundborne Noise and Vibration

---

between fast and slow is only about one dB and we do not really need to spend time debating which is the better. I would say that slow is better because it is more repeatable and more easily predictable.

2347. Slide 21 shows us how we rate the noise from trains passing in tunnels underneath. The impact classification used in the Environmental Statement was labelled low if the L<sub>Amax</sub> S was in the range 35–39, and then we get significant impact should it be over 40. In fact there is no prediction over 40, because this is one of the areas where mitigation measures are well and truly available to reduce the level of noise of a passing train underground.

2348. **Mr Elvin:** Can I stop you there, because the issue about 40 in terms of ground-borne noise I raised this morning. Can I ask you to explain very briefly to the Committee because the issue, I know, is coming up with other Petitioners, in particular Camden, which I think is next, but can you just give a thumbnail sketch of the use of 40 and what it is used for?

**(Mr Thornely-Taylor)** Yes, we began to take steps to deal with ground borne noise when the Jubilee line extension was planned, and clearly, that being part of the London Underground network, the most sensible thing to do was to talk to the then scientific adviser for London Underground and find out what they had found when investigating complaints about noise from the old tube lines, and all their complaints in the late 1960s early 1970s, which encompasses the period when the Victoria line was opened and the Victoria line, like all railways that have been built throughout the last century, has rail directly rigidly fastened to wooden blocks set into concrete—it has no vibration isolation, no resilience in its track support at all—and the results that were provided by the scientific adviser showed that in all cases where complaints have been investigated the sound level due to the passage of a train was over 40—many of them were quite a lot over 40—none of them were below 40, and so that was an important piece of guidance when the design aim for the Jubilee line extension was set. In fact, what happened there and what will happen with Crossrail, is that a type of track form is selected which, so far as one can, achieves the 40 from end to end even through the pinch-points, if I can call them that, where you come either close to the surface or closer to the foundations of the building, as a consequence of which the great majority of the alignment goes well below 40. What should not happen, and does not usually happen, is that you have half a dozen different track forms and you keep changing them to keep bumping under the 40 as you go from end to end. The designer picks the most practicable, best vibration isolating platform for the whole system based on the difficult cases with the results we are going to see in a minute when I show some more slides.

2349. **Mrs James:** I have a question, and it relates to the Victoria line. This morning we saw some evidence in the Promoter's response about sound

levels in theatres and the recommended level of 25 dB. I have recently been to see Billy Elliot at the Victoria Palace and every 15 minutes, without fail, it rumbled through, and to say I was uncomfortable was not true but you were constantly aware of the sound. About what level would that be? Would that be an acceptable level in a home?

**(Mr Thornely-Taylor)** No, that would have been well above 40. I have been going to a lot of theatres in the course of the studies I have been doing for Crossrail.

2350. **Mr Elvin:** It is a hard job, Mr Thornely-Taylor.

**(Mr Thornely-Taylor)** There had not been any plays on at the time. I have not been to the Victoria theatre, because, although future Crossrail lines may affect that area, line one does not, but some theatres do have very bad conditions; some of them have got worse, some of them have got slightly better. The first time Crossrail was promoted in one of the West End theatres you could actually feel through the soles of your feet vibration from a train going by. Those levels are well above the levels, certainly well, well above the levels we set for theatres, but they are well above levels for residential buildings, but it is useful to experience that because there is a huge change in the fundamental design of the track from the Victoria line, which, as I say, was rigidly fastened to wooden blocks set in concrete. From the Jubilee line extension onwards—not the old Jubilee line but from Green Park south to Stratford—all modern underground railways are installed such that the rails themselves are on resilient base plates, they are known as, which are quite soft, the rail deflects anything up to five millimetres as the train goes over it, and in circumstances where you need even lower noise levels—recording studios and things like that—the technique is to construct the track so that the rails are supported from a concrete slab which itself is mounted on rubber bearings; and there are several stretches like that on the Jubilee line extension. There are one or two stretches on some of the older railways. The extension of the Piccadilly line from Houndslow West to Heathrow was one of early floating slab cases, and way back in the 1960s a floating slab was installed when the Circle, Metropolitan and Moorgate lines were realigned at the Barbican, which we will hear about later in the proceedings.

**(Mr Thornely-Taylor)** The Jubilee line was constructed with 40 dB L<sub>Amax</sub> S as a design aim and it has worked there very well. I, in fact, set out on behalf of Crossrail after the Jubilee line opened to get some measurements to compare the measurements with the predictions and validation model, and it was intensely difficult to find anywhere that one could actually detect the passage of trains on the Jubilee line. It is, of course, also interesting that the District and Circle line was reconstructed through Westminster station and it runs through the basement of Portcullis House, and that is on a floating track slab, and, although it has got a bit noisier than it was when it opened, because it is about time the rails were reground, I am not aware

---

An introduction to Groundborne Noise and Vibration

---

of any part of Portcullis House where you can hear the District and Circle line, and it is running effectively through the building. When Crossrail came to be designed in the early 1990s, clearly the data from the scientific advisers to London Underground that I mentioned were beginning to get a bit long in the tooth and we set about getting more information and commissioned a social survey and vibration measurement survey. It was not as successful as it ought to have been rather a large number of people were happy to answer the questions in the social survey but were not too keen on having the instruments in to measure the vibrations; so it is not as big a sample as we would have liked, but it very forcefully confirmed that, particularly if, as is the case with modern railways, there is no 'feelable' vibration—what I was describing a moment ago about the Victoria theatre or West End theatres where you can feel the vibration through the soles of the feet. With modern railways that effect is completely absent no matter what the audible sound level is. When vibration is completely absent the results of the social survey showed a zero response from the public at 40 dB LAmax S That well and truly reinforced the (inaudible) policy, and it has carried through many railways—Docklands Light Railway, its several extensions, and through to Crossrail, CTRL and it is well established, having been tested, in fact, twice in Parliament and in public inquiries with arguments from local authorities and others who felt it should be reduced to a lower number, and it has always come out unscathed from whatever tribunal it has been tested in.

2351. Finally, on that point, can I understand this? Is the 40 dB ground-borne noise a target that Crossrail seeks to achieve or is it something else?

*(Mr Thornely-Taylor)* What it is not is just a numerical target. Mr McCracken was concerned that people would be going out with noise meters to see if it was 40 or not. That is not the way it works. It is a design standard that is used for selecting the basic track form of the system and for designing those lengths of the track which have to have special treatment—I mentioned the floating track slab—to meet the special requirements of things like recording studios, so where it bites is the moment that the permanent way engineers set about designing the track. After the railway opens, if there should be some problem somewhere, somebody complained and it was found to be above 40, or whatever the appropriate limit was according to the use of the building, then somebody might well do some measurements and see if there was a problem which could be rectified and bring the noise level down, but it is fundamentally a design principle given to the engineers when they start designing the railway.

2352. From your analysis, what is the likelihood of 40 dB being reached on the design which is to be adopted for Crossrail?

*(Mr Thornely-Taylor)* It is probably quite well illustrated on my next two slides. If you go to slide 22 first, which says that, if you do set the 40 limit for the permanent way designers, you will end up with much better than 40 in large areas of the railway.

2353. Slide 23 is another of those contour maps—we saw one this morning—and the green contour, which is the biggest one there, is only 25 and even that vanishes in some places; so that is an example of what you get when your starting point is: "Tell the engineers we want no more than 40 wherever possible." So they choose a rail support system of very high resilience, very good vibration isolation performance, and they choose that for the whole railway even where you might not strictly have needed it. I remember having an argument during JLE design as to whether we should continue it under the Thames, because nobody was going to hear it there, but we did. There is vibration isolation even under the Thames; so it is a very important point. It is not uncommon to have people, either a Petitioner at a Parliament Bill or objector to a transport and works order saying 40 is too big a number, we need a smaller number, but it is always essential to read the words that go with the number. There are the railways in the world that use smaller numbers, but the words that go with the number are much less effective than the approach which Crossrail takes, which, I believe, is far and away the best approach, that you use it to the design standards from end to end and you do get a much better railway as a result.

2354. We will leave ground borne noise now and move on to slide 24. There are other kinds of noise, obviously, arising from a railway scheme of this kind. One of the important ones is fixed plant, and the biggest pieces of fixed plant are tunnel ventilation fans, which compared with the fans which most people come into contact with, are enormous. They, like all fans, generate noise and because it is one of the oldest sources of noise that has been addressed in the control of environmental noise, there has long been a British standard which is appropriate for assessing this kind of source. What I am talking about is continuous unvarying noise that occurs as long as the plant is running, and it might be running at night, but not always. This uses a much stricter method of assessment, largely because this kind of noise can be more annoying than other kinds, and, particularly if it occurs at night, one has to be very strict. We use the LAeq scale that I have already described, but except in the very rare cases where the noise could be described as completely characterless, by which I would mean the noise of a waterfall or something like that, it has no tones in it, no rattles or clinks or clanks or anything like that, we add a notional five, a sort of tax put on the LAeq for the fact that this kind of noise can be more annoying, and then we compare it not with the baseline LAeq, as is normally the case, but we compare it with something new, which I will have to explain, called LA90.

---

An introduction to Groundborne Noise and Vibration

---

2355. When I was introducing the LAeq scale a few minutes ago I said when sound varies it is quite a lot of the time relatively low and goes up as a plane goes by or as a car or a lorry goes by so that it would be very cumbersome to say it is this level for such and such a percentage of the time, that level for such and such a percentage of the time. I was in fact anticipating the fact that we do sometimes talk about noise climates—the word that was used—in terms of statistical percentile, and the LA90, strictly speaking, is the level exceeded for 90 per cent of the time. It is actually the troughs in a rising and falling sound-scape, if you put it like that. If the peaks, the crests of the waves are the passing vehicles—passing trains, passing aircraft—LA90 represents the troughs, which are when there is no vehicle or aircraft passing and the moment is quiet, that is the LA90.

2356. In slide 25, you can see there is the LA90 right down near water level. I have taken the Lake District nomenclature off, but it is the same chart. The most important thing about British Standard 4142 is that we are comparing that orange line at the top LAeq, with the tax on it, the five dB added, against the LA90, which is way below it. We are not the comparing like with like in a way and we are looking at what is always an index of higher value than the yardstick against which we test it, and on slide 26 here is the important part of the standard. It says that if the LAeq with its five dB tax on it, which we call the rating level, is about 10 units greater than the background expressed in the LA90 you can expect complaints from people. If the difference is only five, and because of that tax on the LAeq that actually means the real physical LAeq is the same as the background LA90, the standard says it is marginal; and it also says that if it is more than 10 dB below the LA90, which effectively means it is completely inaudible, then, not surprisingly, you can say confidently complaints are unlikely.

2357. **Mr Elvin:** We then move on to mitigation. I think we are going to have to ask you to skim through this fairly rapidly so that we can make sure, given the Committee's other commitments, we can manage to fit in Professor Mair as well. I would be grateful if you could take this relatively shortly, please.

**(Mr Thornely-Taylor)** The ways of mitigating construction noise—obviously the best thing to do is to find quieter methods of working, and, indeed, over the years quieter methods of working have come about—selection of quiet plant, use of noise barriers, noise enclosures for noisy machines, monitoring and management. I have already talked about noise insulation and temporary rehousing schemes. All of this is subject to the provisions of Control of Pollution Act, section 61, under which contractors will be required to seek consent and local authorities in granting that consent have the power to ensure that the best practicable means have been used to reduce the noise.

2358. Slide 28 is for vibration. Not so many opportunities, but again methods of working and, by monitoring and management, levels of received vibration are controlled, and in section 61 vibration is technically noise and subject to the same provisions that I have just outlined.

2359. Slide 39, the surface railway is mitigated with line-side noise barriers, and I have already mentioned the noise insulation scheme.

2360. Slide 30 takes us to ground-borne noise and vibration, which I have described in some detail. There is no need to take time on that.

2361. Slide 31, the fixed plant. That is the type of source that is assessed using that BS 4142 method when you are comparing the LAeq with the LA90. Where there is enough space, and there are limits sometimes, noise attenuators, which are really great big silencers, are installed on the fans, in the vent shafts, and, where it is not a tunnel vent fan but it is an air-conditioning plant at the station or something of that kind, there are well-established acoustical engineering principles that are used to control noise. Was that quick enough, sir?

2362. **Mr Elvin:** Can I ask you one final question, Mr Thornely-Taylor. It relates to a question that you were asked this morning about what you could achieve if the tunnel were dug deeper in terms of reducing noise?

**(Mr Thornely-Taylor)** It is a very unfruitful approach to reducing noise. You would have to double the depth of the tunnel to get about a five dBA improvement, if you stay in the same kind of soil. It is actually not as simple as that, because in almost all cases if you significantly lowered the tunnel—for example east of Tottenham Court Road that we were considering this morning—the tunnel is in London clay, would be in London clay if it were constructed. Lowering the tunnel would take it down into another formation known as the Lambeth Group, which is a much more complex mixture of gravel and clay and changes both the characteristics of the tunnel as a source and its propagation mechanism, but it is a very inefficient way of reducing ground-borne noise to lower the tunnel.

2363. **Kelvin Hopkins:** Could you roughly say the extent to which quiet-rail technology does reduce noise? If one took a tube tunnel, for example under a building, and it was making quite a lot of noise, if you could bring technology in how significant would be the noise reduction in terms of decibels?

**(Mr Thornely-Taylor)** The difference between an old line, and it may happen with re-railing of existing tube lines—the effect of putting in new resilient support rails would bring the ground borne noise levels down by about 10 to 15 dBA L<sub>Amax</sub>, which is significantly better than halving the level. It would drop the number of people exposed to more than 40, which currently at the last count it was 56,000 people, down to a very small number, almost zero.

---

**An introduction to Groundborne Noise and Vibration**

---

2364. What about building for worst case scenarios? For example, I travel by train every day and almost every train I travel on has wheel flats which sound like a metal hammer on a rail, and that would make a significant difference to the noise you hear, but if you were to do a worst case scenario you would have to pay much more attention to noise reduction?

*(Mr Thornely-Taylor)* That is a very important point. Part of the engineering procedure that I was touching on involves having a policy for controlling, not just the wheel roughness and the occurrence of wheel flats but also rail roughness. I did briefly mention that the track through Westminster station has started to rumble a bit, and that is because the rail is in need of regrinding, a normal maintenance procedure, but certainly Crossrail, as JLE has, will have a procedure for monitoring and rectifying defects in the running surfaces of vehicles.

2365. I am not suggesting you put freight through the tunnel, but with modern trucks, we are not talking about Thomas the Tank Engine trucks, we are talking about modern technology, is there a significant difference in the noise between those and passenger trains?

*(Mr Thornely-Taylor)* The critical thing is the weight of the axle that is below the primary spring. With modern trucks, as you call them, that may be is not as high as it was in old-fashioned vehicles. It tends to be higher than passenger vehicles, and that has to be taken into account, but not more than possibly a 50 per cent increase, something like that.

2366. One other question about cost. Is there a significant cost increase in putting quiet rail technology in than just concrete-layering or whatever?

*(Mr Thornely-Taylor)* I do not think anyone would contemplate putting in track nowadays that did not have the fundamental resilient support, the resilient base-plate that I mentioned, but where the cost comes in is moving to floating slab track. As a rule of thumb that doubles the cost of the track work, which the last time I had a costed figure, which was the Jubilee line extension, so it is a few years ago, was about a million pounds per track kilometre. It would be a substantially higher figure now.

2367. **Mr Elvin:** I wonder, Mr Hopkins, if I could also refer you to information paper D10, which has something in it about the maintenance regime which will be expected in relation to the track. In that case, can I thank Mr Thornely-Taylor and I will call Professor Mair to deal with the settlements.

---

---

An introduction to Ground Settlement

---

Professor Robert Mair, sworn

Examined by **Mr Elvin**

2368. **Mr Elvin:** We are following the same procedure and you should be getting paper copies.<sup>3</sup> While that is happening, Professor Mair, I will introduce you. You are Professor Robert Mair. You were appointed Professor of Geotechnical Engineering in Cambridge in 1998. You are Head of Civil and Environmental Engineering and since 2001 you have also been a Master of Jesus College?

**(Professor Mair)** That is correct.

2369. Your career has been in both academia and dealing with settlement geotechnical issues in the professional sector. You have also founded and run a consultancy dealing with such matters?

**(Professor Mair)** Yes, that is correct.

2370. You worked continuously in industry from the early 1970s to the late 1990s with a short break for academic work.

**(Professor Mair)** That is right.

2371. Your PhD was in tunnelling in soft ground, and your tunnelling expertise began with that in the early 70s and has continued through research and giving practical consultancy advice since that date?

**(Professor Mair)** Yes.

2372. Can you give some examples of the projects that you have been concerned with, with particular emphasis on rail projects?

**(Professor Mair)** I spent a lot of my time on the Jubilee line extension which, as everyone knows, was completed about 10 years ago. As well as the Jubilee line extension I was involved with other projects in many countries, railway projects in Bologna, in Florence, in Rome, and a number of other countries, Singapore and Hong Kong as well.

2373. You were awarded the British Geotechnical Society's medal in 1980 for your work on tunnels, the Institute of Civil Engineers Geotechnical Research medal in 1990 and the gold medal in 2004, you have been a board member of the International Society of Soil Mechanics and Foundation Engineering and for the last 10 years Chairman of its technical committee on underground construction in soft ground?

**(Professor Mair)** Yes, that is correct.

2374. And you are a Fellow of the Institute of Civil Engineers and a Fellow of the Royal Academy of Engineering?

**(Professor Mair)** Yes.

2375. That is, of course, the shortened version, but I think it does at least short justice to your eminence in the field, if you will forgive me for taking it that shortly. Professor Mair, can I then ask you to

present your material? The Committee will need to rise shortly after four o'clock. Can you bear that in mind when you go through your material, please?

**(Professor Mair)** I will bear that in mind. I am going to describe the principal factors concerning ground settlements and its effects. Slide two gives an outline of the presentation. I will start with an overview about settlement, and I will then talk about ground investigation and geology and ground settlements due to tunnelling, and I will also describe, reasonably briefly, tunnelling methods, and then I will talk about settlement and building damage assessment and give some examples of building response to tunnelling.

2376. Slide three really addresses the principal point as to why settlement occurs. Crossrail will require excavation of large volumes of ground to form the tunnel shafts and deep boxed basements, and the ground around these excavations will require some form of structural support. In the case of tunnels and shafts, there will be linings and in the case of deep basements there will be walls. The excavation and installation of that support to the ground inevitably produces small controlled ground movements, and it is the ground movements that cause settlement of the ground surface and settlement of buildings.

2377. I should emphasise that the level of settlements that we will be talking about in this context generally are of the order of tens of millimetres. Ten millimetres is approximately half an inch, which is very much less than mining subsidence, which can often be of the order of metres. I just want to emphasise that point.

2378. Slide four leads on to the assessment of the effects of settlement, and that is really all about the assessment of the risk of damage to buildings. The Crossrail process is a development of the same process that has been used on the Jubilee line extension and on the Channel Tunnel rail link and, indeed, on many other projects worldwide. It is intentionally a conservative approach, and, if necessary, protected measures can be designed to protect buildings at risk.

2379. Slide five shows just one example of the level of detail which has been involved in the ground investigation and establishing the geology for a Crossrail project. You will see the blue dots are each representing bore holes. This is in the area of Liverpool Street station. To give you an idea of the scale, each of the squares on the plan there is representing 50 metres—so extensive coverage of the area with a lot of bore holes to establish with a great deal of confidence the geology of the whole project. This, of course, is just for Liverpool Street station.

2380. Slide six shows a geological section, a longitudinal section, through part of the project. What you are looking at here is Farringdon

---

<sup>3</sup> Committee Ref: A34, Ground Settlement by Professor Mair (LINEWD-RJM01-001 to -048).

---

### An introduction to Ground Settlement

---

station on the left-hand side of the picture and the right-hand side going east, right along to the right-hand side, to the Isle of Dogs station area. About seven kilometres we are looking at here from left to right. It is, of course, highly exaggerated scales vertically. The different colour strata there are the different main geological strata. For example, the London clay, the one in brown, is about 25 metres thick in that picture—so this gives you just a feel for the geology—and the white line, the pair of lines going all the way through the section there, are the actual Crossrail tunnel alignment.

2381. Slide seven then deals with the issue of settlement, and I should immediately emphasise that this is a highly exaggerated drawing, but it illustrates the point that when a tunnel has been driven or constructed at depth below the ground surface there is a settlement trough that will develop at the ground surface ahead of the advancing tunnel, and, as the tunnel passes beneath, there will be a transverse settlement trough. I will use a pointer to point on the screen at this point. This is a sort of transverse settlement. So by the time the tunnel has passed beneath the point you are left with a settlement trough of that sort of shape, a transverse settlement trough.

2382. If we go to slide eight, you will see that same transverse settlement trough, again a grossly exaggerated scale, you will see the tunnelling beneath and you will see the settlement trough which occurs at the ground surface. An important parameter we use in tunnelling is called the volume loss, which is the volume of the settlement trough. All of the settlement troughs added up, the volume of that trough, divided by the volume of the tunnel expressed as a percentage. It is a means of expressing how such settlement occurs during the tunnelling process.

2383. Slide nine then looks further at volume loss, and it also illustrates the effect of the depth of the tunnels. You see here two tunnels. The one shown in red is a tunnel at a depth of 20 metres—you can see the scale on the right-hand side showing that—and the red settlement trough above that tunnel, again highly exaggerated scale, shows the sort of settlement that you would expect for that tunnel, one of 20 metres depth, showing a maximum settlement of about 15mm directly above the tunnel, whereas the deeper tunnel, which is the tunnel in black, which is at 30 metres depth, the settlement trough for that is wider and less settlement and only about 10mm above the tunnel. So in essence the deeper the tunnel goes the less is the maximum settlement above the tunnel, although the trough actually gets wider with a deeper tunnel. Slide 10 illustrates the effect of diameter and here we are looking at two examples of a tunnel of 30 metres depth: one is a 4.5 metre diameter tunnel, a typical tunnel in the existing London Underground system, and that produces a settlement of about 10mm maximum settlement, as you can see, above the tunnel, and the red tunnel is a six metre diameter tunnel and that produces a

maximum settlement of 15mm. So in essence a bigger diameter tunnel produces a larger settlement, which is perhaps what we would all expect.

2384. Slide 11, I will briefly describe some of the principal tunnelling methods which will be used on Crossrail and for which there is a great deal of experience already. The first one illustrated on slide 11 is the use of open face tunnel boring machines, TBMs, which is the abbreviation used for tunnel boring machine, and what you can see here is that the actual tunnelling machine is, in essence, a mechanical digger which you can see here, which is digging out the clay from within the protection of a cylindrical steel shield which protects the workers from any possible fall or instability of the ground about, and looking in this direction we are looking from within the tunnel looking towards the tunnel face. This face of the tunnel, the ground is being protected with breasting plates and you can see in the photograph below the same thing—this is taken from within the tunnelling machine looking forward—and you can see the exposed clay just down here. This part is exposed clay and this is called open face tunnelling because it is precisely that—the face of the ground that is being exposed is completely open; it is partially supported by its upper part but otherwise it is completely open. This open faced tunnelling has been widely used for tunnelling in London clay because London clay is such a strong, competent soil, and this technique will be used from Paddington to the Fisher Street shaft for the Crossrail project.

2385. Slide 12 shows a closed face TBM, and this is a picture of an eight metre diameter closed face tunnel machine emerging. This is one of the machines used for the Channel Tunnel Rail Link and this is a view of the closed face machine where, in essence, there is no open unsupported soil—it is completely supported at all times and that is why it is called a closed face machine. The technology used, specifically, is called an earth pressure balance machine. Slide 13 gives us bit more detail of an earth pressure balance machine and the points to take note of here are, first of all, right at the very front, number one here is the cutter head; that is the view we saw emerging in that previous slide. That is the cutter head, which is a big rotating wheel, cutting the soil. Point number three is the TBM skin, which is really the shield that I described earlier, the big cylindrical shield that supports the ground. Another important aspect of the machine is number five, the screw conveyor, and this allows the pressurised soil in here, which is under high pressure because the face has been supported with this high pressure, to come up the screw conveyor and then the pressure is dissipated and drops on to a conveyor belt and the spoil is taken away. The lining is a very important part of the tunnelling process and the actual linings are shown in grey here; they are erected continuously at the back of the machine and these linings support the ground permanently. The lining segments can be seen being brought into position here, to be erected inside the machine.

---

**An introduction to Ground Settlement**

---

2386. The next slide, 14, shows a view from inside the tunnelling machine and here are the lining segments being brought along to the front of the machine and they will in due course be erected to support the soil. Slide 15 shows just that process. This is looking at the very back of the machine. You can see the exposed clay here, this is actually the exposed ground and this is a fully completed lining here and this segment has been erected and another one will very shortly be placed above here, completing the full circle of the tunnel lining.

2387. Slide 16 illustrates a quite different technique which is the use of sprayed concrete linings to support the ground. Sprayed concrete, as the words suggest, is the use of concrete that is actually sprayed in order to support the ground. So this is a very versatile technique. So the excavation can be made—this is no longer using a tunnelling machine, as I have been describing earlier—and if the ground is competent and strong enough, as is the case in the London area, then as soon as the excavation has been made concrete is sprayed on to the surface of the ground and that concrete goes hard very rapidly and it forms a very effective lining to support the ground. And here you can see how it can be used in a very sequential way; that the final tunnel to be constructed is shown here, but it can be built in parts, effectively. So the first bit of the excavation, which is shown on page 17, is when the top heading here, this part here is excavated only. So looking sideways along the tunnel that one metre of excavation just at the very top heading part is excavated. Then the next slide illustrates the next bit of the excavation where that part is done and the sprayed concrete is being applied all the time as this is done. Then the next slide shows the bottom part of the next metre of excavation being done for both the top heading and the bench, and the following slide will show the invert being excavated. Now there will be sprayed concrete all the way around, so this will be an egg-shaped first part of the tunnel, temporarily formed like this. Then a very similar procedure takes place, that the top heading has been excavated, as shown here, and then the next line will show the bench being excavated, and then the next slide will show the same thing happening for a further metre in both the top heading and bench. Then finally the invert will be excavated and all the time during that process the temporary central wall is demolished and you end up finally with the complete tunnel. That is quite a complicated sequence I have described, but it is in order to explain how the very large tunnels can now be constructed in competent ground, using this technology of sprayed concrete. There is considerable experience of it; it has been used extensively for the Jubilee Line Extension.

2388. Slide 26 shows the view of that very process I have described, the first left-hand part with the temporary wall, or the egg-shaped tunnel I described, and the right hand part is being constructed and that temporary wall will soon be

demolished leaving the entire completed tunnel. This is a nine metre diameter tunnel constructed for the Jubilee Line Extension.

2389. Slide 27 summarises the principal advantages of sprayed concrete linings. It enables excavation of large tunnels in smaller parts, and those smaller parts are what I was demonstrating in the previous slides, taking out a piece of ground one at a time. It enables early application of support, which is important—the sooner the support is provided to the ground the better from the point of view of reducing movements. It enables construction of non-circular tunnels—that is a very important point—so that the tunnel no longer has to be circular, it can be perhaps more elliptical in shape rather than circular. It is very useful for construction of openings between tunnels. It allows rapid mobilisation of plant and equipment; it is a highly mechanised method and it has great programming and sequencing flexibility, and I should emphasise that it was used very extensively and very successfully on the Jubilee Line Extension, principally at Waterloo and London Bridge Stations and also it has been used on the Channel Tunnel Railway. There is considerable experience of its use.

2390. Slide 28 moves on to the process of assessment of settlement and there are essentially three stages of that. Stage one is based on simple criteria which themselves are based on settlement and slope values to eliminate buildings subjected to minimal effect. So this is a screening exercise. So stage one would be to look at the likely settlement caused by the product and to eliminate those buildings that are only going to be subjected to minimal, very small effects. Stage two is a conservative assessment of potential damage to buildings and that is based on distortions that might be caused by the “green field” displacement. I should explain that by green field we would mean the settlement that would take place due to the tunnelling project as if there was a green field above and no buildings; so, unaffected by the buildings. Then there is a third stage which may apply in certain cases where a much more detailed assessment is undertaken to determine the risk of potential structural damage and the design of protective measures if they are necessary. The considerable experience on the Jubilee Line Extension has confirmed that the results of the stage two process are conservative. A number of very safe assumptions go into that process and we know that they are conservative. Slide 29 then addresses the question of risk categories. These risk categories relate to the level of potential damage to buildings and this slide shows three categories listed under the left-hand column: damage risk category zero, risk category one and risk category two. The description of the typical damage associated with these risk categories is shown on the right-hand side. So when it is category zero, which is negligible, the typical damage associated with that negligible risk category means that there are only hairline cracks, which are very small indeed, less than about 0.1mm; in other words, barely visible to the eye. The next category,

---

An introduction to Ground Settlement

---

risk category one, very slight, is that there are fine cracks, usually just in the plaster and they might be up to about 1mm, which is something like where you can get a thumbnail into, just, depending on the thickness of your nails; a mm is still a very small amount. The category two is slight, where there are potentially wider cracks, but the point is they are very easily filled and probably would need some redecoration and the cracks would be visible and you would have to redecorate and repaint. The point of this slide is that all three of these categories are only of potential aesthetic significance.

2391. Slide 30 goes up to risk categories three, four and five, and these are of potential structural significance, so these are distinctly different from the previous three categories, and in these cases there may well have to be some action taken. For example, category three, which is known as moderate, the cracks may well require patching and there may have to be repainting and replacement of parts of the external brickwork of the building and doors and windows may be sticking and the crack widths are really significantly wider than the lower categories. Categories four and five, severe or very severe, there could be major structural damage. The important matter is that categories three, four and five, which are of potential structural significance, will not be allowed to occur on the Crossrail project, as they were not allowed to occur on the Jubilee Line Extension project. Slide 31 shows the stage one process I have described. What you see here is the Liverpool Street Station area, you see settlement contours, and the numbers there illustrate the estimated magnitude of the settlement. So where you see minus ten, for example, minus 10 means that that is the contour of 10mm of settlement and in the more central part, immediately above the station, you will see some quite large numbers—in fact the largest is 100, which means potentially that there could be 100mm of settlement there. The point of this screening exercise is that outside the 10mm contour no other buildings are considered for the stage two process. So we only proceed to stage two inside the yellow shaded part; outside the yellow shaded part all buildings are eliminated.

2392. **Mr Elvin:** Professor Mair, the fact that something appears in the yellow zone does not mean that significant damage will occur but you go to the next stage in the assessment.

**(Professor Mair)** Indeed. So the next slide will now talk a little about the kinds of deformation of masonry structures and what is illustrated here is in terms of a brick wall. There are two brick walls shown here and what is important from the point of view of assessing potential damage is differential settlement. If a brick wall settles completely uniformly then it will experience very little damage, but if it experiences differential movement or curvature then potentially cracking will occur. There are two types of deformation mode shown here: on the left-hand side you will see a wall experiencing sagging deformation, which I hope is self-explanatory. You will see that the bottom part is

potentially experiencing rather more cracking than the top part. Conversely, on the right-hand side you see a wall that is experiencing hogging curvature, where the cracking is more severe on the upper part of the wall than the down part, and it is the case, and we know from experience, that buildings and walls are more susceptible to damage when they experience the hogging mode of deformation rather than the sagging mode, and that is largely because the cracking takes place up higher up in the building and is unrestrained, whereas in the sagging case the cracking is taking place near the bottom of the building, near the foundations and may well be restrained by the foundations. These two forms of deformation are shown again on the next slide, number 33, and I must emphasise again that this is highly exaggerated but you will see a tunnel down here and this is a settlement trough at the ground surface in a highly exaggerated form with a building being forced to follow that settlement trough. If the building follows that settlement trough this part of the building will be in sagging, and that is what that is showing, and this part of the building is in hogging. So we find it is very important to distinguish the sagging behaviour of the building from the hogging behaviour. Slide 34 goes through to the stage two assessment and the results of that. Again the Liverpool Street Station, you will see the yellow contours I showed you earlier.

2393. **Chairman:** I am sorry; we will have to adjourn the Committee. We will be back in 15 minutes.

*The Committee suspended from 4.02 pm to 4.16 pm for a division in the House.*

2394. **Chairman:** Mr Elvin?

2395. **Mr Elvin:** Professor Mair, you were just coming on to the assessment results of Liverpool Street because the Committee had seen the stage one elimination and this is the next stage. **(Professor Mair)** Yes.

2396. **Mr Elvin:** If you could continue then, please? **(Professor Mair)** Yes, this slide shows the same Liverpool Street Station area and you will recognise that outside the yellow contour, the grey area, that had been eliminated as part of the stage one process, and then inside the yellow area had all been considered at the stage two process, and that considers much more carefully the behaviour of each building as to whether it, for example, is subjected to sagging deformation or hogging deformation, as I described earlier, and then the level of strain is calculated in the building. The level of strain is very important because that links directly to the category of potential damage. So as a result of this stage two exercise many of the buildings are eliminated as experiencing damage no worse than “slight”. So that what we are left with for consideration for proceeding to stage three is what is shown in the red hatched area on this slide. So only within the red hatched area are buildings that are potentially—and I should emphasise the word “potentially”—which

---

An introduction to Ground Settlement

---

may be subjected to damage categories of “moderate” and above. That is damage category three or above. So the stage three process takes those buildings within those red shaded areas and subjects them to an extremely detailed assessment process.

2397. We will come and show the Committee briefly at the end how the various assessments at each stage compare to what actually is found to occur when the work is actually carried out. You have produced a couple of graphs which we will come to at the end? (*Professor Mair*) Correct, yes.

2398. Can you move to slide 35, Professor. (*Professor Mair*) Slide 35 summarises the volume loss experience. You might recall the diagram shown on the bottom right part of the slide. The volume loss defines the magnitude of settlement in the settlement trough, and it is expressed as a percentage of the whole volume of the tunnel. This slide shows actual quantities of volume loss experienced on previous projects, and on using earth pressure balance machines, in the Channel Tunnel Rail Link, a project fairly recently completed, the volume losses were in the range of 0.5 to 1.0 per cent, and for the Jubilee Line Extension, when earth pressure balance machines were used, a very similar range was measured. So we have a lot of confidence in that range of volume losses using earth pressure balance machines. Using sprayed concrete lines, the SCL technique, for the Jubilee Line Extension, the range of volume loss was 1.0 to 1.5 per cent. Those are the actual measured and observed volume losses for previous major tunnelling projects. The Crossrail assessments is of what might happen to buildings, based on the following assumptions, a volume loss of 1.7 per cent for all of the running tunnels and a volume loss of 2.0 per cent for all of the stations, and you will see that those figures, 1.7 per cent and 2.0 per cent, are significantly higher than the figures that were actually seen and measured on the Channel Tunnel Rail Link and on the Jubilee Line Extension.

2399. Does that mean that the settlement assessments that have been assumed for the Crossrail assessment have therefore been based on conservative assumptions with regard to volume loss?

(*Professor Mair*) That is correct. Slide 36 summarises some general conclusions from the stage two settlement assessments that have been undertaken for the Crossrail project. The first is that for buildings that are affected by the running tunnels alone, that is all the tunnels between the stations, the potential damage category is almost entirely “negligible” to “slight”, so very, very small levels of damage for all buildings affected by the running tunnels only. For buildings close to shaft sites the potential damage category is generally in the “slight” damage category, occasionally the “moderate” category. At stations, a large proportion of the buildings are in the “moderate” or “severe” potential damage categories. I should emphasise the word “potential”. For that reason, stage three assessments will determine the need for

protective measures. So the overall conclusion from the stage two assessments that have been done for the Crossrail project is that the buildings near stations require more attention than elsewhere.

2400. Slide 37—when the stage three settlement assessment process is completed and a building is still identified as being potentially at risk there is a series of protective measures that can be taken, and these are summarised on this slide. Firstly, there are what we call at-source measures which really means that actions can be taken from within the tunnel itself or from within the deep excavation. In other words, particularly when sprayed concrete lining technology is used, there can be actions taken to minimise the ground movements taking place from within the tunnel. The second category of protective measures are ground treatment measures. These involve improving or changing the engineers’ response of the ground by grouting. By “grouting” I mean injecting liquid cement into the ground, and I will be explaining that shortly. The third category are structural measures where you can increase the capacity of a building or a structure to resist or modify or accommodate movements. The kind of thing that is done is steel tie rods, for example, can be placed in certain masonry buildings to achieve that.

2401. But the next slide, slide 38, will illustrate the ground treatment measures that can be used, and I am going to describe now the principle of a technique known as compensation grouting. You will see that what this slide shows is a building on shallow foundations near the ground surface and a tunnel being constructed below that building.<sup>4</sup> The settlement that might have occurred in the absence of any protective measures is shown in this dashed line here which in this particular example might be severe settlement if no protective measures were taken. There are different ways of doing compensation grouting, but typically a shaft would be excavated in the ground outside the building, some distance from the building, and from that shaft grouting tubes would be installed into the ground, drilled into the ground, and all this would take place long before any tunnelling. Then during the actual tunnel construction process, while the tunnel is being constructed, liquid cement (that is grout) is injected through those tubes in such a way as to achieve the building only experiencing slight settlement. So that constantly during the actual tunnel excavation grout is injected and it is a very effective means of protecting buildings.

2402. The next slide, slide 39, shows just a little bit detail as to how these grout tubes can be installed. I will not spend much time on this but just to show the commonest technique is from a shaft, as I explained earlier, but you can also do them from a much shallower excavation, a very shallow hole in the ground, and in some cases you can install these grout tubes directly from the ground surface below a

---

<sup>4</sup> Committee Ref: A34; Ground Treatment Measures: Principle of Compensation Grouting (LINEWD-RJM01-038).

---

An introduction to Ground Settlement

---

building and, exceptionally, they can be installed from an existing tunnel like this, but the principle really is that there are many ways of installing these grout tubes in the ground.

2403. Slide 40 shows the actual process of compensation grouting going on in that you will see in the lower photograph a person in the shaft and he is actually inserting a grout tube into one of those drilled grout tubes that I described earlier, and that will enable grout to be injected, liquid cement to be injected between the tunnel and the overlying building to protect that building from any excessive settlement.

2404. **Mr Elvin:** I think you have got some photographs of a well-known example?

**(Professor Mair)** A well-known example now follows, slide 41. This technique was used with enormous success to protect the tilt of Big Ben for the Jubilee Line Extension during the construction of Westminster Station right opposite Big Ben, shown here, and also the Jubilee Line Extension tunnels that run along Bridge Street between Westminster Station and the Houses of Parliament. There was a significant risk of Big Ben tilting in a northerly direction towards the construction of the new station. So a shaft was constructed in Bridge Street. It is shown circled in yellow on the photograph here. And the left-hand photograph is a photograph taken at night-time of a drilling rig being lowered into that shaft, so that drilling rig goes right down into the bottom of the shaft and then grout tubes were installed horizontally for a distance of about 50 metres from that shaft right underneath the foundations of Big Ben. Then throughout the construction of Westminster Station and of the tunnels along Bridge Street, for a period of about 18 months, liquid cement periodically was injected through those grout tubes to control the tilt of Big Ben, and that was done by having very comprehensive instrumentation attached to the clock tower so that every small movement of Big Ben was measured and the grouting was done to protect that. This technology was used with great success not only for Big Ben but for other buildings on the Jubilee Line Extension project.

2405. What I would just like to do, Professor Mair, so that we do not take too much more time with the Committee, is to look at the conservative nature of the various stages in the assessment and you have got two examples. The first is the very attractive Elizabeth House which backs onto Waterloo International Rail Terminal, it runs parallel to it. The entrance to Waterloo is just down to the left, is it not?

**(Professor Mair)** That is correct, yes.

2406. If we can skip over two slides to slide 44, you have there a graph which deals with assessment prediction and observation. Can you just describe briefly what that demonstrates?

**(Professor Mair)** Yes, there were two major tunnels and a third enlargement tunnel built directly beneath this building, Elizabeth House, and what is shown on this slide 44 are, first of all, the green line represents the settlement profile of that building undertaken as part of the stage two assessment process. So this graph is plotting settlement on the left-hand axis and the distance of 100 metres represents the whole length of that building Elizabeth House. The green graph represents the stage two assessment which assessed that the building could be subjected to something like 53 millimetres maximum settlement. Then there can be a stage three prediction which is a more detailed process, as I explained earlier, and the stage three prediction process for that building predicted that the movement of the settlement of the building would be just a little bit less than 40 millimetres and that is shown in the red line. And then finally the tunnelling was actually undertaken and when all the tunneling had finished the observed movement of the building is shown in those purple squares. The purpose of this slide is to illustrate two things. Firstly, that the original assessment process (that is the green line) was conservative and it over-estimated the settlement of the building. It is known to over-estimate it because of the conservative nature of the calculations. The second purpose of the slide is to show that the actual observed movement of the building turned out to be in pretty good agreement with the prediction that would be undertaken using a stage three more detailed process.

2407. There is then another example, Neptune House in Southwark near Canada Water. If we skip over to slide 47, does the Committee there see not the same graph but does one draw similar conclusions, namely that the further down the assessment route one goes, the closer it is to what actually happens?

**(Professor Mair)** That is correct and, in particular, the stage two assessment process, that is the green line, again is very conservative and over-estimated very much what actually happened to the buildings during tunnelling.

2408. Professor Mair, if I could ask you to be so kind to go to your final slide and to conclude with that, please.

**(Professor Mair)** My final slide, slide 48, really summarises what I have been presenting about ground settlement and its effects. I think the first point is that there is considerable experience in the London area from the Jubilee Line Extension and the Channel Tunnel Rail Link, and for both those projects very little building damage was recorded. The second point is that the methodology that I have described for settlement assessment is proven to be very robust and conservative. The final point is that there are protective measures available and those have been well-proven and they are very effective. That completes my presentation.

2409. **Mr Elvin:** I do not know whether the Committee has any questions.

---

---

An introduction to Ground Settlement

---

*Examined by The Committee*

2410. **Kelvin Hopkins:** I am very interested in what you say but the extent of deflection on the ground level is much greater than I would have expected. Some boring techniques cause much less settlement than others. What can you do underground? I would have thought, I forget the technique now, that frontal boring would perhaps be less of a problem than the sprayed cement system because of a less exposed surface, I do not know. That is one thing. We have been told that more deflection of the ground underneath a building could cause serious cracking of the building. I am just interested to know.

**(Professor Mair)** Well, the first point you make is that, yes, the principle of the earth pressure balance machines, which is the sort which I described, applies a positive high pressure to the face of the tunnel all the time during excavation so at no time is the face unsupported. That is shown in slide 12 here. Certainly it is extremely effective in reducing movements to small amounts. I think it would be fair to say that no technique at present really reduces settlement to zero, but this kind of technology which is very advanced and there is now considerable expertise with it, does reduce movements a lot, so you are right, face support certainly improves matters considerably. Your second point is to do with building damage and I am sorry—

2411. Deflection is what I was talking about, an inch and a half in my terms, 3.5 centimetres in yours, and that seems a lot to me. I know that concrete, for example, is very porous in deflecting pressures. I want you to reassure me that buildings will not be affected.

**(Professor Mair)** I think the key point is that concrete structures, brick structures, or any masonry structures are very sensitive to differential movement, so that if the building uniformly goes down by 50 millimetres, or perhaps two inches in old units, it may not experience damage if it goes down relatively uniformly. That example, Elizabeth House, was a very long building. It is about a 100 metres long and it did in fact settle 40 millimetres at its maximum, but it was very gradual so the actual differential movement in terms of how much each part of the building was experiencing different amounts of settlement was very low, and therefore Elizabeth House suffered absolutely no damage at all despite having the maximum settlement of 40 millimetres. So the real nub of the issue is differential settlement. If it is relatively spread out then it is not damaging.

2412. **Mr Elvin:** Professor, is that why when you go down the various routes of the stages, stage three is the most rigorous individual assessment of the individual buildings and what stresses they are likely to be experiencing?

**(Professor Mair)** Correct, yes.

2413. **Chairman:** Could I just come back, Professor Mair, although it is not the same as coal-mining subsidence, it is a similar set of activities and it is across geological structures which are already fitted with a range of other tunnels and accesses for everything from sewerage through to electricals and Tube lines and everything else. Clearly, as you showed on grid 34, where you had the red grid inside the yellow box system, the areas of probable damage or potential damage, it is still, by and large, guesswork. It is qualified guesswork, yes, I agree with that, very qualified indeed, as we heard from your outline at the beginning but still it is guesswork. I represent a constituency that gets all kinds of settlement damage and long line settlement damage. They are not dissimilar in any regard. What I wanted to ask, and probably Mr Elvin will answer this, I suspect that we are going to get many petitioners who are going to raise this particular matter, and I think your help and advice on some of the stuff you have given today might be very helpful indeed. One thing I did want to raise, though, was in relation to other types of structures which maybe used after the tunneling or alongside it. Are there any skin-to-skin workings on the structures which are going nearer to the surface where you will see where tunnels come together or emerge together pre the station or after the station in areas where you have got a large expanse of tunnels together, and you may leave or build structured walls where the two joints come in because, as you know from your engineering, skin-to-skin working has been seen to be quite dangerous in relation to movement and settlement and subsidence. The second element of that is is it envisaged that within the structure there will be any hanging roof bolt structures which might go at sections like that? Hanging roof bolt systems sometimes become the foundation structure themselves. I just wondered if any of those had been envisaged or are you aware if that has been envisaged in the construction?

**(Professor Mair)** I think, perhaps taking some of your earlier points first, when you referred to slide 34 and you have referred to the red hatched area where buildings were proceeding to stage three, the more detailed assessment, you use the word “guesswork”. I think—

2414. Qualified guesswork!

**(Professor Mair)** With respect, I would say we know a lot more about it than having to guess. In terms of having a very good idea as to the level of movement the buildings could be subjected to. It is much more than guesswork. We have a much better handle on with all the experience of the Jubilee Line Extension and indeed the Channel Tunnel Rail Link. Your second point was about when tunnels are in very close proximity when coming out of stations when they were perhaps rather close.

---

An introduction to Ground Settlement

---

2415. The reason for this is we paid a visit to Liverpool Street Station and we were taken down one of the platform lines at the station where we were shown a building which is almost certainly going to come down or is envisaged to come down which will form part of the new structure. I have got that in my mind and every time I see entrances and exits I see the possibility of other large buildings nearby the proposed demolition that may be affected simply by the demolition itself and structures that will be put in place. So as you can see from the whole plans of this, things come together and when they do they become bigger structures underground, and therefore they have a different effect that sometimes can go outside of these perimeters. As I said, I represent a constituency, it is different in that it is chalk and stone by and large rather than clay, but I know and I have learned from that that if a structure is somewhere between half a mile or a quarter of a mile away from the envisaged area, even though you have got a pillar of stone precisely for the protection of properties it may be because of another building being affected it can cause a settlement problem on a fault line somewhere else. That is why I am asking the question whether or not it has been taken into consideration.

*(Professor Mair)* I think it is fair to say that the conditions in London with the relatively soft soils we are talking about, soft in the sense of not being like stone or hard mining materials, and the effect of an excavation, for example, for Liverpool Street Station, as we are looking at here, a long way away from Liverpool Street Station, the chances of that are extremely remote. It is much more localised. When you are dealing with tunnel construction in soil, we have got a very much better understanding of the limits of how much the movement will affect other areas. I think in the context of unknown faults or something like that taking place, which can be a problem in other areas of the country, would not apply here. We can say that with confidence.

2416. You did accept in your earlier evidence things at a lower level can stop windows and doors opening and cause cracks down the walls inside buildings?

*(Professor Mair)* Yes, indeed.

2417. That is at the minor end of it but, as has been pointed out, at the major end of it, it does not have to be within the area, it can be outside of that. People see cracks in their walls and blame everything on everything, but what I am saying is that there can be occasions where because of the buildings, not just the excavation, the buildings which have to go at the cost of other buildings being taken out, it can have a causal effect on other things outside this grid.

*(Professor Mair)* It would be surprising if buildings outside the contours shown here were affected by the construction. I think that is the point I really want to say. We know enough about it that tunnelling at particular depths in the ground has an

effect on a certain number of buildings at the ground surface and beyond those would have minimal effects. We know that with considerable confidence from all the measurements that have been made on previous projects.

2418. **Chairman:** Again, I am not trying to give a straight comparison, but in my area we had coal-mining subsidence which had effect outside of areas, and the explanation which was given in those days was that nothing could have occurred in terms of cause by coal-mining because coal-mining had ceased to be operational some six years prior. Actually it was not coal-mining but the collapse of the tunnels where the coal was got from which had a repetitive effect throughout the strata. The reason I am raising this is because without any shadow of a doubt we will have other petitioners before us who will say, "It is alright for this to be stated by Crossrail, but we have got other evidence that shows it may affect our properties." I wanted to ask Mr Elvin, if at some point we need Professor Mair to come back, you could create that possibility?

2419. **Mr Elvin:** Sir, the whole point of doing this exercise was simply to give the Committee an introduction to this issue, precisely because the chances of it coming up again are fairly strong, and the whole idea is that we present more detailed evidence as and when necessary, whether in oral form or on paper.

2420. **Chairman:** We are extremely grateful. I have found this to be very enlightening and very helpful.

2421. **Mr Elvin:** It was intended precisely to give you an introduction to the sorts of issues that are likely to arise without seeking to answer all the questions in site specific areas.

2422. **Mr Brian Binley:** Just one point, you did say if anything happened outside it would be "surprising", were the words you used. Having lived to the age I have, I have been surprised at how many times I have been surprised! I just wanted you to qualify that word for me in terms of degree because it is rather subjective and I would like to have a slightly more objective view of the word "surprising" in relation to the various sites that we will be dealing with. We have looked at Liverpool Street but there are other sites. This is the reason I think the Chairman is saying will Professor Mair be around because we will be delighted for the help. But if you could clarify "surprising", forgive me, but it did seem just a little loose.

*(Professor Mair)* I would be happy to clarify that. I said that if tunnel construction caused significant movement to a building outside the contours that would be surprising; I would say it is extremely unlikely.

2423. **Mr Brian Binley:** I am slightly relieved by those words.

---

**An introduction to Ground Settlement**

---

2424. **Chairman:** That is very helpful. Is there anything further on that?

Committee for sitting late. I am afraid our time estimates were a little out but I hope it has been helpful.

2425. **Mr Elvin:** No sir, simply to say that there are more details on these issues also in one of the information papers, D12. Sir, can I thank you the

2426. **Chairman:** Can I say that the Committee will next meet for open public session next Tuesday at 10 am in this room. Thank you very much.

*Adjourned until 10 am on Tuesday morning*

---

**Tuesday 7 February 2006**

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Mr Philip Hollobone  
Kelvin Hopkins  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Sir Peter Soulsby

---

*Ordered:* that Counsel and Parties be called in.

The Petition of The Mayor and Burgesses of the London Borough of Islington.

Mr Richard Honey appeared on behalf of the Petitioner.

*Bircham Dyson Bell appeared as Agent*

2427. **Chairman:** Today the Committee is hearing the petition of the London Borough of Islington. May I remind everyone when addressing the Committee today and placing documents before the Committee that they are allocated a reference number, and please refer to the document by its number in your statements to ensure that transcripts of the proceedings are as clear as possible? I will now ask Richard Honey to make the case for the London Borough of Islington, for whom he is acting as Agent. Just before I do that, Mr Honey, may I bring in Ms Lieven?

2428. **Ms Lieven:** Sir, I think the agreement was—and I have cleared this with Mr Honey—that I would make a short factual opening statement explaining what the Promoters were proposing at Farringdon Station, so that the Committee would understand factually what the position was before we come to hear the Petitioner's arguments to the Committee. I am not doing it to gain advantage, I am doing it because I hoped it would help the Committee to understand what is being proposed.

2429. **Chairman:** That is perfectly acceptable, Ms Lieven. Before you do, Mr Honey I understand that one of your witnesses, one of your experts today has been taken ill and has had to go to hospital. Would you please send him our regards for a speedy recovery? You are in a difficult position at the moment on that particular element, but I hope that you can rectify that situation during the day.

2430. **Mr Honey:** Thank you very much, sir. I hope it will not cause too much trouble for the Committee today because there are two issues which we propose to put before the Committee, and the first of those can be dealt with entirely today and we can go through the evidence and make closing submissions on that, and I understand that there will be no objection to that from the Promoters, and I am grateful for the Committee's indulgence in relation to that and I hope we can come back before too long to call Mr Woodburn and conclude the second part of the case.

2431. **Chairman:** Ms Lieven?

2432. **Ms Lieven:** Thank you very much, sir. Before I start the opening may I say on document numbers that today is the start of what I hope is a brave new world.

2433. **Chairman:** We actually hope that it is every single day!

2434. **Ms Lieven:** I cannot achieve everything, sir, but we are hoping so on document numbers. The system from now on is that the Promoter's documents will have the prefix P and will simply be numbered sequentially as they appear before the Committee. It is not high tech but we hope it will work. The first document will be P24 and we will renumber the ones that you have already had; but we are starting today with P24.<sup>1</sup> Documents put in by Islington will have an Islington code number, which is ISLNLB, Islington London Borough, and then the number of the document, so 1, 2, 3 and so on.

2435. Sir, if I can start with a brief introduction to what is being proposed at Farringdon and start with the plan that appears in the Environmental Statement mapping, which we will call P24?<sup>2</sup> You can see in the middle of the plan the two platforms, the Crossrail platforms, very much the same way as at Liverpool Street. There are two ticket halls proposed at Farringdon, like Liverpool Street. At the western end is what is called the Cardinal House ticket hall, being marked with the arrow, and that lies on Farringdon Road, which is the main road running north-south, and the corner of Cowcross street, which runs west-east, and the Committee will remember that we walked along Cowcross Street on the site visit. Opposite, if I do it on this plan, Cardinal House ticket hall is the existing Farringdon LUL station—and we will come back to that in a minute. Then at the eastern end there is a second ticket hall which is known as the Lindsey Street

---

<sup>1</sup> Crossrail Ref: P24, Petitioners response document (ISLNLB 20803-001).

<sup>2</sup> Crossrail Ref: P24 (1), Environmental Statement mapping (ISLNLB 20803-002).

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

ticket hall, which adjoins the eastern end of Smithfield Market. And just to the north of the Lindsey Street ticket hall is a small emergency shaft, with which you will become familiar today as the Fox and Knot Street emergency shaft. I will explain why it is a separate emergency shaft in a moment when I come to the axonometric, if I may?

2436. If we then move on to the aerial photo, to give the Committee a little context on this, again you can see Cardinal House ticket hall at the western end and Lindsey Street ticket hall at the eastern end.<sup>3</sup> What comes out quite usefully out of this is that you can see the Hammersmith & City, Circle and Metropolitan Lines, coming down from the north, going to Farringdon Station and then bending east to go off to Barbican Underground Station, which is there, and then off to Moorgate and Liverpool Street, off to the east. So that is where it links in with what the Committee has already become familiar. It is important to note Barbican Station because certainly Crossrail's view is that most of the interchange between Crossrail and the Metropolitan, Circle, Hammersmith and City Lines will take place at the Barbican end and not the LUL Farringdon end. The other thing to note from this aerial photo—this is where it comes out most easily—is Thameslink. Thameslink is the cross London network rail line that runs from Bedford in the north through to Brighton and Gatwick in the south. The main Thameslink line runs north to south through this plan, through Farringdon Station and then disappears under the car parks to the south, to the City Thameslink Station, which you may remember that Mr Weiss referred to, and then on to Blackfriars and London Bridge. There is, however, a spur to Thameslink, which goes into the existing Farringdon Station and then turns off east to Moorgate—and we will come back to that spur because it is intimately related to issues around Thameslink 2000, because that spur will be closed under the Thameslink 2000 proposals, which I will come to in a moment.

2437. If we could then move on to the axonometric?<sup>4</sup> This is an axonometric of the entire Crossrail infrastructure works at Farringdon Crossrail Station—and I am not going to spend a lot of time on this one because we have the more detailed ones—and you can see the ticket hall at the western and eastern end. If we could then move direct to the western ticket hall, please?<sup>5</sup> What you can see there is if one comes into the ticket hall at Cardinal House, on the corner of Cowcross Street, the blue dots are the general passenger route and the red dots are the MIP route—and I will talk you through both, if I may, quite quickly. The blue dots, you come through the surface level ticket hall, so you do not have to

drop down to the ticket hall, through the gateline and then through a very long set of escalators, one long drop down the escalators into the cross tunnel and on to the platforms; so a very straightforward movement there. You come through the gateline again and drop down in one long lift shaft down to platform level and then come out through a short passage into the cross passage and get on to the two platforms. So it is pretty straightforward at that end. And so that you can see what is going on on the axonometric, the blue is Thameslink and the pink and yellow is the Circle and Met Lines, for shorthand. So that end of the station is very straightforward.

2438. If we could then move to the eastern end of the station—a bit more complicated—and if we take the blue dots first you come into the Lindsey Street ticket hall, again a surface level ticket hall, through the gateline, down a short flight of escalators to a mid-level concourse, and if we go from there down to Crossrail you come down a long set of escalators, along a passage and then down another set of escalators on to the platforms.<sup>6</sup> If you want to interchange with the Met or Circle Line then you go back to the mid-level concourse, so you come back up those escalators from Crossrail and you go to the mid-level concourse, and then if you are going eastbound you come to the northern part of the station and down the stairs—I think you go right there—that is on to the eastbound; and if you want to go westbound you come down the mid-level stairs back from that concourse that you have just seen. For mobility impaired persons you come to the gateline, follow the red dots, down a very short lift to the mid-level concourse and then cross that concourse and then down a much longer lift shaft down to Crossrail platform level. And if you go back to the mid-level concourse you can see that there is a lift next to the stairs which take you down to the eastbound platform for interchange; and there is another lift, which is quite difficult to see on the axonometric, that takes you down—it is marked, though, MIP lift—from Crossrail platform level to London Underground westbound platform. So there is MIP interchange on to both platforms.

2439. There is one complication at the eastern end, which is that this is a very constrained site. It is very constrained because of the presence of the Thameslink spur which goes across the site and that is the blue that you see on the plan. Because of that very constrained site it is not possible to get the emergency access shaft off the platforms, the eastern end of Crossrail, into the Lindsey Street ticket hall—the site is just too small—with the Moorgate line. Therefore, it has been necessary to construct a separate emergency shaft at the Fox and Knot Street site. The emergency shaft goes down to a mid-level chamber there, then it goes through two adits on to a short concourse level and then down a set of emergency stairs to platform level. All of that is designed to meet LUL's Station Planning Guidance

<sup>3</sup> Crossrail Ref: P25, Farringdon Station aerial photograph (ISLNLB 20803-009).

<sup>4</sup> Crossrail Ref: P26, Farringdon Station 3D axonometric view (ISLNLB 20804-005).

<sup>5</sup> Crossrail Ref: P27, Farringdon Station 3D axonometric view Western Ticket Hall (without Thameslink 2000) (ISLNLB 20804-007).

<sup>6</sup> Crossrail Ref: P28, Farringdon Station 3D axonometric view Eastern Ticket Hall (ISLNLB 20804-005).

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

on emergency access, and you can imagine the rules as to how big the shafts have to be and the stairs, and all those kind of things.

2440. So that is the basic layout of what we are proposing. There is a complication at Farringdon, which was going to come up today directly with Islington's case on Thameslink 2000. As the witness is not capable of being here today the case will not be presented, but I think it would still be most helpful if I explain what is being proposed at the western end with Thameslink 2000 so that the Committee sees it all at the same time. If we go back, this is now the western ticket hall with Thameslink 2000.<sup>7</sup> As the Committee may know, Thameslink 2000 is a scheme promoted by Network Rail, through the Transport and Works Act procedure, which will increase the capacity on the Thameslink line. At Farringdon what that involves is significantly lengthening the Thameslink platforms in order to allow much longer trains. In order to do that lengthening two things have to happen: one is that they have to rebuild the platforms, which involves rebuilding Cowcross Street bridge and knocking down buildings in Cowcross Street, including a listed building; further, it involves closing the Moorgate spur because it is not possible to extend the platforms with the Moorgate spur of Thameslink continuing.

2441. As the Committee may know, or may indeed have picked up from the name, Thameslink 2000 has had considerable problems with its timing. The current situation is that it has recently gone through a second planning inquiry, the Inspector's report is awaited and following the Inspector's report there will have to be a Secretary of State decision, so that decision is expected some time this year, but it is not possible to pin down an exact date.

2442. Because of the difficulties that have arisen with the timing of Thameslink it has been considered necessary to plan Thameslink and Crossrail so that they are capable of being constructed separately, albeit there must be quality interchange between them. So the clear intent of the Promoter has been to have a Crossrail scheme which can be constructed without Thameslink but equally which provides interchange with Thameslink. What we have up now is the western ticket hall with Thameslink 2000 and the blue is the Thameslink scheme. What Thameslink will do is construct a new ticket hall on Cowcross Street, shown in blue, come through to a concourse, as has been shown there, and then drop down by stairs and lifts to the Thameslink level which is, as it were, subsurface level rather than deep level at that location. The interchange, assuming Thameslink goes ahead, which is part of the Crossrail scheme, is that one you can see if you go through the gateline in Crossrail, and you can then walk straight across, which involves the demolition of a wall, into the Thameslink ticket hall level and then drop down. So the interchange is simply that

you come up to the Crossrail ticket hall, you do not go through the gate barrier but turn right, walk across the passive area between the two and then drop down to the Thameslink levels. We have a great deal more sketches on that but I do not think it is necessary to show them to you in any more detail at this stage.

2443. Can I then turn to what I understand is the issue that Islington will be promoting today, which is the Fox and Knot Street shaft, and I just want to show the Committee the visual image photo. The Fox and Knot Street emergency shaft involves demolishing the buildings at 38-42 Fox and Knot Street, which, if I can show you, is the entirety of that block—not the building behind but the block in front.

2444. There is a concern in Islington that the building makes a positive contribution—it is not listed—to the conservation area, and there is a dispute, which Mr Honey will take you through, as to the degree to which the entirety of the building, the façade of the building or the features of the building should be retained. I am not going to say any more about that because this is an uncontentious opening and I just wanted to show the Committee the picture.

2445. Before I finish could I explain to the Committee that the Promoter has offered to Islington an undertaking in respect of this building because there is a concern that the building may not be commercially viable if it is demolished and then a shaft is put back because a proportion of ground floor level would be removed. So if we could put up the undertaking that we have offered.<sup>8</sup> I will read it out: "The Promoter is aware that concerns have been expressed that the proposed over-site development in the conservation area at 38-42 Charterhouse Street may be too constrained to be commercially viable. In the assessment of viability the relevant planning policies covering the site will be taken into account. Should this site not, in the nominated undertaker's opinion, turn out to be commercially viable, the nominated undertaker will be required to work with the local planning authority and English Heritage to seek an appropriate solution for the site (such as erecting an appropriate façade), taking into consideration the relevant planning policies for the conservation area concerned and the quality of the buildings that existed prior to demolition, and to meet the cost of any reasonable works associated with that solution that he agrees are necessary. In recognition of the special circumstances in respect of 38 Charterhouse Street, additional undertakings are offered in respect of this site as follows. 1. As soon as reasonably practicable and in any event no later than two years after the commencement of construction of the Crossrail works on the site, the nominated undertaker shall submit appropriate planning applications for an alternative appropriate solution.

---

<sup>7</sup> Crossrail Ref: P29, Farringdon Station 3D axonometric view Western Ticket Hall with Thameslink 2000 (ISLNLB 20804-008).

<sup>8</sup> Crossrail Ref: P31, Undertaking to London Borough of Islington (ISLNLB 20804-010).

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2. The nominated undertaker shall ensure that the alternative appropriate solution is completed in accordance with planning consents granted as soon as reasonably practical and shall use reasonable endeavours to ensure that it is completed no later than four years after completion of the Crossrail works at the site. 3. The nominated undertaker shall meet all reasonable costs associated with completing the alternative appropriate solution and all reasonable costs associated with maintaining any such solution. Alternative appropriate solutions will not include the erection of a building unless proposed by the nominated undertaker.” Can I explain that last rather elliptical sentence? There are other sites where there are similar arguments about over-site development not being viable, and one that springs to mind is in Bloomfield Street. In Bloomfield Street there is a very small façade and a very big building behind, and we are concerned that we would not be required to rebuild the entire building; we would only be required to rebuild the façade, which is the bit that is important in townscape purposes. That is why we have put that caveat in at the end, to make it clear that in all the circumstances we will not be required to rebuild an entire building. When we come to cross-examination and so on I will come to the degree to which that applies at Fox and Knot Street.

2446. That was all I was going to say in opening as I have very deliberately sought to keep it factual. I do not know if there is anything with which I can help the Committee at this stage?

2447. **Chairman:** Mr Honey.

2448. **Mr Honey:** Thank you, sir. Sir, the London Borough of Islington has responsibility for the control of development within the borough and the protection of the interests of all of those who live and work within the borough. Sir, as you have seen, the Crossrail line passes through the borough north of the City of London and in particular passes through the borough at Farringdon. The borough supports Crossrail but is concerned to see that it produces the best possible transport system available and indeed does the least environmental harm within the borough.

2449. The borough has petitioned this House about a number of matters. We anticipate satisfactory arrangements being in place with the Promoter in relation to a number of those and I do not propose to trouble the Committee about those matters, but for the sake of the record I do reserve the borough’s position to petition in another place, if necessary. There are two matters of concern, however, remaining unresolved and it is about these that the borough petitions the Committee today. The first is in relation to the building you have seen at number 38 Charterhouse Street. The Bill seeks the power to demolish that building. It is a building in the Charterhouse Square conservation area, which the borough thinks is a very fine building which contributes positively to the character and

appearance of the conservation area. The Bill includes the power to demolish the building without seeking the usual conservation area consent for demolition from the borough. It is important to note, sir, that this building is not to be demolished for any of the permanent works being built on the site but merely to provide additional working space for the construction of the escape shaft. Sir, the borough considers that because the building is so fine it should not be demolished unless absolutely necessary. The borough has appointed its own engineer to examine matters in some detail and his conclusion is that it is not necessary to demolish the building at all. Even if the Promoter is not willing to make the few slight amendments that are necessary to preserve the whole of the building the scheme can be built precisely as intended and safely whilst leaving number 38 substantially intact. The borough’s concern about losing such a fine building is, as you have heard from Ms Lieven, exacerbated by the fact that the site of number 38 may not be viable for redevelopment for a high quality replacement building, and that is in particular because of the small size, awkward shape of the building and indeed the need for a high quality design in order to fit in with a conservation area. As I say, this exacerbates the borough’s concerns because there is a real danger that if this building is demolished a gap will be left in the conservation, if not permanently at least for some considerable time to the real detriment of the area.

2450. Sir, the borough will call evidence today from two witnesses on this issue. The first is Mr Alec Forshaw, who is Conservation Manager for the borough; and secondly from Mr Brian Morton, who is the expert engineer, experienced in both civil engineering and heritage matters, retained to advise the borough.

2451. Sir, I will deal briefly, if I may, with the second issue about which the borough petitions the Committee, with which we will not deal today but just to put the issue before you. That is in relation to the western ticket hall at Farringdon. At the moment, as you will be aware, there is an existing London Underground Station, Farringdon Station, at Cowcross Street. Thameslink 2000, expected to be the subject of a decision by the Secretary of State later this year, is proposing a new separate station in Cowcross Street, and so is Crossrail. It is likely, therefore, that we are going to end up with three separate stations at Farringdon, in Cowcross Street, all with different entrances and in different locations. There is no reason, in our submission, why the two new stations for Thameslink 2000 and for Crossrail cannot be accommodated together. Sir, you have seen a proposed drawing this morning which shows the plan to integrate the two buildings for Thameslink 2000 and Crossrail if they go ahead, and

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

in essence all that is required is that the wall between the two is knocked through. In the borough's view that is simply not good enough. If these two stations are not properly accommodated together then Crossrail is going to be an example of how London almost had a world-class transport system but how it fell at the last hurdle, and this is going to cause harm, we say, not just for London as a City but for those who live and work in the borough and who need to use these stations. In relation to this the borough proposes to call evidence from Mr Murray Woodburn, who is the Transport Leader for Partnerships and Projects for the council who is, as I have indicated, unfortunately unavailable today.

2452. Sir, in conclusion we do not think that the two points of principle we are putting forward in this case are contentious; they are merely calling for what we hope is commonsense and joined up thinking, and if the principles are accepted it is simply a matter of finding acceptable solutions which work. The borough has carried out considerable work of its own analysis and planning to be able to consider what is possible and believes that practical solutions are readily available, and the borough hopes that this Committee will provide the will to make those solutions happen. That was the opening I propose to make. If you are content I will move now to call the first witness, who is Mr Alec Forshaw.

---

**Mr Alec Forshaw, Sworn**

*Examined by Mr Honey*

2453. **Mr Honey:** Mr Forshaw, can you begin by giving the Committee details of your qualifications? **(Mr Forshaw)** I am a Member of the Royal Town Planning Institute and the Institute of Historic Building Conservation. I hold an MA and a Diploma in Town Planning and Civic Design. I have worked at the London Borough of Islington for 30 years and I hold the post of Conservation and Design Manager, and my job is to advise the borough on building conservation and urban site matters.

**(Mr Forshaw)** It is outlined in red and that shows number 38 and 40-42 Charterhouse Street, at the junction of where Charterhouse Street splits. The upper part of Charterhouse Street is the ancient, medieval street which ran into Charterhouse Square and towards the medieval Charterhouse. The Victorians provided a new east-west Charterhouse Street on the north side of the market, leading out of the south side of Charterhouse Square, and the site we are talking about sits at the apex of where the two bits of Charterhouse Street divide—quite a narrow and acute angle, as you can see.

2454. Could you identify by way of introduction what you are going to deal with in your evidence? **(Mr Forshaw)** I am giving evidence in support of the London Borough of Islington's objections to the proposal to demolish number 38 Charterhouse Street as part of the construction works of Crossrail. The borough does not consider that this building should be or needs to be demolished.

2458. What is of particular interest as far as the building is concerned, given its position on the site there?

**(Mr Forshaw)** It occupies a pivotal position on this triangular site; it has a very distinctive wedge shape and flat iron design. It might be worth putting up a photograph, which is exhibit 2 and 2A, which shows the corner.<sup>10</sup>

2455. On what is your evidence based?

**(Mr Forshaw)** Based on the architectural and historic value of number 38 and the contribution it makes to the character and appearance of the Charterhouse Square conservation area and the setting of nearby listed buildings.

2459. So starting with Islington numbering afresh these will be Islington documents 2, 3 and 4, and in sequence they will be tab 2, tab 3 and tab 4. Mr Forshaw, please briefly explain what we see in these photographs and what is of interest.

**(Mr Forshaw)** What you are seeing is a sharply rounded corner which faces the market buildings, elaborately decorated and it includes the crest of the Corporation of London. If we look at some of the other photographs following, 2B, that is the elaborate corner, highly decorated stonework. That is the ground floor with the portico of granite columns and carved stonework balustrading.

2456. Could you go on to explain briefly the historic background to the building at number 38?

**(Mr Forshaw)** 38 Charterhouse Street was built in 1876-77, following the construction of the new Smithfield Meat Market by the City Corporation, which opened in 1868 and the consequent realignment of Charterhouse Street, and my map, which is figure 1, shows that.

2460. So overall what do you have to say about the detailing of the building?

**(Mr Forshaw)** It is well decorated; it is a handsomely proportioned building; it is a very good example of commercial Victorian architecture of this period.

2457. That is tab 1 in the bundle and I understand that that is document number A35.<sup>9</sup> Please highlight on there the area we are talking about.

---

<sup>9</sup> Committee Ref: A35, Site location plan (SCN-20060207-002).

<sup>10</sup> Committee Ref: A35, Photographs of Charterhouse Street (SCN-20060207-001 to -007).

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2461. Can you go on to explain how the building relates to its surroundings, referring to any photographs you have?

**(Mr Forshaw)** If we move on to the next photographs, tab 3, A, B and C.

2462. They are, as I understand it, tab 3. Please explain what we can see there and what is of particular interest?

**(Mr Forshaw)** It relates very strongly to an ensemble of nearby Victorian buildings, some listed some unlisted. If you look at the next one, this shows the prominent tower as one of the four corners of the Grade II star listed Horace Jones architect meat market building. We can see how close it is and it relates very, very strongly to this really very important ensemble of Victorian buildings.

2463. What contribution does it make overall to the character and appearance of the conservation area?

**(Mr Forshaw)** It contributes very positively to the character of the area. We have views looking both ways and it sits on the other side of the street from the meat market, and it provides an enclosure to the historic street pattern and contributes very, very positively to the character of the area. If you imagine the area without that building it would be significantly worse.

2464. Can you explain to the Committee what the view of English Heritage is about this building?

**(Mr Forshaw)** Number 38 Charterhouse Street was considered for statutory listing by English Heritage in June 2005 but it was not in the end listed. They considered in conclusion—and this is quoting from their letter, “This high Victorian commercial building falls just short of the standards required of listing. It should be noted here that the criteria of statutory listing of a building that is post-1840 is very onerous and highly selective. It would normally require a known architect or a particularly outstanding attribute. It was concluded by English Heritage’s adviser that it is clearly of strong local interest, linked to the nearby Smithfield Market and forming a strong component of the local scene.”

2465. So turning to the issues arising in this case, can you explain briefly to the Committee what is proposed for this site?

**(Mr Forshaw)** The proposal is to demolish both 38 and 40-42 in order to construct the emergency escape shaft at Fox and Knot Street. But it is important to realise that number 38 itself is not needed for the construction of any operation of the building, it will simply act as a cleared site and workspace during construction. Mr Morton will explain that the escape shaft can be built without the need to demolish number 38.

2466. Is there a plan that shows the site as ultimately intended?

**(Mr Forshaw)** Yes, my figure 4.

2467. Tab 4, and what do we see there?<sup>11</sup>

**(Mr Forshaw)** This is looking at the top of the triangular site. You can see where the emergency staircase is; it sits within the site of 40-42 and does not actually require number 38, which is just left and labelled as a cleared site.

2468. So what is the borough’s view about the need to demolish number 38?

**(Mr Forshaw)** We believe that the Promoter has not tried hard enough to find a solution which can achieve the construction of the shaft whilst retaining number 38.

2469. The Promoter deals with this building in its Environmental Statement. Can you please tell the Committee what the Promoter says about it in the Environmental Statement?

**(Mr Forshaw)** It says in particular in paragraph 8.8.59 that the development of the eastern ticket hall shaft structures will create a significant void through to the frontage. This will be out of keeping with the original massing of buildings on the site and surrounding buildings. Together with a separate emergency escape shaft on Charterhouse Street it will result in a significant adverse impact on the character and quality of the local townscape, including the character of Charterhouse Square Gardens, which is a London protected square. There will be significant impacts on the Charterhouse Square conservation area and on the setting of the adjacent Smithfield conservation area resulting from the demolition of buildings currently making a positive contribution to the conservation area.

2470. Just for the record, that is Volume 2 of the Environmental Statement, page 195, paragraph 8.8.59. Thank you, Mr Forshaw. What is your response to that?

**(Mr Forshaw)** They are acknowledging that it is a building that contributes positively and that is precisely why we think efforts should be made to retain the building and that it is not necessary to knock it down.

2471. The Promoter has considered in this case simply retaining the façade of the building. What is your view about façade retention in this case?

**(Mr Forshaw)** It is a fall-back position if all other options have been considered and rejected. Because the building is not statutorily listed the retention of the interior is not of any great concern or indeed within any ability to control by the local authority, but the interior is perhaps important to the extent that it would assist in maintaining the structural integrity of the facades during the works. It is the facades of the building that are important and it is important if you are going to retain those facades that it is done in a sensible and safe manner.

---

<sup>11</sup> Committee Ref: A35, Crossrail Operational Structures, Lindsey Street End Ticket Hall Site Plan (SCN-20060207-008).

---

 The Petition of The Mayor and Burgesses of the London Borough of Islington
 

---

2472. What are the implications as far as the Bill powers are concerned if the façade, or indeed the whole building, is to be retained?

*(Mr Forshaw)* If the whole building is retained, or indeed the vast majority of the building, then you would not require conservation area consent to demolish it. Therefore, the Bill should not take away, or would not need to take away, the powers of conservation area consent which the local authority currently enjoys.

2473. What is your professional opinion as to whether façade retention, or indeed taking down the building and rebuilding it, is a feasible option?

*(Mr Forshaw)* To take the building down and dismantle and rebuild it would pose very substantial risks, I think, and indeed the end result might be unsatisfactory, so all the more reason to find a solution where you do not need to take the thing down at all and that would allow then the historical and architectural integrity of the fabric to survive.

2474. You have told us how the Environmental Statement deals with demolition. What does it say about mitigation of the significant adverse impact arising from the demolition of this building?

*(Mr Forshaw)* The Environmental Statement says that it is likely that impacts can be reduced or mitigated through the provision of replacement buildings. The borough, however, has very serious concerns as to whether a replacement building would be provided on the site of number 38 Charterhouse Street. A replacement building would only be provided under current proposals if it were financially viable for the nominated undertaker. Furthermore, the council would disagree with the Promoter's suggestion that a high quality replacement building would in itself be a satisfactory replacement for a Victorian building. Loss of a good Victorian building will cause harm to the historic character of the area. The intrinsic character of this conservation area is its surviving historic buildings and it is particularly the collection of good Victorian buildings. Replacing historic buildings with good modern buildings does not give you a conservation area. It might give you a good ensemble of modern buildings but it is not preserving the intrinsic character and appearance of the conservation area.

2475. So what would be the result of the demolition of number 38 Charterhouse Street either permanently, leaving a clear site, as we have seen, or even where the undertaking proposes some rebuilding but some period afterward?

*(Mr Forshaw)* The worst scenario is a missing tooth, a gap, and even with the Promoter's undertakings one might have a gap of several years, perhaps up to four years. Even if a solution is found where you can get a new building that is built or some sort of structure going up there, that is still a loss to the character of the conservation area. You have lost a historic building unnecessarily.

2476. You are concerned about the viability of a replacement building here?

*(Mr Forshaw)* As we have seen from photographs and the plan, it is a very unusual and tight triangular site, very awkward. It has got a very large amount of street frontage compared to floor space. In purely economic terms the construction costs are likely to be higher than for a conventional rectangular building with a single street frontage. Also, the awkward shape of floors gives you a very poor net to gross floor area with a lot of circulation space compared to the amount of floor space you then get, and that is likely to lead to lower than normal rental returns. Also, as we have seen, we are right next door to the meat market which operates at night and in the daytime, and that too would probably reduce the rental values that you might get further away from the market, and particularly for residential development which is likely to be highly unsuitable.

2477. What would be required in terms of the standard of design and what implications, if any, will that have for the viability of redevelopment?

*(Mr Forshaw)* In terms of the bulk of the building that is there at the moment, which is four storeys plus a mansard roof, so a total of five storeys, the borough would be very unlikely to give planning permission for a higher or more bulky building than currently exists and that in itself might affect the viability. We think there is a substantial risk that if it is demolished it may remain as a gap site following completion of the railway works.

2478. We have seen what the Promoter has put forward in the undertaking in respect of over-site development here. Can you say what your view is of the position that would place the local authority in and whether that is acceptable to you, even if it were to be operated without any problems at all?

*(Mr Forshaw)* I think it places the local authority in a very unacceptably weak position. Seeking a solution does not necessarily mean that one will be found. Even if a solution is found and planning permission is granted for a replacement building the nominated undertaker might not agree to the costs, in which case presumably there is going to be some arbitration. Who is the arbiter to say that the costs are reasonable or not? The local authority would lack the powers that it normally has.

2479. Are there any other concerns arising on the borough's part as to how any replacement building would be realised?

*(Mr Forshaw)* It is the delay. We are talking about, say, four years after completion of the railway works that something has got to be done. Four years is quite a long time, during which time there may be just a gap there.

2480. Can I ask you please just to sum up the issue in this objection?

*(Mr Forshaw)* The Bill provides provision for 38 Charterhouse Street to be demolished and the borough contends that it is not necessary for the construction of Crossrail. We believe that the building contributes very positively to the character

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

of the conservation area and should not be demolished without very good reason. We do not think that reason is there.

2481. I would like to turn now to deal as briefly as we can with the procedures involved under the Bill and contrasting with the procedures as they occur in the real world just so that we can see precisely what is being lost in this case. Can you please explain what existing protection the building enjoys at the moment even though it is not listed?

*(Mr Forshaw)* The building is in a conservation area and has been since 1994 when it came within the London Borough of Islington following transfer of the boundaries of the City Corporation and was immediately added into the Charterhouse Square conservation area. Following the designation of conservation area and after public consultation we added this building to the list of buildings which we considered to contribute positively to the character and appearance of the conservation area which, because of their merit, should in normal circumstances be kept. We have policies which state that conservation area consent would not be given for the demolition or part demolition of these buildings unless there were special reasons which overrode the normal requirement to preserve and enhance the character of the conservation area. We have also, because Charterhouse Square is part of the Clerkenwell/Smithfield special policy area, put it within our Unitary Development Plan. These policies have been through additional public consultation and public inquiry which have been supported by the Secretary of State, so the policies for 38 Charterhouse Square and its retention carry particular and special weight in this circumstance.

2482. What overall degree of protection is given to this building from demolition in normal circumstances?

*(Mr Forshaw)* We have very strong powers at the moment to resist demolition. Demolition would require conservation area consent from the local planning authority. When faced with an application for demolition we would consult widely on it in public and with special amenity societies like the Victorian Society and the Islington Society. If we were minded to grant conservation area consent we would also normally put conditions on where we would not allow demolition before we had agreed the design of a replacement building and also we would put a condition on requiring the contract to be let for the construction of that replacement building before the existing building is demolished.

2483. Looking at that normal planning regime can you briefly outline what statutory protection applies to buildings in conservation areas as far as demolition is concerned?

*(Mr Forshaw)* The Planning (Listed Buildings and Conservation Areas) Act 1990 contains provision for protection of unlisted buildings in conservation areas. Section 74 of that requires that a building in a conservation area should not be demolished without the consent of the local planning authority. The

guidance for how you deal with that is set out by the Government in its Planning Policy Guidance Note number 15 on planning and the historic environment. That states that there is a general presumption in favour of retaining buildings which make a positive contribution to the character or appearance of the conservation area.

2484. Within that guidance are there particular criteria that the Secretary of State expects to be taken into account when deciding whether to demolish conservation area buildings?

*(Mr Forshaw)* The Secretary of State sets down in PPG15 that he expects the proposals for demolition of unlisted buildings which make a positive contribution to be assessed against the same broad criteria as proposals for demolishing statutory listed buildings. There are basically three criteria set out that we need to consider. First is the condition of the building, the cost of repairing it. The second is whether there are adequate efforts made to find a use for the building. Those do not really apply in this situation. It is the third which does, which is the merits of alternative proposals for the site. That is the criterion that we would need to look at here. Again, on that, the Secretary of State gives clear guidance. He says that there may very exceptionally be cases where the development would bring substantial benefits for the community which have to be weighed against arguments in favour of preservation. However, even here he says that it will often be feasible to incorporate existing buildings within new development and that this option should be carefully considered. The challenge presented by retaining buildings can be a stimulus to imaginative design to accommodate them. Those are the Secretary of State's words.

2485. Assuming that conservation area consent for demolition were given, what safeguards would normally apply in the event of demolition?

*(Mr Forshaw)* The Secretary of State recommends that the local authority will need to have full information about what is proposed for the site after demolition. Consent for demolition should not be given unless there are acceptable and detailed plans for any redevelopment. In a situation where the demolition is being carefully scrutinised, either in terms of its necessity or in terms of the desire to salvage for reuse, then it would be normal practice to require a detailed method statement for demolition as part of conservation area consent.

2486. You have mentioned there plans for redevelopment and a method statement. Do we have any of those in this case?

*(Mr Forshaw)* No, we do not.

2487. In addition to those are there any other safeguards which would normally be put in place to ensure satisfactory replacement?

*(Mr Forshaw)* Again, the Government's guidance is, as I have said before, that conditions should be imposed that conservation area consent should have a condition to provide that demolition should not

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

take place until a contract for the redevelopment has been made and planning permission for those works has been granted. In the Secretary of State's words, this is to avoid ugly gaps which have sometimes appeared in conservation areas as a result of demolition far in advance of redevelopment.

2488. Moving on to look at the provisions of the Bill could you please explain for the Committee briefly what the position is under the Bill and what is being lost by comparison to the normal statutory regime?  
**(Mr Forshaw)** Under Schedule 8 of the Bill number 38 Charterhouse Street could be demolished without the need for conservation area consent. The only opportunity to consider that is here under the provisions of the Bill. No-one would consider the merits of the case after this stage. The nominated undertaker would simply be able to demolish 38 if it wished. This means that all the requirements sought by the Secretary of State in PPG15 are overruled as well.

2489. Having regard to the undertakings that have been put forward, both generally in relation to over-site development and also in particular in this case, what approach is the borough likely to take to planning permission for a replacement building?  
**(Mr Forshaw)** The borough would be able to refuse unsuitable proposals for a replacement building which it considered to be harmful, or it could grant planning permission for an appropriate replacement building, but the borough would not have the power at all to ensure that a replacement building was actually built or that we would fill the gap side.

2490. Is there anything else that you wanted to say in relation to the planning regime?  
**(Mr Forshaw)** In terms of the western ticket hall, there is some concern that the Bill, whilst it allows some aspects of the external appearance of the operation of the buildings to be considered by the local authority, does not give powers for the local authority to consider how the station is integrated with Thameslink 2000. The restrictions under Schedule 7 of the Bill place the borough in a weak position in that respect.

---

Cross-examined by **MS Lieven**

2497. Mr Forshaw, on that last subject, whether or not the shaft can still be constructed, I am not going to ask you about that. You are not the engineer. The appropriate person is Mr Morton, is it not?  
**(Mr Forshaw)** Correct.

2498. As I understand it, your evidence goes to two concerns. One is that a void is left in the streetscape if 38-42 is demolished and the second is that the quality of 38 justifies its retention?  
**(Mr Forshaw)** Yes, and the second point is where I would start.

2491. On what grounds does the Bill allow a borough to object to a design in relation to a building?

**(Mr Forshaw)** It is really the external appearance of the ticket hall. It is very limited in terms of how the plan actually works in terms of its integration with adjoining buildings or adjoining stations.

2492. What particular issues would give grounds for Islington to object to a design that was being put forward under Schedule 7?

**(Mr Forshaw)** The borough is concerned that the scheme is not well integrated with Thameslink 2000. We feel that Schedule 7 does not give us enough powers to be able to influence that.

2493. Can I ask you please now to sum up in conclusion your concerns in relation to what is proposed at number 38 Charterhouse Street?

**(Mr Forshaw)** We consider that the complete demolition of 38 Charterhouse Street would be a very great loss to the character of the area around Smithfield Market. We believe it is not necessary. In our view we feel that every effort should be made to retain 38 Charterhouse Street as part of the Crossrail proposals in order to preserve the character and appearance of the conservation area and the setting of the nearby statutory listed buildings, particularly the Smithfield meat market.

2494. So what are you seeking from this Committee by way of relief?

**(Mr Forshaw)** We say that the Bill should be amended to delete number 38 Charterhouse Street from the table in Schedule 8 of the Bill so that the existing and normal requirements of conservation area consent for demolition are not removed for number 38 Charterhouse Street.

2495. What, if any, effect would that have on the Promoter's ability to realise its scheme for the escape shaft there?

**(Mr Forshaw)** We believe that the shaft can still be satisfactorily constructed safely and the escape shaft can operate subsequently with number 38 Charterhouse Street being retained in place.

2496. **Mr Honey:** Thank you, Mr Forshaw. I do not have any further questions for you.

2499. If I can start with the first, because that is simpler to deal with in its totality, so far as the void being left is concerned, can we go back please to the undertaking that I referred the Committee to a few minutes ago? That is P31.<sup>12</sup> If one goes to the second part of that, what it requires the Promoter to do is, in subsection (1), to require the nominated undertaker to submit an appropriate planning application for an alternative appropriate solution within two years?

---

<sup>12</sup> Crossrail Ref: P31, Undertaking to London Borough of Islington (ISLNLB 20804-010).

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

*(Mr Forshaw)* Yes.

2500. And under the Crossrail Bill the London Borough of Islington remain the planning authority for any proposed new development on the Crossrail sites, do they not?

*(Mr Forshaw)* They do, yes.

2501. So Islington will retain all its existing powers in terms of what application is or is not acceptable under (1)?

*(Mr Forshaw)* Yes.

2502. Then, (2), the nominated undertaker shall ensure that the appropriate solution—and that is the appropriate solution which, hopefully, has been negotiated and agreed with Islington—is completed in accordance with the planning consents as soon as reasonably practicable and should use reasonable endeavours to ensure that in any event is completed no later than four years after the Crossrail works; yes?

*(Mr Forshaw)* Yes.

2503. I understand the words “use reasonable endeavours” but, subject to things going in a reasonably foreseeable course, a building will be replaced on that site at the longest four years after the Crossrail works are completed. That is what (2) requires us to do.

*(Mr Forshaw)* It depends what the procedure is for arbitration if no agreement is reached. This is assuming that the nominated undertaker will come up with an acceptable design. What if they do not? Who is the arbiter in this?

2504. One thing that is clear is that if the nominated undertaker puts in an application which Islington considers is unacceptable then there is a right of appeal to the Secretary of State, yes?

*(Mr Forshaw)* Yes.

2505. So that would go along absolutely the normal planning control routes, would it not?

*(Mr Forshaw)* Yes.

2506. So far as fine-tuning arbitration, for example, is concerned, has Islington come back to the Promoter and said, “Yes; we like what we see in (2) but we are concerned about some arbitration procedure”?

*(Mr Forshaw)* We have not, no. I am looking at this now but that would be my question: who is the arbiter?

2507. That is your concern about (2). Then when we move on to (3), the nominated undertaker shall meet all reasonable costs associated with completing the alternative solution and all reasonable costs associated with maintaining any alternative solution. Just assume, because one has to some degree to assume goodwill and co-operation in these things, a solution comes forward which has a

modern building but with retained features at the apex, and I will come back to that in a moment. Islington think that is acceptable; yes?

*(Mr Forshaw)* Yes.

2508. Permission is granted for that to happen. There is then an issue about whether or not it is viable, ie, whether the market alone would take that forward. What (3) requires is that the nominated undertaker would carry the cost of making sure that that solution went forward, was built, yes?

*(Mr Forshaw)* Yes, and again what is reasonable. That might be challengeable, I suppose, because they may feel that the costs are so high that it is not reasonable.

2509. They may do but, obviously, reasonableness is something that we are all familiar with as a concept. It does not give 100 per cent security but this gives a high level of security, does it not, that Islington will (1) be able to control the form of the building that goes back and (2) that the building will go back within a time limited period?

*(Mr Forshaw)* Yes. It is saying completed no later than in four years. Four years is still quite a long time.

2510. You make reference in your evidence in chief to PPG15 and the requirements in it in the normal non-Crossrail situation as set out there. First of all, can I just put up one page from PPG15? It is only a background point, and this should be P32.<sup>13</sup> This is the introduction section of PPG15 and it is only a small point, Mr Forshaw, but if one looks at 1.4, “Conservation and Economic Prosperity”, it says that though choices sometimes have to be made conservation and sustainable economic growth are complementary objectives and should not generally be seen as in opposition to one another. There is in issues like this a balance to be struck, is there not, between economic prosperity and conservation, and a balance has to be drawn between the two? Can we agree with that?

*(Mr Forshaw)* Balances always have to be struck, yes. What we are saying here is that the Promoter has not tried hard enough to retain 38 and that the choice does not have to be made in this situation.

2511. You have referred in PPG15 to the normal requirement that when a building that makes a positive contribution to a conservation area is to be demolished then at the same time plans should come forward for the replacement building and indeed normally a contract should be let. That is the normal situation, is it not?

*(Mr Forshaw)* That is good practice, yes.

2512. Can we just think what that would mean in the Crossrail context? If, on every site in a conservation area, the Promoter had to come forward in the Bill with a proposed new development because that would be necessary in order to undertake and let a contract, then that would enormously prolong the

---

<sup>13</sup> Crossrail Ref: P32, PPG 15 Extract, Introductory section 1.4; Construction & Economic Prosperity.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

business of this Committee, would it not? This is not an issue that only arises in Islington. There are conservation areas all along the route, yes?

*(Mr Forshaw)* Yes.

2513. I would suggest to you that the approach which the Promoter has taken, which is not to put forward in the Bill over-site development at every site in a conservation area where a building is to be demolished, must be a sensible one on the facts of the Bill as a whole, must it not?

*(Mr Forshaw)* It may well be, I accept that, but what is not sensible here is the desire to take 38 at all. It is simply not necessary.

2514. I understand that point and I will come to that with Mr Morton in detail in a few minutes. Can we then move to the specifics of number 38? Set aside the issue of the void being left and turn to your second issue, that the building itself is of a quality to be saved. First of all, there is no dispute: it is not a listed building, is it?

*(Mr Forshaw)* No.

2515. And, as you alluded to in evidence in chief, it was considered for listing, I think, at the behest of Islington in August 2005.

*(Mr Forshaw)* Yes, in June 2005, actually.

2516. I think the report is in August but that does not matter at all. In terms of the criteria for listing you did make some reference to this in opening. I just want to clarify the position. I have got a document which is produced by the DCMS and the Office of the Deputy Prime Minister on the principles of listing. Can I just put the relevant page up and see whether we can agree it, and I think this ought to be P33.<sup>14</sup> This is the DCMS consultation document on listing but I think the relevant paragraph is one that is standards. Towards the bottom of the page, at 6.11 we have got the listing considerations. Age and rarity are relevant considerations, particularly where buildings are proposed for listing on the strength of their historic interest. Do you see that paragraph?

*(Mr Forshaw)* Yes.

2517. If we pop down about six lines, it says that after about 1840, because of the greatly increased number of buildings erected and the much larger numbers that have survived, greater selection is necessary to identify the best examples of particular building times, and only buildings of definite quality and character are listed. Can we agree that that is the test that English Heritage would have been applying?

*(Mr Forshaw)* Yes.

2518. Can I ask you then to look at the adviser's report which English Heritage produced in reaching the decision that this building was not to be listed?

Hopefully that document is going to come up on the screen. I assume you have it. It is the document dated 4 August 2005.

*(Mr Forshaw)* Yes.

2519. I think the Committee probably have copies of this but we can see it on the screen, and that should be P34.<sup>15</sup> It sets out something of the context, and then it goes through something of the history, which I think you have already touched upon. Then in "Description" it says, "The claims to interest here are the distinctive wedge shape of the building, and the façade decoration, which is concentrated at the sharply rounded corner of one window bay. The two side elevations are much plainer and, viewed head on from Charterhouse Street and without the benefit of the corner, they are fairly unremarkable. The side elevations are of red brick with a prominent moulded cornice above ground floor, at the top and between each storey. The ground floor is marked out with a pair of pilasters between each bay. There is a Corporation of London crest on the apex. The ground floor has been quite changed internally for what is now a bar. Most of the first floor was accessible, this being an open space for additional bar seating and less altered, with a door out to the corner balcony." Under "Assessment" it says, "The majority of the building is marked by the handsome, but unextraordinary elevations to each side. The decorative attention is all focused at the corner, where the carved stone heads and crest, as well as pilasters in decreasing orders and the Corinthian capped granite columns flanking the entrance are fine. The side elevations, each of seven window bays, are perfectly respectable Victorian commercial architecture, but without the finesse or decoration that we see at the single corner bay. The shape of the building is indeed quite striking and it represents nicely the development ramifications of the large scale improvements that took place in this period. However, in summary, the interest is limited to the corner, the side elevations are relatively plain, and the interior has been modernised at ground floor level." The report then refers to a comparable building in Hackney. In "Conclusion" it says, "On balance, the interest is primarily in how the building makes an important contribution to the streetscape here, with its distinctive shape and fine corner carved stonework. However, the interest lessens beyond this, and the return elevations and the interior are unremarkable." This is the view of English Heritage; neither Islington nor Crossrail. I want to pick a few points out of that. Can we agree that there is no historic or architectural interest accorded here in the interior of the building?

*(Mr Forshaw)* Yes, we do not have control over the interior of the building because it is not listed.

2520. No, but it goes a bit beyond that, Mr Forshaw. This is the English Heritage report which makes it quite clear that there is no historic interest in the interior of this building.

---

<sup>14</sup> Crossrail Ref: P33, Department for Culture, Media and Sport consultation document on listing; Section 6.11.

<sup>15</sup> Crossrail Ref: P34, English Heritage, Adviser's Report recommendation, 4 August 2005.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

*(Mr Forshaw)* Yes.

2521. Equally, there is no suggestion in this report that there is any interest in the building as part of an ensemble of Victorian architecture of that age. Just for the Committee's purpose, you can get listing because you are part of an interesting group, can you not?

*(Mr Forshaw)* You can, but their conclusion is that "it is clearly of strong local interest, linked to the nearby Smithfield Market and forming a strong component of the local scene". The word "component" implies that it is part of a group.

2522. It is part of a group but there is no suggestion in this report that there is any historic or architectural particular interest in it as part of that group.

*(Mr Forshaw)* Not that justified listing.

2523. Next, what the interest in this building does come from, I would suggest to you, is two things in this report. One is its very shape at the apex of this corner, the gridiron shape, yes?

*(Mr Forshaw)* Yes.

2524. And the second, and we might go back to the photograph to make this point good—and I have to say our photograph perhaps rather than yours because it is rather better.

*(Mr Forshaw)* On a sunny day!

2525. The other thing that this report highlights as being of particular interest in this building is that corner apex, the stonework, the pilasters coming down and the columns at ground floor level.

*(Mr Forshaw)* Yes.

2526. That is the second particular feature of interest. So far as the side elevations are concerned, the report is entirely clear that these are an unremarkable bit of architecture.

*(Mr Forshaw)* "Perfectly respectable Victorian commercial architecture", it says.

2527. Respectable but unremarkable. In terms of those two features that we have agreed on, first of all, the gridiron shape at this prominent corner, a replacement building over which Islington would have the control over the shape could clearly maintain that interest, could it not? A quality modern building at this location could take full advantage of that location or position and shape?

*(Mr Forshaw)* Subject to viability, you could provide something of the same footprint, yes.

2528. Yes, but not just of the same footprint, I suggest to you, Mr Forshaw. It is a bit more than that. You could provide something of real interest on that corner.

*(Mr Forshaw)* Possibly, yes, a modern building.

2529. So far as the features at the apex are concerned, which English Heritage has said are of particular interest, this (indicating), I think, is the

Corporation of London thing, is it not, and then the stonework and then the columns. If the building was demolished it would be relatively straightforward to retain those features, ie, take them down and put them away in packing cases or whatever is appropriate, and store them, and, where one is talking about plaster features such as the balcony, to do mouldings on them.

*(Mr Forshaw)* There is a substantial risk involved in taking something down and putting it in packing cases and bringing it back again. The Promoter accepts that there are risks there. There is also a considerable cost involved. If you can come up with a solution so that you do not need to do it, why spend all that money?

2530. We will come to money and risk with Mr Morton. It is not by any means unusual with a building where particular features are considered to be important to retain to take them down as part of the demolition of the building, retain them and then incorporate them in a new building on the site.

*(Mr Forshaw)* It could possibly be done. You could do anything with enough money but there is always a risk involved that something goes wrong when you are doing it.

2531. If those two things were done, a building was replaced that took advantage of the shape of the site to highlight the apex and features which Islington believed were important, such as the stonework and pilasters, were retained, then the two most important features of the building highlighted by English Heritage could be preserved, could they not?

*(Mr Forshaw)* Possibly, but what I want to say here is you are focusing entirely on the listing report. What we have here is an unlisted building, the whole of which is of interest in terms of the conservation area. Conservation area legislation was brought in to protect this sort of unlisted building, that is what it is there for. We have got powers to protect listed buildings, we had that before the 1967 Civic Amenities Act. This building has qualities in its own right, maybe not up to the standards required for listing, I accept that, but as a perfectly respectable Victorian commercial building and we would seek to try and retain the whole of the building.

2532. Can I ask you a few questions about that as a general approach, if I may? Ultimately, I think it is trite engineering that you can find a solution to almost any problem if you throw enough money, time and engineering expertise at it. It is possible to retain almost any building with sufficient resources and so on, but those solutions may themselves have costs, not just costs in terms of finance but costs in terms of programming and costs in terms of safety implications, yes?

*(Mr Forshaw)* They may or may not. Mr Morton will go into that in more detail.

2533. Assume they do, and how many is an assumption I will put to Mr Morton, then it is always going to be the case, is it not, that one is going to balance up the quality of the building, the alternative

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

methods of preserving the interest of the building, such as the new building retaining certain features, and implications in terms of cost, programme and risk of maintaining the building. There is obviously going to be a balance. If you are talking about a Grade I listed building, a 13<sup>th</sup> Century barn, then the balance tips in one direction. If you are talking about, say, and I am not saying this applies here, an unremarkable Victorian building that is mildly positive in the conservation area then the balance tips the other way. There has to be that balancing exercise, does there not?

**(Mr Forshaw)** If you are looking at costs you are putting some assumed value on to a 13<sup>th</sup> Century barn. If you look at the costs themselves it may be that you would save money by keeping this building and not having to knock it down, not having to put up what is possibly going to be an expensive and subsidised replacement, subsidised by the Promoter.

2534. Can we just come back to the question? Do you accept the premise that in deciding where the balance lies the Committee, or any decision maker in these circumstances, has to balance out the quality of the building with the various costs of retaining it?

**(Mr Forshaw)** Yes, there is a balance to be taken.

2535. If we are talking about retaining Big Ben through the construction of the Jubilee Line then a very large amount of cost in terms of money, programming and so on would be appropriate to put into retaining the building, yes?

**(Mr Forshaw)** Yes, but where are those costs. We have not got them.

2536. Have you carried out any assessment of the cost of removing the interesting features of this building, the features at the apex, and storing them?

**(Mr Forshaw)** No.

2537. My instructions are—I have to say I do not know whether this figure has been put to Islington, we can find that out during the course of the day—the cost of doing that is something in the region of £200,000 to £300,000. Does that sound to be in the order of magnitude you would be used to?

**(Mr Forshaw)** I would need to see confirmation from expertise on that.

2538. **Ms Lieven:** Thank you very much, Mr Forshaw.

---

*Examined by The Committee*

2539. **Mr Liddell-Grainger:** Can I ask a couple of questions. You may not be able to answer this. Has any work been done on moving the ticket hall out from the emergency exit underneath the market out through the basement?

**(Mr Forshaw)** I do not know.

2540. The second question is the back of that building is just a brick building, is it not, it is not remarkable? It says “To Let” on those photographs.

**(Mr Forshaw)** Yes. That is 40-42.

2541. Yes. The front bit is the wedge and behind there is a much later brick building.

**(Mr Forshaw)** Yes.

2542. It has got a “To Let” sign on it in the photograph. Is there anything remarkable about that bit at all?

**(Mr Forshaw)** Nothing at all.

2543. It is just—

**(Mr Forshaw)** It is just number 38. 40-42, which is the utilitarian building beyond, we have absolutely no objection to them pulling that down.

2544. Ms Lieven came up with a series of undertakings if the work has to be done. You have seen those, have you?

**(Mr Forshaw)** Yes.

2545. Was that the first time you have seen them?

**(Mr Forshaw)** It was the first time I have seen them in that form.

2546. Just as an initial response, did that allay your fears that they were trying to retain it or work round it or whatever?

**(Mr Forshaw)** There is nothing there really about retaining the building or working round it.

2547. There was retaining the façade, was there not?

**(Mr Forshaw)** Yes, but without a method statement and whatever I am very cautious about that.

2548. Last question. If the façade was retained as a shell façade with the work behind it, would that suffice?

**(Mr Forshaw)** Possibly, yes.

2549. Is that a possibly yes or a possibly no?

**(Mr Forshaw)** Possibly yes.

2550. We are the politicians!

**(Mr Forshaw)** That is a fallback situation if there is no other way to do it.

2551. You would accept that?

**(Mr Forshaw)** Façade retention would be an acceptable bottom line.

2552. **Mr Binley:** I want to talk about façades because it is true to say that façades up and down the country and façade retention has a very variable quality about it, does it not? There are some good examples but there are also some appalling examples that simply look like an old building stuck on the front and dominated by a very modern one.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

*(Mr Forshaw)* Yes.

2553. **Mr Binley:** Is it right to say that you fear that the quality of façade retention might not be properly controlled if this clause stays in the Bill?

*(Mr Forshaw)* Yes. There is always a problem with façades. Some of the poor façade retention schemes you have referred to are perhaps where developers try and cram in more floors than there are at the moment, so you get floors running across the windows and things like that and it looks a nonsense. Yes, there would be concerns about that. It is much better to try to keep the floors in place, or at least some of the floors in place, because that retains the stability of the façade as well.

2554. **Ms Lieven:** Sir, can I just make one point clear?

2555. **Mr Binley:** Can I finish my question, please? I would like to continue a train of questioning as you clearly did.

2556. **Ms Lieven:** I am sorry, sir, but we are not proposing façade retention.

2557. **Mr Binley:** I understand that, I am just asking a series of questions.

2558. **Ms Lieven:** Certainly, sir.

2559. **Mr Binley:** That is most kind. Let me go on to my next question which concerns the relationship between—Before I do, let me declare an interest. My interest is about the quality of planning over the last 50 years and its inability in many instances, to my mind, to take into account the import of local people's feeling of wellbeing and security in relation to the buildings around. I feel quite strongly about that so I give you that as a freebie, if you like. I am concerned that is not fully taken into account and I think this impacts upon your job quite deeply. I am concerned that is not fully taken into account when planners make decisions and sometimes people in your position find it difficult to relate the relevance of the two things together. Is that a fair comment to make in your experience bearing in mind all of the work you have done in this field?

*(Mr Forshaw)* I think that is a very good point. There is quite a glib assumption that you can knock an old building down and put something else up in its place which will be adequate compensation for losing that old and cherished building. The familiar old buildings, even if they are not the most wonderful bit of architecture, are valuable things for local people: they help them relate to where they are, they give a sense of local place identity. That is what conservation areas are about, trying to retain that sense of local place.

2560. Thank you for that. One final question, and thank you, Chairman, for allowing me to ask these questions. We talked about the fact that it is okay because there is another building a bit like this in Hackney. That may be good from the perspective of an architectural buff who will travel distances to enjoy a given building but that does not relate to that concept of people living in an environment and relating to that building pretty much every day of their life, does it?

*(Mr Forshaw)* No.

2561. That is a different perspective, is it not?

*(Mr Forshaw)* Absolutely.

2562. We should also take that into account, should we not?

*(Mr Forshaw)* Yes. That is precisely why the local borough had developed policies for this area which identified buildings of local importance which contribute positively to the character. The buildings are statutorily listed because of their national interest and they are looking for the best examples nationally. Indeed, there may be a better flatiron building in Hackney and they have listed that one rather than this but that is not really the point when it comes to the local scene.

2563. **Mr Binley:** I am grateful to you. Thank you, Chairman.

2564. **Ms Lieven:** Sir, I just wanted the Committee to be clear. This is a difficulty with the process by which we do not put our case at the beginning. Our evidence in the note that will be produced will clearly be that façade retention carries too many risks at this site and is not feasible. I have tried to be very careful to put to Mr Forshaw that it would be possible to take down and then put back the features at the apex but it is no part of our case that façade retention would be appropriate here for engineering reasons. I just want the Committee to understand that so we are not later accused of having misled anybody.

2565. **Kelvin Hopkins:** I just wondered, according to your tab 7 drawing it seemed to imply that it is technically feasible to do the construction without demolishing the entire building, is that right?

*(Mr Forshaw)* Yes. Mr Morton will speak to that.

2566. **Mrs James:** Are there any other designs by the gentleman, Benjamin Tabberer, in this area of the City?

*(Mr Forshaw)* I do not know, I am afraid. I am not aware of any immediately adjacent to it.

2567. **Chairman:** Could you find out and let the Committee know?

*(Mr Forshaw)* I could do, yes.

---

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

Re-examined by **Mr Honey**

2568. **Mr Honey:** Mr Forshaw, I was going to ask you about the undertaking, if that can be put back up on the screen. I understand that in this form this is the first time you have seen it this morning. If you can just take a moment to familiarise yourself with it, I want to ask you one or two questions arising out of what was put in cross-examination. First, does the undertaking have the Promoter doing anything to avoid demolition here or not?

**(Mr Forshaw)** No, it is nothing to do with demolition; it is to do with a replacement building or other structure.

2569. If you could look at the paragraph numbered (2) and just take a moment to read that.

**(Mr Forshaw)** Yes.

2570. In particular have a look at the actual obligation that the Promoter is taking on. Could you say does that require a building to be rebuilt within four years or at all?

**(Mr Forshaw)** No, it is not talking about a building, it is talking about an AAS which is an alternative to a viable building. That might be some sort of hoarding or advert hoarding around the site.

2571. Is the obligation there saying that anything is going to be built or is it something less than that?

**(Mr Forshaw)** It is in accordance with planning consents granted so the local authority would have the ability to refuse a planning consent for something it thought would not enhance the conservation area. I think it puts the local authority in a pretty weak position and if that is all we have recourse to then it is not a very strong position.

2572. You highlighted a moment ago that there is not an actual requirement for a building. What would it be if there was no building to be put there? What would occur under this undertaking, do you envisage?

**(Mr Forshaw)** I guess some sort of hoarding or screening or something like that. Maybe a picture of what the building used to look like or something, I do not know.

2573. Would that be acceptable in your view?

**(Mr Forshaw)** No, not compared to what we have there now.

2574. Perhaps if could have the picture of the building back up, I may refer to that in a moment. Questions were put to you about the normal situation with regard to PPG15, the Secretary of State's guidance, and what would be required usually under conditions there. Could you say for Crossrail to bring about the over-site development on the footprint of number 38, what would they have to do to realise that?

**(Mr Forshaw)** They would need to apply for planning permission for a replacement building. That would go through the normal process.

2575. What would they have to put in place in addition to make sure the building was actually realised?

**(Mr Forshaw)** They would have to provide us with a contract that the building would be built.

2576. So if it is necessary for over-site development to have planning permission and a contract in any event, if you were to require those things before demolition, what additional burden would you be putting on the Promoter in this case?

**(Mr Forshaw)** We would be requiring them to come forward with a design and a developer who is prepared to build it.

2577. What more would it require than they were going to do anyway?

**(Mr Forshaw)** It is a question of timing, is it not?

2578. You were taken to the English Heritage report which considered the building in the context of listing and it was put to you that there was fine façade decoration and I think it says there is fine corner carved stonework as well. Can you say what, if any, of that is proposed to be retained under Crossrail's current proposals, including the undertaking?

**(Mr Forshaw)** None of it. There is no guarantee of keeping any of it.

2579. If, for the sake of argument, we assume that is going to happen and it will be rebuilt, that corner point, what limitations, if any, would that place on the viability of a replacement building?

**(Mr Forshaw)** Quite a lot I would have thought. The building as it is at the moment, the other façades relate very well to the corner, they have still got the same rhythm of windows and whatever. Just to keep the façade and then put up goodness knows what either side of the apex, there would be quite a strong constraint on what you would get planning permission to have rebuilt there if you put in a new building and keep in the apex. That is likely to result in significant costs.

2580. Questions were put to you about retaining what were said to be the two most important features. Can you please just state for the Committee briefly what is the statutory and policy position in relation to demolition in conservation areas? What are we seeking?

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

**(Mr Forshaw)** What is being sought here is conservation area consent to demolish the whole building. We believe that the building as a whole, all the façades are of a positive architectural and historic interest, it is not just the apex, the whole of the elevations are of interest here. They have a very good and strong rhythm and hierarchy to the floors. It is a very, very pleasing building to look at.

2581. How would what is proposed in terms of just retaining those two most important features measure up against the objectives for conservation areas?

**(Mr Forshaw)** Very poorly. The objective of conservation areas is to retain buildings that contribute positively to their character.

2582. Thank you. Questions were put to you towards the end about it being necessary for there to be a balancing exercise taking into account the quality of the building, costs and so on. What evidence have you seen, if any, of that balancing exercise having been done by the Promoter?

**(Mr Forshaw)** None.

2583. **Mr Honey:** Thank you very much. I have no further questions for the witness.

2584. **Chairman:** Thank you very much indeed, Mr Forshaw. Mr Honey, would you like to call your next witness.

*The witness withdrew*

2585. **Mr Honey:** My next witness is Mr Brian Morton.

---

**Mr Brian Morton MBE, Sworn**

*Examined by Mr Honey*

2586. Thank you, Mr Morton. If you are comfortable there and have all the documents in front of you can I ask you, please, for the benefit of the Committee to state your qualifications and appointments?

**(Mr Morton)** I am a consulting engineer who has specialised in work on historic buildings for the last 40 years. In the Honours List last year I was awarded an MBE for my services to conservation of historic buildings. I am a Fellow of the Institution of Civil Engineers. I have a diploma in conservation at the Architectural Association, unusually because there are few engineers who go down that path. I am a member of the Institute of Historic Building Conservation. I have been working on historic buildings for some 40 years. I have worked on almost every sort of building that is conceivable and through my office have passed some 9,800 projects since I formed the company, mainly in the conservation area.

2587. Thank you. What public appointments do you hold as an engineer?

**(Mr Morton)** I am engineer to Canterbury Cathedral. I am on the committee for the fabric of Westminster Abbey. As engineers, we have just completed the new tower at Bury St Edmunds Cathedral. We work very closely with English Heritage and we are trusted by English Heritage. We have a worldwide reputation for our work in conserving historic buildings.

2588. What is your original professional background? Do you have any experience of buildings in this area of London?

**(Mr Morton)** Yes. It is probably worthwhile starting a little way back. I started working in power stations with Sir William Halcrow. I then joined a small firm of consulting engineers, where I worked for 11 years, where they were involved in historic buildings and that initially started me looking at

historic buildings. We were involved in looking at vibration effects on cathedrals throughout the UK. As my experience progressed I became engineer on one of the first early 20 storey buildings in the centre of London which was constructed using a secant pile system, one of the earlier buildings that was done using that system. I spent two years in the district surveyor's office in Fulham in London where I was responsible as an assistant district surveyor for supervising the foundation work to multi-storey buildings and minor buildings. I was responsible for preventing the demolition of Barlaston Hall in Staffordshire where three other engineers had failed to put forward proposals where the building was proposed to settle some three metres over the next 10 years. I went out for a private client for expenses only to Tortola in the British Virgin Islands and in opposition to seven engineers was able to put forward proposals for saving a government building there. Most interestingly, with regard to deep foundation piling, I was brought in as an arbiter between the City of London and English Heritage when negotiations broke down for the construction of a car park in the front of the Guild Hall some 20 metres below ground. I was the sole arbiter. I put forward, in agreement with the two bodies, proposals which were then accepted by the contractor for the form of construction that was eventually adopted. Currently I am consultant to the practice I formed some 40 years ago which now has 20 people, all of whom are trained by ourselves to be engineers of historic buildings.

2589. You mentioned a 20 storey building in London. Can you identify which building that was?

**(Mr Morton)** It is Northampton College of Advanced Technology in Bunbury Row.

2590. In which location?

**(Mr Morton)** In the City.

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

2591. Can you please explain very briefly what you were asked to do by Islington in relation to this petition?

**(Mr Morton)** I was asked to look at the proposals that were put forward and advise whether there was any way of preventing the demolition of this building.

2592. What were you provided with in order to allow that advice to be given?

**(Mr Morton)** I was provided with the information that Islington made available to me. Latterly, in fact on Friday, I did receive Crossrail's Mott MacDonald Consulting Engineers' report on the façade retention. I had nothing else from Crossrail apart from the basic documents that all have had.

2593. Have you consulted with anyone else about the practicalities of realising your proposals?

**(Mr Morton)** Yes, indeed.

2594. Who was that?

**(Mr Morton)** We looked for contractors who have experience and are currently working on tunnelling on Underground construction. I went and met a company called Scanmoor who are currently working in Shepherd's Bush who at this moment are involved in the design of a secant pile shaft for the Underground in the Shepherd's Bush area. I do not know any details of that. They went to the site of their own volition and I met them after they and I had been on site. They indicated that the ideas I had were reasonable and were possible.

2595. Going on in the document you have as your proof of evidence to paragraph seven, can you please explain what is involved in the site by reference to any drawing?

**(Mr Morton)** The overall site comprises two properties, 38 and 42 Charterhouse Street. The requirement is for the construction site to include half the width of Charterhouse Street and the short length of Fox and Knot Street. The proposed boundaries of the construction site are shown on 110 Farringdon which is amongst the bundle.

2596. It is tab 5 in the bundle.<sup>16</sup> To what did you want to draw the Committee's attention on this drawing?

**(Mr Morton)** The mere fact that the site of our building that it is proposed to demolish is not part of the permanent development, it is simply part of the construction site.

2597. What is your opinion, as someone engaged in historic building matters for some considerable time, as to the value of number 38 and its characteristics?

**(Mr Morton)** As we heard from the Committee Member, I think that building is of significant importance in its position. I think we have to look at these sorts of buildings because we are losing our identity, we are losing what is our past which people so much rely on.

2598. You have included within the bundle at tab 7 some photographs. Were there particular aspects of those photographs you wished to draw to the Committee's attention? There are three photographs in tab 6.

**(Mr Morton)** Basically this is a simple building. It shows no significant signs of structural movement. I have looked through the ground floor and the first floor of the building. It is certainly under normal conservation terms a building that would be there forever effectively if it is properly maintained.

2599. What in particular is the structure at the end of the building where number 38 adjoins the building at 40-42 next to it?

**(Mr Morton)** The wall between this building and the adjacent building is described as a party wall but I do not believe it is. In fact, I think we have an enclosing wall which is part of our building. There is a further enclosing wall on the adjoining site, so effectively I believe we have two walls together. What we have is a building which is quite secure in its structure and able to hold itself together very satisfactorily.

2600. Thank you. Just so that we can have this clear before we move on to consider your evidence, can you briefly summarise the Promoter's position as to the demolition and construction works at number 38?

**(Mr Morton)** Surprisingly, the Promoters have only looked at one situation, which is the retention of the façade of the building. I am quite amazed at that because certainly if a project like this was put before us, as a company of engineers, we would look at all aspects of it (a) to provide the best economic solution to the solution that had arisen and (b) to properly advise our clients as to the alternatives that might be available to them. The report that I have draws a conclusion that the only way of dealing with the site is the demolition of the building because they put up an enormous scaffold around the building itself and then say, "We have not got enough room to construct the shaft because we have not got anywhere to put things on the site, this enormous scaffold that is retaining the façade is in the way".

2601. I know that you have considered the Promoter's position. Can you please say what your response is in general terms to the Promoter's position?

**(Mr Morton)** What I have tried to do is to look at this as a project that came to us. The way I see it at the moment as far as the Promoters are concerned is they have not been properly advised as to the possibilities for the use of this site. I think it should be further investigated down the path I have taken which is to put forward three alternative proposals which can be looked at individually and assessed and decisions made.

---

<sup>16</sup> Committee Ref: A35, Plan of construction site (SCN-20060207-011).

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2602. Thank you. We are up to about paragraph 13 in your note. Can I ask you to outline what the position is as far as those three options you mentioned are concerned?<sup>17</sup>

**(Mr Morton)** The first option would avoid the need for any alteration to number 38 at all. The second and third would enable the building to be left substantially intact. All would involve only very minor changes to the Promoter's proposals being based largely upon changes to the construction methods. None of the methods I propose are unusual or would be unduly onerous or expensive. They are intelligent but straightforward solutions to enable Crossrail to be built as planned without demolishing 38 Charterhouse Street. They would provide sufficient working space on the Fox and Knot Street site and not require the works to be carried out other than in a wholly safe manner.

2603. I am going to ask you to explain what is involved in the first option that you put forward and in particular in relation to the construction techniques involved.

**(Mr Morton)** I think probably rather than read this I ought to explain to you and perhaps I can get you to visually understand what is involved. We are digging a big round hole and in digging that hole as you dig it, you have to hold its sides in. There is a system of doing this by putting piles around the periphery of the hole. Initially you put pairs of piles—I am sorry, are you looking for something?

2604. **Mr Binley:** Yes. I would find it easier if I saw the options in front of me, quite frankly. I am sorry, Chairman, but I am finding this slightly difficult.

2605. **Mr Honey:** There is one drawing which will help illustrate and that is at tab 7. Before describing what is shown here, can you just describe what the Promoter is promoting by way of construction techniques?

**(Mr Morton)** There are several ways of constructing a big hole like this. The Promoter is proposing to construct this by effectively digging a ring around the area where they are going to need to construct the walls, in other words a circular ring, which is over width about a metre wider than the actual hole itself. They place concrete blocks at that sort of depth in segments all around the outside. They possibly put another row of these segment blocks around on top of those and, having got to that position, they put concrete around the periphery so it gives the wall at the top some stability and excavate underneath these segments to put further blocks underneath and go down that way. So you are building underneath what you have already constructed the whole time. The risks associated with that are that you loosen the earth behind the wall and thus you have to carry out grouting which is the pouring in of a cement-based mixture to solidify the ground around the outside of the hole. This has a risk of settlement on adjoining building associated with it because the ground almost

certainly will consolidate during this period, but of course properly done the risks are quite small. They go on down with this system until they get the 22 metres down, which is about 75 feet. At the bottom of that they spray concrete on to the further digging that is taking place to hold the earth up beneath this secant pile system. They rely on that as the structural means of retaining the earth and they then construct from that the entrances to the adits that take the people down on to the railway track.

2606. You have an alternative proposal which is illustrated on the screen at the moment.

**(Mr Morton)** Yes.

2607. Please can you explain what is involved in your alternative proposal?

**(Mr Morton)** If you look at the plan you will see there are a series of piles, a series of tubes that are shown around the periphery, which is what is called a secant pile system. Initially you pile every second pile, you leave a gap between them. You then come along and put another pile down between them and on the inside face you build a block wall to consolidate the whole structure. You drive those piles down to the requirement that you have and excavate from inside the waste materials that you do not want any more. That would probably be done by having a small digger dropped into the hole doing the excavation and removing the earth. Again, when you get to the bottom you will have a different form of construction which would almost certainly be a sprayed concrete system.

2608. Comparing the need for working space on the site between the two methods, which would be better?

**(Mr Morton)** The secant pile system needs a rather wider area for its construction overall because you have the block work lining it. I am not aware of the thickness of the segment system but there is a difference. Marginally the shaft would be of somewhat larger diameter.

2609. How about working space needed on the site in terms of the storage of materials and so on?

**(Mr Morton)** In due course I would have to refer to the proposals to retain the façade because that significantly affects the construction overall related to storage on the site. In my view this system would not require any more storage space than the segment system. With the segment system it is suggested storage space on site for the segments that are going to be immediately used and in the case of the piling system you would not have those segments but you would have tubes and reinforcement on the site ready to go down into the various piles.

2610. To your knowledge, is this system for building shafts related to rail works being used elsewhere?

**(Mr Morton)** Yes indeed. Scanmoor tell me they are working on such a shaft and putting forward proposals in Shepherd's Bush.

<sup>17</sup> Committee Ref: A35, Alternative construction plans for Fox and Knott Street (SCN-20060207-015 to 021).

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

2611. Having regard to the options you are putting forward in order to avoid the complete demolition of this building, what is your first option?

**(Mr Morton)** The first option is to move the shaft some two metres. That is something of a guess, but something of that order in the direction of Fox and Knot Street. This means that it impinges on Fox and Knot Street rather more. One of the arguments put up against this is possible services in Fox and Knot Street but the comparatively quick investigation that Scanmoor did suggests that there is a sewerage line on the far side of Fox and Knot Street, although there does not seem to be anything of significance on our site side.

2612. Are there any barriers to moving the shaft some little distance towards Fox and Knot Street?

**(Mr Morton)** Not that I am aware of.

2613. Will it have any effect on any other buildings in terms of increasing the need for acquisition?

**(Mr Morton)** No, it certainly will not.

2614. I understand that using this system there is also a second option. Can you please explain what that is?

**(Mr Morton)** The second option is as shown on the drawing. That uses piles flattening out one side of the ring in the way that is shown on the drawing. If that is done, it is my opinion that we could get away without even taking down our enclosing wall to the building at 38.

2615. I understand that there is a third option where, even if you accept absolutely everything that the Promoter is proposing, you do not believe it is necessary to demolish the building. Can you please explain what would be involved in those circumstances?

**(Mr Morton)** In working on historic buildings, one is always looking for a solution. You are prepared to go to any lengths to design a solution to save that building. What I have done here is say to myself, "Okay, the chips are down. We cannot do anything else. We have to accept some loss of this building. What can we do about that?" I looked at the photographs.

2616. The photographs are to be found in your tab six. Is it the last photograph in there?

**(Mr Morton)** Yes.

2617. Please explain by reference to that photograph.

**(Mr Morton)** If you look at that photograph, you will see at first floor level there are two windows. Alongside those windows in the retained part of the building there is a brick pier. You can simply remove that section of the building to the right of that pier. It is a structural line across the building. It has beams across the floor at the upper levels. You could take that section out and rebuild it afterwards. The only difficulties, if they are difficulties, are the slight complications of replicating the cornice and pilasters on the front elevation. Exactly the same situation

applies on the elevation on the other street. If you simply take that off, it would give you an extra three metres of building site area to work in. It seems to me to be a much better alternative to total demolition of the whole building.

2618. Has Crossrail, the Promoter here, considered anything similar to that at all?

**(Mr Morton)** They have indeed, in their report.

2619. The drawing is tab five, the last drawing. Can you explain first what this drawing is and where it comes from?

**(Mr Morton)** This is related not to trying to save the whole building but to restraining the two long walls at their ends so that work could be carried out to build the shaft without taking the ends of those walls down. The odd thing is that what has been proposed—please understand this is totally related to facade retention—is only taking out the wall in the ground floor. Then they comment on that that it is not really practical because you still have the building above you and you cannot get at it. They have looked in a sort of way at one of these proposals but then dismissed it.

2620. Have they considered what you are putting forward as this third option at all?

**(Mr Morton)** No, they have not.

2621. There is evidence in relation to the facade retention you mentioned earlier and the need for buttressing mentioned by the Promoter when you were to retain the facade. Can you please explain whether there would be any need for external buttressing in any of your three options?

**(Mr Morton)** The building as it stands is restrained by the floors of the building. It stands there perfectly foursquare. It is a solid structure. It is not going to go anywhere. If you take out the end wall as I have suggested, removing the three metres, it will probably be necessary to put some ties across to restrain the open ends of those walls but, apart from that, no other work would be required to the building to restrain it.

2622. What if any use would the retained, existing building be capable of on the work site there?

**(Mr Morton)** It could be used for the facilities one needs on site, the health and safety situation and the contractors' huts inside the building. It is interesting that Crossrail's engineer suggests, in talking about the retention of the facades, that the interior of the building has no value for their working abilities on the site.

2623. As far as your options are concerned, what if any of the problems that you would face with facade retention would be encountered with your three options?

**(Mr Morton)** The problems simply are not there. You have the building; it is a solid structure. You have considerable advantages because you do not

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

have the loss of the large amount of the overall contractual site that occurs because of the facade retention scaffold. Could I refer to tab five?

2624. It is the second page at 5B. Can you explain what this drawing is and what it shows?

**(Mr Morton)** This is the construction site. It is based around the facade retention proposals. You can see to the left hand side of the site and to the bottom the facade retention areas that are necessary to restrain the walls. This proposal shows a situation where they are going to put a steel frame across these areas with access underneath it for lorries or storage materials. You can see it takes up an enormous space on the site. If you do not need those facade retention structures, you gain a great deal of space all round. You can see on that plan as well the area where segments of the precast concrete would be stored at the top of the drawing and then various fuel tanks, generators et cetera that are obviously a necessary part of this form of construction. I see it may be put forward that access around the site is going to be difficult but of course it will be quite possible to put these items that need to be stored on a scaffold or steel framework at first floor level, as you see on many construction sites. You could end up with a fairly clear area of ground on which you could work.

2625. Can you identify on this plan for the Committee please the location of the tower crane that is proposed?

**(Mr Morton)** Yes. The tower crane is shown on that drawing in the centre of the retained building. It is marked in blue.

2626. At tab seven we can see your proposals which include organisation of the site. Can you please talk us through this drawing in terms of organisation and what working space would be available?

**(Mr Morton)** You can see quite clearly on Charterhouse Street the space that is now available, where you do not have the retention proposals. You do not need to bring the lorries into the site at the end of that sloping area shown to the right. You can bring them in half-way down that boundary so you would gain space behind the lorries in open ground for storage of segments for other site huts or materials that you need to bring to site. You also gain space on the bottom of the drawing where you can see again there is the width of the pavement for further storage inside the site boundaries. I discussed with Scanmoor the arrangements for the crane. I cannot really repeat their comments but the thought was that it was crazy to put a crane in the middle of a building that had a steel framework all round it and anything you had to lift you had to lift over the top of that building. It would be much better and much more convenient to put the crane in the sort of position that is shown on this plan.

2627. As the borough understands it, the Promoter has concerns about limited working space there may be on site and health and safety issues which could arise from that. Could you please explain what,

under your three proposals, would be available in broad terms for working space and whether it would be sufficient to give rise to any significant risks?

**(Mr Morton)** You can see from this plan that you have a bare site which has a big hole at one end of it. You have the remains of that site, apart from the floor plan of that building, which can have the ancillary facilities inside it. Believe me, site huts are quite a problem. Toilet facilities and whatever could be put inside the building and it could be used as an adequate site office during the construction period, altogether a much better arrangement. You significantly reduce the health and safety risk associated with the construction. You are not endangering the building. You do not have the danger of the facades falling down. Okay, you require some protective measures and a risk assessment needs to be carried out so that the risks can be avoided. Any project is possible as long as a proper risk assessment is carried out. The risk assessment indicates the sort of risks that are associated with the construction and then you put forward proposals to avoid those risks. That is the normal way of doing it. I believe that the risks associated with each of the three proposals I have put forward are far fewer than they would be if we try and retain the facades, although it is perfectly possible to retain the facades.

2628. Having regard to what the Promoter proposed to do, which is to level the site essentially and knock everything down, taking into account all relevant factors, do you think the risks proposed by your options are acceptable or not?

**(Mr Morton)** Absolutely acceptable.

2629. In respect of the time that the proposals would take to realise, what effect on the time taken for construction would your proposed options have?

**(Mr Morton)** There would be a significant reduction in the time required for carrying out this construction.

2630. That is as against what?

**(Mr Morton)** As against the proposals for erecting a massive structure to retain our building before you can carry out any work or construct the shaft.

2631. As against what the Promoter is proposing to do, which is not facade retention, would this significantly add to the period taken for construction or not?

**(Mr Morton)** Not at all. The building is there; you do not have to demolish it. With the health and safety risks in demolition nowadays, there is a significant time associated with taking it down and getting that material off the site.

2632. Could you say briefly what, in your opinion, the likely cost implications are of your proposals both as against complete demolition and some form of facade retention?

**(Mr Morton)** In the report by the engineers for Crossrail, they have a list of costs associated with their proposals. Most of those costs simply

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

disappear. There must be an enormous cost saving in adopting these proposals and a consequent time saving as well.

2633. As against what the Promoter is proposing to do in terms of demolishing the building, what are the cost implications of your proposal, in broad terms?

**(Mr Morton)** There is a significant cost attached to demolishing a building with the health and safety requirements that are now in place. It is a dangerous business and will require time and care to demolish the building.

2634. Overall, are the reasons the Promoter puts forward for wishing to demolish the building in terms of time, money and safety concerns at all when compared to your options?

**(Mr Morton)** No, clearly not.

2635. What is your overall professional opinion in advising this Committee as to what ought to happen on this site?

**(Mr Morton)** I believe that Crossrail's engineers have not looked properly at the proposal to build this shaft on this site. There are clearly other options. It seemed to me when I received the original information on this project just 10 days ago that somebody had fairly arbitrarily drawn a ring on that site, keeping it off Fox and Knot Street and said, "That is the only place it can be." I do not believe that this is a well thought out position for the shaft. I do not believe that it has been properly thought out.

2636. Is there any other evidence that you want to give to the Committee today?

**(Mr Morton)** No.

---

*Cross-examined by Ms Lieven*

2637. When were you instructed by Islington?

**(Mr Morton)** Two weeks ago.

2638. We have not seen any report from you or any plans from you at all until this morning at 9.30, have we?

**(Mr Morton)** I am sorry; that is not my involvement. As far as I am concerned, a meeting was held with Crossrail engineers where we did have a document but I understand that was not sent.

2639. It is not a criticism of you, Mr Morton. It is just to try and explain where I am at now. We had no written document from you or plan of your proposals until 9.30 this morning. Is that your understanding of the position as well as mine?

**(Mr Morton)** That may be so but I did not have anything from Crossrail with regard to the retention scheme until Friday morning last week, which has meant I have had to work over the weekend to put this all back together again.

2640. On the retention scheme, I think there may be some confusion creeping in here. Islington asked us to consider facade retention and we commissioned Mott MacDonald to draw up a report. It is no part of Crossrail's scheme, is it, to retain the façade?

**(Mr Morton)** It is no part of Crossrail's scheme but if I was the engineer appointed by Crossrail to look at a facade retention scheme I would say, "Hey, Mr Client, there are other ways of doing this that can save you money and make it easier for yourself."

2641. The conclusion of the Mott MacDonald report was that Mott MacDonald would not recommend facade retention, was it not?

**(Mr Morton)** That is right.

2642. As I understand it, you are not recommending facade retention either.

**(Mr Morton)** Facade retention could be done. It is not difficult. Storage could be arranged offsite for various units. It is possible.

2643. On this criticism that Crossrail have not done the balancing exercise and we have just blasted in with a bunch of civil engineers and popped a shaft down, are you aware that Crossrail have been advised throughout by Alan Baxter Associates who are both well known civil engineers but also well known advisers on historic buildings and conservation? Before you comment on their *bona fides*, were you aware that Alan Baxter had been advising Crossrail throughout?

**(Mr Morton)** I knew they were involved but I did not know their total involvement. I know them and have a great deal of respect for them.

2644. Can we look at the constraints on this site? I am going to put one of our documents on the scanner. I do not want to get into the detail of what bits of kit are needed on the site. I want to use this as a drawing to show the constraints around this site. To the north we have Charterhouse Street very confusingly called the northern arm. On the Crossrail proposals as they exist at the moment, we are already taking half of the highway, are we not? There is no scope to go north on the work site without closing Charterhouse Street?

**(Mr Morton)** No.

2645. To the south we have an equally confusingly named Charterhouse Street, southern arm. Again, we impinge on the pavement there. I do not know whether you are aware of this but there is no scope to move the work site south into Charterhouse Street, southern arm because that would begin to have implications for the delivery vehicles going to the market. The City has made it clear that that is unacceptable to it.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

*(Mr Morton)* I just noted that Crossrail's engineers' proposals showed the steel work supporting it beyond that arm.

2646. But not, as I understand it, impinging on the parts of the highway that would have any effect on deliveries to the market. That is a no go area. Is that your understanding as well?

*(Mr Morton)* If you look at 5B, you will see that the facade retention projects out beyond the site boundary.

2647. Effectively, that is the same plan, is it not?

*(Mr Morton)* Yes.

2648. I cannot say it too often. That is not Crossrail's proposal. That is in our view the only way that you can retain the façade. Are you aware of the constraint on the Charterhouse Street, southern arm, by which any taking of the highway there would be opposed by the City because it would constrain access to the market?

*(Mr Morton)* I accept that.

2649. Can we revert back to what we are proposing? So far as moving east is concerned, the Crossrail proposal for the work site takes the entirety of Fox and Knot Street. Do you see that?

*(Mr Morton)* It does not, does it, except in terms of the storage requirements.

2650. What I said was the Crossrail proposal for the work site takes the entirety of Fox and Knot Street.

*(Mr Morton)* Right.

2651. We cannot move onto the pavement in Fox and Knot Street—in other words, here—because this very large building here has its emergency access onto that pavement.

*(Mr Morton)* I am talking about two metres at the most and that would not take it that far, based on that scale.

2652. We will come to the dimensions in a moment. You are aware that we have to maintain an emergency access to that building on Charterhouse Square? Were you aware of that constraint?

*(Mr Morton)* I am sorry to say that if you are putting the storage, huts or whatever there you do not get that access, do you?

2653. We do because this is pavement.

*(Mr Morton)* I am not intending to go on to the pavement.

2654. I am trying to get the constraints straight at this stage before we come to what you are and are not proposing. Are you aware that we cannot take that pavement and block the emergency access to 23 Charterhouse Square?

*(Mr Morton)* I accept that.

2655. **Kelvin Hopkins:** Where is the emergency exit?

2656. **Ms Lieven:** I will speculate. I think it is somewhere in the middle, about there, but not right at one end or the other. Can we turn to what is being proposed for this site before we look at the options? We know from earlier that the shaft is an emergency access shaft and there are certain dimensions which have to be met for that shaft in order to meet Her Majesty's Inspectorate of Railways standards. The dimensions are effectively fixed. You do not just have to have the stairs; you have to have landings as well.

*(Mr Morton)* The volumetric areas are fixed, not the plan areas.

2657. I am quite happy with that at this stage. From the bottom of the shaft—this is all explained in the Mott MacDonald Report—the chamber at the bottom, the cross adits and the passages down to the platform for emergency access all have to be built from this shaft, do they not?

*(Mr Morton)* Yes.

2658. You accept that?

*(Mr Morton)* Yes.

2659. Can we check exactly what is going on with your plan by reference to the dimensions of the shaft at the Fox and Knot Street point. On our proposal, the shaft comes here, just crosses the pavement of Fox and Knot Street and the outer rim impinges into Fox and Knot Street there. Do you see that?

*(Mr Morton)* The outer rim is only at ground level.

2660. The hoarding line is there on the pavement of Fox and Knot Street?

*(Mr Morton)* Yes.

2661. Can we put up your tab seven? Forget the bitten bit out of the biscuit on the west side. The position of the shaft is identical to the position of our shaft. Is that right?

*(Mr Morton)* Yes.

2662. You have pushed the hoarding back onto the pavement on Fox and Knot Street. Our line is there and your line is there.

*(Mr Morton)* I am sorry; that is a mistake. It should not be like that.

2663. Your hoarding line ought to be in exactly the same position as ours?

*(Mr Morton)* That is right.

2664. Perhaps we can redraw that with the dotted line on the pavement. Can we look at your options? First of all, your option one, as I understood it, involved moving the shaft two metres further east, effectively moving the shaft to here. This is tab seven again.

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

(*Mr Morton*) That is right.

2665. We do not have a drawing of your option one, do we?

(*Mr Morton*) No.

2666. Your option two involves cutting out a chunk of the biscuit and bringing it across here. Is that right?

(*Mr Morton*) Yes.

2667. Your option three is maintaining the circle of the shaft but chopping off the last 10 feet, about three metres, of the building. Is that right?

(*Mr Morton*) That is right.

2668. Can I get to the bottom of one change that you have brought in and try to understand whether it makes much difference? Your proposed construction method is a secant piled shaft?

(*Mr Morton*) Yes.

2669. Ours is a segmented shaft. In terms of the site requirements, I do not understand your evidence to be that you are saying that the fact that you are using a piled method means that you need less space than us.

(*Mr Morton*) I think it is probably about the same space.

2670. Why have you gone for the piled method rather than the segmented method?

(*Mr Morton*) Because I believe it enables us to go closer to the wall of our building and also it enables us to virtually ignore the possibility of settlement of our building due to using the secant system.

2671. Can I work through the structural implications of option two? Option two is the one that takes the chunk out of the biscuit here?

(*Mr Morton*) That is right.

2672. If you do that and you do not have a circular shaft, as I understand it, the shaft no longer has its own structural integrity. I am no physicist but the circle will keep the piles up. If you have a non-circular shaft, it is necessary to put things into the shaft to maintain the integrity of the piles. Is that right?

(*Mr Morton*) Yes.

2673. Necessarily, option two involves that extra complication of having to prop the shaft internally.

(*Mr Morton*) It is a matter of engineering calculation because, as you go down the shaft, you put in the floors and the stairs. The floors and stairs, configured as they are, will restrain the piles that are now straight rather than circular, so you maintain the integrity of the shaft and you provide the lateral restraint with the stairs and the various landings.

2674. **Kelvin Hopkins:** In Westminster tube station, there are vast, horizontal concrete props holding the walls up. One could see something like that?

(*Mr Morton*) No. Here, all you have in that shaft are the stairs and landing. My understanding is that where you have the dotted lines that run alongside the stairs the areas alongside the stairs are also concrete slabs, so you have your tube going down but every 15 feet or so you will have a deck.

2675. Of reinforced concrete props going across?

(*Mr Morton*) Yes.

2676. **Ms Lieven:** Option two involves piling right up against your party wall, does it not?

(*Mr Morton*) Yes. If you look at the brochures related to secant piling, the one thing that they emphasise in selling the system is that that is exactly what you can do. When I was on site for the construction of the 20 storey building and they were building this BP building, they were piling at the back edge of pavement to get the maximum use of that site. It was one of the earliest uses of secant piling and that is one of the things that impressed me about it.

2677. Although piling very close to a building 150-odd years old is not going to be an altogether easy exercise, is it?

(*Mr Morton*) It is not an easy exercise but you are putting tubes down. You are boring up the cave from the inside. As you do it, there is no great potential for damage in that sort of operation.

2678. The other issue about option two is that if you do not have a circular piled shaft but you have this biscuit bite shaft shape, at the bottom of the shaft my instructions are that the piles would have to be toed in at the bottom and they will insert into Crossrail tunnels. Option two creates further complications at the bottom of the shaft, does it not?

(*Mr Morton*) I am not sure because the details are not available to me as to what happens at the bottom of the shaft. Clearly, at the bottom of the secant shaft or the segment shaft, you are going to have those problems to deal with. They are engineering problems but I am certain they are capable of being overcome. I am not party to how that would work.

2679. **Ms Lieven:** Perhaps I can come back to how easily they are able to be overcome after lunch. Would that be acceptable, sir?

2680. **Chairman:** Can I ask that at some point in the future, Mr Morton, you can get us a revised drawing of this which rectifies the mistake?

(*Mr Morton*) Of course.

2681. **Mr Honey:** That is a matter I will deal with in re-examination. For the avoidance of doubt, I will make it clear that we do not think there is a mistake.

2682. **Chairman:** I am just referring to the witness.

2683. **Ms Lieven:** It is quite important, sir, that we know if there is a disagreement between counsel because we need to work on the drawings that are correct.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2684. **Chairman:** The reason I referred to it was because the witness gave evidence that it was a mistake. Therefore, I wanted the new plan showing no mistakes to be put in front of the Committee. If you have a different view on that, you can perhaps make it clear in your rejoinder this afternoon. We will return at 2.30.

*After a short adjournment*

2685. **Ms Lieven:** Sir, before I return to cross-examining Mr Morton, the undertaking which I read out this morning is being passed round. Mr Morton, could we go back to your options and use your tab 7 as an aide memoir? All your options involve a pile shaft, do they not?

**(Mr Morton)** No, the third option could be the segment system. What I am saying is that the third option could be exactly as shown on the drawing.

2686. The third option is the one that lops three metres off the end of the building.

**(Mr Morton)** That is right.

2687. Let us take options 1 and 2 for a moment, the piled options. I just want to run through with you various problems associated with a site like this, a very constrained site, with piling. First of all, piles themselves are thicker than the segmented wall, are they not, so they take up more space?

**(Mr Morton)** Yes, 1.2 metres diameter.

2688. Once you have put the piles in you then have to line the shaft as well.

**(Mr Morton)** Yes, you do.

2689. So what that means is that the total diameter of a shaft has to be bigger with your options than it does with a segmented shaft.

**(Mr Morton)** That is exactly right.

2690. Obviously that is a disadvantage on what I think we can all agree is a highly constrained site.

**(Mr Morton)** It is certainly a disadvantage, but if it were possible to move the shaft as I have suggested then a particular amount of that would be taken up in that way.

2691. That is option 1?

**(Mr Morton)** Yes.

2692. What it means by having a bigger shaft is that you are taking up more of what little extra space you gain.

**(Mr Morton)** That is true enough, yes.

2693. In terms of the construction plant that you need for piling, you need the crane, which you need for a segmented shaft as well, but you also need a piling rig.

**(Mr Morton)** Yes.

2694. And you need to have on the site not just all the piles but also the reinforcement cages.

**(Mr Morton)** Yes.

2695. And piles and the reinforcement cages are pretty big bits of kit, something in the region of eight metres long, I am instructed.

**(Mr Morton)** That sort of order.

2696. So you have to find space for all those sorts of things on the site. We will come to the space allowance in a minute. The other issue with piling, if you pile this shaft down 22 metres you then have to break through the piles at the bottom to get into the adits, do you not?

**(Mr Morton)** Yes, you do but that was taken account of in the Crossrail engineers' proposals for a rectangular shaft, which they put into their report.

2697. It is not impossible but it will add time to the construction programme because it is more difficult to break through the piles than to go through and spray a concrete lining system, is it not?

**(Mr Morton)** I do not think that is necessarily true.

2698. You do not think it will add time?

**(Mr Morton)** I do not think necessarily, no.

2699. Then can we deal with a specific issue around piling on option 2, which is the one with the biscuit chunk taken out. We talked this morning briefly about how that option, because it had lost its circular structural stability, would require propping; do you remember we agreed that? One point I should have put to you and I did not, you suggested that the propping could be provided by building the floors and the stairs as you go down?

**(Mr Morton)** That is possible, yes.

2700. So that it would be self-supporting, as it were, self-propped. The difficulty with that is that you recall at the beginning of the cross-examination that it is necessary to construct the chamber, the adits and the passage, at underground level, to go down to the Crossrail platforms, from this shaft, is it not?

**(Mr Morton)** Yes.

2701. So if you prop by constructing the floors as you go down you are then making it significantly more difficult to excavate and construct the underground parts of the station, are you not?

**(Mr Morton)** I think what you would probably do is you would leave the final staircase out until you needed it.

2702. I assume, Mr Morton, you are like any engineer, in that ultimately you can always find a solution to something. If you do put the floors in and leave the staircase out you are making that underground construction a great deal more difficult, are you not, because you have to have your digger down at the bottom, getting the stuff into the middle and then get it up a relatively small central hatchway?

**(Mr Morton)** But if you take your clients' proposals you have to erect those floors and that staircase within that shaft at some time. Presumably that

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

would be done, I imagine, as you go down—I do not know if it will be or not. But you still have the same thing to do in a different way.

2703. I think, Mr Morton, you may have missed the point, with respect. You obviously have to put in the floors and the stairs otherwise it is not much use as an emergency shaft, but under our proposal you do that at the end when you had constructed the adits downstairs. Under your proposal, in order to maintain structural stability, you would have to put those in as you were constructing the shaft.

*(Mr Morton)* As I have said, you would leave the central staircase up.

2704. Just to come back to the point, that would involve a difficult—not impossible—operation for excavating underground and then getting out the spoil.

*(Mr Morton)* I do not think that is again necessarily so. This is an engineering matter and what you are doing is you have to put the floors in anyway and if you do not put any floors in as you go down you have to come back up and put in those floors. You have exactly the same situation; you have a great deal of work to do to achieve that.

2705. I will try one last time. It is not the same situation because under our proposal you do all the excavation and the construction from the whole width of the shaft. Under your proposal you put the full work of the floors in in order to brace the shaft.

*(Mr Morton)* Yes.

2706. Thank you. Can we just look at what plant and material you need for all three options, and can we have up the plan that shows the construction plant that you need? Can we go through the elements on this that one would need, first of all for constructing by either method? This is our construction proposal with number 38 removed. There is no issue that you would need a crane on the site, is there? That should be document 37.

*(Mr Morton)* Before you go on, could I go back one step to a question you just asked me about the use of secant piles and the difficulties of doing that. I see in the Mott MacDonald report that with the rectangular proposal, which they obviously thought was a possibility, they actually have secant piles shown.

2707. Mr Morton, have you read the Mott MacDonald report?

*(Mr Morton)* Yes, I have.

2708. Do you remember it says, perfectly clearly at 6.22, “Construction of a rectangular pile shaft is not considered feasible for safety”?

*(Mr Morton)* It is constructionally feasible.

2709. Are you proposing a rectangular pile shaft?

*(Mr Morton)* No, but I am proposing to have a secant pile shaft, and they have shown it on their drawings.

2710. Can we revert back to the plant on this site, and what I hope you now have is P37. There is no dispute that there has to be a crane on the site.

*(Mr Morton)* There does.

2711. Equally, there has to be space for a delivery lorry to bring stuff on.

*(Mr Morton)* Yes.

2712. There has to be space to get the spoil off the site.

*(Mr Morton)* Unless you put it straight into the lorries.

2713. You have to get it off the site somehow or other.

*(Mr Morton)* Yes.

2714. You can put it straight into a hopper, as is shown here on the red hatching above the lorry.

*(Mr Morton)* Certainly you could but it is certainly not unusual to load it directly onto the lorry.

2715. There would not be in any benefit in space terms in loading it straight into the lorry, would there, because the hopper is above the lorry.

*(Mr Morton)* All right.

2716. I am not sure why it is necessary to argue about that. So you have to have that space. Then it is necessary, moving around the site, just taking the stuff for the construction of the shaft, to have space for the lorry that is taking the spoil, but you also need space for a lorry that is bringing in deliveries, do you not?

*(Mr Morton)* Yes, you do.

2717. You then need to have some space, red hatched here, for what is called materials lay down. You have to have some space to put things that you are going to need in the construction of the shaft.

*(Mr Morton)* Yes.

2718. Green here, you have to have some space for welfare and stores, do you not? We are trying to make the best use of the site so we have welfare above and stores below?

*(Mr Morton)* I am suggesting both can go into the building if the building is left on site.

2719. First of all, you have to find somewhere on a site for those two uses, do you not?

*(Mr Morton)* Yes.

2720. I will come back to whether you can use the building, if I may, when we go through the options. Then moving around the site you have relatively small things like the fan and the ladder bay, but we probably do not need to worry about those too much. But you need to have a generator, fuel for the generator and a compressor, do you not?

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

**(Mr Morton)** Yes, you do.

2721. None of those, as it were, are optional extras. Then up here we come to the cement silo and the washout skip. Because of the adit, the chamber and the shaft downstairs—I will call it downstairs—in the underground part of the station, there is a very considerable amount of concrete that needs to be poured via this shaft to construct those underground works, is there not?

**(Mr Morton)** Right.

2722. So we have to have space for the cement silo and washout skip for that part of the construction.

**(Mr Morton)** That is the most economic way of doing it but it could be done with pumped concrete being delivered to the site.

2723. What would be the cost implications of that?

**(Mr Morton)** Significant.

2724. I am also instructed by Mr Berryman that to do a pumped concrete solution with spray concrete lining is technically extremely difficult; I do not know whether that falls within your expertise?

**(Mr Morton)** It is horses for courses; some systems work in some instances and others work in others. You could use either system.

2725. If you were going to construct this by methods of piling rather than segmented shaft then also on that site we would need the piling rig and the reinforcement cage and the piles themselves; yes? They are not shown on this plan because we were not proposing to do it that way, but you would need to find space for those as well, would you not?

**(Mr Morton)** Unless they are delivered as required, and I see that you have space for storing the segments, which could be part of that system.

2726. You could take up some of the segment space but the reinforcement cages and the piles would take up considerably more space than that, would they not, because they are so big?

**(Mr Morton)** Not necessarily so, no; as I said, you could have these delivered to the site as work progressed, as you wanted them.

2727. There is a phrase for it, “just in time” delivery, which has the necessary risk and cost consequences, does it not, because if the just in time lorry gets stuck in a traffic jam on Farringdon Road then you are in real trouble with your construction programme.

**(Mr Morton)** Yes.

2728. So there are risk and cost consequences of not having space on site for those items, is that right?

**(Mr Morton)** One is working on a constricted site and one has to take account of those in considering the solutions to the problem.

2729. But there is a balance to be struck: yes, we are working on a constricted site, but if you make it even more constricted than that has risk and cost consequences, does it not?

**(Mr Morton)** But you have saved a devil of a lot of money by leaving the building there.

2730. Can we just stick to what we need? The other thing that is not on here is that, going back to the underground works, it would be necessary to store on the site the tunnel segments that will be used underground to construct the adits.

**(Mr Morton)** They will come at a later date when the shaft is constructed and the system is to move over the shaft and use that for storage space at that time, and there is space for dropping materials down through it.

2731. So that is the solution you propose to that, is it?

**(Mr Morton)** No, that is actually suggested in the Mott MacDonald report.

2732. Can we turn to your plan, tab 7? You have not shown on this plan a number of the items that we have just been through, have you? So you do not, for instance, have anywhere to put the spoil that is thrown out by the piling? You do not have anywhere to load lorries, you do not have the delivery space. You simply have not done it on this plan, have you?

**(Mr Morton)** We have not shown it on the plan because taking Scanmoor to the site and then looking at the site and considering the proposals, they thought that they had worked on much more constricted sites than this.

2733. But they are not here to give evidence, are they?

**(Mr Morton)** No, they are not.

2734. And they have not produced any plan of how they would do it, have they?

**(Mr Morton)** No. It is the first time I have seen the previous plan presented.

2735. You have seen the Mott MacDonald report since last Friday, have you not?

**(Mr Morton)** Yes, I have.

2736. And we have not seen a single thing of yours since 9.30 this morning, so let us put that in context. Can I ask you to have a look at another plan we have prepared, which is P38? This is our best stab at what would happen if you retained the building. The grey is number 38. The shaft has been moved to the east on this to take advantage of the Fox and Knot Street two metres.

**(Mr Morton)** Right.

2737. So we are, as it were, maximising our use of the site, and what we have done is laid out the things from the previous plan that we have agreed we need on the site, and on the right hand side you can see those items which we have not been able to fit on. Cross out, if you would, the segments because that is a mistake there, and if I can ask the Committee to cross it out—it was an oversight. But the other items,

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

the crane, the waste skip, the fuel generator and the washout skip, we simply have not been able to fit on to that site.

**(Mr Morton)** Suddenly mysteriously at first floor level a storage structure comes out of it, stores at first floor level, and on the previous plan that you showed there was no suggestion of stores at first floor level, and you seem to have a lot more items going on to site on the second plan than you do on the first.

2738. I do not think that is right, Mr Morton. What we have tried to do is to make the best possible use of the site in the second plan, retaining the building, so we have put the stores at the first floor level because that makes the most efficient use of the site. We have done it that way so that we can bring the lorries in underneath. I do not think we have put lots of extra bits of plant on to the second plan, but what we have shown is that there is simply nowhere to put those other items. That makes it very difficult to construct the shaft from this location, does it not?

**(Mr Morton)** I think the way you have shown this on the two plans is confusing, because if you take all the coloured items on the first plan that you showed and impose those on this site again and you have the first floor stores, they all seem to go in.

2739. No, that is not right, with respect Mr Morton. If you look in the top right hand corner we have the crane, the waste skip, the fuel tank, the generator and washout skip that we simply cannot get on the site.

**(Mr Morton)** Where you have the green shaded area it says stores at first floor level, where are those stores shown on the previous plan?

2740. They are the materials lay down on the previous plan and any part of the segments that we could not fit on site.

**(Mr Morton)** Why can you not increase the size of those and increase it in length? It would be jolly difficult just to assess this, but it looks to me as if you have much more now you have put that green blob on the plan, and it seems to me trying to get much more on to a site than you do on the previous plan.

2741. Let us focus on one issue on this plan, Mr Morton. You cannot fit a crane on and the crane, I think we can agree, is an absolute prerequisite to building this shaft.

**(Mr Morton)** But if you put the crane on to the previous plan and you revert back to your second plan with the green first floor structure put into it, then it does start to work.

2742. Where do you put the crane on that plan, Mr Morton?

**(Mr Morton)** You have to look at your previous plan and put the crane in the corner of that. By producing these drawings today it has really produced an unreasonable situation, asking me to decide whether items can go on the site in this way.

2743. Let us not get into an argument about who is more unreasonable with timing, Mr Morton. On the second plan can you see anywhere to put a crane?

**(Mr Morton)** The way it has been put on that plan, no, I cannot, but I believe that the crane can go on to the same site by just moving things around on the first plan that you presented.

2744. **Mrs James:** I know they say that women are no good at this, but the stores on the original plan, 002, look significantly smaller than the stores that you have on the second plan because on the second set of plans the stores have got longer and wider. Even if it is to scale they do not look ... Welfare above and stores below on the first one and then you have the spaces for lorry parking and deliveries. It has got extremely large there, has it not?

2745. **Ms Lieven:** Can I try to explain, that the dark green is the structure holding the thing up, so it is the light green which is used for space.

**(Mr Morton)** Why do you need that structure to hold it up?

2746. **Ms Lieven:** The light green is the welfare area and if you go back ... I am not asking Mr Fry to do it, but if everyone does it mentally, that light green is an identical size. Here light green is the stores and that is comparable to the red hatched on the previous plan, which is the materials lay down. In fact it is a good deal smaller than the material lay down. Then there is some additional space to the north here for an additional lorry for the concreting, so that we can minimise the amount of space we need for concreting.

2747. **Mrs James:** So the light blue squares correspond to the original squares, and the dark green space?

2748. **Ms Lieven:** As it were the bits around it. I will just check with Mr Berryman because I do not want to mislead you. The dark green is the structure which is holding up the Portakabins above. So the dark green is not useable space, it is holding up the Portakabins.

2749. **Mrs James:** You did not need that on the original plan?

2750. **Ms Lieven:** No, because on the original plan we just have the one smaller Portakabin down here, so we did not need to have so much space for holding up.

2751. **Mrs James:** It does give the impression of a double-decker building there.

2752. **Chairman:** I really do think that this is going the wrong way. We have a witness here to be questioned for the Petitioner and what we are doing is listening to evidence—or we are not listening to evidence—from somebody is not going to be able to be cross-examined and that is not appropriate. If Mr Berryman is to enlighten the Committee perhaps at

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

some point you might bring him in front here so that the Petitioner's representative might be able to cross-examine Mr Berryman. This is the problem, we have moved away from the witness and we are now receiving evidence from the Promoters and you are supposed to be cross-examining the witness.

2753. **Ms Lieven:** Sir, I am sorry. I was trying to be helpful, to explain the plan, and I am sorry if I went too far. What we are proposing to do, because Mr Morton's proposal has come very late to us for reasons that I do not want to bore the Committee with, is that Mr Berryman and the engineer who has actually worked on this site will draw up a note for you setting out exactly what space is required and the various constraints, and I was proposing to hand that in tomorrow morning. I had hoped to be able to do it today but it is simply not possible when you get quite a technical issue like this where I do not want to mislead the Committee.

2754. **Chairman:** And counsel for the Petitioners?

2755. **Ms Lieven:** Of, course, sir, yes.

2756. **Chairman:** You are happy keeping the same stance as you had this morning?

2757. **Ms Lieven:** Yes.

2758. **Mr Honey:** Sir, in relation to that, we had been intending to finish the case today and not to have to come back tomorrow morning and, sir, as you have rightly identified, there are problems with information being put in when witnesses are not available to question for our part, so if a note is going to be put in containing points, these ought to be put to Mr Morton today in cross-examination so that he can comment on them, and if that is done, sir, there is no need for any further note and no need for us to come back tomorrow morning. We can simply press on and finish the case.

2759. **Chairman:** If that is possible it is the most practical route to take, but if it is not then I realise that you are coming back anyway with another witness at some point in the future, and if that is not to be tomorrow then perhaps Mr Morton may have to return if you wish to cross-examine that particular piece of evidence.

2760. **Mr Honey:** Yes, sir, certainly if there is new evidence being put in the note I will want to recall Mr Morton so that he can respond to that.

2761. **Chairman:** If that is necessary, yes.

2762. **Ms Lieven:** Sir, to some degree we went through this with the City and Liverpool Street, the same type of issue. Our chosen course, unless the Committee indicates strongly that it wants us to do otherwise, is not to call oral evidence at this stage. I was going to propose that I would close when Mr Honey came back on the entirety of the Islington case. We will undertake to produce a note on these

issues by tomorrow morning which will give Islington plenty of time to go away and consider it and deal with it either in writing or by calling Mr Morton again when Islington return. In that way both sides have an opportunity to consider the matter fully. In my submission it is not appropriate to deal with quite a technical matter like this that has quite significant implications very much on the hoof. It would be better to have a bit of time for Mr Berryman and the other engineers to work up a note overnight.

2763. **Chairman:** I have a couple of things to say further. First of all, when we receive the note and we have seen it then we will take a decision. It would be inappropriate before then to do so because we may want to call evidence from your adviser. Let me go back to where I started from. We have spent quite a lot of time on technicalities and we have moved away from the witness, so perhaps we could get back to the witness.

2764. **Ms Lieven:** Mr Morton, I have got very few more questions, but I just want to go back to option three for a moment on your plan. Option three is the one that retains the circular shaft so has the structural advantages of that but takes off the three metres at the back of number 38. Can I suggest to you that that is the least good of your options both in townscape terms and engineering terms? It is the least good in townscape terms because it obviously partially compromises the building, so you have got a problem not just that you have lopped off the back of it but also that you have then got to integrate a new building into what you have retained. Can we agree that of your three options that is the least good in townscape terms?

**(Mr Morton)** Absolutely.

2765. It is also the least good in engineering terms because it jeopardises the structural integrity of the rest of the building. I am not saying it is not do-able but by taking off the back wall and part of the internal floors the rest of that building then becomes more difficult to maintain, does it not?

**(Mr Morton)** I do not think that is necessarily so.

2766. It necessarily becomes more difficult?

**(Mr Morton)** I do not think there is a difficulty of degree in it. I think it is work that is straightforward and can be done.

2767. So you do not think it any more difficult to keep that building as it is when you have taken off the back three metres than if you retain the entirety of the building?

**(Mr Morton)** One has to realise that Crossrail in their report were proposing to take that wall down on the ground storey alone and had obviously thought in terms of cost that that was worthwhile doing. Yes, okay, some work is necessary if you take that wall out but much less than would be involved if you just took the ground floor out in my opinion.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2768. A final point on the options. Option one, which is not shown on this plan but which we have a closely similar plan to in P38 (it is the same location but it is without piles), would involve underpinning the back wall of number 38, would it not?

*(Mr Morton)* If you use the secant pile system yes.

2769. Let us use this plan as we have got it up. There is no doubt that this is a highly constrained site. There are a lot of things going on in a small area. As a general proposition it would be right to say that the more constrained you make the site the more difficult it is to work within it and the greater the safety concerns for working within it. That is not to say that they are insuperable, but the more constrained, the more difficult in those terms?

*(Mr Morton)* I do not think that is necessarily so.

2770. Do you not?

*(Mr Morton)* No.

2771. So it does not make any difference in terms of safety as to whether you have a great big site that goes all the way over here with bits of plant scattered around it or whether you have a very constrained site building right next to an existing Victorian building?

*(Mr Morton)* You can make it more difficult but if you do a proper risk assessment on it then you can overcome all the risks associated with it.

2772. So it does not make it any more difficult?

*(Mr Morton)* I do not think it does.

---

*Examined by The Committee*

2773. **Chairman:** Mr Morton, just before I call Mr Honey back there are one or two questions I want to raise out of your evidence. One of the things you talked about was that you had not chosen to put a rectangular shaft in there. Could you tell us why?

*(Mr Morton)* A rectangular shaft requires bracing, as counsel have indicated, and so you get a fairly thick structure. Whereas a circular structure would hold itself together a square structure needs restraint, which you do not have.

2774. **Chairman:** My other two questions are inter-related. They are about time and cost. I listened to all your evidence and you kept saying why there would be time savings and why there would be cost savings but you did not actually give us the cost variations or time variations.

*(Mr Morton)* We have not worked out any particular cost calculations but there are various fairly obvious things that are money-saving. The cost of the restraining structure for the enclosing walls would be enormous. You would almost certainly have to pile that system in the road. There is an awful lot of money involved in that situation. You have to take down the existing building and we have talked a lot about health and safety. To take down that building, believe me, the health and safety risks are posed that are apparent with demolition are much greater than any other thing you do on a site. It has to be done extremely carefully. It is an expensive operation and it is time-consuming.

2775. **Chairman:** I understand that. One cost saving usually means costs on another side. Can you give us a guesstimate? Is it five per cent, 10 per cent, 15 per cent, 50 per cent?

*(Mr Morton)* Based on a retaining gantry structure we did on a building in Warwick Street in Westminster for a comparatively simple façade which was piled, we are talking about in the order of £120,000. In my view, to restrain the external walls of this building we are probably talking of the order of £200,000 or £250,000 to build that structure. You

have got to build it, you throw away the steel at the end, you have got to pile it. There are significant costs associated with it.

2776. What about time?

*(Mr Morton)* Time is the other factor, of course, that they cannot start work on the site until they have done that and so there is going to be, I do not know, six months' delay in starting.

2777. **Mr Liddell-Grainger:** I have three things to ask you. The first is on option three, which is to take the three metres from the back of the building. You see that as the lesser of all evils presumably, if you have got to go that way.

*(Mr Morton)* It is a situation where I always ask, is there a way of retaining all of this building or part of it? I could see the possible objections that were going to come forward with regard to the other proposals, and I felt there must be a way of saving a substantial part of this building. It seemed to me to be a fairly straightforward method of doing that. I do not want to do it but if the chips are down this is a way it could be done.

2778. If you take away three metres, and these are not to scale but if you use your fingernail, you have not got much of a building left. It is rather a like a piece of Swiss cheese. What are you going to do with it?

*(Mr Morton)* No, I am sorry. You rebuild it afterwards.

2779. The point I am making is that you are going to take away more of the building. Is it going to be a viable building after you have finished or is it just going to be a sort of edifice to some interesting local Victorian building?

*(Mr Morton)* No. You would take it down, keep the elements as much as you could and rebuild it afterwards, so the building would end up the same as it is now.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2780. As a usable building. On all the drawings you have submitted and counsel have submitted there seems to be some form of tracked crane. Could you not use a tower crane above the level of the buildings to be able to move the stuff in and out?

*(Mr Morton)* It has been shown diagrammatically as a crane. In fact, the Crossrail report on façade retention talks of a tower crane which would have a piled foundation and would be fixed in one spot.

2781. And that would be above the level of the existing buildings on either side?

*(Mr Morton)* Yes, that is right.

2782. So that would be quite feasible?

*(Mr Morton)* Yes.

2783. And it would resolve the problem of where the crane goes?

*(Mr Morton)* Yes. Also, on the same subject, Crossrail's engineers' report talks of all sorts of different ways of servicing the shaft by having a small crane at a very high capacity. It talks about having a gantry across the shaft. There are all sorts of ways of doing it. That leads me back into the discussions that have taken place about storage on this site. Quite honestly, we are going to argue for ever as to whether there is sufficient space on this site to perform this operation because I will say one thing and my supporting contractors will say one thing, and Crossrail will say another. I do not think it is an easily resolvable situation. I accept what you are saying about if another engineer gives evidence and can be cross-examined and so on, but I think it is a very difficult situation to resolve. I can immediately say with regard to this proposal, which is the one with the green gantry, "Goodness me, you do not need that size structure to support those doors. You could extend that first floor level gantry along and so the lorry goes underneath it and only half the lorry is exposed to being tipped into. You could create again storage space over that area. You would double it up. Yes, by all means, we can have another discussion and further evidence can be given about this but I do not think you will get anywhere, to be honest.

2784. **Kelvin Hopkins:** I want to clarify certain assumptions. One thing which I assume is fixed is the diameter of the shaft.

*(Mr Morton)* Yes.

2785. It looks rather large to me. I would have thought that for egress of this kind a smaller shaft would be sufficient, but is that a requirement?

*(Mr Morton)* One of the proposals that I put up to Scanmoor, the specialist contractor, was to build a rectangular stair structure and that was all it was, but the safety rules require that people coming into the shaft and out of the shaft have to have sufficient space to be stationary on landings coming up the stairs, and you just need all that space. It is a standard that one has to adopt to comply with the safety regulations.

2786. I assumed that; I just wanted to make sure that was the case. On your suggestion that where the three-metre rear part of the building would be dismantled and then rebuilt after the shaft was built, presumably the outer perimeter of the shaft would encroach over the building line inside the building to an extent, it would overlap the building line, but on the outside you would still have the façade?

*(Mr Morton)* Yes.

2787. So some would say that it is reinstated but there would be some encroachment over the building line of the shaft?

*(Mr Morton)* Yes. I understand that there is proposed to be a building on the site which is the entry or exit from the shaft and that it can be in that position.

2788. And the access would be going north-eastwards, so to speak?

*(Mr Morton)* That is right.

2789. A question I asked earlier on, and I think it is quite significant, was about the location of the emergency exits from the building to the north east. Even if it was in the middle of Fox and Knot Street, particularly if it was towards one end, one would have the pavement going from there to one road or the other but not all the way through, and the rest of the pavement could be used as part of the site? Is that reasonable?

*(Mr Morton)* Absolutely.

2790. And you could gain quite a considerable area for the building site if you had egress from that exit to one road or the other, particularly if it was closer to one end of the road than the other.

*(Mr Morton)* I am advised that the entrance is actually in the middle and so you could do that.

2791. It still means that you could have egress along one pavement and the other pavement could be used for access.

*(Mr Morton)* That is absolutely right.

2792. I have my concerns about the biscuit with the section bitten out of it on one side, as it has been described. Given that that is right next to the wall I just worry slightly about the strength of that. I am basically very sympathetic but it looks like a less preferred solution to one with a circular—

*(Mr Morton)* Oh, yes, absolutely. Of course, one would try and do it as the circle, there is no question about that, but what one is looking at as an engineer who is asked: is there a means of doing this, is that one puts forward propositions which are ultimately, if one was going to carry anything forward, costed and then you would make your decision as to which one you used.

2793. Given the enthusiasm of Islington Council for what you are proposing it is possible that they would be very co-operative in trying to make as much space as possible to enable your solution to be used rather than the Promoter's.

---

The Petition of The Mayor and Burgesses of the London Borough of Islington

---

*(Mr Morton)* That is the way I would look at it, sir, yes. It was mentioned that Alan Baxter's company are involved in this. I am jolly sure that if Alan Baxter had been given the brief to save that building and I wanted to put the shaft here, they would find a solution.

2794. **Mr Binley:** I perfectly understand what you are telling us. Without going into the detail of how it is going to be done, you are telling us, I think, that in your considerable experience of working on difficult engineering projects on constrained sites that there are creative ways of using the space such that the difficulties that the Promoter has put to us can be overcome and that the elements that they suggest cannot be fitted on the site can in fact in some way

or other be accommodated and that there is nothing uniquely difficult about this site or the job that it represents. Am I right in that?

*(Mr Morton)* You are absolutely right. You quite often see construction sites with three and four storey buildings built up against the face for storage, for offices, for whatever. It is a question of just how you look at it and how you come up with a solution. There is not a contractor in the world who, given this job and this site, would say, "We cannot do it".

2795. I did understand correctly?

*(Mr Morton)* Yes.

2796. **Chairman:** Mr Honey, did you want to re-examine?

---

Re-examined by **Mr Honey**

2797. I do have a number of questions to ask Mr Morton. I will try and be as brief as I can. First, there have been references to Alan Baxter Associates. Can I ask please whether you have seen any document produced by Alan Baxter Associates considering number 38 and whether there is a need to demolish it?

*(Mr Morton)* No, I have not seen anything at all.

2798. There was some debate about drawings earlier. Can I ask you to take up the bundle of drawings and go first to tab seven where we see your drawing? You were particularly asked about the Fox and Knot Street edge. Do you recall that?

*(Mr Morton)* Yes, I do.

2799. Can I ask you to go now please, holding that one open, to tab five where there is a drawing at 5A? First, can you tell us what this drawing is at 5A?

*(Mr Morton)* This is the worksite layout phase one.

2800. What is shown as the boundary on this drawing for the worksite layout on Fox and Knot Street?

*(Mr Morton)* It certainly appears that my technician has drawn it on our drawing, which is tab seven, correctly.

2801. Did he produce this drawing in 5A?

*(Mr Morton)* That was produced by Crossrail's engineers presumably.

2802. So now that you have been able to compare the two, is there any need to change your plan at tab seven at all?

*(Mr Morton)* No, there is not.

2803. You were asked a series of questions about site constraints and maybe if we keep the drawing at 5A open, can you say please what, if any, clash there would be between your options and the site constraints identified by Crossrail to you in cross-examination?

*(Mr Morton)* If you look at plan 5A, clearly the storage of the rings and the—

2804. Forgive me: I put the question wrongly. I am going to go on to materials in a moment but you were asked first about the site constraints like location of buildings, and the location of the emergency access I think arose at this point. Having regard to those things what, if any, clash is there between those site constraints and your options?

*(Mr Morton)* There is none at all as far as I can see.

2805. Just after lunch you were asked a number of questions about piling and what that would involve. Can you say practically what, if any, real hurdles are presented by a secant pile approach here?

*(Mr Morton)* I do not think there are any significant problems other than the fact that the thickness of the shaft wall is going to be greater. You have all the engineering problems at the base of the shaft that are the same as for the segment system. You have got to link that in with the exits at the base. You have got to construct your floors. It is a different way of doing it but I do not see any particularly onerous problems associated with it.

2806. Comparing the two in terms of the Promoter's proposals, segment against secant pile approach, is your approach significantly more expensive or time-consuming so as to make this other than an option?

*(Mr Morton)* I do not believe it is any more expensive but also you have to look at the fact that it is accepted that the segment system can generate settlement of adjoining buildings and thus it can generate settlement of the building we are trying to hold up. I accept that there is within the Crossrail general documents provision for measuring settlement and when the settlement gets to more than 10 millimetres warning bells start to ring, but if you can avoid that situation by using the secant pile system it seems logical to do it.

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

2807. You were asked some questions about arranging the site and a drawing was produced which I think has the reference P38. It is the second one of the two that were stapled together. Do you have that?

**(Mr Morton)** Yes, I do.

2808. You told us in your evidence in chief that you would be able to use the building if it was retained in storage. Looking at this drawing, what elements could be transferred to within the building to free up further space?

**(Mr Morton)** Certainly office facilities could be accommodated within the building. Toilet facilities could be accommodated within the building and generally any other accommodation that is required on the site for people to use.

2809. What, if any, space could be used for storage of certain items?

**(Mr Morton)** It would be possible to use the ground floor internally for storing items but, of course, unless you are going to take the gable wall out there is not going to be easy access to that ground floor.

2810. Keeping that plan open can I ask you to go back to the one at 5A and compare the areas of the site proposed, particularly at the apex end between what we have at 5A and what has just been put in today? What extra space would be available if the hoardings were as shown on the proper Crossrail plan?

**(Mr Morton)** What comes out of that question is that you look at the plan given to us today, which showed the green storage area at first floor, and you look at the storage shown on 5A and you see that there is significantly more on the plan given to us today than there was on the drawing 5A which was produced some while back.

2811. Looking at the hoarding line, which I think is shown in red on both drawings, particularly at the apex, can you see any difference between the two?

**(Mr Morton)** The line is different, is it not? It is a diagonal line which on one drawing is a fairly flat diagonal and on the other drawing is much more acute.

2812. So, having regard to the position of the building, for example, what extra space would be available if the hoarding was put where it was originally proposed on 5A?

**(Mr Morton)** There is rather more space to be able to think of putting the crane in that corner.

2813. Do you think you would be able to accommodate the crane on the site if it were to be as originally proposed at 5A?

**(Mr Morton)** I do indeed. Indeed, Scanmoor felt that that was a very sensible place to put the crane. They absolutely dismissed the idea of putting it in the position shown on drawing 5A.

2814. You were asked about option three and what was involved in taking down the end three metres. Can you please compare the difference between total demolition of the building and taking down the three metres in terms of the risks and the time and the cost involved?

**(Mr Morton)** It is a comparatively easy matter to scaffold up that small section of the building and literally having it taken down by hand. One would be much happier doing that. There is the likelihood of, if you like, a hammer demolition of the whole building which is undoubtedly the way the way it would go if you were going to demolish the whole of the structure.

2815. So if you were simply trying to allocate enough space to do the works which would you recommend: taking down just the end of the building or knocking the whole thing down?

**(Mr Morton)** Oh, taking down the end without a doubt.

2816. There is one question I wanted to ask for the sake of clarification. You were asked a question about your option one and the need for underpinning number 38. Can you please clarify whether any underpinning would be required to number 38 if you were using secant piling in option one?

**(Mr Morton)** There would not be.

2817. The Committee asked you a question in relation to the length of the building that could be taken down in option three, three metres, and what that would leave of the building. Could you say roughly perhaps, if we have a look at the drawing on the screen at the moment, what proportion of the length of the building would be left intact compared with what would be taken down?

**(Mr Morton)** It must be 80 per cent, 85 per cent perhaps that would be retained.

2818. Thank you very much. Sir, I have no further questions for Mr Morton so that ends our evidence in relation to this first of the two matters that we have. I understand the Promoter proposes to call no evidence in relation to this issue. There was a debate earlier about whether a note should go in. What I would like to propose the Committee to consider is that we go on to close this issue today while it is fresh in our minds. Sir, you said you would consider whether a note would be allowed in. What I would propose is that if a note is allowed in and it raises any issues we can deal with those later by submissions but the best thing is simply to press on, have closings today while it is fresh and then have this issue resolved. Sir, that is what I would propose.

2819. **Ms Lieven:** Sir, can I say I would be most unhappy about closing this issue today. These are very technical issues and we only received Mr Morton's plan after 9.30 this morning and that was the first time he had put options to us. I have done my best to put the problems to him in cross-examination but surely the position that the

---

**The Petition of The Mayor and Burgesses of the London Borough of Islington**

---

Committee is in is that it has to weigh what the problems and the pros and cons of this are but it really cannot do that until it has seen a note as to our view of the options. It is unrealistic to suggest that I in cross-examination can genuinely put all the engineering problems with the proper weight. As you yourself said, although it could have been Sir Peter, when chairing an earlier session, it is not my function to give evidence, it is my function to ask questions and the Committee needs to see the evidence in the form of a note. I would suggest given that Mr Honey is returning in the very near future, at least I assume it will be in the very near future as we are moving down the line, to deal with the rest of Islington's case, the best way forward is for Crossrail to put in a note and I can undertake to do that by tomorrow morning so that you have got our position on the engineering difficulties and when Islington come back we can close on the entirety of Islington's petition in one go. After all, the Committee has indicated it is not going to make decisions on these matters until right at the end of the process, so the fact that it is not fresh in your mind, as my learned friend puts it, really is not here nor there, what is important is that on the record is the clearest possible exposition of both sides' case so that when the Committee does come at the end of the day, whenever that may be, to appraise all these petitions it has got the full statements from both sides.

**(Mr Morton)** Can I just say a word because I am rather irritated by what counsel is saying. We had a meeting with Crossrail, with the particular station manager there, I think it was Thursday last week, about 10 days ago, when I went through all our proposals in a note, they knew what we were proposing and they talked to me about it, there were questions across the floor. This is not the first they knew of it.

2820. **Chairman:** I am minded to accept the Promoter's view on this for two reasons. On the matter which we have to have presented back to us we need a note or something from the Promoters themselves there are two items. Whilst I am very sympathetic to moving this case on, I think it is fair and just if we delay and come back at some later date. I am sorry, Mr Honey, but we cannot do very much more today.

2821. **Mr Honey:** The other alternative, if you are minded to take that course, is for us to come back tomorrow morning and do it having had the benefit

of this note being provided to us later this evening. Mr Morton is correct when he says that there was a meeting on 31 January, I think it was, when this was discussed so there is nothing new arising.

2822. **Ms Lieven:** Can I just say on tomorrow that we have got two days for Camden who are only raising ground borne noise. They said they needed two to three days but we are finding it difficult on our side to see how one can talk about ground borne noise for more than two days, so there would be time tomorrow morning. If that was the most convenient to the Committee I would be quite happy to go down that course.

2823. **Chairman:** That will give us continuity, so I agree that is what we will try and do.

2824. **Ms Lieven:** Sir, before we rise, I do not want to get into the whys and wherefores of what went wrong with the documents on this case, it is history now, but could I ask you to say something further, as you did before on Liverpool Street, about asking Petitioners to give the Promoters documents at least 24 hours in advance. We will undertake to do the same. We will undertake to give whatever material we have at that stage which is relevant to that Petitioner and which we intend to present to the Committee to the Petitioners in advance. If we do not see their material, and I do not want to get into the rights and wrongs of Islington, in documentary form at least 24 hours in advance then we will keep coming up against this problem where we are producing plans that we have drawn up the night before. I cannot believe it is helping the Committee. More words from the Committee on this issue would allow Winckworth's, our agents, to pass that back to the Petitioners and I would hope to help the Committee more in the future.

2825. **Chairman:** I think it is a fair point that even though, as you said, Mr Morton, you had met with Crossrail it was not very much time before the hearing. I take that point and I will say something about that tomorrow morning.

2826. **Ms Lieven:** I am very grateful, sir.

2827. **Chairman:** The meeting is now closed. We will reconvene at 10 o'clock tomorrow morning.

*The witness withdrew*  
*Adjourned until 10 o'clock tomorrow morning*

---

---

**Wednesday 8 February 2006**

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Kelvin Hopkins  
Mrs Siân C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

*Ordered: that Counsel and Parties be called in.*

2828. **Chairman:** Ms Lieven.

2829. **Ms Lieven:** Sir, the Promoters went away yesterday afternoon and we did listen very carefully to the Committee's questions and also to Mr Morton's evidence. We are keen to respond to the Committee's concerns but also to have enough time to consider the material that was presented yesterday really carefully. What we are asking is to have the time to examine again whether it would be practicable to retain number 38, the building that we were discussing yesterday. Obviously, if it is practicable, we will come back to the Committee and tell you that. What we want to do is go away and have a really hard look at Mr Morton's material but also work with him to try to find a solution to this problem that we can be confident works, both in terms of not having an unreasonable cost and programme implication but also in safety terms, because there are real issues on this. We have agreed this approach with Islington. We would wish to discuss Mr Morton's ideas further with him, work with him, as well as with our own advisers, and then be in a position to come back to the Committee and present our view to the Committee. I would suggest that we are in maybe quite a good position here because Islington, as we know, have to come back anyway on Thameslink 2000, we think, in about four or five weeks time, which gives us and Mr Morton enough time to have a good conversation about this. What we would ask is that the Committee gives us that time, very much in the spirit of what the Committee suggested on Liverpool Street, to talk to petitioners and try to get this point solved in a way that we hope will meet the Committee's concerns. I am sorry to have risen first, but that might shorten proceedings this morning.

2830. **Chairman:** That is extremely helpful. Mr Honey, do you wish to comment?

2831. **Mr Honey:** We welcome the commitment to collaborative working on the part of the Promoter to try to find a solution which will enable number 38 to be retained without full demolition, and so we are content with the proposed course of action.

2832. **Chairman:** I am grateful to the Promoter and the Petitioner. Do you want to say anything more?

2833. **Ms Lieven:** No, sir.

2834. **Chairman:** On behalf of the Committee can I remind everybody of the answer. Everyone, particularly those who are about to appear in front of the Committee, are expected to make available a copy of any document they expect to refer to in the committee to the opposing Council or Petitioner at least 24 hours in advance, wherever possible. To ensure that this occurs smoothly, we are now asking Promoters and Petitioners to also make their documents available to our clerks 24 hours in advance. I think that is very fair considering the problems we had yesterday. It is fair to both sides. Is that okay?

2835. **Ms Lieven:** Absolutely, sir, and we are committed to try to stop those kind of problems arising. We will work hard on that.

2836. **Chairman:** We will next move on to the Borough of Camden.

2837. **Mr Honey:** There are two short points. I do not want to detain the Committee unnecessarily but there was a question by Mrs James yesterday in relation to other buildings by the same architect, Benjamin Tabberer. We have been able to do some research overnight. May I take a moment to put those points to the Committee. There are three buildings remaining in the City of London. The first is number 58-60 Cornhill, which is a listed building dating from 1877, which was described as "a tall eclectic renaissance commercial block on the corner with Gracechurch Street". The second is number 42 Cornhill, dating from 1877-77, where the front facade only survives at the moment. It was formerly a hat warehouse, a tall and narrow building now serving as the entrance to number 39-42 Cornhill, a large office redevelopment carried out in 1979. The third building is number 24 Lyme Street, which dates from 1900, described as having "a superimposed pilastered storey in coloured stone untouched by late Victorian fashion".

2838. The second point: there was a suggestion of Mr Morton putting in a revised plan yesterday. Just to clarify, his final position after re-examination was that there was no need to put in a revised plan, and that is in the transcript at paragraphs 2800-2802.

---

The Petition of London Borough of Camden

---

2839. **Chairman:** I understand that now, but I do not actually accept his analysis that there was no need to put in a new plan. There was, because he said it was a mistake. What I put to you is that I hope when you come back, hopefully with an agreement, there will be no need for such a plan, but that will be up to the two parties who are in negotiations at the moment. If the position remains that your case is on the original graph where Mr Morton actually admitted a mistake had been made, then, if there was not, he will have to come back and explain that to the Committee.

2840. **Mr Honey:** He dealt with the matter in re-examination. I do not think I can take it any further today. Sir, I am grateful.

The Petition of The London Borough of Camden.

Mr Patrick Clarkson appeared on behalf of the Petitioner.

Messrs Sharpe Pritchard appeared as Agents.

2841. **Mr Clarkson:** Can I take a few minutes to introduce our case on behalf of the London Borough of Camden. Our area of interest is on map C5 and C6 at the southern end of the borough between Tottenham Court Road Station and Farringdon Station, really from Charing Cross Road to Farringdon Street.

2842. Our position is that we welcome the principle of the Bill insofar as its intention is to improve public transport and accessibility in London. Camden particularly welcomes the intention to improve the station at Tottenham Court Road, which has been a major concern for them for a considerable number of years. That overview asserts the positive. Inevitably, with a major project like this, there are a number of concerns of fine tuning.

2843. Camden is, of course, the highway authority; they also have responsibility for housing, public health, recreation, civic welfare and amenity as well as the economic welfare of its residents and businesses. In broad terms, Camden sees the proposal as touching those. Inevitably there has been discussion with the Promoters on a number of the issues raised in the Petition, and I categorise the product of those discussions in three ways. First, we have agreed or are seeking second House undertakings. Next, there is an agreed position—this is a group—or there is no further issue, discussions are continuing or there is an acceptance of the Promoter's response. The third category is those matters not agreed at all. Simply because this is really the only opportunity that we have to identify for the Minutes where there is agreement and where there is not agreement, I am going to take a very short while to tell you about those, and that avoids me having to call a witness.

2844. Going back to the first category, second House undertakings or agreements, it is the area of second House undertakings that are sought. First, paragraph seven, the impact on listed buildings and

conservation areas. Paragraph eight, nine, ten, 11, 12 and 24, construction impact and settlement. Paragraph 13, Kingsway tram, which the Committee will know is the northern part of the tramway where it goes underground, is blocked off, of course, but now is used for storage. There a second House undertaking or agreement is sought. Paragraph 14 and 15, there is a form of agreement, we think, tending towards a second House undertaking. That is concerned with the location and number of station entrances at Tottenham Court Road. Camden accept the location and number of station entrances and exits proposed in the Bill. The remaining concern relates to the surface aspects of the entrances relating to the need to create urban rail of the highest quality. Given that discussions are on-going on this issue, the Council seeks a second House undertaking. Paragraph 18, authorisation and planning discussions and timetable. That is under this category. Thirty-five to 41: traffic. The dialogue is continuing and the position is protected, as we see it, and then Tottenham Court Road, paragraph 43A and B, that is work surface and design, we are content to agree or take that forward. Before I leave that heading, where there are second House undertakings, Camden do not take it forward at this stage because there are meaningful discussions and the provision of detailed information that the Council needs in order for it to be able to decide whether it is satisfied in due course.

2845. The next heading, those that are removed from contemplation, and I will take those more quickly: construction timetable for Tottenham Court Road (Petition 16), Petition 17 archaeology, 20 and 24 construction impact and construction code, 21 construction sites, 25 knowledge that Camden will receive fees and compensation set out in schedule 14, Part 1, 29 application of national compensation code to compensation, 42 satisfied on parking; 43D and E satisfied on the Chelsea and Hackney and the TCR construction impact. Then there is a compendium of sundries under this heading, 45 to 51, Camden accepts the Promoter's response, saying under 49, "Camden seeks consultation to the extent that we want agreement. There will be full use of the planning forum in due course", after the event, so to speak, and that is still, as I understand it, being discussed.

2846. The contentious issues I can deal with quite shortly as well. First, Camden support the City of Westminster who, in due course, will present a generic case for hours of work and recovery of costs; second, they support Tower Hamlets in their presentation of the generic case on airborne noise; third, support under the Borough of Havering on their generic case on static noise relating to ventilation shafts, etcetera; and fourth, and this is where we take your time today, they have major concerns about groundborne noise and present the generic case for a number of the petitioning Boroughs who are concerned with tunnels, and they are, of course, Camden, Islington, Tower Hamlets,

---

**The Petition of London Borough of Camden**

---

Westminster City Council, Newham, Islington and the City, and, of course, it is done in a way, as with other generic cases, to avoid duplication for the Committee.

2847. We will call Mr Methold, who is an acoustician with railway experience, who will explain the details of our case.

2848. May I just give you a short cameo of what our case is. The very short cameo is, should it be 40 dB(A) Maximum as the standard or should it be 35? The Promoters are saying 40, we say 35. There is a 50 per cent difference.

2849. You heard from Mr Thornley-Taylor on Wednesday of last week, a week ago. Consequent upon that, to shorten matters, we invite the following background approach. First, we are talking about groundborne noise that comes through the walls and is radiated laterally and vertically, not just in a room say fronting a road or fronting the river. Occupants who sustain groundborne noise cannot move rooms. The next point: its characteristic is low frequency and is therefore unusual, all pervading—as Mr Thornley-Taylor said it can go through your pillow—and we say it has the potential to be extremely annoying. The vernacular of assessing it, and it is the vernacular, and I do not understand the Promoters are going to change horses, of assessing it in LAmax cannot accommodate the frequency if one incident of noise is assessed. It does not tell how frequently that occurs. We agree that it is a logarithmic approach, every 10 dB increase sounds like a doubling, and the reverse is a halving. We also agree that there is a technical solution that can resolve the groundborne noise issues that we raise.

2850. The fighting ground is this. The groundborne noise has to be raised as an issue now, because, as we understand it, there is no mechanism in the future for local authorities—the environmental health officer of Camden as an example—to scrutinise the design or ultimately the performance, in any real sense, of the track system in the tunnels. Once the standard is set—as the Bill leaves this House or the other place—it is set for all time. Unlike airborne noise, there is no attenuating feature for groundborne noise that is not achieved at the outset.

2851. Next, we are looking at best case at this stage. It is an inevitable consequence, and something, reading the Minutes, that the Committee has picked up, that the combination of things such as poor maintenance of track and poor maintenance of vehicle wheels as examples, the noise profile will increase thereafter. If there is a design that is proffered, the engineering and the mechanics thereafter of the vehicles, of the rails, is likely to exacerbate, subject to maintenance, the noise problems. Therefore we invite a precautionary approach, both specifically and generally, as the modern idiom.

2852. You will hear from Mr Methold that there is a concern, in any event, about having a complaint threshold as the threshold of approach. Complaints do not necessarily mean annoyance, and Mr Methold will tell you that the product of 40 dB(A) for the Channel Tunnel Rail Link tunnels in North Kent has been the subject of matters raised with environmental health officers in Tonbridge and Moring in Kent and with local and national politicians.

2853. What we see is a number of undertakings, which I do not propose to read out, because when I call Mr Methold he will give you a document that has those undertaking that we see in the graphic form and they can be projected on the screen and the Committee will have the document. Unless you would like me to read them out, I will not do so. I will call Mr Methold, unless there is anything you would like me to deal with at this stage.

2854. **Chairman:** Before you proceed, the practice we have been following already is that, Mr Taylor, would you like to come in with a short summary of introduction?

2855. **Mr Taylor:** I am quite happy to if the Committee wants me to, although I think my learned friend has done a rather good job of identifying what the issue is.

2856. **Chairman:** Would it be okay for us to continue?

2857. **Mr Taylor:** I am quite happy to do that.

---

---

The Petition of London Borough of Camden

---

**Mr Rick Methold**, sworn

*Examined by Mr Clarkson*

2858. **Mr Clarkson:** Would you tell us who you are and what your background is, please?

**(Mr Methold)** My name is Richard Methold. I am director of an organisation which specialises in noise and vibration. I have 15 years' experience working on industrial commercial and transportation schemes. I work for both promoters, train operating companies and also local authorities in the railway sector, and I have specific experience of working on the Channel Tunnel Rail Link, Thameslink 2000, the west coast route modernisation, the Kowloon and Canton Railway and the Washington Metro.

2859. For the minutes, what are your qualifications? What is your expertise?

**(Mr Methold)** Bachelor of Engineering. I have a degree in electro-acoustics and I am a Member of the Institute of Acoustics.

2860. Would you take the matter forward, please?

**(Mr Methold)** I really wanted to make the point that the Petitioner is dealing with both construction and operational groundborne noise, that is operations that will take place while the tunnel is being constructed, namely tunnel-boring machines and the temporary railway that will operate within the tunnels as well as the permanent railway that will operate. We have had some discussions with the Promoter in relation to construction and groundborne noise and we have issued them with some draft undertakings on which we wish to pursue further discussions.

2861. I am going to interrupt you because I think we can jump to what I said the Committee would have. Have you got that clip of exhibits?

**(Mr Methold)** That is right at the end of the Petition.

2862. Right at the end. If you have not got it, you should have it. It is on the screen as well.

2863. **Chairman:** Mr Clarkson, can we note, this document is A37.<sup>1</sup>

2864. **Mr Clarkson:** It is the end of A37 that I want to take the Committee to because that is the essence of why we are here and what we are seeking via the London Borough of Camden for those authorities who are concerned. You were going to say something about construction groundborne noise, that is LBC37 and those are the undertakings sought. Just explain, would you?

**(Mr Methold)** The Promoter has put forward in its information paper D10 the measures that it proposes to adopt as part of controlling construction groundborne noise. We were pleased to see that most of the issues that we had concern about were included in that list, but we did want the

promoter to go a little bit further and include two specific items. The first is that there is an opportunity to make selection on the locomotives and rolling-stock for the temporary construction railway in the tunnel in advance of the construction method being completed. That can have a significant bearing on the groundborne noise that is generated during the construction phase, and we wanted to have that inserted alongside the commitments that had already been made. The second one is that the tunnelling technique itself can be optimised such that you can minimise groundborne noise. For example, the pressure at which the tunnel boring machine operates against the cutting, or the work, face can have an impact on the overall groundborne noise. These were the two items that we asked the Promoters to include alongside their existing commitments.

2865. Very briefly—we need not take too much time with this, just so we clearly understand because it is something hopefully that can be resolved—what is the anxiety, for example, about the locomotives for the construction?

**(Mr Methold)** The main issue is that the mass of the locomotive itself can have a significant bearing on the amount of groundborne noise that is generated in properties above the tunnel, and there is an opportunity upfront to assess alternative options for this rolling-stock well in advance of any contractor being brought on board. That is what we are trying to seek.

2866. Staying with the undertakings, that is undertaking (1) that is sought, I believe?

**(Mr Methold)** That is correct.

2867. Would you explain what it is that Camden and others are seeking under (2)?

**(Mr Methold)** The second undertaking deals specifically with tunnel boring machines. The Promoter acknowledges that significant disturbance could arise from the operational tunnel boring machines when they are near properties, groundborne noise and vibration, I should add. Our experience is that tunnel boring machines can give rise to significant sleep disturbances. It is a continuous type of groundborne noise, very different to the type of train groundborne noise we will be talking about a little bit later. It is of a continuous nature associated with feelable vibration. What we are trying to seek with the second undertaking is a commitment from the Promoter to offer, in extreme circumstances, alternative sleeping accommodation for residents affected by this particular source of vibration and groundborne noise. We think it is reasonable and we think it is equitable with the policy that the Promoter is putting forward for airborne construction noise.

---

<sup>1</sup> Committee Ref: A37, Petition on Groundborne Noise (CAMDLB-31905-001 to -039).

---

 The Petition of London Borough of Camden
 

---

We do not believe it is an onerous imposition on the Promoter, and this is essentially what the second undertaking is trying to seek.

2868. As a passing understanding to the Committee, you say 10 or more nights in any 5-night consecutive period. Would you remind us how far the tunnel boring machines would go in a 24-hour period?

**(Mr Methold)** As I understand from talking to the Promoter, we could be looking at progress rates—this is the amount of distance that the tunnel boring machine could proceed—of around about 60 metres per week. It could be more than that; it could be less than that. It is highly dependent on the materials encountered or any obstructions that are encountered. Ten nights really is equitable with the airborne construction noise policy. The idea is that it gives some respite to residents should this be triggered. If we have a situation where the tunnel boring machine, for example, hits an obstruction and is slowed down quite considerably, then this undertaking bites and the Promoter will be required to make available alternative sleeping accommodation, which could be in the form of having rooms in hotels available. This is not an uncommon process. I have certainly worked on projects for Network Rail where this has been accommodated.

2869. On the ten-day period, if it is 60 metres a week, we are talking of something in the region of 80-90 metres away from the initial point of concern. Is that fair?

**(Mr Methold)** That is fair.

2870. That is construction noise. The more contentious issue, as I understand it—those three, four and five undertakings sought, which is up on the screen now, LBC38—would you take us through those, the last page?

**(Mr Methold)** Certainly. Undertaking number (3). This undertaking is requesting the Promoter to keep local authorities involved in the design of the track system as it develops and as it is finalised. Currently, as Mr Clarkson has already stated, there will be no powers for local authorities in the future to scrutinise or agree to this track system. Hence the very reason we are here petitioning today. We have only once chance to state our case on this. This undertaking is identical to the undertaking that was provided to the CTRL project and my discussions with local authorities involved in that project have concluded it was an extremely useful process. It has enabled them to bring their own specialists around the table with the Promoter to develop and finalise the track system together and understand the various cost and engineering discussions and debates that have needed to have taken place to come up with the final track design, and they have found it very satisfactory. We therefore seek the same undertaking.

2871. The next undertaking is key to the whole issue, is not it? “The Nominated Undertaker will apply the Best Practicable Means to the design of the

temporary construction railway and the permanent operational railway, taking into account future planned usage, such as the groundborne noise level from a single train pass-by measured close to the centre of any habitable room within a building legitimately occupied for residential purposes, does not exceed a level of 35 dB LAmax.” We will not elaborate that other than to flag up that what you are going to look at is best practical means groundborne noise level from a single train pass-by measured close to the centre of any habitable room and the level. That is what your evidence is going to be directed to, is it not?

**(Mr Methold)** It is. I would further add, I think Mr Thornley-Taylor last week in his presentation on noise made a very valid point that it is not just the numbers, it is the words that go with the numbers that are important. The essential items of difference between us and the Promoter is a number. We want 35, they want to stick to 40, but also we are introducing best practicable means into the argument here, which means that if there really is no way that a Promoter can achieve 35 and he can demonstrate that on the basis of both financial and engineering constraints, then the best practical means bites and every opportunity has been had by the Promoter to try and achieve 35. We will be satisfied with that.

2872. We will say no more at this stage, we will flesh it out in your evidence, on best practicable means other than to say it is a term of art, is it not? It is something that has statutory currency. It is a concept well-known to environmental health?

**(Mr Methold)** It is indeed. It is enshrined in very important documentation.

2873. We will look at those in due course. The last undertaking sought is (5).

**(Mr Methold)** Number (5) is dealing with the matter that Mr Clarkson alluded to, which is that of the maintenance of the railway. This is to ensure that the rails are kept smooth and that the wheels are kept smooth also.

2874. I saw in the Minutes an error, which I hope has been corrected. “Wheel flaps” with a “P”. It should be, of course, “wheel flats”. It was a typographical error. That is one of the areas of maintenance required?

**(Mr Methold)** It is. This undertaking is at this stage asking again for local authorities to be involved and understand the development of the maintenance regimes. We are aware of several projects that have quite strict policies in terms of maintenance, but we are being realistic. The railway will not know how often it wishes to maintain its track and rolling in stock. We just want to be involved and understand how the Promoter intends to achieve the commitment on this that it has stated in this information paper.

2875. Those are the undertakings that are sought by the Petitioners. What I want to do now is to go back to the beginning of your noise case, Mr Methold,

---

The Petition of London Borough of Camden

---

using the overhead projection and the graphics that we have given to the Committee. In combination they are one and the same. Some of this we can take quickly because, of course, Mr Thornley-Taylor has given the Committee a cameo a week ago. Let us look at the first one, Exhibit LBC1. I think that has had some sort of currency already, has it not?

**(Mr Methold)** Indeed, this is very similar to the scale that Mr Thornley-Taylor presented last week. As a brief recap, we are talking about decibels. This is a logarithmic scale. Mr Thornley-Taylor explained that essentially a 10-decibel increase correlates to a perceived doubling of loudness. I would like to draw your attention on this scale to the range of levels between 20 and 60, and on the right-hand side we can see that a bedroom at night would typically be between 20 and 30, a residential area between 30 and 40, a living room in urban areas between 40 and 50, typical business offices between 50 and 60.

2876. That is during a working day, is it?

**(Mr Methold)** That is correct.

2877. Groundborne noise next, please, LBC3?

**(Mr Methold)** I do, unfortunately, need to introduce the Committee to another area of technicality. I apologise in advance. It is to do with frequency, or pitch, as you are probably more familiar with. The human ear can detect frequencies between 20 and 20,000 oscillations per second. This is quite a broad range. We will all be familiar with, for example, a glass breaking or small waterfall having predominantly high frequency noise, whereas, for example, thunder or the noise from a diesel locomotive is predominantly low frequency noise. The human ear responds best to the mid frequencies, and typically our speech, talking to you now, is between one and 5,000 oscillations per second, or hertz, as we call them. Mr Thornley-Taylor mentioned the A-weighting network last week. This is a network that is imposed upon the noise level to reflect the response of the human ear. In other words, it penalises the local frequencies and very high frequencies. We are not too good at detecting the lower frequencies. It is very important for us acousticians to understand about the frequency make-up of any sound, and to do that we package up the energy from the sound into a series of discrete slots or frequency bands across the range, and we call this the spectrum. So it goes from the low end up to the top end. We have these discrete frequency bands. Just coming on to groundborne noise, this slide is illustrating how groundborne noise is generated from the passage of a train. Here we have the train running in a tunnel, wheels running over the rails, generating vibration and excitation in the system. Vibration is transmitted into the bottom of the tunnel and then round the tunnel lining and out into the surrounding soils.

2878. When we are looking at that, tell the Committee, would you, what you bring to that with your previous evidence about the frequency?

**(Mr Methold)** The frequency of groundborne noise generated once the vibration has been transmitted into the building is predominantly low frequency. I will show you a couple of slides shortly that will illustrate that point. Once the vibration has propagated to a building it transfers itself into the structure, causing the walls, the ceilings and the floors to vibrate—often imperceptibly. You cannot necessarily feel that vibration but it is enough to regenerate the noise back into the room.

2879. On LBC3, where it says “Receiver” in the building, and those lines on the walls and the floors and ceiling—what are they indicating?

**(Mr Methold)** That is indicating the movement and vibration of those surfaces. So it is essentially a source that is all around you. You cannot detect where it is coming from. That is what makes it very different to airborne noise, which we are all familiar with. If a road is placed outside your window you can obviously tell when you are sat in your room the noise is coming through the window, but with groundborne noise you cannot do that; it is all around you. For that reason it is also inescapable, because it affects all of the rooms in the buildings. So whereas somebody may be able to move to an alternative room, or change their bedroom completely by moving away from an airborne noise source, you cannot do that with groundborne noise. This is what makes it very, very different to airborne noise and why we have to treat it in a much more precautionary way. It is also the reason why we set the lower limits than we do for airborne noise. Just to reiterate, there is really only one opportunity to get this right. Once this tunnel has been built and the track system is in place there is no way that we can retrofit this to improve it at reasonable cost.

2880. LBC4. This approach is agreed, is it not?

**(Mr Methold)** It is, yes. This is the noise metric that groundborne noise is assessed with. This issue we do not intend to challenge the Promoter on. Just to recap on what it actually means here, it is the maximum sound pressure level during a single train pass-by. Mr Clarkson has made the point already that this does not take into account how frequent these trains will be. It is another reason why we have to be very, very precautionary in our setting of the noise limits. It is A-weighted. We have described that as being a weighting network for the human ear, and it is measured with a slow time constant, which is what the S corresponds to.

2881. That was explained last week. The Petitioner does not seek to challenge this metric, as the graphic says. Do you understand any other metric to be promoted by anybody else before the Committee?

**(Mr Methold)** One of the reasons we do not intend to challenge this metric is that the very small database of information we have in this field is almost entirely in terms of LAmax. It has been argued that the LAeq should be used or could be used, and of course we know this is, if you like, an energy average of the noise level taking into account

---

The Petition of London Borough of Camden

---

the number of events. As far as I am aware, I have seen no scientific basis for using the LAeq for groundborne noise for trains.

2882. LBC5.

**(Mr Methold)** This is a figure which is showing the frequency spectrum that I referred to. I would like you to concentrate, initially, on the blue line. The left-hand side of the bottom axis is the very low frequencies that I was talking about—the very low frequencies—moving up to the right-hand side, to the very high frequencies. The blue is predominantly energy in the range of about 500 Hz to one KHz. I should say the blue line is actually the background noise level we measured in a bedroom. It corresponds to a level of around about 27 decibels. This figure is setting out how the frequency is distributed for that particular noise source. The energy on the blue line between 500 and 1,000 Hz is probably due to a number of factors, possibly road traffic noise coming through a window, but also on this occasion there is noise from the central heating system—water passing through the radiators. That gives us an indication of how frequency is distributed in the bedroom. I would like now to turn your attention to the red line. This is the frequency distribution from a pass-by of a train beneath this bedroom, passing in a tunnel. The overall level from that pass-by was 46, but what I am trying to show here is that in the range between 40 and 250 Hz this is where the groundborne noise energy lies—it is this very, very low frequency contribution. This is what makes groundborne noise very, very unique in our field.

2883. Is it the short point, looking at it superficially, that the red columns on the left-hand side emphasise the low frequency nature of groundborne noise?

**(Mr Methold)** Indeed. The bars we see on the top of this graph are the difference between the red line and the blue line. So it is telling us where the new energy is coming from, and it is all in this low frequency area. Not to be accused of presenting the Committee with a noise level that is above the design aim, can I have the next slide please?

2884. This is LBC6.

**(Mr Methold)** This slide is showing a pass-by at 40 decibels, which is the Promoter's design aim. Here we can see differences, and I am going to quote from the actual green bars you can see here. We have differences of up to around 28 decibels in individual frequency slots or frequency bands. That equates to almost an eight-fold increase in loudness in those particular frequency bands. I was very interested to hear Ms James mention last week about her experience at the Victoria Palace Theatre.

2885. Billy Elliot?

**(Mr Methold)** That is correct, Billy Elliot. I think she made some very interesting statements. She said she did not believe it was necessarily uncomfortable but she was aware that it was there. This is the point I am trying to make about this particular noise source; it is at low frequency and, because of that,

the ear picks up on it very differently to a sound that would have more distributed frequency. For your information, Ms James, we actually measured some noise levels inside the Victoria Palace Theatre and we came up with an average noise level of just under 43, which is within the margin of error that the Promoter may well be predicting his noise levels to. The next slide presents a series of generic track forms, and we are interested in what we call non-ballasted track forms—in order words, concrete slabs in tunnels with the rails fixed in some form. I do not want to dwell too long on this one but I want to make some points about the Promoter's proposed systems. If we look straight at the top, we have a system which is called directly fastened rails. This is where the rails are fixed straight on to the bottom of the tunnel—concrete that is laid in the tunnel.

2886. Is that the Victoria Line?

**(Mr Methold)** This is essentially the system that Mr Thornley-Taylor was alluding to as being the culprit for bad underground noise in London. It is very rarely used these days. What I should say is that moving down these systems we do, of course, see an increase in performance, and as with most things we also see an increase in the capital costs. Moving on down, I would like to draw your attention to item i) on this slide, called "Resilient baseplates". This is the standard track form that Crossrail is promoting for the tunnels. The thick black line there indicates the point at which the resilience is being applied to the system. This squishy material that is put in there to isolate the vibration. Moving right down to the bottom we see "floating track slab". This is the highest performing system that we currently know about for this type of application. Interestingly, and I want to draw the Committee's attention to it at this point, the Channel Tunnel Rail Link successfully argued that they could not accommodate floating track slab as part of their design because it was unproven technology for high-speed rail. This is a very important point because it was used to justify why 40 decibels should be applied for that project. Both parties, the local authority and the Promoter, agreed that the only way they could achieve 35 would be to apply floating track slab for that particular railway but because of the cost implications and unproven technology and, hence, the safety aspects it was revealed to be a far too expensive option and an unknown option, and the Committee sided with the Promoter in that respect. That is the main reason why 40 dB is accepted for the Channel Tunnel Rail Link.

2887. Just so we can reveal where the issue is for the Committee currently, the second group g) through to i), one way or another—am I right—that is going to be provided in any event?

**(Mr Methold)** That is correct, and we are led to believe that it will be i).

2888. The issue is as to whether a floating track slab solution should be provided to achieve 35 dB(A) in the way we seek in the undertaking.

---

The Petition of London Borough of Camden

---

*(Mr Methold)* I think, as a worst case, that would be the situation. What we do know is that there is potential to increase the performance on the Promoter's standard track form by looking at softer resilient baseplates than they are currently assuming. There are all sorts of operational parameters that come into play when we start to look at soft resilient material, such as acceptable deflections on the rails with the rolling of the rails, its propensity to corrugate—all sorts of operational issues. So we do understand those well, but we understand from discussions with the Promoter that there is scope for actually getting a better performance resilient baseplate than they have assumed, so it may be along some locations that this could be applied where we want them to try and achieve 35. They can do that by just increasing the performance of the baseplate system they are already proposing to use.

2889. That is in the second group as opposed to the first.

*(Mr Methold)* That is correct. An important point to make is in relation to the floating track slab, that Crossrail is not constrained in the same way that CTRL is. Crossrail can accommodate floating track slab and it does not need to alter its dimensions of the tunnel to accommodate it, which CTRL would have had to have done. It is an important point I wanted to make. Can I have the next slide, please?

2890. We are going into a category now, "Guidelines and Policies".

*(Mr Methold)* The first thing to say about this is that there are no standards for groundborne noise anywhere in the world. So we rely primarily on guidelines. The slide you have in front of you is a summary table from a publication by the American Public Transit Association.

2891. Just explain what they are.

*(Mr Methold)* Sure. They are an association comprising railway industry sector companies, suppliers, operating companies, developers, promoters. So this is the railway industry's take. The American Public Transit Association, or APTA. These are called design goals. Rather interestingly, they make a distinction between single family dwellings and multi-family dwellings. This is the second and third columns in this table. It is a bit of a false distinction, we think; it is implying that we should apply lower limits just because we have multiple family dwellings, such as tenements or blocks of flats. The left-hand side is categorising the acceptable noise levels according to the density of the residential dwellings. Again, this is an unusual approach, and if you look elsewhere in the document it is actually more related to the ambient noise outside of these properties. It gives you an idea of the range of the existing external ambient noise levels. So, again, it is implying that that might well have an effect on what is an acceptable noise level inside. As we can clearly see, for a single family dwelling,

whether it be low, average or high, the range is 30-35. Can I have the next slide, please? The next series of guidelines we have relates specifically to impact assessment criteria.

2892. Explain again who the Federal Transit Administration is.

*(Mr Methold)* The Federal Transit Administration is an arm of the US Department of Transportation. So this is essentially government policy assessment criteria. This publication was published in 1995. The previous publication was published in 1981 and this particular document was based upon the experiences of the guidelines. Interestingly, it got rid of any discrimination between single and multiple dwellings, on the basis—and it says this very strongly—that you cannot say that there would be a difference in somebody's bedroom between somebody who lives in a quiet area and somebody who lives in a relatively noisy area, on the basis that if people have reasonably good windows that close well there should be no difference. Category 2 is the one we are interested in and it refers specifically to residences where people normally sleep, identifying the sensitive time of day. This table also talks about frequent and infrequent events, and down the bottom of this table it refers to frequent events as more than 70 noise events per day, which we clearly will have with Crossrail. So we think this provides fairly strong evidence that 35 is a contemporary guideline for the impact assessment of groundborne noise. What I would also add is that these guidelines have been transferred to high speed rail guidelines only four months ago in America. Therefore they are still contemporary guidelines for impact assessment of groundborne noise.

2893. Two questions before we leave them. Did you give the date of the APTA document, LBC 9?

*(Mr Methold)* I did. 1981.

2894. Thank you. Have these been invoked in any work on railways in this country?

*(Mr Methold)* They have formed the basis of criteria which was developed for the Channel Tunnel Rail Link. There is direct reference to these guidelines in the criteria developed. We will come on to this a little later, when I can compare the criteria. These are widely used across the world. Recently I have been asked to work on a railway in Turkey where these will be advocated. These are the only guidelines we have, I should add, in the world. Next slide, please.

2895. I think we are turning to local authorities now.

*(Mr Methold)* We are. This is an important slide. These are adopted groundborne noise policies by the local authorities that will be affected by Crossrail. These are approved policies. They have gone through the formal approval process. Every opportunity has been there for the Promoter or other parties to challenge these policies. These do not just apply to somebody building a house over the top of an existing railway. I have had confirmation

---

 The Petition of London Borough of Camden
 

---

from all of these local authorities that the intention of these policies is to apply to a new railway passing under existing dwellings.

2896. Camden has an adopted UDP policy. Islington has a SPG (Supplementary Planning Guidance). Tower Hamlets has—what category is it? Is it their own adopted rail noise policy?

**(Mr Methold)** It is very specific. It is related to rail noise policy, and my understanding is that it does form part of the Unitary Development Plan for that process. Can I have the next slide, please? We have another interesting document issued in 2004. That was the London Mayor's Ambient Noise Strategy. This is the first city-wide strategy of its kind in the UK and it is focused very much towards minimising noise and vibration within the city within the sustainable development framework. I would just like to read out the quote that relates specifically to new railway projects, and Crossrail is mentioned directly in this document. "The Mayor will urge proposers of major rail schemes and light transit projects to minimise *any* adverse impacts of noise and vibration, using the best available cost-effective technologies. The noise and vibration impacts of schemes should be assessed along with other criteria, and understandable information conveyed in public consultation as proposals are brought forward." This, quite clearly, is reflecting the requirements of the Government's remit on sustainability, which is also a requirement for local authorities to adhere to. It is the very reason why we seek groundborne noise levels of less than 35 dB LAmax,S. Can I have the next slide, please? I would like to talk a little bit about environmental impact assessment criteria. There is a distinction between the assessment criteria and design aims, and I want to draw a line down the middle between the two. I want to concentrate on the assessment criteria used for the environmental statement purposes, and later I will come on to talk about the design for the future targets that the Promoter proposes to deliver the railway to. This is a table lifted directly from the Promoter's technical reports supporting the environmental statement. It shows the impact classifications for groundborne noise being low, medium, high and very high. The second column shows the range of groundborne noise levels that correspond to those classifications. The interesting item to notice on this table, which I would like the Committee to remember, is that the project is only identifying the significant impact at levels above 40. It is therefore not recognising 35-39 as an adverse impact. Next slide, please.

2897. This is LBC15.

**(Mr Methold)** This is the impact assessment criteria adopted for the Channel Tunnel Rail Link project. You will notice the same semantic scale has been used, but importantly the Channel Tunnel Rail Link recognised that the adverse impact could occur above 35. The significance of any impacts was based upon the consideration of all adverse impacts. In other words, low, medium and high impacts were taken into consideration when deciding whether an effect was significant or not. This is a very, very

important difference I want you to understand, because essentially what has happened with Crossrail is we have lost an entire category of impact classification in the environmental statement. On that basis I believe we have a less onerous series of assessment criteria than was adopted for the CTRL. Do not forget CTRL is a high speed railway, with faster trains and heavier trains. Can I have the next slide, please? I would like to talk a little bit about design aims.

2898. Before you turn to this, give us the source of this. Is it the environmental statement volume 2, or is it D10?

**(Mr Methold)** This is lifted from the Promoter's information paper, D10, and provides a list of target noise levels that it is intending to impose on itself. Right at the top we can see residential dwellings set at 40. This is the subject of our debate today. What I would like to point straight to now is that the level that is being proposed for offices is the same level as residential. Mr McCracken last week made direct reference to this very point. It does not seem sensible in terms of logic and common sense that the design aim of 40, for daytime use in a noisy office, should be the same as that applied to residential dwellings in bedrooms at night. Moving on down the list, we have 35 set for lecture theatres. Again, it just does not make sense to me that a lecture theatre in use during the day should be more sensitive than residential dwelling bedrooms at night. The final point I would like to make on the slide is that these are based upon predicted noise levels. I will come on to talk about that a little later. These are not necessarily levels that the Promoter would actually achieve but these are predicted level limits.

2899. With that theme we go to LBC18.

**(Mr Methold)** We do. This slide is presenting the Parliamentary undertakings that were given to the Channel Tunnel Rail Link project. This particular undertaking is the primary groundborne noise undertaking and restricted the project to 40 dB(A), with a slow time constant, measured near the centre of any dwelling room on the ground floor due to the passage of a single train. The second half of this undertaking is the interesting part and is what I alluded to earlier. The Select Committee agreed that the use of floating track slab and the associated costs would be unreasonable for CTRL, particularly because of the unproven nature of the technology. These are the main reasons why 40dB was deemed to be acceptable for that project.

2900. There was a concern, was there not, about a train going at over 100 miles an hour, well over 100 miles an hour, being on a floating track slab?

**(Mr Methold)** Indeed. I think at that time it was unproven technology for high-speed rail. There are safety issues associated with using squishy material on the track. Can I have the next slide, please? Very interestingly, a second undertaking was given by the Select Committee. This is one I would like to draw the Committee's attention to now. This undertaking specifies the number of properties that were expected

---

The Petition of London Borough of Camden

---

to experience the low and medium impacts. This undertaking constrained the project such that it was not allowed to introduce any new impacts in the low category. In other words, importance has been placed on the low impact category of 35-39. CTRL recognised that this was an adverse impact and that the project should be constrained to not introducing any additional low impacts. Again, I would suggest that this is more onerous than the situation that Crossrail is putting forward to us at the moment.

2901. **Mr Binley:** Can I clarify for own benefit, because in a number of instances we have two and sometimes three different tunnels operating one above the other in levels, and at times trains will be going through those tunnels at the same time. Does that affect your calculation in any way? Nobody has said anything about that. It may not but it may.

**(Mr Methold)** It could affect the overall noise level. If two trains are passing at the same time it is reasonable to say that the noise level will be additive, particularly if you are using the slow time constant, because, as we know, that means that the needle has slowed down on our meter, so it means that there is more opportunity for the two noise levels to occur at the same time. With a fast time response, which is much more of an intermittent flickering noise level, it could be argued that it is very unlikely you would get the two fast events at the same time with a passing train. It would only really be an issue where you have the same distance between the property and the two tunnels. It may be unlikely that you would find many situations where that would be the case, but clearly if you were straight down the middle of the two—

2902. **Mr Clarkson:** Just to pursue the hon Member's question a little bit further, has there been any material in the environmental assessment that you have seen that deals with that point?

**(Mr Methold)** No. Can I have the next slide, please? I would now like to explore the origins of the Crossrail Design Aim.

2903. LBC21.

**(Mr Methold)** Indeed. We have three studies that underpin the design aim. Two were undertaken by London Underground, and one by Crossrail. This is the study that Mr Thornley-Taylor alluded to last week—the Crossrail Social Survey, as I shall refer to it. Interestingly, the two studies undertaken by London Underground are based around considering complaints. I want to draw a distinction between the annoyance and complaint. Many more people can be annoyed by the noise than would complain, for all sorts of reasons which I shall come on to a little bit later on. We think it is inappropriate that a design aim should be based upon reported formal complaints. Mr Thornley-Taylor mentioned this particular study which was looking at complaints received in the 1960s and 1970s, and I think it followed the opening of the Victoria line extension at that time. It was reported in 1980, and I was heartened to hear Mr Thornley-Taylor say that he felt that that information was long-in-the-tooth at

the time. It means that I do not have to dwell on it too long. All I will do is read out a passage from the front cover of that particular report. “The report is based entirely on complaints and that these indicate only that a threshold level of tolerance has been exceeded. No information is available to indicate the degree of nuisance or annoyance caused by the railway noise below the level at which a complaint is stimulated. The criterion developed in this report does not, therefore, represent an acceptable limit of noise but only a threshold point on a scale of annoyance. Further environmental and practical factors will need consideration in order to determine an acceptable and reasonable limit for underground railway noise.” This is a fairly straight talking summary of that particular study. Mr Thornley-Taylor also alluded to all of the measurements being over 40 in the survey. Inspection of those complaint histories actually indicates that we have levels around 40 and below 40 at certain points within buildings, for your information. The next slide is LBC22. I would like to talk a little bit about the Jubilee line extension. I put “circa 1991” but I am not entirely sure when the environmental statement did appear for this one. We draw on the text I am quoting under item a) from the Promoter's technical reports for Crossrail. The environmental statement for the JLE identified 35 dB(A) as a desirable level. This can be sourced directly to the APTA guidelines. They went on to talk about 40 dB(A) as a potential complaint threshold, based upon the study we have just talked about.

2904. **Mrs James:** We have very carefully had explained to us the difference between the levels, and the level to the power of 10 is actually a doubling. What does that 35-40 actually represent? Is it one-and-a-half times?

**(Mr Methold)** It is a trebling of acoustic energy.

2905. **Mrs James:** Thank you.

2906. **Mr Clarkson:** Let us get this clear: a trebling of acoustic energy between 35 and 40?

**(Mr Methold)** That is correct.

2907. And loudness?

**(Mr Methold)** Loudness, it would be somewhere between zero and 10. We know that doubling of loudness is 10. We can suggest that might be half as loud as maybe a doubling of loudness.

2908. If I can lead on the arithmetic, and you will correct me if I am wrong, I think to answer the hon member's question, is that a 50 per cent increase?

**(Mr Methold)** It is an over 3 dB increase, so it is a noticeable difference. That is probably the best way to describe it. The studies that indicate that 10 dB is a double of loudness is based on laboratory experiments where somebody is asked to push a button in a booth when they felt that a noise level sounded twice as loud. The JLE project went for the design aim of 40 dB based upon a complaint

---

 The Petition of London Borough of Camden
 

---

threshold. Item c) here, we put unchallenged here; Mr Thornley-Taylor made the point that this was an unchallenged design aim at the time.

2909. Is the question mark deliberate?

**(Mr Methold)** It is deliberate. It is interesting to read the transcripts of the Channel Tunnel Rail Link Bill where the specialists advising the local authorities and the specialists advising the Promoter were the same people involved in the Jubilee line extension. What we can see when we read the transcripts is that the specialists advising the local authorities most certainly did want to challenge this design aim and were engaged in discussions with the Promoter right up to the point at which the Committee was due to take hearings. The specialist advising the local authorities was under the impression, or believed, that he had secured an informal assurance that 35 dB would be a desirable level and would feature in an undertaking. We can see when we read the transcripts, however, that that did not transpire, and that I think it was regarded as a misunderstanding between the parties. This is an unfortunate misunderstanding because it marks a point in history at which 40 decibels has been argued to be unchallenged through the Select Committee process. Can I have the next slide, please? Crossrail Social Survey. I talked about the London Underground study being related to complaints. This is actually an attempt to try and relate it to annoyance, a more appropriate indicator for design aim purposes.

2910. First, please, before you go any further, is this table, LBC23, a lift?

**(Mr Methold)** It is. It is a lift straight from the main social survey report. We have two reports that comprise the social survey. There is the actual social survey report done by a specialist organisation. We then have an interpretive report undertaken by the Promoter's expert witness on that information. This is from the main social survey report. The first thing to notice—and I will explain a little about the table, first. We have categories of noise level on the left-hand side of this table: less than 35.9, 36 and 39.9, and then 40. We presume this to mean 40 plus. This is a direct lift from the report itself. The second, third and fourth columns are then documenting the number of respondents who said they were either “very annoyed” “quite annoyed” or “not annoyed” at certain noise levels. These are grouped in the table. The first thing to notice about this is that we only have 26 respondents on the survey where information is useable. The second thing to notice from this table is rather peculiar patterns. We have three respondents “very annoyed”—all of them below 40, we should point out. Nobody is “very annoyed” above 40, and yet we have “quite annoyed” respondents above 40. These are very unusual patterns and really start to indicate very early on that we had an unusual data set because it is so small. This is a very small sample of information.

2911. **Kelvin Hopkins:** Should it be assumed that the people who were “very annoyed” at 39.9 were also “very annoyed” at 40?

**(Mr Methold)** It cannot be, not according to this survey. Can I have the next slide, please? This is a graph taken from the interpretive report. It is documenting the responses of those 26. Along the left-hand side we have “not at all annoyed”, “not very annoyed”, “quite annoyed” and “very annoyed” on the scale. Along the bottom we have the measured noise level. The crosses, obviously, represent the measured noise level and the particular noise annoyance response.

2912. **Mr Clarkson:** Just so we get it absolutely clear: this document is produced by whom?

**(Mr Methold)** This is produced by Mr Thornley-Taylor on behalf of Crossrail.

2913. Should the base data be the same as your previous exhibit?

**(Mr Methold)** It should be. I am hoping it is the same data. We can see that there are only four respondents here; quite annoyed and very annoyed, in total. It may mean that some of the crosses are on top of each other.

2914. **Kelvin Hopkins:** Was any attempt made to establish whether or not some of these people were hearing impaired? That is quite significant. If they all had a hearing impairment they would have a different reaction.

**(Mr Methold)** That is perfectly true and I do not have the answer to that. It is not documented whether we have hearing impaired—

2915. **Mr Clarkson:** I think in the survey, as I recall reading some of the material, some people refused to turn off their televisions in one survey, so they could not get a proper survey. Is that the sort of problem you face?

**(Mr Methold)** Indeed, I believe that over 600 questionnaires were sent out for this survey and they had responses from 277 but only managed to get noise and vibration measurements within 27 sites. This is an incredibly small sample for this type of exercise but the whole point of this is to try and identify what we call a dose response curve, a way that we can predict the likely annoyance based upon a set noise level. The diagonal line you see through this data set is an attempt to try and develop this dose response curve, so it is a best fit line. Statistically it has been generated through a mathematical process.

2916. **Mr Clarkson:** I have no doubt that some in the room will not want to be too interested in the detail of this but there is one area that I ask you to explain to the Committee and that is the top right which is a statistical—well, you tell us. What is it?

**(Mr Methold)** This is an indication of the statistical confidence of that diagonal line through that data. It comes out of a mathematical process. An R squared at 1.0 indicates that the prediction model of the diagonal line will give you a 100 per cent right answer every time. What we have got here is something that is saying that less than six per cent of the annoyance can be attributed to the noise level

---

The Petition of London Borough of Camden

---

L<sub>A</sub>max.S. This is a very important conclusion. Statistically this is an incredibly weak relationship we have here. It is almost obvious to see this. We have slightly below 40 and we have a whole gamut of different responses across the board, which is a very clear indication that we have a sample that cannot be used as a scientific basis for this type of exercise. There is one final point and it is a very important point that I want to make about this survey and that is to do with measurement position. We know, reading through the social survey reports, that all of the measurements undertaken for this survey were conducted in the corner of a room. I will draw you back to the Design Aims that we have seen and the assessment criteria that we have seen for Crossrail which refer to the middle or near the centre of the room. We can expect up to three decibels difference between a measurement taken near a wall and near the centre of the room. We can expect up to an average of six decibels difference between a measurement made in the corner of a room compared to the centre of a room.

2917. **Mr Clarkson:** Explain.

**(Mr Methold)** What this means is that this social survey is based upon noise levels at the upper end, so it does not relate directly to the assessment criteria that Crossrail are putting forward. In other words, if Mr Thornley-Taylor is using this to defend 40 decibels what it actually means is that at the centre of the room this could be round about 35 decibels.

2918. **Mr Clarkson:** I would like you to flesh that point out about the corner and the wall a bit more for the Committee.

**(Mr Methold)** You would expect more reflection near the corners of the room. If you are measuring the middle of the room certain other aspects kick into the acoustic requirements, such as carpets absorbing some of the reflections, which you may not get when you measure near a corner. You also have, if you like, three sound sources from each of the walls in a corner position radiating at the microphone in close proximity.

2919. **Mr Clarkson:** What was the historical approach to that sort of measurement?

**(Mr Methold)** Historically people did tend to try and measure in a corner because it was easier to get consistent measurements but recent publications and in particular the Association of Noise Consultants have published a book, which I believe is called *Guidelines for the Assessment of Measurement of Groundborne Noise and Vibration*, of which Mr Thornley-Taylor is an author. This is quite clearly stipulating the preferred location for assessment of groundborne noise as being near the centre of a room. This is the point we are making here. We are not comparing like for like. Can I have the next slide please? These are extracts from Mr Thornley-Taylor's interpretive report on this social survey study and I would like to read them out: "Because of the small size of the sample of interviewees for whom both noise and social surveys were achieved, the confidence limits of the results are

very low." The second extract reads, "Because of the small number of results, the survey does not serve to establish, with the degree of confidence which attaches to the surveys of noise from above-ground transportation, the relationship between noise from underground trains and its effect on people. It nevertheless adds to the existing small database on the subject although any interpretation placed on the results must be treated with caution." These are very serious warning signals for the use of this information and I do not believe they should be the basis for defending the project's position that 40 dB is an appropriate design level. Can I have the next slide please?

2920. **Mr Clarkson:** LBC26.

**(Mr Methold)** This is the second London Underground study that Mr Thornley-Taylor referred to last week. In particular I believe he referred to the number of people in London already experiencing groundborne noise levels above 40. This table shows that just over 56,000 people are identified as being exposed to levels above 40. I should add that this table was only provided to me in the earlier part of this week. I was handed the complete document of this study about an hour and a half ago and so I have not had the opportunity to digest the entire contents. There is a published paper on this study which is a lot shorter, I can assure you, than the report that has been handed to me this morning. The purpose of this study was as an auditing tool for London Underground. It was intended to try and identify the hotspots along the route and the number of dwellings that might well be exposed to various noise levels. For that reason alone it was designed to be cautious. It is also only based upon prediction and prediction models again will have erred on the side of caution for this type of exercise. The published paper for this study makes it clear that the L<sub>A</sub>max level is actually intended to be the fast time constant. We need to be clear about the difference between fast and slow at this point. For a modern continuously welded railway you would expect only one or two dB difference between fast and slow. For London Underground with its track joints and other track problems you would expect the difference to be up to four, so already in terms of using this model for the application we are talking about you can assume that the study is four decibels too high. The other thing we can note from the published material is that there appears to have been an over-estimation in the predicted airborne noise levels for this study. They also looked at surface sections of the London Underground as a result of the rail roughness assumptions. I am just having a quick flick through the report that was handed to me this morning. It looks as though that over-prediction could have been in the region of eight decibels at one of the sites down to the assumption of rail roughness.

2921. **Mr Clarkson:** Can I say in passing, Mr Methold, that you are coming back, wearing another hat, before the Committee, are you not, on another matter? If the Committee will allow you, if

---

The Petition of London Borough of Camden

---

there is any material that has been missed because you have had it late I am sure you can bring it forward subject to the Committee approving it.

**(Mr Methold)** Understood. What I am getting at here is that if that type of magnitude of over-estimation was identified for the surface sections due to the roughness assumptions it could be a systematic over-estimation for the groundborne noise model also, so already we have potentially eight plus four over-prediction and it is fairly obvious that that could impact on a number of dwellings that we are talking about here being exposed to levels of 40. In fact, if you shift that scale down by, let us say, 10 decibels, you arrive at a result of 7,000 properties instead of 57,000.

2922. **Mr Clarkson:** So that is absolutely clear, your broad conclusion on this LBC26 is that if you lower it by 10 dB(A), and you have explained in what circumstances you would do it, where would they be lower than, first of all? What have you given a figure of?

**(Mr Methold)** Basically I have shifted the noise level part of the table on the left hand side by 10 decibels, so that essentially what was greater than 40 now becomes greater than 30.

2923. **Mr Clarkson:** So how many more than 40 is how you leave it?

**(Mr Methold)** What is there at the moment is that greater than 50 becomes greater than 40, in other words just over 7,000 properties.

2924. **Mr Clarkson:** It is 1,834 plus 31 in the total?

**(Mr Methold)** The table is referring to greater than 50 there, so 7,000 dwellings.

2925. **Mrs James:** So now where you had 30 you have 25? On the left hand side of the table, the noise levels, 30 would be 25, or 20?

**(Mr Methold)** No, 30 would be 20, 10 decibels less.

2926. **Mr Clarkson:** Fifty would be 40, 7,008; 55 would be 45, 1,834; 60 would be 50, 31; is that right?

**(Mr Methold)** Indeed. This we can observe from just two points of attack, adding them together. What we also know is that it is very unlikely that these population densities are very accurate and I will explain why. The locations where London Underground trains are likely to be the noisiest are those where they are in cut and cover tunnels. Those cut and cover tunnels normally follow the lines of very busy roads in London. For example, the Central line follows the line of Oxford Street and the Northern line follows the line of Tottenham Court Road.

2927. **Kelvin Hopkins:** They are not cut and cover though, are they? They are bored?.

**(Mr Methold)** I am making the point that tunnel sections of the rail network are the noisiest tunnel sections.

2928. **Kelvin Hopkins:** Those along the Embankment, for example.

**(Mr Methold)** Yes, I will accept that they are not all cut and cover tunnels but they will still probably be one of the noisiest types of tube in the area. The point I am getting to is that it is unlikely that those properties closest to those roads are residential. They are likely to be commercial or retail. That again is another aspect we think is a weakness in this particular study. The final point to make on this is that this study is entirely based upon looking at people who are already exposed to groundborne noise from London Underground trains. We know we have sections of what I term virgin territory, people who do not currently experience groundborne noise, and this is the big difference and the reason why this study does not necessarily justify 40 for Crossrail's purposes. The next slide is LBC27. I would like to get a little philosophical with the Committee at this stage, which is against my nature, but I want to introduce you to the fundamentals of developing the Design Aim.

2929. **Mr Clarkson:** So we are now on LBC28.

**(Mr Methold)** To do this I am drawing on the Promoter's own words in terms of designing a development and these are words that are found in the supplementary Environmental Statement under a section called "Health Effects of Noise and Vibration". This is my interpretation of their words. It is a graph showing a thick line on the graph, which is what I have already referred to as the dose response curve. I have not got any numbers along the bottom but it is noise exposure so it is an increase in the noise. All I have done is mark some pointers on there. Along the left hand axis is the percentage of people affected, in this case the annoyance. Point B on the noise exposure side indicates a point which is wholly unacceptable for almost 100 per cent of the population. These are the Promoter's words, I should add,—my graphical interpretation of their words. Point A on the scale marks a boundary beneath which there is no material noise effect for anyone. In developing a Design Aim we clearly need to find somewhere between A and B which is acceptable. Again, drawing on the words of the Promoter in quotes at the top there, which is point C and the dotted line we can follow to the top, "Point A as the AIM, subject to reasonable, acceptable & practicable costs and side-effects". What they are saying is that we should be moving as far as we can towards that demarcation point subject to it being practicable to do so. This is the very essence of what the local authority Design Aim is all about. We want the Promoter to move away from working up to a minimum standard and moving towards working down to a better standard subject to it being practicable, swinging the shift.

2930. The next slide is LBC29. We have talked about reasonable and practicable and Mr Clarkson introduced the concept of best practicable means. It is a tried and tested concept in environmental noise control. I will read out the definition of "best practicable means" from the Environment Protection Act. "Practicable" means reasonably practicable having regard among other things to

---

The Petition of London Borough of Camden

---

local conditions and circumstances, to the current state of technical knowledge and to the financial implications; the means to be employed include the design, installation, maintenance and manner and periods of operation of plant and machinery, and the design, construction and maintenance of buildings and structures.”

2931. Just for the reference, that is consistent with section 72 of the Control of Pollution Act as well, is it not?

**(Mr Methold)** It is. This is taken from section 79 of the Environmental Protection Act.

2932. Exactly, but it is for construction noise as well, is it not?

**(Mr Methold)** Indeed. We have attached best practicable means to our preferred design and we believe that it is consistent with the wording that the Promoter has put forward as part of their health effects statements.

2933. LBC30.

**(Mr Methold)** I have already expressed my concern about the scientific sources on which the design is based and we must remember that two of these were based upon considering complaints. It is well understood that complaints only represent essentially the tip of the iceberg. Many people may not be moved to complain although they can be annoyed by noise. In particular, people affected by groundborne noise may feel that any attempt to pursue a formal complaint would not yield a satisfactory outcome although in doing so they may enter into a formal dispute which could be marked against the property, or others may not know how or to whom to complain. We are drawing here upon a very important report presented to Government in 1963 published by the Wilson Committee. This is an extract: “Although the information has enabled us to form a picture of the types of noise that caused complaint, we do not think that it always gives a reliable guide to the number of people who are annoyed, nor to the degree of their annoyance. For instance, many people who are annoyed do not complain, for one reason or another, although they may be disturbed as much as those who do complain ... returns of numbers of complaints [do not] necessarily give the correct impression of the relative importance of different noise sources as causes of noise nuisance.”

2934. Was the Wilson Committee confining itself to any particular style of noise or was it broad?

**(Mr Methold)** These were very broad conclusions drawn by Wilson. He was looking at a whole series of noise sources, the problem as a whole. Just at the bottom of this exhibit I have put some other research which indicates that only five to 10 per cent of residents actually complain and researchers agree that noise is annoying but they also agree that the majority of people affected by noise do not complain. I am just trying to emphasise that there is a big difference between people’s annoyance and the

prevalence of complaint, and it is inappropriate, I think, to use the complaint threshold as a design limit. Could I have the next slide please?

2935. You are bringing it up to date now to the Crossrail EIA with LBC32.

**(Mr Methold)** Indeed. Here is an extract from a Department of the Environment document called *The Preparation of Environmental Statements of Planning Projects that require Environmental Assessment* which was published in 1995: “Determining the significance of impacts: when placing value on the predicted impacts, the environmental assessment study will have to rate the significance of the impacts in terms of factors such as the number of people affected, magnitude of impact and timescale of impact.” There is no record anywhere of the number of adverse impacts, whether significant or not, in the Environmental Statement and therefore we do not have any qualification of the scale of impact for the decision maker. For your information, the Channel Tunnel Rail Link recorded housing counts for any adverse impact and I would remind you that that was anything above 35. The next slide please.

2936. This is LBC33.

**(Mr Methold)** The Promoter considered three different levels of prediction in the Environmental Statement. The first is referred to as portal to portal contours and we have already seen some of those presented to the Committee by previous Petitioners. These were assuming standard foundations for buildings and the Promoter assumed 2m deep basements for all buildings, the worst case conditions. When I say “worst case” it is by assuming that there will be a chalk layer beneath the tunnel which could cause a reflection of vibration, so that was taken into account as a worst case assumption. The second level of prediction is looking at individual buildings or those with special sensitivity or piled foundations. We know that piled foundations can act as better vibration receptors or groundborne noise receptors and, of course, they are also in most cases a lot closer to the top of the tunnel. The third level of detail referred to is looking at very sensitive buildings in the maximum amount of detail possible. We really only have the first two sets of information at this stage. Looking at the contours, it is fairly obvious that all buildings along the route will meet 35 dB according to the information I have seen, apart from one area at Pudding Mill Lane portal in Newham, but this is an area where the Promoter is stating that they will consider a special track form for meeting this.

2937. This is as a result of looking at what?

**(Mr Methold)** This is as a result of looking at the contour information in the Environmental Statement. It is looking at the text for the entire route and at reported absolute groundborne noise levels and more recently looking at the individual calculation sheets that the Promoter has provided to me for all of the special buildings they have considered.

---

 The Petition of London Borough of Camden
 

---

2938. **Chairman:** For the whole route, is that last point?

**(Mr Methold)** It is not for the whole route. It is just for the route windows, C1, Central 1, to C6. We have route windows C7 to C13, all of the South East 1 to South East 6 areas where no site specific calculations have taken place in the actual buildings in those windows. We understand that they have looked at an approximation of the potential impact in those areas but they have not been done to the same level of detail.

2939. **Mr Clarkson:** Those figures of 35 dB(A) L<sub>Amax</sub> Slow, is that a prediction or a standard that is proffered?

**(Mr Methold)** Those are predicted noise levels. If you go to the top of this slide, this is really summing up what I have said about the contour part of the prediction process. I have got some other observations but we do need to take into account that the modelling done for special buildings has to be looked at alongside the contours, and we have some residential buildings where we are above 35. The Promoter is only identifying 1,500 metres of floating slab track as required and this is mainly due to special buildings such as theatres through the theatreland area of Tottenham Court Road. What is very apparent, having had discussions with the Promoter, is that they have not undertaken any calculations to look at the effectiveness of this mitigation and at this stage it is all based upon professional judgment that it will be achieved by applying a floating slab track. I have already referred to the fact that no special buildings have been looked at for quite a significant majority of the tunnel section and again some form of professional judgment is being made about possible special buildings in those areas. We believe that this is an indication of incomplete information for the decision maker at this stage. There are no qualifications of adverse impacts above 35 and at this stage we think they are relying solely on achieving the Design Aim in the future and not really following an appropriate EIA process which would be expected for a project of this stature. On the basis of this there are no significant impacts for the project. The next slide please.

2940. LBC34.

**(Mr Methold)** It is okay for me to bang on about having better standards but it is very important that we understand whether this is actually achievable in engineering terms and also in cost terms.

2941. Before you go into that, have you seen a cost analysis from the Promoter on the issue of a floating slab?

**(Mr Methold)** No, we have not. I asked the very direct question last week in a meeting with the Promoter and it is clear that they have not costed for meeting 40 dB, let alone 35, although we understand that some kind of budget allocation is in place. I do not believe they have costed it. I have set about in the best way I possibly could with the information that I had to try and understand what the additional costs

might be for the project in trying to achieve 35 and in doing so I have had to make some cautious worst case assumptions. In particular I have tried to over-estimate the cost that a floating slab track might incur, and I believe, looking through all the information I had, that we are probably looking at a worst case of 3.5 km of additional floating slab track, which I believe would only introduce an eight per cent additional cost to the budget on the track system. I have already alluded to the fact that I do not think that in most of the locations they would need to use floating slab track to achieve 35, so this is in my view an absolute worst case.

2942. Can I ask you to explain to the Committee how you got there on that conclusion of 3.6 km?

**(Mr Methold)** I analysed all the individual calculations that the Promoter passed to me last Friday, all 192 of them, and identified the address and where those properties were and by how much they exceeded 35. If there was an exceedance of 35 I assumed for the purpose of this exercise that floating slab track would be applied and I have already said that in most cases we are only talking about a two or three decibel exceedance, so floating slab track might not be needed. A better resilient base plate system might do the trick.

2943. Is that cheaper?

**(Mr Methold)** It would be cheaper, yes.

2944. But you have worked to worst case, have you?

**(Mr Methold)** I have. I have also heeded Mr Thornley-Taylor's advice that you can assume a double cost for floating slab track compared to a resilient base plate system.

2945. **Kelvin Hopkins:** When you say "worst case", by "worst" do you mean absolutely awful?

**(Mr Methold)** I will stand by "worst" in my opinion.

2946. **Mr Clarkson:** That is worst in cost terms as well; is that what you are saying?

**(Mr Methold)** I believe so, to the best of my ability, with the information that I have. I do think this is a very cautious over-estimate but I would like the Promoter to respond directly on this point when their witness is called to give evidence. I will be the first to admit if I have got any of this model wrong but I believe this to be a cautious and prudent assessment. The other thing to remember is that the local authority standard will not necessarily require an absolute commitment to 35 if the project can demonstrate that there are unreasonable financial implications, and then the best practicable means test that we are advocating would kick in.

2947. Is the best practicable means an objective test or is it a test that the undertakers in due course can decide for themselves?

**(Mr Methold)** They can decide for themselves. It really is an attempt to try and focus the Promoter on looking at all available track systems and putting them through the test to see whether they can be applied reasonably, whether they achieve a cost

---

The Petition of London Borough of Camden

---

effective performance essentially. They can make that decision themselves but, remember that if we followed the model of CTRL we would expect a project representative to be involved who would be scrutinising any undertakings and compliance with undertakings.

2948. If they are cavalier in deciding what is best practicable means what sanction is there, what supervision?

**(Mr Methold)** Currently there probably would not be any supervision other than themselves and the project representative, which is another reason why we would like the local authority to be involved in those discussions, and again I will allude to the fact that this is regarded as a very successful process that CTRL adopted.

2949. You have worked out 3.6 km of additional floating slab track. Then you go on to eight per cent additional cost. How do you arrive there?

**(Mr Methold)** That is really looking at the total length of the tunnel and applying the cost to the standard track form, the resilient base plate track form, plus the 1,500 metres of floating slab track that the Promoter does mention in the Environmental Statement to achieve essentially what I regard as their base case costs. I have then looked at the areas that I think a floating slab track might be needed in and in a couple of the cases it is actually where the Promoter is proposing to install floating slab track as well, so we cannot double count those. My figure is arrived at when comparing the total anticipated floating slab track in my study against the Promoter's base case cost.

2950. Just so that we can get it clear for the Committee—and I am going to lead on this simply to try and see if we can understand it—is it a case of you identifying the length of a tunnel—are you with me?

**(Mr Methold)** Yes.

2951. And identifying that which already has floating slab track according to the Promoter's scheme and then bringing in your provisional length of floating slab track, and then working out the percentage?

**(Mr Methold)** That is correct.

2952. So you have not actually entered into pounds, shillings and pence?

**(Mr Methold)** No.

2953. It is a linear approach, is it not?

**(Mr Methold)** It is. It is a relative exercise.

2954. Would you go on to LBC35?

**(Mr Methold)** We have heard about projects that have adopted 40 dB as their Design Aim. We have to be very careful that when we talk about the effectiveness of a Design Aim of 40 dB we have to bear in mind that some projects, for their own risk management purposes, may well have designed and operated a railway to levels below 40, so that any

reported annoyance or complaint from a railway designed to 40 has to be very cautiously considered, and I am thinking in particular of the Jubilee line extension, which Mr Thornley-Taylor referred to when he said he walked down the route and he found it very hard to find anywhere where he could hear groundborne noise. That is not necessarily a function of a successful Design Aim. It could have been well engineered such that the levels were well below 40. What is of much more importance for this debate is whether we have a railway scheme designed to 40 dB that has produced an adverse public reaction. As part of my studies for this petition I wrote to all the local authorities along the Crossrail route but also all of the local authorities along the route of the Channel Tunnel Rail Link where tunnels had been built. The responses I received drew my attention fairly rapidly to the North Downs tunnel and Tonbridge and Malling Borough Council. There is an interesting series of events evolving there and I have visited the area. I have spoken to some of the residents affected and I have had direct formal correspondence with Tonbridge and Malling Borough Council on the issues. What is fairly clear is that there has been an adverse reaction to the railway groundborne noise in this area with 90 properties reported to be affected by excessive groundborne noise.

2955. Just by way of introduction, remind us, would you? It was Kent County Council which was pressing this, was it not, at the CTRL? What was it that the local authorities were seeking first of all?

**(Mr Methold)** The local authorities were seeking a design based upon 35.

2956. What were they given?

**(Mr Methold)** They were given 40 dB.

2957. Predicted or measured?

**(Mr Methold)** Predicted.

2958. So when we are looking at this, and the Committee has this material on LBC35, what it has is the product of the North Downs tunnel on a predicted 40 dB(A) approach. Is that right?

**(Mr Methold)** That is correct.

2959. Go on.

**(Mr Methold)** In response to the concerns that have been raised by the residents the borough council have commissioned some noise and vibration surveys and they have undertaken quite an extensive survey of nearly 500 train pass-bys in a total of 27 residential properties above the tunnel. The information I have been provided with by the council indicates that the measured noise levels are below 40 dB at 81 per cent of those properties surveyed. They also undertook vibration measurements and these were below any threshold of adverse comment, and having visited what is reported to be the worst affected property myself I can confirm that I could not actually perceive any feelable vibration.

---

**The Petition of London Borough of Camden**

---

2960. **Chairman:** Mr Clarkson, can I stop you there? It is two minutes to 12. We are going to have to break because members have to go to the chamber for Prime Minister's Question Time. We will sit again at 2.30.

*(After a short adjournment)*

2961. **Chairman:** Let me first of all apologise for the delay, Mr Clarkson.

2962. **Mr Clarkson:** Thank you, Sir. Can I recap as to where we are from this morning. Exhibit LBC 35, Mr Methold, correct?  
*(Mr Methold)* Correct.

2963. Just recap where we got to for those who have not got the document or those who were not in the room. Just summarise that sheet please.

*(Mr Methold)* This exhibit is providing information on the Channel Tunnel Rail Link where we had been informed there had been an adverse reaction to railway groundborne noise. This was on the basis of written communications I had with several local authorities; Tonbridge & Malling Borough Council being the local authority involved in this particular location.

2964. What is the conclusion that you draw from the information on that sheet?

*(Mr Methold)* It might be helpful if we run through this sheet. We only managed to get through two or three of these points before, so if the Committee want to start at the top again, I apologise for repetition. Moving on to the second bullet, because we have already talked about the first one, around 90 properties were reported to be affected by excessive groundborne noise. In response to concerns by the residents the local authority commissioned noise and vibration surveys within 27 of the residential properties, totalling nearly 500 train pass-bys, which I understand is one of the biggest data bases on this particular aspect in the country now. The summary of the information provided to me by Tonbridge & Malling indicated that the noise levels were below 40 dB at 81 per cent of these sites, and the vibration measurements were below any threshold of adverse comment. This is an important point that we need to discuss because I believe Mr Thornley-Taylor has suggested complaints at 40 dB only really occur when vibration is present also. So we have a situation where vibration is below any threshold of adverse comment and I have witnessed that myself and I could not feel any perceptible vibration. Other activities occurring in the location at the moment are the setting up of a working group chaired by the Member of Parliament for Chatham and Aylesford, Mr Jonathan Shaw, who I believe has been fairly active on behalf of his constituents on this matter and has indeed raised questions in the House on behalf of his constituents. I understand talking to some of the residents in that area that there are currently on-going negotiations in terms of financial compensation with the operators and some of the residents are expecting to pursue their cases at the

Land Tribunals. Above all of this, the project has demonstrated it has met its parliamentary commitments, and this is an important point to make, that it is based upon predicted levels and every prediction model will have some margin of acceptable error, either below or above the prediction, so if somebody were to measure the noise level afterwards you could expect it to be within a certain margin below or above that predicted level. This is one of the issues we want to address with our preferred undertaking and that is the level should be based upon measured levels and not predicted ones.

2965. **Kelvin Hopkins:** The essence of what you are saying to us is that despite the fact they have met their parliamentary commitments the noise levels are still high to the point where people complain?  
*(Mr Methold)* I think that is fair.

2966. **Mr Clarkson:** Can I just take that forward with two questions. As far as your understanding of the local authority is concerned, first, does the local authority consider that the parliamentary undertaking is being met?  
*(Mr Methold)* I believe that is their current position.

2967. But nevertheless what are the residents saying?  
*(Mr Methold)* I believe the residents are querying the whole issue of the commitment being based upon predicted levels. The particular model we are talking about for this project I understand, having had correspondence with Tonbridge & Malling, is that in 95 per cent of the cases it should be able to predict within 8 decibels the true value. So that means if it is predicting 40, it is entirely possible that levels would be either 8 decibels above or below. Indeed at certain locations I believe that is the case.

2968. Is there anything else on LBC 35 which you want the Committee to be informed of?  
*(Mr Methold)* I do not think so. We can go straight to the final slide.

2969. LBC 36, which is you summarising the evidence you have given?  
*(Mr Methold)* Indeed. I apologise for the number of bullets here but it indicates the number of areas we do have concerns with. The first one Mr Clarkson introduced at the start, the local authority will have no powers of approval for trackform once the project achieves Royal Assent. There will be no opportunity to retrospectively mitigate the track system other than compensation. Because of the nature of groundborne noise, the individual occupants cannot do anything themselves about this noise. It is different for airborne noise where they can clearly insulate their windows, people could put noise barriers up in their gardens, they could move to a different room, but you cannot do this with groundborne noise.

2970. Appearing as you and I do for a number of local authorities on this aspect, how easy is it for environmental health officers to deal with it once the railway is built and there is a complaint?

---

 The Petition of London Borough of Camden
 

---

**(Mr Methold)** Very difficult, I would suggest. The railway industry has statutory powers and is relatively immune from accusations of statutory nuisance in this respect and often environmental health officers have little choice but to refer any complainant straight to the operators themselves.

2971. Next, the third bullet point?

**(Mr Methold)** This is the issue we raised about local authorities being kept involved in the track design process. It is one of the undertakings we are seeking which we introduced at the start. We firmly believe the Promoter's Design Aim for residential dwellings is a minimum standard rather than a desirable aim. We do not believe there is robust scientific evidence for the use of 40 decibels as they are designing. CrossRail Social Survey conclusions are statistically weak. The application of the complaint threshold we do not believe is appropriate for a design aim. The design philosophy which is based upon the health effects section in the Promoter's supplementary environmental statement we do not think is being strictly adhered to. The local authority's adopted policies and the available US guidance would

support a lower level of 35. From my own precautionary studies, I believe that 35 dB is reasonably achievable across the route.

2972. Do you understand anybody to be saying different in physical engineering terms?

**(Mr Methold)** The Promoters have not communicated to me that would be a problem. I do not think I have asked the question directly.

2973. Fourth up from the bottom?

**(Mr Methold)** The Promoters should be encouraged to adopt best practicable means, and I have explained what that concept involves. It also I believe is very much aligned with what the London Mayor is attempting to achieve with his ambient noise strategy looking at cost effective techniques to minimise any adverse impacts. I think we now have evidence of adverse reaction to railway groundborne noise below 40 decibels in this country and this has to be seen as a major risk to CrossRail and to the residents involved who will be residing above tunnels in London. As a result, we are seeking undertakings to protect.

2974. **Mr Clarkson:** For completeness, we need not go through them again, they are LBC 37 and 38. Thank you.

---

Cross-examined by **Mr Taylor**

2975. **Mr Taylor:** Good afternoon, Mr Methold.

**(Mr Methold)** That is correct.

**(Mr Methold)** Good afternoon.

2976. I want to begin by sorting some points out about documents. The Committee should have been passed a file of documentation, Sir, headed "Counsel Information Pack: Groundborne Noise, London Borough of Camden" and that contains documents which I will be putting to Mr Methold and Mr Rupert Taylor in evidence later on. We provided this to Camden on Monday, so they have had it for a much longer period than the Committee, for which I apologise. In the light of your indication earlier, we will endeavour to do better in the future.

2981. On to more important things. Can we start by looking at your exhibit LBC 37 and the first undertaking that you seek where, as I understand it, what is being argued for is the application of best practicable means to the tunnelling process and to the temporary construction railway.

**(Mr Methold)** Correct.

2977. **Chairman:** For the stenographers it should be put down as A38.

2982. I would like to draw your attention to the Information Paper D1 which sets out and appends to it the draft construction code and in particular page 20 of the draft construction code, paragraph 5.1.1. This document will be P39, I am told.<sup>2</sup> Paragraph 5.1.1 states, "The nominated undertaker will, as far as reasonably practicable, seek to control and limit noise and vibration levels so that affected properties and other sensitive receptors are protected from excessive noise and vibration levels associated with construction activities. The nominated undertaker will apply Best Practicable Means (BPM) as defined under Section 72 of the Control of Pollution Act 1974, to all activities." You are aware of that paragraph?

2978. **Mr Taylor:** One other matter relating to documentation which Mr Methold could help with: you reserved your position in relation to the document relating to the London Underground number of dwellings affected by noise levels and that is provided today?

**(Mr Methold)** Indeed.

2979. Just so the picture is clarified, that document was a confidential document, was it not?

**(Mr Methold)** I understand so.

2980. And the permission of London Underground had to be sought to release it to you?

---

<sup>2</sup> Crossrail Ref: P39, Extract from Crossrail Construction Code, Procedure Number: CR/QMS/P/0302, Paras. 5.1.1 to 5.1.3, billdocuments.crossrail.co.uk.

---

 The Petition of London Borough of Camden
 

---

*(Mr Methold)* Yes.

2983. That means, does it not, there is already a commitment to apply best practicable means to control noise and vibration in relation to the tunnelling process and the temporary construction railway?

*(Mr Methold)* That is correct, but I would draw your attention to the specifics of paper D10 which does actually list those specific commitments which would be taken into account in defining best practicable means. We are seeking for additional items to be set alongside those.

2984. Let us just turn to D10 and we can deal with that particular point. D10 is the Information Paper on Groundborne Noise and Vibration, and in relation to construction there is a commitment in relation to the temporary construction railway at paragraph 2.7 on page 3. That indicates that, "The nominated undertaker will endeavour to ensure that the groundborne noise from the operation of the temporary construction railway that is experienced by any theatre, large auditorium/concert hall, studio, church, court, lecture theatre or small auditorium/hall, does not exceed levels greater than those it is already subject to by the presence of London Underground, other railway and road transport operators, or the levels listed in Table 1, whichever is the higher noise level during the periods for which the buildings are in use." So there is a commitment on top of the commitment in the Code of Construction Practice to use best practicable means to adhere to the particular levels which are set out in Table 1, which we can see at the top of page 2 of D10. We can see a number of different criteria there. In relation to residential buildings there is of course reference to 40 dB LAmax S, which is obviously a matter of contention between us. The proposition I am putting to you is that there is a general commitment already to best practicable means which will apply to tunnelling and to the temporary construction railway and there is on top of that a commitment to a specific level in paragraph 2.7 of D10 in relation to the temporary construction railway, and that meets the point in your first undertaking in LBC 37, does it not?

*(Mr Methold)* It might be useful if I can expand a little on why we have developed this undertaking. As part of my correspondence with the local authorities on CTRL, it was fairly evident that substantial complaints had been received during the construction of the tunnels through Hackney predominantly associated with the running of the temporary construction trains. It was fairly clear to the local authority when they reviewed whether best practicable means were being utilised that the selection of the locomotives and the selection of the stock would have had a significant bearing on the groundborne noise levels being produced, but at the time they reviewed the best practicable means it was not best practicable means to change the rolling stock from the vehicles, and that argument was used by the contractor. What we are seeking here is to make very firm to the Promoters that this is an

expectation on behalf of the local authorities for consideration as part of best practicable means. That is why we have the words "as part". Secondly, I do not believe there is a specific commitment to the use of tunnel boring machines for the extracts you have recited to me.

2985. Sorry, there is no specific commitment to use tunnel boring machines?

*(Mr Methold)* You have referred to the operation of the temporary construction railway.

2986. Yes.

*(Mr Methold)* There is no specific attention drawn to the tunnel boring machines.

2987. I see, so where it says that there is a commitment to BPM in relation to all construction in the Code of Construction which has been drafted, you do not believe that embraces the tunnelling?

*(Mr Methold)* I accept it does include it, but one of the issues was that adjustment of the tunnel boring machine progress rates could have a bearing on the groundborne noise and vibration generated in the properties above the tunnels, but that was a selection process or an assessment which needed to be done well in advance of anybody going anywhere near a section 61 consent under COPA. It is essentially the point at which a tendering contractor is deciding how he is going to build a tunnel; he needs to be aware of the tunnelling progress rates and associated thrust forces and the expectation of the local authority in assessing those techniques and methods.

2988. I think the pages I referred to in D10 were given the reference number P40.<sup>3</sup> Let us move on to deal with matters relating to the provision of information. You seek undertakings in that regard under undertaking 2 in exhibit LBC 37 where you ask for an undertaking that the nominated undertaker will provide relevant information to the community as part of its public relations activities on groundborne noise and vibration during construction, in advance of any tunnelling commencing. Similarly, information is sought in your third undertaking in LBC 38, the nominated undertaker will be required to supply copies of plans of the tunnels to the relevant local authorities and to continue technical discussions concerning groundborne noise issues with any representative appointed by the local authorities to act for them collectively. Again, I would like to draw your attention to a number of passages in the Information Papers starting firstly with information paper F3.<sup>4</sup> To go to the first page of that document, paragraph 2.5, there at the bottom of that page (ii), where there is a specific commitment to: "maintain regular communication to ensure that the community and all other stakeholders and affected parties are kept well-informed ... required to produce information

<sup>3</sup> Crossrail Ref: P40, Extract from Information Paper D10, Groundborne Noise And Vibration, Paras. 5.1.1 to 5.1.3.

<sup>4</sup> Crossrail Ref: P39, Extract from Information Paper F3, Community Relations.

---

 The Petition of London Borough of Camden
 

---

sheets of the works to be carried out, detailing expected disruptions and the measures being taken to minimise and mitigate adverse effects of these works at least two weeks prior to construction activity taking place. Information sheets will also be distributed in the case of overrunning, unplanned works or emergency operations. (iii) As far as tunnel boring is concerned, the nominated undertaker will be required to establish a website to provide information on the forecast and actual passage of the tunnel boring machines. In addition, the nominated undertaker will be required to distribute leaflets along the route of the tunnel drives providing notice on the forecast passage of the tunnel boring machines.” Before I ask a question I just want to take you to another reference, which is in D10—back to the page we were looking at before—page 3, paragraph 2.12. “The nominated undertaker will provide to the local authorities, through which Crossrail tunnels pass, details of the type of rail and/or track system proposed and its predicted performance with respect to vibration and groundborne noise.” Those commitments and those information papers meet your concerns regarding the provision of information. Do they not?

**(Mr Methold)** Certainly the provision of information for the construction groundborne noise undertaking, that is the first part of undertaking 2. I do not believe that paragraph 2.12 in paper D10 does meet our requirements under undertaking 3 where we ask expressly for involvement and the continuation of technical discussions concerning groundborne noise with any representative appointed by the local authorities, acting with them collectively. I read paragraph 2.12 and D10 as a one-way flow of information.

2989. A planning forum has been set up, has it not, and will continue to operate into the future in respect of the Crossrail project? There is a sub-group of that planning forum which is referred to as the environmental health sub-group. You are aware of that?

**(Mr Methold)** I am.

2990. The local authorities are members of that particular planning forum and the environmental health sub-group.

**(Mr Methold)** Indeed.

2991. There is, therefore, a forum at which all new matters can be discussed already proposed.

**(Mr Methold)** I agree with that entirely.

2992. I want to go and deal very shortly with the proposal in, I think it is, the second undertaking you seek in LBC37 for a scheme to make alternative sleeping accommodation available. I have already put to you that the tunnelling operations will be subject to best practicable means and that means, does it not, that there is nothing more that could be reasonably done to mitigate the noise and vibration from the tunnelling than will be done.

**(Mr Methold)** That is correct.

2993. In that context, we need to look at what is being proposed in your second undertaking. Am I right in saying that we are currently unable to predict whether the criteria that you set out there of 30 dB LAeq 1hr will actually be exceeded in any given case because there is insufficient knowledge of the noise implications of tunnelling boring to be able to produce accurate forecasts?

**(Mr Methold)** I would say that there are techniques for being able to predict groundborne noise and vibration from tunnel boring. The contractors involved in tunnelling have specialist advice in this area. The targets or limits or threshold levels are not uncommon for tunnelling contracts. This is nothing unusually new for a tunnelling contractor to have to comply with or at least assess a risk against.

2994. I see. So you have carried out a model on tunnel boring machines, have you?

**(Mr Methold)** I have not.

2995. Have you seen a report carrying out such modelling?

**(Mr Methold)** Yes, I have.

2996. Can you tell me what the accuracy of that modelling was?

**(Mr Methold)** I cannot recall the actual level. It is based upon published material.

2997. It is one of the things we would have to take into account in order to be able to determine what the likely financial consequences would be of adopting this particular undertaking.

**(Mr Methold)** Absolutely, and that is why we submitted these undertakings as draft versions for discussion.

2998. As I understand the position, you have not adduced any evidence to the Committee that indicates what the likely financial implications of this undertaking would be.

**(Mr Methold)** No, I have not because these are drafts for negotiation.

2999. You have mentioned that similar undertakings had been imposed on other projects that you have been involved in for Network Rail, when you gave your evidence-in-chief. Can I just ask whether those other projects involve tunnelling?

**(Mr Methold)** They did not; they involved generating groundborne noise in properties overlying tunnels.

3000. The next undertaking I want to have a quick look at is your fifth one, LBC38, which seeks, as I understand, information on the frequency of routine maintenance regimes. The criteria under which maintenance activities such as wheel turning and rail grinding will be triggered. You seek to impose the best practicable means on the maintenance regimes, if I might put it colloquially. In that regard, can I again draw the Committee’s and your attention, Mr

---

**The Petition of London Borough of Camden**

---

Methold, to information paper D10, page 3? This time paragraph 2.10. Here we see that: “The nominated undertaker will put in place measures that will ensure that the track of the underground sections of the wheels and vehicles operating the Crossrail passenger service are maintained in a state which under all reasonably foreseeable circumstances will lead to adequate control of groundborne noise and vibration arising from the railway. Prior to opening, the nominated undertaker will ensure that the rails of the underground sections of Crossrail are conditioned by grinding, or other suitable means, and are appropriately maintained thereafter” Your concerns, I would suggest, are met by paragraph 2.10 of information paper D10.

**(Mr Methold)** The local authorities are intrigued by the wording “adequate control of groundborne noise and vibration”. We do not believe this is very committal and we want to understand more and attach the best practicable means attachment to that undertaking.

3001. I see. Let us go to the nub of the issues between us. That arises out of the undertaking that you seek as undertaking 4 on LBC38. I just want to take a moment to look at the wording of the undertaking sought at number four. You are seeking this: “The nominated undertaker will apply best practicable means to the design of the temporary construction railway and the permanent operational railway.” That is the first point to note, the best practicable means applied to the design of both of those railways, “such that the groundborne noise level from a single train pass-by measured close to the centre of any habitable room within a building legitimately occupied for residential purposes, does not exceed a level of 35 dB LAmaxS”. So you are also seeking to apply to the design of both railways a level of 35 dB LAmax.

**(Mr Methold)** Correct, yes.

3002. So your proposed undertaking, as I understand it, is inevitably based upon modelling not upon measurement, because the criterion is to be applied at the design stage.

**(Mr Methold)** I do not believe that was the intention of that wording.

3003. It is not the intention of the wording?

**(Mr Methold)** No. I think we intended to cover for the non-predicted situation.

3004. So you are intending that the noise level of 35 should apply after the railway has been built.

**(Mr Methold)** That is correct.

3005. So you go into a room and measure the noise, and it has to be below 35.

**(Mr Methold)** Correct.

3006. I have to say, I had understood that your evidence to the Committee was that once a railway had been built you could not change it so as to provide additional protection.

**(Mr Methold)** Indeed.

3007. So can you just explain what is the point of having an undertaking that relates to a 35 dB(A) measured level if there is actually nothing you can do if the design does not meet the 35 level to begin with?

**(Mr Methold)** It is a test to ensure that best practicable means are being employed and this is to cover the maintenance aspect also. So if we have a situation where the design is not 35 but if somebody measures above 35 then that might indicate that the maintenance of the railway does not meet the requirement of best practicable means.

3008. Let me take a step back from that. The issue that we have is the level at which to set the threshold and also whether or not best practicable means should apply. So far as the threshold level is concerned, what we are concerned to do is to set that threshold at a level that is appropriate to expect people to live with. Do you accept that?

**(Mr Methold)** Yes.

3009. In terms of identifying what that level should be, we need to have regard to dose response research.

**(Mr Methold)** Yes, we do.

3010. As I understand it, your case is that 35 dB LAmax is the level it is appropriate to expect people to live with and no higher.

**(Mr Methold)** Yes.

3011. So noise below that level is acceptable.

**(Mr Methold)** It would be audible but it is acceptable.

3012. If we also apply best practicable means, the application of best practicable means has the potential to require measures to be taken that would result in noise being reduced to a level significantly below 35.

**(Mr Methold)** Potentially, yes.

3013. So the application of best practicable means has the potential to impose costs in the form of mitigation that would need to be provided that would not give rise to any material benefit to the noise environment people would have to live with.

**(Mr Methold)** Part of “best practicable means” is consideration of financial implication, and all these aspects would have to be weighed up if there was a significant cost associated with reducing noise levels well below 35—

3014. Let us look at it this way and see if we can explore it in this way: if the noise level of 35 is acceptable then there would be no purpose in requiring any additional mitigation on your basis because the noise is already at an acceptable point and any additional cost would not be best practicable means.

**(Mr Methold)** I think Mr Thornley-Taylor’s modelling would suggest it could be achieved to go lower than 35.

---

The Petition of London Borough of Camden

---

3015. Just to answer my point, Mr Methold, if you would be so kind, the point is simple: that if 35 is acceptable then any further mitigation would not be required on the application of best practicable means.

**(Mr Methold)** If 35 is deemed to be acceptable. Additional costs to go below 35—

3016. So if the criterion is set at a level that requires 35 to be attained, there is no additional benefit in requiring an undertaking that refers to best practicable means.

**(Mr Methold)** Best practicable means can work the opposite way; it would allow the Promoter to argue in situations where it could not achieve 35.

3017. I see. So where you refer to best practicable means, what you are intending is that it should bite in situations where 35 cannot be achieved.

**(Mr Methold)** I think that is fair, yes.

3018. Again, forgive me, but I thought the thrust of your evidence to the Committee was that 35 could be achieved for the whole length of the route.

**(Mr Methold)** Well, I did couch my evidence very carefully by saying that it was based upon information I had been provided with; it was based upon looking through the information in the few days I have had available to do that. It also is not clear to me whether some of the special buildings that had been considered were residential or commercial, but to err on the side of caution I did assume them all to be residential. On that basis I felt that 35 could be achieved.

3019. Again, just looking at 35 for a moment and using that, I think you would accept that at that level the noise will be audible but, you say, acceptable. Is that right?

**(Mr Methold)** It is the division line between barely perceptible and distinctly perceptible. So I would argue that it is audible but acceptable.

3020. At 40 dB(A) LAmax the issue, as I understand it, from your point of view, is that it is audible but unacceptable.

**(Mr Methold)** Indeed.

3021. Let us turn briefly to look at some of the information relating to the complaints data that you referred to in your evidence-in-chief (and I will take this as briefly as I can). It is at tab B in the folder Counsel Information Pack. I want to turn to that document. There is a table, table 1, which looks like that. I think I am on p41 now. Here we see a table with a number of addresses down the left-hand side and then a series of columns: first for northbound trains and then for southbound trains. If we look under the northbound trains column to sound level dB(A), we see numbers which are measured, as I understand it, in LAmax, and we see there is not a single number there below 40. If we do the same for southbound trains as well, again, there is not a single number there below 40. Yes?

**(Mr Methold)** Correct.

3022. We can do the same if we turn to table 2, which is the next page. I think I am on p42 now.<sup>5</sup> Here we have: “Complaints of railway noise investigated in detail by the laboratory 1970-79. There is a column headed: “Noise due to trains dB(A)”, and we can see that for some of the properties a range is given 33-35 in the first row, Wigmore Hall—and I will take you to that in a moment. If you go right the way down, for some of the properties, for example, in Westbury Hotel in December 1974, 38/50. Again, there are a lot of other measurements where there are two brackets given. Apart from Wigmore Hall, Mr Methold, every single one of those properties has an LAmax level measure within it that is above 40.

**(Mr Methold)** We have figures there for Westbury Hotel and Catherine Place and Gibson Square in the first floor measured at levels of 38, 35 and 38 ground floor for Gibson Square.

3023. I see. But there is also a measurement of 45, is there not?

**(Mr Methold)** There is. That does not necessarily suggest that the complaint has come from that particular floor, especially for a hotel, I would suggest.

3024. So where, when you gave your evidence in chief you said to the Committee that you had seen the data and it did not support 40, because there were a number of numbers below 40, it was to that particular property that you were having regard, was it?

**(Mr Methold)** It was to the top property, Wigmore Hall, and the three properties that we have just discussed.

3025. But Wigmore Hall is not a residential property, is it?

**(Mr Methold)** No, it is not, but that is a complainant property.

3026. And the 40 threshold that we are looking at at the moment is to apply to residential properties.

**(Mr Methold)** It is.

3027. Before we turn away from these documents I want to go back to table one for a moment and have a look at the two columns under the heading “No Trains”. We can see a column headed “Sound Level dB(A)” and these, as I understand it, are the max levels when no trains were passing by. If we look down those levels we can find that there are only four properties where, when there are no trains passing, the LAmax level is below 35 and I will not point them out because everybody can scan their eye down the column. That suggests, does it not, that the noise environment within rooms in London is generally above 35 even without any trains underneath the property?

---

<sup>5</sup> Crossrail Ref: P42, Table RMT 2: Complaints of railway noise investigated by London Transport Research Laboratory 1970-79 (CAMDLB-31904-007).

---

**The Petition of London Borough of Camden**

---

**(Mr Methold)** During the daytime it generally is, yes.

3028. And in fact during the night time that is true too, is it not, for a substantial number of properties in London?

**(Mr Methold)** That is not what table is saying. Those measurements were all taken during the daytime.

3029. I understand that those measurements were taken during the daytime. The point I put was that for a substantial number of properties in central London the noise climate within bedrooms exceeds 35, does it not?

**(Mr Methold)** Are you talking about LAmax?

3030. I am talking about LAmax.

**(Mr Methold)** We need to be very clear about what we are talking about here and it is the very reason I introduced the Committee to the concept of low frequency spectrum of characteristics with Groundborne noise. The sorts of LAmax's we are measuring here under the "No Trains" column will be anything from somebody closing a door next door to a passer-by on a motor bike, et cetera, a very different spectrum of characteristics, so I do not believe we can be comparing like with like in this case.

3031. To come back to my question, if you would not mind, Mr Methold, the point is simply that when applying LAmax to bedrooms within central London there are a very substantial number of properties where the LAmax level exceeds 35, are there not?

**(Mr Methold)** It would not surprise me.

3032. Indeed, that is true not just in central London but in all cities and towns across the UK?

**(Mr Methold)** Indeed.

3033. In your evidence in chief when you were looking at your coloured column—

3034. **Mr Clarkson:** I am sorry—just so that I can be clear from that question: was that an LAmax groundborne?

3035. **Mr Taylor:** No. The point was simply put at an LAmax level.

3036. **Kelvin Hopkins:** This is ambient ground noise we are talking about, that is, traffic and so on?

3037. **Mr Taylor:** Yes, generally. I will get Mr Rupert Taylor to give the answer.

3038. **Mrs James:** At the end here when they are talking about 20 past 12 to one o'clock, is that during the night?

3039. **Mr Taylor:** They are all measurements taken during the day rather than during the night, which is the point that Mr Methold made. I am reminded

that in relation to the Wigmore Hall, just in case there is concern that we are not taking into account properties of that nature, it is right, is it not, that the Crossrail criterion for protection of theatres is 25 dB(A)?

**(Mr Methold)** That is correct.

3040. When you gave your evidence in chief I think you cited an example of an LAmax measurement that you had taken in a bedroom with a train going underneath of 26 dB(A) at LAmax. Can you tell me where that was?

**(Mr Methold)** First, it was not LAmax background; it was the true background noise level, the underlying noise level that Mr Thornley-Taylor introduced us to last week, the L90, which strips away events. It was taken in a bedroom above the North Downs tunnel.

3041. And the noise climate, apart from the railway, above the North Downs tunnel, is that similar to the noise climate in central London?

**(Mr Methold)** In similar properties it certainly is. We have the A229 running fairly close to some of these properties. In Kit's Coty I measured a level of 58.5 dB outside one of those properties.

3042. The next point I want to turn to is my reference to documents that are set out at tab E in the bundle that I have put in and that Mr Thornley-Taylor will speak to, the front page of which reads "Guidelines for Community Noise". If we turn in this document to page 65 we can see a table 4.1 which sets out certain guideline values for community noise in specific environments.<sup>6</sup> I want to draw the Committee's attention to the right hand column of that table, which is headed LAmax Fast, and we need to know that it is fast rather than slow. If we go down we come to a 45, which is a guideline value for community noise as an LAmax Fast for sleep disturbance at night inside bedrooms.

**(Mr Methold)** Correct.

3043. Again, if we keep going down we come to another 45, which is a sleep disturbance guideline value for pre-school bedrooms and indoors. That is to apply to sleeping toddlers during the day. We can keep going down and there is a 40 in that same column, hospital ward rooms indoors, sleep disturbance at night time, again a 40 LAmax Fast level is indicated. I put it to you that none of those levels set out in this document supports the adoption of 35 dB(A) LAmax as a threshold for protecting people from sleep disturbance, does it?

**(Mr Methold)** The World Health Organisation document does not anywhere refer to groundborne noise and again I refer you back to the technical evidence I gave earlier which was making specifically the point that this is a very unusual, low frequency type of noise. In fact, the World Health Organisation is very careful on several occasions in

---

<sup>6</sup> Crossrail Ref: P43, World Health Organisation, Guidelines for Community Noise, p65, Table 4.1 Guideline values for community noise in specific environments (CAMDLB-31904-029).

---

 The Petition of London Borough of Camden
 

---

its document to point out that we should treat low frequency events very differently from other community noise types of source. Noise with low frequency components require lower guideline levels—and I am quoting from the document here—and in intermittent noise it is emphasised that it is necessary to take into account both the maximum sound pressure and the number of noise events.

3044. Coming to the number of noise events, obviously, the LA<sub>max</sub> threshold is a particular threshold which does not take into account noise over a continuous period of time, but the LA<sub>eq</sub> does, does it not?

**(Mr Methold)** It does.

3045. We can see from table 4.1, for example, in the row headed “Dwelling Indoors”, inside bedroom sleep disturbance night time we can see 30 LA<sub>eq</sub> dB is identified and the time base of eight hours, that being the eight hours of the night time.

**(Mr Methold)** Yes.

3046. If we turn on to tab F there is a note that Mr Thornley-Taylor has prepared in which he has set out a calculation of what an LA<sub>max</sub> level of 40 equates to in terms of the eight hour LA<sub>eq</sub> having regard to the number of trains that would operate in particular hours. I am not going to take the Committee to the rather frightening formula on page four, but I will take the Committee to the conclusion of that document in paragraph 1.6 on page 5 where Mr Thornley-Taylor concludes, “Thus, the 40 dB LA<sub>max</sub> is equivalent to less than 22 dB LA<sub>eq</sub> where T is eight hours”.<sup>7</sup> Do you see that conclusion?

**(Mr Methold)** Yes, I do.

3047. I think you have had an opportunity to look at this particular note. The calculation set out there is correct, is it not?

**(Mr Methold)** It is.

3048. And so the conclusion must be that by reference to the guidelines for community noise level that takes into account the frequency of events, the 40 dB LA<sub>max</sub> level provides a significant margin of protection compared to those guideline values, does it not?

**(Mr Methold)** We need to be very clear about what that 30 dB LA<sub>eq</sub> is based upon and again the WHO document is very clear: it refers to sleep disturbance due to continuous background noise and I reject the suggestion that a noise event from a train passing underneath a building is a continuous background noise source.

3049. The 40 dB LA<sub>max</sub> criterion has been adopted as a design criterion for CTRL; is that correct?

**(Mr Methold)** Yes.

3050. For Thameslink 2000?

**(Mr Methold)** Yes.

3051. For the Jubilee line extension?

**(Mr Methold)** Yes.

3052. And for the Docklands Light Railway; is that also right?

**(Mr Methold)** Correct.

3053. In relation to the Jubilee line extension are you aware of any recorded complaints or records of annoyance arising from the operation of that line?

**(Mr Methold)** I am not aware of any.

3054. You referred in your evidence in chief to design guidelines presented by APTA, the American Public Transit Association; is that right?

**(Mr Methold)** Yes.

3055. Am I right in saying that the thresholds identified in that document are not based upon any specific dose response research?

**(Mr Methold)** That is my understanding.

3056. So they are policies rather than related to any particular level of environmental noise deemed to be acceptable?

**(Mr Methold)** In the absence of any dose response curve for this type of noise; that is correct.

3057. And the same is true, is it not, of the FTA criteria that you also produced?

**(Mr Methold)** That is correct.

3058. With regard to the policy documents that you referred to, Camden UDP and the supplementary planning guidance, I think I am right in saying that none of those documents provides any reference to being based upon any particular dose response research?

**(Mr Methold)** That is correct.

3059. Again, they are in the same categories, the APTA and the FTA; they are policy led?

**(Mr Methold)** They are based upon the best practice that is advocated by APTA and the FTA documents.

3060. But without any scientific base?

**(Mr Methold)** Apart from well used project experience.

3061. I have to put a point to you, Mr Methold, so that you can respond. There is no evidence, is there, that the adoption of a 35 dB LA<sub>max</sub> criterion would produce any material improvement to people’s lives compared with the adoption of a 40 dB LA<sub>max</sub> criterion?

**(Mr Methold)** There is no published scientific evidence to suggest that but I draw your attention to the summary data that I presented in terms of the North Downs tunnel.

<sup>7</sup> Crossrail Ref: P44, Crossrail groundborne noise LA<sub>max</sub> and LA<sub>eq</sub>, 2 February 2006 (CAMDLB-31904-037).

---

**The Petition of London Borough of Camden**

---

3062. And so when one is weighing up whether or not additional cost is justified in terms of introducing additional mitigation measures, for example, floating slab track, to meet the 35 dB LAmax criterion that you have recorded, one needs to bear that particular conclusion in mind?

**(Mr Methold)** One does, and the magnitude of the costs would be a material consideration.

3063. Again, I am going to put to you, and Mr Thornley-Taylor will explain this later on, that our calculations are that to provide floating slab track throughout the central section, which obviously is the worst case because it is the most robust case, where the greatest amount of money would be spent, would cost about £10.6 million.

3064. **Mr Clarkson:** Is that for the whole of the central section?

3065. **Mr Taylor:** It is for the whole of the central section, both parts of it.

**(Mr Methold)** So that is a location where it is probably not needed as well; is that the case?

3066. I do not know whether it is needed or not. I am just a lawyer. I am sure Mr Thornley-Taylor will be able to explain that. The point is simply this, is it not, that what we have to do is weigh up the potential costs which may be as high as £10.6 million against the potential benefit for which there is no scientific data to support, which is if 35 was adopted.

**(Mr Methold)** The cost is a consideration to weigh up.

3067. I am just being told to give the document numbers again. P43 is the table 4.1 and at P44 is the page 5 from the documentation relating to the LAeq, a note that Mr Thornley-Taylor has produced.<sup>8</sup> Mr Methold, thank you very much.

---

*Examined by The Committee*

3068. **Kelvin Hopkins:** The CTRL, when it goes from North Downs, there were complaints about noise when it was way below 40 decibels. Is that on floating slab tracks or is that on the standard embedded track or the standard concrete track or what?

**(Mr Methold)** That is a ballasted track system so it is a different kettle of fish and I understand that the system that is in place there is based on a resilient rail pad. That is one that we did not discuss this morning. The resilience is placed directly underneath the rail. It is a bit higher up as a system than the base plate system.

3069. How deep is the CTRL tunnel below ground and is it clay or is it chalk and does it make a difference? How would that tunnel compare with Crossrail?

**(Mr Methold)** It is very different. I understand it is 80 metres cover at its deepest and some of the residents are on a slight hill there, which means that it is as low as 40 metres and it is predominantly chalk.

3070. Does chalk conduct noise more easily than clay?

**(Mr Methold)** It will do and also at higher frequencies.

3071. Would it be possible to use floating slab track selectively for sections of Crossrail where it goes under sensitive areas, such as residences, rather than for the whole of the central section?

**(Mr Methold)** I believe that is the case. That is clearly what Crossrail were putting forward at this stage in any case. They are saying that they will

apply a standard track form throughout but in certain locations they may need floating slab track, and it is not all just in one location. I talked about theatreland and around Tottenham Court Road station but there is also a section proposed for the Barbican and that is some distance away. The project is acknowledging that it can accommodate different sections along different parts of the route, discrete sections.

3072. There is reference to Wigmore Hall, which is very sensitive, is it not, where they have concerts of chamber music? I travel every day on Thameslink and I am familiar with wheel flats, as I mentioned in a previous session. Quite frankly, Thameslink do not grind out their wheel flats very often. Almost every train I go on has a wheel flat, sometimes several, and the track, as you know, is not looked after in some areas as well as it should be. Camden is seeking guarantees that the operator will make certain that the track and the wheels are kept in good order because it would make a significant difference.

**(Mr Methold)** In so far as it can at this stage. One of the problems is that I do not think the Promoter can tell us how often they need to maintain the railway and we have to acknowledge that. We do know that the Docklands Light Railway, for example, has quite a strict noise vibration policy which actually requires them to regrind their rails or have their vehicles maintained if certain noise levels, on an annual survey basis, exceed certain trigger thresholds. That is something that we are looking to the project to mimic almost and give assurance on. That is why our undertaking at this stage is merely couched in, "Please involve us in those discussions. We understand your problem that you cannot tell us now but we do want reassurance on this because we do not think your commitments in D10 go far enough for us. We want to understand what 'adequate control' means".

<sup>8</sup> Crossrail Ref: P43, World Health Organisation, Guidelines for Community Noise, p65, Table 4.1 Guideline values for community noise in specific environments. Crossrail Ref: P44, Crossrail groundborne noise LAmax and LAeq, 2 February 2006.

---

The Petition of London Borough of Camden

---

3073. This is for my interest, to get some feel for what different track sounds like. I travel, as I said, on Thameslink between the new MT box station under St Pancras, which I think is in Camden and the Kings Cross Thameslink, which I think is probably in Islington, or is it in Camden?

3074. **Mr Clarkson:** In Camden.

3075. **Kelvin Hopkins:** You go through the box station, which has a very smooth sound, very modern, with continuously welded track, and you go from there into a tight curve with a jointed track and squealing wheels which make an enormous noise. Presumably that kind of noise would transmit to buildings above a lot easier.

**(Mr Methold)** High frequency noise, if we are talking about a wheel squeal on cornering, probably would not. It is more of an issue for passenger comfort when you are sitting in the train. Airborne noise generated by wheel squeal would normally be expected to be attenuated by the time it has got through the tunnel and through the soil and come out.

3076. And the banging of the jointed track?

**(Mr Methold)** Banging of jointed track definitely is a factor for groundborne noise and vibration.

3077. Do you know what kind of base the track through the box station is laid on?

**(Mr Methold)** I am not familiar with the Thameslink section through there.

3078. I am very familiar with the noise. Thank you.

**(Mr Methold)** One of the interesting points that counsel raised there was that 40 dB is applied to Thameslink 2000 and we must remember that that project is more or less an upgrade of an existing alignment and, as you are quite rightly pointing out, is already fairly bad in terms of groundborne noise. I think I would be fair in saying that the local authority has probably regarded 40 dB as an improvement on what is there already but we have

also to bear in mind that an intensification of an existing railway corridor in terms of legal terms sides very much on the side of the operator and the Promoter. It is guarded by the Railways Act and so any attempt to try and change the Groundborne noise criteria for a project which is merely an upgrade or relaying of track is nigh on impossible. This is a new railway.

3079. **Chairman:** Earlier in your evidence you talked about floating slabs and the cost and so on. As I recall in the Environmental Statement there was a commitment to have systems incorporated in all sensitive areas and now that seems to have been lost a little bit. Can you elaborate a little bit more on your costings because you said you were very cautious about the maximum of eight per cent added to the cost? It seems to be being implied that it is significantly higher than that?

**(Mr Methold)** This is the point I probably made inappropriately earlier, but if you compare, and you will hear from Mr Thornley-Taylor, that with this section of floating slab track they based their costs on is over the entire central section. If you look at the individual buildings which have been looked at, and this is exactly what I did, I do not think you need to apply floating slab track the whole way across the central section. I alluded earlier in my evidence to the fact that you can probably squeeze a few extra decibels out by using a softer base plate system. The other point I should make is that the modelling so far has been done for the purposes of the Environmental Statement and has used worst case assumptions, and the Promoter is reserving its right to go back and do more detailed modelling at the detailed design stage. We can perfectly expect the levels to come down as a result. Therefore, it could be the fact that the end predicted levels will already be performing well below 35 and below what we have already seen in the Environmental Statement.

3080. So do you accept that it does not need to be throughout the system?

**(Mr Methold)** I do not think it does.

---

---

The Petition of London Borough of Camden

---

## Re-examined by Mr Clarkson

3081. **Mr Clarkson:** Can I ask for some help first for the Committee about this £10.6 million which is the first the Committee has heard and is the first that Mr Methold has heard it and the first that we have heard of it? Could we ask, through Mr Reuben Taylor, if we could have a document that Mr Methold could look at and instruct us and in due course, if necessary, the Committee, as to the efficacy of it?

3082. **Chairman:** Yes, I would agree.

3083. **Mr Clarkson:** Is it available now?

3084. **Mr Taylor:** I am afraid I do not have that here. I have got one but it is in a different location. I am sure we can make that available overnight.

3085. **Chairman:** And could we have a note from yourself on that?

3086. **Mr Taylor:** Certainly. I will make sure that it is available in the morning.

3087. **Mr Clarkson:** Sir, I hope I have made it plain: it is fundamentally important that if Mr Rupert Taylor is going to give evidence this afternoon as to £10.6 million, I trust, because that is the basis upon which the question was put, the Committee needs to know whether that is a gross figure, what the input is into it and what the basis of the costing is. It is a very new and important aspect.

3088. **Chairman:** Mr Clarkson, can I reiterate what was said earlier on this morning in that in the plea that was made the day before why documents should be in the hands of people at least 24 hours before, we have now introduced a new system which hopefully will protect that in future. This has not occurred on this occasion and therefore we are going to give you a note and the document and if it is necessary for you to come back with your witness we will be more than happy to oblige that.

3089. **Mr Clarkson:** I am grateful, sir. Mr Methold, would you take up LBC17, which is your document? Do you recall a question that was put to you by Mr Taylor towards the end of the cross-examination on the basis that no evidence that 35 would produce any material improvement compared with 40 dB(A)?  
(**Mr Methold**) I do.

3090. Looking at LBC17, there is, do you see, a difference between how residential buildings are treated, churches, courts, theatres, lecture theatres, small auditoria, halls, at 35—with me?  
(**Mr Methold**) I am.

3091. On that table is there any difference being promoted between what can be heard in a church and what can be heard in a residential dwelling?  
(**Mr Methold**) Not a material difference. There would be a slight difference of the characteristic of it.

3092. The next question following from that is, why is there a different level for those several lower standard buildings?

(**Mr Methold**) I believe it is because the Promoter is identifying them as more sensitive.

3093. And the rest of that I can take up with Mr Rupert Taylor. Heading “Best Practicable Means”, please. You have it in your text but I will remind you broadly of what the point is on BPM. Having regard amongst other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications. If the Committee say that the standard should be 35 dB LAmax, what is your advice as to whether it would be a requirement of best practicable means to go below that when you have best practicable means defined in the statute as having regard to local conditions and circumstances? Would it be a requirement to go below it?

(**Mr Methold**) If best practicable means dictated that the levels could be achieved within the confines of reasonable cost and engineering technology it could be.

3094. The blue file of the Promoter, tab B, table one, the lunchtime counts; have you got them?<sup>9</sup>

(**Mr Methold**) I have.

3095. Year?

(**Mr Methold**) 1969.

3096. Do you know what the sophistication of measurement was 35 years ago?

(**Mr Methold**) I would hazard a guess that it was using a swinging needle.

3097. Slow or fast?

(**Mr Methold**) I would imagine it would be slow but it is not very clear in this document.

3098. Point of measurement?

(**Mr Methold**) I do not know.

3099. Rigour of measurement; do you know?

(**Mr Methold**) I do not think we have the information here that enables us to understand whether that is the worst case level recorded or whether it is an average of a sample of measurements. One thing we have to bear in mind is that you can get quite a variability between different train times and speeds. This does not tell us very much about that at all.

3100. Over the page to complaints of railway noise 1970-1979, and I ask the same question compendiously, do you have any more detail as to the efficacy of that survey than you did on the 1969 survey?

---

<sup>9</sup> Crossrail Ref: P41, Table RMT 1: Complaints of railway noise from the Victoria Line compiled in 1969 (CAMDLB-31904-006).

---

The Petition of London Borough of Camden

---

*(Mr Methold)* No.

3101. The World Health Organisation document at tab E; would you go to page 58?<sup>10</sup> The penultimate paragraph, “Where noise is continuous the equivalent sound pressure levels should not exceed 30 dB(A)”, so we are going in to LAeq, are we not?

*(Mr Methold)* We are.

3102. It is 30 dB(A) indoors if negative effects on sleep are to be avoided. It goes on to say that when the noise is composed of a large proportion of low frequency sounds a still lower guideline value is recommended, because low frequency noise, eg from ventilation systems, can disturb rest and sleep even at low sound pressure levels. “It should be noted that the adverse effect of noise partly depends on the nature of the source. A special situation is for newborns in incubators ...”. What does that advise you about the issue that is before the Committee?

*(Mr Methold)* It is advising a much more precautionary approach to the development of any Design Aim noise limit and it is also based upon a continuous noise level the LAeq quoted in that paragraph.

3103. That is all I have. Thank you very much.

3104. **Chairman:** Thank you, Mr Methold. You will bear in mind that we may have to recall you at some point if your counsel advise us so.

*The witness withdrew*

May I just remind you, Mr Taylor: you will get that document for us and a note for us tomorrow?

3105. **Mr Taylor:** I will indeed, sir.

3106. **Mr Clarkson:** Both Mr Taylors.

---

**Mr Rupert Thornely-Taylor, sworn**

*Examined by Mr Taylor*

3107. **Mr Taylor:** You are already known to the Committee, Mr Taylor. Firstly and importantly, can you confirm that we are not related?

*(Mr Thornely-Taylor)* Yes. I have actually got a slightly longer name, if it helps. Rupert Thornely-Taylor.

3108. Can we begin please with the issue of floating slab track and can you explain to the Committee what is currently proposed with regard to floating slab track by the project?

*(Mr Thornely-Taylor)* The current assumption for costing purposes is a length of tunnel in both directions of 11.36 km and the actual cost of the slab part of that work is £10.6 million and there are other costs as well which take the total cost, if we do put that much floating slab in, to £16.96 million. The total length of tunnel is 47.38 km, so if they were all to be floating slab track we could multiply that by four and Mr Methold I think was suggesting that he would envisage something in between, not going for floating slab track for the entire tunnel but somewhere between what we currently see as likely and the entire tunnel.

3109. Whilst we are talking about floating slab track one of the points made by Mr Methold was that there had been no quantification and calculation of the effect of the introduction of floating slab track. Can you explain to the Committee what experience you have had of the introduction of floating slab track and what degree of mitigation you believe it will provide?

*(Mr Thornely-Taylor)* There is a very large jump between the groundborne noise level you get from standard track on resilient base plates and the groundborne noise that you get where there is

floating slab track. Using the kind of design we have on the Jubilee line extension, where I deliberately chose not to include a resilient base plate between the rail and the slab; the rail is rigidly supported from the slab, and the reason for that was to avoid the small dip in performance that putting base plates on top of the floating slab, would of course avoid that. The benefit that that gives one can take as a rule of thumb as a drop of about 15 dB(A) L<sub>Amax</sub> in groundborne noise. It is possible to do better than that if one does include a resilient support for the rail on the concrete slab and then it would be about 20.

3110. Mr Methold also suggested that there was scope to provide alternative mitigation to floating slab track by using a softer resilient material. Can you indicate to the Committee your view on the use of softer resilient material than you have assumed in your modelling?

*(Mr Thornely-Taylor)* The base plate that I have assumed in the modelling is already very soft. It is a little less than half the stiffness of the most commonly used commercially available resilient base plate. It does produce a reasonably large rail flexion as the train passes over it and it has taken a number of years for permanent way and rolling stock engineers to accept that that does not cause problems which cannot be lived with. There are systems which again are just resilient rail supports, not reconciled, which are even softer than the base plates which I have assumed. There is one which is actually installed on a bridge near Waterloo—it was installed, it may have been taken out now—for trial purposes which is about 20 per cent softer. As far as I know it does not yet have system-wide approval for use on the rail network. It may be that in time to come that will be overcome and softer rail supports will be possible and we will be able to get lower levels of groundborne noise without going to floating track

<sup>10</sup> Crossrail Ref: P43, World Health Organisation, Guidelines for Community Noise, p58 (CAMDLB-31904-023).

---

**The Petition of London Borough of Camden**

---

slab, but at the present time it would be very unwise to consider going softer than the assumptions I have made.

3111. Let us turn away from floating track slab—

3112. **Chairman:** Before you leave that, I want to return to a question, because what Mr Methold did imply was, yes, it was a variation between the amount which you had already agreed to place in the floating slab and the maximum, but it was not very much more. He was saying it was a number of specified areas so it was not that much greater. What he was also arguing was that he thought if you did it to the levels he stated and worked out a solution, then the cost could be down as low as a maximum, a conservative figure, of an increase of 8 per cent of budget. That does seem to be still very small if it was conservative. Could you comment on that?

*(Mr Thornely-Taylor)* We are talking about figures reckoned in tens of millions, which are not small, compared with figures reckoned in tens of billions, but I am sure I am not the only person dealing with issues which have costs reckoned in eight figures.

3113. I understand that, but what you have just said to us is 10.6 million at one point and then at the end of your paragraph you said you could assume it could be as high as by four. He was not saying that in his evidence, he was saying a conservative estimate would be 8 per cent. An 8 per cent increase on 10.6 is not by four.

*(Mr Thornely-Taylor)* Indeed.

3114. I am trying to get you to elaborate on that really.

*(Mr Thornely-Taylor)* I was saying I thought Mr Methold was looking for something between what was currently envisaged and four-fold. The difficulty is that we do not know now precisely where all the cases will be, when the detailed design comes about, where this will arise, because we do not for example currently know all the building foundation details. I was talking to a petitioner only a week ago who had lost their building foundation details, they thought they had pile foundations, it was over the tunnel, if it had pile foundations it will require much more mitigation that if it does not. I agree, it is not likely we will actually have to put it in portal-to-portal, that is the boundary of the cost envelope, and the truth will lie somewhere between that and the 17 million.

3115. I am grateful for that. I am also interested in your answer about the type of materials that you are going to use. I think that is very sensible. A final question, in the Environmental Statement it did seem to indicate that floating slabs were going to be used a lot and then suddenly in the recommendations it seems that commitment is lessened. I wonder if you could comment on that?

*(Mr Thornely-Taylor)* What it says in the Environmental Statement is the likely outcome. As we go through that central section where there are many recording studios, many theatres, through to

the Barbican with its very high quality concert hall, it is very likely that stretch as identified in the Environmental Statement will be the place where the floating slab is.

3116. **Chairman:** I am sorry, Mr Taylor. Would you like to continue?

3117. **Mr Taylor:** Not at all, Sir. One last point on the floating slab track before we leave it, when one comes to design the relevant track support system, is it possible or sensible to simply introduce floating slab track in short sections underneath particular buildings with particularly deep foundations? What is the approach which is adopted?

*(Mr Thornely-Taylor)* That is a very important point. It is not a question of putting in small bits of floating slab. Even if one address requires it, it is usually necessary to have a couple of hundred metres of floating slab because of that. You usually find that you have a need for floating slab in not quite contiguous runs of 100 or 200 metres, and then it becomes highly desirable to join them up because of the maintenance implications of going down the tunnel and here you need one kind of equipment to maintain the track and further on you need another kind, which is extremely undesirable. One of the people involved in the early days of the Docklands Light Railway used to say, “We don’t want a piano key railway” where you keep going from one key to another, one kind of track to another. So it is highly desirable to minimise the number of types of track form and preferably have the basic system-wide resilient base core and floating slab where you need it. The other point I do need to make about floating slab is that whereas resilient rail support is straightforward (the contractor buys the base plates, bolts them in, fits the rail and that is that) all floating slab always needs a highly skilled engineer to design it and to deal with the dynamic problems which can arise and will arise. For example, in Singapore bits fell off the trains because of unforeseen effects from the floating slab which had to be put back retrospectively. There is always a need for a specialist of a fairly unusual kind when there is a floating slab need, which is not the case for resilient rail support, you just buy it off the shelf and fit it.

3118. In the light of that answer, if the design criteria is dropped from 40 to 35, what are the likely implications in terms of the introduction of floating slab track? Are you able to give an indication?

*(Mr Thornely-Taylor)* Yes. I need to think back to the presentation I gave on Day 7 when I talked about this being a complete process, not just of picking a number but of deciding on a design process and a procurement process when it comes to the nominated undertaker’s contractor deciding what to install. There are two consequences of couching the requirement in different terms, for example, as Camden would wish. I do know of railways where all that is in there is a number and the contractor puts in the cheapest base plate that he can get away with to achieve that number, and a consequence of the Camden suggestion is that the contractor would put

---

The Petition of London Borough of Camden

---

in stiffer base plates than I have assumed and all the areas where the contours are either 25 to 30 or even vanish would come right up to 35, and as I think Mr Methold has established 35 is audible just as 40 is. So that is not in my view really an improvement. I am under the illusion of thinking I have enough influence in the world that had I recommended something different, like lots more floating slab or different base plates, the project would accept it and perhaps I would not be sitting here because it would have been perceived as better by Camden. What I have recommended to the project is what I know from my experience produces an outturn railway that is highly acceptable from the point of view of groundborne noise, as we know from the Jubilee Line extension.

3119. Let us turn to the point that was raised in the second undertaking that Camden was seeking about the alternative residential accommodation. You will recall that the point I put to Mr Methold was regarding whether or not it was possible to predict the groundborne noise implications of the tunnel boring process. Can you explain to the Committee what your views are on that?

*(Mr Thornely-Taylor)* The tunnel boring process is different from the process of running trains in an underground railway where the entire mechanical process is understood, quantifiable and capable of numerical modelling. The tunnel boring process involves tunnel boring machines, as we saw in Professor Meyer's presentation on Day 7, passing through a range of different soil types. Some of the time it has been London clay, which is like plasticine, and I do not remember from the tunnel drive of the Victoria Line or the Jubilee Line there being any problem with noise from the passing of the tunnel boring machines. That I think was what caused the CTRL people to reassure residents before the CTRL tunnel drive that they were not going to hear it, but of course that was a tunnel drive through sand beds partly which were almost like sandstone in places, and you hear anecdotes of people hearing tunnel boring machines from some way off. It is not possible in anything like the precision that is possible with the operating railway to predict what is going to occur along the route. There will be some places where it will pass almost unnoticed, there may be some places where all the time the tunnel boring machine is passing significantly above the 30 figure proposed in Camden's suggested undertaking.

3120. **Chairman:** There is also the size of the tunnels themselves.

*(Mr Thornely-Taylor)* Yes, Sir. The CTRL tunnel is broadly 8 metres diameter and we are talking about a 6 metre diameter, which is a good deal smaller and the machines and the whole enterprise is smaller and the consequent energy emitted as vibration noise is less. But it is not a predictable effect in anything like the precision that the operation of the railway is.

3121. **Mr Taylor:** So when one is looking at the financial implications of providing alternative sleeping accommodation, in the form sought by Camden, are you able to assist the Committee on what that would be?

*(Mr Thornely-Taylor)* It would have to be assumed, because we do not have enough information, that everybody above the tunnel might be in a position to ask to be put up in a hotel. At the other extreme, during boring through the London clay it probably would not be significant at all. If I were asked by the Department for Transport how much would this undertaking cost, I would have to say we had better assume we will get applications from people all along the route and even then it would be hard to know how many.

3122. I want to turn away from that particular issue on to points that Mr Methold made regarding the design of the North Downs Tunnel. He has produced his sheet, exhibit LBC 35. Can you explain to the Committee what it is you understand has occurred in relation to the design of the North Downs Tunnel and why it is you believe that noise concerns have arisen?

*(Mr Thornely-Taylor)* Mr Methold explained something about the prediction method. He said from his point of view he thought it was plus or minus 8 dB in the 95 per cent confidence band. Some of the figures I have seen are a little wider—plus or minus 9, which is an 18 dB difference between the highest value you might find you get and the lowest value you might find you get for a central prediction. The reason for that is that the CTRL prediction model is quite different from the one we have used on Crossrail and on the Jubilee Line extension. It is based on a large number of measurements which were made from operating railways, many of them actually on the surface and the results corrected to make the results applicable to a tunnel, with a considerable amount of uncertainty in that correction, and then to take a wholly statistical approach to plot the measurements and produce a regression analysis and get coefficients from that, so you can then generate a number for a property at a particular distance from the tunnel, at a particular depth for a particular train speed. If you produce a chart as they did, exhibited in evidence to the Channel Tunnel Rail Link Committee, where along one scale is the predicted level and on the other scale is the actual level, that is where you find you can be at a prediction of, say, 40 and using Mr Methold's plus or minus 8, the outturn could be anything from 32 to 48. That is why we have the odd situation with the North Downs Tunnel of CTRL saying, quite rightly, they discharged their obligations because they predicted for below 40 but there are lots of problems where they are getting more than 40 because they did not actually predict low enough to include all of the distribution, all of the 8dB distribution, to get 95 per cent accuracy. So it is not surprising, it is wholly to be expected, there would be some properties over 40. Because of the difference between that prediction and the Crossrail prediction methods, which start from the complete opposite

---

 The Petition of London Borough of Camden
 

---

end of the range of possibilities, what we do is to set up a fine mesh which represents mathematically all the characteristics of the physical world, the real world, and mathematically move a train through the model and, in time steps of a few milliseconds, each work out what every part of the modelling will be like, what movements take place as a result of the rolling of the wheels of the trains, and then, in the next millisecond, that propagates out as vibration. This is done for thousands and thousands of time steps and we actually model in a computer exactly what goes on in the real world, so its uncertainty is limited solely on the fact that we do not know anything about the real world as we cannot see everything beneath the soil. Having done that, we then went through a validation exercise, in fact, of two kinds. One was to model and to measure the groundborne noise from a railway where we could know almost everything there is to know from the rail running and the wheel running upwards, and that was the Docklands Light Railway Lewisham extension between Cutty Sark and Greenwich. The report of that, the specialist technical report, is on the web. That showed that in the worst case there was an unpredicted 3 dB LAmax. The other piece of validation work that was done was on the Jubilee line extension. I mentioned on Day Seven that it was very hard to find anywhere that would pick up groundborne noise but it was possible to hear passing trains in the second basement of Christies in King Street, which is also a nice, undisturbed place to be. I both measured passing groundborne noise from the Jubilee line extension trains and predicted, using the same model, for that site. That, of course, included an uncertainty that was not in the Cutty Sark/Greenwich measurement. We did not know the wheel and rail roughness, so that included a test of the appropriateness of the general assumptions we made about what the wheel and rail roughness would be. The error there was 2.5 dB(A). In fact, we combined those two and applied a 5 dB uncertainty correction to the predictions. If I had given you the computations as they actually came out of the computer they would have all been 5 less and with a 5 dB uncertainty margin. That is why 40 is in D10 as the objective for the operation of Crossrail.

3123. So to avoid the sort of difficulty that seems to have arisen in the North Downs tunnel situation occurring with Crossrail, what is it that you do in the design process?

*(Mr Thornely-Taylor)* We allow for the uncertainty in the predictions to the extent that the probability of it turning out worse than the prediction as presented after the uncertainty is so small as to be not a significant risk.

3124. Thank you. Now let us turn and deal with 35 dB(A) as a design criterion, if we may. What evidence are you aware of that establishes that a 35 dB design criterion would make a material improvement to the living conditions of the people above the tunnels, compared to the design criterion of 40 dB(A)?

*(Mr Thornely-Taylor)* I cannot point to any scientific or academic work, and I think Mr Methold said the same, which would demonstrate that.

3125. In the information pack, which I think you have got before you in the blue file, there is produced some data relating to complaints, I think, about the Victoria line. Is that correct? In tab B?

*(Mr Thornely-Taylor)* Yes.

3126. As I understand it, Mr Methold does not believe that this data should be given weight because it represents a complaint threshold. What do you say in response to that?

*(Mr Thornely-Taylor)* Mr Methold, in one of his exhibits—I do not have the number in front of me—was suggesting that complaints are not a good indicator of satisfaction with things. He was suggesting, I think, that about 5-10 per cent of people complain from the population that is upset about something. But we find, not so much in the tables in front of us but other London Underground research from which Mr Methold drew his figures on the number of people affected from 35 to 40 dB(A), that the percentage of complaints at 40 dB(A) is .05 per cent. It was misprinted on the front page of that document as .5 per cent but in the body of the document it was .05 per cent, which is so much lower than the 5-10 per cent that Mr Methold postulates as being the proportion of people who complained among a population that are disturbed. That actually is a strong indication that people are much less disturbed at 40 dB(A) LAmax.

3127. Mr Methold made criticisms of the accuracy of the numbers in the document setting out the number of dwellings that were affected. I am rapidly searching through these documents to find the right page. It is LBC26. I think the general thrust of what he was saying was that the numbers on the left-hand column need to be reduced by 10 to take into account the points that he has made in the bullets beneath the table, namely to use LAmax FAST, and over-prediction for rail roughness as well. Can you just explain your views on that, please?

*(Mr Thornely-Taylor)* Yes. Mr Methold was not really quite right about the LAmax F point. It was, I think, put to him by Mr Clarkson how did they do the measurements in 1969. In fact, right up to 1994 and beyond they used not a sound level meter but a graphic level recorder which instead of showing you a number on a dial or on a screen uses a pen to write a chart on a continuous roll of paper. It is neither fast nor slow; it is governed by the writing speed of the chart recorder. That is a problem we used to have in those days when those instruments were widely used, and how do we relate the writing speed to fast or slow. The answer is you cannot precisely, and they did what is best described as “eyeballing”; they looked at the chart and they say explicitly in the form in which these figures are drawn they did not take the highest excursions of the chart, they took what looked like a good figure to represent the maximum for the pass-by noise. So it is not fast; it is not that different from LAmax slow, in fact. The other part

---

The Petition of London Borough of Camden

---

of the 10 dB, I think, he was attributing to over-estimated rail roughness as one of the causes. I have to say that I do not know if there was an over-estimation in 1994 but there are many lines which have got worse since 1994. So even if there might have been an over-estimation then I would not like to say there is now. I have been revisiting some old sites recently and on one occasion found it was worse by 7 dB(A). I think I referred to it on Day Seven. I do not agree at all that you should shift the noise level scale down by 10 dB(A), or down at all, in fact. Given that 56,000 to 57,000 is a very small proportion of London's population and even a small proportion of the population of people who live

above underground lines, it feels right. All of us know we have been to people's houses where you hear trains—it is very common—and it is not at all surprising that it is tens of thousands.

3128. **Mr Taylor:** Thank you very much. Is there time to put another point at this stage, given the time? Perhaps we can continue tomorrow.

3129. **Chairman:** That is a very good idea. The Committee will meet tomorrow morning at 10 am.

*Adjourned until tomorrow at 10.00 am*

---

---

**Thursday 9 February 2006**

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Mrs Siân C James  
Dr John Pugh

Mrs Linda Riordan  
Sir Peter Soulsby

---

*Ordered: that Counsel and Parties be called in.*

3130. **Chairman:** The Committee will be undertaking a visit to the Tottenham Court Road site on Tuesday 14 February. Any Petitioner or Agent with an interest in the site may attend. However, I would be grateful if Agents would liaise with the Clerk in

advance of the visit to finalise their attendance.

3131. Today the Committee will continue to hear the petition of the London Borough of Camden. Mr Taylor, do you want to continue?

---

**Mr Rupert Thornely-Taylor, Recalled**

*Examination by Mr Taylor*

3132. **Mr Taylor:** Thank you, Sir. Further to events of yesterday, we have produced a note about Predicted Floating Slab Track Costs which hopefully has been handed to the Committee. I am told this document is number P45.

3133. **Chairman:** For the stenographers, it is listed as A39.<sup>1</sup>

3134. **Mr Taylor:** I am going to ask Mr Rupert Thornely-Taylor to take the Committee through this document that has been produced. Mr Thornely-Taylor, would you like to explain the note and what it sets out for the Committee, please?

*(Mr Thornely-Taylor)* Yes. What this note does is to take what we know about the likely requirement for floating slab based on predictions which have been made, and what we currently understand about building foundations and matters of that kind, because that is probably the best way of getting a feel for the proportional increase in cost which will result from Camden's proposed undertaking for Crossrail's approach as set out in information paper D10. This is fairly specific. It begins in section 1 with the costs per kilometre, the cost of floating slab track breaking down as the track slab itself as £933,000 per kilometre plus indirect costs and contingency costs taking us up to just under £1.5 million per kilometre. These are all 2002 prices. Then it sets out what we know as likely locations for floating slab, maybe a different quantity from the possible outturn when uncertainties are taken into account but it provides the most helpful way of comparing the consequences of two competing proposals. First of all, there is explicit mention in the Environmental Statement itself, as we heard yesterday, of a total of one and a half kilometres in the locations set out there and also in the work tables. In the Noise and Vibration

Specialist Technical Report there is more detailed reference to a need for special trackform, which I explained yesterday we assumed to be floating track slab.<sup>2</sup> That leads to a broad assumption of an additional 1.4 kilometres. What is meant by Level 2 Single Building Calculations, in the next section, is that we have done calculations for buildings with known special features, principally deep basements or pile foundations but in other cases buildings with qualifications for the lower assessment criteria that are in D10 such as sound recording studios, theatres, concert halls and matters of that kind. That gives us another 1.8 kilometres. The Crossrail position, based upon that approach, is a requirement for 4.711 kilometres of floating slab. That is the benchmark. We then look at the additional cost associated with the Camden proposal and reapplying the forecast through route windows C1 to C8. An additional 26 buildings are identified with the result of taking 35 as the trigger, five of these are already within the total that I have given. That gives us an additional 21 buildings requiring floating slab and a requirement for an additional 4.2 kilometres, giving a cost estimate for the provision of this additional floating slab of £6.3 million. As I have mentioned none of this includes the likely discovery of further cases requiring floating slab that have come to light during the detailed design stage. The figures I gave yesterday of 10.6 million for the slab and a total, including contingencies, of 16.96—I think it was—are actually the costing based on engineering judgment as to what is appropriate to be included in the cost estimates, allowing for what will turn up in the future that we do not know about yet. That would be subject to the same proportional dressing up that we see here for the more specific information about things that we know about now. I hope that is helpful.

---

<sup>1</sup> Committee Ref: A39, Additional Cost associated with Camden Design Criterion, Crossrail, 9 February 2006.

<sup>2</sup> Crossrail Ref: P44, Environmental Statement, Noise and Vibration Specialist Technical Report.

---

The Petition of the London Borough of Camden

---

3135. I want to turn to address the social surveys which were conducted in the early 1990s, Mr Thornely-Taylor. Those are set out in the Counsel information pack that was produced yesterday at least as an Executive Summary at tab C.<sup>3</sup> Could you please explain to the Committee what you say the findings of that survey are and why the Committee should have regard to them?

*(Mr Thornely-Taylor)* Yes. I think the most important thing to bear in mind is we all recognise the survey was small but it is useful information to take into account. It did produce two conclusions that you will find in tab C of the pack on page eight. It says "...two strong general conclusions emerged of a kind which probably would still obtain were a much larger sample studied. These were firstly that of reported annoyance due to noise, only a tiny proportion of the annoyance is explained by measured noise level. Significant correlations between noise annoyance and physical measurements are only obtained when both noise and vibration are included as independent variables." We saw yesterday an exhibit of Camden's which was one off from a full interpretive report which made it look as if three people were very annoyed in the band 36 to 39.9 but it was only part of the information because it tried to look also at people very annoyed by vibration. The pattern is very similar, there were two rather than three in that category, but it is explained by this strong conclusion from this small sample that "...with no vibration ...", it says, reading again from paragraph 4.2 "... annoyance due to noise is very low, and that noise annoyance, for the same noise level, increases with increase in vibration."<sup>4</sup> The correlation between noise annoyance and vibration alone is not much lower than that between vibration annoyance and vibration alone." Another thing we heard about yesterday that was slightly misleading was when talking about the North Downs Tunnel Mr Methold was saying the vibration was below the threshold and these were people disturbed only by noise. Why I say it is slightly misleading is that you could be below the threshold of the low probability of adverse comment, which is a term from the British Standard, when vibration is well and truly feel-able and the vibration we are talking about in the context of this survey was below the threshold of low probability for adverse comment. So we must not misinterpret the evidence yesterday about the North Downs Tunnel to suggest people were complaining about noise with no vibration, it does not follow from that evidence. The final thing I think I need to say about the social survey is, quite rightly, Mr Methold highlighted the very low correlation on the particular chart he showed.

3136. I think that was LBC 24.<sup>5</sup>

<sup>3</sup> Crossrail Ref: P44, Noise and Social Survey Non-technical Summary, Mr Rupert Thornely-Taylor, p3 (CAMDLB-31904-009).

<sup>4</sup> Crossrail Ref: P44, Noise and Social Survey Non-technical Summary, Mr Rupert Thornely-Taylor, p5 (CAMDLB-31904-011).

<sup>5</sup> Committee Ref: A37, Petition on Groundborne Noise (CAMDLB-31905-001 to 039).

*(Mr Thornely-Taylor)* Drawing the single conclusion from that, if there was a complete correlation it would be one, drawing the single conclusion that only indicated that the survey was inadequate in some way. Of course you can have a superb statistical survey of the population covering thousands of people and get a very low correlation if you are studying something from which there is a poor correlation. If you, for example, to take a slightly ridiculous example, were studying the relationship between the length of people's hair and the noise levels they heard, you would get a low correlation, not because the survey was poor but because it does not have much effect on the thing you are studying. While I fully accept and say several times that this survey was disappointingly small, the fact that the correlation was small can perfectly well be because the link between grumble noise level and annoyance is not as strong as you might think. We do need to keep that very much in mind when taking an overall view of what is happening.

3137. If we look at your non technical summary, paragraph 3.3 you have explained there that "The striking conclusion of the survey is the only reasonable correlations are between vibration and reported annoyance, and as far as annoyance due to noise is concerned, the best correlation was with measured vibration"<sup>6</sup>

*(Mr Thornely-Taylor)* That is true and it is supported by people's general experience which is that when there is underground train noise and you do not feel anything through the sense of touch, what you hear—and I have often described it as such and people have said "Oh, yes, that is exactly what we find"—from the passing train is very similar to the noise of a lorry passing on the road at the end of your own road, a distant lorry passing. It is quite difficult to distinguish the two. If there is vibration it is all different. You would have the sense of intrusion, you have this problem, which was highlighted yesterday, that you cannot shut the window to get rid of it, and when there is vibration and noise from an underground railway it is much more of a problem than where there is noise only. Some of the well-known locations in London with current problems, like South Kensington, from time to time, just north east of King's Cross, and from time to time Victoria to Brixton, where there are bad problems that London Underground have to keep continually responding to representations from the public, there are nearly always quite severe vibration problems as well. I have been in buildings where if there is a chair up against the wall it buzzes against the wall because of the vibration and things like that which will make any of us complain because it is a quite different effect from distant passing lorries.

3138. Two last matters. The first of which is paragraph 4.2 of the conclusions, which you have already referred to this morning. In the first sentence of that you explain that there were two strong

<sup>6</sup> Crossrail Ref: P44, Noise and Social Survey Non-technical Summary, Mr Rupert Thornely-Taylor, p4 (CAMDLB-31904-010).

---

The Petition of the London Borough of Camden

---

general conclusions which emerged. You have already explained what those were. You go on to say "... which probably would still obtain were a much larger sample studied". Can you just explain to the Committee why it is you believe that two strong conclusions probably would still obtain if you had a larger sample?

**(Mr Thornely-Taylor)** There are several indicators of that. One of them is that if you take the raw data, and not separate out the noise and vibration and the noise only cases, the percentage of people highly annoyed is very much in line with the broad percentages you get from the much bigger surveys that I was talking about on day seven in my presentation when I showed a chart relating to noise levels to percentage of people highly annoyed. None of the results fall outside expectations in any way. The second point is really just a further aspect of the description I gave of what one finds in the field where people are complaining. It fits with observed experience that it is noise and vibration which cause complaints rather than noise on its own. That statement that it will probably still obtain were a much larger sample studied is based on a combination of those facts and 40 years' experience.

3139. Let us move on and turn to another document in the file at tab E, *The Guidelines for Community Noise*. First of all, can you please explain the status of this document, Mr Thornely-Taylor?

**(Mr Thornely-Taylor)** This is the report of an expert group whose deliberations were facilitated by the World Health Organisation. It is the report of the four authors listed there: Berglund, Lindvall, Schwela and Goh. It is published, as we see on the first page, ii, on behalf of the World Health Organisation. It is not a formal publication of the World Health Organisation. There is the disclaimer that "The authors alone are responsible for the views expressed in the document". Nevertheless it is a very useful *vade mecum* of information about the effects of noise on people. A wide range of international experts are quoted and it is often called the WHO guidelines, under whose auspices the work was facilitated.

3140. Thank you. We looked yesterday at table 4.1 in this document at page 65.<sup>7</sup> Can you explain to the Committee what you see as the relevance of this table to their deliberations as to which design criteria ought to be adopted?

**(Mr Thornely-Taylor)** This table is a frequently quoted table and it is a statement of guideline values for the onset of the effect on the chart listed, they are called Critical Health Effects. The meaning of "critical" is that sometimes noise has more than one effect. It may disturb sleep, it may disturb concentration, it may disturb speech, intelligibility and, whichever one requires, the lowest noise level is the critical one and it is therefore entitled—in international English that we are dealing with—the

Critical Health Effect. At these levels the guidance is that this is the point below which there really is not the noise effect. We heard yesterday about the eight hour LAeq of 30 for sleep disturbance, night-time inside bedrooms and L<sub>Amax</sub> fast of 45. One could place these numbers at point A on Camden's exhibit LBC28.

3141. We will look at this screen. We are looking at Camden's LBC28.<sup>8</sup>

**(Mr Thornely-Taylor)** This was Mr Methold's graphical interpretation of a passage in the supplementary environmental statement addressing the broad philosophical approach to the choosing of the noise standards for policy purposes. Point A is where you emerge from a region of no material noise effect for anyone, and then progress up through a zone where there is a progressively increasing threat until you reach point B above which it is wholly unacceptable for almost everyone. Planner and decision makers usually set their goals somewhere in the zone between A and B according to the balance of advantage to the Treasury and the public and all the other things one is asked to take into account. Nearly always these targets are in that middle zone, quite a long way above A. Airport developments, and public inquiries into them, spend time deliberating the large numbers of people predicted to be annoyed and significant numbers highly annoyed. The same is true of highway schemes, the same is true of surface railway schemes. A judgment has to be made by a decision maker or politician where to pitch point C. The guidance that we have been looking at in table 4.1 is what is meant by point A on that boundary.

3142. If we put the 40 dB L<sub>Amax</sub> criteria in the context of the values in table 4.1, whereabouts does that lie on the line in LBC28?

**(Mr Thornely-Taylor)** We need to make an allowance for the switch from L<sub>Amax</sub> fast to L<sub>Amax</sub> slow, and I mentioned on Day Seven that it was accepted in the CTRL proceedings in Parliament that they differ by only about 1 dB for a modern railway on continuous welded rail. If we call 40 L<sub>Amax</sub> slow and about 41 L<sub>Amax</sub> fast, it is well into the zone labelled "no material effect for anyone".

3143. Yes. The point was taken that of course it has to have regard to the effect continuing over a period of time. Can you explain to the Committee how you have addressed that in the context of the LAeq level of 30 for an eight-hour night-time period?

**(Mr Thornely-Taylor)** There are two ways of doing this. One is to look behind table 4.1 at the reasoning that produces it. If you go back to page 46, we find that the 45 in that is meant to be never exceeded. It says in the second paragraph from the top that indoor sound pressure levels should not exceed approximately 45 dB L<sub>Amax</sub>, more than 10-15 times a night. They do envisage some exceedances of 45dB

<sup>7</sup> Crossrail Ref: P43, World Health Organisation, Guidelines for Community Noise, p65, Table 4.1 Guideline values for community noise in specific environments (CAMDLB-31904-014).

<sup>8</sup> Committee Ref: A37, Petition on Groundborne Noise, London Borough of Camden, Interpretation of Promoter's Design Aim Philosophy (CAMDLB-31905-029).

---

The Petition of the London Borough of Camden

---

LAmx. The more formal way of taking into account duration of number of events is to use LAeq. As Mr Methold said, we are not advocating, either of us, that as a principal metric for assessing this problem, but it is the only thing we have got to do a formal calculation of the effect of a number of trains. We see from the paper, that tab F—we looked at it briefly yesterday—in any viewing terms, 40 of a train service concerned is 22 LAeq. Very few locations, if you heard two trains together, have to take them into account in the LAeq calculations. It would be 24, but that is at the most, the minimum of six less than the figure of 30, which, once again, one can regard as point A of the boundary of the no material noise effect for any one point. We are so well below the figure of 30 that even if it were right—and that is something which is not straightforward and it might be seen that allowance should be made for low frequency noise—we are still into that no material noise effect zone.

3144. **Mr Taylor:** The point was also taken yesterday that the 30 LAeq figure applied only to continuous noise. Train noise would not be continuous. What comment have you to make with regard to that?

**(Mr Thornely-Taylor)** That is mistaken because it is made clear in text 6 of the WHO document, the example on page 44, the second paragraph from the top. It notes that most of the more recent field observances on disturbance have been conducted for aircraft noise. Other concerns are in terms of the effect of road traffic and railway noise. If you plod through the document and check what all the references are, they are virtually all about transportation noise, but that is a source which is far from continuous.

3145. It is transportation noise sources and research into the effects there which has given rise to the identification of the 30 LAeq eight hour pressure to protect sleep.

**(Mr Thornely-Taylor)** Yes.

3146. The other point that was made with regard to the relevance of the guideline values of table 4.1 was touched on a moment ago about the low frequency levels. What do you have to say about that, Mr Thornely-Taylor?

**(Mr Thornely-Taylor)** We heard yesterday about low frequency noise. There was a slightly loose use of language. Mr Methold showed an exhibit which I think all of us had to scratch our heads over to follow. Again, I do not want to take too much time on it. It was the multi-coloured chart with a frequency spectrum on it; it is LBC 5.<sup>9</sup> All I will do is point out that this spectrum with low frequency at the left and very high frequency at the right has been subject to a weighting, which I have described, which makes it approximately a response to the human ear. We can see its highest is 125 Hz. That is lowish, but that is not what is meant by low frequency noise.

What is meant by low frequency noise is the sort of thing you get from very large combustion appliances, the flues of very large boilers and the intake of a slow-speed reciprocating air compressor. Its frequency is reckoned in the very few bands at the left of LBC5. That is not what we get from underground railways. If we do succeed in finding somewhere for the Committee to hear underground railway noise during the trip on the 14<sup>th</sup>, you will hear a low distant rumble, but it does not have the low frequency content that is meant by the references to low frequency noise in the report from the WHO that we have been looking at. They, in fact, do not find that scale particularly inadequate, even for low frequency noise. There was a passage which was mentioned on page 28, in the top paragraph, around halfway down which says: “A-weighted measures have been particularly criticised as not being accurate indicators of the disturbing effects of noises with strong low frequency components. However, these differences in prediction accuracy are usually smaller than the variability of responses among groups of people. Thus, in practical situations, the limitations of A-weighted measures may not be so important”. Although they do in another passage point out that low-frequency requires further consideration, I do not think it is a particularly big issue by this group of authors.

3147. You have already explained that the guideline values in this document of table 4.1 derive from research into transportations. We have seen the frequency profile of a train pass-by at 46 dB(A) in the LBC5. What other noise sources provide similar frequency response ranges to those that we can see in LBC 5?

**(Mr Thornely-Taylor)** Very similar indeed to the sound of a lorry passing in the road as heard through closed windows.

3148. While we are still on issues about frequency and low frequency, you recall yesterday Mr Methold criticised the measurements that had been undertaken in relation to the Social Survey because the measuring equipment had been placed in the corner of the room. He made the point that essentially if the measurement is taken in the centre of room, it may be different. What comment have you got to make about that point, Mr Thornely-Taylor?

**(Mr Thornely-Taylor)** The general point is when we consider noise from a Crossrail train is because of its resilience and support, will have most of its noise energy around the 50 Hz point. With Crossrail trains there would be a bit more frequency than the present day underground train because of their track support. That is where most of the sound will come through from a Crossrail train. It is above the region I was talking about that could probably be described as low frequency in the context of the references I pointed to. Nevertheless, the essential thing is that most residential rooms are less than a wavelength in dimension, which means you cannot have a normal standing wave-path in the room, which is what gives

<sup>9</sup> Committee Ref: A37, Petition on Groundborne Noise, London Borough of Camden, Groundborne noise spectra train pass by at 46 dB Amax, S (CAMDLB-31905-006).

---

 The Petition of the London Borough of Camden
 

---

rise to a high noise level in the corner or placed by the wall and less noise level in the middle. In fact, the whole room is just squashed and expanded bodily to produce noise at that sort of frequency. It does not make nearly as much difference, as we were invited to believe yesterday, when you measure the noise.

3149. Another point that was raised yesterday related to the extent to which you had taken into account the combined effect of noise from trains passing in the two tunnels at the same time. Can you explain to the Committee what your position is on that matter?

*(Mr Thornely-Taylor)* I have looked at what happens if we were to consider two trains heard passing at the very same time with maximum noise level occurring at precisely the same moment. It will happen occasionally in most places because of the separation between the tunnels, where that would raise the received noise level by the 3dB, which I have explained we get from doubling the noise source. You are some distance from both tunnels, so the actual noise level is well below the 40 or even the 35. I did find in very restricted locations some cases where the highest noise level would be increased slightly. The largest increase I could find was 2 dB and I recall that was towards the western portal, up past Paddington station, which is not a residential location in those parts of the contours.

3150. Mr Methold also suggested yesterday that the Environmental Impact Assessment carried out for the Crossrail scheme in its environmental state adopted a different threshold of significance in terms of groundborne noise, that it had being adopted in relation to the CTRL scheme. What comments do you have on that point, Mr Thornely-Taylor?

*(Mr Thornely-Taylor)* I cannot see that there is any difference. I have looked carefully at the Camden exhibits that were produced. For the Channel Tunnel Rail Link it was exhibit LBC 15 and Crossrail is LBC 14. Crossrail has low impact

between 35 and 39 and medium/high and very high impact between 40 and 44. The two bands up identify that there is significant impact which becomes a significant effect in the context of the law relating to the preparation of environmental statements. The next page, LBC 15 is the same save for the fact that it does not have quite a considerable and significant impact.<sup>10</sup> If you look in the CTRL Environmental Statement they explain that between 35 to 39, not unless it is audible, is not high enough to be significant and significant impact occurs at 40. It may be that the difference Mr Methold was referring to was an accounting of properties within the 35 band of CTRL and there is not in Crossrail. That is largely to be clear, given the current climate in which we work, about legal requirements for an Environmental Statement what one has to report is significant effects. It would be obfusatory to report a lot of the effects that were not significant. On the other hand, compared with CTRL, we do, in fact, show this in contours, not in the Environmental Statement, but in the Specialist Technical Report, under 25. I really cannot discern any material that is between the two approaches.

3151. Mr Methold also criticised the Environmental Statement for not identifying the properties that suffered significant effects as a result of groundborne noise. Can you explain your position on that please, Mr Thornely-Taylor?

*(Mr Thornely-Taylor)* It does identify a number of significant effects, it is zero. It explains that all the groundborne noise effects are mitigatable by measures which are certain to have enough effect to eliminate them, and the answer is none. CTRL had many properties in property count, but Crossrail does not.

3152. Thank you very much indeed, Mr Thornely-Taylor.

---

<sup>10</sup> Committee Ref: A37, Petition on Groundborne Noise, London Borough of Camden, Channel Tunnel Rail Link—Groundborne Noise (CAMDLB-31905-016).

*Further examined by Mr Clarkson.*

3153. **Mr Clarkson:** May I deal with a preliminary point, Sir, just to explain where we are on this calculation. The Committee had it at 10 and we had it at a quarter to ten. May I ask some questions of elucidation so that Mr Methold can hear them and then, in due course, briefly or when appropriate, I shall recall him to deal with this so that you are informed. I can then go on to the points I want to put in cross-examination. Mr Thornely-Taylor, firstly, we had evidence yesterday from you that the figure was some £10.6 million, correct?

*(Mr Thornely-Taylor)* Yes, I referred to that again this morning.

3154. Do you recall I asked specifically that we have the detail of the 11.36 kilometres that were subject to that 10.6 million expenditure?

*(Mr Thornely-Taylor)* It was not asked of me because I was not cross-examined yesterday.

3155. It was asked earlier by me and we were told that we would be given it. Do you recall?

*(Mr Thornely-Taylor)* I have to say, I do not.

3156. I will show you it in a minute, if you like, Mr Thornely-Taylor. I ask the simple question, where is it?

*(Mr Thornely-Taylor)* I have explained in my evidence this morning where the £10.6 million, which is £17 million when others matters are taken into account, came from. It is the costing which has been allowed for, in the global costing of the whole Crossrail scheme, making an engineering judgment

---

The Petition of the London Borough of Camden

---

about what should be allowed for when we take into account the things we do know at the present and will come to light during the detail in the process.

3157. Mr Thornely-Taylor, where is the calculation that enables you to say that? I presume you have the calculation that says, in fact, it is going to be £7 million. Where is the other calculation?

*(Mr Thornely-Taylor)* The calculation was based, as I have said, on an engineering judgment and what I believe the costing people do—the one quantity surveying and cost accounting was not mine—was to look at what we know, make a judgment about what we do not know and make the assumption that excluding the Thames Tunnel and the section east of that, about 70 per cent would be resilient trackform, 30 per within the floating slab and the corresponding rules applied to the remainder. It is not a precise calculation by any case this morning.

3158. Is it finger in the wind or is it science? If it is science it is documented, surely.

*(Mr Thornely-Taylor)* As I have explained it, I understand by the costing people it was an engineering judgment.

3159. The only material the Committee is to have is the document A 39 this morning that says the cost of the FST is £7 million, correct?

*(Mr Thornely-Taylor)* That is what is said in this document, yes.

3160. What is the component of that £7 million? How much of that is residential?

*(Mr Thornely-Taylor)* Most of it is non-residential. I explained yesterday that there is a central section which is very densely populated with buildings with a particular sensitivity: recording studios, concert halls and the like, so the greater part is non-residential.

3161. For churches and the like?

*(Mr Thornely-Taylor)* All of the buildings that are in IPD10 in that table, which I have looked at and you can see on page 2 of D10.<sup>1110</sup>

3162. What is the figure for residential buildings in the additional cost?

*(Mr Thornely-Taylor)* It would be possible to let the Committee have a copy of the document which I gave to Mr Methold on which he has based his estimates. That does identify the buildings within the route windows between Paddington and Liverpool Street.

3163. Were those the 210 sheets you gave him on Friday night?

*(Mr Thornely-Taylor)* That is correct.

3164. I am sure the Committee will welcome that.

*(Mr Thornely-Taylor)* There is a summary on two sheets.

3165. Tell us how many residential dwellings are included in the extra cost at six?

*(Mr Thornely-Taylor)* I do not know that because these buildings have been in my database since the first Crossrail scheme, some have changed use and some I do not have an identification of on their list, they are on the list because of piled foundations or deep basements. It is of no actual relevance to the costing what the occupancy of the building is, all we need to do is look at the building according to its classification in table one in D10.

3166. So your advice to the Committee and us from quarter to 10 to 10 o'clock this morning is that the extra cost is 6.3 million?

*(Mr Thornely-Taylor)* I explained this morning that the best way of looking at the comparative increase that would result from substituting another type of undertaking was best done by taking those requirements that we know about and looking at that in proportional terms. It is then reasonable to say when we look at the larger figure which has been allowed for costing the whole project purposes the proportional increase may be of the same order.

3167. You have, after how many years working on this— How many years have you been working on this, Mr Thornely-Taylor?

*(Mr Thornely-Taylor)* Probably 15.

3168. Fifteen. After 15 years is this the first exercise you have laid before anybody as to the detail of FST?

*(Mr Thornely-Taylor)* I have not even done the detail because, as I have explained once or twice, we do not know what will be the final position as regards building foundations and changes of use and all the matters which will come to light during the detailed design phase.

3169. We will have that in mind and proceed. First I want to set the matrix so that we can agree it so the Committee understands. 24 trains an hour, agreed?

*(Mr Thornely-Taylor)* I will just make sure I do not give any misleading information. During the night it is 16 trains per hour.

3170. Generally 24 trains an hour, 16 at night.

*(Mr Thornely-Taylor)* I believe we are concerned with sleep disturbance, I think we should concentrate on that.

3171. Is the answer yes to that?

*(Mr Thornely-Taylor)* The answer is no, it is 16 trains per hour at night.

3172. How many trains are there in the day?

*(Mr Thornely-Taylor)* In some parts of the day it is 20 and in some parts of the day it is 24.

3173. Exactly. Then we come to night, and we have agreed at night it is 16. Tunnels, 80km per hour, is that right?

---

<sup>1110</sup> Crossrail Ref: P44, Information Paper D10, Groundborne Noise And Vibration, p2.

---

The Petition of the London Borough of Camden

---

*(Mr Thornely-Taylor)* There is a speed profile which varies almost continuously between stations. For most of the tunnels there is a speed limit of 80 and there are sections where 80 is the speed.

3174. The noise we are talking about is low frequency, correct?

*(Mr Thornely-Taylor)* No. I have spent some time this morning distinguishing between low frequency and looking at the Camden exhibit.

3175. Can I just keep this short. Is it your case to the Committee that the noise we are concerned about is not low frequency noise?

*(Mr Thornely-Taylor)* Sir, shall I go over it again?

3176. Yes or no and then add to that, please. Yes or no?

*(Mr Thornely-Taylor)* I would have to say that the case for the Committee is that Crossrail noise is likely to be concentrated around the 50-63 hertz part of the spectrum. That is not low frequency in the context in which we have been talking about it, which would be noise from combustion equipment, low speed reciprocating air compressors and that sort of thing. In the specific case of the report of the WHO authors I think I must answer Mr Clarkson no. You will hear a low rumble, a distant low rumble, should you visit a site where you can hear this noise.

3177. So this case is being promoted upon the basis, is it, Mr Thornely-Taylor, and this will be remembered and quoted in the future, that groundborne noise is not low frequency?

*(Mr Thornely-Taylor)* No.

3178. It is not?

*(Mr Thornely-Taylor)* I hope people will read the transcript and take into account the—I hope—helpful and reasonably detailed explanation I have given as to what the frequency aspects of this are.

3179. Next, groundborne noise can reach the ear without passing through the air, correct?

*(Mr Thornely-Taylor)* I think you are probably referring to the fact that you can sometimes hear noise in bed that is coming up through the bed and through the pillow.

3180. That has the capacity, does it not, to cause greater effect than would be expected with airborne noise at a similar level? Do you agree?

*(Mr Thornely-Taylor)* No. The difference between vibration-free groundborne noise and noise from a lorry passing in the road is quite small because with closed windows, and I did make that caveat, by definition as the airspace has been blocked off sound can only get in your building by vibrating the walls if it is a lorry going by. The difference is that it is surfaces that are radiating the noise that are not the same as they are with a passing lorry. I accept the point made by Mr Methold yesterday that you are less likely to be able to move to another room if you

want to reduce the noise and that is probably where groundborne noise can be differentiated from noise from vehicles in the street.

3181. Let us ask the question again and get a simple answer, please, Mr Thornely-Taylor. Groundborne noise will cause a greater effect than would be expected from airborne noise at a similar level, yes or no?

*(Mr Thornely-Taylor)* I have to say no because it is not a simple point. If I said yes I would be oversimplifying it.

3182. Would you have a look at your Crossrail document, please? I have in front of me the Crossrail Technical Report volume one of eight. I am not sure what the number is.

*(Mr Thornely-Taylor)* I know the one.

3183. It is the RPS document.

*(Mr Thornely-Taylor)* I know it very well.

3184. What I just read to you is a direct quote from 2.15 which is a document produced by Crossrail. Do you say no again?<sup>1211</sup>

*(Mr Thornely-Taylor)* I would be glad to read out what is in that document because it is more or less the same as I have just been explaining to the Committee.

3185. I just read it out to you. Do you want to have a look at it?

*(Mr Thornely-Taylor)* I would prefer that we read extended passages from it because I have explained in that document the same concepts that I have just been explaining to the Committee.

3186. I will read the full sentence: “The second feature is that at night groundborne noise may reach the ear without passing through air through the bed and pillow and causing greater effect than will be expected from airborne noise at a similar level”. Right or wrong?

*(Mr Thornely-Taylor)* A different question, not the general point that Mr Clarkson put to me a moment ago.

3187. It was exactly that.

*(Mr Thornely-Taylor)* I did not agree to the general proposition that groundborne noise and airborne noise were essentially different.

3188. Explain how that is wrong on that basis?

*(Mr Thornely-Taylor)* When the sound comes up through the pillow it is different because, as I explained a little while ago, the noise from a passing vehicle in the road, though it does vibrate the structure, tends to vibrate a different part of the structure and there would probably be less of that effect from a lorry than there is from an Underground train.

---

<sup>1211</sup> Crossrail Ref: P44, Technical Report (UNEWO-STR109-011).

---

 The Petition of the London Borough of Camden
 

---

3189. Let us really try and get this clear. It is your solemn case, Mr Thornely-Taylor, that it is noise through the pillow that will cause a greater effect than airborne noise at a similar level. Seriously?

*(Mr Thornely-Taylor)* Yes.

3190. Very well. May we proceed on that basis. The characteristic is that groundborne noise tends to be the same in all rooms, does it not, subject to a slight reduction or increase in floor level?

*(Mr Thornely-Taylor)* Yes, Mr Clarkson is right. At the same floor level there would not be much difference as you move around the rooms on that floor but there is a slight reduction as you move up the building.

3191. Unlike the noisy lorry in the street outside, I cannot move rooms, can I?

*(Mr Thornely-Taylor)* That is quite right.

3192. Noise insulation regulations cannot help me if there is a problem, can they?

*(Mr Thornely-Taylor)* No, they cannot.

3193. Once it is there it is fixed, is it not?

*(Mr Thornely-Taylor)* No, it is not fixed because, quite rightly, you had some evidence yesterday about the importance of the maintenance regime on the railway, the condition of the rail surface and the wheels of the train and noise levels do vary quite considerably over time.

3194. That goes to my next point, and the Committee has picked this up, that there is a point at which such as wheel flats and rough rails have the characteristic of deteriorating groundborne noise, do they not?

*(Mr Thornely-Taylor)* Yes, they do.

3195. You told us yesterday that many lines were worse since 1994, is that right?

*(Mr Thornely-Taylor)* Yes.

3196. So when we design this now we anticipate, do we not, deterioration?

*(Mr Thornely-Taylor)* We anticipate a maintenance regime that will intercept deterioration that takes the roughness of the rail and the wheels beyond the point that has been assumed in the moderately pessimistic predictions that have been made.

3197. What specific allowance have you made, if any, for that deterioration or failure of the maintenance regime?

*(Mr Thornely-Taylor)* The spectrum of roughness that is in the model is worse than good spectra that you find on the railways by a sufficient margin to allow for the fact that with a maintenance regime there is a starting point when things are good, there is a deterioration over time and maintenance is triggered, things drop back to being good and then deteriorate again. It is a sawtooth shape and the assumption in the modelling allows for us to be at the top of the sawtooth.

3198. What allowance is that, how many dB(A)?

*(Mr Thornely-Taylor)* There is actually a large difference between the assumption in modelling and the roughness levels you find on very good systems. Five or, in some cases, as much as 10 dB(A) difference.

3199. So the picture is—I think you said 7 dB(A) yesterday—poor maintenance could increase the groundborne noise by some 10 dB(A), is that fair?

*(Mr Thornely-Taylor)* Things can go badly wrong and it can be as much as 20.

3200. Do we look at this in the terms of this is a railway that is there and should be analysed for a few years or do we look at it in the longer term?

*(Mr Thornely-Taylor)* We are very much looking at it in the longer term because in normal environmental assessment practice we would go out and look at the baseline and see what effect the development is going to have in the context of the baseline and judge it using that comparison. If we had done that we would have found through that section I mentioned where all the theatres are, for example, a very widespread incidence of high levels of groundborne noise from the existing Underground system and we could have said these theatres are suffering this much noise from the Underground system and the addition of this project will make a very tiny change in that. The impact is not significant without any mitigation at all. The policy that we adopt is to assume during the 120 year life of Crossrail the other Underground lines will be re-railed and track will be installed at some time in the future on not all of them but some of them and that will reduce their level of noise by the substantial margin that we have already heard about for Crossrail.

3201. Why? Why should they?

*(Mr Thornely-Taylor)* I am simply quoting from my knowledge of what takes place in the organisation that manages the Underground.

3202. Let us take the logic. I am not interested in the organisation but the logic. What you are saying is that some are unacceptable, Mr Thornely-Taylor, are you not?

*(Mr Thornely-Taylor)* Some of the existing Underground lines are severely unacceptable.

3203. “Severely unacceptable”, let us keep that in our minds. Let us go forward to policy. You tell us you have been involved in this business for 40 years. Have you been constrained by any policy in those 40 years as to groundborne noise from Underground railways?

*(Mr Thornely-Taylor)* Forgive me for saying this but I have actually made the policy.

3204. You have not done very well, have you, when the Victoria Line is a severe nuisance?

*(Mr Thornely-Taylor)* The Victoria Line was designed before I came into the field. It was designed in the early 1960s, I started the consultancy in 1968.

---

The Petition of the London Borough of Camden

---

Although I did do some work on the Victoria Line, it was about designing noise attenuators for plant rather than the operating railway.

3205. What policy have you written?

*(Mr Thornely-Taylor)* I have written the policies of all the railways that have policies, I think.

3206. You call that policy but that may be the financial objective of a railway undertaking and that is not policy, is it not?

*(Mr Thornely-Taylor)* I have done my work without being constrained by financial considerations other than being practicable in one's approach to engineering decisions which all engineers have to do.

3207. Let us not beat about the bush. The issue here is it is no engineering problem to achieve this, it is how much it costs, is it not?

*(Mr Thornely-Taylor)* Certainly you will often hear an engineer say he can do anything at a cost.

3208. How many railways have you promoted before parliamentary committees in one form or another?

*(Mr Thornely-Taylor)* It began with the first of the Docklands Light Railway Bills followed by the Beckton Extension, followed by the City Extension, the Croydon Tramlink Bill, the Lewisham Extension of the Docklands Light Railway, the Jubilee Line Extension, Crossrail first time around, the Channel Tunnel Rail Link.

3209. We can summarise it as lots.

*(Mr Thornely-Taylor)* Yes.

3210. On every occasion you have persuaded, have you not, that there should not be an excessive cost as you perceived it for your promoters?

*(Mr Thornely-Taylor)* I have not been concerned with cost beyond making practicable engineering decisions.

3211. Let us see how the world has moved on, can we? Before we do see how the world has moved on, do you think the dwellings affected—LBC 26—of some 50,000-60,000 people in London hearing a rumble from the old line, is acceptable?

*(Mr Thornely-Taylor)* I am sorry, I am just turning up LBC 26.

3212. Yes. Do you think the figures over 40, 45, 50, 55, 60 are acceptable?

*(Mr Thornely-Taylor)* Indeed not. That was what I had in mind when I said that some existing lines were severely unacceptable. The thought of groundborne noise at 60 is excruciating.

3213. Do you accept as a generality that the world now is more environmentally careful than it was when you started in your profession?

*(Mr Thornely-Taylor)* Yes.

3214. There has developed, has there not, the notion of "polluter pays"?

*(Mr Thornely-Taylor)* Yes.

3215. We have a mayoral approach towards an ambient noise strategy, do we not?

*(Mr Thornely-Taylor)* Yes.

3216. We have local authorities now who either formally or informally are developing policies dealing with groundborne noise saying 35 dB(A) max, LBC11.

*(Mr Thornely-Taylor)* Not entirely. I think we do need to bear in mind that the policies in the Camden exhibits are about developers proposing new buildings affected by existing Underground lines to avoid this greater than 60 excruciating effect that I have just been referring to.

3217. No, to avoid greater than 35.

*(Mr Thornely-Taylor)* That is nothing to do with the design of new railways, these policies are all about the design of new buildings affected by existing groundborne noise.

3218. I am not going to accept that but we need not debate it other than to say this: what is the difference? If I am living in a dwelling and it is a new one above a railway or you put a railway beneath my dwelling, what is the difference?

*(Mr Thornely-Taylor)* The differences are many. The approach that is necessary to meet the requirements of, for example, Camden UDP is first of all to predict what the likely level of groundborne noise will be in the proposed new building and if it is above Camden's requirement to incorporate what is known as base isolation in the building where you put springs under the foundations of the building. It is a completely different area.

3219. That is the engineering, Mr Thornely-Taylor. What is the difference as to whether 35 is acceptable according to the Camden UDP whether it is a railway under or a dwelling over? It is unacceptable to exceed is the point, is it not?

*(Mr Thornely-Taylor)* No, it is not. Going back to my point about practicable engineering, it is the difference between if you are addressing measures to isolate one building, what is appropriate is not the same as when you are addressing what is happening to hundreds of buildings above a complete new railway. They are a different set of considerations to take into account when making the judgment.

3220. But the noise standard is the same, is it not?

*(Mr Thornely-Taylor)* For a different purpose.

3221. Look next, please, at LBC9 and 10. Nine, first of all, the American Public Transit Association design goals. I think you invoked these as advisory, did you not?

*(Mr Thornely-Taylor)* LBC9 in my pack is the American Public Transit Association.

---

The Petition of the London Borough of Camden

---

3222. Yes.

*(Mr Thornely-Taylor)* I do not think I have ever invoked them. I have never really understood them. They have been in front of me in each of the tribunals where we have had this argument and ended up with 40 as a policy.

3223. Did you have in front of you the latest material that is the FTA document, which is LBC9?

*(Mr Thornely-Taylor)* We had that for the Channel Tunnel Rail Link.

3224. Yes.

*(Mr Thornely-Taylor)* In my pack FTA is not LBC 9.

3225. LBC 10, the next one.

*(Mr Thornely-Taylor)* Yes.

3226. Can we agree that in the United States groundborne noise impact assessment criteria are set at 35 for frequent events?

*(Mr Thornely-Taylor)* As they are here in Crossrail, our assessment criteria start at 35 as we were looking at a moment ago. I am not sure that this has been reproduced accurately because I do not think the assessment is in the original document, but I will let that pass.

3227. Good.

*(Mr Thornely-Taylor)* And compare those levels with the assessment criteria of both the CTRL and Crossrail where 35 is the lowest number in the matrix for considering groundborne noise.

3228. Is it your case that the Committee should impose a maximum dB(A) of 35, in which case I will sit down?

*(Mr Thornely-Taylor)* It is my case that the Committee should ask for an approach to the procurement of the railway that will achieve the very good outcome that we achieved with the Jubilee Line Extension bearing in mind everything that takes place between imposing a number and writing the words to go with it and writing contract documents and administering the contract and checking the performance of the contractor. I firmly believe, and it is my own decision—I could have taken a different view but I do not have to pay for the railway—the way we did it works best. I firmly believe that the Camden approach is actually damaging in introducing concepts like Best Practicable Means. We do not need Best Practicable Means, we can do these numbers. We need to write them in in the precise way that will achieve them in the contract in ways that do not give the contractor a let-out but in ways which bring about a system that for the greater part of it is much better than 40, which is what you get from adopting this as an approach. I firmly believe as a very experienced practitioner in this field that we are doing it right. If it ain't broke, don't fix it.

3229. From what you have just said, are you advising the Committee that if they are persuaded as to the Camden 35 dB(A) plus Best Practicable Means to say take out Best Practicable Means, is that right?

*(Mr Thornely-Taylor)* Yes. If the Committee were attracted to the number 35, I would recommend they just changed 40 to 35, but the consequences of that would be very large because I have already talked about the uncertainties and the unforeseen problems that arise when the detailed design comes along. I do not think it would be practicable and therefore we would be unable to be sure of achieving the good outcome that I have talked about, in those circumstances, without taking a wholly different approach and looking at a floating track railway rather than a resilient base railway. I do not think we should put in best practicable means.

3230. We will note that and I am sure your clients will appreciate it. LBC17 next, please. I want you to help the Committee with the comparators. Is there a difference between 35 dB and 40 dB?

*(Mr Thornely-Taylor)* There clearly is a difference. I am not quite sure of the question.

3231. The answer is yes?

*(Mr Thornely-Taylor)* There is a five unit difference.

3232. A difference so important that some shall have the benefit of a ceiling of 35 and some shall not?

*(Mr Thornely-Taylor)* It is the usual way of classing different noise impacts into bands, to carve them up into 5 dB steps.

3233. There is a difference between 40 and 35 that is so substantial that it is worth doing for a church and not for an office or a residence?

*(Mr Thornely-Taylor)* I do not use your semantics. I simply say that five is the customary way of dividing up a range of targets into a convenient set of classes. That is not so substantial. Mr Methold himself said it was a noticeable difference. I referred to Mr Methold's evidence and I agree with him.

3234. You are not going to trivialise it, are you, because otherwise you are deceiving us by saying that a church should have 35. There must be a difference.

*(Mr Thornely-Taylor)* There is a difference. I hope the Committee can hear it for themselves. They will not find it enormous but they will notice it and see why we use five as a classification system. There was a moment when we were slightly alarmed and Mr Methold was saying there was a three fold change in energy. I was at pains to point out on day seven that the ear does not respond to energy in that way. It is a significant change but not as big as you would think from that comment.

3235. On day eight I think you told us that a 10 dB(A) increase is a doubling?

---

 The Petition of the London Borough of Camden
 

---

*(Mr Thornely-Taylor)* I did.

3236. And a five is a 50 per cent increase. Correct?  
*(Mr Thornely-Taylor)* I did not say that. It is not. If you take the square root of two, you get 1.4.

3237. What is it then?  
*(Mr Thornely-Taylor)* 40 per cent.

3238. For the Committee, what they are talking about is a church being treated differently to the extent that it will have a 40 per cent reduction in groundborne noise compared to a bedroom.  
*(Mr Thornely-Taylor)* Yes.

3239. Why?  
*(Mr Thornely-Taylor)* Because what you are concerned about in bedrooms is primarily the effect of noise on sleep. What we are concerned about in churches and some of the other categories there, which also have levels lower than 40, is the effect of sound on acoustical characteristics of the space, because people are listening to music where sound would be intrusive in a qualitative, artistic sense and the artistic qualities of a building are regarded as a valuable resource; whereas the effect of noise is studied from a completely different standpoint. It is studying what effect noise has on a population of people, having already had a tour round it in the document by the World Health Organisation authors, and the conclusions they make are now well known to the Committee.

3240. We are not talking about sound studios or large concert halls. A congregation of a church is to be advantaged compared to somebody sleeping in their bedroom. Is that right?  
*(Mr Thornely-Taylor)* Broadcasting takes place from a lot of churches. That is the principal reason for it. For example, they are not affected by Crossrail. They were affected by Thameslink 2000. Southwark Cathedral is an important broadcasting location and there are many other churches like that. Churches are also used for prayer and meditation where intrusion by noise from underground trains is more significant than the effect that they have on sleep.

3241. Your advice is that it would be intrusive to have 40 dB(A) on reflection and prayer in a church?  
*(Mr Thornely-Taylor)* A combination of those considerations of the use of churches for broadcasting, the uses of churches for uses we all know churches are used for, is the reason why it is placed in the 35 dB class rather than the 40 class but not as sensitive, for example, as recording studios or concert halls.

3242. What is the philosophy that advises offices and bedrooms should have the same groundborne noise climate?  
*(Mr Thornely-Taylor)* It might be arguable that a higher figure should be used for offices. It is largely done for convenience because we cannot easily distinguish the uses of all buildings along the route.

It is a safety measure really. We have been caught out in the past where buildings that were once offices have become residential. If I were to go through all the considerations, I probably would come up with a figure higher than 40 for offices.

3243. You say, "It might be arguable that offices should be higher." It is the policy in the United States that residences should be lower, is it not?  
*(Mr Thornely-Taylor)* These organisations, APTA and the FTA, have guidelines. The individual railway undertakings make their policies and we do not have those in front of us.

3244. I am not going to debate the semantics of guidelines and policies before the Committee. They can form their own judgment. That is the picture in the United States, is it not?  
*(Mr Thornely-Taylor)* I do not think they have offices in there.

3245. I said "residences".  
*(Mr Thornely-Taylor)* I must have misunderstood the question. I am sorry.

3246. What you are saying is that, where there is parity, you have the convenient approach of saying offices should be higher; whereas looking at it on the other approach the argument for residences being lower has the support of the United States guidelines, does it not?  
*(Mr Thornely-Taylor)* Lower than what?

3247. Than 40.  
*(Mr Thornely-Taylor)* We see ranges of 35 to 43 in these pages. If you look at the source documents, you will see ranges as high as 50.

3248. I am looking at your design aims. Let us go to the Victoria Palace and Billy Elliott because that is something the Committee has particular experience of. Is it your case that the noise that was measured at 43 is about right?  
*(Mr Thornely-Taylor)* No.

3249. Have you measured it?  
*(Mr Thornely-Taylor)* Not in the Victoria Palace Theatre, no. I misunderstood the question. Are you asking me whether it is an accurate measurement?

3250. Do you take any issue with it?  
*(Mr Thornely-Taylor)* I have no reason to say that Mr Methold did something wrong, no.

3251. Is that the sort of experience in groundborne noise terms that the Committee should contemplate when it comes to assessing the quality of groundborne noise?  
*(Mr Thornely-Taylor)* No. It is a very good case in point because all round that area what you hear is noise and you feel vibration.

3252. **Mrs James:** When you are on American cruise liners they automatically issue every passenger with a sleeping pill and earplugs because the vibration is

---

The Petition of the London Borough of Camden

---

so bad. Sleep is obviously recognised as a problem. People want to sleep and I am very concerned about the noise element.

*(Mr Thornely-Taylor)* That is a very good illustration, if I may say so, of what is meant by low frequencies because the noise on ships is very low frequency. I sleep extremely well on ships but not everyone does. That is why you need those measures.

3253. You would not want those measures at home, would you?

*(Mr Thornely-Taylor)* If we were contemplating anything remotely resembling that effect, I would not be recommending it.

3254. **Mr Clarkson:** I would like to move to the empirical basis for your evidence and that is A38. There are two areas I want your help with. The first is paragraph three. The material in that document supporting 40 dB LA maximum is the Victoria Line Experience?

*(Mr Thornely-Taylor)* Yes.

3255. Social surveys conducted in the 1990s?

*(Mr Thornely-Taylor)* Yes.

3256. The JLE experience?

*(Mr Thornely-Taylor)* Yes. I am not sure the social surveys were in 1990.

3257. The 1990s.

*(Mr Thornely-Taylor)* Yes.

3258. That is the basis upon which you tell the Committee, plus your 40 years, that there should be the 40 dB(A) max?

*(Mr Thornely-Taylor)* Not entirely. I am somewhat influenced by the fact that we have had this sometimes very heated debate in so many tribunals, all of which have concluded that the approach which I have proposed was the best one.

3259. That is your empirical data.

*(Mr Thornely-Taylor)* It is not empirical. The decisions of the tribunals are all on record.

3260. No; the decisions of the tribunals were based on such material as you chose to put before them, presumably.

*(Mr Thornely-Taylor)* No. We had vast amounts of evidence on CTRL from opponents which I would not wish to burden the Committee with, because it is history now. The case put for the CTRL was voluminous.

3261. That is what you are presenting to the Committee here today?

*(Mr Thornely-Taylor)* Yes.

3262. Tab B is not the social survey, is it? This is a complaints record?

*(Mr Thornely-Taylor)* That is correct.

3263. There are complaints, are there not, below 40 on table two?

*(Mr Thornely-Taylor)* The Wigmore Hall, yes.

3264. The Westbury Hotel?

*(Mr Thornely-Taylor)* The Westbury Hotel is 38 to 50.

3265. Below 40?

*(Mr Thornely-Taylor)* No, 38 to 50.

3266. There are complaints where the noise regime somewhere in that building is below 40.

*(Mr Thornely-Taylor)* I am sure there are places in the building where it is even lower still. Complaints are driven by the high noise levels.

3267. Exactly, at 35, 38, 38 and 40.

*(Mr Thornely-Taylor)* No. They are 38 to 50 at the Westbury Hotel, 35 to 48 at Catherine place and 38 to 45 at Gibson Square. Very few are in the high noise level.

3268. How do you know? Show us the material that justifies that answer because the document does not say that, does it?

*(Mr Thornely-Taylor)* I do not know if it exists. I cannot offer any. Any reasonable person looking at that table would conclude that people were complaining at Catherine Place because the noise was up to 48.

3269. A reasonable person would read that there were complaints in the range 35 to 48. You have no evidence to say which end of the range it was.

*(Mr Thornely-Taylor)* I do. It is reported at 35 to 48.

3270. You have no evidence to say that it was not at 35. It may have been in the basement or on the ground floor.

*(Mr Thornely-Taylor)* I think we are stretching credulity beyond reasonable lines.

3271. You may think that but is there any other material? This is your document.

*(Mr Thornely-Taylor)* I am sure in the attic of the Westbury Hotel it is 28. Maybe people were complaining from there.

3272. In which case there is a problem, is there not?

*(Mr Thornely-Taylor)* I am not sure whose problem it is.

3273. Is there any evidence that people did complain from that area in the Westbury Hotel? It is all very well to be flippant but this is a serious, technical issue and I am looking for serious, technical data. Is this the best you can do?

*(Mr Thornely-Taylor)* This is nothing more and nothing less than what it says it is, a sheet produced by the London Transport Research Laboratory listing the measured noise found due to trains in places where there were complaints. They have analysed levels over, in many cases well over, 40 in all places where people sleep. They did not find them

---

The Petition of the London Borough of Camden

---

at Wigmore Hall and it is a very high quality concert hall with the other considerations that I have already commented on.

3274. Let us move on to tab C, the social survey. 2.2, the last sentence: "... statistical confidence levels in the survey results are very low." You rely on that?  
*(Mr Thornely-Taylor)* It is very interesting. I do not rely on it entirely. I wish it were bigger and I could. In years to come, we will be able to because with Defra we are working on a much bigger survey.

3275. We do not have that. 2.4: "Because of the small number of results, the survey does not serve to establish, with the degree of confidence which attaches to the surveys of noise from above-ground transportation, the relationship between noise from underground trains and its effect on people. It nevertheless adds to the existing small database on the subject although any interpretation placed on the results must be treated with caution." It is statistically unreliable, is it not?

*(Mr Thornely-Taylor)* It is a small sample. It is the dog that did not bark in the night. It could have shown us that people were complaining above 40. It did not. That is the real reason why it is here. It is not by any means the sole justification for the approach, but it is another of several pieces of information that give us confidence that what we are doing is right.

3276. It is the one added to the 1969 survey which we have looked at. Over the page we see what, in statistical terms, I think is called a heroic assumption at 3.1, half-way down: "In the Crossrail survey the correlations between noise measurements and annoyance due to noise were particularly low. While the small size of the sample is one cause of this, the low correlation between noise (as opposed to vibration) and annoyance may be indicative of a result that would be obtained in a larger survey." Is that statistically robust or is that flannel?

*(Mr Thornely-Taylor)* It is the point that I made earlier this morning, that low correlation does not mean poor survey quality necessarily. It may just mean that the cause and the effect that you are studying are very weakly linked.

3277. Do you and I invite the Committee to approach that document on the basis of your conclusions at 4.1: "... the confidence limits of the results are very low." Is that the way we approach it?  
*(Mr Thornely-Taylor)* I invite the Committee to treat it with caution, to regard it as something which could have shown there was a problem but did not, but to consider all the wider evidence which I have also given.

3278. Let us go to tab D, the Jubilee Line Extension. The Environmental Impact Assessment, I believe it was, declared the desirable level at 35 dB(A). Is that right?

*(Mr Thornely-Taylor)* It is the analogy to what we have in the two LBC exhibits, where we have 35 as the first entry in the assessment matrix. If we look at LBC14, we see the Crossrail impact assessment

criteria and, if we look at LBC15, the Channel Tunnel Rail Link, both of those have 35 as the onset of low impact. If absolutely nothing else mattered, it would be nice to get below 35.

3279. Can we advise the Committee that the approach should be and remain that it is desirable to achieve a level of 35 dB(A)?

*(Mr Thornely-Taylor)* To the extent that it is desirable to eliminate everything that has even a low classification, yes, but in the real world we cannot do that.

3280. Who wrote the Jubilee Line Extension Environment Assessment on Noise? Was that you?  
*(Mr Thornely-Taylor)* I was then a sub-consultant to Environmental Resources Limited, who wrote it. I cannot remember who wrote that bit.

3281. Is it the picture that you came in later and modified it, saying, "What we really want is 40 because it is cheaper"?

*(Mr Thornely-Taylor)* I am not changing what is there. 35 is the lower boundary of the low impact classification. It was then; it is now and it will be, I hope, for time to come.

3282. Let us go to the guidelines for community noise. This is a document produced by four acousticians. Am I right?

*(Mr Thornely-Taylor)* Forgive me if I say no. I do not mean to be awkward but Professor Berglund is a psychologist.

3283. Sorry; four individuals. He was in charge of sleep, was he?

*(Mr Thornely-Taylor)* Brigitta is a woman.

3284. Those are the views expressed of those four people?

*(Mr Thornely-Taylor)* According to these pages, they are responsible for the views expressed in this document.

3285. What we must not believe, must we, is that this is a document of World Health Organisation policy that is different, for example, to the FTA policy in most states?

*(Mr Thornely-Taylor)* It is not World Health Organisation policy.

3286. Could you show us, please, where the document deals with what we have been concerned about for the last two days, which is groundborne noise?

*(Mr Thornely-Taylor)* It does not explicitly deal with groundborne noise.

3287. It is careful to say, also, is it not, that where there was a large proportion of low frequency sounds you should look at lower guideline values?

*(Mr Thornely-Taylor)* In giving my answer I must remind the Committee of my explanation as to what is meant by low frequency sound.

---

The Petition of the London Borough of Camden

---

3288. In your work have you done an investigation of any complaints on recent railways that you have promoted?

*(Mr Thornely-Taylor)* No.

3289. Do you accept the advice of the Wilson Committee in 1963—this is LBC30—that complaint does not always give a reliable guide to noise?

*(Mr Thornely-Taylor)* I said quite a lot about that yesterday. I use that as a basis for drawing conclusions from the London Underground information without challenging it. I have no idea if it is right but it feels reasonable.

3290. The Wilson comment you think is right?

*(Mr Thornely-Taylor)* I am looking at LBC30 and reading about "... Only 5 to 10% of residents exposed to noise actually complain or participate in related activity".

3291. Yes. The Wilson Committee quote at the top, do you agree with that?

*(Mr Thornely-Taylor)* I agree that complaint is a surrogate for annoyance. Everybody who is annoyed does not complain.

3292. Good. Have you, as a result of the work and issues that you have faced over the years, done any surveys of buildings that have 35/40 to ask you what they thought?

*(Mr Thornely-Taylor)* I am wondering whether the question is about surveys in the sense of a sample population that one can treat statistically or whether I am being asked about individual cases.

3293. No, sample population we can treat statistically.

*(Mr Thornely-Taylor)* I have done no social surveys. I am not a surveyor, I do not have the qualifications to do that.

3294. What we do not have in that bundle is the reality of what has happened on your CTRL at North Downs, do we?

*(Mr Thornely-Taylor)* There is a page about the North Downs.

3295. You know where the tunnel is, do you not?

*(Mr Thornely-Taylor)* Yes.

3296. You know where the local authority is, do you not?

*(Mr Thornely-Taylor)* Tonbridge and Malling.

3297. Yes. Did you contact them?

*(Mr Thornely-Taylor)* I have had completely unrelated contact with Tonbridge and Malling. They have been clients of mine but not about this.

3298. Have you sought any information as to whether the 40 dB(A) on the CTRL was working?

*(Mr Thornely-Taylor)* I am party to a lot of information about these things because of my links with the railway design and construction and promotion work.

3299. You heard what Mr Methold did, he applied a scientific method. He wrote to local authorities and asked.

*(Mr Thornely-Taylor)* I have to say that Union Railways do not have to ask, they receive comments unsolicited. Even I have received unsolicited comments from people living above the North Downs tunnel, whether or not they knew my connection with the parliamentary proceedings or whether they just phoned me up because they found me on the internet I do not know.

3300. Mr Thornely-Taylor, you have received complaints about the North Kent tunnel, is that right?

*(Mr Thornely-Taylor)* Yes.

3301. Where have you told us that? In any document, in any analysis of CTRL, any Environmental Assessment for this Crossrail?

*(Mr Thornely-Taylor)* No, I certainly have not given evidence about all the phone calls I receive from people about groundborne noise which is extensive. I am not sure if it would be helpful. I am well aware of the fact that there are problems in North Downs tunnel.

3302. What was promoted by you relevant to North Downs tunnel at 40 has caused a problem, do you agree with that?

*(Mr Thornely-Taylor)* I explained in detail yesterday what had happened. It is the application of the prediction method with a very large uncertainty band attached to it, and what I think Union Railways would say, who are no longer my client. What I think they would say is they did what was intended which was to predict for average effect of 40 which inevitably means some will go over 40. That is not what Crossrail will do but it appears to be what Union Railways did. One would expect from the nature of the statistical properties of their prediction methods levels up to 48 above the North Downs tunnel, maybe even higher.

3303. Let us just look at LBC35. I am going to return to that. Can we go to LBC35, please? While we turn that up, it is the recollection on this side of the room, and perhaps you can confirm, that Tonbridge and Malling were asking for a 35 dB(A) standard, were they?

*(Mr Thornely-Taylor)* The petition against the CTRL Bill in Parliament was brought on behalf of the Kent authorities acting together.

3304. Yes.

*(Mr Thornely-Taylor)* They were calling for a very large number of changes to the policy. If we did need to go there I think we ought to look at at least a report of the deliberations because it is highly complex.

3305. Is the answer yes?

*(Mr Thornely-Taylor)* The answer is no. They were asking for a complex matrix of changes to what was being promoted by Union Railways.

---

The Petition of the London Borough of Camden

---

3306. One of which was 35 dB(A), was it not?

*(Mr Thornely-Taylor)* You may be right. I would need to revisit the papers. It may not have been couched in such clear terms. For example, one of the things they wanted was a matrix of targets that were related to background. From memory, I think that was construction noise but I would need to check the papers. I do not want to mislead anyone by giving a simple answer where I might be wrong.

3307. The document that we have exhibited now is the product of Mr Methold's work. He gave evidence yesterday that there was no noticeable vibration.

*(Mr Thornely-Taylor)* I heard his evidence as being that the vibration was below the threshold of no probability and adverse comment. I had better check the transcript but I think that is what he said.

3308. I may have got it wrong.

*(Mr Thornely-Taylor)* I explained this morning that does not at all mean that it is not noticeable. He did say he had witnessed it and could not feel any perceptible vibration.

3309. That is good enough for me. Just give us the reference. What paragraph is it?

*(Mr Thornely-Taylor)* It is Day Ten and paragraph 2964.

3310. Mr Methold could not notice any vibration. Simply and starkly, and you have explained the circumstances of what was predicted, that 40 has failed those people living above the North Downs tunnel, is that right?

*(Mr Thornely-Taylor)* That is why I do not want Best Practicable Means in our case.

3311. This is the highest number of properties surveyed in any document that you or we lay before the Committee, is it not?

*(Mr Thornely-Taylor)* I do not think any social survey has been done.

3312. This is the highest number of buildings surveyed, is it not?

*(Mr Thornely-Taylor)* You mean measured sound levels?

3313. Yes. It is the best we have got, is it not, Mr Thornely-Taylor?

*(Mr Thornely-Taylor)* No, we have got the London Underground report from which we drew the 90,000 people at 35 dB(A).

3314. Is that measured or is it theoretical?

*(Mr Thornely-Taylor)* No, it was a mixture of the two. There is measurement from which an extrapolation and interpolation of methodology was derived and validated by the measurements which compared those extrapolations with actual measurements.

3315. The North Downs tunnel is the highest number of—I will bring it up-to-date—modern measurements that we have before the Committee, is it not?

*(Mr Thornely-Taylor)* I have not seen the results. I see in front of me, as we all do, that of 90 properties 81 per cent of them—

3316. Do you have any data? Are you still instructed by those responsible for running the railway in noise terms?

*(Mr Thornely-Taylor)* I did say that Union Railways were no longer my client but I do receive quite a lot of information by various channels about the railway world.

3317. This is the last topic I have, so it rounds it all up. It is under the concept of design, bringing all that into the question of design. Both sides are agreed, are we not, that we can achieve an engineering solution, we have dealt with that already?

*(Mr Thornely-Taylor)* Yes.

3318. What is proposed here by way of specification, and I will read it out, is: "The nominated undertaker will be required to design a permanent track support system so the level of ground noise near the centre of any noise-sensitive room is predicted in all reasonably foreseeable circumstances not to exceed . . ." 40 dB(A). You told us that is a design principle given to the engineers when they start to design the railways, is that right?

*(Mr Thornely-Taylor)* It starts further back than that. The principle has been adopted by the Department for Transport as being the approach that will be placed upon the nominated undertaker.

3319. As you told us that is a design principle, that is what they have before them when they start designing the railway. Who is going to design it? Do we know that yet?

*(Mr Thornely-Taylor)* I assume the nominated undertaker will appoint a contractor.

3320. Exactly.

*(Mr Thornely-Taylor)* There will be specification documents which are always voluminous against which the tender bid will be prepared and eventually the contract administered.

3321. One of the inevitable criteria for that tender is cost, do you agree?

*(Mr Thornely-Taylor)* Yes.

3322. What is your evidence as to how you have assessed it? Have you assessed it, as we understood it yesterday, with a 5 dB(A) range either side, margin of confidence?

*(Mr Thornely-Taylor)* I explained yesterday that the predictions shown in the specialist expert report have five added to them to account for the known upper band of uncertainty associated with the prediction process that we use.

---

The Petition of the London Borough of Camden

---

3323. When we see 40 dB(A), is that 35 plus 5 therefore?

*(Mr Thornely-Taylor)* Going back to the point I made—I think you corrected me I have been talking about Day Seven but it should have been Day Eight—when I made my presentation where I explained the approach that had been taken, 40 is the predicted figure. What came out of the computer was 35 to which was added an allowance for uncertainty.

3324. Are you any different than the North Downs tunnel where the range of predictions in fact prevented environmental health officers taking it any further because the range of prediction had uncertainties built into it?

*(Mr Thornely-Taylor)* I explained yesterday that the nature of the Union Railways or the CTRL prediction method was that the 95 per cent confidence band lay 8 or 9 dB either side of the central prediction. So a prediction of 40 would produce some at 48 and some at 32. I understand Union Railways considered that having predicted an average of 40 the obligation had been met. Our approach in Crossrail is different. There is a clear obligation to be placed on the nominated undertaker to achieve 40 which means he must include uncertainty.

3325. Where is that as a clear requirement?

*(Mr Thornely-Taylor)* The clear requirement is in D10, information paper.

3326. D10, 2.9, is that what you have in mind?

*(Mr Thornely-Taylor)* “The nominated undertaker will be required to design the permanent track support system so that the level of groundborne noise near the centre of any noise-sensitive room . . .” We have incorporated an improvement over what was in the Environmental Statement because we are no longer restricting ourselves to the ground floor. This is in any noise-sensitive room.

3327. Yes. “. . . is predicted in all reasonably foreseeable circumstances. . .”.

*(Mr Thornely-Taylor)* It is the “reasonably foreseeable circumstances . . .” which is a legalese way of talking about the statistical uncertainty.

3328. There it is at 40. I am the environmental health officer in five or 10 years’ time, I see it is 40, and you have just told us that the statistical uncertainty allows the undertakers to aim off and go above 40. That is inevitable, is it not, exactly the same as CTRL?

*(Mr Thornely-Taylor)* Precisely the opposite of the CTRL, the nominated undertaker has to predict in all reasonably foreseeable circumstances and has to take account of the tail of the distribution that takes you to the edges of the 95 per cent confidence band.

3329. Has anybody said that the CTRL was designed deliberately over 40?

*(Mr Thornely-Taylor)* I gave extensive evidence to Members of this House explaining that the nature of the CTRL prediction model was that you could use it—I used to use the phrase—epidemiologically. You could look at the effect for a long length of railway and while it would be inaccurate to predict the noise effect of any individual building, if you were interested in aggregating the number of properties—40, 45 or so on—because of its statistical nature you would get an accurate figure. But it is agreed between me and my opposite number on CTRL, we both use different approaches but it is agreed that for specific buildings the CTRL approach is not accurate and even for small groups of buildings its accuracy is poor which is why we have the North Downs tunnel problem.

3330. Let us get it quite clear, was the North Downs tunnel deliberately built to have a regime over 40 dB(A)?

*(Mr Thornely-Taylor)* The North Downs tunnel was deliberately built with a location using the method that was put forward in Parliament and found acceptable. That aimed at 40 dB(A) as the predicted level in the sure and certain knowledge that there would be some cases above and below it.

3331. **Mr Clarkson:** That is exactly the same for the engineer’s brief for Crossrail, that they will design it up to 40 dB(A) and in the sure circumstances, whatever you have just said, read or otherwise and all reasonable foreseeable circumstances, there may be some unforeseeable that will take it apart?

*(Mr Thornely-Taylor)* It is the precise opposite of that.

3332. That is what you say but you are not going to be person who will design it?

*(Mr Thornely-Taylor)* I might do.

3333. Let us end with this on the design. What sanction does the Committee have to stop the designers designing their railway up to 40?

*(Mr Thornely-Taylor)* I believe the Committee will obtain the same meaning from paragraph 2.9 that I do and if they do not, I will invite them to indicate so because information paper D9, I understand, has a status of undertake in Parliament. That is not for me to say, it is for Counsel to elaborate on. I believe what is stated here will happen and if it does not, the procedures which were available for dealing with briefs undertaking in Parliament would come into play.

3334. If the undertaking at 40 was changed to 35, there would be an allowance for statistical range, would there not?

*(Mr Thornely-Taylor)* Yes.

3335. There would be inbuilt allowance for maintenance?

---

 The Petition of the London Borough of Camden
 

---

*(Mr Thornely-Taylor)* Yes.

3336. What is wrong with it?

*(Mr Thornely-Taylor)* It is going to cost more, it is going to introduce design uncertainty for the reasons I explained yesterday about the difference between the simple purchase of base plates and its skilled design work required.

3337. It is cost?

*(Mr Thornely-Taylor)* It is design risk. All risk can be converted into cost. Most things can be put into cost. It is not in the estimates that we have been discussing.

3338. That is all I have. Thank you very much.

---

 Re-examined by Mr Taylor

3339. **Mr Taylor:** Mr Thornely-Taylor, you were asked questions about the guidelines of community noise and the point was put that the document is not a document of WHO policy, which you agreed with. You were also put some questions about the relevance of the APTA and the FTA documents that have been presented to the Committee. I want to explore the differences between the APTA and the FTA document and the difference with the guidelines of the community noise document. What is the scientific basis for threshold levels set out in the APTA and the FTA document?

*(Mr Thornely-Taylor)* I think the scientific basis is weak. They are not based on dose response research so much as the experience of views of the authors of the document with some information from the field, but nothing of the kind we would like.

3340. In relation to the guidelines for community noise document, what is the scientific basis for the guideline in table 4.1?

*(Mr Thornely-Taylor)* It is very soundly based work using what are called meta-analysis of a large number of social surveys bringing them altogether and collapsing the data into one conclusion. It is the work that is referred to in the WHO document that underlies the chart which I showed in my presentation to link noise levels of percentage annoyed. Those data are as statistically robust as any information which exists of that nature.

3341. You were also asked about that community noise document, where does it deal with groundborne noise, and you have confirmed that it does not explicitly deal with groundborne noise. Can you explain why the document is relevant to the Committee's consideration of the issues that are before it in this matter?

*(Mr Thornely-Taylor)* I cannot be certain it does not make passing reference to groundborne noise, it may do, but not in the sections we have. To the extent that I was likening the noise of a passenger Crossrail train without feeling the vibrations to the noise of a passenger lorry passing at the end of the road, its transportation noise inside buildings is just like any other, subject to what was put to me by Mr Clarkson, which I agree with, both noise coming up through the pillow and things like that.

3342. You were cross-examined about the information that was provided in relation to the Victoria Line of the Social Survey, various matters

of that kind, and the point was put to you that what we are looking for is serious technical data. Do you recall that?

*(Mr Thornely-Taylor)* I do, yes.

3343. What serious technical data have you seen that demonstrates the adoption of a design criterion of 35 would result in material improvement to the noise climate in people's homes as opposed to the adoption 40?

*(Mr Thornely-Taylor)* I agree with Mr Methold and would likewise say none?

3344. Thank you? The point was put to you regarding the criterion used in the Jubilee Line extension. Do you remember you were referred to the desirable level of 45. Can you confirm to me what the design criterion was that was adopted with the Jubilee Line extension?

*(Mr Thornely-Taylor)* Forty, exactly as in the terms of Crossrail.

3345. Are you aware of any complaints or any records of annoyance being made arising from the Jubilee Line extension in operation?

*(Mr Thornely-Taylor)* No, I am not.

3346. Mrs James raised a point about ear plugs and tablets being provided to people on American cruises. I have never been on an American cruise ship in my life, unfortunately. I want to understand what you said in response, that it was a good illustration of low frequency noise. I want to contrast the position of somebody on one of those cruise ships with the position of somebody in a residential property, above one of the proposed Crossrail tunnels. What are the differences that would be experienced between those two cases?

*(Mr Thornely-Taylor)* Mrs James was referring to low frequency noise in the context of some of the comments made in the WHO document. It is a much lower frequency than what we are talking about caused by the passenger underground trains, though I think the Committee will find when they do hear it, it is a low rumble. It is not low in the sense of low frequency as is known. There is a professional society devoted to low frequency noise and it addresses these exceptionally drumming, pulsating noises, including that well known elusive phenomenon which occasionally gets into the papers in parts of the country. These are all much lower frequencies and have a different effect from anything

---

The Petition of the London Borough of Camden

---

you would hear from a passing underground train. They merit a study and measures to try and understand them and deal with them. No doubt on a cruise ship, ear plugs and tablets are used, but that is quite a different matter from what we are going to get from underground trains.

3347. That was the low frequency aspect of the issue raised by Mrs James. She also mentioned vibration. Can you contrast the position in terms of vibration between Crossrail and the American cruise ship?

*(Mr Thornely-Taylor)* Ships have the vibration problem because of the relatively non-rigid nature of a steel hard ship. There are probably five levels of magnitude different between the vibration on a ship and the vibration of an underground railway. There will be nothing feelable through the tactile sense above the Crossrail Tunnel at any location.

3348. You were also taken to the fact that there was reference made to the London Mayor's Ambient Noise Strategy and also reference to the Local Authority adopted policies we can see the extract from the Ambient Noise Strategy at LBC12. The policy set there refers being required to: "Minimise any adverse impact...". If 40 is adopted as a design criterion, what is your view as to whether there would be adverse impacts or otherwise?

*(Mr Thornely-Taylor)* I think the Mayor's sentence there would be well achieved by the policy which includes the 40 figure using the best available cost-effective technologies, and we will be minimising adverse effect of noise vibration below 40. It would be hard to describe it as an adverse impact. In at least several of the schemes we have looked at the threshold of significant effect is 40. It would be hard to use the word adverse impact below 40. As we have seen from the predictions, we do achieve levels much less than 40 as a result of this approach.

3349. Thank you very much indeed, Mr Thornely-Taylor.

3350. **Chairman:** Mr Clarkson, you asked for permission to recall your witness, I wonder if you still want to do that? Bear in mind this is only to question this particular document?

3351. **Mr Clarkson:** I think I am content in the sense that I am extremely discontent by the fact that you have only had this material at 10 o'clock on day 11. I can submit around that conclusion at the end of 6.3 million additional FST in context, whether it is 8 million or 4 million I think the Committee has got the point.

3352. **Chairman:** Thank you very much. Mr Taylor, do you want to make your final statement.

3353. **Mr Taylor:** I make this statement in the context of the undertakings that have been sought by the London Borough of Camden, which are set out in LBC 37 and 38. Starting firstly with the first undertaking. That seeks to apply the best practical means to construction tunnelling and the temporary

construction railway. The draft Construction Code already commits to a nominated undertaker to employ the best practical means to mitigate noise and vibration in relation to all construction. You have seen that from paragraph 5.1.1 of the Draft Code in information paper D1.

3354. Further, information paper D10 commits the nominated undertaker to meeting the 40 dB(A) L<sub>Amax</sub> threshold in relation to the construction railway. These commitments embrace the matters sought about London Borough of Camden in its first draft undertaking. So far as the consultation issues that were raised in undertaking 2 and 3 apply, there is already extensive provision for consultation with local authorities in commitments given. This includes the creation of the Environmental Health subgroup of the planning forum.

3355. Local authorities and local residents will be provided with the relevant information and will be consulted on matters pertinent to groundborne noise as the project progresses. The references there are to information paper F3, paragraph 2.5(ii) and (iii), information paper F4 and the information paper D10, paragraph 2.10. The main part of the second undertaking 2, that is to say, alternative accommodation during the passage of the TBM. Mr Thornely-Taylor explained that there is no reliable method to assess the likely impact of the passage of the TBM. As a result, the only reasonable basis, he said, on which to approach the undertaking sought by the London Borough of Camden is to assume that it will relate to every residential property above the tunnelling route.

3356. The undertaking sought would therefore give rise to a substantial and unquantifiable additional cost to the project. A scheme for the provision of alternative accommodation has not been provided for in relation to the tunnelling of any railway in the UK before, as Mr Methold confirmed.

3357. Undertaking 5: Maintenance regime. It is common ground that there needs to be an appropriate regime in place to ensure that track and equipment is appropriately maintained so as to control groundborne noise.

3358. Mr Rupert Thornely-Taylor has explained what that entails in his evidence. The promoter has committed to that principle in information paper D10, paragraph 2.10, and will continue discussions with the London Borough of Camden with a view to establishing robust and appropriate assessment criteria.

3359. Undertaking 4: This is the undertaking which relates firstly to the inclusion of best practicable means and, secondly, the adoption of 35 dB(A) L<sub>Amax</sub> criterion to design the railway. I will start first by addressing matters relating to the best practicable means part of the undertaking. Mr Methold explained that in his view 35 dB(A) L<sub>Amax</sub> represented an acceptable level of noise within

---

**The Petition of the London Borough of Camden**

---

residential properties. He accepted in cross-examination the reference to employing best practicable means to the design of the railway was intended to embrace the position where 35 could not be attained. That is not what the words of the draft undertaking 4 achieve.

3360. In any event, the reality is that if the design criteria adopted represents an acceptable level of noise within residential properties, whether that is 30 or 40, then there is no need to also require that best practicable means are adopted and that point was supported by the evidence of Mr Rupert Thornely-Taylor in cross-examination today.

3361. Turning to the issue of whether 35 dB(A) L<sub>Amax</sub> or 40 dB(A) L<sub>Amax</sub> should be adopted. Mr Rupert Thornely-Taylor explained in his experience that designing to a 40 dB(A) L<sub>Amax</sub> criterion produced acceptable living conditions within residential properties. He pointed to the design of the Jubilee Line extension in support of his view. Mr Methold accepted that there was no evidence of complaints associated with groundborne noise from the Jubilee Line extension.

3362. Of course, as well as the Jubilee Line extension, the 40 dB(A) L<sub>Amax</sub> criterion has been applied to the Thames Link 2000 project, the Docklands Light Railway and the Channel Tunnel Rail Link. Events relating to the design of the North Downs tunnel for CTRL are the only situation that the London Borough of Camden point to as indicating that there is evidence that adopting a design criterion of 40 produces an unacceptable result. The Committee, however, is in the position to be confident that adopting 40 as the design criterion for Crossrail will not have the same result.

3363. The reasons for the results at the North Downs tunnel were explained by Rupert Thornely-Taylor. In essence, the design process there did not make sufficient allowance for uncertainty in the modelling techniques used. Mr Rupert Thornely-Taylor explained, however, that the undertaking in information paper D10 allows for the uncertainty in modelling so as to ensure there is no significant risk of exceeding 40 in practice.

3364. Indeed, he also explained today that the modelling is robust because it includes an allowance of 5 to 10 dB(A) for the duration of the track and equipment overtime and by applying an appropriate maintenance regime it will reduce the forecast by this range. The evidence of both Mr Methold and Mr Thornely-Taylor is that there is no difficulty in building to a 40 dB(A) the L<sub>Amax</sub> criterion. The issue is simply whether designing to 35 is justified. Mr Methold confirmed in cross-examination that there is no evidence that any material benefit would result to people's living conditions in their homes if 35 were adopted opposed to 40.

In other words, there is no evidence that a 35 design criteria means that people in their homes will be better off to any material degree. A level of 35 will, however, give rise to additional costs to the project.

3365. The undertaking sought by London Borough of Camden will therefore impose additional cost on the project whilst not bringing about any material benefit to people's living conditions.

3366. The London Borough of Camden also sought to explain groundborne noise from Crossrail as a particular problem because of the low frequency content of the noise from the trains. However, placed in its proper context, as Mr Rupert Thornely-Taylor explained, the low frequency element of the noise from Crossrail is, in fact, commonplace.

3367. Adoption of the 40 dB(A) L<sub>Amax</sub> criteria level ensures that all of the guidelines identified in the Guidelines for Community Noise are met.

3368. On this basis, the case for a design criterion of 35 dB(A) L<sub>Amax</sub> is simply not made out. Mr Thornely-Taylor explained that he was very firmly of the view, given all of his experience in this field, that 40 dB(A) L<sub>Amax</sub> was the best approach to adopt.

3369. **Chairman:** Thank you, Mr Taylor. Mr Clarkson?

3370. **Mr Clarkson:** Thank you, sir. May I begin with a crude summary. For an eight per cent increase in cost we can guarantee a 40 per cent reduction in groundbourne noise over 47km of tunnel. If the Committee has that ringing in your ears I could almost sit down but, unfortunately, a barrister cannot and I do not think my clients would be happy if I did because there is a context that I must set.

3371. Camden are, of course, in support of the Bill and so are others. I have explained the basis of how they support it and I do not repeat it. Camden, with other boroughs, are concerned about the effect of the groundborne noise through tunnels on their residents. It is their duty to be careful, to examine, to seek, to persuade. In harmony with that is the Hybrid Bill process. The Promoter does not come to Parliament for a rubber stamp but to be examined, as I hope you will find that we have as fairly as we can, on the detailed consequences so that if modification were needed it could be achieved.

3372. We see it as our duty to lay before you for scrutiny what the concern is, to seek to justify it and to test the Promoter's case and ask for adjudication. I say that because that is in stark contrast to Mr Thornely-Taylor's 40 years in which he told you yesterday he is under the illusion of thinking he has enough influence in the world that had he recommended something different, like lots more floating slabs or different base plates, the project would be accepted. He deludes himself if he remains of that belief now. It is the Committee that deals with

---

The Petition of the London Borough of Camden

---

that. It is a matter for Parliament because the issue is raised. It may be there is an endeavour to minimise costs and a balance, of course, has to be struck and that is for the Committee. The Committee has a broad spectrum, we submit.

3373. Question: is it acceptable for a railway undertaker to build a tunnel under residents so that annoyance is caused in the modern idiom, 21<sup>st</sup> Century idiom, of the polluter pays and increasing lack of acceptance of environmental pollution? Of course it is not. The world has moved on from even the Victoria Line of the late 20<sup>th</sup> Century.

3374. That is not a hollow submission when you are given one certainty. Both sides agree there is a solution. In engineering terms it can be done. The only stumbling block is cost. I have touched on that and I will touch on it at the end of my submission.

3375. What are the Promoters offering? They are offering, and I do not read it out in any detail, 40 dB(A) L<sub>Amax</sub> predicted in all reasonably foreseeable circumstances. We are told that is a 5 dB uncertainty margin that is drawn from 35 dB(A) to take it up to there. That is what they are offering. The basis of it is the 40 years, of course. On the historical analysis that I touched on with Mr Rupert Thornely-Taylor, there is not any reliable, detailed empirical research that can give you a clear picture of the amount of noise that is annoying and that can cause complaint.

3376. I am much more comfortable submitting and relying on *Billy Elliott* and the Victoria Palace as an example of what the Committee—I suspect Mrs James will invite the rest of you out to a night out at the Victoria Palace to hear it. That is not a wholly facile remark because that is the quality of the sort of experience we are talking about.

3377. If that is not enough, and it is not, much more substantial is the North Downs tunnel experience. Clearly there is something to be addressed at 40 dB(A). Clearly there have been complaints and some 90 dwellings have been looked at and it is a high proportion of those where the noise is significant.

3378. Mr Thornely-Taylor knew about that because it had been brought to his attention by the acoustical grapevine. That was a predicted 40 dB(A) exactly as here. What we are anxious about is with this predicted 40 dB(A) what will happen is the designers will say, "That is what I have got to design to. I will design up to 40 and then if anything goes wrong I will say the qualification of it in all reasonably foreseeable circumstances bails me out because there is a reasonably foreseeable circumstance that the range of prediction goes beyond 40". That is exactly the argument that is promoted currently, not promoted as in the Bill, in respect of the North Downs tunnel. There is an 8 dB(A) margin there.

3379. Looking at it in terms of the current environmental approach, the historical analysis saying no complaint borders on the worthless if it is not just weak. It is an unacceptable philosophy of approach. If it be argued, and I am not sure it is, that some 55,000 or 60,000 experience something over 40 dB(A), even if that is right it is not a climate upon which it is appropriate to judge and build.

3380. What is worthy of emphasis is the characteristic. It is not the passing lorry, I can move to the other side of the room or a different room, it is the all-pervading groundborne noise that goes through a pillow. It may be so low as not to be intrusive but what is suggested to the Committee is it must be fundamentally careful to make sure that there is a level that there is no risk of noise. That is not just shut the window noise, it is all-pervasive.

3381. I turn to the question of cost as to whether it is unacceptable. All the Committee can do, as we can, is adjudicate, with respect, upon the material you have before you. You are told that the extra FST is some 6.3 million cost, 4.2km at 1.49. You are not told whether that is all residencies or not. You are not told whether the underlying figure is residencies, you are told a lot of it is studios and theatres. Still you do not have a perfect exposition of the point. What you do have is a scale, an order. Whether it is eight per cent or six million or something more, in the context it is a bagatelle. The consequence of achieving it for those who have to live here in ten, 20, 50 years is important. What those who live above the Victoria Line experience is unacceptable and the simple suggestion that we put to the Committee is require it, and we have given a mechanism by which it can be required. I turn to that.

3382. This is my last area that I am going to deal with very shortly. LBC 37 and 38. This is what we seek and ask the Committee to require the Promoters to undertake. The first, as Mr Methold told you, has the extra ingredient of locomotives and rolling stock and the TBM progress rates and associated thrust forces. The Petitioners seek clarity and certainty that those construction concerns will be met and the undertaking has been drafted to meet that.

3383. Ditto undertaking two. During construction, why should people suffering from groundborne noise be treated any different from those who are suffering from airborne noise? They have no remedy. They cannot have double glazing, even with temporary double glazing or the like. We ask that if it is serious enough they be decanted and if it is travelling at 60 metres a week the tunnel boring machine is not going to cause great expense to the Promoters if there is a problem.

3384. Undertaking three is perfectly reasonable. It reflects what was before CTRL. We say quite simply it is sensible and is a requirement that the local authorities be involved.

---

**The Petition of the London Borough of Camden**

---

3385. The fourth I say nothing about, over and above saying if there is a concern of the Committee about the consequences of Best Practicable Means then of course the Petitioners will reflect, we will be told and we will address it. As it stands, it is a perfectly acceptable approach, we suggest, that makes sure that people have 35 dB with some leeway for prediction, interpretation, maintenance.

3386. The fifth undertaking is I think a matter—I am somewhat hesitant in this—that ultimately we can resolve. The way it has been put in closing by Mr Reuben Taylor is an approach that we will stand alongside and try to work out a solution to with the Promoters to come before the Committee informally and give you a certain approach on it. At the moment we do not change it. We still ask for it but we are going to work on it. We will listen to what the Promoters say.

3387. That is all I have unless the Committee has anything for the Petitioners?

3388. **Chairman:** Thank you very much indeed, Mr Clarkson, gentlemen. Can I just remind people here that the Committee is visiting the Tottenham Court Road site next Tuesday. Anybody who wishes to be there, whether they are agent or counsel or whatever, should contact the clerks. Thereafter we will meet here on Wednesday the 15th at 10.00am.

3389. **Mr Clarkson:** Sir, can I just raise one point on site inspections to help the Committee. If at any stage you feel it appropriate to go into any location to hear sound, Mr Methold would be available and I would be very anxious that he would be present to try and give you any insight that you may need.

3390. **Chairman:** I think that is a very good idea and we have already arranged that, Mr Clarkson. We have extended an invitation to our visit next Tuesday and we would be most grateful if Mr Methold would come along.

3391. **Mr Clarkson:** Thank you very much. We will liaise with the Committee clerk as to where and when. Thank you very much.

3392. **Chairman:** Thank you all for your brevity today.

---

Wednesday 15 February 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Kelvin Hopkins  
Mrs Sian C James

Mr Ian Liddell-Grainger  
Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

Ordered: that Counsel and Parties be called in.

The Petition of City of Westminster.

Mr Patrick Clarkson, QC, appeared on behalf of the Petitioner.

*Sharpe Pritchard appeared as Agents.*

3393. **Chairman:** This week the Committee will publish its provisional timetable to take us to 27 April. Due to the unpredictable nature of these hearings, it is important to stress that the dates given in the programme are provisional and maybe brought forward or moved back if necessary. We would ask for the co-operation of both the Promoters and the Petitioners in enabling this Committee to use the time we have effectively. Can I just point out to both sides that there is a possibility set out in the programme that we may be moving, also, to an extra two hours of hearings on a Tuesday between 6 and 8 pm, if that is necessary. So I hope everybody will bear with us.

3394. Also, the good news is that the Commons Catering Group, the most powerful body in this place, has on request from the Committee agreed to provide coffee and tea along the corridor on the upper waiting hall, between the hours of 11.30 am to 12.10 pm. So if anybody—of course, not of the bench, so to speak—wishes to nip along there for refreshments they can do. Today we will continue to hear the Petition of the City of Westminster and I will ask Mr Clarkson to start.

3395. **Mr Clarkson:** It is me, again, sir, and I propose, if I may, to do the same as I did for Camden last week and give you a cameo of the issues where we are agreed, and we come down to one narrow issue today that we are putting before you. The area of interest is clear. The Committee went there yesterday on a partial site inspection. It is map C1(v), between Tottenham Court Road station through Paddington to Westbourne Park.

3396. The background is one of support. I will be calling Mr King in due course to set the scene for Tottenham Court Road to Hyde Park, and a bit of Hyde Park to Paddington. Paddington needs resolution in due course. There is going to be substantial discussion, we believe, but again it may be helpful to the Committee on time. We are hopeful.

3397. Our formal position is this: first we welcome the principle of the Bill, so long as the works are carried out so as to ensure that the burdens on Westminster residents and businesses are justified by

the provision of a high-quality cross-London rail service. Next, it does not need emphasis but I deal with it shortly: the West End is a major tourist destination and investment in it benefits the national economy. Westminster is a major business centre. That overview asserts the positive. There are concerns of fine tuning. Westminster is a highway authority, housing authority, public health, recreation, civic welfare, amenity as well as the economic welfare of its businesses. The Petition has headings of concern. I do not elaborate them but I headline them just for the minute: the impact on the West End; performance of work sites; ventilation and escape shafts; construction traffic; highways, acquisition of council land; tunnelling; groundborne noise; vibration and track design, operation of the railways; listed buildings and buildings within conservation areas; archaeology; authorisation procedures; social, economic and community impact, and there is additionally a number of site-specific concerns. There has been discussion.

3398. I do not propose to rehearse all matters that have been under discussion or are agreed or are close to agreement, or susceptible to second House undertakings. There are many and I hope that the Committee will accept we have saved you a substantial amount of time by the fact that they are in discussion, many of which, may I assure the Committee, have been taking place between 6 and 8 in the evening on Tuesdays.

3399. It is not agreed as to the generic matters and we subscribe to the single presentation approach to optimise the use of your time. We, Westminster, present the generic case for hours of work and recovery of costs related to that. That will be presented at Paddington, if it is not agreed beforehand, but we think it might. Westminster supports Newham in their presentation of a generic case on airborne noise; we support Havering on the static noise case relating to ventilation shafts. We have concerns, also, on groundborne noise and support the generic case you heard last week.

3400. There is support to the Tower Hamlets noise insulation and rehousing case, and may I say, in passing, for the avoidance of doubt, that Westminster's position is exactly the same as that of

---

The Petition of City of Westminster

---

Camden in respect of the generic issues. At 2846 of the minutes they do not show accurately what Camden is or is not supporting, but it may have been my fault. What I have just rehearsed there for Westminster should have been rehearsed for Camden as well.

3401. Paddington next. As I say, there are substantial issues there. They are under discussion and we are hopeful, and that will be dealt with at a later stage to tidy things up. So we are left with one issue that we lay before you today and it is a sub-point of the highway concerns expressed, for the minutes, at Petition paragraph 26 and following. It is paragraph 31 and I read it just as the best introduction: “A significant number of on-street parking places, for which your Petitioners are responsible, will be lost temporarily during the construction period and permanently on completion of construction. The nominated undertaker should ensure that alternative spaces (including bays for residents, pay-and-display parking meters, taxis, motor-cycles and coaches) should be made available nearby to replace lost spaces where this is practicable, and to compensate the Petitioners for lost of revenue.”

3402. So the issue is (one) replace spaces where practicable and (two) compensate for loss of revenue. This is not original thinking by Westminster. What Westminster is seeking is exactly what has to be done with an ordinary developer if an ordinary developer takes car parking spaces. The figures are: 33 spaces will be lost (and this is from the environmental statement 8B paragraph 3, 5.39); 3 residents’ spaces, motor-cycle bays for up to 80 motor-cycles and a taxi rank for 12 taxis also will be lost. They are heavily used and it is unlikely, we say, that they can be replaced elsewhere.

3403. The cost is, over a four-year period, we say, £1.7 million. Just, again, for the minute, the mathematics: 33 parking meters plus 3 residents’ bays, 36; £4 an hour, 10 hours a day (8.30 to 6.30); six days a week, 52 weeks, four years. Total sum: £1.7 million.

3404. I am going to call Mr Graham King, who you met yesterday, and he will tell you the Westminster context, introduce the issues on the route which are under discussion, and I am going to ask him, if the Committee thinks it is helpful, to go all the way to Paddington today by way of introduction simply because if we come back to Paddington we do not have to take your time in the future. We are here, it will introduce the matter to the Committee and we will not have to do it again. While we are here, we might as well use the time, if that is acceptable to the Committee. It will not be very long.

3405. **Chairman:** Mr Elvin?

3406. **Mr Elvin:** I am quite happy with that, Chairman.

3407. **Mr Clarkson:** The last point he will tell you about is the narrow issue on parking spaces. Unless there is anything I can deal with in opening, I will call Mr King.

3408. **Chairman:** Just before you do, Mr Clarkson, Mr Elvin, do you have a brief cameo?

3409. **Mr Elvin:** Sir, we do not, for the simple reason that Mr Clarkson and I were discussing the matter over the last couple of days we knew the issue would come down to the narrow one of car parking. We are intending to give an undertaking with regard to over-site development today, on behalf of the Secretary of State, and I would propose, if the Committee wishes, to call very short evidence just to explain where we have got to in terms of progressing over-site development, which is a concern likely to come up again. Short of that, we were not proposing to take you through the Westminster proposals since you were not being asked to look at the Westminster proposals in any detail. If the need should arise, next time Westminster comes back, it did seem to us rather better we should do it when you were actually having to deal with the matters on a site-specific basis. If you would like something more than that—**Mr Clarkson:** It would help Westminster and the Committee and it may help Mr Elvin if the undertaking as to over-site development has currency now and goes before the Committee, and then I can ask Mr King to comment upon it. If it suits him to introduce it.

3410. **Mr Elvin:** You should have a small bundle of documents from us, P46. It is got the usual lengthy page number references in green stamped on them as well. Sir, if you would go through to, on the green markers, page 12, the last page-but one, there is a note I prepared yesterday. Sir, the Committee may recall that I touched on this very briefly in opening sometime ago. The Secretary of State set out in one of the information papers, which is referenced in this document, D18, a draft undertaking that was proposed to be given, and the Secretary of State qualified that in the light of discussions with Westminster. It may not represent the final position and, as we say in paragraph 3 of this note, it is subject to revisions during the course of the Committee hearing to accommodate any amendments to the Bill and, indeed, improve it.

3411. Sir, I will read the undertaking out if that is convenient to the Committee, so it is read into the record. “The Secretary of State will take steps to ensure that (1) There is consultation with Local Planning Authorities prior to submission of a planning application for OSD on: (a) the proposed use, quantum, layout, scale, access, appearance and response to context of the proposed OSD (including where appropriate co-operation in the preparation of a Planning Brief and/or SPD) and (b) the means by which the fundamental design elements of the new development will be integrated with the Crossrail Works (including loadings, support and access). (2) OSDs in or adjacent to Conservation

---

The Petition of City of Westminster

---

Areas will be designed in accordance with relevant national, regional, spatial and local planning policies, and in consultation with English Heritage. (3) In assessing the contribution that OSDs will make to the character or enhancement of conservation areas the quality of buildings that existed prior to demolition will be a material consideration. (4) A planning application and accompanying environmental statement for the proposed OSD is submitted as soon as reasonably practicable and in any event no later than 2 years after the commencement of construction of the Crossrail Works on the site unless the Local Planning Authority agree to a deferral or agree that an application is not required. (5) Reasonable endeavours will be used to obtain planning consent by the date the works for the new stations or railway on the sites are completed. (6) Reasonable endeavours will be used to ensure that development is commenced in accordance with the planning consents granted once the works to the new stations or railway on the sites are completed.”

**Mr Graham King**, sworn

*Examined by Mr Clarkson*

3415. **Mr Clarkson:** You are Graham King?  
**(Mr King)** That is correct.

3416. You are Head of City Planning Group for the City of Westminster’s Planning and City Development Department. Correct?  
**(Mr King)** Correct.

3417. That includes specific responsibility for strategic schemes, one of which is Crossrail.  
**(Mr King)** That is so.

3418. You are a Chartered Town Planner, and a Member of the Institute of Historic Building Conservation. You have been involved, have you not, with a number of rail schemes, involving Westminster?  
**(Mr King)** Yes.

3419. What were they?  
**(Mr King)** Since 1989 I have been involved in the Heathrow Express scheme, which is the railway now in operation at Paddington, the various proposals for the Jubilee line extension including Green Park, as well as Crossrail first time round, and for that matter a number of other railway projects to do with the major termini in Westminster: Victoria, Marylebone, Charing Cross and Paddington.

3420. In respect of this Bill, have you been involved in the meetings inter-borough and with Crossrail?  
**(Mr King)** Yes, I have. I have been involved in virtually all the meetings between the Promoter and the City Council and representing the City Council on the planning forum established by the Secretary of State under the Chairmanship of Chris Waite, and also on the Heritage and Design sub-group, which

3412. Sir, that is the undertaking. If I might just remind the Committee of the context, over-site development—that is to say development which is not the operational development of the shafts, stations and the like—is outside the Bill powers and it is therefore left to the normal planning processes and, therefore, lies within the control of the usual local planning authorities, hence this undertaking is there to indicate that the Secretary of State will take reasonable steps to ensure that that is brought forward as soon as is reasonably practicable.

3413. Of course, as Mr Mould reminds me, because it is part of the normal planning process OSD will involve the normal planning procedures, separate environmental impact assessments for the specific developments and the normal public consultation that would go with any planning application. So, sir, that is the context. Thank you, sir.

3414. **Mr Clarkson:** I am grateful. I call Mr King.

covers planning and conservation matters, and Westminster has become the host and chair of the authority of the inter-borough group, which is a group of principally London boroughs but it does include some of the outlying districts as well, who get together before the planning forum to discuss and agree how best our combined interests can be represented in the promotion of this Bill.

3421. What is the basis of the City Council’s in principle support for the Bill?  
**(Mr King)** The City Council is always aware that it holds the role of having to balance conflicting demands and pressures at the heart of the world city. We have a residential population of a quarter of a million, a working population of a million. If you take those two alongside the figure that we have somewhere in the order of 26 million visitors per annum to the City, that gives you a world-class economy, and it is affecting 250,000 people who live here and those others who work and visit. There, therefore, needs to be a balance drawn on a variety of occasions throughout the year both in policy and operational matters as to how you come down and allocate scarce resources between those competing groups. They are all vying for the same piece of turf, frankly, and not all interests are co-terminus, there are tensions in opposition to each other. However, given that the economy of Westminster is, for example, twice that of the City of London there is no denying the economic power, vitality, character and function that both brings people here and is required to bring people here to produce the high percentage that currently contributes to the GDP. That needs to be done in the context of the historical environment and therefore it is a balance. If you take those matters into consideration it has always seemed to

---

The Petition of City of Westminster

---

the City Council wrong to stop with the railway speculators in the 19th Century as to where they put their terminuses and with the rather inelegant connections provided by private tube entrepreneurs at the end of the 19th and beginning of the 20th Century to connect these things together. Crossrail is a way of overcoming those issues and, therefore, promotes a role for central London that directly affects the adjacent regions, eastern England, the South East in particular, by overcoming the bottlenecks that occur at main termini interchanges.

3422. Let us flesh that out, can we, with just a few statistics as to the special and unique character of Westminster. I believe it has got a large number of Royal Parks, or a large area of Royal Parks, including Buckingham Palace and the Palace of Westminster. So that is a good start. Go to more detail or the more subtle elements.

*(Mr King)* I think, on the more subtle elements, many of which are touched on by this Bill, in terms of its ambition, its construction and when the railway it seeks to build is operational needs to be borne in mind. For all the economic vitality, two kilometres of Oxford Street, Europe's largest shopping street, is perhaps one example. We have two-and-a-half times the number of listed buildings Bath has got; we have 11,000—76% of the City is a conservation area. What those two figures alone mean is that all that activity takes place within the historic environment that has been recognised as some of the first conservation areas ever designated in the country, and we were second to Stamford on 1968 in designating one. The fact of that environment is one of the reasons—a significant reason—26 million people come here and a large part of the million workforce work here—you included, I have to say. You are not only conservation area listed buildings but a World Heritage Site, and all the issues that concern this building are writ in concentration along the Crossrail route and, frankly, buildings of a similar grade to this one of almost the same significance, but also the West End conservation areas which do factor in the West End, and we will concentrate on that in a moment. It is worth bearing in mind that this is further emphasised by the fact that Paddington is a Grade I listed railway station and, quite possibly, one of the three most important railway stations in the world. Crossrail seeks to dig up the road alongside it as a means to connect it. The people that will be using Crossrail will be acting as people who come to visit 38 theatres, 60 cinemas and, currently, 17 casinos—and we expect that to grow. I think we have a third of the national number of casinos in Westminster at the moment. We have 130 embassies. We have in Westminster 40% of all the Greater London's hotels. So the fact that Crossrail goes to Heathrow and the West End, and with 60% of people coming to Heathrow Express wanting to be in the West End, for a whole variety of business and commercial reasons means, it is essential for us that the project does what it now says on the safeguarded routes and delivers that in a way which produces the benefits of being able to access

the West End, from the rest of the world, in fact, via Heathrow, without giving rise to the impacts which are unacceptable either at street level or in existing buildings. There is then the concern with all this development activity. It is worth bearing in mind that we are dealing with 10,000 planning applications a year. That is the same as the whole of the City of Birmingham, which has a population of 2.5 million, but we have to manage all of this development activity along with managing Crossrail. So some of our more detailed, and sometimes called generic concerns, reflect the probability that although Crossrail may, as it has been for some time, be one of the larger projects on their books, it may be the biggest project being built when it gets under way, but it would certainly not be alone. The public, residents and the business community have every reason to expect that it behaves itself in a way which is commensurate with the powers and pressures which all those other people have.

3423. Going on from there, did you hear me introduce the Westminster position on generic issues? Did I get that right?

*(Mr King)* Yes, you did.

3424. I think next what we will do is notionally go to the Hon members' walk yesterday. If we take up the bundle of exhibits, let us do what the Committee did yesterday. What I would like you to do is begin perhaps at the Tottenham Court Road sheet, which is headed "Crossrail Transport's Links: Bond Street to Tottenham Court Road", and it is up on the screen, thank you.<sup>1</sup> Just take us through, Mr King, and tell the Committee what the headline points are that have either been addressed or are in the process of being addressed, and what the issues are?

*(Mr King)* In broad terms what this shows is the existing underground spaghetti which Crossrail will cut through. It shows in orange the existing tube lines. These are the corridors of the tube lines and they are numbered one to six on the far side, as to which line they are. They are, reading from Tottenham Court Road end, running east to west, on the Central line down Oxford Street, the Northern line, north along Tottenham Court Road, and we are then into the Piccadilly and Bakerloo lines, running through Piccadilly Circus and the Jubilee line running through Bond Street. You will see also shown, because I think it has been mentioned and it is an existing railway, to the north of Oxford Street the underground post office robot railway, which is now currently defunct and awaiting a new use. You will see also to the south of Oxford Street in blue the safeguarding route with the hatched areas affecting the surface interest of the current scheme. You will also see in dark red where the stations are. I think this is important to bear in mind, because one of the things that Crossrail is most welcomed by, in terms of the City of Westminster's interest, is the relief this will give to the existing unacceptable levels of overcrowding on

---

<sup>1</sup> Committee Ref: A41, Crossrail: Transport Links—Bond Street to Tottenham Court Road (SCN-20060215–001).

---

 The Petition of City of Westminster
 

---

the existing tube network. So, for example, the fact that at Tottenham Court Road we have a scheme which addresses the very long-standing measures which came from safety measure considerations back in 1989/1990, which have been approved previously by this House but not implemented, is very welcome news, but it does bring with it the possibility that, in fact, at Tottenham Court Road some works will start this autumn but would not be completed with over-site development for a further 10 to 12 years potentially from today. That is a long time to consider the impact on the critical gateway to the West End. It may be the border between Westminster and Camden but I have to tell you that in practical terms as well as, frankly, in terms of how local authorities get on, Westminster and Camden are absolutely at one on this issue; that border is something which exists for our administrative convenience. It is not something which characterises the West End as some kind of Berlin Wall. We expect to see benefits and the issues be dealt with across that boundary and, indeed, they are. So the more recent moves by the Promoter, either under the guise of their involvement through TfL/London Underground works or directly, reassess the public role concerns, which the Committee saw yesterday, which will transform—the removal of the fountain in front of Centre Point which is in Camden—will totally alter the arrangement of footways which are, at the moment, in Westminster. The fact that there will be a hole in the ground for three years plus a temporary diversion of Charing Cross Road may sort out some of the issues, although the details are still to be proven on that matter, but how the pedestrian movement happens at this important north/south junction between major shopping streets—

3425. Work is on-going on refining that with the Promoters. Am I right?

**(Mr King)** Work is on-going. It will be necessary for that work to develop very quickly if we are to present the public later this year, as I understand it, notwithstanding the progress of this Bill, with London Underground's attempts to bring forward the utilities works to start this autumn. You will see these are very live, complex matters and the agencies involved are trying to pull together the most effective response that is possible.

3426. Shall we go west to Hanover Square?

**(Mr King)** The big issue with Hanover Square we have today is that in an ideal world one might think it would be appropriate to connect Crossrail, with all its regional transportation benefits, to Oxford Circus. We have always accepted the Promoter's (indeed, one should say, various promoters of Crossrail) assurances over time that it is simply too difficult to do. There are too many people at Oxford Circus, there is too much underground kit, formed by the late bringing together of two separate underground railways. No one built Oxford Circus, the Bakerloo line built their bit and the Central line built their bit, and since the 1920s London

Underground may have tried to make a sensible co-ordinated job out of it. It is now extremely busy, both at footway level, where we are in separate discussions with Transport for London and others as to what should happen with Oxford Street, and, also, at underground level. So we accept Hanover Square. Without regaling the history to this Committee of why we have ended up where we have ended up, probably in planning terms it is the second-best option, but the most practical first option is no longer open to the Promoter to follow. It was but—

3427. That was to take the Gardens themselves?

**(Mr King)** No. Sorry. The very best idea would have been to take the building on Regent Street but the Crown Estate were not interested in changing their plans. As they are a developer who is unable to take the risk to make this available, that would have been our best case that was outlined sometime back. We resisted the Promoter's first intention, that you have just mentioned, which was to take Hanover Square Gardens because we felt it entirely iniquitous for this part of Mayfair conservation area to lose an integral part of the very early planning and development of Mayfair, which was the first part of the 18<sup>th</sup> Century, which forms a set piece with St George's Hanover Square, which is further down St George Street, and, also, would lose a major public amenity which is very well-used by people who visit and work in the West End for a considerable period of time, and then replace it with a railway station entrance. The City Council preferred, from day one, the loss of two very unprepossessing 1960s buildings which were built before the area was made a conservation area. Otherwise we would not have lost the rather more interesting buildings that had been there.

3428. Were they pointed out in the inspection yesterday?

**(Mr King)** Yes.

3429. So the Committee knows exactly where they are.

**(Mr King)** It was exactly where the coach stopped yesterday. Therefore, we are in favour of the Hanover Square location that has now been chosen. Our continued discussions with the Promoter, which appear to have been resolved by very recent correspondence—I think last week—now seems to preclude, other than in an emergency, any use of the gardens themselves. The problem with the use of the gardens is not only the loss and impact of trees, and loss of green space, but there would obviously be, if part of the gardens went, activity there which would have a knock-on effect on the use in the remaining part of the garden. So we hope that issue is now resolved between us and we look forward to the fine details of the undertakings over that matter.

3430. As we are going through, the other plans show the land-uses, the conservation areas and listed buildings, residential density, office uses and tourism uses, to give a sense of what is on the ground, so to

---

 The Petition of City of Westminster
 

---

speak. Also, embassies in Westminster.<sup>2</sup> The last document is Paddington, which we will come to. Let us stay for a moment, please, with Hanover Square. Tell the Committee, would you, what the issue is that we lay before the Committee today?

**(Mr King)** The narrow issue, which you have referred to in the past in your presentation, is the matter of car parking. Hanover Square, because it has virtually no—we think only one—residential occupier on it (which is fairly unusual) and because of the range of uses in and around the Square, is an area where the City Council can make provision on street for the parking of coaches, particularly on the east side (this is to serve the tourist trade of Japanese airlines and Korean airlines who operate a remarkable arrangement of facilities for their national shoppers in this country in their premises there) and for motor-bikes, for which there is a growing demand in the City—a figure of 80 was put before you earlier. If we doubled that number here they would be taken. That has been one of the major growth areas for sometime, particularly however since congestion charge introduction in 2003. That would appear—

3431. Just in passing, the reference document for this is 5.39 of volume 8B.

**(Mr King)** Then there is the issue of car parking spaces, 33 of which are shared use. This is for commercial users, people who just turn up but it is also available for residents. That is because we have an increasing number of residents in this area and, in fact, quite a large number in the streets behind, not all of which can accommodate their own residential needs. So it does act as a major resource for various uses as well as being a bus route. It also has a taxi cab shelter and a taxi rank. So it is, despite—indeed because of—its Georgian layout, a major road transport resource for the area. If you bear in mind the ground floor use diagram, diagram 2, or conservation and listed buildings diagram 3 in the bundle put before you, you will see a huge intensity around Hanover Square of the range of uses which characterise the West End. To this I should point out that the West End, unlike the City of London, is not characterised by large floor-base, single-occupied uses. According to the VAT register there are 47,000 VAT-registered businesses in Westminster, the majority of them in the West End. The nature of the buildings—many of them listed and many more are conservation areas—are small and traditional and meet exactly that need. You will also appreciate that in relatively few of these buildings, the area has suffered little bomb damage for a variety of reasons—therefore land holdings are relatively unaltered in the last 50 years—and has not experienced large-scale redevelopment which you will see, for example, in the City of London. So you actually have the Georgian city with a surprising number of Georgian buildings left. What that does mean is that those buildings have virtually no on-site provision for deliveries, servicing or for parking. That takes place on the street. For that

matter, where we have car parking on the street it is a matter where we try to keep it and make it as disposable as possible to the widest range of people who have a reason to be there. That constitutes the policy reason for our case. The second reason for our case is this: if a developer comes forward, as they do every week, one of the 10,000 a year, quite often they will only be able to build their development by using our highway. They will not have enough room, particularly if it is a refurbishment, to have all their facilities exactly where they are needed. We ask them to, we urge them to but we will at times have to allow the suspension and removal of parking meters for development to take place, and you will see the yellow hoods put over the parking meters and those have been suspended for that reason, I am sure. It is normal practice for us to charge that developer for that period of suspension. The calculation that was read to you earlier is no more than that. It is obviously capable of negotiation, re-calculation, further revision, further refinement, I am sure, but in order to give a magnitude to this Committee, it is, we feel, not a misleading figure to put before you. The £1.7 million, or whatever it turns out to be, is not generally income to the City Council, it is income to the Parking Place Reserve Account for which we are separately responsible to reporting to the Secretary of State for Transport under road traffic regulations, and can only use that money for a prescribed list of purposes. They relate to public transport, road safety; they relate to the costs incurred in providing those services. They relate to, for example, the cost of us providing our proportion of the taxi-card subsidy, which enables disabled and elderly people to have more mobility in the City at a cheaper rate than would otherwise be the case. It is also spent on very major infrastructure projects which the City Council have been responsible for, and is therefore part of making the City continue to work on a daily basis. It does not offset other expenditure from other—

3432. So you have laid before the Committee the issues. The remedy now. What is it that Westminster seek in due course?

**(Mr King)** The remedy comes in a combination of three factors, I would suggest. One is further discussion as to exactly what this impact will be and for how long. Bear in mind that over-site development requires—it could be the ironic position where if over-site development follows the normal rules, as is now being suggested, that the over-site developer will pay for the suspension of the bays for the period he needs the suspension while he builds his building, whereas Crossrail will have had the same space, effectively, at our expense for two-and-a-half times as long while they built the railway.

3433. So, there is further discussion as to exactly how many bays have to be lost. Arising from that, where within the general area, and it is a fairly small area of a couple of hundred metres around the Square, you could relocate some of the space, and if you do what is the knock-on effect on those areas. That is something we would expect the Promoter to bear the cost of working through.

<sup>2</sup> Committee Ref: A41, Crossrail: Ground Floor Land Uses—Bond Street to Tottenham Court Road (SCN-20060215-012).

---

 The Petition of City of Westminster
 

---

3434. There is then the issue, obviously, of straightforwardly making financial settlement with the City Council along the lines that any other developer would, at the appropriate time. We are not looking for the money upfront: we are looking for when the loss of parking occurs for that to be, first of all, reduced to the absolute minimum, mitigated by if not on-site adjacent re-provision, and if all else fails a financial settlement to be settled at the end of the occupation of the space which, as I say, is then in most cases likely to be reoccupied by the over-site developer who actually will pay under the rules.

3435. So we regard ourselves in treating the Promoter in this case as no different from any other form of developer who requires the suspension of parking bays in an area where there is known and, for all we can see, continuing demand for on-site parking for pay and display, residents and bikes.

3436. So anything else on Hanover Square? Do we keep going west?

*(Mr King)* We keep going west. In terms of going west we turn then to Davies Street, right at the edge of the plan, and in Davies Street, as I think the Committee saw yesterday, we have another example of a location which is incredibly important. The deep red area at the junction of Oxford Street and Davies Street is the existing station that serves the Central Line and now the Jubilee. These stations have become much busier, and certainly the Jubilee extensions. This is a much busier interface. However, that interaction takes place within a building known as the West One Shopping Centre, designed in the early 1970s to accommodate the initial Jubilee scheme, not the extension scheme. It is a shopping centre with offices over; its owner has petitioned this Committee on its concerns, Westminster's case is similar in many respects to the Grosvenor's case, and we therefore will be continuing discussions with the Promoter and Grosvenor and London Underground and will come back to you on Grosvenor's slot, and appeal to you, Chairman, if we have not been able to resolve matters.

3437. The matters we seek to resolve are simply these. It is clear from the above ground buildings and the London Underground station that those facilities are wearing out more quickly than the devisers of that scheme 25-30 years ago would have thought, and it is likely within the life of the Bill you are considering as a railway under construction, that someone will have to step in there and do something.

3438. We would therefore like to see the best of all possible worlds come from that necessity, as well as the necessity of taking out the rather unpleasantly large neo Georgian building in the 1950s and replacing it with a new station with a new over-site development we can control under today's hopefully more enlightened planning policies than those that are the same age as I am.

3439. One of the issues that ties these together is in the management of the public realm. Given how busy Oxford Street is as a pedestrian route, and I do not have to go into any detail of that I do not think, the influence of how this affects Davies Street, how people flow to and from it, how this adds to the character and vitality of Oxford Street and brings more improvement both to the transport user and also for the person that is simply visiting it to shop is something we think the scheme is capable of doing, without moving outside the scope of building the railway. This is not building a railway across green fields: this is not building a railway through a brownfield area of regeneration: this is building a railway through the heart of the West End with one of the most valuable and dynamic property investment portfolios in the world. That is not a boast: that happens to be the case. The Promoter has to accept that reality in the same way we have to accept that reality. It should not be assumed Westminster likes that position: it causes us untold grief on regular occasions at planning committee every week, and we do have planning committee every week, but it is a balance that has to be struck and the Promoter simply relying on the fact that all we are doing is building a railway is frankly a weak response to the issue that we are facing.

3440. We do have those discussions. As I say they are four-way, they involve London Underground who are not a Promoter of this, previously London Underground was a Promoter of Crossrail; they are not now other than through TfL. There are London Underground's own concerns, there are the concerns of the Promoter on this particular railway, there are Grosvenor's concerns as the principal freeholder, and ours as a local authority. But I would point out to you, Chairman, that immediately at the back of the Bond Street station is West One Shopping Centre and surrounded on at least one, if not two sides, is social housing owned and operated by Peabody over the last 120 years which will continue in that role. If it was local authority housing it may well have been subject to right-to-buy and may have gone into public sector. It is not, and has not. It remains as social housing and, as far as we can see, will continue that way. I say that because obviously people in social housing have less opportunity to move, to realise their assets, or to do other things that is often prayed in aid when it is considered that people may be affected by the scheme.

3441. It is vital in terms of the Westminster's view of the character and function of the West End, that it remains a place people can live. I only mention it, not to be at all facetious, because it has been an established part of Westminster's planning policy for over 30 years, and when asked to characterise our housing policy in the 1970s the line was taken, and it was in our district plan at the time, that Westminster had to find a way of trying to provide housing for all classes from waiter to MPs.

---

**The Petition of City of Westminster**

---

3442. **Chairman:** Some MPs were waiters!

*(Mr King)* Before we even knew that we felt that to be true. It is even more so now that we are particularly concerned at the impact on any residential community of something simply as large as this. It is exactly this type of activity that can so change the character and function of an area as over time to drive out residential uses.

3443. **Mr Clarkson:** I am going to interrupt now to try and round up one aspect of this sector, and that is the over-site development undertaking. You have seen it, I think, last night. What is your comment upon this draft?

*(Mr King)* The over-site development that we saw of today's date but we did see it last night, and it is a very welcome relief to see this submitted at all, does follow on from extensive negotiations through some of the groups I have mentioned to you already, Chairman, and represents I think the most definitive statement in the right direction we have seen so far.

3444. In terms of linking the text in bold with paragraph 3 in the introduction, it would be I think unhelpful to sign up to this as of today but to indicate that, subject to what (3) actually entails, which I will turn to in a moment, if I may, this should form the basis for an agreement certainly for Westminster and I would hope for others.

3445. Without belabouring the point I would like to sketch in the background to our problem with this measure. If we accept this, we are making a compromise in effect for the first time in 32 years and over a subject we have not had to compromise on. 32 years ago Parliament in the 1974 Town and Country Amenities Act decided to right and omission or a wrong created by the 1967 Civil Amenities Act and 1968 Town and Country Planning Act which introduced the designation of conservation areas. The first generation of those—Mayfair, Soho, for example—did not give local authority control over demolition of conservation areas.

3446. It allowed you to promote Bills for this and it allowed you to do lots of silly things, and I worked in the pre 74 system and post it and I have to say it was fairly chilling to see the speed with which key buildings in conservation areas were lost, particularly given the number of historic buildings and some just being good buildings in a street sense, they were never going to be listed. They were being lost and we have holes in our conservation system as a result. The 1974 Amenities Act procedure is now called Conservation Area Consent in the 1990 and subsequent legislation.

3447. This gives local authorities the ability to insist that if they are going to allow any building to be demolished they know exactly what is going back on the day they give permission for demolition, and they can have a condition in there, before demolition takes place, to see the developers contract for the replacement building, for the developer to prove he is going to say what he said he was going to do. This

is a fundamental principle. Perhaps I feel strongly about this because I knew the system before that Act came into force, but it is a fundamental principle that has created some success, both publicly and professionally of what conservation is there for other than drawing a felt-tip line around a plan and saying "This is interesting" and then not doing anything more about it.

3448. Here we are faced with a position where the Promoter is building a railway, and we accept that case and the Promoter is not, as far as we can see from the legislation, seeking to put himself in the position of being a developer, but he will at some stage yet be announced by format yet to be announced bring forward commercial parties—it might be the current owner, it might be a new owner—to bring forward a scheme to replace the buildings that are being lost for construction of the railway.

3449. In the meantime we get to look at a vent shaft, because the railway is able to build these vent shafts, and we have had an example of the Fisher Street document I think shown to you, and there are other documents shown and various documents put to you which show in some cases seven storey, I think I am right in saying, towers with a series of grills at the top, and so for the Davies Street site you visited yesterday, Chairman, you would not have a seven storey rather ugly 1950s neo Georgian block in red brick, you would have a flat site at Davies Street with a small three storey glazed element in one corner providing cover to the Crossrail station beneath you, a cleared site with hoardings, then at the back facing social housing a seven storey sheer brick and metal face structure.

3450. Is the issue of how long you have that site undeveloped, say, for the entrance hall and the vent shaft?

*(Mr King)* That is exactly the point. The fact is we would not normally allow in a conservation area a gap to appear. We may, and there are mechanisms which we can discuss with the Promoter if he is willing to follow the traditional path of how we manage this process in more detail, but we would not accept this is possible. The same issue will occur at Hanover Square: you will lose the two 1960s buildings and then at the back towards Tenterden Street you will see a vent shaft rise, and you will see, I think it is fair to say, and I do not seek to characterise it badly, but a family of structures at the Tottenham Court Road site.

3451. Let's just summarise: what do you fear as worst case and what do you seek as best case, given the constraints on the Promoter?

*(Mr King)* Given that the City Council has already produced draft planning briefs for all of the sites in this area, and I am only representing Westminster, we have already issued planning briefs, we have issued them to Crossrail and we have reported them back to our Committee after consultation, we are happy to use that process in parallel, and it is in fact

---

The Petition of City of Westminster

---

mentioned under Section 1, I believe, of the undertaking, to ensure that parallel with the demolition we know what is going back. We would also think it incumbent on the Promoter in this unusual situation where he is enabling commercial development but not responsible for it to spell out before the Bill passes to Royal Assent and to tell us how commercial development is going to move forward on these sites, and for that to mimic, echo, follow the process we follow 10,000 times a year in the city against an up-to-date policy background which enables all of the matters that need to be discussed with whoever they need to be discussed with to be resolved.

3452. And I think the process is, to summarise this, that there is going to be a meeting of the Crossrail Heritage subgroup, am I right?

**(Mr King)** That is correct.

3453. When is that?

**(Mr King)** That meeting is 24 March.

3454. Who chairs that?

**(Mr King)** The Government Office for London.

3455. Who attends?

**(Mr King)** The local authorities who have interest in the planning heritage issues, which is not all the local authorities on route, are English Heritage, Commission for Architecture and Buildings Environment, Greater London Authority's planning and architecture units—

3456. Will they discuss the undertaking that has been proffered this morning?

**(Mr King)** I trust, as this is run effectively at the behest of the Secretary of State, that this undertaking will be discussed there. If the Promoter does not raise it I would feel it incumbent upon me to do so, I must say. There is another opportunity that has occurred to me since being presented with this which I do not believe is on the agenda for the meeting that has been called of the Planning Forum on Monday.

3457. So, just simple mechanics, when will you and presumably other authorities have the opportunity to give the final response on this proposed undertaking?

**(Mr King)** As long as this is circulated to all parties in advance of 24 March meeting I would see no problem, if the minutes of that meeting follow the week after, for everyone to respond accordingly at that stage.

3458. I am going to move on now to the last area that we can deal with compendiously, I do not think we need to go into Hyde Park? Did the Committee go there yesterday?

**(Mr King)** They did see it from the Bayswater Road.

3459. I think that is resolved or in the process of being resolved?

**(Mr King)** In view of what Mr Berryman was able to say to your Committee yesterday on site, which I think has not yet been said to us in writing in exactly the same detail I think I am right in saying, we are now

expecting to see a smaller footprint of less work in the Park which is very welcome. Arising from that is the ability to reconsider the impact on North Carriage Drive, and therefore the traffic impact on the wider area given that the works are now smaller—

3460. I have gone too fast. There is a vent shaft in Park Lane, is there not? Is there an issue outstanding on that?

**(Mr King)** There is no issue on that.

3461. So now we can go to Paddington, please, and I do not need you to take as much detail but what are the broad issues that are for resolution—the broad issues—at Paddington?<sup>3</sup>

**(Mr King)** The broad issues for Paddington which come before you on this screen, the blue showing the safeguarded area, the orange showing the special policy area, all the comments I made earlier about the characterisation of the West End and what we call the central activity zone, where most business activity takes place, do not hold true in the orange area. This has been our one major brown field of choosing of vacant land where there is already over a million square foot of new offices, 800 housing units already constructed, last week another 1.5 million square foot of offices and residential units are applied for, and by the time your Committee meets we are likely to get another million in as well, so this is an area of significant change in the city.

3462. Also it is the area where one of our larger infrastructure projects is close to completion, and if you come at the end of May you can go on the new bridge and understand the project in that respect in terms of the problem we face being the one faced by many people over the years of how do you integrate Paddington with the rest of London in terms of where the station is and where the activity is. The road network around Paddington station has not coped very well since well before this comment was remarked on by Sir Raymond Unwin in the Town Planning and Practice in 1905, and we continue to try and discharge an obligation to resolve that problem. This is where Heathrow Express comes, it has more taxis than ever before; it has at the heart of it a Grade One listed building, the railway station, which has been extensively refurbished and re-equipped to serve the Heathrow Express. It is also you can see the grid of streets to the south and the east in particular a very residential district surrounding the station, very residential indeed—a large number of hotels but principally residential, and if one was to go further west to the work sites at Paddington New Yard, still in Westminster, Westminster goes all the way effectively up to Ladbroke Grove in this case, you have the issue of how all the activities that take place here, the major construction activity is to take place on railway land certainly but immediately cheek by jowl and serviced from residential streets. So there is the integration with this with all the other transport modes of Paddington, the integration of construction sites, the integration of business and residential

<sup>3</sup> Committee Ref: A41, Crossrail: Paddington Special Policy Area (SCN-20060215-003).

---

 The Petition of City of Westminster
 

---

communities, and how Crossrail assists in the continuing regeneration of what is our last major brownfield site this scale.

3463. The mechanics of how that is delivered is under discussion, is it?

**(Mr King)** It has been for some considerable time. The redevelopment of Paddington is worth noting. The current format started two years before the Central London Rail Study, so throughout the time of Crossrail post the study the Paddington area has been subject to intense development pressure and activity. The mechanics of how the stations—tube, rail stations—continue to operate while Crossrail is constructed is perhaps the most pressing concern not only for ourselves as the Petitioner but also for the Petitioner from NetworkRail, which you will be hearing at a later date, and goes directly to another petition you have received which we have common ground with in some respects, BAA in terms of the service Crossrail will provide to Heathrow. Because Crossrail alleviates going to Heathrow the pressure on Paddington as the only premium rail connection, fast rail connection, between the world's busiest international airport and one of the two great world cities.

3464. At this stage we need not elaborate any more on that. Let us go a little bit further west and give a cameo of the issue of the last area in the city, Westbourne Park?

**(Mr King)** It is not on this plan; it is our bundle 9. As the Great Western Railway goes west from Paddington it goes through an area physically characterised by having the Westway built over parts of it, and Harrow Road to the north, wholly residential either side of it, with some of our more deprived wards. In fact, in the city of Westbourne there is a major set of social, physical and regeneration measures under way.

3465. It then seeks to utilise an aggregate depot and former goods depot as the principal work site. This means 24/7 impacts in this area and we will be safeguarding that. We are now looking at the area from Paddington on the east side as the throat as you come through under Bishop's Bridge Road, past Warren Oak tube station, and the area shown grey here is all railway activity. Westbourne Park bus garage will be retained but will have some of the services that it operates from beside the railway tracks erected underneath Westway, and I assume that scheme will continue—we have not heard it will not. But this will also have the impact along the Harrow Road which follows a rather circuitous route from Paddington and curves back towards the work site, one of the major construction routes.

3466. One of the matters we will be returning to you hopefully with more information from TfL in terms of the responsibility for congestion charge is to

explain to you, if they can explain to us, how Harrow Road from February 2007 will become not only the congestion charge cordon of the western extension which the Mayor has chosen to make it, as well as the construction traffic as well as the principal bus routes to this part of inner north west London, and also how those cumulative impacts are to be felt by the different groups living and, indeed, working along there.

3467. Is there an issue for business premises then?

**(Mr King)** There is, which is a rather curious one. Apart from the impact on the main shopping street of Harrow Road, where we are looking to make a significant investment with the Mayor to upgrade this, subject to the impact this project has, on the railway depot site there is a remarkable structure called the missing goods depot, which is a converted 1930s Great Western, very large, goods shed currently holding 140 creative businesses, who have petitioned your Committee.

3468. Given the work now supported by the Mayor through the London Development Agency the Royal Borough of Kensington & Chelsea and ourselves, the creative cultural industries in west London, that means going from frankly central London all the way out to the BBC, is a major part of the economy of communities here, being both business and residential, and we feel that the Promoter's treatment of these businesses is less than helpful to the economic wellbeing, character and function of this part of the city or, indeed, that part of Westminster's economy which, when you tie it back to the media and communication industries in Soho, is one of the major things Westminster has some economic profile on, given how varied our economic characterisation of the city actually is.

3469. So there is a certain amount of praying in aid because of the very deprived nature of some of the residential communities in this area, the physical impact this area has already had to suffer from the last 34 years of having the Westway, and how the management of the construction of the railway will work. It should be noted that, apart from the services at Paddington, there are no local improvements in services to be gained from Crossrail. The railway goods yard area, Paddington New Yard, is not turned into a station—it just looks like one. It is the place where 14 trains per hour will simply be terminated and cleaned.

3470. I do not think we need to go into any more detail at this stage; you are flagging up the point for issue. It is under discussion, as I understand it, and if it is not resolved it will be brought before the Committee at another stage. Am I right?

**(Mr King)** That is correct.

3471. **Mr Clarkson:** I think really that rounds up the evidence that you give today, Mr King. Just wait there, please.

*Cross-examined by Mr Elvin*

3472. **Mr Elvin:** Sir, I am sure the Committee will be pleased to hear I am only going to ask questions with regard to one of the issues raised this morning. As Mr King only brings effectively for the Committee's consideration the car parking revenues issue I am only going to ask questions about that. All the other issues remain under discussion. So far as his explanation of the issue with OSD I was going to call short evidence from Mr Colin Smith, one of the property advisers, just to explain to you the issues and give you the Crossrail position, just to balance against what Mr King has said.

3473. Would that be helpful?

3474. **Chairman:** Yes.

3475. **Mr Elvin:** In which case I am going to ask a few questions about the car parking matters.

3476. Mr King, good morning. The issue with regard to Hanover Square and the car parking revenues, comes to this: Westminster accepts the use of Hanover Square. It now accepts the revised proposals that are put forward which do not involve the loss of the Square itself, that is right, is it not?

**(Mr King)** That is correct..

3477. And therefore it is accepted that some disruption during the period of construction to Hanover Square will have to occur in order to avoid impact on the Square itself?

**(Mr King)** Absolutely.

3478. So that is not the issue; the issue is effectively what the implications of that are for revenues.

3479. Can I understand this: you have a number of types of parking and bays around Hanover Square, and if we go to P46, we have provided two diagrams which show various bays and the various metered spaces, and this is from the Westminster website, Mr King, you are familiar with it, I am sure?<sup>4</sup>

**(Mr King)** Certainly.

3480. Westminster gives priority to certain types of space, for example, residents' spaces, coaches, doctors and the like?

**(Mr King)** That is correct.

3481. And the question is how they are to be re-allocated elsewhere within the locality, and the answer is their relocation will require the loss of other metered spaces that are generally available?

**(Mr King)** That is correct.

3482. And if we look on the next page, page five of P46, we can see the metered spaces in the vicinity of Hanover Square, some of which will have to be temporarily replaced by residents, coaches, doctors and the like for the duration of the works?<sup>5</sup>

**(Mr King)** Yes.

3483. So there is no question that the essential priority spaces of the area can be relocated. The question is do you lose money from your general meter revenue because they are replaced by the priority spaces?

**(Mr King)** Yes.

3484. And of course Crossrail has already indicated to you in discussions that it will assist in the relocation of the priority spaces?

**(Mr King)** Yes. That has been mentioned.

3485. We are talking about, therefore, the loss of revenue from about 30-40 metered spaces; you have given a figure and I am not going to take issue with any of those matters, but can I ask you this: the 40 spaces that will be displaced during the construction, how many metered spaces does Westminster have providing revenue in total?

**(Mr King)** From memory it is about 20,000.

3486. So the Committee can understand what the percentage of that 40 represents in terms of your total meter revenue?

**(Mr King)** Yes, but I would add a caveat that you should not assume that all meters have the same degree of use as those in the West End perhaps. It is not a uniform city therefore use is certainly not uniform either.

3487. Do you have an indicative figure for the West End of that 20,000?

**(Mr King)** No. The greater part of the 20,000 is certainly within the central activity zone which the West End forms a part of.

3488. So the greater part are likely to be the main revenue bearing meters?

**(Mr King)** Yes. Certainly I would have assumed it would be round about 12,000, rather than 15,000.

3489. As a matter of provision of amenity facilities to those coming into the area who are not residents or people who have got priority spaces, that is not an issue you have raised. There are, as a matter of fact, a number of car parks in close proximity, are there not, which can be used?

**(Mr King)** There are, but all those are the City Council's—

3490. I appreciate it is not a revenue issue.

**(Mr King)** No. That was the point I was going on to make. Therefore the tariff regimes on those car parks would not necessarily equate with the tariff regimes for on-street meters.

3491. And the car parks, the Committee can see on page 13 of P46, are the ones in closest proximity to Hanover Square, and those will be available to those who cannot use the general metered spaces.

**(Mr King)** I am not in a position to give you a yes/no answer to that, and I would like to explain why so as not to mislead the Committee.

---

<sup>4</sup> Crossrail Ref: P46, Parking Bays—Hanover Square (WESTCC-32104-004).

<sup>5</sup> Crossrail Ref: P44, Parking Meters—Hanover Square (WESTCC-321-4-005).

---

 The Petition of City of Westminster
 

---

3492. In terms of the car parks we own, the leasehold of Cavendish Square car park is currently indicated to us and is leased to somebody on ownership and they wish to take that out completely and refurbish it, and we are looking very carefully at what that means and how that is managed. So it is likely within the life of this project, and we are having, as we said before, to project over a significant number of years and I would not like to rely on Cavendish Square always being there. Welbeck and Grosvenor Hill are not ours. NCP have elsewhere, it is true, moved to move car parks, Brewer Street, for example, they have asked for permission to convert to residential.

3493. The City Council finds itself between a rock and a hard place in relation to the two related car parks at Soho and Broadwick, Soho formerly known as the Poland Street car park. This adjoins the Marshall Street Leisure Centre, which is listed. The planning brief for that site, which has been adopted and we are now in advanced commercial negotiations with the preferred developer, would reduce the size of those two car parks by more than 50%. Both of them were likely to be taken out for a 2–3 year period for the site to be redeveloped, in order to bring the existing leisure centre, including the swimming pool and other community facilities, back into use.

3494. So on the evidence of the map you put in front of me here I have to say that it would be wrong for us to indicate, not least because we are making the Soho car park scheme happen, that anything like that amount of provision is going to continue through the life of the project.

3495. However, that is what is there at present and I am not making any point about revenues, I just wanted to give the Committee an idea of what was in the area.

3496. Can I understand the Council's strategy? I appreciate the Committee does not want to spend a lot of time on policy and I will be short, but P46, the first three pages, is a section from the draft UDP which is due for adoption shortly once is issue of affordable housing is sorted out?

*(Mr King)* We do hope so!

3497. The Council's strategy, in fact, is to tighten up on on and off-street parking, is it not? We can see in the strategy, 4.15, (j), "control on and off street parking to reduce overall parking demand and increase the availability of space for essential users".<sup>6</sup> So the priority is to tighten up parking and to give greater priority to those we have already discussed—residents, doctors and the like—who have a genuine need for spaces close either to their places of business or to their homes?

*(Mr King)* I want to answer this carefully and to avoid dragging the Committee into our unitary development plan—

3498. I hope we can avoid that!

*(Mr King)*—which is very large. It is an axiom that it is inappropriate to quote from one policy or one part of one policy in a document of this complexity. Without going down that point any further than just to note it, I would invite you to look at page 61 which is the strategic policy 25 which says: "To control on and off street parking within the requirements of traffic reduction. Preference will be given to the special requirements of residents and people with disabilities."

3499. So that is what I have just said.

*(Mr King)* Yes. But if you then turn over the page—

3500. I was rather hoping to look at the traffic reduction policy on page two of the extract?

*(Mr King)* The paragraph I would like to lead you to starts, "In considering any further methods of traffic reduction . . ."

3501. If this is page 211 of the UDP the Committee have it as page 2 of P46.

*(Mr King)* If you look at page 212—

3502. That is page 3.<sup>7</sup>

*(Mr King)*—the matter there goes on to state at (c), "The legitimate requirements of residence and the business and commercial sector for movement and access are safeguarded", so in that respect in terms of what the UDP says that is exactly what it says and why.

3503. I should point out, and this is something which may mislead, this is about controlling development. This is about how we determine planning applications, not about how we manage on street parking. It sets the overall context for on street parking only in so far as it relates to control and development, and the control of on street parking is, I am afraid, slightly different. The story does run across; we are trying to restrain traffic use; we are trying to ensure that parking is provided, but it does come up with legitimate requirements of residents and businesses.

3504. **Chairman:** Is one of the reasons why your Council supports Crossrail that it will lead to massive traffic reductions and transfer of passengers on to trains?

*(Mr King)* We certainly believe and hope that is what it will do, and we certainly hope it will enable people to visit and access, for whatever reason, the West End without the need to use cars.

3505. So it will mean less people hopefully driving into central London?

*(Mr King)* Yes.

3506. The reason I am asking is that you seem to indicate that whereas it does conflict in one sense it is okay in another. All development plans, as I

---

<sup>6</sup> Crossrail Ref: P46, City of Westminster Unitary Development Plan—The Council's Strategy (WESTCC 32104-001).

---

<sup>7</sup> Crossrail Ref: P46, City of Westminster Unitary Development Plan—Traffic Reduction (WESTCC 32104-003).

---

The Petition of City of Westminster

---

understand it, which go to the Secretary of State ultimately are about an holistic approach, so if the common direction is to support a policy favourable to Crossrail, then having another section which is really about a thing which stands to not gain on that site seems to be a bit contradictory?

**(Mr King)** I think this is the interesting point of the parliamentary process as opposed to the planning process. The planning process would, for example, have a transport impact assessment, which, in more detail than we have had so far from the Promoter—in fact more detail than the Promoter can currently give us, given the stage of the project—would advance in full all of the traffic impacts and all traffic benefits, and out of that the local authority can make a decision exactly where you want to close and other things, and you can see the way we are minded to take decisions. You need to see this of course also into the background of the 27,000, I think it is, off street parking spaces that various people have allowed to be built in the scheme, that either existed there before planning came in in the 1947 Act or between any form of constraint—the first constraint of central London boroughs in 1957—and it is actually trying to control that on the redevelopment to which these policies are directly related. However, it is the case that where we have the ability for on street parking we would like to retain it, both for the fact that we do expect to see an increase in congestion charge extension of traffic in this area, in the zone.

3507. **Chairman:** What you are saying is you want the benefits of Crossrail but you want to retain the on street parking, and that is about revenue, is it not?

**(Mr King)** No, it is not about revenue. We are not just retaining it for revenue purposes, we are retaining it because it is part of the character and offer of the West End that people who may well live close by, people who may be residents can do this. It is quite likely that in a post-Crossrail operation that we would review the balance between residents and pay and display, and in fact that is something we do on virtually a day to day basis: that we review yellow lines, review local waiting restrictions, review what the wait is. The chances are that as we do not require much or any central area schemes to have more than the absolute minimum car parking, more of those schemes will be residential, it is likely that some of those are going to require some car parking spaces and where is it going to be provided? So there is the case that the loss of the parking spaces for a period of time—and, as I have said, many other things will happen while the works on this are being constructed—it is not something we would start off wanting to lose the ability to either have that money or have those spaces.

3508. **Mr Elvin:** Can I pick up one of your points, Mr Chairman, because if we turn back to page 211, we see there precisely the point that the Chairman is putting to you, which is that you have a formal policy—and this is page 2 of P46—Trans 15, which is to reduce traffic, and you adopt the traffic reduction targets in the Mayor's Strategy, so it is actually

formal UDP policy to reduce traffic.<sup>8</sup> And hand in hand with that, if we go down to the bottom of the page 4.121(a), tighter controls on parking, and at (b) the introduction of traffic management calming measures. All this means, Mr King—if we cut to the quick in your lengthy explanation—what it comes down to is you give priority to certain types of people—residents, the legitimate interests of business, taxis, coaches, those things—and what you are complaining about is the loss of metered parking which is available to everybody and your policies are actually aiming to tighten up and reduce that.

**(Mr King)** I think I would rest my case on the fact that we have not seen in the evidence submitted by the Promoter the work that we would normally expect to see, in something that looked like a planning application, addressing the parking impacts so that we can respond to it in a positive manner. If you ask us the right question in the right way you will tend to get the right answer; if you merely say, “We are not going to ask it in the right way, we are not going to show you how we are working on these things” you will get our answer.

3509. Mr King, it is for the honourable members of the Committee to decide whether the right answer and the right questions are being asked. I only have one more point to raise with you. So far as parking spaces are concerned you talk about private development but where there is public infrastructure work—utilities, alterations to the highway and other public utility type works—parking bays and meters can be suspended, can they not?

**(Mr King)** Yes, they can and they are.

3510. And they are not charged because they are part of the public interest which is being balanced, are they not?

**(Mr King)** I hesitate to answer that because of the opposition we have been putting on your question of utilities, which you mentioned.

3511. I am talking about ordinary street works.

**(Mr King)** In terms of ordinary street works I completely agree.

3512. So Westminster has an expectation that you do not charge back the revenue costs where there is work being carried out in the public interest?

**(Mr King)** If we stick with street works by highway authorities then I am content with that. Otherwise, you will appreciate that that is an issue between government and boroughs at the moment over the use of roads and other matters.

3513. So there is no guarantee of revenues where public interest works are concerned and it is a matter for the Committee to decide, listening to your objection, whether Crossrail comes within the latter category, given the public benefits you expect to get from Crossrail.

---

<sup>8</sup> Crossrail Ref: P46, City of Westminster, Unitary Development Plan—Traffic Reduction (WESTCC-32104-002).

---

 The Petition of City of Westminster
 

---

*(Mr King)* It is certainly obviously within the ambit of this Committee to make its decision, yes.

3514. **Mr Elvin:** Thank you, Mr King.

3515. **Mr Binley:** I am particularly concerned about having sight of building plans before demolition in areas that are particularly of interest from a conservation and general interest perspective, and indeed I raised this question on our trip yesterday with regard to a façade at Tottenham Court Road, when I suggested that the truth of the matter was that that could be there for nine years before a building was completed behind it, and this raises the thought that you would see no more than a nice

architectural picture made from a piece of software before that building was demolished. Is that the case?

*(Mr King)* That is the case, yes.

3516. Then it seems to me that that gives a freedom that is not given to other people in a similar planning situation. Is that the case?

*(Mr King)* That is absolutely the case.

3517. **Mr Binley:** I am happy with that; unhappy with the facts, but I am happy with your answers. Thank you.

3518. **Chairman:** Mr Clarkson.

---

 Re-examined by Mr Clarkson

3519. **Mr Clarkson:** Is it the proposal of the Promoters to remove parking from Hanover Square once Crossrail is built?

*(Mr King)* We do not have the detailed post-Crossrail plan from the Promoter. That is something we have talked about the need for, but that was in the context of when they were also part of the gardens. So 18 months ago we asked for Crossrail to show us a mitigation strategy saying, "We will do these things. This is how we manage it and this is what it will be like." We have also not finished our discussion with Crossrail from that time on the matter put forward as the exhibit as to how the work site is arranged.

3520. That is the work site, but do you know whether there will be parking in Hanover Square afterwards, or not?

*(Mr King)* From what we know of the Crossrail scheme there would appear to be no reason why the existing level of parking . . . Or given the fact it is annually reviewed anyway, whatever at that stage we think is appropriate and necessary to put back into the Square.

3521. Do you say what type of user uses that parking?

*(Mr King)* At the moment we would assume it would come from a number of factors. In a post-Crossrail world I would hazard the following: firstly, there would have been an increase in the number of people who live in that area. We will, therefore, if resident parking facilities continue anything like they are at the moment, have more resident demand for parking in the W1 area.

3522. **Chairman:** Mr Clarkson, just before you go on. In Hanover Square you told us some time earlier that there is only one resident.

*(Mr King)* Yes.

3523. You expect that to increase dramatically, is that what you mean?

*(Mr King)* Yes, because if you look at the planning permissions log we are receiving more applications for residential buildings in that area than before, as well as from office development pressure. We are talking about quite a period of time in Mr Clarkson's question, and I would expect our normal planning policy to further restrict the amount of parking made available for any other form of development. Another major factor, which would tell us who we should try and serve in this area, is the output from the Mayor's West End Commission, which is due to report in various stages in the next three months, and when he advises us will set the tone for his review of the London Plan, to indicate the planning policies he wishes to follow, really from 2012 through to something like 2020. I mention that as being quite important because we are perhaps for the first time in a generation or so on the cusp of some significant change and further developments, certainly for the Mayor's ambitions to be realised, and both Westminster and Camden are fully taking part in that. That scheme envisages a world where Crossrail has been constructed and is in operation, but I do therefore suggest that the current pressures on parking will be changed on one level by further decreases in parking provision elsewhere—and, as we mentioned, some car parks are expected to go. Car parks as car parks are losing money, so the tariff will certainly need to be changed, and that might make them closer or more applicable to on street parking. But it is hard to envisage anything like a situation, even with congestion charging going up—it is not going to go down—as a daily charge, the demand for some vehicles to be in this area, and given the activity of the number of users in the area it is perfectly reasonable to assume—

3524. I am sorry, Mr Clarkson; I just want to go into this slightly. There is only one resident at the moment, one flat resident in the area, and even if it were to increase it is my understanding, looking at the properties there, that there are quite a number of underground car parks provided to those buildings.

---

The Petition of City of Westminster

---

Will they not accommodate the residents who might move into the area because the car parks are under the same buildings?

**(Mr King)** We would expect most of those underground car parks that exist relating to private buildings to be lost on redevelopment. If you have a 1950s office building, say before 1957, you may easily expect it to have—as I think the James Laing office in Hanover Square has—about 20 car parking spaces. One of these days the owner will come in and ask permission to redevelop and he will be lucky if he gets two spaces out of it—you insist the rest goes—because that is private parking.

3525. What I am trying to say is that, as I understand it, there are four or five major, significant underground car parking facilities for quite numerous amounts of cars. If they do move into these buildings they are likely to have a car parking space in the basement there?

**(Mr King)** No. I think the buildings will be redeveloped and by the exercise of the policy pointed out by Mr Elvin we would actually say, “I am sorry, you cannot have that parking back again.” If they wish to increase the amount of gross office floor space they have over the existing they will trigger other policies in the plan which requires them to provide proportionate housing, both private and affordable on site. They would in most cases not be able to meet that parking need either. If we are to meet the Mayor’s ambitions—and I mention the Mayor in this context because he has put numbers both on jobs and housing in the central area that he wants to see achieved—we talk about trends and he talks about numbers, and that is the only difference between us—then, frankly, more buildings are going to come out, they are going to be redeveloped and some of those private parking spaces that do exist will be lost and they will not be replicated in buildings either he or we approve because of the dint of our policies. Meanwhile, the activity levels go on.

3526. **Chairman:** Mr Clarkson, for everybody who is not in the same position as the briefs, the tea urn facility that people are waiting for opened three minutes ago and will continue until 12.10. Without causing a stampede, we will continue!

3527. **Mr Clarkson:** That is a very unfair way, sir, of stopping my re-examination! Mr King, following on from the Chairman’s point, notionally, please, redevelop the west side of Hanover Square, in your mind. The developer can do what he likes on his own site or what you allow him to do on his own site. What do you allow him to do in the public realm *qua* the car parking and the meters?

**(Mr King)** In relation to the public realm we will need to see where the Crossrail proposals meet—

3528. Forget that. I am talking about a specific notional development of the west side. Forget the Crossrail; what would a developer have to do about the parking that he sterilises in some way?

**(Mr King)** If 18 to 19 were to come forward for redevelopment without Crossrail and they were to take parking spaces away they would be required to pay for the period that those bays were suspended.

3529. Postulate now a public works exercise, is a four-year period usual for utilities?

**(Mr King)** I can think of no utility work that has lasted for that period of time and served its interest.

3530. Taxis and motor cycles and deliveries, under a compendious heading: is there any policy London-wide or City UDP that in any way seeks to restrict access to those vehicles to such as Hanover Square?

**(Mr King)** No, there is no policy to restrict that precisely.

3531. Do they have to stop on occasions?

**(Mr King)** Yes, certainly.

3532. **Mr Clarkson:** Thank you, Mr King. Sir, that is our case.

*The witness withdrew*

3533. **Mr Elvin:** Sir, we are in the Committee’s hands as to what the Committee would find most helpful. I am not going to produce any evidence to deal with the car parking revenue because it is a very straightforward issue and you know what the points are, and unless you feel the need for assistance I do not think there is anything else to deal with on the car parking revenue. I do have Mr Colin Smith on an issue which you are not being asked to determine at the moment, which is the issue of over-site development on the view that it might assist the Committee if we gave you a little more information as to why there were difficulties with it. We are in your hands as to whether you want to hear that now or at some future date.

3534. **Chairman:** I think we should move straight to final statements and then conclude. We can come back, even this afternoon if we can liaise with the clerk, and we can just discuss that outside.

3535. **Mr Elvin:** It is just that we wondered whether you would find it helpful to have a little more information.

3536. **Chairman:** It might be helpful but I would rather have final statements first.

3537. **Mr Elvin:** Sir, I am only addressing the car parking revenues issue for the reason it is the only matter put before the Committee now by Westminster for your decision at this stage. There is no issue between us that there will be some loss of revenue from metered spaces because although Westminster is content with the use of Hanover Square for the works, given the way that they have been restructured by negotiation, their concern is about the loss of revenue because the spaces for priority users will have to be adjusted and moved on to metered spaces, hence the loss of revenue. It is

---

 The Petition of City of Westminster
 

---

clear from what Mr King says that you are looking at the loss of about 0.02% of the total metered spaces that Westminster has, of which the bulk, it seems, lie within the central activity zone. As I have said, no issue that there will be some loss of revenue, but the question for the Committee is whether that is justifiable, given that there are massive public benefits arising from Crossrail, which Mr King of Westminster accepts, and whether this really stands in the position of a private developer rather than others who carry out works to the public highway in the public interest in order to carry out those works and disrupt parking spaces and the like and cause inevitable loss of revenue. Hand in hand with that you have the Council's own strategy, which is in line with the Mayor's strategy, to tighten up the use of car parking spaces, although to give priority to those who clearly have need of spaces—residents, doctors, local businesses and the like, and those priority spaces will be relocated. Where there is not need, that is the general metered spaces, Westminster policy is to tighten up on them, and therefore they can have no expectation that their revenues will continue in any event. We say that the public interest effectively ought to trump this particular issue as it does in the case of normal street works. Of course, Crossrail is taking longer in Hanover Square than normal street works, but it is also delivering a scale of public benefit to Westminster and other parts of London, which are unprecedented in terms of public transport provision. So perhaps the balance, we would suggest, is not an unfair one in favour of Crossrail.

3538. Finally, so far as the points that were raised in re-examination about what goes back, that is entirely within the control of Westminster. Westminster is the Highways Authority and whether it needs more residential spaces, tightens up on metered spaces, redistributes local business delivery spaces, is entirely a matter for Westminster. We do not dictate what Westminster does with the highway once Crossrail is complete; they will have their policies to apply and determine what is best in the public interest at that stage. So all the points that came out in re-examination do not really seemed to go anywhere because that is entirely within the control of Westminster when Crossrail completes.

3539. Sir, I end by saying that, as you know, the Secretary of State sticks, so far as the Committee will support that, to the National Compensation Code, which Parliament has applied again and again to major projects. That Code does not make provision for compensation in this case. This is a public interest case with an overriding public benefit and there is no reason, we suggest, for departing from the general fairness which Parliament has seen in the National Compensation Code in the case of Westminster losing some 0.02% of its parking revenue spaces for a limited period of time. Sir, those are our submissions to the Committee on that issue.

3540. **Chairman:** Mr Clarkson.

3541. **Mr Clarkson:** Sir, I can be equally as brief as you have just heard Mr King. What he is concerned about are three matters. He wants clear indication as to the impact on parking in Hanover Square proposals and that he seeks by way of detailed resolutions through discussion. Second, he wants information about relocation. Again, that is something that could be achieved by discussion. Third, he seeks on behalf of Westminster financial settlement along the lines of any other developer. That last point is what I do flesh out and I postulate the notion of somebody developing on the west side of Hanover Square and ordinarily that developer would have to reimburse Westminster for the cost of any loss of revenue to meters resulting from the development.

3542. The parallel of public works is not really a solemn parallel given that the public works by way of utilities are usually short. This is a major loss of revenue that goes of course into what I would call the transportation account and so there are issues that do spread through to the broader realm. Added to that is a concern that there should be information as to likes of taxis, as to the likes of motor cycles, special users, deliveries and the like. What Westminster is uncomfortable about is there is no policy that Crossrail will eliminate parking in Hanover Square or anywhere else. What they seek is clarity and the position that they see today is that there is no clarity. So the compendium of lack of dealing with the issue of lost revenues and the lack of detailed exposition as to exactly how the car parking is to pan out means that simply, through Mr King, we have to lay that before the Committee to explain what our problem is.

3543. What we really seek is twofold. One, an earnest endeavour from the Promoters to explain in due course how the parking is going to be dealt with. Second, from the Committee that there be some accommodation for the loss of revenue to the transportation account in the City of Westminster. Our case is as simple as that. Unless there is anything I can help you with?

3544. **Chairman:** Thank you very much indeed. I think it is an appropriate time now to suspend until 2.30 this afternoon. It gives members time to get down to Prime Minister's question time and also to participate in, as they will recall, on the way down, to deferred decisions in which they may be allowed to vote in today.

3545. **Mr Clarkson:** Sir, I would like a steer from the Committee as to what you seek from us at 2.30?

3546. **Chairman:** We have agreed to come back on Mr Elvin's points and I thought you may have been interested in those, Mr Clarkson. What we are going to do with the remaining time, after we suspend, is to converse to see what we can do this afternoon. There is not a second witness, I presume?

---

The Petition of City of Westminster

---

3547. **Mr Clarkson:** No, there is not.

3548. **Chairman:** Perhaps we can do it quickly outside and have a quick chat. What I would like to do now is to officially suspend until 2.30, and if we do what Mr Elvin is requesting, to do that then and work out the necessity of your appearance here.

3549. **Mr Clarkson:** If it is to be done at 2.30 we will be here at 2.30.

3550. **Chairman:** I do not think there is sufficient time to do what needs to be done.

3551. **Mr Elvin:** It will probably take about 20 minutes, 25 minutes.

3552. **Chairman:** In that case we will return at 2.30.

*After a short adjournment*

3553. **Mr Clarkson:** Sir, can I correct one thing from this morning? You will be riveted to hear that the number of metered parking places in Westminster is not 20,000, it is half that—9,528. Mr King asked me to correct that.

3554. **Mr Elvin:** In which case I correct the figure I gave you in my closing submissions. I said I thought it was 0.02% of the total number of meters and it has now gone up to 0.04%. I thought I would share that with the Committee!

3555. Sir, in that case, I will call Mr Colin Smith.

---

**Mr Colin Hugh Smith, Sworn**

*Examined by Mr Elvin*

3556. **Mr Elvin:** Mr Smith, as this is your first appearance I will introduce you to the Committee. You are Colin Hugh Smith and you are a Fellow of the Royal Institute of Chartered Surveyors, and at the moment you are a director of Colin Smith Associates Limited.

*(Mr Smith)* Correct.

3557. You are a property consultant and you have over 30 years' experience in the property industry with the previous 16 year in senior roles in London Transport, 10 years as managing director of the London Transport Property Department.

*(Mr Smith)* Correct.

3558. Amongst the roles you have played over the years is advising on a number of major transport infrastructure property issues including the DLR, the Jubilee Line Extension, safety measures and Crossrail.

*(Mr Smith)* Correct.

3559. You set up your consultancy in 2003 direct from leaving your role as managing director of London Transport Property.

*(Mr Smith)* Yes.

3560. Mr Smith, could you begin by picking up a letter that was sent to Westminster last week. I am asking you to refer to this because it sets out quite a lot of the detail on over-site development, which is what you are here to speak to the Committee about this afternoon. Sir, it is P46 again.<sup>9</sup> Do you have a copy of that?

*(Mr Smith)* I do.

3561. The relevant parts are at pages 8 to 10 and it is a letter from Crossrail, and can I ask you to confirm that you had input into the text in this letter, dealing with over-site development?

*(Mr Smith)* I did, yes.

3562. Can you help the Committee with a number of issues? We will come back to the terms of the letter in a moment. The first question really relates to this issue of how rail infrastructure projects compare to ordinary conservation area developments? If I can ask you to assume that an ordinary conservation area style development is one where you are bringing forward a development to replace an existing building in the conservation area and, as Mr King says, the normal policy is that you let the contracts and have the designs of the replacement building before you knock down the existing building.

*(Mr Smith)* Yes.

3563. Can you then explain to the Committee the difficulties with that approach with a rail project, please?

*(Mr Smith)* With something of the nature of Crossrail, where we have major works on site, it differs in the different sites that we are talking about here in the central area, but if we are looking at the areas of Bond Street, Tottenham Court Road, it is likely to be a period of four to six years within which these major railway works would need to be constructed, so there will not be an immediate follow through from the demolition of the buildings that are on the site to the eventual construction of the commercial development. There will obviously be a lag while those major works are carried out in the public interest. So you do not have an immediate follow through. You have continual works but you do not have an immediate follow through because the railway works have to be built first and then the development sits on top.

---

<sup>9</sup> Crossrail Ref: P46, Correspondence from CLRL to Westminster City Council, Commercially Sensitive Over-Site Developments, 13 February 2006 (WESTCC-32104-008 and -009).

---

 The Petition of City of Westminster
 

---

3564. Can I ask you, from your experience of other Bills before Parliament—JLE for example—has Parliament ever required in a major infrastructure project an absolute requirement to provide or secure OSD to coincide precisely with the completion of works to the railway or the station which is being constructed?

*(Mr Smith)* No, sir, it has not.

3565. Has it considered this issue before?

*(Mr Smith)* It has, but the point that has been made before, and I think sustained, is that because of the length of time that is required nobody will commit to actually commencing a development at such a future date when economic conditions will be unknown at that time. We are looking into the future, as opposed to the normal development which Mr King talked about, which is immediate.

3566. I would like to take you to a number of elements of that and to explain what is being done to progress plans for over station development, even notwithstanding those issues, so that the Committee knows that this is not just being left until some indefinite moment in the future. I would just like to understand a little more about the difficulties. Can I ask you to go to the letter because it helpfully sets out some of these issues? We can see on page 8 of P46 paragraph 2, “It is the Secretary of State’s intention that appropriate over-site development should be delivered as quickly as practicable following completion. . . . We share the Council’s desire to avoid unnecessary delay, which could leave gaps in conservation areas.” And referring then to the draft undertaking, which of course has been given, “It is not possible to offer a guarantee as to when such development will start or complete and we do not understand . . .” and this is a letter written to Mr King, “... that you expect an undertaking as to the date for completion.” You then set out in paragraph 3 why there are difficulties, which are the difficulties you have just explained to the Committee, which makes it unlike an ordinary conservation area and demolition, for the simple reason that there will be a hole in the ground and works to be carried out before the new development can go in on time.

*(Mr Smith)* Correct.

3567. If we go to the next page it then goes on to deal with the location of OSD and the position with regard to land owners and new development, and rather than read out the letter I would rather you explain to the Committee, please, in your own words. The situation that is set out in the letter and that you have explained is there is no absolute guarantee. Can I ask you, what is the likelihood that the development will be brought forward in good time, given the locations that we are dealing with, particularly in Westminster and the city of London?

*(Mr Smith)* We are confident that there is a high likelihood that they will be able to be brought forward on time. As Mr King said, this is a major world centre in terms of commerce and therefore we are confident that normally we would think this could occur, that we could bring forward these developments straight

away following completion of the railway works. However, one cannot ignore the fact that in the past there have been times when there has been no demand for commercial development, it happens on a cyclical basis, and if we happen to come out of the Crossrail site at that particular point in the cycle then there will be difficulties in immediate commencement.

3568. Can we look at paragraph 8 of the letter, where it refers to the fact that delivery will be spread over several years; reasonable endeavours will be used to deliver the OSD; no absolute commitment can be given other than in respect of the planning applications; and “Given the nature and location of the sites, there is every reason to expect development to proceed,” which is what you have just said, but nonetheless not appropriate to provide a guarantee and not possible to foresee the economic circumstances. What I would like you to explain to the Committee is what is the position, coming to land owners to discuss these issues, or to developers, to try to deliver the OSD. You are at the moment in negotiations with some land owners and developers?

*(Mr Smith)* We are. We have a separate land disposal policy which was put forward deliberately to enable certain land owners to be able to repurchase land that has been compulsorily acquired from them to undertake the development. And we are talking to both Grosvenor and Hammerson, for example, in the Westminster City Council area, and they have welcomed this initiative. They are very knowledgeable of development in the West End and so it is a win-win, I think, from all sides. However, we have put to them would they be willing to commit now to develop in, say, five, six years’ time, and they have been very firm that they are unwilling to do so because of the unknown circumstances at that time. As I say, it is unlike a normal development when you get on straight away and build because here we are talking about a lag whilst we build the Crossrail works. So we cannot get that sort of commitment from major developers.

3569. The land disposal policy, of course, is set out in the information papers in C10, Mr Smith, so that can be seen if anyone wants to pick that up. Can I understand this? Developers and land owners are not prepared to sign a contract now to deliver development possibly in five, six or more years’ time. Is there any other disadvantage, not just of private development but from the public interest, of actually trying to fix development at this stage rather than the time it has to be delivered when the stations are nearing completion?

*(Mr Smith)* Yes, there are practical problems. Because of the timescales, if we try to fix a property development now and get a consent today, shall we say, for the sake of argument, by the time the Crossrail works are complete and are ready to develop, firstly the planning consent could have expired in terms of normal reflection of time; secondly, the changing and demands of properties, of occupiers, you are always getting changes and you would want to be up to date with your application and your details and you would want to have that

---

 The Petition of City of Westminster
 

---

confirmed, really, shortly before you develop. You would not want a five, seven-year old consent in terms of developing a new building. Thirdly, there could be opportunities that even the local planning authority would foresee, for example an adjoining site maybe coming available, which obviously we would not be involved in but we are making sure this process happens, and if the Council wanted to tie in that extra piece of land, and if they felt that was in the public interest to do so, if you fix something today you would be fixing something rigidly that you could not really improve upon. So in all the cases and when we are talking to developers, they are, “We want to take forward the principles, we want to take forward the integration and design, but to actually fix the development now will be premature.”

3570. Can I interpose this, Mr Smith? The Bill does not retain powers in relation to property development as opposed to railway development and that is a matter which is there for all to see. Absent powers in the Bill for the Secretary of State on a nominated undertaking to act as a general developer, how dependent is the Secretary of State, the nominated undertaker, on the cooperation of the property development market and the planning authorities in order to bring something forward which is deliverable?

*(Mr Smith)* We are very dependent on both. We are looking to use the special skills of the private sector. They are the people who have the knowledge in development to help bring these developments on stream. They are not part of the authorised works but the Secretary of State has given an undertaking and we want to see that brought forward, the development of sites, as soon as is reasonably practicable and we will be utilising the skills of the private sector in order to do that. We would also, obviously, in terms of bringing forward planning and development, go through the normal planning processes and we would have extensive discussions with Westminster City Council on planning policies, on environmental impact assessments, on heritage and other matters. These are sensitive sites so we foresee that we will have heavy consultation with them as well in order to get the development at the end of the day which matches the best development in terms of public interest.

3571. Can I just pick that point up? Of course, OSD, as I said to the Committee this morning, when given the undertaking of the Secretary of State, is outside the scope of the Bill. It has to go through the ordinary planning processes.

*(Mr Smith)* It does, yes.

3572. So it is, therefore, subject to the normal requirements of the local planning authority; all the protective planning policies that would apply to the area and to public consultation.

*(Mr Smith)* Absolutely. The full process has to be gone through. As Mr King mentioned this morning, he would expect to see us and we would expect to discuss with him and we will take that process forward, but it is laid down that it is the decision of Westminster City

Council, as the local planning authority, as to what they eventually grant and what they do not grant within Westminster City Council’s boundary.

3573. In terms, of course, of the undertaking which was given this morning, which is on page 12 of P46, the undertaking reflects a number of these matters and we note, in particular, that undertaking (4) is to submit planning applications and the environmental statement for over station development in any event no later than two years after the commencement of construction, unless of course the planning authority agrees otherwise.<sup>10</sup> Two years after the commencement of the construction. In average terms that it will take to build a station, how far in advance of the stage of development being able to be commenced over the station is that likely to be?

*(Mr Smith)* Given that we are on site, on average, between four and six years, we are talking about an average of three years in advance of being able to come out of the ground with the commercial development. So we are in advance of that.

3574. Then, of course, “reasonable endeavours” and you have explained the inability to give an absolute guarantee but to use reasonable endeavours to obtain planning consent by the date the works are completed and to use reasonable endeavours (this is item (6)) to ensure that that development is commenced in accordance with those consents once the station works are complete.

*(Mr Smith)* Yes.

3575. Would it be realistic to go further than that and give guarantees?

*(Mr Smith)* Well, no, it would not, sir, because we cannot get those guarantees from the private sector. They are not prepared to give those guarantees.

3576. That is for the reasons you have given?

*(Mr Smith)* For the reasons I have given. So, no, it would not be sensible, I believe, in the public interest to do that. It could actually mean that the very developers we want to encourage with land disposal policies, those that have a knowledge of Westminster and a knowledge of this type of development, we do not want them to go away because they are not prepared to enter into this sort of obligation which is not something that they would usually enter into at all. So we want to encourage the use of the private sector not deter it. We would see this as a deterrent.

3577. Finally, Mr Smith, would you just explain in general terms to the Committee what is happening at the moment in terms of discussion about over-station development?

*(Mr Smith)* Yes. There are broadly 17 sites we are looking at, mainly in the central area, at the moment, and mainly in Westminster and the City of London, where we are taking land and constructing railway works beneath those sites which afterwards, having constructed fairly deep level works, and in some cases

---

<sup>10</sup> Crossrail Ref: P46, Proposed Undertaking to Parliament—Over-Site Development (WESTCC-32104-012).

---

The Petition of City of Westminster

---

the ground floor ticket hall, once that is complete, then the airspace above it can be developed. Obviously, it cannot happen with a lot of thought in advance, so, with Crossrail moving to the next stage of detailed design, we are now appointing multidisciplinary consultants to look at the over-station development at the same time as the main railway design work is being taken to a detailed stage, and we are trying to fit the two together so that they absolutely work. Obviously the key elements are going to be structures, support, loading and access. It is fairly obvious as we come into a ticket hall branch or level, if we are going to be able to develop above we have to have enough space for the public to use but we also have to have space for whatever access to the commercial development is necessary, and loads of other things such as loading and unloading and all of that have to be thought through. So we are starting that process now. We have had preliminary discussions, as I say, with some developers who are existing landowners, but we will be fully consulting through this period in the next few months and years with the local planning authority on the appropriate form of development. As you said, we will be looking at the planning briefs that Mr King said are already on the sites, we will be looking at the planning policies with him and looking at all the other issues that arise—heritage and the environment—so that by the time Crossrail goes to be built it is quite clear how we can support and integrate a development on site.

3578. So the objective is to integrate as far as possible the OSD by the time that station work is under way?  
**(Mr Smith)** Absolutely. In fact, we have to start that work now. If we do not do it now it is too late. We are going down the route to give detailed design and that would mean if we do not get the supports designed in, then unfortunately you could not build above, so we have to do that now. That is the main area that is under way at the moment.

3579. **Mr Elvin:** Sir, that is what I wanted Mr Smith to come and tell you, just to give you a broad overview of what was happening with over-site development. No doubt the Committee will ask questions if you have any.

3580. **Mr Binley:** You rightly and properly, of course, refer to the state of the market in 12, 13, 14 years' time in what you are telling us. When some of this development, which is talking about starting in four years' time—

**(Mr Smith)** If we started in late 2008 and ran on for five years—

3581. We talked about a site yesterday that might not be finished for nine years in terms of a façade with a building behind it. So we are talking about a sizeable amount of time down the road.

**(Mr Smith)** We are.

3582. I understand your thoughts about the market at that time but, with respect, the proposers are making a proposition which is quite long-term in itself, and if you are concerned about the marketplace in order to protect the proposers, should not the people be concerned about that too, and ask the proposers to take some of that risk in more ways than we are just getting here? In other words, if the marketplace does not sustain a developer in the way that it should, should not the proposer take on that responsibility?

**(Mr Smith)** I think the short answer to that is, I think, no, because I think the proposer does not have the skills to undertake that form of development. I think what we are proposing is a balanced approach. The fact that we cannot give a guarantee does not mean to say it will not happen.

3583. I did not say that. If your worst fears came to fruition, should there not be some protection by the proposers who are making the proposal for this massive great exercise throughout London to take some responsibility in this respect? Would that not be reasonable?

**(Mr Smith)** I think if we are looking at a Doomsday scenario, sir—

3584. Which is what you are presenting to us as a possibility.

**(Mr Smith)** Then I think if there were no demand—let us assume there was no demand for a commercial development on this site at that time—then I am sure that in the public interest the Promoters would wish to discuss with the local planning authority any alternative measures that are necessary in order to make those sites presentable for the period in which the market has to come back.

3585. Do you see any reason why an undertaking cannot be given in that respect?

**(Mr Smith)** I would say not.

3586. **Mr Binley:** Okay. Thank you.

---

Cross-examined by Mr Clarkson

3587. **Mr Clarkson:** Just a couple of points of elucidation. First, we had mentioned this morning, Mr Smith, about a meeting on 24 March, with—I do not know whether you will be there, Mr Smith—the Heritage Sub-Group. Is that right?

**(Mr Smith)** It was mentioned.

3588. Is that something you attend?

**(Mr Smith)** No, I have not attended those, to-date.

3589. That is the one English Heritage attend. Has this undertaking gone to others that would attend that meeting, do you know?

---

The Petition of City of Westminster

---

*(Mr Smith)* I do not know. I would have to ask. It should be there by the time of the meeting.

*(Mr Smith)* Yes.

3590. We heard about that this morning. I want to take the thing forward from there, and I am grateful for your evidence this afternoon. It is something that has the potential to be a genuine issue, is it not, because, for example, the OSD above the Jubilee line extension at Southwark still has not happened, has it? *(Mr Smith)* No.

3593. I think that is an agreed position between the two of us.

*(Mr Smith)* Yes.

3594. The way it is put in the draft undertaking is, of course, at (4): “A planning application . . . will be submitted as soon as reasonably practicable and, in any event, no later than 2 years after the commencement of construction . . .” That is the application setting it out, is it not?

*(Mr Smith)* Yes, that is correct.

3591. How long is that? How old is that?

*(Mr Smith)* That is probably six years.

3595. Then (6): “Reasonable endeavours will be used to ensure that development is commenced in accordance with the planning consents granted once the works to the new stations or railway on the sites are completed.” So the picture between the two sides here today is that we are all aiming, are we not, to do it seamlessly from completion into OSD.

*(Mr Smith)* Yes.

3592. Where Westminster—and there may be others as well, Camden certainly—have an anxiety (and I think this is an anxiety with you as well) is to make sure that there is movement from the railway completion to over-site development as soon as possible.

3596. And we are all hopeful that it will succeed.

*(Mr Smith)* Yes.

---

*Re-examined by Mr Elvin*

3597. **Mr Elvin:** Two things: one is a question and one is a response to Mr Binley’s question, if I may, in that order. Can I just check this: in terms of Southwark (and the Committee probably knows the answer to this before I ask the question) how do property prices and property values compare with Oxford Street and the City of London?

*(Mr Smith)* Unfortunately, Southwark is in the City fringe and it is very different from Mayfair and some of those sorts of areas we have been talking about.

discussions with the Heritage Forum I will bring back a revised undertaking, and certainly we will take Mr Binley’s point on board when considering any improvements to the undertaking.

3600. **Chairman:** Thank you, Mr Smith. Do you want to make a final statement?

3598. Does it present a different level of risk?

*(Mr Smith)* You will find in the property market, I think, the City fringe is a far higher risk than in Mayfair. I would not expect that sort of thing to occur in the Mayfair area.

3601. **Mr Elvin:** I think our position is clear, sir. Unless there is anything the Committee require me to clarify.

*The witness withdrew*

3599. Thank you, Mr Smith. In response to Mr Binley’s question, can I correct Mr Clarkson? This is not a draft undertaking; I have given it as an undertaking but it is subject to improvement. As the Committee are aware, this is going back to the discussion with Heritage. The Secretary of State thought it was better to get the undertaking on the record now. If it can be improved following

3602. **Chairman:** Thank you very much indeed. We conclude events for today. The Committee will now not sit until Tuesday 28 February at 10 am, because we are on half-term next week.

3603. **Mr Elvin:** I hope the Committee has a pleasant recess.

3604. **Chairman:** Thank you very much.

*Adjourned until Tuesday 28 February at 10.00 am*

---

---

**Tuesday 28 February 2006**

Before:

Mr Brian Binley

Mr Philip Hollobone  
Kelvin Hopkins  
Mrs Siân C James  
Mr Ian Liddell-Grainger

Dr John Pugh  
Mrs Linda Riordan  
Sir Peter Soulsby

---

In the absence of the Chairman, Sir Peter Soulsby was called to the Chair

Ordered: that Counsel and Parties be called in.

The Petition of Smithfield Market Tenants' Association.

Mr James Dingemans QC and Mr Paul Letman appeared on behalf of the Petitioner.

3605. **Sir Peter Soulsby:** Today the Committee is hearing the Petition of the Smithfield Market Tenants' Association. I understand Mr James Dingemans is here, assisted by Mr Paul Letman. You are welcome. Mr Elvin?

3606. **Mr Elvin:** Sir Peter, can I just record for the record that I received a letter from Mr Meale last week requesting certain discussions relating to the City of London and Liverpool Street. Can I just tell the Committee that those matters are in hand, so that, for the record, you know that we have received the letter and they are being actioned. Also, in accordance with the previous presentations, I wondered whether the Committee would find it helpful for me just to say a few short words to say what is happening at Smithfield before Mr Dingemans begins?

3607. **Sir Peter Soulsby:** If Mr Dingemans is happy with that I am sure we will be.

3608. **Mr Elvin:** It will not be very long. Sir, you should have from us P49<sup>1</sup> which is the bundle of exhibits which have clearly been supplied to the Petitioners as well. I am only going to refer to three of these documents, and they will be put up on the screen as usual. Sir, an overview of the layout of Crossrail's general proposals for Farringdon Station, the Committee may recall, was given in the opening made by Ms Lieven when the London Borough of Islington presented its Petition to the Committee a few weeks ago. Sir, the overall picture for the Farringdon Crossrail station is dealt with in the transcript of 7 February, in paragraphs 2435 to 2442.

3609. I propose now just to deal with the way in which the east end of the proposed Farringdon station interacts with Smithfield Markets, because of course the Committee is hearing the Petition of the Smithfield Market Tenants' Association. Can I ask for exhibit P49, page 7, to be put on the screen,

please?<sup>2</sup> Page 7 shows the eastern end of Farringdon station and its relationship with Smithfield Market. The Committee will see Smithfield Market marked in the bottom left-hand quadrant of the plan. The Committee will see also the triangle of Fox and Knot Street, which was dealt with some weeks ago, you will see the platforms to the eastern end of the proposed Farringdon station, and you will see a tunnel coming up to a box with escalators in it underneath Smithfield Market to the south, which will take passengers to and from the eastern ticket hall which is to be built on Lindsey Street, which you will see just to the right of Smithfield Market. You will see the entrance to Farringdon Crossrail eastern ticket hall at that particular point.

3610. Can I also ask that photograph exhibit page 9 be put up, please?<sup>3</sup> That is simply an aerial photograph. That shows Smithfield Market, the Committee will know. Over Smithfield Market itself there is a dotted line to show the approximate outline of the basement worksite which will be needed for these works, the passage under Lindsey Street, which you will be hearing a good deal about from the Petitioners, and the area of the Lindsey Street worksite which will be needed for excavations and for the construction of the eastern ticket hall. You will see, also, the relationship of the proposed eastern ticket hall with Barbican Tube station which is existing, and you have already heard during the City of London's Petition that there will be a connection between the Crossrail ticket hall and the Barbican station.

3611. As I have already mentioned, there will be an entrance into Lindsey Street, and the eastern ticket hall will also provide an interchange, as I have mentioned, with the Barbican station to the east. As you have seen from the previous plans, there is a series of escalators and passages that will provide

---

<sup>1</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association.

<sup>2</sup> Crossrail Ref: P49, Petitioner Response Document, (LONDLB-28004-007).

<sup>3</sup> Crossrail Ref: P49, Petitioner Response Document, (LONDLB-28004-009).

---

**The Petition of Smithfield Market Tenants' Association**

---

access from the Crossrail platforms at deep level up under Smithfield, and one of those flights, as I have already mentioned, passes directly under Lindsey Street and into a box constructed under the Smithfield Market basement.

3612. Perhaps I could ask for drawing 8 to be put up, which shows this in section.<sup>4</sup> You will see there on the left-hand side the eastern end of Smithfield Market and you will see the market basement shown and, underneath that box, the escalator and the passageway from the deep platforms which are to the north up to Lindsey Street and the ticket hall which will be, of course, at ground floor level. To enable the construction of the box under the basement, part of the basement will need to be temporarily occupied as a worksite (the worksite is shown in the response document, which I do not need to show the Committee at this stage, unless the Committee wants to see it) and the approximate outline of the site of the market you have seen on the photograph. Mr Berryman from Crossrail will provide more detail of the engineering matters and will be able to answer any questions that the Committee has on the technical construction issues.

3613. So far as the issues for the Committee are concerned, the main issue raised by the Market Tenants' Association is to protect the traders and their businesses during the construction of Crossrail. It is understood from recent meetings, correspondence and discussions which we have had, both at Crossrail and counsel level, particular items of concern include traffic impacts, loading bay provision in Lindsey Street, car parking, air quality (particularly concerns about nuisance dust and impact on the hygiene of meat), the structure and integrity of the market building and issues as to compensation. No doubt Mr Dingemans will give you his submissions in a moment, and I should note, because he will be mentioning it in a moment, that as a result of the discussions there have been a significant number of assurances and undertakings now given by the Secretary of State to the Market Tenants' Association, but I will leave it for Mr Dingemans to explain what has happened and those matters with which the Market Tenants' Association still require further steps to be taken. Thank you.

3614. **Sir Peter Soulsby:** Thank you, Mr Elvin.

3615. **Mr Dingemans:** As you know, I appear on behalf of Smithfield Market Tenants' Association, with Mr Letman. I have produced, and I hope it has been handed up, a short note of our submissions which I hope will save your pens, at least, and give a clear outline of what we are attempting to do on behalf of the Association. That is a document beginning "Note of Submissions on behalf of SMTA", and I will refer to a number of other documents which have been handed out together with that.

3616. **Sir Peter Soulsby:** Mr Dingemans, just for the record, that document will be numbered A42.<sup>5</sup>

3617. **Mr Dingemans:** Thank you. If one goes to paragraph 3 of that note, you can see that some of the issues which concern the Association were in fact identified in the evidence given by the Corporation of London on 31 January, so I will not repeat that, and since then much progress has been made. I have produced a document headed "Outstanding Undertakings from the Promoter". That is in a treasury tag and there are two documents headed: "Undertakings from the Promoter" and "Outstanding Undertakings". Can I show you that?

3618. **Sir Peter Soulsby:** You can, and, predictably, the "Undertakings from the Promoter" document will be numbered A43.<sup>6</sup>

3619. **Mr Dingemans:** Perhaps the "Outstanding Undertakings" which are in the same tag—do you want a separate number for that?

3620. **Sir Peter Soulsby:** Mine are safely stapled together!

3621. **Mr Dingemans:** Can I take you straight to the "Outstanding Undertakings", so that we do not travel over the ground that has already been covered, and identify what we are hoping to persuade the Committee to require the Promoter to give to us? First of all, in relation to highways, one of the provisions of the proposed Bill is a power to stop up Lindsey Street in its entirety. Now, if I may ask you to go back to the photograph at page 9, you can see, from what I hope will be an aerial photograph, Lindsey Street is at the end of the market and I think you have heard, and having read the transcript, Lindsey Street is critical to the market because, effectively, there is a one-way system running from Charterhouse Street, round Lindsey Street and through West Smithfield. The Bill proposes the power to stop up Lindsey Street in its entirety. If you look at the undertakings that have been given, "the nominated undertaker will maintain vehicular access around Lindsey Street" is one that has been given, and that is to include the 38, 40 and 44 tonne vehicles. The Petitioner's short point in relation to Lindsey Street is that if there is this undertaking that Lindsey Street will remain open all the time we would much rather this provision was removed from the Bill because the effect of having it in the Bill is that it gives statutory authority to block up Lindsey Street, and the protection that we are given is only the undertaking, and we will come back to what is the effect and legal effect of the undertakings later. That is paragraph 4.1 of my note.

---

<sup>4</sup> Crossrail Ref: P49, Petitioner Response Document, (LONDLB-28004-008).

<sup>5</sup> Committee Ref: A42, Note of submissions on behalf of SMTA (Smithfield Market Tenants' Association).

<sup>6</sup> Committee Ref: A43, Undertakings from the Promoter.

---

**The Petition of Smithfield Market Tenants' Association**

---

3622. Paragraph 4.2 is the hours of working. There is a short point here. The market, as you probably know from the earlier evidence, works effectively ten at night till nine in the morning. If construction begins at eight in the morning, you will have the construction traffic arriving at seven in the morning, and the effect of that will be, we say on the evidence, chaos. We just do ask for an adjustment of hours of working.

3623. Paragraph 4.3 is the timing of works, which is simply to avoid the Farringdon crossover works. In fact, since this document was produced last night further progress has been made on that point. It seems that that is not likely to be a real issue, so I will skip that very quickly, if I may.

3624. In paragraph 4.4, there has been really substantial progress on dust levels and suppression plans. You do not need any explanations today of how critical dust and environmental measures are for a meat market, but one remaining area of difference is this: that the trigger levels, which are the background levels that you start monitoring the dust at, are, at the moment, all within the power of the nominated undertaker. They are going to carry out some monitoring and consult with us, but then have the power to decide the trigger levels. We simply ask for a provision that we be entitled to agree them with agreement not to be unreasonably withheld, and if we are unreasonable it can go to arbitration. That is because, as you can imagine, dust is really inconsistent with the continued function of a market.

3625. Finally, one undertaking is the continuous use of the market buildings. Everything has been designed to ensure that the market continues to operate, and we would respectfully request an undertaking that that be given for the reasons that

I will come back to when we look at remedies for infringement of undertakings and the effect of the construction works.

3626. Can I drop down to the bottom of page 2?<sup>7</sup> As far as paragraphs 4.1 to 4.5 are concerned, you are going to hear evidence from some of the market traders (and I will get on to them as soon as possible simply because they have been working overnight—interesting though it is listening to lawyers, I suspect they would rather get on with the real job of life, if that is all right) and I will simply identify for the Committee's consideration the remedies point as briefly as possible, so that you can identify in the evidence what are going to be the important points in this respect. I have shown you the undertakings from the Promoter, which contain the undertakings which have been offered, and we will need to explain the manner in which those carrying on in the business operate in the market, the rights and remedies provided by the Compulsory Purchase Acts, which have been described as the national compensation code, the effect of the Bill on what would have been our rights without statutory authorisation and what we respectfully submit is required to ensure a fair balance between the public interest in ensuring that Smithfield continues and the Crossrail Bill is built.

3627. In relation to all those aspects, you can see that the rights and remedies provided by the national compensation code and the effect of the Bill on common law rights, remedies and a fair balance really stray into legal matters, but it is against that background that you will need to know the manner in which those carrying on business in the market operate with those concerns. So, with that very short introduction, if that is all right, and if I could be a wee bit more boring about the law later on, I will call Mr Greg Lawrence, who is the Chairman of the Traders' Association.

**Mr Gregory Alfred Lawrence, Sworn**

Examined by **Mr Dingemans**

3628. **Mr Dingemans:** Can you tell the Committee your full name?  
(**Mr Lawrence**) Gregory Alfred Lawrence.

3629. What is your occupation?  
(**Mr Lawrence**) I am a meat wholesaler.

3630. Are you a Managing Director of a company?  
(**Mr Lawrence**) I am.

3631. What is that?  
(**Mr Lawrence**) G Lawrence Wholesale Meat Company Limited.

3632. Are you the Chairman of the Association?  
(**Mr Lawrence**) I am.

3633. In your witness statement I think you have given us a bit of the background of Smithfield and the Smithfield Market, but if it is all right I will skip that. It is set out in various authorities. How long has the Association been continuing?  
(**Mr Lawrence**) I think approximately 120 years.

3634. Who does the Association represent?  
(**Mr Lawrence**) I think it is about 99 per cent of the tenants of Smithfield Market.

3635. Can you describe to the Committee how business is carried on at Smithfield Market? First of all, do you own the premises that you occupy?

---

<sup>7</sup> Committee Ref: A42, Note of submissions on behalf of Smithfield Market Tenants' Association.

---

The Petition of Smithfield Market Tenants' Association

---

(*Mr Lawrence*) No, we lease them from the Corporation of London.

3636. I think you have produced a standard lease. Is that right?

(*Mr Lawrence*) That is correct.

3637. That is SMTA1 on the numbering. I will not take you through that now but there are various provisions of it which are relevant. How long is that lease for?

(*Mr Lawrence*) Ten years.

3638. When is it due to expire?

(*Mr Lawrence*) In 2010.

3639. You are protected as a tenant, is that right, under the 1954 Landlord and Tenants Act?

(*Mr Lawrence*) That is correct.

3640. Which, effectively, means you have a right to renew your tenancy?

(*Mr Lawrence*) That is correct.

3641. The business that is carried on in the units, can you describe that for the Committee?

(*Mr Lawrence*) The business is two different types of business. I will call them shops: cutting shops and boxed shops. The cutting shops cut carcasses of lambs, pigs and beef and the boxed shops sell vacuum pack beef and frozen beef already boned out. We start at approximately ten o'clock in the evening, the meat gets delivered from all around the country and Europe. The cutting shops start cutting at ten o'clock for the orders to go out at six, seven or eight o'clock the following morning.

3642. How many lorries make deliveries, as a guesstimate?

(*Mr Lawrence*) Approximately 60 containers a night, approximately. Some nights are busier than others.

3643. Who picks up the meat? To whom is the delivery made?

(*Mr Lawrence*) The tenants of the market.

3644. Who do the tenants sell to?

(*Mr Lawrence*) Butchers, caterers, etc.

3645. How do they arrive at the market?

(*Mr Lawrence*) They arrive from midnight onwards to collect their meat and poultry, load up and then go on their way.

3646. At what time has the market effectively stopped trading?

(*Mr Lawrence*) Effectively, eight-thirty to nine o'clock in the morning.

3647. Are the regulations for the supply of meat the same for boxed meat and carcass meat?

(*Mr Lawrence*) Yes, really. It is, yes.

3648. As far as carcass meat is concerned, how does that have to be delivered?

(*Mr Lawrence*) Everything has to be under temperature control and wrapped.

3649. Does the carcass meat have to come in a specific way?

(*Mr Lawrence*) Yes, the carcass meat is delivered to the market via sealed locked lorries under temperature control, again.

3650. Which premises does your company occupy?

(*Mr Lawrence*) 23 East Market.

3651. How do you keep the meat cold at the market?

(*Mr Lawrence*) Everything is under refrigeration and the cutting rooms are run at seven degrees.

3652. What physically keeps the ability of the market to chill meat?

(*Mr Lawrence*) The refrigeration.

3653. Who runs that?

(*Mr Lawrence*) It is the tenants' own refrigeration.

3654. Is there water supplied?

(*Mr Lawrence*) Yes, chilled water which is provided by—it is not City Gen now. It used to be City Gen.

3655. Where does that come from physically?

(*Mr Lawrence*) From the City.

3656. Where is the chiller unit for that located?

(*Mr Lawrence*) In the car park underneath the East Market.

3657. The market was refurbished. When was that done?

(*Mr Lawrence*) It was completed in 1997.

3658. What was that to ensure?

(*Mr Lawrence*) The market can continue under new rules and regulations. It has to be EC approved.

3659. You mentioned the chiller unit down in the basement. What else is underneath the market at Smithfield?

(*Mr Lawrence*) The car park.

3660. How many car parking spaces are there there?

(*Mr Lawrence*) Approximately 500.

3661. The impact of the proposed Crossrail works on the market operation. Can I, first of all, deal with Lindsey Street? Why is Lindsey Street important to the market?

---

**The Petition of Smithfield Market Tenants' Association**

---

*(Mr Lawrence)* Well, as you have already mentioned, it is a one-way system of traffic. If Lindsey Street was closed the market would stop absolutely. It would be a disaster.

3662. What else happens on Lindsey Street?

*(Mr Lawrence)* There are loading bays for the customers. I think there are approximately 30 loading bays that are used all through the trading times, through the night and through the morning.

3663. How many loading bays, roughly, on Lindsey Street?

*(Mr Lawrence)* I think it is approximately 30.

3664. What would be the effect of the loss of those loading bays?

*(Mr Lawrence)* Again, it would damage the market considerably, because the loading bays do not just load one for one customers—one customer comes in and stays for half-an-hour and moves on and another customer will arrive to the market. We would be losing, through the day, it could be 120 spaces if it is used three or four times a day.

3665. For those at the east end of the market, those nearest Lindsey Street, which entrance do they use, as it were, for their customers to take the meat out of the market?

*(Mr Lawrence)* The Lindsey Street entrance.

3666. In relation to pollution, what are your concerns about dust and dirt from building works?

*(Mr Lawrence)* They are considerable. This is a 24-hour market and we can expect meat inspections at all times. If there is dust or pollution in the air it will destroy the meat.

3667. How many meat inspections did Smithfield have last year?

*(Mr Lawrence)* I think, again, approximately, between 35,000 and 40,000 inspections.

3668. That is a year?

*(Mr Lawrence)* Each year, yes.

3669. What happens if the inspectors are unhappy with the meat?

*(Mr Lawrence)* They detain it first and then they condemn it if they are not satisfied.

3670. Is it possible to arrange insurance for condemned meat?

*(Mr Lawrence)* No. Sorry, unless the refrigeration breaks down.

3671. The refrigeration unit that you have mentioned. When was that installed?

*(Mr Lawrence)* In 1997.

3672. Has that worked on an uninterrupted basis since then?

*(Mr Lawrence)* No, we have had numerous problems in the ten years we have been continuing trading in the East and West Market concerning mainly the chilled water.

3673. What happens when the unit breaks down?

*(Mr Lawrence)* We cannot trade. Trade stops.

3674. How long will the meat last once the unit is interrupted?

*(Mr Lawrence)* As soon as it goes out of temperature it could be two, three or four hours.

3675. We know that one of the proposals is to put the escalator unit right under the eastern end of the market. What concerns do you have in relation to the continued operation of the market?

*(Mr Lawrence)* It would be very, very difficult, but we will be able to continue as long as Lindsey Street is open all the time while we are trading, but that is an absolute must. It must happen.

3676. In terms of losses that market traders are likely to suffer, what can you envisage the losses that the market traders suffer being?

*(Mr Lawrence)* If Lindsey Street is closed?

3677. Well, just from the works etc.

*(Mr Lawrence)* It is very, very hard to tell, but obviously there will be some loss of trade. It could be considerable; it could be worse for some tenants rather than other tenants.

3678. In relation to your particular business, is there anything else you wanted to say in relation to the proposed effect on your business?

*(Mr Lawrence)* No, our main aim is just to keep Smithfield able to continue trading at all times. That is our main aim.

3679. **Mr Dingemans:** Thank you very much.

3680. **Sir Peter Soulsby:** Mr Elvin, are you planning to ask any questions?

3681. **Mr Elvin:** Mr Dingemans is going to call experts later on, and I will be calling my own evidence. I have just a few points of clarification.

3682. **Sir Peter Soulsby:** Before you start doing that, Mr Elvin, Mr Lawrence, I wondered, without obviously revealing any trade secrets or any details of your own business, can you give us some idea of the scale of the business, or the value of the trade on any particular day?

*(Mr Lawrence)* In turnover, the value of the turnover is approximately three-quarters of a billion a year. That is for the market.

3683. I was not suggesting that was for your business. Thank you very much indeed.

---

The Petition of Smithfield Market Tenants' Association

---

Cross-examined by **Mr Elvin**

3684. **Mr Elvin:** Mr Lawrence, I have only got a couple of questions. The numbers of the Association are 35. How many groups of traders are there there? You said it was about 99 per cent. What is the total number at the moment?

**(Mr Lawrence)** Of traders: 36.

3685. Can I just check with you: as I understood what you said to Mr Dingemans earlier, you see keeping Lindsey Street open as critical to maintaining the operations of the eastern end of the market?

**(Mr Lawrence)** Absolutely. To the whole market.

3686. As you know, the Secretary of State gives you an assurance that it will be kept open even for the larger 44-tonne trucks. You do understand that?

**(Mr Lawrence)** Yes.

3687. If that is done, that will meet your main concern about keeping Lindsey Street open for market trade.

**(Mr Lawrence)** That would be a major concern, yes.

3688. I know there is still the issue of the loading bays, which we will touch on with other witnesses, but that is the key issue from your point of view.

**(Mr Lawrence)** Yes.

3689. So far as dust is concerned, and again I will take it up with your expert on the dust issues, is it right that you have to take a lot of steps at the moment to make sure that the individual trading premises are each secure from dirt and are kept clean and properly refrigerated where necessary?

**(Mr Lawrence)** That is correct, yes.

3690. That is under the EC regulations for hygiene.

**(Mr Lawrence)** Yes.

3691. Can I just get your confirmation: the six loading bays which are hermetically sealed to allow the movement of meat which is not packed into the market, they are three on the north side of the market and three on the south side? None of those loading bays are within Lindsey Street.

**(Mr Lawrence)** That is correct.

3692. If we go to A44, page 55.<sup>8</sup> I said there were three on the north and three on the south but there are four in the north and two in the south. Is that right?

**(Mr Lawrence)** Yes.

3693. Can I put this on the scanner because it is not the right way round? We see four at the top and two at the bottom. Is that right?

**(Mr Lawrence)** Yes.

3694. Four of them are attached to the central part of the market and two attached to the northern part of the eastern end of the market. They are not affected by the Lindsey Street works; they remain in operation.

**(Mr Lawrence)** Yes. The two furthest to your right at the top could be a concern whether the containers can turn round easily, but we are quite confident it should be—we are not 100 per cent sure.

3695. Can I just ask you about your leases? You have got ten-year leases. One of the objects of the Association is to renegotiate the standard form of lease for the City of London.

**(Mr Lawrence)** That is correct.

3696. Given that the leases, although you are protected under the Landlord and Tenants Act, come to an end in 2010, presumably you will be starting to negotiate new ten-year leases at some time before then?

**(Mr Lawrence)** Yes, we will.

3697. Do you have an expectation that you will get further ten-year leases to replace the existing ones? Is that the likelihood?

**(Mr Lawrence)** Absolutely.

3698. So that, at the time of the works, the market traders will be in possession of substantial leases of ten years or thereabouts which will allow them certain rights in relation to the settlement deed.

**(Mr Lawrence)** Yes.

3699. **Mr Elvin:** Thank you very much.

3700. **Sir Peter Soulsby:** Thank you very much indeed for your evidence, Mr Lawrence. I am sure the Committee will want me to say that you have helpfully introduced us to the nature, the scale and the vulnerability of your business. We much appreciate that. The Committee did, at an earlier stage, have an opportunity to visit the area and I know that a number of Members, myself included, have actually seen the market in operation on previous occasions. Thank you very much.

*The witness withdrew*

3701. **Mr Dingemans:** Mr Twogood, please. This is page 112 of A44.<sup>9</sup>

---

**The Petition of Smithfield Market Tenants' Association**

---

**Mr Mark Twogood**, Sworn

*Examined by Mr Dingemans*

3702. **Mr Dingemans:** Can you tell the Committee your full name?

**(Mr Twogood)** Mark Twogood.

3703. What is your occupation?

**(Mr Twogood)** I am a Director of a meat wholesale business.

3704. Where do you trade from?

**(Mr Twogood)** Poultry Market personally, but we have six businesses throughout the market.

3705. How long have you been at the Smithfield Market?

**(Mr Twogood)** Twenty-six years.

3706. Can you tell the Committee how much of your business is done at the market and how much is done over the telephone?

**(Mr Twogood)** We telephone most of our customers most of the day, but pretty much all the meat is bought from the market and picked up from the market over the morning.

3707. So the physical delivery still takes place at Smithfield?

**(Mr Twogood)** Absolutely, yes.

3708. What are your concerns about the Lindsey Street end of the market for those of your units that are towards that end of the market?

**(Mr Twogood)** Most of our businesses are actually on the south side but they will all be affected, the businesses, if we do not have continuation of market flow. On high days and holidays the market can get very clogged, with everything being open, as it is, so with any of the accesses shut it would cause major problems, not just for the businesses on the eastern side but right the way round.

3709. What is your particular view in relation to the loading bays and the loss of loading bays on Lindsey Street?

**(Mr Twogood)** If you had the loss of Lindsey Street it would be almost impossible to actually load or unload meat. I think it would completely mess up the whole of the timings of the delivery. Most of the deliveries are done last thing at night and first thing in the morning.

3710. Can I ask you about the rodent population and your concerns in relation to that?<sup>10</sup>

**(Mr Twogood)** The rodent population?

3711. Yes.

**(Mr Twogood)** At the moment, we are checked on a regular basis. We are told that the upheaval of building works and everything else will cause rodent infestation and movement of rodents, which obviously we have a great concern about.

3712. If there was a rodent infestation, what would be the effect on the ability to trade?

**(Mr Twogood)** Unless we could show that we could actually deal with it, it would be very difficult.

3713. **Mr Dingemans:** Thank you.

3714. **Sir Peter Soulsby:** Mr Elvin, do you want to cross-examine?

3715. **Mr Elvin:** I do not think I do. The issue on rodents is already the subject of an assurance and it is not one of the outstanding undertakings. I do not propose to take that up. I have no questions to ask.

3716. **Sir Peter Soulsby:** Thank you very much indeed.

*The witness withdrew*

3717. **Mr Dingemans:** Then Mr Abrahams. This is page 118 in your bundle.<sup>11</sup>

---

**Mr George Christopher Abrahams**, Sworn

*Examined by Mr Dingemans*

3718. **Mr Dingemans:** Can you tell the Committee your full name?

**(Mr Abrahams)** I am George Christopher Abrahams.

3719. What is your occupation?

**(Mr Abrahams)** I am Chairman and Director of the George Abrahams group of companies.

<sup>8</sup> Committee Ref: A44, Petition of SMTA (LONDLB28005-179).

<sup>9</sup> Committee Ref: A44, Petition of SMTA (LONDLB28005-236).

<sup>10</sup> Committee Ref: A44, Petition of SMTA (LONDLB28005-238).

<sup>11</sup> Committee Ref: A44, Petition of SMTA (LONDLB28005-243).

3720. What part of the business at Smithfield do you deal with?

**(Mr Abrahams)** As my title suggests, I am the MD of the group of companies that trade at Smithfield Market.

---

The Petition of Smithfield Market Tenants' Association

---

3721. Are you in the carcass meat or the boxed meat side?

*(Mr Abrahams)* I am in boxed—predominantly boxed meat, yes.

3722. For how long have you been working in the market?

*(Mr Abrahams)* I am in my 35<sup>th</sup> year at Smithfield.

3723. Can you tell us about your concerns in relation to Lindsey Street?

*(Mr Abrahams)* I think an important factor that has been missed out is the fact that if you get somebody parking inconsiderately in Lindsey Street when it is even narrower than it is now, it could bring the whole area, not just Lindsey Street, to a complete standstill. The onus is going to be on the market constabulary and, also, the City of London Police to make sure that if Lindsey Street is open we still have a through flow of traffic.

3724. Have you any experience before of closures of roads around Smithfield?

*(Mr Abrahams)* I have. In 1999 we had the West Poultry Avenue closed because of concerns about the underground tunnelling beneath that particular road under the latest EU legislation on tunnels and bridges. Consequently, they closed West Poultry Avenue. One of my businesses, Keevil and Keevil, was situated at that corner of the market, and it was catastrophic for us. We had to take very, very prompt action indeed to make sure that the demise of the business was not long-term and fatal.

3725. What is your view on the likely effect on the continuation of your business if there are no loading bays on Lindsey Street?

*(Mr Abrahams)* As I said earlier, sir, I think the impact on the logistics of running the whole market will have a catastrophic effect on the running. In these ever-increasing days of meeting timetables and delivery slots, we just cannot afford, as companies, to miss these windows because our customers will just go elsewhere. If we do not meet a deadline or a delivery date they will just go elsewhere.

3726. What would be the effect of any temporary closure of the market, for example, if pollution levels have risen too high to continue trading?

*(Mr Abrahams)* Again, I think the Committee has heard the amount of turnover we do collectively, and obviously there are a number of people's livelihoods that are at stake. Smithfield Market is a key part of supplying the food industry in London and the South East, and I would like to think that this Honourable House would be enjoying products from Smithfield Market.

3727. Is the effect on your business because you are boxed produce any less in relation to airborne pollutants, etc?

*(Mr Abrahams)* To a degree, yes, because we have the protection of boxed and wrapped products, but nonetheless, with airborne pollution that could be as significant as asbestos (we just do not know what is in these underground workings) it would, again, have a catastrophic effect on stock and making sure that it was fit for human consumption.

3728. **Mr Dingemans:** Thank you very much.

---

*Cross-examined by Mr Elvin*

3729. **Mr Elvin:** I have just a few points of clarification, Mr Abrahams. The West Poultry Avenue. Is that the area that the Committee will have seen permanently closed off?<sup>12</sup> It has got big red and white bollards across the road.

*(Mr Abrahams)* From your descriptions it sounds very much like it, yes, sir.

3730. That was closed in 1999 because of the weight restrictions.

*(Mr Abrahams)* It was, on the tunnelling underneath.

3731. That was closed permanently, though. Was it not?

*(Mr Abrahams)* Until the tunnels are reinforced. So that could open again.

3732. But it has been closed now for over six years, basically.

*(Mr Abrahams)* Possibly. I do not know the exact date, but yes.

3733. Roughly speaking. Can I just check with you? Have you got the blue document in front of you called "Smithfield Market Tenants' Association"?

*(Mr Abrahams)* Yes.

3734. Which is D49. I just want to look at the loading bays in the plan. If you go to tab H inside, you will see that is also page 49 of the exhibit.<sup>13</sup> If that can also be put up on the screen, please. That shows the Committee where the various loading bays are around the market. Is that right?

*(Mr Abrahams)* I do not think it does.

3735. No?

*(Mr Abrahams)* When you say the loading bays, do you mean the temperature controlled ones, or—

3736. These are the general loading bays, not the hermetically sealed docks, which the Committee has already seen.

---

<sup>12</sup> Committee Ref: A44, Petition of SMTA (LONDLB28005-244/245).

<sup>13</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28003-049).

---

**The Petition of Smithfield Market Tenants' Association**

---

*(Mr Abrahams)* Not really. You have got entrances either side of the Poultry Market building which are tunnels which give access to that particular building, which do not seem to appear on this.

3737. I am just looking at the on-street loading bays here, Mr Abrahams, rather than the entrances into the market. It is just the on-street ones.

*(Mr Abrahams)* That is right.

3738. Does that look about right?

*(Mr Abrahams)* Yes.

3739. The ones we are talking about being lost for some of the time are outlined in red.

*(Mr Abrahams)* Yes.

3740. So are the loading bays in West Poultry Avenue, the ones where there is a weight restriction issue, not used at all now, or can they be used by lighter vehicles?

*(Mr Abrahams)* As far as I am aware, the area in West Poultry Avenue is not used at all. Certainly half of it is not used at all. It is shown as being used on this particular document.

3741. We can see that, on the screen, it has a blue arrow. That is the avenue we are talking about being closed.

*(Mr Abrahams)* Yes.

3742. **Mr Elvin:** Thank you.

---

*Re-examined by Mr Dingemans*

3743. **Mr Dingemans:** Can I just ask one further question? Can we have P49 page 23, if that is all right?<sup>14</sup> This is a photograph, we are told by the Promoter, of Lindsey Street taken at seven in the morning. Does that show, in fact, loading bays on the left-hand side extending right down towards the zebra crossing?

*(Mr Abrahams)* It does, sir, yes.

3744. If we go back to page 49, I am not sure that we see those on page 49.<sup>15</sup> I am not sure very much turns on it.

*(Mr Abrahams)* It is the red rectangle.

3745. **Mr Dingemans:** The blue appears to stop halfway down.

3746. **Mr Elvin:** There is a van parking on a zig-zag "no parking" area!

3747. **Sir Peter Soulsby:** The numbers are blocked out. Thank you very much, Mr Abrahams.

*The witness withdrew*

3748. **Mr Dingemans:** That, effectively, is the last witness evidence. We hoped to have two further witnesses: Mr Fisher, whose statement is at pages 115-117, is unfortunately not well, and Mr Andrade, if we do go into Wednesday morning, will be available then. I suspect his evidence duplicates that which you have heard rather than taking it any further. That really will be the lay witness evidence.

3749. Before we go into the expert evidence, and after those members of the Association who want to go back to bed now go back to bed, may I deal with

the less interesting aspects of the concerns in relation to compensation, having regard to the particular position of the Association members.

3750. **Sir Peter Soulsby:** That would be very helpful. In case your witnesses do feel the need to go back to bed this morning, and before they do, could I thank them very much for so very clearly putting to us their very understandable concerns.

3751. **Mr Dingemans:** Thank you very much.

3752. It is at the bottom of page 2 of what I have called the "Note of Submissions". I have set it out at some length in the hope that it remains comprehensible and the dullness factor is reduced, because, unhappily, I will have to deal with a little bit of the law.

3753. Could I pick up, at the bottom of page 3 of that document, on operations of business in the market. As a matter of historical note, if anyone is in the slightest bit interested, the full history to Smithfield Market is set out in a judgment given by Lord Hoffmann. It is available in the bundle and it takes us all the way from 1350 to 1708 and then up to the present day. Of more relevance to the Committee is what is said in paragraph 9, which is the continuing current economic relevance of Smithfield. The Committee is aware, I know, from questions that were asked on 31 January, of the extensive refurbishment which took place, and you have heard Greg Lawrence briefly in relation to that. You have also heard, with reference to paragraph 10, of the difference between boxed meat and carcass meat and inevitably the slight differences in sensitivity between the two aspects of that.

3754. Could I summarise parts of the lease, at the bottom of page 4, and tell you why this is relevant. At the moment, the members of the Association have reasonably short-term leases: ten years, which get renewed, because they have the right to renewal

<sup>14</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-023).

<sup>15</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-049).

---

The Petition of Smithfield Market Tenants' Association

---

under the 1954 Act. At paragraph 11.1 I have summarised the provisions which you would expect to comply with statutory requirements and by-laws. I have set out where that appears in the bundle—and, happily, I will not take you to that.

3755. At 11.2 there are, again as you would expect, arrangements relating to the operation of plant and machinery, the insulation and refrigeration machinery.

3756. At 11.3 there is provision for the landlord—and this is important—as far as reasonably possible to perform the services set out in paragraph 5C of the Schedule, and, if you drop to paragraph 11.4, you can see that 5C includes the condenser water, which is the critical part of the business for hygiene. There are also provisions for the suspension of rent if the premises become unfit for occupation at paragraph 11.5.

3757. Now the bit which I will try to keep as interesting and as short as possible: the Compensation Code. As you know, the Promoter in its response to the Association and in correspondence has referred to the provisions of the “National Compensation Code” and has asserted that these provisions are sufficient to satisfy any reasonable requests of the SMTA for compensation. For that reason it is necessary to consider what the relevant statutory provisions are. The analysis in this note (to ensure accuracy and so that references can be verified) is based on the Law Commission Final Report which was presented to Parliament in December 2003. As you know, when the Law Commission present a report, they summarise all the relevant law, so that even lawyers cannot argue about what the law is. The Executive Summary, which I quote at page xiii, says there is at present no “National Compensation Code”. There is a collection of Acts: the Land Compensation Act 1961, the Compulsory Purchase Act 1965 and the Land Compensation Act 1973 are the most important, and there is obviously a whole series of other amendments and the Tribunals Act. Effectively, as you probably know, you can get compensation under these schemes under two separate bases: if there is a permanent or temporary taking or if there is no taking.

3758. Effectively, looking at paragraph 13, for the SMTA there is going to be no permanent or temporary taking. Everything that is going to be taken belongs to the Corporation of London. You have seen earlier, on plans, that part of the basement which is going, and that is not demised to the Smithfield Tenants Association, so the relevant scheme is that which relates to compensation after no taking. The Law Commission have summarised what the law is in relation to that at pages 129 to 139: “Compensation where no land is acquired”.

3759. I hope that paragraph 14 is a summary of that. That is the Compensation Act and that gives a right to compensation for “injurious affection” caused by

the “execution of the works”. Do you mind if I show you very briefly that part of the Law Commission’s report? I hope it was handed up to you.

3760. **Sir Peter Soulsby:** Yes, we have that in front of us. It has been numbered A45.

3761. *Mr Dingemans:* At page 130, paragraph 11.4 is set out. There are four conditions that you need to satisfy to get any compensation under the 1965 Act. These are in fact called the *McCarthy rules* but they have been reaffirmed, if you turn the page to 131, in a case called *White Hotels v Harrow London BC*.

3762. The four rules are these: “(1) The injurious affection must be the consequence of the lawful exercise of statutory powers, otherwise the remedy is action in the civil courts”—so effectively it has to be something that is provided for in the Act. That is important because, of course, if you exercise your statutory powers negligently then you have remedies.

3763. “(2) The injurious affection must arise from that which will give rise to a cause of action if done without the statutory authority ...” so it has to have been actionable but for the Bill, otherwise you are creating compensation where none existed before.

3764. The third rule is very important. “The damage or injury for which compensation is claimed must be in respect of some loss of value of the land of the claimant.” That is really, put shortly, as far as the Association is concerned, where we are in real difficulty because our land is not valuable. We have, as you have seen, reasonably small units and you have seen the price of the leases, on Mr Lawrence’s lease. There is the provision for upward-only rent reviews and RPI increases, but the actual value is not great.

3765. “(4) The loss or damage to the claimant’s land must arise from the execution of the works and not from the use of the lands compulsorily acquired following completion of the works.”

3766. Could I go back to my note at page 7. I have set out what the provision means, because the Law Commission described it as “opaque”—which we respectfully submit is a fair proposition. At paragraph 15 you can see that I have set out four conditions—and I have just taken you through those. Halfway through paragraph 15, I make the point I have just made orally, that, given the limited land held by the claimants, this will not assist. Further, in general terms, there are no claims available to members of the SMTA for noise and inconvenience caused during the construction period. This is because in practical terms liability will only accrue if there is an absence of reasonable consideration for neighbours. Therefore, if you have a contractor doing their honest best that allows an escape of dust, then you have effectively other problems for the claims under the Act.

---

**The Petition of Smithfield Market Tenants' Association**

---

3767. Turning to the common law claims, this means that the members of the SMTA will be forced to bring actions for the common law tort or civil wrong of nuisance. I am very sorry to get into the law but nuisance is at least one that is reasonably well known. It is a defence to any such claim to show that the activity carried out was authorised by statute—and that is where you get into the need for the Compulsory Purchase Act—and that the nominated undertaker has exercised all reasonable care when carrying out the activity. You cannot just say, “I was authorised by statute”; you have to show you tried carefully.

3768. It is in paragraph 17 that we respectfully identify the problem for the Association. The problem this situation will cause for the members of the SMTA can be illustrated by dust. The Promoter has said that the nominated undertaker will be required to put in place Tier 3 mitigation measures at Lindsey Street and the east basement work sites at Smithfield. That is for all the reasons that you have just heard in the evidence. An important protection for the Association. We do not quibble with the fact that it is an important protection, but if, because of a temporary failure of Tier 3 mitigation measures, dust escapes and relevant environmental limits are exceeded, the market will be closed. You did not hear that this morning. You heard that on 31 January from Mr Smith—who in fact is still listening here—and the paragraph number is set out. The Promoter has made it plain that it will not require the nominated undertaker to stop work in such circumstances.

3769. At paragraph 18 we identify the problems this is likely to cause. The SMTA are likely to suffer losses: the contamination of meat by dust; and the loss of income or profit (if you are trading at a profit) for the periods when the market was closed. Under what the Promoter has called “the National Compensation Code”, the SMTA have no possible claims at all because the claims will not relate to the loss of value of land—and that is it. So under section 10 we are out, and the only potential remedy is a claim in the courts for nuisance—which will no doubt be defended on the basis that the undertaker took all reasonable steps and that the escape of dust happened notwithstanding that reasonable care. The only persons who can be happy about that confrontation are the lawyers—because it is, unhappily, in the very difficult exercise of nuisance and the interrelationship of statutory powers and failure to take reasonable care. That is the problem. If you want to make the lawyers rich, then change the law and make specific provision for the Association. If, as we respectfully ask, clarity can be given for the specific situation of the Association, we now come to a possible way of providing that. That is at the bottom of page 8.

3770. The undertaking from a promoter requiring the nominated undertaker to enter a deed is covered at paragraph 19. It is respectfully suggested on behalf of the Association that a practical way

forward is to require the Promoter to undertake to ensure that the nominated undertaker agrees to provide the Tier 3 mitigation measures with the promoter and also with the members of the SMTA . . . In fact, it should be: “and the lessees of the Smithfield Meat Market” because there is one missing person.

3771. The costs of the project should not increase (because the nominated undertaker will be charging the Promoter for the costs of providing the Tier 3 mitigation measures anyway) but the persons for whose benefit the measures are being provided and who will suffer the real losses in the event of a failure of those measures will have a contractual right to claim in the event of a relevant breach of the undertaking. That is the critical aspect of it, rather than the uncertain common law claim: “Oh, you did not exercise reasonable care,” we would say, because you have breached the Tier 3 measures,” and they would say, “Well, you can never be guaranteed, etc, etc. You have a straightforward claim.” Another way of achieving the same aim is to provide in the contract between the Promoter and the nominated undertaker that the relevant rights (for example, the dust suppression measures) are for the benefit of, and can be enforced by, members of the SMTA. That would work under something called the Contracts (Rights of Third Parties) Act 1999—and it will not surprise you to know that followed another Law Commission report, because lawyers got very exercised about who could enforce contractual rights but not many others did.

3772. We respectfully submit that a similar formula ought to be adopted for all the requirements which the Promoter has undertaken to impose on the nominated undertaker to meet the concerns of the SMTA. Those are all set out, I hope helpfully, in the “Undertakings from the Promoter” document. That would mean, for example, that if the market became inoperable because vehicular access had not been maintained, the members of the SMTA who would lose business would be able to recover any losses they could prove to have suffered. That is the deed provision and it is simply because of a slight defect in what is called the “National Compensation Code” but is really the collection of statutes.

3773. Could I take you to the bottom of page 9 and the Provision for Cessation of Work. We also respectfully seek measures to compel the cessation of activities of the nominated undertaker when the operation of the market has been halted by an excess of dust or airborne pollution in excess of the trigger levels caused by the activities of the nominated undertaker. For example, if they cause problems to us because of the dust, we do ask for permission to stop their works. That undertaking has been refused and we do submit that, if by reason of a breach of an undertaking the market

---

The Petition of Smithfield Market Tenants' Association

---

is forced to cease operation, it is only fair that the nominated undertaker should cease work (as soon as it is safe to do so) until mitigation measures have been agreed. That is a fairly short point which is not going to get better or worse really for repetition.

3774. That brings me, finally, to the question of compensation. The members of the SMTA seek compensation in the event of losses caused by the construction works, in a clause that is not restricted to loss of value of land or breaches of undertakings extracted for the benefit of the SMTA members. If losses are caused by the construction of Crossrail, we submit there is no particular reason why the members of the SMTA should bear those losses. The financial resources of each trader vary, but even a short interruption could lead to the failure of businesses. In fact that was in the written evidence of Greg Lawrence but you really heard it orally from Mr Abrahams.

3775. Such a clause would cover the situation where members of the SMTA have suffered losses because of the partial stopping up of Lindsey Street. The defence of statutory authority would defeat any common law claim for nuisance (which would have been available but for the Bill) and any claim under the Compulsory Purchase Act is restricted to the value of the land. We do submit there is no justification for restricting any claim to the value of the land. The Law Commission in fact supports that.

3776. Could I take you to page 137 of the Law Commission report on this—part of a report which at the moment is still awaiting, as it were, final consideration, but it at least can inform the Committee's considerations. (Discussion between counsel)

3777. The Government have said they are not going to legislate, my learned friend tells me.

3778. In their conclusions, at page 137, 11.22, they say this: "We are on firmer ground when considering the extension of compensation beyond loss in the value of the land. Although this would add to the costs imposed on the public authorities, there is no reason in principle why the extent of compensation should differ materially from the corresponding common law right which is not so limited." That is effectively the point in relation to statutory authority on that side of matters.

3779. Those are the three things that we ask for: the deed; the provision for cessation of work; and the freestanding compensation clause. We do respectfully submit that there is no additional cost in at least the deed, because all these measures are going to be incorporated in any event.

3780. Pages 11, 12 and 13 I can take very shortly. That is really arguments in relation to human rights—which, I am afraid, have infected even this area of law. Could I show you at the bottom of page 11 what the European Commission said in *S v France*. The reason for showing you that is that this is now, it seems, the most cited statement of the relevant principles: "... where an authority carries on an undertaking in the interest of the community as a whole it may have to pay compensation to individuals whose rights are infringed by that undertaking in order to achieve a fair balance between the interests of the individual and the community."

3781. In paragraph 27 we submit that it is for the Committee to decide the fair balance between the public interest, which we recognise in the Bill, and this. Could I ask you to note, at the bottom of page 12 of this note, the following points as to what we say informs the fair balance: so far as we can discern from the published petitions, the SMTA is in a unique position—well, I say the SMTA, but, all the members/lessees of Smithfield. This is because: the permitted works are to be carried on beside and below their units; access to their businesses will be part removed; there will be a taking of land but the land to be taken is not part of their respective premises; detailed specific requirements for the benefit of the members of the SMTA are being imposed on the nominated undertaker by the Promoter but the members of the SMTA will only have uncertain claims to enforce those requirements at common law; the provisions of the relevant statutes forming part of the Compensation Code provide no effective remedy to the members of the SMTA; and the members of the SMTA are even outside the terms of the settlement deeds—although that depends on when the timing of the works takes place.

3782. It is really with that in mind that you have heard the evidence from the witnesses today. Against that background I propose to turn to deal with the few remaining issues of expert evidence, if that is all right.

3783. **Sir Peter Soulsby:** Thank you very much indeed. Yes, we will move straight on to that at this stage. We are very grateful for that very clear exposition you have just given us of both the problem and the Petitioners' proposed solutions. On a couple of occasions you referred to the SMTA as the Petitioners but it is the lessees as a whole to whom—

3784. **Mr Dingemans:** In fact, I am appearing on behalf of the Petitioners but there is no sensible reason to differentiate between the 35 and the 36<sup>th</sup> person as well. It is really "all the lessees" yes. It was just inelegant drafting, I am afraid, in the early hours, which meant that I put it down as SMTA rather than Petitioners.

---

**The Petition of Smithfield Market Tenants' Association**

---

3785. Sir, I think you have a Buro Happold document.<sup>16</sup>

3787. **Mr Dingemans:** We are going to be looking at that now, and it would be helpful if you could turn to page 18.<sup>17</sup>

3786. **Sir Peter Soulsby:** We do indeed.

3788. **Sir Peter Soulsby:** That will be A46.

---

**Mr Steven Kenneth Farthing, Sworn**

Examined by Mr **Dingemans**

3789. **Mr Dingemans:** Could you tell the Committee your full name.

**(Mr Farthing)** My full name is Steven Kenneth Farthing.

3790. What is your occupation?

**(Mr Farthing)** I am a transport planner.

3791. Could you explain your professional qualifications.

**(Mr Farthing)** I am a Member of the Institution of Highways and Transportation and also a Chartered Member of the Institute of Logistics and Transport.

3792. What experience have you had in relation to traffic consultancy?

**(Mr Farthing)** I have seventeen years' experience in transport consultancy. I am currently an associate with Buro Happold Limited, working in London in their infrastructure group. I have worked on a number of transport projects and also a number of rail related projects.

3793. You have looked at the proposed construction works at the Smithfield area, have you not?

**(Mr Farthing)** I have.

3794. And you have identified a number of matters. There are a number of undertakings which have been given, with which I will not tax you, but could I deal with the remaining parking issues. This is loading bays on Lindsey Street. Have you attempted to model the construction works for Lindsey Street?

**(Mr Farthing)** In terms of the swept path movements we have.

3795. Is it now possible to show those to the Committee? Can you describe what this is going to show?<sup>18</sup>

**(Mr Farthing)** In our discussions with Crossrail we have been made aware of some of the changes that will occur to Lindsey Street throughout construction, the closure or partial closure of

Lindsey Street. I have developed a scheme which would allow those works still to take place but also to provide throughout construction some loading bay provision on Lindsey Street which is very important to that eastern end of the market. The information we are just about to show will demonstrate that there is a way of accommodating the works and maintaining loading bay provision within Lindsey Street. It is probably worth clarifying that, in a similar way to the Crossrail developed options, we have looked at the three phases, essentially when different sections of the road are closed, so the image you can see before you is the first of those three phases. The swept path there is of a 16.5 metre articulated vehicle. The red area adjacent to the market is the area that we believe could be made available to maintain loading bay provision. The areas on the opposite side of Lindsey Street, adjacent to the Lindsey Street worksite, show the worksite itself and constructions areas that we believe would provide sufficient space to allow that construction work to be undertaken.

3796. As the construction phase goes on, could we move to the second animation.

**(Mr Farthing)** This shows the other half of Lindsey Street being closed, so the loading bays in this diagram are pushed to the northern end of Lindsey Street and changed in their configuration. They are actually perpendicular to the kerb rather than parallel, as in the first diagram. Under this option, we can provide, we think, eight bays. Under the previous option I think it was seven bays.

3797. Could we then move to the final animation.

**(Mr Farthing)** This is very similar to the first phase, although the worksite on the compound area on the opposite side is changed slightly. Again, seven bays can be provided to the east end of the market.

3798. This deals with whether or not you think seven bays can be provided at all times for the market.

**(Mr Farthing)** It does.

3799. Could I turn to the basement car park. As the Committee knows, the Bill provides for the whole of the eastern end of the basement car park

<sup>16</sup> Committee Ref: A46, Buro Happold: Smithfield Market Expert Witness Report.

<sup>17</sup> Committee Ref: A46, Buro Happold: Smithfield Market Expert Witness Report (LONDLB28005-083).

<sup>18</sup> Committee Ref: A46, Buro Happold: Smithfield Market Expert Witness Report (LONDLB28005-121 to 123).

---

The Petition of Smithfield Market Tenants' Association

---

to be lost. How many car parking spaces will remain in the western end of the basement car park?

*(Mr Farthing)* One of the areas where we do not have firm numbers yet is in the number of spaces that remain in the car park. West Smithfield car park currently has a capacity for 180 spaces. The environmental statement that Crossrail produced suggests that approximately 50 per cent of those spaces will be removed, which would suggest a balance of 290 spaces. However, having examined the worksite area that would be required by Crossrail, it would appear that quite a bit more than that would be required, or the loss would be greater than the 290, and in the order of 330 spaces would be lost, leaving approximately 250.

3800. Have you done any surveys to see what usage the car park has at material times?

*(Mr Farthing)* We have. We have undertaken surveys of the West Smithfield car park on two occasions. The first of those was in December, just before Christmas.

3801. Could you give us the date.

*(Mr Farthing)* It was 18 December. It was a Sunday.

3802. What did that show?

*(Mr Farthing)* That showed quite a few different things. The key information probably for today is that the maximum number of cars that were accumulated in the car park was 71. The surveys also tried to establish the relationship between those parking in the car park and the market itself.

The conclusions from that were that a little under 90 per cent of those using the car park during the period surveyed were related to the market itself.

3803. Obviously we need then to know the period surveyed.

*(Mr Farthing)* It was from 9.00 am on the Sunday until 9.00 am on the Monday morning, so it covered the main operational hours of the market.

3804. When did the second survey that you have referred to take place?

*(Mr Farthing)* That was on February 22, a Wednesday. On that occasion a maximum of 258 vehicles were observed in respect of maximum accumulation. There was a slightly lower level of relationship between the car park and the market at 75 per cent.

3805. Did you reach any conclusions from that?

*(Mr Farthing)* The main conclusion we have drawn, if the car park were to be reduced in the way we have estimated (that is, 250 spaces were remaining), is that under both those situations it would not be sufficient capacity for the parking demands that we have observed.

3806. The final provision related to replacement of loading bays that are lost on Lindsey Street. You go down to seven or eight on your remodelled proposal. Have you looked elsewhere to see whether there might be other loading bays provided?

*(Mr Farthing)* There are limited areas around the market for re-provision of loading bays. One option would be to consider use of space in the Rotunda area. There are possibly some areas there, or possibly re-allocation of spaces from current parking bays—pay and display bays or residents bays—for use of the market.

---

Cross-examined by Mr Elvin

3807. **Mr Elvin:** Mr Farthing, I assume you have dealt with the two outstanding matters, which is the loading bays and the car parking.

*(Mr Farthing)* I believe so.

3808. I just wanted to be sure—I do not want to bore the Committee by dealing with matters we have already dealt with. Could I ask you about loading bays, please? The Committee has already seen the plan and the loading bays around the perimeter of the market and some within at ground floor level. You say that with management measures there is scope for the provision of additional loading bays outside of Lindsey Street. Is that right?

*(Mr Farthing)* I am not sure about the reference to management. We believe there are areas where some additional bays could be re-provided during the temporary loss of Lindsey Street bays.

3809. How many do you think?

*(Mr Farthing)* We have not quantified the number of bays.

3810. You must have an idea, if you have sat and tried to work out where the bays could go.

*(Mr Farthing)* The area on which we have focused is the provision of bays within Lindsey Street itself throughout construction.

3811. I will come to that. I am asking about the point you made two minutes ago, which was that you thought there would be some scope for loading bays elsewhere.

*(Mr Farthing)* I believe there is scope for bay provision within the Rotunda, but I cannot give you an estimate of the number of bays that we feel could be accommodated.

3812. Are we talking about five or ten, or one or two?

---

**The Petition of Smithfield Market Tenants' Association**

---

**(Mr Farthing)** I would have thought it would be nearer to five or ten.

3813. Five or ten. The Committee have already seen a photograph of Lindsey Street and have already visited the market.<sup>19</sup> It is quite clear to anyone who is familiar with this area that lorries and vans do not always park as efficiently as they can to make the best use of space. Some park end-on, some park side-on. It is sometimes rather higgledy-piggledy. I drove past last night and there were a number parked at angles which would have prevented quite a few vehicles parking there. Have you observed that?

**(Mr Farthing)** I have. I would like to add that the photo before us was taken at 7.00 am, which is somewhat out of the market's peak operating period.

3814. I appreciate that. Is the point I am putting to you a fair one, that people do not always park in the most efficient fashion?

**(Mr Farthing)** I have observed in some areas, where, perhaps with closer management, there could be more efficient use of bays. I have also observed vehicles parking in areas perhaps where they should not, because there is not sufficient bay provision for them.

3815. We have the possibility, therefore, not only of finding other loading bay spaces in the order of five to ten, but, if greater management is exercised over existing loading bays, there is some scope for providing additional practical capacity for those who are displaced from Lindsey Street if that is to happen.

**(Mr Farthing)** In theory, yes.

3816. It would be in the interests of all those involved: market traders, Crossrail and the City of London, to make sure that those management operations are carried out and to ensure that the market is kept thriving.

**(Mr Farthing)** I cannot answer on behalf of the traders, but from my own point of view it would seem to make sense, yes.

3817. Could I ask you about your diagrams for Lindsey Street. Rather than showing cartoons again, interesting though they are, we have three diagrams showing the position in your report, A46. Figures 5, 6 and 7 represent the three phases. The position so far as Crossrail is concerned, is that it has indicated it will use all reasonable endeavours to maintain six loading bays during the works but it cannot guarantee that loading bays will be available at all times. That is our position, is it not? You understand that, do you not?

**(Mr Farthing)** I believe I have seen something that alludes to that, yes.

3818. You also understand—and you understood this when you drew up your figures—that of course we have not yet reached the stage of detailed design of the works.

**(Mr Farthing)** Yes.

3819. You are not surprised at that. You would expect detailed designs to come at a later stage.

**(Mr Farthing)** We are aware from discussions with Crossrail which stage of the design process we are at.

3820. The reason that loading bays cannot be guaranteed—I am sure you understand this—is because, until the final design is carried out, there is no certainty as to whether the provision of spaces can be guaranteed for loading at all times. That is right, is it not? Until you know the precise characteristics, dimensions and particular issues when the excavations start of the working site, you cannot be sure that you can provide those loading bays.

**(Mr Farthing)** There is a reasonable level of certainty at this stage that would allow diagrams such as these to progress with some degree of confidence.

3821. How do you know until you know where the boundary is? We have to keep a route through—and we have agreed to do that—but, assuming we keep the route through, how do you know until the detailed drawings are provided, that there will be enough room for loading bays as well as keeping open the route for up to 44 tonne vehicles?

**(Mr Farthing)** The diagrams that we had before us show the areas, working with my structural colleagues, that we think would be needed for the construction—and I use the word “think” carefully—and also the space that would be needed for bays and the swept path. Obviously we cannot categorically say it could be constructed in this manner, but, based on the information we have and the knowledge of structural colleagues, this is what we believe is practical.

3822. You cannot categorically state, because the detailed work has yet to be done. We are with you that those bays should be provided if they reasonably can be—and we give an assurance to that effect—but there can be no certainty until that work of detailed design is done. You cannot be categorical.

**(Mr Farthing)** I guess it depends on where you draw your constraints.

3823. I will ask Mr Berryman to give our side of that, Mr Farthing, but I understand where you are. Could I ask you about the basement car park? You do understand that we do not intend to take any of the western car park and that shared use of the ramp will remain for the duration of the works.

---

<sup>19</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-023).

---

The Petition of Smithfield Market Tenants' Association

---

*(Mr Farthing)* That is what I understand, yes.

3824. Therefore, in so far as we are aware—and this was made clear in recent correspondence—50 per cent of the car park (that is to say, the entirety of the western car park) will remain.

*(Mr Farthing)* We have read in the environmental statement that 50 per cent will remain. We have also received some drawings from Crossrail which show the position of hoarding lines within the basement, which does not appear to equate to 50 per cent loss but seems to equate to a higher loss.

3825. Let us get out the petitioners' response, document P48, which has the diagrams in it. Would you look at the final drawing in appendix A, the mezzanine level.<sup>20</sup> Can you see the three entrances?

*(Mr Farthing)* I can.

3826. This shows up and down routes for vehicles coming in. The hoardings are in the eastern side of the car park only. We see there no reason to believe the hoardings are going to extend beyond the point where they are shown, or that they will prevent proper circulation within the car park—indeed there will still remain a dedicated entrance at the basement level, which is the western ramp that you can see to the left, which will be to the western car park at basement level, and, at the right-hand side, the entrance will be for the area of the worksite at the eastern side. There is no reason, we say, to take the view that the western car park, that is 50 per cent of the car park, will not be available.

*(Mr Farthing)* I am not disputing the fact that the western car park will be available. I am questioning the effect of the hoardings that are shown for the basement and the mezzanine level and the number of spaces that that will effectively remove.

3827. The hoarding is within the eastern side; it is not within the western side. It will not take spaces from the western side.

*(Mr Farthing)* As I have said, I am not questioning any loss of spaces in the western half of the car park.

3828. If we are not questioning that, can we look at how that stacks up in terms of the figures.

*(Mr Farthing)* Certainly.

3829. Could we go to P49, tab B, page 12.<sup>21</sup> In Smithfield there are 580 spaces, 50 per cent of which will be lost. According to my arithmetic, that gives us about 290 spaces.

*(Mr Farthing)* You are correct: 50 per cent of 580 would give you 290.

3830. Your surveys show between 45 per cent and 48 per cent occupancy, maximum accumulation, at 261 and 278; that is to say, less than 290. Our

surveys in fact show something slightly less, around 42 per cent and 43 per cent, but let us take your figures. Even on your figures, there is still spare capacity within the western car park for the maximum accumulated demand.

*(Mr Farthing)* If you were applying the 50 per cent to the 580, you are correct, yes.

3831. I am sorry, is there an implied qualification in that?

*(Mr Farthing)* The qualification is that we have been out to the car park and physically counted the spaces, related that back to the hoarding line diagrams (to which I think you referred in the petitioners' response), and the conclusions of that, backed up by some information sent to us in the last day or so from Crossrail's consultants, suggest a greater loss than 50 per cent.

3832. If the hoarding is where we show it in the diagrams, it is actually taking slightly less than the eastern side, is it not? It does not make sense, therefore, that you can be losing more than 50 per cent of the car parking spaces.

*(Mr Farthing)* I am not sure what the protocol is. I have in front of me some sketches based on the visit this morning that can show the number of spaces that we have counted within the hoarding line. At the basement level, we are saying there will be 165 lost and at the mezzanine level 139, which gives a total of 304. If some additional space was required to gain access to the hoarding and the security fence that is indicated on that diagram, it would seem to tie in with the figure of 330 that was referred to in a report that I mentioned provided to us by Crossrail consultants on Monday.

3833. **Mr Elvin:** I am not sure how far I can advance this by asking questions. I am going to ask my witness and perhaps you could have a word with Crossrail to see if we can reach a resolution.

3834. **Sir Peter Soulsby:** That would be very helpful.

3835. **Mr Elvin:** There is no doubt in your mind that the hoardings are entirely within the eastern side and indeed take up slightly less than the whole of the eastern side.

*(Mr Farthing)* I am not disputing that. I would say that the line that is shown on that diagram there and the number of spaces that are lost as a result of that have been estimated by us on that level to be 139 spaces and on the other level to be 165 spaces.

3836. **Mr Elvin:** We will see what we can do to help the Committee with that.

3837. **Sir Peter Soulsby:** It will be very helpful to explore those figures between the Promoter and the Petitioners.

3838. **Mr Elvin:** I know how tedious it can be just having people reading figures and it does not help you. Let us just assume for a minute you are right.

<sup>20</sup> Crossrail Ref: P48, Promoter's Response Document to SMTA, (LONDLB-28003-010).

<sup>21</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28003-012).

---

**The Petition of Smithfield Market Tenants' Association**

---

If you are right and we are looking at the sorts of levels of capacity that you are talking about, then somewhere between 11 and 28 cars, on the maximum figures you have used, will need to find car parking elsewhere?

**(Mr Farthing)** I think, without checking your maths now, yes, those figures would seem reasonable.

3839. And there is capacity. You have seen our car parking report. There are a number of car parks in the near vicinity of Smithfield. If you want to go back to P49, tab B, they are on the table that I showed the Committee a moment ago, at page 12. There is a plan showing them on page 13.<sup>22</sup> There is ample spare capacity within those car parks according to our car parking report, is there not? Certainly more than enough to accommodate another 11 to 28 cars which may not be able to park in the basement?

**(Mr Farthing)** I believe there is spare capacity in those car parks. I guess the difference would be the car park is directly beneath the market where potentially buyers could be returning with produce brought from the market. I think the other car parks are, on average, about five minutes' walk from the site.

3840. There may be management issues to make sure that those who may need to be proximate because they are picking up produce as opposed to going for other reasons, going for a meeting of some description to discuss supplies and the like, get priority in the basement. Management methods could be used, could they not?

**(Mr Farthing)** I presume they could. I am not quite sure who would be responsible for that but presumably they could.

3841. **Mr Elvin:** Thank you very much.

3842. **Sir Peter Soulsby:** Mr Dingemans?

3843. **Mr Dingemans:** Very briefly, can we have P49, page 28.<sup>23</sup> Is this the document produced by Mott MacDonald, who are the consultants for Crossrail, served on us yesterday giving you the figure of about half will be closed, say 330 spaces? Does that accord with your views?

**(Mr Farthing)** Yes, it does.

3844. Secondly, reference has been made to the other car parks. Are you aware of different pricing structures at the other car parks?

**(Mr Farthing)** I am not aware of the pricing structures but I am aware that the West Smithfield car park has certain discounting arrangements for traders at the market and those visiting the market.

3845. **Mr Dingemans:** Thank you very much.

3846. **Sir Peter Soulsby:** It strikes me that it is now 11.32 and I understand that some refreshments are available for us. I am sure members of the Committee are ready for a cup of coffee in which case I intend to reconvene in ten minutes' time.

*After a short break*

3847. **Sir Peter Soulsby:** Order, order. Just a note for future reference, that 15 minutes is rather more appropriate than ten! Mr Dingemans?

3848. **Mr Dingemans:** Can I now call Mr Curson. This is page 14 of A44.<sup>24</sup>

---

**Mr Trevor Andrew Curson, Sworn**

*Examined by Mr Dingemans*

3849. **Mr Dingemans:** Can you tell the Committee your full name?

**(Mr Curson)** My full name is Trevor Andrew Curson.

3850. And what are your qualifications?

**(Mr Curson)** I have a Bachelor of Technology Degree and a Post-Graduate Diploma in Acoustics and also a Royal Society of Health Diploma in Air Pollution Control and a Diploma in Dusts, Mists and Vapours.

3851. What relevant experience do you have in relation to dust and airborne pollution?

**(Mr Curson)** I worked as a local authority enforcement officer for seven years and I have been involved in a large number of infrastructure projects for 18 years.

3852. And have you been involved in assessing air quality controls at Smithfield?

**(Mr Curson)** I have, yes.

3853. Can I take the Committee to the outstanding undertakings from the Promoter, it is A43, and it is 8 and 9 just so that you can see what we are arguing about, as it were. And the relevant undertaking that we are seeking is the undertaking that: "the nominated undertaker shall not proceed with the permitted works unless and until the following Tier 3 measures are agreed with

<sup>22</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-013).

<sup>23</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-028).

<sup>24</sup> Committee Ref: A44, Petition of SMTA (LONDLB28005-081).

---

The Petition of Smithfield Market Tenants' Association

---

SMTA”—the trigger levels and the appropriate dust control plan, and any disagreement is to be resolved by reference to a suitable arbitrator. Can I just ask you in relation to that proposal, what is wrong with consultation alone?

*(Mr Curson)* One of the concerns I have there is that the final decision rests with the undertaker and may result in measures which are less than appropriate for the interests of the market traders.

3854. And have you noticed any potential areas of concern in relation to the proposed trigger levels that have been mentioned by the Promoter's experts?

*(Mr Curson)* I think there is a growing body of evidence that suggests this setting of trigger levels at the outset of a contract like this—and I have suggested in my evidence what those trigger levels should be—is more appropriate than figures which are set on the baseline. The reason for that is that baseline levels of dust would be many times lower than the levels we would seek to use as a trigger level.

3855. Could you explain very briefly what is a baseline?

*(Mr Curson)* The baseline level of dust is the ambient level which is there at the moment and which is satisfactorily updated for the market.

3856. And you have taken a trigger level from where?

*(Mr Curson)* I have taken a trigger level from my experience which I know has been used on other equivalent contracts, including the new Arsenal Football Stadium and the construction of the Dome Arena, and it is also a figure in the very new draft London-wide Code of Practice.

3857. And that, as I think you made clear, is still a draft figure in relation to other matters?

*(Mr Curson)* It is, yes.

3858. And that is the relevant area of dispute between you and the experts for the Promoter; is that right?

*(Mr Curson)* That is correct, yes.

3859. **Sir Peter Soulsby:** Thank you, Mr Dingemans.

---

Cross-examined by **Mr Elvin**

3860. **Mr Elvin:** Good morning, Mr Curson. Your concern is that consultation on the dust management plan which we have offered will not give you enough control; is that right?

*(Mr Curson)* My concern is that consultation alone may not give the level of control that would be appropriate, bearing in mind the nature of the activity and the sensitivity of the interests of the market traders.

3861. Would you be satisfied if it were in the hands of the local authority to determine?

*(Mr Curson)* I have proposed that there is some form of independent arbitration in the event of dispute on the matters, yes.

3862. The problem with this is that it is actually a matter for the local authority to decide. Dust suppression measures under the Bill are within the control of the local authority. Perhaps Schedule 7, paragraph 7 of the Bill could be put up.<sup>25</sup> So you will see paragraph 7: “Development shall be carried out in accordance with arrangements approved by the local planning authority at the request of the nominated undertaker”. Sir, if we can go on three pages to point 7 in the table, which is page 132 of the Bill,<sup>26</sup> under “suppression of dust measures” construction operations are matters which fall within the ultimate approval of the local authority, and the grounds upon which they have control you

will see it says “as item six”, and if we go back to the previous page to item six at the foot of the page, you will see that the basis upon which the authority may exercise its decision-making powers are to preserve the local environment or local amenity and are reasonably capable of being so modified.<sup>27</sup> So the issues—that is the protection of the local environment—are precisely the issues of concern to the market traders, are they not?

*(Mr Curson)* They are the same issues, yes. The point I was seeking to make is that there appears to be a lack of involvement for the market traders, bearing in mind the importance of this issue to them?

3863. The market traders are no more and no less involved than they would be for any local authority decision taken in the public interest. You have a determination by a public body, not Crossrail, the nominated undertaker or the Secretary of State, and we have offered you more, which is we have offered you an assurance that you will be involved in the production of the dust management plan. Could I have put up the letter which we sent yesterday, page 74 of P49,<sup>28</sup> and can we please go to page 75 which deals with the air quality issues.<sup>29</sup> There we have set out over this page and a number

<sup>25</sup> Crossrail Ref: P1, Bill Schedule 7; Paragraph 7, (LINEWD-EXHO1-134).

<sup>26</sup> Crossrail Ref: P1, Bill Schedule 7; Paragraph 7, (LINEWD-EXHO1-136).

<sup>27</sup> Crossrail Ref: P1, Bill Schedule 7; Paragraph 7, (LINEWD-EXHO1-135).

<sup>28</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-074).

<sup>29</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-075).

---

**The Petition of Smithfield Market Tenants' Association**

---

of following pages assurances on the dust and air quality issues because you will appreciate that we take them very seriously because we are as concerned as you are to ensure that the market traders remain protected from environmental harm. The first bullet point on page 75 is “to prepare dust management plans to include detailed procedures to be followed in the event of dust escape from the site above the limit specified in the plans, and to consult with the SMTA and the Corporation of London.” So we have imposed an additional layer of plan preparation and consultation in addition to the requirement to actually obtain the formal authority of the planning authority under the Act, so we have added in an extra level of consultation. And you would not take issue with the fact that the relevant dust level and trigger level really has to be dictated by the local environment?

**(Mr Curson)** The letter that you have pointed me towards was of course received yesterday and it does helpfully commit to consultation. The market traders themselves are seeking, on my suggestion, something a little bit further than that which is the opportunity to be involved and to influence the dust management plan for the site. With regard to your second point, which was the objective dust levels, baseline monitoring will be helpful, but I go back to my earlier point which is that there is growing custom and practice that the level is set to be unambiguous and the level which identifies that which might start to cause a problem in the interests of local residents or for SMTA.

3864. Mr Curson, the whole intention, if you just look at the first bullet point, is that the dust management plan should set the appropriate levels of concern but at the moment—and you make this clear on page 16 under “meat hygiene” of your report—you have not done the detailed environmental research to know what the dust environment is like specifically, nor have we.<sup>30</sup> The whole purpose of the dust management plan is to allow the research to be carried out, the studies to be carried out as to what the environment is, to know what the background levels are already and then to set the appropriate levels in consultation with the market traders even before we would have to seek the formal approval of the local authority on dust suppression measures. That is a fairly high level of consultation and protection and it is by reference to, I am sure you would agree, the relevant consideration which is the specific circumstances at Smith field; is that right?

**(Mr Curson)** I do not think there is a direct correlation for an area like this between the background level and the trigger level. There is a direct correlation with the proposed activities and I would agree with you that it is appropriate that the Tier 3 measures are agreed when the detailed construction plan is determined.

3865. So the Tier 3 measures, those are the site specific measures to ensure the highest level of protection to the market traders, are to be determined at a later stage. Is it not purely common sense that at the same time the dust levels are consulted upon that the appropriate trigger levels, if that is what they are, are set at that stage? It is all done as a package with the involvement of your clients and with the ultimate sanction of the City of London acting as a public decision maker, not simply as a consultee? Does that not protect your clients sufficiently?

**(Mr Curson)** I would agree it can be done as a package. I think the point I am seeking to emphasise is the lack of a direct linkage between the baseline monitoring which is proposed and the setting of the trigger level.

3866. The setting of the trigger level, though, that sensibly should be done as part of the Tier 3 package and the consultation with your clients and the City of London? That sensibly comes at that stage, does it not?

**(Mr Curson)** If the SMTA are involved in the way we are seeking at that stage then it can be done at that stage.

3867. We have given you a written assurance that you are involved, the letter yesterday says so. So you have that assurance. Your clients will be involved and can employ you no doubt to have your input into saying what the levels should be. That can be satisfactorily done at that point, can it not?

**(Mr Curson)** It can be done at that point.

3868. So the assurance we have provided now is satisfactory to you?

**(Mr Curson)** Yes. I do not want to go over old ground. I have made the point that I was seeking to make.

3869. **Mr Elvin:** Thank you.

3870. **Sir Peter Soulsby:** Mr Dingemans?

3871. **Mr Dingemans:** Page 76 of the same document if that is alright, at the third hyphen down; was that the provision that caused you concern when you saw the otherwise acceptable undertaking?<sup>31</sup>

**(Mr Curson)** Yes, it was.

3872. And just very briefly can you explain what it was that caused concern in that respect?

**(Mr Curson)** The pre-construction monitoring will establish the baseline levels of dust in the area which will be substantially lower than the levels which we would seek to set as a trigger level to make sure that the dust environment does not become too difficult for market traders, so whether, for example, the background level was ten or 50, if

---

<sup>30</sup> Committee Ref: A46, Buro Happold: 010056 Smithfield Market Expert Witness Report (LONDLB28005-083).

---

<sup>31</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-076).

---

The Petition of Smithfield Market Tenants' Association

---

we are seeking to set a background of 250, it does not directly connect with the trigger level that we are seeking to set.

3873. **Mr Dingemans:** Thank you very much.

3874. **Sir Peter Soulsby:** Thank you, Mr Dingemans. I think that is it. Thank you very much indeed, Mr Curson.

*The witness withdrew*

3875. **Mr Dingemans:** That is effectively the evidence which we seek to adduce. I know my learned friend is proposing to adduce some evidence.

3876. **Sir Peter Soulsby:** Mr Elvin, are you intending to bring witnesses?

3877. **Mr Elvin:** I was expecting to hear two other experts according to the report we were served with on Friday.

3878. **Sir Peter Soulsby:** I think Mr Dingemans explained earlier on that at least two of his witnesses—

3879. **Mr Dingemans:** Of those two witnesses, one was ill and one was due to return tomorrow. In terms of the expert evidence, the other issues are covered by the undertaking we have got so I have tried to restrict the amount of time we take.

3880. **Sir Peter Soulsby:** That is clear and very helpful. Mr Elvin, are you ready?

---

**Mr Keith Berryman, Sworn**

*Examined by Mr Elvin*

3881. **Mr Elvin:** You are Keith Berryman, you are Managing Director (Projects) of Cross London Rail Links Limited. You are a civil engineer with extensive experience of planning, design and construction of major railway projects both in the UK and abroad, and the projects that you have been involved in include the Hong Kong Mass Transit and the Jubilee Line Extension?

**(Mr Berryman)** That is correct.

3882. You were previously a Director of the Strategic Rail Authority. You are a Fellow of the Institution of Civil Engineers and a member of the Institution of Structural Engineers?

**(Mr Berryman)** Yes, that is correct.

3883. Thank you. What I would like to deal with with you, Mr Berryman, is the issue as to what is happening at Smithfield and then particularly to come to look at the various issues affecting Lindsey Street and the like. Can I just ask you to explain first about the Crossrail proposals as they affect the east end of Smithfield Market?

**(Mr Berryman)** Yes, I can certainly do that. As Counsel has explained earlier, the construction at the east end of Smithfield Market is to provide the eastern entrance to Farringdon Station on the Crossrail system and to provide the interchange between Farringdon Station of Crossrail and Barbican Station of the Metropolitan and Circle Line. If we could look at exhibit nine, that is the photo of the site you will be able to see here the size of the site and you will see at the top corner, the Fox and Knot Street worksite, which members of the Committee took evidence on a couple of weeks ago, but the area that we are talking about today is particularly the Lindsey Street site which is on the corner of Lindsey Street and Long Lane and stretches right across to Charterhouse Square

and the site underneath the Smithfield Market. Crossrail platforms at this level are approximately 30 metres underground and to get to them from the ticket hall site, which is at the corner of Long Lane and Lindsey Street, we need to go down with escalators to get below the levels of the adjacent railway lines, that is the Thameslink lines and Metropolitan and Circle Lines, pass under them, and then go down again to the Crossrail lines, so the work required underneath the market consists of constructing an escalator box which is below the market. Can we have number 7, please. This is the plan which shows the works there. You can see that there is a large shaft near the corner of Lindsey Street and Long Lane with three little blobs in it. That is a ventilation shaft. It will also be used for construction purposes so that will be built, first of all, to allow access to the tunnels down below. There is also another smaller shaft between the Metropolitan line and the Thameslink lines which is used for fire brigade access and MIP access, you can see it there, and then of course there is the work on the other side of the street at the Fox and Knot Street site. The escalator box, which takes escalators down from the ticket hall level to an intermediate level, is under the market and shown there. At the intermediate level, which is above the Crossrail lines but below the Underground and Thameslink lines, there is a passageway which takes us to a location between Crossrail lines so we can get an escalator down to them and the works which we are particularly interested in today are those which are in Lindsey Street itself and underneath the market obviously.

3884. Thank you and if we turn then to what construction activities, focusing on the Lindsey Street area and the eastern end of Smithfield, will be required for the construction of Crossrail.

---

 The Petition of Smithfield Market Tenants' Association
 

---

*(Mr Berryman)* Can I have number 5. All the property on the Lindsey Street site will be demolished and a basement will be followed on the site down to the existing track level of Thameslink. It will be alongside Thameslink at the same level. That basement will be formed using a secant piling system or something similar, where piles will be driven and interlocked with each other. From that basement, a shaft will be sunk which will ultimately be a ventilation shaft but during the construction period will be used for the excavation of the tunnels. The smaller shaft which I mentioned earlier, the escalator shaft, will be constructed to provide lifts and so on. The passage to the basement will be constructed under Lindsey Street, if I could have number 8 up, please. This is a cross-section showing how the works fit in with the market, and you can see there the basement of the market which currently has a mezzanine floor in this. That is not shown on this cross-section. This is a cross-section looking south. You can see Lindsey Street there with the building in the background, there is Lindsey Street, and you can see the box which we intend to construct underneath the market basement so that the roof of the box ultimately forms the floor of the market basement and then you can see the passage which will take passengers down to the Crossrail lines. An interesting feature of Lindsey Street, which is not made very clear here, is that Lindsey Street is itself formed by a series of vaults. Originally there were sidings underneath the market and they continued under Lindsey Street and that structure is still in place so they are Victorian structures.

3885. They are Victorian vaults under Lindsey Street?

*(Mr Berryman)* They are indeed.

3886. Do we know whether they stretch the whole strength of Lindsey Street?

*(Mr Berryman)* They do not stretch the whole length of Lindsey Street but they certainly cover the area we are concerned with. Some of those vaults span over the existing Thameslink lines and the Underground lines.

3887. **Sir Peter Soulsby:** That is the fire alarm but let us carry on for now.

3888. **Mr Elvin:** We were talking about the 19th century vaults.

*(Mr Berryman)* We were and you asked me that immediately before the interruption. The vaults were built at the same time as the market so I would say mid-19th century. Obviously we assume that they are in reasonably good condition but we do not really know that until we get in there and start work on them.

3889. **Sir Peter Soulsby:** I think we will adjourn now and reconvene at 2.30 this afternoon.

*After a short adjournment*

3890. **Sir Peter Soulsby:** Mr Elvin, you were on your feet.

3891. **Mr Elvin:** I was. Sir, hopefully there will not be any division bells, fire alarms or anything else in the next ten minutes, and we will see if we can finish Mr Berryman.

3892. Mr Berryman, I think we tried twice to deal with the Victorian vaults under Lindsey Street. As I understand it, you need to investigate further the state in which those vaults are at the moment.

*(Mr Berryman)* Indeed.

3893. Are there any other issues with regard to Lindsey Street in respect of which there is uncertainty?

*(Mr Berryman)* The other issue about Lindsey Street, which I think is kind of related to the vaults, is at the northern end of the street where there is a bridge over the existing underground lines the condition of which we are not entirely sure about, and we will not be until we have actually demolished the property and had a look at it.

3894. Mr Berryman, we were going to deal with a whole number of issues about construction, percussive and non-percussive methods and the like, but since the issues have narrowed so far as your concerns, can I ask you to go to the questions relating to Lindsey Street, both in terms of the control of dust measures, firstly, in terms of the Lindsey Street site? And then we will go on to the question of certainty over space for loading bays and the like, and it is point eight in your aide memoir.

*(Mr Berryman)* Yes. I think the whole construction process starts with the demolition of the existing buildings which are on the Lindsey Street site, and of course that process has a potential to generate dust. Normally these days in London buildings are completely shrouded when they are demolished; a scaffold frame is put up outside and sheeting is put over the scaffold frame and water mist is applied inside the enclosure to create in that way. So the dust which arises as a result of the demolition does not become a problem, and we would be doing that in this case, of course, as with all the other demolitions in Central London. When the demolition is finished the construction work starts and there are certain activities within the construction work which can generate dust. There are particular issues which will be familiar to anyone who has been near a construction site, where mud gets on the road, it dries and it causes dust. We will have wheel washing to prevent that happening, which again is normal practice in other sites in Central London. We will also have high hoardings around the site, about five metres high,

---

 The Petition of Smithfield Market Tenants' Association
 

---

which will prevent the overwhelming majority of dust escaping from the site, if any is developed. But I should emphasise that the best way of dealing with dust is to deal with it at source so that in any dust-generating activities the dust is suppressed by water jets or other appropriate means.

3895. In terms of the basement, the Promoter has undertaken to seal the work site in the basement of Smithfield; can you explain that, Mr Berryman?

*(Mr Berryman)* Yes. As you know, there is a significant work site in the basement at Smithfield Market. What we will be proposing is a floor to ceiling hoarding with tape sealing the apertures between the walls and so on. It is a similar technique to that which is used when buildings are cleared of asbestos and it completely prevents the ingress of dust from the site. We have an entrance into the site from the basement to allow the preliminary underpinning work to be done, and that can be provided either with fans or with an air lock, if that is appropriate, to prevent dust passing out from the basement where we are working into the rest of the building. Also any holes in the floor of the market, which communicate between the market itself and the basement, will be sealed up with tape in the same way. This is a well-established technique which is used on many sites.

3896. Dr Ireland will be dealing with the dust monitoring and trigger levels and those issues, is that right?

*(Mr Berryman)* That is correct.

3897. Can I ask you then to deal with the question of maintaining loading spaces in Lindsey Street, which I think is your final point?

*(Mr Berryman)* That is right. As I have explained before, we have to construct the escalator box partly under Lindsey Street and we propose to do that half and half, by building one half of it first, sliding over, diverting the traffic on to the half that we have already built and then building the other half. If all goes well, and if things are as we expect them to be, that should not be a major problem. We may be able to, during that period, maintain some of the loading bays which the Petitioners have requested; and, as we have already said, we will use reasonable endeavours to do that. We are reluctant to give an undertaking to do that because the condition of the arches underneath is not yet known, and when we actually get to it we may find that it is not actually practical to do it in quite the way which the borough has suggested. However, we are happy to give an undertaking to use reasonable endeavours to do that.

3898. Are there any other uncertainties which exist which make it difficult to give any absolute guarantees with regard to loading spaces in Lindsey Street?

*(Mr Berryman)* Yes. There is also the issue of the fact that the Highway Authority in this area is the City Corporation and they will be interested in making sure that traffic circulates properly in the area and that there are no obstructions caused. So we would need to get their approval for any such scheme.

---

 Cross-examined by Mr Dingemans

3899. **Mr Dingemans:** As far as Lindsey Street is concerned, can I deal first of all with maintaining the loading bays? The difference between you and the Petitioner is reasonable endeavours or an absolute undertaking. This is right, is it not? You know the work site you are going to work on at Lindsey Street, you know the parameters that exist there?

*(Mr Berryman)* Yes, we do within the constraints of knowing what is there in the shape and sub-structure and what we have to demolish, because Lindsey Street is not a ground-on street—it does not sit on the soil, it actually sits on a Victorian structure, the details of which we have as much idea as we can get at this stage, but will not be clear until we start demolition.

3900. This is also right, that if it became a requirement that you maintained the six or seven loading bays, and then you would be able to continue all your works, it would just mean that you would have to adjust the way in which you tackle any unforeseen problems?

*(Mr Berryman)* No, that is not quite correct. We would be able to do the work if things are exactly as they appear to be at the moment, but with structures of this age and this nature we know that there are very often issues which arise and only become clear once we actually start to get into breaking out the structure.

3901. But you have given an undertaking to maintain access around and through Lindsey Street throughout the whole of these works, have you not?

*(Mr Berryman)* That is right, yes.

3902. Which means that you must be confident of maintaining a bridge across Lindsey Street and over the Victorian vaults.

*(Mr Berryman)* That is correct, and if worse comes to worse there are a number of fairly drastic things we can do to achieve that, such as putting a temporary bridge structure over or something of that sort.

---

**The Petition of Smithfield Market Tenants' Association**

---

3903. The same can be said for the loading bays?

**(Mr Berryman)** Not really no, because some kind of temporary bridge structure would have beams at the side and so on and would make it very difficult to operate loading bays in that area. I have to say that the balance of probability is very strongly that we will be able to maintain the loading bays, but we would be reluctant to give a categorical undertaking to do that with the level of knowledge that we have at the present time.

3904. Because it might impose an expensive parameter on your construction scheme?

**(Mr Berryman)** Yes, I suppose you could put it that way. It is not just expense, of course, it is issues of safety and general construction management.

3905. Just on the importance of the loading bays, you have heard what those witnesses from the market said about the importance of the Lindsey Street loading bays this morning. You would not argue with their expressions of importance?

**(Mr Berryman)** I am sure all the loading bays around the market are very important, but the percentage of the total number of loading bays which we are talking about here is a very small percentage of the total.

3906. Can I turn to the question of working hours? As you know, one of the things that the Petitioners have asked for is that the working hours be moved to enable work to take place between ten and eight rather than the usual eight and six. Is there any reason why the Promoter is resisting that undertaking?

**(Mr Berryman)** We have a code of construction practice which sets out, amongst many other things, the working hours during which we can operate. There is a provision in that to negotiate with the local authority for different working hours if that is appropriate for the site. We know, for example, in the City some people with property nearby would prefer us to work at night rather than in the day, and subject to local authority agreement we are happy to do that, but of course there are other people in the area apart from Smithfield Market, and I think it is appropriate that this kind of negotiation is done with the local authority rather than directly with this group. In principle, assuming that we could agree

with the local authority, there would not be any objection to working the kind of hours that they are talking about.

3907. So as far as the Promoter is concerned the hours of ten to eight would be acceptable?

**(Mr Berryman)** As I say, there are other people in the area apart from the market operators, and I think it is for the local authority probably to strike the balance between the requirements of the different inhabitants of the area.

3908. The substitute loading bays for those lost on Lindsey Street—this is the outstanding undertaking number four, following on the document—you accept to try and use your best endeavours to obtain substitute loading bays for those lost on Lindsey Street, is that correct?

**(Mr Berryman)** That is correct, yes.

3909. As far as the Buyers Walk is concerned, I understand that has been clarified and that it is now proposed to keep open the entrance on the eastern side of the market, the west side of Lindsey Street?

**(Mr Berryman)** Yes, that is correct—a pedestrian entrance only of course at that point, and we may have to move it around a little bit from time to time, but always a reasonable pedestrian access there.

3910. Trigger levels, I understand from what you said, someone else is going to be dealing with that?

**(Mr Berryman)** That is correct.

3911. One final undertaking that the Petitioners asked for was an undertaking that the market could be safely operated and occupied during the course of the construction works. Is there any objection to giving that?

**(Mr Berryman)** It is certainly our intention that the market should be safely operated during construction works; there will of course need to be liaison with the tenants, not just meat traders, but there is office accommodation there as well, as to when exactly some activities are carried out. But generally speaking, yes, we intend that the building should be kept open.

3912. Is there any reason why you would not then be prepared to offer an undertaking to that effect?

**(Mr Berryman)** I was under the impression that we had, actually.

---

*Re-examined by Mr Elvin*

3913. **Mr Elvin:** The safety issues with regard to the situation that might arise if you gave a guarantee of loading bay provision at all times in Lindsey Street, you said that access and, at the worse case, some form of bridging structure could be provided, so what are the safety issues which make loading bays a different consideration?

**(Mr Berryman)** I think with the loading bay it is not just a question of a vehicle passing backwards and forwards, the vehicle has to actually be able to be

opened and things taken out and moved out of the way. A bridge structure that one might envisage would need to have some sort of raised sides in a situation like this where we cannot have beams underneath because there is a brick structure underneath, so I think it would be quite a difficult thing to envisage exactly how that might work.

*The witness withdrew*

---

---

The Petition of Smithfield Market Tenants' Association

---

**Mr David Anderson, Sworn**

*Examined by Mr Elvin*

3914. **Mr Elvin:** Mr Anderson, you have been sworn but I do not think you have given evidence here so we will introduce you to the Committee. You are David Anderson; you are Head of Planning for Cross London Rail Links Limited.  
**(Mr Anderson)** That is correct.

3915. You are responsible for the transport, planning and environmental aspects of the project, including the business case. You previously worked for BAA plc on projects such as the Heathrow Express, Heathrow Terminal 5 and the development of Stanstead Airport.  
**(Mr Anderson)** That is correct.

3916. Although you do not use the title you are a Doctor of Philosophy and a Fellow of the Institution of Civil Engineers?  
**(Mr Anderson)** That is correct.

3917. You are going to give a little more information as to how environmental impacts during construction works will be controlled and to deal briefly with the remaining issues on parking?  
**(Mr Anderson)** That is correct.

3918. Can I ask you to outline very briefly to the Committee—this is the first time this issue has really arisen—how environmental impacts during construction will be controlled?  
**(Mr Anderson)** There are two mechanisms for controlling the impacts. The first series of controls will be applied through the Bill itself, and there has been some discussion about this this morning in relation to the suppression of dust, which is a condition contained in Schedule 7 to the Bill. So there will be some controls through the detailed consent process at a later stage on that particular matter. The routing of lorries gaining access to the site is another matter that is controlled in that way. Outside of the Bill we also have the Environmental Minimum Requirements, so-called EMRs. The EMRs comprise the undertaking that is given to Parliament, the planning memorandum and the environmental memorandum, and they are essentially documents which set out the way that the Promoter will work with local authorities and statutory bodies. The EMRs also include the construction code, and it is the code that is most relevant to what we are considering here.

3919. The approach using the Environmental Minimum Requirements, is that something which has just been used for this particular Bill?  
**(Mr Anderson)** No, that is not the case; it was developed and applied successfully for the Channel Tunnel Rail Link Bill. For that reason the EMRs for CTRL were our starting point in that they provide a template for us. However, particularly for the construction code we have also looked at more recent codes developed for other major

projects, such as Terminal 5 and the Jubilee Line Extension. We have also looked at codes developed by local authorities.

3920. And the contents of the code include what?  
**(Mr Anderson)** There are a wide range of matters covered by the code. In terms of the discussion today it does include the effects of dust and the effects on harnessing of traffic project.

3921. As can be seen from the various information papers, including the construction code at D1, information paper D1, this has been the subject of detailed discussion with the planning authorities?  
**(Mr Anderson)** That is correct. We use the Planning Forum, which reports to the Highway Forum, chaired by the Minister, to develop the code and take on board comments from the local planning authorities.

3922. So how is it expected its compliance with the EMR and the code will operate in practice?  
**(Mr Anderson)** The EMRs will be a contractual requirement on the nominated undertaker or undertakers appointed by the Secretary of State. So the nominated undertaker will be required to ensure that all contractors undertaking work upon the project will comply with the code and the code will apply to all the works being undertaken by the Promoter.

3923. What happens in practice, do you expect, if there are problems on a day to day basis?  
**(Mr Anderson)** Again, this is covered in the code and in the information papers that there will be community relations personnel appointed, and they will focus on engaging with the community directly affected by the works. They will be the first line of response to deal with any issues which arise. We would hope that if people were unhappy with the project they would raise it with the project in this way. The information papers on the code give more information on how that process would work. It will include, for example, a telephone helpline which will be staffed 24 hours a day to deal with concerns. All calls will be logged and a prompt response would be given. The helpline and the availability of staff will be displayed as a slogan, and it would also be possible to contact the project by the Crossrail website, as you would expect. For those who are still unhappy with any aspect of the construction, the next step would be to complain to the Secretary of State if the project locally was unable to deal satisfactorily with the response. Beyond that there will be a complaints commissioner for the project. Again, the process is set out in information paper F5,<sup>32</sup> and that paper describes how matters may be referred to the commissioner if they have not been dealt with

---

<sup>32</sup> Crossrail Ref: P3, Information Paper F5, Complaints Commissioner.

---

**The Petition of Smithfield Market Tenants' Association**

---

satisfactorily as regards the complainants by the project. The complaints commissioner is an independent person and their role will be to investigate any grievance that has been alleged by complainants.

3924. Let us take an example such as a lorry driver who is not complying with the delivery hours that have been agreed with the local authority and those who have been consulted, or there has been a departure from lorry routing. How would you anticipate that being dealt with?

*(Mr Anderson)* I would anticipate that those affected would raise that with the project in the first instance by the helpline, and what would happen in that instance is that the community relations personnel will take up the issue and steps will be taken to make sure that the controls previously agreed on routing were reinforced. Again, if that was not done satisfactorily there are other recourses, such as the Secretary of State himself or the complaints commissioner.

3925. Can we then turn to the remaining issue so far as loading and car parking is concerned, and Mr Berryman has dealt with some of the loading issues so we can move ahead. So far as loading is concerned we have heard from the consultant employed by the Market Traders' Association that there is scope for provision of another five to ten spaces within the market area and that the use of management techniques might actually make more efficient use of the spaces that exist at the moment. Do you have any views on the ability of management techniques to assist the traders to achieve their objective?

*(Mr Anderson)* I would agree with the views that we heard this morning that there is scope to manage the available loading capacity in the area. I would expect us to be working on that with the traders and indeed the Corporation of London as we take the project forward.

3926. Finally, can I ask you to deal with the loss of car parking in the basement? That is something I have said to the Chairman that you will talk about to the expert from Buro Happold outside, and try and reach agreement on the number of spaces. But so far as you are concerned, what is the position with the car parking?

*(Mr Anderson)* The position from our understanding is that of these 580 spaces currently in the car park that the absolute maximum displacement would be 290.

3927. The 330 that appears in the table that Mr Dingemans has referred to, is that a correct figure?

*(Mr Anderson)* No, that was an earlier estimate based on less good information; we now have better information than that.

3928. I put to the Buro Happold witness that there are other car parks in the area, and I think we have within P49 a map of the other car parks, at tab B, page 13 of the exhibit, if that could be put up?<sup>33</sup> This shows the car parks in proximity to Smithfield, some of which of course will be closed during construction. Has a report been prepared and given to the Petitioners which indicates the scope for potential capacity within those adjoining car parks, which will more than easily accommodate the 11 to 28 additional cars that they thought might not be accommodated if that were a concern?

*(Mr Anderson)* Yes, it has, and all of these car parks operate on a 24-hour basis, and so one would expect them to have a capacity available during the night time period.

---

*Cross-examined by Mr Dingemans*

3929. **Mr Dingemans:** You dealt, first of all, Mr Anderson, with the possibilities of complaints when undertakings were breached, both locally and then up to the Secretary of State, and described the mechanism for that. Another possible mechanism would be to extract an undertaking from the nominated undertaker and allow them to contract directly with the market traders, is that right?

*(Mr Anderson)* It would be a possibility, but the method that the Promoter is currently proposing is that set out, that I have set out and is set out in the code.

3930. You will understand the concern of the Petitioners is that if dust levels exceed a certain amount the market is stopped. It is not something that is really suitable for resolution by the Complaints Commission. Would you accept that?

*(Mr Anderson)* There will be action taken much earlier than that. I think I indicated there was a hierarchy of response possibilities and the first step would be to deal with any emission that occurred directly on the ground.

3931. Can I deal with the outstanding undertakings that you are giving evidence about? You talk about management techniques in relation to the missing loading bays and loss of car parking spaces. Who is it that is envisaged will be managing these car parking spaces—employees of the nominated undertaker?

*(Mr Anderson)* No, ultimately this is a matter for the Corporation of London, so I think we envisage taking forward any management strategy in conjunction with, not just the market traders but also with the Corporation themselves. Ultimately it is the Corporation that is responsible for the provision of the parking spaces and loading bays on the highway.

<sup>33</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-013).

---

The Petition of Smithfield Market Tenants' Association

---

3932. You are aware, are you, that in the two weeks before Christmas there are effectively traffic controllers around the market funded by the Corporation of London? If what you are suggesting is traffic controllers to be funded by the Corporation of London has the question of funding been discussed with the Corporation?

(*Mr Anderson*) I am not aware that it has.

3933. Is that something that the Promoter, if they think the answer is management, would be prepared to deal with?

(*Mr Anderson*) Clearly we would need to discuss that with the Corporation themselves. I think the first step would be to identify with them the appropriate controls and we need to do more work on the strategy and develop it to enable us to do that.

3934. Car parking, there was a rogue figure, I think—I hope that is not unfairly described—in the Mott's report. Can I just clarify now, are you saying that the Promoter will give an undertaking that 50 per cent of 580 spaces will remain in the basement car park?

(*Mr Anderson*) I think that is what the undertaking implies that we have already given, yes.

---

Re-examined by Mr Elvin

3935. **Mr Elvin:** The use of EMrs and the complex structure with the construction code, the EMrs and all the various undertakings, which you say were developed in the template of CTRL and with experience from other major infrastructure works, what is your expectation that they will be effective to deal with the sort of concerns which have been expressed by the market traders?

(*Mr Anderson*) I believe they will be very helpful.

3936. Do you have a view as to whether it would be necessary in order to give them the protection they need to give each 36 market traders a contract with the nominated undertaker?

(*Mr Anderson*) No, I would not.

---

Examined by The Committee

3937. **Mr Binley:** You know the concept of *Sod's Law*, do you not, that if something is going to go wrong it is going to go wrong? Let us work on that basis of worse case scenario. Given the worse case scenario what sort of an impact do you think the absence of loading bays might have on the traders in the market place in terms of trade?

(*Mr Anderson*) In terms of the worst case? Clearly the ability to load up at that eastern end of the market will be restricted. That would put pressure on other bays that are used for loading nearby on Long Lane and Charterhouse Street, and one would expect them to get busier. Possibly there could be some congestion arising from that. I think what we would consider in terms of the management strategy is ways of dealing with that.

(*Mr Anderson*) I think we do in terms of the traffic effects and, as I have said, it could lead to further congestion.

3940. I said on trade. You see, my concern about this is that that is a figure which is not too difficult for clever chaps like you to work out. I am just wondering why you have not worked it out. You are not willing to give an undertaking but you do not know what you are not willing to undertake; that is the concern I have.

(*Mr Anderson*) I think on the basis of the work we have done I would not expect there to be an extremely adverse effect on the operation of the market.

3938. So you have not really assessed the impact of worse case scenario on traders, is that what you are saying?

(*Mr Anderson*) What I am saying is that we identify that the loss of the space could be an impact on the market operation, but from our observation and investigation at the site we felt that there was sufficient scope there for us to be able to mitigate that.

3941. But you do not know.

(*Mr Anderson*) A calculation of that has not been done.

3942. **Mr Binley:** Could that be done, just to reassure us that the interests are protected?

3939. But you still have no real idea of what impact that might have in a worse case scenario?

3943. **Sir Peter Soulsby:** Could you refresh our memories as to the proportion loading space that is likely to be lost if none were possible on Lindsey Street? It might be helpful to go back to the plan, the one which shows the whole of the loading space around the market.

---

**The Petition of Smithfield Market Tenants' Association**

---

3944. **Mr Elvin:** It is P49, page 49.<sup>34</sup>

3945. **Sir Peter Soulsby:** I think it might enable members of the Committee to get an idea of what proportion of the loading space is being lost.

*(Mr Anderson)* Our estimate is that there are about 20 bays available in the area bounded by the red line. So on that basis and on the basis that we believe that some of those bays could be reallocated elsewhere in the market area it would be a relatively small effect on the overall loading capacity available.

3946. **Sir Peter Soulsby:** I think that is very helpful.

3947. **Mr Binley:** If I could ask another question, Chairman, with respect. This is a sizeable market areas and it is an area where particular merchants specialise in particular products, is that so?

*(Mr Anderson)* I believe that to be the case, yes.

3948. So in truth, for given products this loading bay is particularly important to certain traders, is it not?

*(Mr Anderson)* I am sure it is, yes.

3949. **Mr Binley:** That is my concern. It is not the overall effect on an overall market if they are just selling one product, it is the specific effect upon specific traders selling specific products, and that is the work that you have not done, and that concerns me, and I think it could be done relatively easily and taken into account as a part of your decision about undertakings.

3950. **Sir Peter Soulsby:** Do we have anywhere in addition to this very helpful plan in front of us a schedule saying how many loading bays there were in total in different parts of the market and what proportions are being lost were the worse case scenario to arise here? It might help the members of the Committee to see the context.

3951. **Mr Elvin:** I do not think we have but we can probably provide one.

3952. **Sir Peter Soulsby:** I think it might be helpful in the light of those questions to see how many spaces there are, how many will be lost in Lindsey Street and how many might be relocated elsewhere?

3953. **Mr Elvin:** Can I say in response to that question that we have no idea because we have not been given the information and I suspect that the traders may not be too happy to divulge what the turnover is of those individual units that might be affected. We cannot do an estimate when we do not have the financial information.

3954. **Sir Peter Soulsby:** I think what I was looking for was the loading space being lost rather than any loss of trade that might result from it.

3955. **Mr Elvin:** We will see if we can give you the figures overnight.

3956. **Mr Dingemans:** May I ask one question arising out of that?

---

*Further examined by Mr Dingemans*

3957. **Mr Dingemans:** It is really to Mr Hopkins' question, which related to you also, Mr Binley, just to show the location of units. Can I ask the Committee to be shown A44, page 55? This is the map with the layout. Mr Anderson, if you look at that document, some of the market traders' evidence this morning was that those in the east market would be most affected by the loss of Lindsey Street. Is this right, that you cannot park in Grand Avenue?

*(Mr Anderson)* I believe that is the case.

*(Mr Anderson)* Correct, although I think there is some further parking around the Rotunda that Mr Farthing alluded to this morning.

3959. But the concern of those occupying the units towards the right hand side of the picture, as we now look at it, is that Lindsey Street—and this is why you have very kindly given an undertaking to keep open the Buyers Market door—is effectively where you are carrying out market meat and that is why Lindsey Street is so important for those traders at the corner. Is that something you accept?

*(Mr Anderson)* It is certainly the most convenient for them.

3958. You can only park in Lindsey Street or East Poultry Avenue or along the outside?

3960. **Mr Dingemans:** Rather than just a proportion of loading bays as to which we accept the general point.

---

---

The Petition of Smithfield Market Tenants' Association

---

Further re-examined by **Mr Elvin**

3961. **Mr Elvin:** Mr Anderson, in terms of those using the hermetically sealed loading bays—and I know that Mr Binley was not in earlier and would not have heard this—those six hermetically sealed loading bays can be seen sticking out at an angle and there are four on the north side and two on the south side.

**(Mr Anderson)** Correct.

3962. Are they proposed to be interfered with by the construction works?

**(Mr Anderson)** No, they are not.

3963. They will remain in operation?

**(Mr Anderson)** Correct.

3964. For those needing the hermetically sealed bays for bringing in of uncovered meat, they will remain?

**(Mr Anderson)** Correct.

*The witness withdrew*

---

**Dr Matthew Ireland, Sworn**

Examined by **Mr Elvin**

3965. **Mr Elvin:** You are Dr Matthew Ireland?

**(Dr Ireland)** I am.

3966. Your various qualifications: you are a Chartered Environmental Scientist; you have wide UK and international project experience in environmental assessment and the management of developments ranging from mining mineral workings to power generation and desalination, waste disposal incineration, road schemes, to residential and commercial developments?

**(Dr Ireland)** That is correct.

3967. You are a technical leader and expert witness and you are with Mott MacDonald?

**(Dr Ireland)** That is right.

3968. You specialise in air quality assessment and management policy with extensive experience in monitoring the compilation of emissions inventories and dispersion modelling?

**(Dr Ireland)** I have, yes.

3969. You were responsible for the air quality climate change and dust assessments in the Crossrail proposal?

**(Dr Ireland)** I was.

3970. You are also a council member of the Institution of Environmental Scientists?

**(Dr Ireland)** Yes.

3971. Since the issue with regard to dust has now narrowed to the question of trigger levels, can I ask you to explain how you consider the question of trigger levels to operate and whether it is either sensible or realistic to specify trigger levels at this stage or whether it should be done at some later stage?

**(Dr Ireland)** I will. The establishment of a trigger level needs to make reference to ambient background levels and background concentrations

because the trigger value clearly needs to refer to dust arising from the site that you wish to control. So the trigger value will be established by reference to the data from the preconstruction monitoring in the market and from the London area monitoring sites. One simple reason for this is that whichever trigger level you set—and I think the reference was made to *Sod's Law* earlier—is that *Sod's Law* raises that at some point in the past that trigger level has already been breached due to sub-Saharan desert dust flying over or someone standing under the monitor smoking a cigarette or someone dropping a bag of cement or some such activity. So really you need to be aware of background monitoring to make sure that you can exclude external factors, such as the sub-Saharan desert. The precise value of the trigger level will be dependent on the background levels and variations observed during the monitoring. However, a trigger value—and the witness this morning suggested 0.25 milligrams per cubic metre—does represent a practical reference point for further investigation, so we are in agreement there. However, in addition to the numeric value of the trigger value, the trigger value needs to be defined in terms of particle size and averaging period. The background monitoring data are available for PM<sub>10</sub> and that is a particulate matter with a mean diameter of less than ten microns. This represents to me a suitable particle size to refer to because we can compare the monitoring on the site with background data and hence be assured that any breach of the trigger value is due to local circumstances, not due to regional or even global effects. With reference to the averaging period, this is really dependent on the consequent action that may be required should the trigger value be breached.

3972. In terms of the point that was made this morning by the witness for the Market Traders, namely that he was concerned about the relevance of background levels, do you agree with him that background levels are not relevant to the setting of trigger levels?

<sup>34</sup> Crossrail Ref: P49, Petitioner Response Document to the Petition of Smithfield Market Tenants' Association., (LONDLB-28004-049).

---

The Petition of Smithfield Market Tenants' Association

---

*(Dr Ireland)* As I said, I think they are relevant because it would be unfair on the Promoter if the operations had to be ceased, on a worst case scenario, due to a dust cloud passing over London with the trigger value being breached, hence you do need to make reference to background levels in such circumstances.

3973. We went through this morning with the witness that there are two levels of protection. There is the dust management plan which is to be consulted with the market traders. There is also the formal dust suppression approval process which requires the approval of the local authority under Schedule 7 of the Bill but so far as the dust management plan is concerned, how would you see the trigger levels as operating in terms of the practical steps depending on what levels were set and how they were set?

*(Dr Ireland)* Clearly the precise actions to be taken if the trigger levels are breached are detailed in the dust management plan, but I will try and give you some examples. If the trigger value is breached for a period of 15 minutes—and 15 minutes really represents the shortest averaging period that we can practically work with—an initial investigation by the site manager would be warranted by inspection of the activities on and off the worksite and reference to the background concentrations elsewhere in London. So you can imagine the trigger value being breached, an alarm going off, and the site manager sticking his or her head out of his Portacabin, seeing if there is anything on site perhaps looking around the site and then with reference to background concentrations elsewhere in London. So if it turns out that the episode is a one-off event—a bag of cement dropped on to the floor—that episode would need to be recorded because the monitoring data would show that it was in breach and we need to explain why. But if the trigger level then continues to be breached we

would then need to look at further controls or activities on the site, if the cause is identified to be on the site, with activation of additional suppression measures.

3974. Thank you and does it follow that this has to be a slow or a lengthy process if you are investigating the cause of specific levels in terms of dust emissions being registered?

*(Dr Ireland)* Well, I would suggest that it would take probably 15 or 20 minutes or half an hour once the initial trigger level has been breached to investigate around the site whether there is a particular dust-generating activity that needs to be controlled, so it is a matter of less than an hour or an hour rather than a day or a week or a year.

3975. Right and this is the question of monitoring in case problems arise. In general terms, how stringent will be the methods of controlling dust, as is common ground this will justify Tier 3 mitigation, which is the highest levels of protection from dust emissions that is provided, and it is tailor-made to suit the specific proposals and the specific site? Can you give the Committee just some feel for the level of protection that Tier 3 affords so that they can gauge the likelihood of problems arising, whether the monitoring really is belt and braces or whether it is something that is likely to be indicating problems on a regular basis?

*(Dr Ireland)* The method of monitoring and the opportunity for an instant response and the methods of controlling dust once you have identified the source, excuse the expression, are not rocket science. It is basically wet suppression or asking people to be a bit more careful with their activities is what it is about really. And with the method of monitoring that allows instant response then I believe the dust management process would be sufficient to prevent dust leaving the site.

3976. **Mr Elvin:** Thank you very much.

---

Cross-examined by **Mr Dingemans**

3977. **Mr Dingemans:** You mentioned PM<sub>10</sub>. That is particles which are very small, less than ten microns in diameter, and we are likely to be concerned with particles which are much larger; is that right?

*(Dr Ireland)* No, there is almost a direct relationship between what is referred to as total suspended particulates, that is the total fraction of particulate and particulate matter, with a diameter of less than ten micron PM<sub>10</sub>. The advantage of using PM<sub>10</sub> as a metric is that we can make reference to background monitoring data.

3978. The figure that was proposed by Mr Curson of 22.5 micrograms, that is something that is effectively standard in operation in London construction projects; is that right?

*(Dr Ireland)* I think it was 0.25 milligrams.

3979. Sorry, 0.25 milligrams.

*(Dr Ireland)* Yes, it is referred to in the draft Code of Practice, as I indicated earlier, which seems a practical reference point for further investigation. In other words, it seems a good moment to start with.

3980. And his concern with you taking, as it were, background levels and then monitoring from that and setting trigger methods based on pre-construction monitoring is that you might have absurdly high levels if you wait for your dust cloud over London or your person dropping a bag of cement?

---

**The Petition of Smithfield Market Tenants' Association**

---

*(Dr Ireland)* The concern this morning was that if we were to use the background monitoring to then set a threshold above the background, rather than an absolute trigger value—the idea of an absolute trigger value is a practical way forward so I agree with the witness there—but the reason for having background monitoring is to establish whether the trigger value has been breached due to activities beyond the control of the worksite. I think it is only fair that is also taken into consideration.

3981. As far as the trigger level is concerned, no-one is going to ask the poor Committee to decide what an appropriate trigger level should be, but what we are asking the Committee for is to enable us to be involved in the agreement of the trigger level. So far the Promoter has said that the Traders' Association expert can be consulted. Is there any reason why his agreement should not be required and if there is a dispute about that then going off to some independent expert?

*(Dr Ireland)* I guess I am here to provide technical evidence and I will stick to dust, if that is okay.

3982. In terms of an undertaking to cease work if the trigger levels are exceeded, you are aware that the market is extremely sensitive in relation to dust issues?

*(Dr Ireland)* I can understand a genuine cause for concern in relation to dust, but I think at this stage without knowing the concentrations of particulates in the area to this level of detail and also within the market itself, it would be difficult to say how sensitive it is.

3983. But did you read or hear the evidence of Mr Smith on 31 January to the effect that the market would be closed if relevant environmental limits were breached?

*(Dr Ireland)* As far as I am aware, there are no environmental elements relating to dust and to meat in trading places.

3984. And in relation to that, what the Petitioner is seeking is simply that the nominated undertaker ceases work as soon as it is safe to do so in circumstances where the market has had to stop work. Is there anything you can assist us with from an expert point of view on that?

*(Dr Ireland)* I think it depends for what reason the market has had to cease operations. I can think of all sorts of different situations why the market might have to cease operations which may or may not be related to dust in the worksite.

3985. But if it is dust from the worksite?

*(Dr Ireland)* I believe the dust management plan would include sufficient measures to prevent that occurring.

3986. Suppose, unhappily, the dust has escaped and the nominated undertaker continues to work, the market is closed; in those circumstances can you see any sensible reason why the nominated undertaker should continue to work?

*(Dr Ireland)* I would have to understand why the market was being closed.

3987. **Mr Dingemans:** Thank you very much.

3988. **Sir Peter Soulsby:** Mr Elvin?

---

*Re-examined by Mr Elvin*

3989. **Mr Elvin:** Can I understand this, Dr Ireland, if a trigger level is exceeded, does it follow that the dust deposition that has been recorded comes from the construction works?

*(Dr Ireland)* No, that is right; it could be from a variety of different sources.

3990. And from what you know of the area of Smithfield, are there other activities in the area which could generate dust?

*(Dr Ireland)* Clearly.

3991. I just wanted some idea as to whether it would be reasonable to have a trigger level that required work to cease, regardless of the cause of the dust deposition, without investigating it first?

*(Dr Ireland)* I think that would be completely unreasonable.

3992. Do you have a copy of the Buro Happold report, which is A46?

*(Dr Ireland)* I do.

3993. This was Mr Curson's report. I did not take this up with him because he did not seem to be raising it, but now it has been raised, could we go to page 16, please. Can we just zoom in on the first two paragraphs, please. We see the reference to the trigger level and you have explained to the Committee why you do not think that is appropriate. He then refers in the next paragraph to what should happen if it is exceeded. Does he suggest that activity at the construction site should cease?

*(Dr Ireland)* No, he does not.

3994. Do you have any comments on what he says about what one should do if the trigger levels are exceeded?

*(Dr Ireland)* I read this and it seemed to be a very reasonable and practical approach based on experience.

3995. **Mr Elvin:** Thank you very much. Sir, does the Committee have any questions of the witness?

---

**The Petition of Smithfield Market Tenants' Association**

---

3996. **Sir Peter Soulsby:** No.

*The witness withdrew*

3997. **Mr Elvin:** Sir, can I deal with a number of matters some of which Mr Dingemans has already touched upon in terms of additional assurances.

3998. **Sir Peter Soulsby:** I think that would be very helpful.

3999. **Mr Elvin:** Sir, can I ask you to pick up A43 which are the undertakings from the Promoter, or for it to go on the screen at least. We need to see number 5. This is not the precise form in which the assurance has been given. That was in a document delivered on 9 February, sir. Can I just confirm this. This relates to access to Buyers Walk and in respect of the assurance we gave in writing on 9 February can I just make it clear that our assurance includes this: that the nominated undertaker will be required to maintain public access to the Buyers Walk entrance at the eastern end of the market in Lindsey Street. For the record, we are making that clear.

4000. Can I also deal with the structural impacts issue. This is paragraph 22 of A43. Again, this is not verbatim of the wording that has been used in the Department's letter but this is about consultation, and can I make it clear that the Promoter is prepared to offer an assurance to consult the SMTA on proposals for any strengthening works to be undertaken in the east basement including the relevant method statements. It is the method statements upon which clarification was sought. We will extend the assurance to include that as well. I also said to Mr Dingemans that I would publicly state the position with regard to the crossover. As you will be aware, the crossover was an issue which the City of London has put to one side while these issues were looked at and an additional provision is promoted. Sir, the position is that it is highly likely that the crossover will not be an issue. I suggest with the Association, as with others who have raised this issue, that that matter simply be put into abeyance until that matter is dealt with rather than troubling the Committee with it now.

4001. There are also two matters that I need to clarify. Can I clarify the position on the 50 per cent of the basement car park issue. Our undertaking is to retain 50 per cent of the space in the basement car park. Until we agree the total number of spaces with the Association it is not possible to agree the precise number of spaces that will be retained. I hope I can give you figures as to whether there is capacity or there is a small loss. You have some idea of the range already, but I hope to give you the accurate figures if they can be agreed.

4002. Secondly, Mr Berryman said he thought we had given an undertaking to keep the market open. Sir, can I correct that. That was not quite the

situation. The situation is that we have said to the City, and we will incorporate within the heritage deed giving approval for work under the heritage deed, the City will be able to take into account the impact on the operation of the market. In other words, the City can refuse to approve work if it is likely to lead to the closure of the market and is not going to be restricted simply to heritage-based considerations such as the listing of the building and such other matters but the closure of the market will also be a material consideration but they must consider all relevant matters including the effect on Crossrail. So the City will be in the position of the independent adjudicator. It will weigh the heritage issues and it will weigh the market issues, but it will also weigh the countervailing issues and reach a decision, as it must do in the public interest. So, sir, that is the position on that and I hope that has clarified the position.

4003. Sir, you mentioned half an hour ago before I called Dr Ireland my closing submissions. Might I ask you to stand over the closing until first thing tomorrow morning because Mr Dingemans has raised a number of legal submissions on compensation and human rights which I would like to think about overnight and respond to you crisply tomorrow morning hopefully, if it would help, by a short note.

4004. **Sir Peter Soulsby:** I would certainly be minded to accede to that request. It seems an eminently sensible one. I was aware that we have gone into considerable detail on other issues Mr Dingemans has raised. Of course that very big issue has not yet been adequately explored. Perhaps the suggestion you make will enable us to do that properly. I think we would expect an oral statement tomorrow morning on that. I see nods from my colleagues on that, which is not to say something in writing might not also be very helpful.

4005. **Mr Elvin:** What I will do is make the statement orally but have a written version of it, if that would help the Committee and the Committee Clerk. I also, like Mr Dingemans, will promise not to get too involved in issues. I think there is a limit to which we can try your patience on detailed legal matters, particularly in an area such as compensation but I will do my best to emulate Mr Dingemans' account of it this morning.

4006. **Sir Peter Soulsby:** Thank you very much indeed, which leaves us where now? Is there absolutely nothing more for this afternoon?

4007. **Mr Elvin:** You have heard all the evidence.

4008. **Mr Dingemans:** What I would like to do, if that is all right, is after my learned friend has made his submissions to the Committee respond in the normal form. Overnight I very much hope that the documents that I produced as A43, which was the undertakings which have been begun, we will tidy

---

The Petition of Smithfield Market Tenants' Association

---

up to incorporate what has been clarified today and also, I hope, produce a crisp list of the outstanding undertakings that divide my learned friend and me so that we can concentrate the detailed submissions which are not the legal ones on those remaining issues.

4009. **Mr Elvin:** I do not know whether again this is something that will assist the Committee. We had done our own version of the undertakings and what we have done is got a document which lists all the requirements that the Market Traders' Association have suggested they needed and we have put in where we have responded what we have given. Would it help the Committee to have a copy of that for the record if I refer to it in closing?

4010. **Sir Peter Soulsby:** I think that would be very helpful, if it is sufficiently up-to-date given what has been said today.

4011. **Mr Elvin:** It will be updated to take account of what I have said today. Could I also say—and I am not sure whether I should be apologetic about this or not given how efficiently the issues have been dealt with today—that it will mean that the business for the week concludes short tomorrow and, as I understand it, there is nothing else in the timetable.

4012. **Sir Peter Soulsby:** I think that is our anticipation, in which case it would be convenient now for the Committee to stand adjourned until 10 o'clock tomorrow morning.

---

---

## Wednesday 1 March 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Mr Philip Hollobone

Kelvin Hopkins  
Sir Peter Soulsby

---

*Ordered: that Counsel and Parties be called in.*

4013. **Chairman:** Today the Committee will continue hearing the petition of the Smithfield Market Tenants' Association. Mr Elvin, do you want to make a closing statement?

4014. **Mr Elvin:** Thank you, good morning. I have a number of documents, all of which I sent to the Committee Clerk overnight. Firstly there are two documents which I promised yesterday. One is a collation of the requests by the Market Tenants' Association for various undertakings and our responses to them, which we have collated and indeed, subject to one amendment I need to make, it represents an agreed position as to where we are. It sets out, therefore, all the assurances and undertakings that have been offered to the Petitioner. It will be P50.

4015. **Chairman:** Yes.

4016. **Mr Elvin:** Can I make one amendment because it has been made clear that the City has not yet had a meeting with our representatives? On the final page, page 11, the very final paragraph, the question about taking account of the impact of the works on the operation of the market, the last sentence, which says, "This assurance is also given", I am told that in fact it is still yet to be agreed with the City. This assurance is proposed to be given to the City but it is subject to detailed drafting. Can I make it clear, so that the market traders are absolutely sure about the position, that it is the intention of the Promoter that the impact of the works on the businesses of the market traders is intended to be taken into account as a consideration when approvals for details are considered by the City? So there may be some tinkering with the wording but let there be no doubt that it is our intention that the impact on the businesses of the market traders should be taken into account.

4017. **Chairman:** You will notify us of that agreement?

4018. **Mr Elvin:** We will notify you of the revised format. So that the Market Tenants' Association are not in any doubt that that is what is intended I have now said it so that they can be sure of that.

4019. The second document, which will be P51, is the request for information yesterday on the quantity of loading bays lost. It has effectively been done by measurement and I hope the note is explanatory; it is based on the average width of the parking bays

and the length that would be required, including the area for loading. We have looked at both types of loading bay, the echelons, which are at an angle to the market, and those that are parallel to the pavement and to the road, and you will see that 12.5 per cent of the echelons would be lost during construction if they were all taken out, and 7.5 per cent of the parallel. It is just under ten per cent in total—it is 19 out of 189. But that of course is subject to our undertaking to use reasonable endeavours to keep loading bays there during construction works, which was explained to the Committee by Mr Berryman yesterday. We cannot guarantee, but that is our objective, because there is a degree of uncertainty over the precise nature of what is underneath the pavement and other matters.

4020. **Mr Binley:** Thank you, Mr Chairman. I am happy with this. I just wanted to have my own mind set at ease that when you made the initial statement, that you would do everything to take the loss of business into account, that that was in relation to the question I raised about Lindsey Street and parking in that area yesterday. I am grateful.

4021. **Mr Elvin:** We have put it in wide terms, "impact on their business", that is impact from the works.

4022. **Mr Binley:** I am happy with that, thank you.

4023. **Mr Elvin:** Sir, that concludes those additional documents. Finally, I have some closing submissions which I have put in writing, with the agreement of the Committee yesterday, and I am going to read them out, of course. The most detailed bit I am afraid is the legal bit on compensation issues, which is responding to what Mr Dingemans said yesterday. I will try and take it as lightly as possible but I thought it would be helpful to the Committee to at least have it in writing because the point may come up again at some later stage. Sir, I imagine that this is P52.<sup>1</sup>

4024. Sir, in the light of the representations and assurances given, summarised in P50, which you have just had, there now is little between the Promoter and the Petitioner on this issue. There are six main headings of areas of difference. Firstly, a request for direct contracts between the nominated

---

<sup>1</sup> Crossrail Ref: P52, Petition by Smithfield Market Traders' Association, Promoter's Submissions (LONDLB-28004-110 to 115).

---

**The Petition of Smithfield Market Tenants' Association**

---

undertaker and the market traders. Secondly, trigger levels applicable to dust monitoring; thirdly, the stopping up of Lindsey Street; fourth, the loss of loading bays; fifth, the loss of car parking; and sixth, compensation issues. On direct contracts, which turns on the enforcement of environmental minimum requirements and the like, as Mr Anderson explained the model that we have used here is one which has been used successfully for projects such as CTRL and the Construction Code, for example, that was developed at JLE. Mr Anderson explained in his evidence how controls would work in practice and there is no reason, we say, to assume that they will not also work here to protect the market traders.

4025. The Secretary of State has undertaken to require the nominated undertaker to comply with the environmental minimum requirements and to take such steps as are reasonable to secure compliance.

4026. To offer contracts to 36 market traders—because the Association is an unincorporated association and we cannot contract directly with it, with the possibilities of many differences of view—offers scope for considerable confusion and disagreement. Indeed, the SMTA seeks something which is not available to others and which, if it was available, would offer even greater prospects of bogging down works as the nominated undertaker was faced with differing demands from many contracting parties. You can imagine the sort of chaos that might result.

4027. Whilst the Promoter does not offer a general assurance to keep the market open—and this comes to the point I made earlier in respect of the assurance that is being negotiated with the City of London—the series of assurances and controls are more than sufficient to protect the traders, including the new inclusion of impact on the business of the market as a consideration in giving approvals under the draft Heritage Deed.

4028. While there may be no essential difficulty in restricting working hours to avoid the trading hours of the market, as Mr Berryman explained yesterday this is a matter to be dealt with under the provisions of the Construction Code.

4029. Dealing shortly with dust and trigger levels, Mr Curson for the SMTA accepts in general the appropriateness of what the Promoter has offered, including Tier 3 mitigation, which is the most rigorous form of mitigation available, and consultation regarding a dust management plan. The additional requirement for the City of London's approval (as planning authority) of dust suppression measures in paragraph 7 of Schedule 7 to the Bill provides an independent determination of the issues required to be made, of course, in the public interest.

4030. The only remaining and very narrow concern was the reference to use of background dust levels in the letter of 27 February, which is summarised in P50.

4031. Dr Ireland for the Promoter explained why it was necessary to consider the background monitoring since dust at the relevant levels may be caused for reasons other than the construction works.

4032. Trigger levels ought to be fixed having regard to local circumstances, and it would be unreasonable for a trigger to automatically lead to cessation of work since the trigger might arise from a number of causes, not necessarily the works nor ones which even required cessation. A staged approach, we suggest, is needed and indeed Mr Curson's own evidence in A46 sets out such a staged approach. He suggested a number of possible actions and Dr Ireland thought them appropriate. They did not include automatic cessation of works.

4033. The production of the dust plan and the need to obtain the City's approval for dust suppression measures provides an ample basis for considering local dust conditions, setting levels and designing protocols for the actions which should be taken when those levels are exceeded. Mr Curson appeared to accept that it was sensible to deal with those matters when designing the Tier 3 mitigation, which is specific for this site, specific for the market.

4034. On the stopping up of Lindsey Street Mr Lawrence, one of the market traders, and indeed the Chairman of the Association, explained that the key issue for the traders was to maintain access around the market at all times. This has been made the subject of an assurance, even for the largest 44 tonne trucks.

4035. Stopping up allows the works to be carried out since otherwise the road remains public highway and any obstruction or destruction of it would be an offence. While access can be maintained for the market the precise location of the road will be moved as the works progress. Mr Farthing's diagrams and indeed his computer animations yesterday showed that the road would have to move in the available space depending on the phase of the works. If the road were not stopped up this would simply be unlawful.

4036. So we simply say that the Bill does not need to be amended and the assurance provides what the traders require.

4037. Turning to the loading bay issue, it is common ground that some loading bays in Lindsey Street should be retained if at all possible, and an undertaking to use reasonable endeavours has been given. However, for the reasons which Mr Berryman gave to the Committee yesterday, at this stage there is no certainty in the precise design of the works: for example, Lindsey Street is not a ground level

---

**The Petition of Smithfield Market Tenants' Association**

---

highway but is an artificial structure over 19<sup>th</sup> century vaults, whose precise structure and condition is not clear at the moment.

4038. Bays would only be lost in Lindsey Street and only for a period of time, not permanently as in West Poultry Avenue, which you will recall was a problem which arose as a result of new EC loading regulations. If there were none provided for a time in Lindsey Street there would be a reduction of about 12.5 per cent of the echelon bays and 7.5 per cent of the parallel bays—as I said earlier, 19 in total out of 189. However, I would just draw the Committee's attention to these factors. None of the six hermetically sealed unloading docks on the north and south sides of the market would be affected. Mr Farthing considered there was scope to provide between five and ten additional bays elsewhere within the market area. Mr Farthing also agreed that the use of management of the spaces could increase practical capacity. And the Promoter in any event proposes to use reasonable endeavours to keep six bays on Lindsey Street during construction. So if one takes account of those various factors the notional loss of 19 bays during construction, we say, should not be a significant problem.

4039. Car parking spaces. The Promoter will not affect the use of the Western car park and will still permit use of the ramp. As Mr Farthing's evidence showed, the car park as surveyed at most reached 48 per cent capacity.

4040. The loss of spaces, we say, is not of concern since on our revised figure of 290 remaining there is sufficient capacity. But even on Mr Farthing's figures at most 29 cars would be displaced. Twelve per cent of those using the car park are not associated with the market and management of the car park could ensure that priority was given to those requiring access to the market. And since 12 per cent comes to 33 cars out of that maximum surveyed in the car park it is quite clear that there is more than ample capacity for those people using the car park who need to use the car park for direct access to the market. In any event, point four: ample spaces exist in nearby car parks, and the Committee has seen the plans of where they are.

4041. That is the meat of the practical issues. There is then the question of compensation, which the trade has raised. The National Compensation Code applies generally throughout England and Wales, and a similar Code applies in Scotland. The phrase is simply a useful shorthand for the body of legislation and legal authority which applies to compensation when land is compulsorily purchased, and it is explained at greater length in IP C2.

4042. The Secretary of State's policy on compensation is simply that as a matter of fairness the National Code should apply equally to the Crossrail project as it does to infrastructure and other schemes throughout the country. As C2 explains in paragraphs 1.4 to 1.5—I am not going to

read it all out but just to draw your attention to the fact—what the Bill does is to apply the mechanics of the Compensation Code to this scheme. The government is satisfied that in general the Compensation Code is appropriate for application. The purpose is to provide a uniform code and it is not considered appropriate to depart from what is a fair and uniform code throughout the country and for this specific project.

4043. Here the SMTA claims special treatment over and above all others subject to public work schemes, namely that they should be able to make compensation claims where no one else can; where, in other words, business losses occur where their land is not taken and where there is no lack of care taken in carrying out the project.

4044. The Promoter submits that the proper approach to dealing with the issues at Smithfield is on the basis adopted, in other words to provide proper protections against harm via, for example, the Construction Code, the Tier 3 mitigation measures and the many assurances and undertakings which have been offered and which, to a considerable extent, have met SMTA's concerns.

4045. In any event, compensation exists for SMTA as it does for everybody else, either under the Compulsory Purchase Act or at common law. I make the following brief points. The Code and the common law both require undertakers to take reasonable care in carrying out works, whether it is under the Act or the common law duty not to cause a nuisance. And although claims under Section 10 are for loss in the value of the land, as Mr Dingemans pointed out yesterday, this does not mean that there is no compensation which reflects business difficulties as the result of temporary works. He drew your attention to Lord Hoffman in *Wildtree Hotels*. That was precisely the issue in *Wildtree Hotels*: can temporary works causing harm—to a hotel in that case—be compensated? Answer, yes. In that case I think it was obstruction of their access. Compensation for temporary works, such as construction works, is included since they may affect rental value: for example, if the premises are rendered partly or indeed wholly unusable during the period of works. Although a direct claim for loss of profits cannot be made in the sense that you cannot simply put in an application for loss of profits, loss in value of the premises can take into account the fact that they are less suitable or convenient for the business which would otherwise be carried out there. Again, that was specifically an issue which Lord Hoffman addressed in *Wildtree*. Loss of profitability, therefore, may affect value, and not simply capital value, and this can be the subject of compensation. So I depart from what Mr Dingemans told you yesterday and say that in fact the Compensation Code is more generous than he has assumed is the case.

---

The Petition of Smithfield Market Tenants' Association

---

4046. When considering the claims for special treatment by the market traders it is important to recognise that neither the Code nor the law provide an indemnity for all losses suffered as a result of works. The law simply does not require a private or public contractor carrying out works with all reasonable care to underwrite losses suffered by neighbouring owners or occupiers—there must be a degree of “give and take” in modern society. It is the policy of the law to draw a balance between the legitimate interests of those affected by works and in not placing an unreasonable burden on the development of the land and on the national economy.

4047. That principle of give and take in fact was encapsulated in a relatively old case, *Andreae v. Selfridge*—it is old to those of us who have to spend time reading these dusty volumes—in 1938, but the important point is that it was applied by Lord Hoffman in *Wildtree Hotels* only a few years ago, so it is an up to date principle. You will see there that what the Master of the Rolls said: “When one is dealing with temporary operations, such as demolition and re-building, everyone has to put up with a certain amount of discomfort, because operations of that kind cannot be carried on at all without a certain amount of noise and a certain amount of dust. Therefore, the rule with regard to interference must be read subject to this qualification,” and he goes on to say, “In respect of operations of this character, such as demolition and building, if they are reasonably carried on and all proper and reasonable steps are taken to ensure that no undue inconvenience is caused to the neighbours, whether from noise, dust or other reasons, the neighbours must put up with it.”

4048. I turn briefly to the Human Rights dimension. It adds little, if anything. I may say that I cursed Mr Dingemans last night because the recent case he referred to is only reported in French, so I had a pleasant evening! However, I did manage with the aid of an Internet translator to get to the bottom of it. I will come to that last. Firstly, Strasbourg requires that there is a “fair balance” to be struck between the public interest and private individuals, giving a wide discretion to public authorities in striking that balance. This is exactly what the give and take principle does in the common law, as I have already explained. The present case involves no compulsory purchase or expropriation of land owned by the market or traders. The Court of Appeal recently examined the Strasbourg cases in a case called *Trailer & Marina v Secretary of State for the Environment* last year and, having considered whether compensation is required, Lord Justice Neuberger concluded that compensation was not required except where land was taken. I have set out the passage in the judgment at paragraphs 57 to 58. Cases such as *Dennis v. Ministry of Defence* do not assist you since they involve extreme facts—and I use the word “extreme” taken from the judgment—very different from the circumstances of Crossrail. The *Dennis* case involved the considerable noise

from Harrier jets from RAF Wittering, which impacted on a nearby country house in circumstances which Mr Justice Buckley described as “extreme noise”. You will see the sort of facts he was dealing with—and I have cited from paragraph 40 of his judgment where he said: “To fly the Harriers in such places or in such a manner that they exhibit their maximum and ‘fearsome’ noise very close to or even over a neighbour’s house and when that may occur many times throughout a flying day and into the evening, in my view manifestly amounts to a nuisance unless otherwise justified.” An extreme set of facts. There is no comparison with Crossrail where works are being proposed within many controls via the Bill provisions, the EMrs, undertakings and assurances.

4049. Finally, my favourite judgment from last night! The recent decision of the European Court of Human Rights in *Athanasiou*, decided only on 9 February, is currently only reported in French. So far as can be ascertained at short notice—and I thought about providing it to the Committee, but I thought probably you had better things to do!—and as far as I could tell with an evening’s perusal, it is also very different from the circumstances here. It was the case of permanent blight caused to a number of properties situated very close to a new railway. Some of them were less than five metres away from it, some of them were under the bridge and some of them had the railway line passing above the ground level of the buildings that had been created, and they were trains which were intended to pass at high speed with a degree of regularity, which the court repeated. Circumstances there of that sort of blighting from the operation of public works would be covered here in any event by the Land Compensation Act 1973, and the details of those compensation provisions are provided in footnote 5 and are set out in paragraph 3.3 of IP C2. So it is a set of facts which we compensate for in any event in this country. So, again, it is a set of facts which do not help the Committee, in my submission.

4050. So, pulling the matters together, the Promoter suggests, therefore, that there is no good basis for the market traders claiming that they should be treated as a special case, that they should be treated differently, indeed far more favourably than the vast majority of homes, businesses, schools, hospitals and the like which have to accept the give and take principle both in the Code provided by parliament and in the common law.

4051. SMTA can have no legitimate basis for complaining since they are being treated equally under the law, especially when the sensitivity of their position is dealt with by a significant body of controls through the Bill, the EMrs and by many specific assurances and undertakings. Thank you, sir.

---

 The Petition of Smithfield Market Tenants' Association
 

---

4052. **Chairman:** Mr Dingemans.

4053. **Mr Dingemans:** Can I deal first of all with the outstanding technical issues, if I can call them that, by reference to the outstanding undertakings from the Promoter's document, which I handed up this morning? It is a two-page document that will help focus submissions in that respect, and it is now on the screen. May I set on record that we are very grateful to the Promoter for all the undertakings that have been provided, and these now, as it were, are some issues that remain dividing us? As you know from the submissions yesterday, we are critically concerned to ensure that these undertakings are effective, in circumstances where building works will go wrong, to ensure that are not just left with words that were well meant at the moment that they were given, promises that were intended to be kept, but circumstances have led to them being breached.

4054. Can I first of all go through the small parts? One: the agreement to remove the power to stop up Lindsey Street in its entirety. My learned friend has offered the undertaking to keep Lindsey Street open, and with 44 tonne lorries. The only question now is whether or not the power should be amended to keep within relevant limits, which will shift of course the power to stop up Lindsey Street. We do respectfully submit that it is fairer for all concerned to know exactly what is being stopped, how and when. Secondly, the undertaking on working hours. What my learned friend says is that you can rely on the Control of Pollution Act and there will be consultation. We respectfully submit that the evidence proves to the Committee that you simply cannot have construction works going on at the same time as the market—no one has sensibly argued against the proposition. If that is right what is wrong with Parliament, which is the body to decide these matters, imposing that solution on the local authorities, rather than leaving the possibilities of other individuals influencing a decision which will simply lead to chaos on the ground? If Smithfield is to remain open and these works are to take place they cannot be carried out at the same time; that was the effect of all the un-contradicted evidence that you heard. So we do respectfully press for undertaking 2.

4055. Undertaking 3 is the minimum of seven loading bays. We demonstrated by expert evidence how this can be done. Mr Berryman said, "There may be difficulties." We do respectfully submit that if the Committee requires this as an undertaking then the net effect of it is this: it becomes a construction parameter, a bit like having the hoarding closer into the building site, and that ensures that rather than just reasonable endeavours the seven loading bays are met. My learned friend has shown you in P51 this morning the overall effect of percentages but, as was demonstrated I think yesterday by reference to the map when dealing with the points made by Mr Hopkins and Mr Binley, the eastern end of the market is where some of the traders are. I am representing all the traders at the

market, if I were only representing a person at the eastern end it would really be of no interest that there were other spaces around. That is really the critical point that we do respectfully press on the Committee today.

4056. Finally, undertaking 4 we have now modified, and I hope to reflect the points that my learned friend was making, which is that they use reasonable endeavours to provide substitute loading bays and consultation with the Corporation and Smithfield, and we respectfully submit that there can be no sensible objection to that, that that is effectively what they are trying to do; but it gives a proper structure for it.

4057. Market operation, the parking. If you have reference to the document that my learned friend has already handed up it is at number 11, the undertaking that he has offered, and the only difference between us is effectively 50 per cent of the 580 spaces, and that is a short point which I leave without further submissions.

4058. Air quality and environmental measures, we have removed the provision to stop works in the event of excess and we simply continue to ask that which was pressed by Mr Curson, namely that he be involved in the agreement of trigger levels, and if there is any unreasonable behaviour on his part then of course it can be determined by independent arbitration. As you know, dust is inconsistent with the continued safe operation of the market, not only for the market traders but also for those consuming the market produce.

4059. Can I then go to number 7 and ask you to take up my learned friend's document, which I think is number P50? Number 7 is an undertaking that the market can be safely occupied and operated during the course of the construction works. That appears to be everyone's intention and indeed what all these undertakings give. If you look at P50 at page 11, the bit that my learned friend clarified this morning, what my learned friend says is that there will be a Heritage Deed, and that the Corporation of London, who as you know support the Smithfield position in this respect, will be able to take into account the impact of the works on the operation of the market, or the businesses of the traders. We respectfully submit that that is not enough because taking into account the impact of the works on the business of the traders does not mean that if you cannot safely occupy the building you will have to redesign a different way of doing it. What we respectfully request the Committee to do is to ensure that which the Promoters have said is their intention throughout, namely to ensure the continued existence of Smithfield. Without that unequivocal undertaking that in fact, as you know from the evidence yesterday, it was thought on behalf of the Promoter had been given—in fact that is simply not right, it was an innocent error by the witness—it is always going to be open to the nominated undertaker to say, "I am sorry, it is too expensive to

---

 The Petition of Smithfield Market Tenants' Association
 

---

keep the market going, et cetera, and although the City can take that into account we simply cannot safely guarantee you the continued safe operation of that.” With this undertaking the continued existence of Smithfield is assured, and we respectfully submit that that is what the Committee should be guaranteeing for the market traders. That is really, together with Lindsey Street, one of the principle reasons for our appearance before the Committee, and that is an undertaking from the Promoter that the market can be safely occupied and operated during the course of the construction works. If that is really what they are intending to achieve why can they not promise that to us?

4060. That brings me back to the discussions of law—and I know that although lawyers get very interested by these things sensible people do not. Can I deal, I hope fairly and accurately, with the points that my learned friend has made? My learned friend says that we are in Section 10 of the Compulsory Purchase Act 1965—that is common ground. He says we can get compensation for loss of profits by reference to the loss of value of land. As we demonstrated in the evidence, the leases held by the market traders are effectively very small value leases. You have seen their ten-year leases, you have seen the values—that is all in the evidence—and the scheduled works 2008 starting in the Smithfield area is about two years before the expiry of the lease. What that means is that we do not even come within the qualifying schedule for entering into a settlement deed. Our property interests are so limited, albeit protected by the 1954 Act, that the value of the land we hold is almost worthless. Of course, what my learned friend cannot deal with was the example I gave you yesterday: the dust suppression measures do not work, dust gets into the market, the meat is contaminated and condemned, who is going to pay for that? Answer: not the nominated undertaker under the Compulsory Purchase Act 1956 because that does not relate to the value of land. What does that mean? Off to the common law action in nuisance. What does that mean? What I submitted yesterday and what in my submission is plainly the case, that the only people who will benefit from that are lawyers, and in my submission it is not the function of Parliament to enrich lawyers any more than they are already.

4061. That brings me to the Human Rights Act point. All I cited yesterday was *S v. France* and *Dennis* for the proposition that a fair balance needs to be struck between the interests of the Promoter and the public protected by them, and the interests of the market traders. But the striking of the fair balance is not something that is for the courts to do; the courts do it by default. But this is what was said in *Trailer* and a paragraph cited with approval by the Court of Appeal: “Courts should have in mind that theirs is a reviewing role. Parliament is charged with the primary responsibility for deciding whether the means chosen to deal with a social problem are both necessary and appropriate. Assessment of the advantages and disadvantages of the various

legislative alternatives is primarily a matter for Parliament,” which is why we are here asking you to take into account. We respectfully say that we have identified all the problems the market traders have under the Acts which generally will work well. We have very minimal land rights; we are not in a position where any of our land is being taken, so we are not protected in that situation. We have works going on below us and we have works going on beside us. We have a whole series of undertakings that have been offered for our specific protection which, when they do not work, will be worthless in the sense that we will not be able to get money for any breach of them. We might have uncertain remedies of approaching the Secretary of State for enforcement, Judicial Reviews, claims for damages in nuisance to try and show the breach of the common law duties. We do respectfully ask the Committee to bear all that in mind and to consider seriously the three proposals we have made. The first is, as you know, that these undertakings are offered and exchanged with the market traders and, as you know, there are 36 of them. The alternative is to ensure that the Promoter offers an undertaking that these undertakings can be enforced by those market traders under the Contracts (Third Party Rights) Act. That was the whole point of the Law Commission Bill; it was very unfair to have contractual provisions for the benefit of one party who is not the party who can enforce it. All we are trying to do is meet an anomaly which has already been recognised publicly by the Law Commission and by Parliament in 1999 in the Contracts Act. The third possibility, which we press for independently, is the limited compensation provision. My learned friend says the Railway Clauses Act is applied by the National Compensation Code. Of course that is right, but the effect of the clause, we have suggested, is to give us a right to claim under it. Under the existing law, under those provisions we do not have that right because there is no taking.

4062. So those are the respectful points we continue to urge on behalf of the Association. That said may I, as I think I have already indicated, thank the Promoter for all the undertakings which have been offered and which are recorded in P50.

4063. That leaves me with one final point, which I have discussed very briefly with your clerk. I am afraid it is another nightmare area, which is the question in relation to costs. There are at the moment real issues and interesting comments about whether or not a Committee such as this even has power to order costs, and just for your learned clerk’s note Erskine May deals with it at paragraph 533, page 1061, and I know that those provisions have been drawn to your attention. The matter is also helpfully summarised in the explanatory notes to the Parliamentary Costs Bill. If you do have the power then we do ask that you do take into account and consider whether it would be appropriate to order any sum, or even a proportion of the sum to take into account the fact that we have come here and we have obtained undertakings. Although, as

---

**The Petition of Smithfield Market Tenants' Association**

---

was made plain in the evidence, financial resources amongst market traders vary and the turnover can be significant, not all of them are in the situation that they are able to afford that easily. Those are our submissions.

4064. **Chairman:** Thank you. Can I just say that we do not know whether or not under the Hybrid Bill terms that it actually applies? We will check on this and we will get back to you, either in our response on the report—indeed, as well as that we will write to you to let our judgment on that. But we have to check.

4065. **Mr Dingemans:** I certainly understand that, sir. May I say that while my learned friend was reading French last night we were trying to find out what powers you do have, and I am afraid none of us were much better informed.

4066. **Chairman:** As I understand it in the Act it is only where the Committee may decide that you had been unnecessarily called in defending your Market Tenants' Association.

4067. **Mr Dingemans:** If, which is uncertain, the Parliamentary Costs Act 1865 applies to the Hybrid Bills then what I need to do is show two things. First of all, that there has been an alteration for the protection of the Petitioner, and we would submit we have shown that because of the undertakings. The other thing is that the Petitioners have been unreasonably or vexatiously subjected to expense. We do not promote the suggestion that there is any vexation here, but we do respectfully submit, taking into account all the matters, that we have had to engage our experts to review what has happened, and other ways to suggest Lindsey Street. Before we had even started there was not even an undertaking

to keep anything at Lindsey Street open. Of course that is not vexatious and of course it just reflects the very hard work that has been done by the Promoter, but we would respectfully submit that that is an unreasonable expense that the Petitioners had to bear. Those are our short submissions as to if there is power, on which, as I say, better minds will be working.

4068. **Chairman:** Mr Dingemans, without prejudice in any way I do not think any Member here is unsympathetic, but we do not know whether it applies or whether we have the powers. But we will get back to you.

4069. **Mr Dingemans:** Thank you very much.

4070. **Mr Elvin:** Sir, might I just say something about that? I think this is probably one of those issues that we will address you on comprehensively at the end of the Committee hearings in our final closing, but we have our doubts that this applies to the Hybrid Bill procedures. In any event, alteration in the Parliamentary Costs Act, our view, for what it is worth at this stage—and I am doing it on the hoof—is that that means an alteration in the Bill, not simply the giving of an undertaking. So if the Committee were satisfied that no amendments needed to be made to the Bill then of course the jurisdiction would not be invoked in any event. Sir, I think the best thing to do, rather than my address it on the hoof, is to deal with it, if that is convenient to the Committee, when we finally close at the end of the hearings. If you would like me to deal with it earlier of course I will do so.

4071. **Chairman:** I think that is very helpful. Thank you very much. That concludes today's hearing and we will next come together on 8 March at 10 a.m.

---

Thursday 9 March 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Mrs Siân C James

Mrs Linda Riordan  
Sir Peter Soulsby

---

Ordered: that Counsel and Parties be called in.

The Petition of Springdene Ltd.

The Petitioner appeared in person.

Bircham Dyson Bell appeared as Agent.

4072. **Chairman:** Good morning. Today we will continue the Petitions with Springdene Ltd, the Stafford Partnership and Mercury Theatres Ltd and Legal & General Investment Management Ltd. May I first of all call on Mr Goodman to make the case for Springdene Ltd. Mr Goodman, before we start, Ms Lieven wants to raise an issue.

4073. **Ms Lieven:** Sir, only that if it helps the Committee, I was proposing to make a very short two minute opening statement to explain where the property was to orientate the Committee.

4074. **Chairman:** Okay.

4075. **Ms Lieven:** Sir, Springdene has a lease on the ground floor and the basement of number 40-42 Charterhouse Street. If I can put up our exhibits which are P54, number two, which is a photograph of the Springdene property. The Committee may remember hearing Islington's Petition a few weeks ago concerning property number 38 Fox and Knot Street, the one on the apex, which was described as the flat iron building, which is being pointed to now. Springdene's property is the one next door that is being pointed to now.<sup>1</sup> Just so the Committee knows, so far as number 38 is concerned, Islington is returning next week on Tuesday, and the Promoter has been working very hard with Islington to come up with a solution to the problem at number 38 but it is important that the Committee understand that that solution will not involve saving the Springdene property, number 40-42, so, on any provision which is proposed next week, number 40-42 will continue to be scheduled for demolition. The Committee will remember the emergency axis shaft comes right up in to the middle of number 40-42. So far as Mr Goodman's Petition is concerned, my understanding is that Mr Goodman will present to you an alternative solution for the emergency shaft which involves coming up in to Charterhouse Square, and, if I can just show the Committee a further photograph in this bundle 06, I do this because when we went on the site visit the Committee was not taken around Charterhouse Square. It is a listed square with a number of listed

buildings, a grade two and a grade one listed building, I will show the Committee in a second. Mr Goodman's proposal is that the emergency shaft comes up roughly at the location of the silver car there.<sup>2</sup> What I intend to do, Sir, is, after you have heard the evidence of Mr Goodman, to call Mr Berryman to explain both the problems with that location, both in terms of what goes on underground, but also in environmental terms. I may also call Mr Smith to deal with any compensation concerns that Mr Goodman puts to the Committee but to some degree that will depend on what Mr Goodman says. I hope that is enough at this stage to explain that the factual position of Mr Goodman, and I will leave it there to hear what he says.

4076. **Chairman:** Mr Goodman, do you want to make your case?

4077. **Mr Goodman:** Yes, I do. Can I make one point on that, the question of number 38 Charterhouse Street—

4078. **Chairman:** Mr Goodman, before you proceed, I know this is very worrying for you because you are not used to this, but, can I say, you can take your time and it will be easier as it goes on.

4079. **Mr Goodman:** It is a question on the opening address where it is now news to me that number 38 is possibly not going to be demolished. In the Promoters' response to us, we said that they should not take down buildings within the conservation area unless it is absolutely necessary and they included 38 and 40-42, so, it is news to me that they are still discussing number 38. Some of the things I will say here is that we are against knocking down two buildings for fire escape stairs.

4080. **Chairman:** Can I say, do not worry about what you have to say, we now have the knowledge, Ms Lieven, about the position but when this is raised later on, if you want to cross-examine any witness that may be called, you may do that. Mr Goodman?

---

<sup>1</sup> Crossrail Ref: P54, Photograph of 38-42 Charterhouse Street (ISLNLB-22504-002).

<sup>2</sup> Crossrail Ref: P54, Photograph of 'Western Arm' of Charterhouse Square (ISLNLB-22504-006).

---

**The Petition of Springdene Ltd.**

---

4081. **Mr Goodman:** Thank you. I appear as a Director of Springdene Ltd, and I am accompanied by a professional adviser, Mr James Winbourne, here a chartered surveyor who will give objective oral evidence as may be required and whose written advice to us, that is to Springdene Ltd, is attached to these notes. I have, Chairman, supplied 15 copies of these notes with the attachments already to Mr David Walker this morning. The Committee should also note that although I am a corporate member of the Institution of Civil Engineers, I am not appearing in an engineering capacity as I have not been practising as a professional civil engineer for over 30 years, I am a touch rusty on that.

4082. By way of background to the business that we are in, we formed the company in 1997 to find suitable premises in this general area from which we could trade as a drinks and food operation. The ground floor and basement of 40-42 Charterhouse Street were identified as suitable premises as they had conditional planning permission for a change of use from shop and storage to A3, which was the ability to be able to serve food and drink. They were well located in the Smithfield area where the outlet might be amongst the first to offer this type of service. In addition, the premises were located opposite one of the Crossrail stations, so we were told, that if the project ever went ahead, that would further enhance our location. The premises, however, were dilapidated and could not obtain the A3 usage until substantial refurbishment was carried out including the renewal of all services, the installation of heating and ventilation in the basement, the tanking of the walls in the basement to prevent ingress of water, and, of course, the change to the interior layout to provide for its new usage as a drinks and food operation.

4083. All necessary searches were carried out by our solicitors with particular reference to any effect that the Crossrail project might have on the premises. Apart from local authority notification that the space beneath the building was reserved and safeguarded for any tunnelling works that Crossrail might need to do, they were no other obstacles or reservations which could endanger our business in the future. Accordingly, a business lease was entered in to on 19 January 1998 for a term of 25 years such that it will expire on 18 January 2023. The company's substantial refurbishment works were then set in motion and a sum of over £250,000 was spent to replace all the services, install ventilation, put tanking works in the basement and to refurbish the two floors such that the drinks and food operation could be offered on both floors. The bar opened in June 1998 under the name of Fluid to sell alcoholic drinks and oriental food and to provide live music on Thursdays, Fridays and Saturdays with a late licence on those days until 2am which has now been changed until 4am. In order to prevent the use of the name by others an application was also made to the trademarks registry at the Patent Office to trademark the name and this was subsequently granted on 29 March 1999 for a period initially of

ten years but renewal for further periods of ten years. Fluid has become well known and successful even after other competitive outlets opened in the general area and has continued this success through to the present time.

4084. Chairman, that is by way of background as opposed to finding premises which are already fitted out for A3 usage in which we would have to just paint and redecorate, we had to substantially transform the storage building which would not work in the basement, that was not allowed in to one where we could offer our service to both sides. A large sum of money was spent on that in that regard as opposed to moving into more or less suitable premises for A3 usage. The effect of the rate changes to the Crossrail project, it was not until we received a letter dated 18 February 2005 from Terraquest Solutions PLC that we were informed officially that the Crossrail project, far from only having the effects of tunnelling on the company's premises would now have a much more profound effect requiring the total demolition and the compulsory purchase of Lindsay House for the Bill. In effect, this would now bring about the destruction and the total extinguishment of our business.

4085. We have had no direct experience of such Bills in Parliament or of compulsory purchase orders but from information, from various chartered surveyors known to us previously, and our present advisers, we believe that the process could take at least three years before any real negotiations could begin. With this uncertain timing of the project and the uncertain timing of the compulsory purchase negotiations, the matter of further capital expenditure by our business that in the normal course we would need to make to keep the business fresh and ahead of the competition, will now be very difficult to address and we believe our business is now blighted, although it appears that we are outside the official blight notice limits, albeit just above. We were also led to believe that with the recent award of the Olympic Games to London it might take even longer as the games have a fixed deadline of 2012 whereas Crossrail, to the best of my knowledge, does not. Therefore, if there is any question of priorities, then in our view the games will always take precedence. Accordingly, we believed we had no option other than to petition Parliament against this measure which was submitted on 16 September 2005.

4086. We received the Promoter's response document to our Petition and we read carefully their responses and we comment as follows; we questioned in our Petition why the very late changes were necessary such as the whole of the island site comprising 38 Charterhouse Street and 40-42 Charterhouse Street building, both of which were not under any sort of threat prior to 2005 should now be targeted for demolition purely and simply to accommodate the relocation of escape stairs from the platforms below. We also pointed out that both of the buildings were within the Charterhouse conservation area and therefore given the general

---

**The Petition of Springdene Ltd.**

---

character and appearance of the area, demolition should only be carried out, in our view, where absolutely necessary. The Promoter's response was to state that although escape stairs are normally formed within the ticket hall infrastructure, they could not do so in this case if the ticket hall is off the line of the Crossrail platforms, and, hence, the island site comprising of 38 and 40-42 Charterhouse Street offered the closest feasible distance from the platform ends. Against this, we would now assert that this reasoning does not sufficiently address the overall policies that buildings of note, within the conservation area, should only be demolished as a last resort and we believe that not enough investigation has been carried out to avoid this outcome. Therefore, in the next part of this representation, we indicate one possible alternative site for the escape stairs in Charterhouse Square requiring no demolition whatsoever, of course, there may be others. Our view, therefore, is that not enough investigation has been carried out by the Promoter to avoid the demolition of two worthy buildings within the conservation area.

4087. We understand that concurrent objections have been made by our superior landlord, and local authority, the City of London. The effects of these changes on Springdene and our business and a sudden change in our security of tenure in 2005, has suddenly put a blight on our business because we have no idea how long we will have to wait before we can begin negotiations on compensation nor do we have any idea on how much, or more likely, how little this compensation will be. As before, we are advised that a blight purchase notice cannot lie.

4088. Our premises after some seven to eight years of operation are now in need of refurbishment, and we had already undertaken business planning to determine the extent and the cost of such a capital expenditure prior to the news of compulsory purchase threat. Our plans for refurbishment have now had to be halted for the time being. As indicated earlier in this presentation, the shareholders in Springdene have invested over £250,000 into the business and, although we have a successful business, we could have reasonably expected this business to continue throughout the remaining 17 years of our lease. Therefore, to invest further money into the business now, when we cannot be sure how long it will be until we are compensated or how much that compensation will be, is a very difficult decision for the board of Springdene to make. Clearly, some investment improvements will have to be made to avoid the business closing down.

4089. Therefore, we put a proposal to the Committee. Under the present proposal, Springdene cannot enjoy the benefits of its leasehold interest in 40-42 Charterhouse Street, which it reasonably could have expected over its remaining 17 years of this lease. In our view, there seems to be a very suitable alternative location for the escape stairs and that is within the vehicular and car park around Charterhouse Square. Now there was a slide that I

put up, that is it, you will see on the slide on the right-hand side the triangular building with brown opposite, opposite the ticket hall which is there and we have suggested in our line that the alternative location could be where it is shown in green.<sup>3</sup> This location for the escape stairs is, in effect, closer to the ticket hall than the present one and, as it involves simply the confiscation of a part of the Smithfield Market ringroad which, in any case, cannot at present exit on to the main road and a number of car parking spaces, we believe it is worthy of further investigation.

4090. I now call up the next slide which is photographs; I think you have seen these already. The top slide is taken from the main road outside, the extension of Charterhouse Street, and you will see the white van on the right-hand side.<sup>4</sup> There I have taken a photograph showing the little guard hut on the right and that white van. Now, we are not giving exact mention as to the location as to where it should be, but it seems to me reasonable common sense that if we were to simply erect escape stairs in that area, it would not have any significant detrimental effect on the square. After all, during working hours—this was taken on a Sunday morning—that space is full of cars and it is very difficult get a parking space in there. It would be, as it were, a canopy coming up from below with stairs where people could exit and exit straight onto the main road outside. Whilst this location is nearer to the ticket hall than the present one, we do understand that from the platform level below, which we see here on the right-hand side of the yellow area which is the platform end is the top part, you will see a dotted circle, that is the shaft going up into 40-42 Charterhouse Street.<sup>5</sup> It abuts number 38 Charterhouse Street which the Promoter did suggest might give engineering problems for subsequent underpinning and in his response to us he said, "In any case, we need further working area". That building is a flatiron building which they did say earlier was worthy of retention. It is very difficult to see our location on that, but you will see I have marked on "Extent Platform Length" or "Tunnel Through" from the end of the platform to that location in Charterhouse Street. The distance is roughly, there was a scale on the plan given to me, some 50 metres. We believe that with a little bit of effort and will we could have escape stairs located where we park cars during the week and we could retain two buildings, one of which is worthy of retention, so we said, and our building which does house our business which we take very much to heart as being valuable. As I have made clear, we are not practising engineers, but we do believe with an effort and will a solution to this problem could be found and given that the more suitable location, in our view, for the escape stairs at ground floor level, the

---

<sup>3</sup> Committee Ref: A48, Farringdon Station Street Level Plan (ISLNLB-22505-001).

<sup>4</sup> Committee Ref: A48, Petitioners photographs of alternative location (ISLNLB-22505-003).

<sup>5</sup> Committee Ref: A48, Diagram of alternative intervention site location (ISLNLB-22505-002).

---

**The Petition of Springdene Ltd.**

---

demolition of two buildings within the conservation area could be avoided. We are not equipped to carry out a detailed investigation or a resultant cost-benefit analysis of this proposal, but we are advised that Crossrail's engineers are expected to investigate and evaluate objectively all reasonable schemes and all partial mitigation proposals. Common sense to us suggests that one should try to avoid the environmental disturbance and heavy compensation that would be payable for demolishing two buildings within the Charterhouse conservation area, one of which the Promoters themselves suggest is worthy of saving. Furthermore, it would seem to us that there would be very little compensation for a portion of an employers' row and some carpark spaces, and this substitution and mitigation, if agreed, should be beneficial to the Promoter to those involved in the demolition of two buildings, to those in those buildings and to London generally. We anticipate that Crossrail may be reluctant to look at further re-design and in all my dealings with Crossrail, or in several dealings I have had with Crossrail, it was made fairly clear that they did not believe that there was any suitable alternative other than 40-42 Charterhouse Street. We anticipate they may be reluctant to look at further re-design and therefore we urge the Committee to accept our proposal for an entirely objective investigation to take place, both of our proposal and/or of any location that might just avoid the demolition of two buildings worthy of retention and remove a blight on our business and that of others within the two buildings. Therefore, we propose to the Committee that an investigation, either by Crossrail or, preferably, by an independent body be carried out to investigate the following: the design implications of relocating the escape stairs in Charterhouse Square or any other suitable location, such that the island site of both 38 and 40-42 Charterhouse Street is removed from total compulsory purchase and demolition under the Crossrail Bill; and, secondly, that if a stairs and passages can be relocated satisfactorily in a physical sense, as we believe, that a cost-benefit analysis and comparison for the proposed relocation should be undertaken.

4091. Chairman, I prepared this presentation, and up to yesterday it was still being revised. Late yesterday afternoon I received by email the attachments which have been circulated here. I know who it was from, but there was no wording, no text, nothing to indicate to us what they were or whether they would be presented today or anything. It was just a pure plank email with some attachments. When we looked at the attachments, we could see—I think, to our bit of joy at that stage that—yes, it could be relocated in Charterhouse Square, although there would be some extra tunneling needed to do so. Conveniently, they put the escape stairs right in the middle of that road opposite the RBS building entrance rather than to one side.

4092. **Mr Binley:** Forgive me, these are the attachments?

4093. **Mr Goodman:** Those are what I received late yesterday afternoon by email, with no notification of what the purpose of sending them to me was.

4094. **Mr Binley:** Thank you. I know now what we are talking about. My apologies.

4095. **Mr Goodman:** You will see the last two attachments, after the photograph of the building, which you see there, do show a tunnel possible from the end of platform through into Charterhouse Square. There a rather alarming S there; I am not sure exactly sure what that S is on the right-hand side of that picture. We could only deduce that from that that, yes, this was a doable proposal if accepted; where I have said to you on the top-right picture you will see the staircase coming out of the middle of the road, that does not make any sense to us.<sup>6</sup> We would move it down, so it came out on the main road. Now I understand these proposals will be referred to by Crossrail this morning, but I just want to make the point I have received them without any notification. It would have been courteous, polite and quite sensible to have said, "These are the attachments that will be presented at the hearing tomorrow". If I had not been in my office at that time, I probably would not have got them, so they would be fresh.

4096. In conclusion, I thank the hon Select Committee for its patience and for giving us the opportunity to present our considerable concerns at this relatively new Crossrail revision which affects us so drastically. Chairman, thank you.

4097. **Chairman:** Mr Goodman, do you want to call your witness?

4098. **Mr Binley:** Chairman, can I ask a couple of questions which appear to me to be relevant. I find it slightly disturbing that your paper, through no fault of your own, is based not on information that is up to date, quite frankly, because we have clearly had discussion about the building that you referred to, the older building at the apex of the group you are talking about. I wonder through you, Chairman, whether we can know why that information was not sent to you at the time it became known to this body, because it seems to me to be particularly relevant to the case you are making. It seems your case is slightly changed because that information was not sent to you, and I do not understand that. The second point I would like an explanation of at this stage is why these were sent to you not saying where they came from, because they are relevant too, it seems, to your case, and we need to know both answers to both of those questions before it seems sensible to proceed.

4099. **Chairman:** Mr Goodman, I just want to finish. I think it is true to say that you reflect on both of those questions?

---

<sup>6</sup> Crossrail Ref: P54, 3 plans: Farringdon station escape shaft (circular); Springdene proposal (ISLNLB-22504-003).

---

The Petition of Springdene Ltd.

---

4100. **Mr Goodman:** Indeed, I totally support that. Some of these points may not be relevant, 38 may be retained, it may not. All I would point to, to the Promoters' response, we were saying, "Do not demolish buildings unless it is absolutely necessary". They do say that although the shaft would just abut the parting wall of 38, where it joins up to 40-42, it would require some underpinning, not rocket science, underpinning, straightforward engineering stuff, and then it goes on to say, "Anyway, it needs more working area". It seems to me illustrative of the fact that no matter what was said, the buildings may well not survive and that I cannot understand.

4101. The second thing is to present these late drawings, although they do, to a certain extent, bolster our scheme—it is a doable scheme, it is not engineeringly outside the realms of possibility, it can be done—but to send that with no notification of why they were sending it, et cetera, I find strange.

4102. **Chairman:** You are not proposing to call your witness? Are you going to call your witness?

4103. **Mr Goodman:** We thought beforehand that if there are questions brought by the other side which we might need to address particularly on the guesstimate, which it can only be at this stage, of what the compensation cost to demolish both buildings is, if that comes up or is relevant, then I would like to call that witness at that time.

4104. **Chairman:** It is not exactly the order which we normally prescribe to. Can I ask you just to give me a moment or two because I want to hear Ms Lieven?

4105. **Ms Lieven:** Yes, certainly, sir. Can I first of all give a genuinely heartfelt apology to Mr Goodman that we did not put a covering note on the exhibits explaining what they were for. That was a mistake and we will sort it out in the future. I can only apologise to Mr Goodman. Can I then explain, what we were trying to do was to follow the Committee's instructions to give the documentary material, which we were going to rely on, to the other side in advance. What we sought to do in the exhibit pack was to explain in engineering terms what we understood Mr Goodman to be proposing—although Mr Berryman will give evidence that in engineering terms it is feasible, and I have already said to the Committee in engineering terms it is feasible—it is, in our view, highly undesirable for the reasons Mr Berryman will go through. The attempts in the drawings that have been put up on the screen were an attempt by Crossrail to show how Mr Goodman's ideas could theoretically be put into reality. That should have been explained in a covering note and I can only apologise in clear terms that it was not.

4106. **Chairman:** The Committee are at one in saying that this really is not good enough. The Promoters have to do better in the future. It is not acceptable that such material should be sent to a Petitioner at

such short notice but also with a lack of explanatory material. We do hope that it will not occur in the future.

4107. Can I just put to you a point that the Petitioner has made which you may deal with in the course of your performance. Can we delay, or would you be agreeable to delay their choice of whether they put their witness forward until slightly later in this hearing because of the questions that he raised?

4108. **Ms Lieven:** I am perfectly happy to be led by the Committee on that. As I indicated in opening, I have Mr Smith here to deal with the compensation issues. If it would help the Committee to hear Mr Berryman and Mr Smith first and then hear Mr Goodman's witness, I am perfectly content with that order.

4109. **Chairman:** I think that is the way we will proceed.

4110. **Ms Lieven:** Certainly, sir. Can I just come back on the issue of the exhibits for the moment. So far as the explanation is concerned, I completely accept what the Committee said and I will do my utmost to ensure that is done in the future. Can I just say on timing that we were, to be frank, late with Mr Goodman by a few hours. That was an administrative failure and, again, I have to apologise but the Committee do have to understand that the nature of this process, and this is no fault of Mr Goodman's, is we only find out quite late in the day what Mr Goodman is proposing as an alternative. We do our best in the PRD, which the Committee will remember we are now giving to the other side four weeks in advance to put forward the position, but it is inevitable that after that there are further discussions and there were telephone conversations with Mr Goodman. We then understood that what he was suggesting was the alternative he has presented this morning. We then put together, as it were, a more detailed response to that. I am afraid the Committee will have to accept that it does inevitably mean that things will be going backwards and forwards quite close to the hearing. Having said that, I am not seeking to justify the fact it only got to Mr Goodman yesterday lunchtime/afternoon and it had no explanation. On that I am nothing but apologetic and we will sort that out in the future.

4111. **Chairman:** There is no need to return to what we have said.

4112. **Ms Lieven:** Can I just deal with Mr Binley's other point, the number 38 point? As I hoped I had made clear in opening, what we are discussing with Islington that we will tell the Committee about next week will not in any terms remove the need to demolish number 40-42. I do not have any difficulty in just presaging next Tuesday to the Committee.

4113. We are talking about moving the shaft by something like two metres using more of Fox and Knot Street. 40-42 will still have to be demolished.

---

**The Petition of Springdene Ltd.**

---

As far as Mr Goodman's petition is concerned, it actually makes no difference whatsoever to him what we are discussing with Islington. There is also the point that those discussions have not, as it were, reached an end point yet so it would be wrong in some ways to be discussing them with another petitioner and could confuse the situation. On the facts of this case it makes no difference to Mr Goodman, his property will undoubtedly have to be demolished under any alternative proposal put forward next Tuesday.

4114. You can see that on this slide.<sup>7</sup> That is where the shaft is proposed at the moment. It is likely that we will be showing you next Tuesday shifting that shaft two metres across Fox and Knot Street, but you can see very simply that the bulk of the shaft will

remain on the Springdene property. On some of the exhibits one can see the Springdene property outlined in red. On the plan that is in front of you, you should be able to see the Springdene property. It is easy to see if you move the shaft two metres across Fox and Knot Street it does not have any benefit, I am afraid, in retaining the Springdene property. I hope that answers the question.

4115. I was not intending to ask Mr Goodman any questions. I think the most efficient way to deal with this petition is for me to proceed directly to call Mr Berryman and then Mr Anderson the environmental side to deal with the points raised, if that is acceptable to the Committee.

4116. **Chairman:** That is acceptable.  
Mr Keith Berryman, Recalled

---

*Further examination by Ms Lieven*

4117. **Ms Lieven:** The Committee have already met Mr Berryman on the Smithfield Traders' petition so I will not reintroduce him to the Committee. First of all, can I ask you to explain what the proposed shaft at 40-42 Charterhouse Street is going to be used for?

**(Mr Berryman)** This is an escape shaft to provide escape stairs from platform level of the Underground station to be used only in a case of emergency.

4118. Can you then explain why it is, as Mr Goodman quite rightly said, that this part of the scheme only came forward quite late in the day?

**(Mr Berryman)** The original designs for the station were carried out when it was assumed that the Thameslink 2000 scheme would proceed in advance of the Crossrail scheme. What we had intended to do at that stage was make use of what would have been the redundant track bed of the Moorgate branch of the Thameslink line to provide for a shaft. That would have been in a position around about here.<sup>8</sup> It would have been within the ticket hall building. Unfortunately, as Members will know, the Thameslink 2000 scheme has been significantly delayed and, therefore, we had to come up with a scheme which allowed Crossrail to go ahead while the Thameslink Moorgate branch was still in place. That is why we changed the scheme to a different shaft location. I think Members will appreciate that it has led to a rather complicated arrangement at this end.

4119. While we have got that plan up and you are explaining that, could you just explain how you get from the platforms to the emergency shaft under our proposal?

**(Mr Berryman)** Yes. These are the two platforms here, there is a cross passage between them and from that cross passage a staircase rises up so that the level of the escapees, if you like, is above the level of the tracks, above the level of the running tunnels. There is then a transverse shaft which leads into the escape stairs and vertically up to the surface. The point to make here is that the shaft location is on the opposite side of the running tunnels to the platforms, therefore people have to be taken over the top of the running tunnel to get to the possible location of the staircase.

4120. We will look at the implications of that for Mr Goodman's proposal in a moment. In general are there any particular rules that need to be applied when you are locating an emergency escape shaft?

**(Mr Berryman)** HMRI—Her Majesty's Railway Inspectorate—publish a document called *Railway Safety Principles and Guidelines* and the guidance on stations does contain, if you like, design guidance on how escapes should be planned from stations. It is obvious that the recommendation of that document is to keep escape routes as short as possible. I have never had the unfortunate experience of being involved in a fire but I imagine if you are escaping from a fire underground, getting to the surface as quickly as possible would be your number one requirement. This scheme as shown on that plan is already the longest escape route on the Crossrail network.

4121. Can we compare what we are proposing with what Mr Goodman is proposing and look at Exhibit 4?

**(Mr Berryman)** Before we do that can I just use this drawing to point up some issues? What Mr Goodman is proposing is that we should have—you can see why I never became a brain surgeon—an escape headhouse around here in the road that surrounds Charterhouse Square. I would just point out that is also on the opposite side of the running

<sup>7</sup> Crossrail Ref: P54, Axonometric of Farringdon station / 38—42 Charterhouse St (ISLNLB-22504-001).

<sup>8</sup> Crossrail Ref: P54, Axonometric of Farringdon station / 38—42 Charterhouse St (ISLNLB-22504-001).

---

The Petition of Springdene Ltd.

---

tunnels from the platform locations and we would therefore still be faced with this problem of getting people up and across before they could escape.

4122. As you are dealing with that now, would it help that problem to extend the platform at the northern side platform as Mr Goodman was suggesting?

**(Mr Berryman)** If you did that you would still need to have the staircase to the top and a passageway across. That would deal with this platform, that is to say the eastbound platform, but people from the westbound platform would have to cross through a cross passage and along and up, so it would make the escape distance longer, significantly longer, for people from the westbound platform.

4123. If we can look at exhibit 04 just to see our engineering interpretation of Mr Goodman's proposal, is that right?<sup>9</sup>

**(Mr Berryman)** That is the one. What this is showing is how we think an entrance could be constructed in Charterhouse Square. We have done two alternatives for this. This shows a rectangular shaft formed by contiguous piling but we have also looked at a circular shaft as well. The additional distance from here to here is roughly 48 metres, so that would be increasing the escape distance by that amount. 48 metres does not sound very much but it is actually quite a long way if you are in a panic situation with a big crowd of people with you. The other issue is on this scheme, our scheme, we have the shaft here and as soon as you get right to the top of these stairs the bottom of that shaft is visible, and that is a psychological factor. In the alternative, when you get to the top of the stairs the bottom of the shaft is not visible because it is further up and it is around a corner. The other point is to make is at the top of the stairs, and these are substantial stairs, six metres wide, we like to have a staircase discharging on to an area which is not a busy road, so the reason we have set our headhouse further away from the road than perhaps Mr Goodman has suggested is because we would not want the passengers discharging from here to discharge directly on to a busy road. In this case here they discharge on to Charterhouse Street, which is effectively closed, and in this case here they would go on to Charterhouse Square Road.

4124. Which is itself a private road.

**(Mr Berryman)** It is a private road and not busy.

4125. We will leave traffic volumes for Mr Anderson. While we are looking at Charterhouse Square, roughly how big would the headhouse structure have to be?

**(Mr Berryman)** It is roughly seven metres wide. This dimension across here is seven metres. Could we put the petitioner's exhibit up of the car parking area, that would be helpful. I could point out how big it would be.

4126. The one with the photograph.<sup>10</sup>

**(Mr Berryman)** These car parking spaces are usually about 3.6 metres in length. We have not measured these but these are pretty standard bays, I guess, so the width of the headhouse would be roughly double that. Although there is room for a traffic lane down here, it would be a substantial structure.

4127. I will leave the visual impact for Mr Anderson, but in engineering terms, and obviously you have not looked at it in great detail, what effect might it have on the trees in the square?

**(Mr Berryman)** There is a row of trees down this edge of the area, which is not particularly clear in this photograph. Clearly there will be issues with the roots of those trees and the potential damage to them.

4128. Just in case the Committee are wondering about this, does there need to be a head structure or could one get away without it?

**(Mr Berryman)** The first thing to say is that you have to have a way for people to get out, an emergency exit to get out of the shaft if it is ever needed. I think it is worth emphasising that we fervently hope that it will never be needed, it is purely for emergency use only. If an emergency does happen people need to get out. This means you need doors, you cannot have a hatch or something like that that people have to lift. The two alternatives for doors are to have a headhouse building, which is the most practical and normal way, or to have something rather like a Victorian public lavatory which is recessed into the ground. There are a lot of management problems with that kind of facility: vandalism, graffiti, litter, it is very difficult to maintain. We would not normally recommend that, and certainly not in this case. It is worth pointing out that even that would be a very substantial structure even if that kind of structure was going through.

4129. **Ms Lieven:** Those are all of my questions for Mr Berryman.

---

<sup>9</sup> Crossrail Ref: P54, 2 plans: Farringdon station escape shaft (rectangular); Springdene proposal (ISLNLB-22504-004).

---

<sup>10</sup> Committee Ref: A48, Petitioners photographs of alternative location (ISLNLB-22505-003).

---

 The Petition of Springdene Ltd.
 

---

## Cross-examined by Mr Goodman

4130. **Mr Goodman:** Could I just ask you, Mr Berryman, on your drawing here the staircase that you have shown in Charterhouse Square would appear to be substantially bigger than that of the one at 40-42 Charterhouse Street.<sup>11</sup>

**(Mr Berryman)** No, that is not correct. They are both three metres in width. If you look at the circular option you can see they are virtually identical. It looks bigger on the square option because of the shape but they are drawn to the correct dimensions. Each staircase is three metres wide so the total width is six metres plus the structure.

4131. Indeed, but that option on the top-right hand side looks as though it is for a staircase of six metres wide.

**(Mr Berryman)** That is correct. That is the staircase that is coming to the surface.

4132. Whereas you could have, as you did in your other option, one of three metres wide as you have got in 40-42 Charterhouse Street. The impact of that coming out of the ground would not be as great as one double the size.

**(Mr Berryman)** The total width would still be six metres. You could have a set of doors there and a set of doors there, if that is making sense. There would be doors on opposite sides of the building. The total width is still six metres because you have got two staircases, scissor stairs, which are passing over, each one of three metres width, so the total of the staircase is six metres. Perhaps I have not explained that very well.

4133. I still query whether that would be so at the ground floor level. It is like the stairs in an office building where you have half landings—I do not know whether this would have half landings—so that you would go up and turn round and go up and keep going round like that and eventually you end up exiting on a staircase that is three metres wide.

**(Mr Berryman)** Yes, that is correct, but when you are going up the staircase, the height of the staircase is such that it emerges from the ground and the other side of the scissors is emerging from the ground at the same time, so you still finish up with the same size of building. It is the kind of thing that one would illustrate with a model if required.

4134. **Mr Binley:** Are you saying that you need two staircases side by side, one for the emergency services to go down and the other for people to come out?

**(Mr Berryman)** No, sir. It is all one staircase. It is designed as a scissors to save space basically. They are both for escaping passengers to go up.

4135. **Mr Goodman:** I have to accept that at ground floor level then your building would be six metres wide although it does not appear to me that it need be that. The other point I had was that in terms of the escape distance you said that our proposal will be roughly 48 metres extra in length than the current proposal.

**(Mr Berryman)** Roughly.

4136. Of course, one must look at that 48 metres in the context of the platform length and I have no idea how long it is but it must be about 200 metres long and, therefore, you are moving it from 200 to 248, that sort of ratio.

**(Mr Berryman)** That is not quite right because the initial exit from the platform is not at the end, it is roughly at the third point of the platform. You are right, the distance is of the order of well over 100 metres, nearer 200 than 100. We would be increasing that by a significant proportion. Moreover, we are increasing it in a more tightly confined space rather than the platforms which are relatively open.

4137. I have one further question and that is could the platforms not be extended?

**(Mr Berryman)** The platforms could be extended, as I mentioned when looking at the slides earlier on.<sup>12</sup> By extending this platform and having an entrance there, you still have the issue of having to get people from the platform level across to there and the escape distance for people on this side will be very significantly increased from what it is now. This illustrates the other point that the entrance to the escape passage, if you like, is not at the end of the platform, it is at roughly the third point of the platform, so the total distance, although the platforms are long, is not as great as the 200 metres.

4138. On the plan I have I do not think those escape stairs are anything like a third of the way along. I think the people at the western end of that platform—

**(Mr Berryman)** The people at the western end would not escape that way, they would escape through the west end of the station.

4139. Those escape stairs are not a third of the way along the platform, not in my view anyway.

**(Mr Berryman)** If you make the assumption that half the passengers escape from the western end and half from the eastern end, for the people escaping from the eastern end it is from about the third point of the distance they have to walk.

---

<sup>11</sup> Crossrail Ref: P54, 2 plans: Farringdon station escape shaft (rectangular); Springdene proposal (ISLNLB-22504-004).

<sup>12</sup> Committee Ref: A48, Diagram of alternative intervention site location (ISLNLB-22505-002).

---

The Petition of Springdene Ltd.

---

4140. **Mr Goodman:** I have no further questions.  
Further re-examination by Ms Lieven

4141. **Ms Lieven:** Just on that last point to make it absolutely clear, Mr Fry if you could put up Mr Goodman's exhibit 02,<sup>13</sup> the one which has got a whole platform on it, the entire platform is 250 metres long, is that right?  
**(Mr Berryman)** 240 metres long.

4142. If you are on the western half, the western 140 metres, could you explain how you would escape?

**(Mr Berryman)** Yes. You escape through this end of the station. You can see the escape stairs here. What you do is walk to the end of the platform through this cross passage and you are immediately into a vertical staircase which takes you to the surface. There is a relatively short distance from the platform to the bottom of the stairs.

4143. **Ms Lieven:** Thank you very much, Mr Berryman. I do not know if the Committee has any questions.

4144. **Chairman:** No. Thank you, Mr Berryman.  
The witness withdrew

4145. **Ms Lieven:** Can I call Mr David Anderson to deal with the environmental matters.

---

**Mr David Anderson, Recalled**  
*Further examination by Ms Lieven*

4146. Mr Anderson has given evidence to the Committee before. I am assuming he has been sworn. That is right, is it not, Mr Anderson?  
**(Mr Anderson)** Correct.

4147. He has given his qualifications before. Perhaps Mr Fry can put up the photograph of the building itself which is number two in our exhibit pack.<sup>14</sup> Can you just start by telling the Committee whether the Corporation of London, who are the freeholders, or Islington, who are the local planning authority, have raised any objection to the demolition of this building?  
**(Mr Anderson)** I am not aware that they have.

4148. On your assessment this building clearly falls within the conservation area. Does it make a positive, negative or neutral contribution to that conservation area?  
**(Mr Anderson)** The assessment that was recorded in the Environmental Statement suggested that this building made a negative contribution to the quality of the conservation area.

4149. Can I move on to Mr Goodman's proposed alternative and Charterhouse Square. Perhaps Mr Fry could put up the photograph of Charterhouse Square, which is number six.<sup>15</sup> Can you describe to us the townscape of Charterhouse Square in very rough terms because, as I recall, the Committee did not visit it on the site visit.  
**(Mr Anderson)** Charterhouse Square is a protected London square located entirely within the conservation area. It is regarded generally as a high

quality townscape with a high sensitivity to potential change. It might be helpful if we could pull up the plan which is number five.<sup>16</sup>

4150. Yes.  
**(Mr Anderson)** This is just focusing on the square. You can see the pentagonal layout of the square and the number of listed buildings that form the terraces around the square, in particular the Grade I Charterhouse building which is at the top. We have a photo of that.<sup>17</sup> It is also worth pointing out a number of features of the square, including the railings, the bollards and, indeed, a telephone kiosk are also listed structures.

4151. That is a Grade I listed building, is it not, Mr Anderson?  
**(Mr Anderson)** Correct.

4152. While we are on the square, perhaps we can go back to the photo of the gates of it, number six.<sup>18</sup> Is it a private square or a public square? Is the road a public road?  
**(Mr Anderson)** I believe the square and the road are privately owned.

4153. As far as the owners of the square are concerned, at this stage have they any notice that there is a suggestion that there might be a head shaft going into their square?  
**(Mr Anderson)** Not that I am aware of.

4154. Could we go through impacts briefly. What would the temporary construction impacts be in terms of townscape and built heritage of putting the escape stairs into the square?

---

<sup>13</sup> Committee Ref: A48, Diagram of alternative intervention site location (ISLNLB-22505-002).

<sup>14</sup> Crossrail Ref: P54, Photograph of 38-42 Charterhouse Street (ISLNLB-22504-002).

<sup>15</sup> Crossrail Ref: P54, Photograph of 'Western Arm' of Charterhouse Square (ISLNLB-22504-006).

<sup>16</sup> Crossrail Ref: P54, Charterhouse Square—Key Environmental Features (ISLNLB-22504-005).

<sup>17</sup> Crossrail Ref: P54, Charterhouse Square (SCN20060309-001).

<sup>18</sup> Crossrail Ref: P54, Photograph of 'Western Arm' of Charterhouse Square (ISLNLB-22504-006).

---

**The Petition of Springdene Ltd.**

---

*(Mr Anderson)* Clearly there would be a work site at this location in the square and that would add to the work site impact that is going to be experienced in this area. Although there is a worsening of the situation in this particular location because of the volume of construction activity in the area, it would not be a particularly significant addition in terms of the temporary impact.

4155. What about the permanent impact?

*(Mr Anderson)* The permanent impact would be significantly different because of the sensitivity to change of this particular square on the townscape. We can expect the intrusion of the shaft structure at this location to be regarded as a significant adverse impact on the square itself.

4156. How easy do you think it would be to make a headhouse structure fit into the square?

*(Mr Anderson)* I think it would be quite difficult. I think Mr Berryman has given an indication of the scale of the structure and, indeed, its location in the centre of the cobbled highway there.

4157. **Ms Lieven:** Thank you very much, Mr Anderson, I think that is all at this stage.  
Cross-examined by Mr Goodman

4158. **Mr Goodman:** Just turning to the statement about the Corporation of London, in their petition, which they kindly gave me a copy of, they do state in their paragraph 31 that: "As a local planning authority with statutory responsibility as respect listed buildings and buildings, whether listed or not, in conservation areas, your petitioners are concerned to be satisfied that in respect of buildings that make an important contribution to the streetscape; all alternatives to demolition, including

the retention of the façade, have been explored." They go on to say: "The ES proceeds on the assumption that following demolition of buildings and completion of works in conservation areas within the City, it is extremely unlikely that the sites will not be redeveloped". That is the ES statement. "The Corporation as a petitioner would cite as an example of this numbers 38 and 40-42" and they question the assumption made by the ES. I do not think they have entirely ruled out the question that if at all possible 40-42, if at all practical, should remain.

*(Mr Anderson)* My understanding of their concern was about the feasibility of providing a replacement following demolition and that is a matter which we are discussing with them and, indeed, the London Borough of Islington who are the planning authority for this particular site. I think the extract you have read out reflects the role of those buildings make a positive contribution to the area and a presumption of their retention there and it goes on to talk about the potential difficulty of providing replacement development at this site should it be demolished.

4159. **Mr Goodman:** I have no further questions.

4160. **Chairman:** Ms Lieven?

4161. **Ms Lieven:** No, thank you, sir.

*The witness withdrew*

4162. **Ms Lieven:** Sir, I have Mr Smith. I am in the Committee's hands. Mr Smith is an expert on compensation who has already given evidence to the Committee. Strictly speaking that is not a matter for the Committee but it may help to understand the compensation position. I will call Mr Smith.

---

**Mr Colin Smith, Recalled**

*Further examination by Ms Lieven.*

4163. Mr Smith, you have given evidence to the Committee before but it might be helpful to remind the Committee as to what your role is here.

*(Mr Smith)* I am advising Crossrail on property issues. I am here this morning in respect of any of the compensation points that may be raised by Mr Goodman.

4164. All I would like you to do for the Committee is to explain in broad terms what heads of compensation may be open to Mr Goodman. I appreciate there will be various circumstances and things may change but give the Committee some idea of the compensation position that is likely to arise here.

*(Mr Smith)* The Office of the Deputy Prime Ministry set out, or tried to set out, the basis for compensation to people affected by compulsory purchase. It is a very trying time for people and we

try to give these booklets to people who are affected down the line of the route in trying to help explain what implications there may be. If I can try and explain to the Committee, what I understand is that a business is run from here but I do not know the profitability of that business or any details about it so I am talking in principle about what Mr Goodman may be able to claim when the time comes. Firstly, we understand he has a lease with, I think, several years to run until 2019. He will be able to claim as a head of claim compensation for any value of his interest in land, which is the lease, and the value of that is assessed in the market generally between the rent he pays and the rent he could receive if he were to assign that least to somebody else, somebody will pay a value for that. If there is a profit element in it, someone will pay a monetary sum for it. He could do that if there were not a compulsory purchase and, therefore, he is able to do that as part of compulsory purchase

---

The Petition of Springdene Ltd.

---

assessment. The whole principle of compulsory purchase is, as far as money can do it, the Government in its legislation has tried to put the claimant in as similar a position as he was before the compulsory purchase, or ignoring the compulsory purchase, as afterwards, so trying to put him in a similar position so he can get the value of his interest in land. In addition to the value of any interest he may hold in land he can have what are called disturbance payments. That could involve any impact on his business or any other costs. There are two broad situations that occur. Firstly, where somebody running a business is not able to find suitable alternative premises—let us take the very worst case—we hope Mr Goodman will be able to find alternative premises, if these premises are due to be demolished and the Committee decides that is the case, but if he is not able to he will get the value of his business paid to him in compensation. What he could have got for it in the market if he were to sell it will be paid to him in compensation. In addition to that, of course, he will also get incidental costs paid to him on the cost of close down of that business for sale of stock, administrative fees and costs. If, on the other hand, which we very much hope, Mr Goodman can find suitable alternative premises there are still costs that arise over and above the value of his leasehold interest. He will have to move to those premises, he will have to fit them out. The special cost of adapting premises is allowable in compensation paid. If maybe he has to notify customers he has moved he will be paid that. When some businesses move from one location to another their profitability is affected and certainly very usually it is temporary but it can be permanent. Either way we will pay that temporary loss of profits and if there is any permanent loss, that is payable. The legislation has tried to assess that what he loses will be paid in compensation. There are other incidental costs, such as new stationery, there will be fees and costs in buying new premises and these are allowable costs payable in compensation. If I can go back to the principle of equivalence to try to put the person in no worse or no better position before and after the compulsory purchase, that is a very broad outline of the principles. There is one last point. The Government recently reviewed compensation in the Planning and Compulsory Purchase Act 2004 and a new loss payment is also now payable. It used to be just for residential owners who got a home loss payment for the disturbance and inconvenience of being compulsorily acquired but that now applies to business owners as well up to a maximum of £25,000. There is a way of assessing that. It will be assessed on a percentage of the value of his leasehold interest or an area of the building, it is set out in the legislation. Again, he is entitled to that payment in addition to any of the other things I have said. I hope that is not too difficult.

4165. Can I ask Mr Smith one specific point that Mr Goodman has raised. If he invests in the property now and more expenses are covered now, is that at all recoverable if he is later compulsorily purchased?

*(Mr Smith)* If Mr Goodman invests now, and I imagine he is only going to invest if he wants to improve his business, we will pay compensation for the value of his goodwill whether it is temporarily or permanently disrupted and he should receive some back compensation. Also, if a premises is well fitted out that will be assessed in the special adaptation of new premises that he may move to. That will be taken into account when that compensation is assessed. I appreciate it is difficult for business owners with the “axe” of compulsory purchase over them but they must act in a normal commercial manner and realise that the law is that, as far as we can do it, they will be put in an equal position.

4166. **Mrs James:** Could I have some clarification. At the beginning of his submission Mr Goodman mentioned that he found it very difficult to find suitable premises, that he had been looking a long time for his consortia and eventually with a great deal of investment this was suitable. Will that initial investment be taken into consideration, the fact that there has been a huge amount paid upfront to get the building into the state it is in now?

*(Mr Smith):* Yes, basically because it would be reflected in (a) the value of his leaseholding to some extent because it is a profitable organisation and (b) it will be taken into account in any value paid to his business, so, yes, it will be taken into account.

4167. **Mrs James:** As a second part to that question, we are talking about equally advantageous sites, are we not, like for like?

*(Mr Smith):* Yes. Could I say, in the acceptance of a suitable site it is really for the claimant to decide whether is suitable, it is not for Crossrail to say what is suitable, he is running the business. All I can say from Crossrail’s viewpoint is we would want to relocate as many as we possibly can. If we can offer assistance to Mr Goodman at the time that Crossrail comes along, it is part of our policy to, for example, provide him with details of premises that may be available in the area. We cannot make the decision for him but we can try and help.

4168. **Mr Binley:** Let me give you a little of my background. I was, for some time before, an area manager for one of our leading breweries; a very happy life I might tell you. I had under my control 155 pubs, restaurants, nightclubs and so forth, a reasonable estate. There are some businesses which are special in terms of their location and their marketplace. Building up a marketplace in a given ambience, in a given location is a very important part of a businessman’s business plan in that respect. It takes a lot of investment and it is specific to the ambience and the feel of a given site. I want to know whether that is understood within the confines of compensation and if it is understood whether Mr Goodman will be compensated for all of that investment in building up a clientele which might not be but, in fact, almost likely will be moveable to another site.

---

**The Petition of Springdene Ltd.**

---

**(Mr Smith):** Your experience is obviously wide and all I can assure you is, yes, it is understood, Sir. If Mr Goodman decided to move to another site, as I tried to explain, on the move, there is usually a temporary loss because there is disruption. Then, there is a longer term situation, if, after the move, the level of profits Mr Goodman achieves are not what he was achieving on his investment here because, as you quite rightly say, these can be very local issues and people decide to go to a certain place that they may not go to in another location. If that level of profitability is not sustained then that is an element that can be compensated, so if his profits went down, shall we say by 20 per cent, we could assess that and give him money to give him that profit that he would have received.

4169. Can I ensure now that is on the record that would be helpful to Mr Goodman. Mr Goodman says his business is blighted but it appears it is outside of the official blight notice. I do not understand how that can be when a damn great shaft is going to be there. How can that be?

**(Mr Smith):** Broadly speaking, blight notice provisions are there to protect the small traders and the small householders and it enables them to serve

a notice on Crossrail and to buy in advance of the actual proceeding of the scheme after Royal Assent is granted. Like anything, a line is drawn somewhere and the current line—I do not know exactly what Mr Goodman's rateable value is, I think around the low 40s, £40,000 rateable value—is drawn, I believe, I look to counsel, around £30,000 rateable value. So he is above the line and therefore it is only properties below the £30,000 rateable value, business properties that can actually serve a blight notice.

4170. Does that fact inhibit Mr Goodman in any sense at all from claiming his full and just desserts in terms of compensation?

**(Mr Smith):** No, not at all.

4171. **Mr Binley:** Thank you.

4172. **Ms Lieven:** Just one final question, Mr Smith, to give the Committee further re-assurance. It is the second issue Mr Binley raised. The loss of goodwill if he re-locates and some of the goodwill that he has generated at the existing location does not transfer as a matter of law. Is that recoverable?

**(Mr Smith):** Yes, definitely.

---

*Cross-examined by Mr Goodman*

4173. **Mr Goodman:** I have to say I find some of the items listed for compensation most bizarre. The last point made was if our level of profit in the future is lower than it is now then we could claim that. We are really talking about coming to a decision on compensation on our existing premises, finding alternative premises, building that up and somewhere down the line if we are able to claim that our profitability is not as good as it may be. It is so hypothetical that I do not believe it would offer any comfort whatsoever certainly to me as a businessman. I cannot believe that is an item that you can seriously think is claimable.

4174. **Chairman:** Mr Goodman, do you have a question for Mr Smith?

4175. **Mr Goodman:** That is a direct question. I could not understand that if we moved to another location and our profits over however many years are less than our profits over however many years now, you are talking a long time down the line before we would get any compensation for the loss of the profitability.

**(Mr Smith):** On loss of profitability, that is once you have moved there but, unfortunately, you cannot assess that in advance. It is something where very often you would need a period of time, perhaps a year, to see what the level of profitability is in the new premises given the time it takes to build up. Unfortunately, that is what happens. That is the way in which compensation is assessed.

It is trying to put you in a similar position as you are now as you may be in the future. This is the way it is structured. I do not know what else to say.

4176. I understand what you are trying to say, but all I would say is in the real world if our profitability was less than it is now we would probably go out of business and have to close it down anyway at that stage, and to think we could struggle on for however many years to compare it with our profitability now is difficult. The locations are different as one of the Members of the Committee has pointed out and it would take time to build up profitability. I just cannot believe that would offer any comfort whatsoever to us.

**(Mr Smith):** I think what you are saying, if I may be so bold as to say, is that you are fearful that if you move to another location you may not have such a profitable business. That may be the case. We are talking of generalities here. When the time comes we have to discuss with you, Mr Goodman, your profitability and whether it makes sense for you to look to move. We are not forcing you to move but if it does not make sense, if you are on marginal profitability, and it would cost you more to move than it would to close down then that is what you would do. Is that a fair answer to your question?

4177. Can I make that amply clear, you are saying that we are not forced under the compensation laws to move to alternative premises?

---

The Petition of Springdene Ltd.

---

*(Mr Smith):* What you have to do is manage yourself in a way which minimises your loss so, in other words, if it does not make sense for you to move then compulsory purchase procedure and compensation cannot force you to. If, on the other hand, it would make sense for you to move then it is assumed that you would choose that course of action, that is all.

4178. We are not forced to. Would that affect the level of compensation?

*(Mr Smith):* You are not forced to. Let us be clear about it. If you have a very profitable business and you do not want to move for some reason but you want to close down then there are provisions whereby you have to demonstrate that is not putting a greater burden on the acquiring authority. This does not happen very often but it can happen. I am just hedging that, it is not as clear and black and white. We do not force you to move, but if it would be clearly in your best interests to move, then we are not necessarily compensating you on the basis of a close down. It all depends on your individual circumstances.

4179. It rather presupposes that the people negotiating compensation know better than the shareholders in the business. You must understand that we put up \$250,000, the leasehold property improvements, it is a technical term but it is really the money that went into the structure of the building which is normally depreciated over the extent of the lease. Our leasehold property improvements are not even half way there so some 80,000 or 90,000 is the written down value of those leasehold improvements and they would be progressively written down over the following 17 years. We are, in effect, if I might illustrate it as leaving this money in there to go, as you suggest, in another location I think the shareholders would think that is the craziest idea because we have invested a lot of money in this fund here, we did our best to insure that they were no threats to the business and there now is a threat to the business. If the compensation is what is the best we can get, we would probably take it and not want to start up another business because who knows what threat that may pose in the future. It is not simply a question of moving your premises somewhere else.

*(Mr Smith):* You will get compensation for the value of your interest. Without seeing your profitability I cannot give you a specific answer because I am only giving general advice to the Committee. I cannot say what your profitability is and whether it makes sense for you to move to another property, I cannot do that at this stage. Obviously I do not know the relevant information. All I am saying is we are not forcing you to move to another property.

4180. Are you saying, "but if you do not move the compensation will be less"?

*(Mr Smith):* It may be, it may not. It really depends on your business and its profitability.

4181. Just as an additional point: I am having our business evaluated by our accountants on a going concern basis at the present time and that would be available some time fairly soon in anticipation of this sort of question here. If we had that evaluation done by our accountants which takes into account our current level of profits and the trend of our profits, whether that trend is upwards or whatever, if we have that level is it possible to open discussions with Crossrail hypothetically?

4182. **Chairman:** Can I stop you a moment? We are not a negotiating body. What I will say is that I think Mr Smith's remarks earlier could be quite helpful in your determination on whether you can meet a settlement, but he has laid down the terms and the conditions. This Committee, nevertheless, would always be interested in information that people wish to provide in its consideration but we cannot be drawn into any of the negotiations on that. If you wish to supply something, that will be something we may consider if you have not made any arrangements at some point in the future. We cannot do it here today.

4183. **Mr Goodman:** I do understand that, Sir. If I have implied that, I apologise. All I would say is that if and when the negotiations on that commence, I find it rather worrying that people on the other side of the table on the compensation issues should say things such as "we will determine if it is in your best interest to move to an alternative location or not and that may affect you".

4184. **Chairman:** May I give you some comfort, Mr Goodman. We have regularly asked the Promoters to keep their door open and continue the negotiation with Petitioners and it is a matter we stress all the time. The mere fact I am saying it here in response to one of your queries is giving assurance that that will continue in your case.

4185. **Mrs James:** I have had some experience in the past on compensation, et cetera, particularly compensation where buildings and profitability are concerned. My understanding is that any independent accountant would look at this and evaluate the trends, as you said, and look at the compensation. It is not as easy as people deciding what their cost is, it would be evaluating the profit and you would be able to feed into that process.

4186. **Mr Goodman:** Yes, I understand that, that is why I have asked for an official evaluation from my accountant. He is independent, he is not on our side and, therefore, he is giving me an objective statement of what it is now just purely for our own interests. I find the nervousness of everybody suggesting that our best course of action to move to alternative premises may be our best option, that is for the shareholders to determine and I can tell you that I being one, and my son being a substantial shareholder in this, would not want to move to alternative premises to deal with that and maybe to have another threat.

---

**The Petition of Springdene Ltd.**

---

4187. **Chairman:** There are no more questions to Mr Smith?

The witness withdrew

4188. **Mr Goodman:** Yes. Prior to all of this new information coming about we did put our business on the market at the end of 2003 just to test the water there. We did receive an offer, it was proceeding and for one reason or another the negotiations stopped. Is that of any use to the compensation question?

4189. **Chairman:** Mr Goodman, do you intend to call your witness?

4190. **Mr Goodman:** Yes, I would.

4191. **Chairman:** We will delay that. We will now break until 11.50.

After a short break

**(Mr Smith):** It would be something that we could take into account. Just to put people's minds at rest, if there were disputes on compensation, the legislation is that there is an independent assessment by the Land Tribunal so it is not a matter of Crossrail saying, "You are not getting anymore". If there is a genuine dispute, a third party will determine that. Thank you, Chairman.

4192. **Mr Goodman:** Chairman, I would like to bring the witness, James Winbourne, of Martin French, in here. I suggest that he does not need to go over all of the issues we have raised but he is our professional adviser and I would ask him to comment on any points that he thinks are relevant to put to the Committee that may emphasise or give more detail.

---

**Mr James Winbourne, Sworn**

*Examined by Mr Goodman*

4193. **Chairman:** Mr Winbourne, you do realise that because you appear as a witness, you can be cross-examined?

**(Mr Winbourne)** Of course, yes.

4194. **Mr Goodman:** James, would you like to comment on the issues that have been raised today and on any items that you think are relevant?

4195. **Chairman:** It is not really the way it should be done. You should ask him to comment on a series of things but we will allow you this unorthodox method.

**(Mr Winbourne)** Chairman, and Members of the Committee, thank you and good morning. Mr Goodman came to us originally in early February 2005 because the business, a property he had taken converted for a bar, had all of a sudden become subject to compulsory purchase under the Crossrail Bill, which we are fully acquainted with as chartered surveyors. I am a member of the Compulsory Purchase Association and understand the procedure, which you have had explained to you by Mr Smith previously, on how compensation is payable. We went down and met Mr Goodman, clearly went through the process which was involved if he was to be acquired, what he could do about it, whether or not there was any recourse and when he could expect to receive compensation. This is the thought process that would go through anybody's mind when they come up against a compulsory purchase.

4196. For the record—I may have missed it—would you like to tell us the name of your firm?

**(Mr Winbourne)** I am James Winbourne. I am the Managing Director of Martin French Chartered Surveyors and qualified since 1993 as a chartered surveyor. We are based just down the road from

the subject premises, down in Carter Lane in the City of London. I have approximately 16-odd years' experience in compulsory purchase matters. The primary thought process is is there a way I can oppose this, do they have to take my building, if not when I am going to be compensated and will I be fully compensated? Mr Goodman had bought the property—and this was under the previous plans so I understand them—which involved the ticket office being sited in a different location, so this property would not need to be taken in the first place. This had been held up by the Thameslink 2000 proposals which are sort of running concurrently. I understand that an inspector's report is imminent on that, so I do not want to discount in the Committee's mind that maybe there may be an alternative to reverting back to the situation prior to when my client's property was brought into this—and this goes for number 38 as well and there are ongoing discussions on that—if the timetables were to fall back into one. You will appreciate with Crossrail potentially not being moved forward until after the Olympics this is some time in the future and something which may be short-term and not falling into place at the moment with the Thameslink 2000, it may not be the case in a few years' time.

4197. **Chairman:** Can I just enlighten you a little, to our knowledge there is no decision being made to delay Crossrail until after the Olympics. The decision being made we perceive will interfere with the Olympics, so it is slightly different. I do not recall there being any statement made at all.

4198. **Ms Lieven:** Sir, that is absolutely right. There is no statement to delay Crossrail until after the Olympics.

---

 The Petition of Springdene Ltd.
 

---

*(Mr Winbourne)* I accept the fact that there is no statement, but I think within the property industry it is widely felt the two huge capital schemes will use up a certain amount of resources within the country and cannot be carried out at the same time, the Olympics project at the same time as the Crossrail project.

4199. **Chairman:** I understand that, but despite the rumours or the views of the construction industry when governments make a decision and allow things to proceed they generally do it, albeit at a quick enough pace, but bear it in mind.

*(Mr Winbourne)* Okay. We were originally involved as a practice, not myself personally, as petitioners last time Crossrail came before Parliament. Bear in mind with experience on such a large project as this that I would say delays, in my opinion, are inevitable. I take on board what you say. Moving along from where we were previously, we have heard all about the consideration given to Mr Goodman's proposal, a proposal for an alternative escape route which I think is entirely plausible. I have looked at it. In terms of walking distance, if you were to walk outside the property, it is negligible. The proposed siting by Mr Goodman of the alternative staircase is adjacent to Charterhouse Square. It is not opposite the listed building, it is opposite a pretty average, possibly 1960s, building of little aesthetic merit. If it was being sited right next to a listed building or opposite or spoiling something, I could understand it. In fact, a lot of current railway architecture must be admired, in my experience, and it is not to say that something could be constructed that was aesthetically pleasing in any case except for a parking attendant's hut which is *in situ* where the proposal is. What we had not seen until yesterday—in fact, for me until this morning—was any sort of consultation on this, and I know we have talked about this. It has been noted that this is not good enough in terms of notice. I think it is quite clear; in fact in Mr Goodman's petition he says, "Why can the escape staircase not be sited adjacent to Charterhouse Square?" We are told it is something which can go ahead, we have not seen any cost-benefit analysis, all we have is a diagram. I accept it is always desirable to have escape staircases as close as you can to a platform but, having said that, it still seems to be to me to be pretty close if you compare it to other escape staircases, which we probably all use at times using the Tube. It does not seem like a long distance to me. I think that is all I want to say about it, but certainly it is by no means agreed or we have had no consultation as you yourself, Chairman, and your colleagues have noted. There has been no response or consultation with us saying what is happening on 38 Charterhouse Square, the restaurant and bar, the flatiron building.

4200. Just to correct you, Mr Winbourne, I did say that the materials which had been sent had not been explained and arrived very late and I asked for that to be changed. I was not stating there had been

anything else. Certainly the latest reasoning of my criticism and of Members of the Committee was that the latest drawings arrived very late. I just want that on the record.

*(Mr Winbourne)* Sorry, I did not mean to put words in your mouth by any means. From my perspective, if there are ongoing alterations which are being considered by the Crossrail team with regard to adjacent property which materially affect our property—and this has been going on for several weeks—if it was possible to get an email to us the day before today's hearing, stating, "Here is a plan showing your proposals", it would have been possible to say, "We are now looking at underpinning 38", if that is indeed what the suggestion is. Certainly there has been no cost-benefit analysis provided to us, which seems reasonable with a reasonable proposal like this that is sustainable, although it may not, in your view, be desirable, and in our view obviously because it ceases the necessary confiscation of our property. Lastly, because I think I have said enough on those points, I would like to move on to the question of compensation. As Mr Smith agreed, Mr Goodman is below a blight notice. A blight notice limit is £29,200; I know the figures and the rateable value for Mr Goodman's premises is £44,250. As a result, there is a difference of value there. The blight notice limit does not take into account the fact that there is a difference in London as to what a small property is and a small bar is as opposed to perhaps a provincial town, maybe Staines or somewhere, for example. Here we have a small independent operator who could be delayed from receiving any of this so-called compensation. I say "so-called" because it is compensation but it is compensation when the arresting declaration is served on the property, it is not before. With a band of £30,000 in London, it will leave a lot of people like Mr Goodman hanging in there.

4201. I well understand that, Mr Winbourne, but it is not within the parameters of this Committee to change that guideline. That guideline is laid down by statute by Parliament. It is not within the remit of our inquiry as a Committee to change that. I think you have made your point.

*(Mr Winbourne)* Okay, so briefly to summarise: the question mark initially in my mind is the change in the Thameslink 2000 situation brought Mr Goodman's property within the Crossrail CPO project. If that situation is altered then is there a need for us to be here, do they still need the property? Secondly, looking at the alternative costs of decanting—the nicest way of putting it—Mr Goodman and the offices above, the three floors which are all occupied and the compensation both for the property itself, which is, in my opinion, going to be a minimum of a couple of million pounds for the property before you take into account the disturbance of all of the individual occupiers with regard to finding alternative premises. That I would say is unlikely to find something which is going to produce, cherry-picked in this case, in view of the fact I think they always

---

**The Petition of Springdene Ltd.**

---

quote that three-in-one new restaurant businesses which, effectively, would, if moved to a new location, fail in the first year. I think it is food for thought. Essentially we would like the Select Committee to ask for cost-benefit analysis to be put into this alternative suggestion and also to question mark the need and timetabling with the Thameslink 2000.

4202. Just to ask you a question, there is a 'To Let' sign in the picture.<sup>19</sup>

**(Mr Winbourne)** There are three names on there, I cannot tell if there is anyone in there at the moment.

4203. **Mr Goodman:** Mr Winbourne, there is an implication that Crossrail should do whatever possible not to demolish buildings unnecessarily. Given the alternative suggestion we made, which has been worked up into an approximate scheme, although it will add 48 metres to the escape distance, it does not, as I understand, contravene

any escape distance criteria. That is hearsay, and Mr Berryman has told me that, so it is not illegal, it is just that the code has suggested it should be as short as possible. So it does not contravene that. Given that the scheme is workable and the extra 48 metres does not contravene any regulations, is it your view that Crossrail are willing to investigate this proposal in any depth or are they saying, as they seem to be suggesting, it will not succeed and it will carry on to demolish the building?

**(Mr Winbourne)** I think what is clear is that we would appear to have before us a hastily prepared representation without any costs attached to it in response to Mr Goodman's proposal for an alternative exit. There has been no pragmatic consultation about the scheme so there does not appear to be a willingness to consider a reasonable alternative here.

4204. **Mr Goodman:** I have no further questions.

4205. **Chairman:** Thank you. Ms Lieven?

---

*Cross-examined by Ms Lieven*

4206. **Ms Lieven:** Can I have up our exhibit number seven?<sup>20</sup> This is in respect of the parking attendant's hut that you referred to. You referred to that as being a structure in the square. That hut is two metres by two metres, I understand. Does that sound right to you?

**(Mr Winbourne)** Yes.

4207. So a square metrage of four square metres. At the headhouse structure, according to Mr Berryman, it would need to be seven metres by 11 metres, so a square metrage of 77 square metres, something like 20 times bigger. Is that your understanding?

**(Mr Winbourne)** I measure things all day long and you are asking me to look at that objectively. I would say it has got to be about a car's length, would you not? We have had quoted that as being about 3.6 metres in length, not two by two, so we are talking about double a car's length, which was seven metres for the ticket hall. We are looking at something maybe four times the size.

4208. **Ms Lieven:** Just for the Committee's information—I do not want to get too stuck into this—Mr Berryman visited last night and stepped out the size of that hut. We are not saying it is exact but that is the basis for the question I have just asked you. I think the Committee has all the information it needs. I am not intending to ask anything else.

4209. **Mr Goodman:** Just one minor point. It was alleged that the question of an alternative location for the staircase was only brought to Crossrail's notice in the last week. Might I say I had a meeting with Crossrail staff before Christmas last year and at that point I put forward our suggestion that rather than knocking down this building which we occupy it would be better served in Charterhouse Square where you are only confiscating some car parking spaces and a portion of the road. The answer I got was it would destroy the amenity of Charterhouse Square and they could not really consider that.

4210. **Chairman:** Was that verbal or in writing?

4211. **Mr Goodman:** It was verbal. The question of us suggesting this location has been around for two to three months and, therefore, coming up to attend the Select Committee, as we are doing now, I cannot see what other point we would make other than to bring this point up. It is not within your remit to discuss compensation, therefore the only thing it could possibly be would be the question of relocating this into Charterhouse Square. I just raise that as clarification.

4212. **Chairman:** That is two valid points you make there. Do you have any more questions for Mr Winbourne?

4213. **Ms Lieven:** No, thank you.

*The witness withdrew*

<sup>19</sup> Crossrail Ref: P54, Photograph of 38-42 Charterhouse Street (ISLNLB-22504-002).

<sup>20</sup> Crossrail Ref: P54, Photograph of Charterhouse Square, Gates and Hut (ISLNLB-22504-007).

4214. **Ms Lieven:** I will close now, sir, in very short terms. The starting point for what you have to consider is the degree of concern about demolishing

---

 The Petition of Springdene Ltd.
 

---

the building in question. It is perfectly plain from the photograph that the building has no architectural merit whatsoever. I appreciate that does not mean much to Mr Goodman but in conservation terms, looking at the balance, there is simply nothing on the conservation side in terms of preserving that balance. As Mr Anderson told you, the Environmental Statement assesses it as having a negative impact on the conservation area and in my submission that is the right assessment. Perhaps more importantly, neither the City Corporation, who are the freeholders, nor Islington, who are the local planning authority, has raised any concern about the demolition of that building. Of course, the Committee is very aware that Islington are greatly concerned about the demolition of the building next door, so they have assessed this area and they know which building they wish to see retained. Indeed, I would go so far as to suggest that a new building on that site could be a significant enhancement to the conservation area there.

4215. The proposed alternative that Mr Goodman puts forward is, in my submission, significantly worse both in passenger safety and design terms and also in environmental terms. There is the significantly longer emergency passage which if one takes the midpoint of the Crossrail platforms is adding a very significant percentage to the journey length of somebody trying to escape from that part of the platform. That is a very important consideration to the Promoters. In my submission it is highly undesirable to extend emergency escape lengths unless there is an overwhelming fact on the other side of the balance: that you are protecting an important building in other words or some other important consideration. There is also the point that Mr Berryman made that it is not just that you have this additional 48 metres but the escapee, and it is necessary to put oneself into the situation that such a person would be in—hopefully they never would be—is being forced to move quickly towards a blind corner, which is not a desirable layout, to put it mildly.

4216. In terms of the environmental considerations above ground, the proposal comes out in a very important protected London square with a large number of listed buildings, including a very large Grade I listed building. If I can just remind the Committee that the railings themselves are listed, a point that Mr Winbourne did not seem to appreciate. Even if you put a headhouse structure closer to the main road, thereby taking it away from some of the listed buildings, you then impact all the more greatly on the listed railings.

4217. The headhouse structure, however designed, is going to be a very prominent structure there and, in my submission, highly intrusive and large. You can see the parking attendant's hut just at the corner of that photograph and Mr Winbourne highlighting that was quite useful to see as a scale of magnitude. Whether or not Mr Berryman has

got the scale absolutely right, we are talking about something in the region of four square metres going up to something in the region of 77 square metres, a big increase at a very sensitive location.

4218. Finally, on compensation: obviously this is not the place to discuss, let alone try to assess, compensation in detail but equally I am sure the Committee would want to have its mind set at rest that people in the position of Mr Goodman will get acceptable compensation. You have heard the evidence of Mr Smith. He will be fully compensated on the basis of the business as a going concern. If he does not wish to relocate for his own reasons then he will still receive compensation and that compensation, perhaps importantly, will take into account the investment that he has put into the property both up to now and during a period when he did not know Crossrail was coming and after that up to the point where he gets the CPO. That will all be eligible for compensation.

4219. In the light of Mr Winbourne's comments about Thameslink 2000, of course to some extent one has to feel for owners/occupiers, such as Mr Goodman, who unlike those whose properties were affected way back to the early 1990s, the news that their property is going to be affected has come very late in the day. I am afraid that is simply an unalterable consequence of changes that have taken place to Thameslink 2000. We have to provide an emergency shaft and it is unfortunate for Mr Goodman but there is no escaping that.

4220. The overarching point on compensation which Mr Elvin made to you in more detail last week is the one about the National Compensation Code. If I can refer the Committee, just for the record, to Day 14, paragraph 4043 onwards. It is in the Promoter's view appropriate that this Committee should follow the National Compensation Code and Mr Goodman will be eligible for exactly the same compensation as anybody else who is subject to compulsory purchase and in my submission that is entirely right in the way that the Committee should go.

4221. I have done that shortly but I hope that covers the key points.

4222. **Chairman:** Mr Goodman, is there anything you want to say in summary?

4223. **Mr Goodman:** Yes. Chairman, you have already heard my views on the compensation and as shareholders in this business we are not at all confident that these grandiose terms that we will be fully compensated wash with us. Any business that runs must take decisions on a business level as and when they occur. We could reasonably have expected, if our business progressed the way we wanted it to, that we could sell it and make an exit but that option is no longer there. We are faced with an indeterminate time as to when this

---

**The Petition of Stafford Partnership and Mercury Theatres Ltd.**

---

compensation will take place and how much compensation that will be. We are blighted in the meantime.

4224. The question of believing that the alternative suggestion has no merit seems to me to be a high-handed attitude from Crossrail to the effect of: "This is the design, this is where it is, 40-42 Charterhouse Street is the only place we can do that and, therefore, we will not open our minds to anything else". I take it that the distance that you would have to travel to escape would be longer but that does not contravene any regulations at the present time and although it will reduce the amenity of Charterhouse Square I would suggest

that the present decision to knock our building down totally reduces our amenity and we believe that we have a right to be heard.

4225. I hope that the Committee could look at appointing an independent assessment of the situation so that it is not done by Crossrail but is open-ended and could be presented to the Committee for their final decision.

4226. **Chairman:** Thank you, Mr Goodman. That concludes the petition hearing for Springdene Limited. We will now move on to our next petition. The next person we will hear is Mr Stafford from Stafford Partnerships.

4227. **Ms Lieven:** Can I say, sir, I am handing over to Mr Mould at this point.

---

The Petition of Stafford Partnership and Mercury Theatres Ltd.

The Petitioner appeared in person.

4228. **Chairman:** Before you start, can I just tell my colleagues we are aware that you are partially deaf. Can I just say I am also partially deaf, I have got 47 per cent hearing, which in my job is not much of a disadvantage and sometimes a positive advantage! We are well aware of the difficulties you may have. If you find particular difficulties during the course of either your presentation or anything else, please feel at liberty to ask for it to be repeated.

4229. **Mr Stafford:** The Clerk was kind enough to say that you would turn the Loop system on and, I must say, that, combined with a little bit of air-to-air hearing, is okay.

4230. **Chairman:** Before you start, Mr Stafford, I would just like to invite Mr Mould to make an opening address.

4231. **Mr Mould:** I generally find that people who are hard of hearing have a profound advantage when they have to listen to anything I have to say! I will try to be brief in opening and explaining the context of this particular petition. We have put on the screen an extract from the deposited plans with the two properties with which this petitioner is concerned highlighted. The position is that the Stafford Partnership owns number 15 Monmouth Street, which is there shown as land parcel 60. You can see that is a property under which the westbound running tunnel of the proposed Crossrail railway is proposed to run. The Stafford Partnership also owns numbers 65-67 Neal Street which as you can see is somewhat more remote from the scheme and is not within the Bill limits at all.

4232. Mercury Theatres Ltd is the tenant of 15 Monmouth Street, that is the first property to which I referred. Mercury Theatres Ltd is a post-production film editing company and my understanding is—Mr Stafford will speak to this—their premises at 15 Monmouth Street are a sound recording studio.

4233. At this point the running tunnels in relation to the westbound tunnel are intended to be at a level of approximately 20 metres below ground. Thank you.

4234. **Chairman:** Mr Stafford?

4235. **Mr Stafford:** Thank you very much. Good afternoon. My name is Mark Stafford and I am representing the freeholders and the present occupiers and tenants, Mercury Theatres. This opportunity of addressing you today is very much appreciated. My co-Petitioners, Mr Glass, Maureen Timmers and David Carstairs, who are directors of Mercury Theatres, are here today too.

4236. You should have copies of our summary which was supplied last week but I can take you through that now. It is more or less the same.

4237. As you know, we jointly petitioned against Crossrail because we feel that the proposed tunnel is too close to the ground level. We have worked out that some 30-odd feet is all that separates the bottom of the foundations at 15 Monmouth Street from the proposed tunnel. That is about half the distance, if you like, going right the way along the corridor to the lobby area. Halfway is about that distance. We feel that is far too close. I do not know whether you recall the previous Crossrail attempt, which was many, many years ago, but in those days we were dealing with London Underground and their chief engineers explained to

---

The Petition of Stafford Partnership and Mercury Theatres Ltd.

---

us that anything coming through has to go up to get over the other lines which run across, so it is better to go deep with the tunnel but it has to rise up fairly close to the surface to avoid other lines. I just mention that in passing.

4238. We think that some noise, vibration and low frequency sound will be apparent from the operation of the railway. This might be reasonable in offices or shops, for example, but at Monmouth Street we have highly sensitive, sophisticated editing suites and recording facilities for film and TV post-production. The operation of these would be adversely affected by the rumble of trains passing underneath the building every three or four minutes.

4239. Mercury Theatres is one of the leading post-production film editing companies in London. Their clients include the BBC, Paramount Pictures Corporation, DreamWorks Studios and many other international film and TV producers.

4240. Their central location in Covent Garden is essential because actors, translators, editors and directors travel from all over the world to Covent Garden to record voiceovers and dialogue in many languages to add to or to localise films and TV programmes for worldwide distribution. It is a 24/7 operation which includes things like lip synchronisation to newly recorded dialogue. Not surprisingly, the equipment used for this technology is sophisticated and the slightest vibrations could spoil the film. Many of the documentaries you see on your TV screen or films on general release have probably passed through the post-production facilities at Monmouth Street.

4241. If Mercury Theatres cannot continue at Monmouth Street due to continuous underground noise from the operation of the Crossrail line they will either have to improve the sound-proofing or relocate to other premises. Either option is going to cost money and disrupt their business.

4242. Fortunately there is a very simple solution to this problem. Sound engineers can place sound and vibration sensors and record their findings over, say, a couple of weekdays and a weekend to get a good picture of the existing noise levels. If these results can be agreed by surveyors for Crossrail and Mercury Theatres, this would form a true and fair record for comparison at a later date. The point I am trying to make is that the recording studio was installed bearing in mind the ambient noise levels at that time, about ten years ago. We are charging the ambient noise levels with the introduction of the Crossrail line and it may have a significant effect on the recording studio, it may not. What we really want to say is can we take some measures so that we have a record.

4243. Unfortunately, the Promoters of Crossrail have rejected this solution. In their pack of "goodies" they have offered a settlement deed which does not include sound and vibration monitoring,

plus the fact that all claims have to be made within two years. They state in their Environmental Statement: "they did not identify any significant groundborne noise or vibration impacts arising from either construction or operation". They further state that their nominated undertaker must "put in place measures that will ensure the new underground sections and wheels of vehicles operating the Crossrail passenger service are maintained in a state which will ...lead to adequate control of groundborne noise and vibration arising from the railway".

4244. In short, it seems that legally the undertakers only have to use their best endeavours but there is no come-back if they do not. We have a history of poor standards of train and track maintenance in this country, I am afraid to say: worn tracks, cracked rails, poorly maintained signalling equipment and so on. The King's Cross escalator was subject to routine maintenance from experts and inspected, no doubt, by experts from the company's insurers: it caught fire. When faced with this history of "best endeavours", I think most people will agree with me that Crossrail's claim that "...future maintenance of wheels and tracks will control the level of groundborne noise and vibration" should be taken with a large pinch of salt.

4245. Tracks and wheels do become worn. Rubber vibration isolators do become hardened over time or may possibly perish from oil and grease contamination. These are facts of life. The replacement of worn parts can be postponed indefinitely by the nominated undertaker for "operational reasons" or budgetary considerations". Anyone affected has no legal recourse. It is not possible, for example, to pick the phone up and ring your local undertaker and say, "Hey, these trains are taking a lot of noise this morning" because they are not allowed to record the noise before so we cannot compare it with something which can be recorded later.

4246. Only by agreeing a pre-existing set of conditions can any meaningful comparisons be drawn for the future. This is as much in Crossrail's best interest (to avoid spurious claims) as it is in Mercury Theatres' best interests. You are no doubt aware of the London Party Wall Act, where affected parties have the right to appoint experts at the undertaker's cost to look after their interests. We feel if something similar could be combined within the legal framework of the Crossrail Bill this could be in the best interests of everyone.

4247. Nobody wants to frustrate Crossrail's plans, nor do they wish to delay the project for any reason but, conversely, nobody wants to be disadvantaged by the scheme and left "whistling in the wind" for compensation if sound and vibration levels rise as a result of poor maintenance.

---

**The Petition of Stafford Partnership and Mercury Theatres Ltd.**

---

4248. I am hoping today that you will remember Mercury Theatres the next time you go to see a movie or switch on the television and support our concerns. I believe they have got a reasonable case here and I hope that you will support us.

4249. May I just summarise briefly. Can we suggest the following prior to commencement of works. One, that 15 Monmouth Street is listed as Stage 3 protected status. This places the building in the sector reserved for special monitoring and would normally apply to listed buildings and the like. Two, that a schedule of condition is agreed between the undertaker's and freeholder's surveyors including noise and vibration monitoring records which could

form a sort of contract, if you like. Three, that all reasonable costs are covered by the nominated undertakers. We are your humble Petitioners, Mercury Theatres and the Stafford Partnership. That concludes my address, thank you.

4250. **Chairman:** Do you wish to call any witnesses, Mr Stafford?

4251. **Mr Stafford:** No, not at all.

4252. **Chairman:** Thank you very much. Mr Mould?

4253. **Mr Mould:** Sir, what I would like to do, if I may, is just to call Mr Thornley-Taylor to explain our response to the Petition.

---

**Mr Rupert Thornley-Taylor, Recalled**

*Further examination by Mr Mould*

4254. Mr Thornley-Taylor, the Committee has already heard from you in relation to matters relating to groundborne noise. You will recall that first of all you gave a presentation on Day 7 which touched upon this issue and the design approach that has been adopted for the purposes of Crossrail, I think both during the construction phase and, indeed, for the purposes of the operational railway. We then had a more prolonged debate about the issue and about the appropriateness of the design criteria that Crossrail have adopted for these purposes in the context of the petition made by the London Borough of Camden. Members will remember what was said in relation to the design criterion of 40 db L<sub>AmaxS</sub> which Crossrail are proposing in relation to groundborne noise. It may be helpful if you would shortly summarise the design approach that Crossrail is taking in order to control groundborne noise both during the construction and operational phase and then we will turn, equally briefly I hope, just to explain what we are going to do in relation to Mercury Theatres. Is that convenient? Just tell us briefly, if you will, what the design approach is.

*(Mr Thornley-Taylor)* The design approach, which is set out in information paper D10 is that the nominated undertaker and his contractor will select as a basic portal-to-portal track form a resilient rail support system which will, so far as is possible, achieve the general aim of 40 dB(A) maximum noise level that I talked about the last time I was here. There will be a few locations where a standard track form is not quite good enough for that and in particular there are a considerable number of locations for which a more onerous noise target exists and these are set out in table one of D10 according to the use of the building including, for present purposes, sound recording studios.<sup>21</sup> The nominated undertaker will be required to predict the

levels of noise that will result from the standard track form and in any case where either the system-wide objective of 40 is not likely to be met, or in particular where the much more onerous requirements for special buildings are not likely to be met, he is required to install an enhanced form of track support which is commonly a form of track support called floating slab track where the concrete on which the track is supported is itself supported on rubber bearings. It is explained in the Environmental Statement that it is likely there will be a significant length of such track through the area we are concerned about today. That produces a considerable reduction in groundborne noise as a result and is what will be used to meet the more onerous requirements that are set out in table one. It is accompanied by a commitment to maintenance because, as Mr Stafford rightly observes, it is not sufficient merely to design the system right in the first place, it is important to maintain the condition of the track, the wheels of the vehicles and over a long period of time the condition of the resilient components that support the rails and the floating slab track if that applies.

4255. The relevant criterion in relation to the current case of sound recording studios is 30dB L<sub>AmaxS</sub>, that is correct, is it not?

*(Mr Thornley-Taylor)* That is right.

4256. These thresholds that are the basis for the design approach to control construction and operational groundborne noise are based on experience in relation to previous schemes, are they not?

*(Mr Thornley-Taylor)* They are very similar to the corresponding table that was used for the design of the Jubilee Line Extension, for example, and although it did not run under studio land, if I can call it that, it did run under some sensitive locations—lecture theatres in basements at both the Institution of Civil Engineers and the Royal Institution of Chartered Surveyors, for example—and floating

<sup>21</sup> Crossrail Information Paper D10, Groundborne Noise & Vibration; p 2, Table 1 Construction & Operational Groundborne Noise Criteria (LINEWD-IPD10-002).

---

**The Petition of Stafford Partnership and Mercury Theatres Ltd.**

---

slab track was triggered as a result. I think I mentioned when I was last here that the accompanying revision to Westminster Station District and Circle Line triggered these floating slab tracks because it runs through the lower parts of Portcullis House. The general approach has produced the desired effect, a very well designed system of vibration isolation that gives extremely low noise levels in these sensitive spaces.

4257. There were two particular concerns raised by Mr Stafford in his presentation. One was the effect of not merely noise but of vibration. If the design proceeds as you have just described it, can you say anything about that in the case of this particular Petitioner?

*(Mr Thornley-Taylor)* What I would say in respect of this Petitioner, as with all of them, is that a fortunate effect of the change to modern designs for track installation is a very large reduction in the level of what I call “feelable” vibration, that is vibration that is received through the sense of touch, either through the soles of the feet, the fingers or when you are sitting or lying down. There is an enormous drop in the level of vibration whether or not the railway is running under a sensitive location simply by virtue of the use of continuous welded rail and very precisely aligned track using modern methods of construction and maintenance. In no case is any perceptible vibration, feelable vibration, predicted from tunnel portal to tunnel portal.

4258. Mr Stafford very helpfully told the Committee that the recording studio at 15 Monmouth Street was installed about ten years ago and it was installed, if I can put it this way, to be fit for purpose in relation to ambient noise levels that prevailed at that time. Do you recall that?

*(Mr Thornley-Taylor)* Yes, I do.

4259. Insofar as audibility is concerned, with that in mind and having regard to the design approach that you have just outlined that is proposed for Crossrail, do you want to say anything about the likelihood of problems arising in relation to the operation of the studio simply through noise being audible in that respect?

*(Mr Thornley-Taylor)* This particular studio is not one of the ones for which I have done what I call a level two assessment because I do not think it was there when Crossrail was last in Parliament when the first Crossrail Bill was here and we did have Committee proceedings then. Therefore, it is not one of the buildings for which we have detailed predictions. However, neighbouring buildings, which one can take as comparable, with deep foundations, as I understand this building has, do have predictions which indicate that in this case, as in many other cases, an enhanced form of track support is likely to be needed to meet the 30 dB LAmax slow. In fact, through this area of London there are so many buildings which fall in the more onerous categories of table one that it is likely there will be enhanced vibration isolation all the way along.

4260. **Chairman:** Mr Thornley-Taylor, would it be possible for you to do a prediction on these properties?

*(Mr Thornley-Taylor)* It would be if we had drawings of the foundations. I do not have drawings of the foundations of this building. I do have drawings of all the buildings from the 1992 Crossrail scheme that had other than simple one basement, no piles. The received noise level is strongly dependent on the nature of the foundations and it would be necessary to obtain such drawings but we do not have them at present.

4261. Could you acquire them?

*(Mr Thornley-Taylor)* If Mr Stafford is able to provide drawings of his building’s foundations then certainly, sir.

4262. **Mr Mould:** Sir, I will certainly pursue that and we will do the best we can to update the Committee on that.

4263. **Chairman:** That would be helpful.

*(Mr Thornley-Taylor)* I can confidently predict based on similar buildings nearby with piled foundations that it will be one of the several studios that will trigger this more enhanced form of resilient track support, which is a good thing from the Petitioner’s point of view because the drop in noise level is quite substantial when you move from the standard track to floating slab should it go to that.

4264. **Mr Mould:** Touching on maintenance, there is a little bit of unfinished business on this as the Committee will recall from the Camden Petition. We are in the process of refining the undertaking on maintenance that is set out in paragraph 2.10 of the information paper. It may be helpful if I just read into the record the reference to that is Day 11, paragraphs 3357 and 3358. Mr Thornley-Taylor, is it right that the refined, as it is intended to be, substance or the essence of the maintenance approach is that for both track and rolling stock to ensure under all reasonably foreseeable circumstances that the design criteria set out, in this case 30 dB(A) LAmaxS, are met and maintained during the operation of the railway?

*(Mr Thornley-Taylor):* Yes, this reduces to a policy to control the condition of what are known as the running surfaces, the head of the rail and the wheel threads. Groundbourne noises are influenced, more than anything else, by rail roughness and wheel roughness. When one is predicting levels of groundbourne noise in the future, one has to make an assumption as to what level of roughness is there. That prediction then goes on to serve as an important part of the maintenance policy because should things deteriorate to the point that the assumption is no longer valid and the roughness gets worse, then obviously the levels of groundbourne noise become higher than the commitment that was made in the first place. What one does is to build into the maintenance policy a means of monitoring and triggering rail grinding and wheel turning so as to ensure that when they reach their worst state, in

---

**The Petition of Stafford Partnership and Mercury Theatres Ltd.**

---

between maintenance, they are no worse than the assumption that was used in the model. For the Jubilee Line extension, I wrote a section for the maintenance manual to that effect and an appropriate approach will be used for Crossrail maintenance procedures.

4265. With all of those thoughts in mind, I would be grateful if you would help the Committee with this. In your judgment, is it then necessary for the Promoter to permit as the Petitioner seeks, a monitoring process of the kind that was mentioned in Mr Stafford's opening remarks?

**(Mr Thornley-Taylor):** Not in the way Mr Stafford proposes but I have understood his request. He is looking to monitoring before and after the opening of Crossrail. By then, all the steps would have been taken to ensure that the requirements of a sound recording studio are met. The levels of existing groundbourne noise from current underground railways do have a part to play in the information paper D10 as regards to the operation of a temporary construction railway which I referred to when we were discussing the Camden case. The paragraph in D10 which deals with the temporary railway commits to either the levels in table one or levels of existing noise from a current underground railway, whichever is the higher.<sup>22</sup> Given that the Petitioner's studio is midway between three existing underground railways, it will be appropriate to establish what the levels of groundborne noise are from those for the purposes of the control on the groundbourne noise from the temporary construction railway. 2.7 is the paragraph we need: "The nominated undertaker will endeavour to ensure that the groundbourne noise from the operation of the temporary construction railway that is experienced by any theatre, large auditorium/concert hall, studio, church, court, lecture theatre or small auditorium/hall, does not exceed levels greater than those it is already subject to by the presence of London Underground, other railway clear and road transport operations, or the levels listed in Table 1..." to deliver commitment on that it will be necessary to establish what those existing levels are.

4266. We touched a little a moment ago on what we were told earlier about the design of the studio about ten years ago, those existing lines of course were all in operation at that time. Is that likely to be of some relevance in judging the fitness of the existing studio for its purpose with the addition of the Crossrail model.

**(Mr Thornley-Taylor):** Yes, indeed, no doubt the acoustical engineers who designed the studio will have taken into account levels of groundbourne noise from the existing underground lines that I mentioned and also from the Crossrail scheme because in this area the present scheme is identical to the scheme promoted in the early 1990s. I would expect any studio that was designed after I was sitting, not in this room but in the Grand Committee Room 14 years ago, and it had all the information it

needed to design against Crossrail, and, in fact, in the following years, I have frequently received approaches from designers asking me about the effect Crossrail will have and what they need to include in their building when eventually it comes along. Crossrail has an information pack which was given out to developers along the alignment ever since the early 1990s including several reports which have been prepared giving advice on what the expected levels of groundbourne noise will be against which they should design when they design the vibration and isolation for things like the studio.

4267. Thank you very much, indeed. There may be some questions for you.

4268. **Chairman:** Mr Stafford, would you like to ask Mr Thornley-Taylor some questions?

4269. **Mr Stafford:** Yes, they were a couple of things. First of all, David Carstairs wanted a few words about the decibels which is technical stuff as far as I am concerned. Would it be possible to quickly swear him in so he can ask some questions?

4270. **Chairman:** At the moment you are cross-examining Mr Thornley-Taylor, unless you do not wish to.

4271. **Mr Stafford:** Yes, I understand that but Mr Carstairs is a co-Petitioner and he is the director of Mercury Theatres.

4272. **Chairman:** This is unorthodox. Mr Mould, I need your assistance, what I am going to propose is that the other Petitioner is able to ask Mr Thornley-Taylor a question or two and Mr Stafford will temporarily stand down as the Petitioner during that period. If you feel it necessary I will allow you to come back again to ask a further question.

4273. **Mr Mould:** I am perfectly content with that, Sir.

4274. **Mr Binley:** Chairman, before we do that, can I ask a question of Mr Thornley-Taylor. I am not quite clear exactly what you said. It seemed to be that in 2.7 you were saying that the noise levels have already been established for the area we are talking about and you then go on to say that if those are exceeded, the Petitioner is protected. Is that what you were saying?

**(Mr Thornley-Taylor):** That is correct, yes.

4275. We are already in a situation where we are aware of the noise levels and if they are exceeded after the building of Crossrail the Petitioner will have every right to come back to you and action can be taken on the basis of the information you already have.

**(Mr Thornley-Taylor):** That is not the way it is intended to operate. The provisions will bite long before Crossrail opens in determining how the contractor designs the method of track support and takes all the measures he needs to achieve the

<sup>22</sup> Crossrail Information Paper D10, Groundborne Noise & Vibration; p 3, para 2.7 (LINEWD-IPD10-003).

---

**The Petition of Stafford Partnership and Mercury Theatres Ltd.**

---

objectives that are built in to his contract and those I have mentioned. It is not intended to be a retrospective approach, it is not intended that you open Crossrail, see what happens, measure the noise, if it is too much, do something. It is intended that it is all done well ahead of that.

4276. I understand that. You and I live in a world where experts have been proved wrong on some occasions. I want to be sure that what you were telling me actually protects Mr Stafford in the way he is requesting and that there is information available, that we will allow Mr Stafford afterwards, if what you say and what the proposals say does not turn out to be true god forbid, to have something to test against because you are giving him an assurance that Mr Stafford and his co-Petitioners will be okay in this respect. I want to be assured that if they are not okay there is a way of then proving that they are not okay. That is what I want to be assured about.

**(Mr Thornley-Taylor):** It is probably helpful to go through the thought experiment of some date in the future, Crossrail has opened and, as you say, some expert went wrong somewhere.

4277. I want you to say yes, what I have just said to Mr Stafford is correct so that is on record for Mr Stafford.

**(Mr Thornley-Taylor):** What you have said is correct, experts can be wrong and I thought it would be helpful, Sir, if I explain what I think would happen should the noise levels turn out to be higher than they should be.

4278. **Chairman:** Mr Mould, how long do you think you will need, Sir?

4279. **Mr Mould:** I do not need very much more because all I propose to do is ask any questions in re-examination and then make a very short closing submission. I do not know how long the Petitioner is proposing to be but I do apprehend he is not intending to be very long.

4280. **Chairman:** I am going to extend the Committee to 1.15pm. Can I put it more succinctly, you have a table, you have agreed the levels, if it exceeds those levels, as down in the table, then there is a mechanism for people who are effected by that to come back and say noise levels are not in tune with the levels prescribed and some remedial activity can be undertaken, as you said, of its wheels and its track. Is that what you said, Sir?

**(Mr Thornley-Taylor):** If it exceeds those levels it will be because want of maintenance although there is a procedure for addressing that, or if there was faulty design, then there would have been a failure to deliver the undertaking and everything that follows from that.

4281. **Chairman:** If you could just say, Mr Carstairs, who you are?

4282. **Mr Carstairs:** My name is David Carstairs. I am a director of Mercury Theatres that operates out of 15 Monmoth Street. Personally I have been in the film and television business now for 30 years, establishing a number of corporations. It is quite interesting because, unfortunately, although I would have considered myself a technical expert maybe years ago, my expertise now lies in pacifying angry American film producers.

4283. **Chairman:** Fortunately, we do not have that.

---

*Cross-examined by Mr Carstairs*

4284. **Mr Carstairs:** Exactly, be thankful. The questions that I wanted to raise, there are two things. Firstly the 30 dB LAmax. It is an interesting one that, because probably if you had asked me 20 years ago, I would have been able to spout off a lot about dBs and volume units and things like that, but they become rather irrelevant when you are at the sharp end of these things, and realistically what you have to look at is what is 30 dB. For example, I do not know if Mr Thornley-Taylor is aware of the fan going in the projector; what sort of level would you suspect that is at?

**(Mr Thornley-Taylor)** Here and now and if we all kept quiet, I would measure about 45, 48 dB(A).

4285. I would say it is nearer 23, 24, but we will not argue. That fan, for example, would not be allowed in the studio, all fans are eliminated, that is the level of quiet that you need in a studio. Mr Thornley-Taylor spoke earlier about studios being designed when in consideration of Crossrail when the studio was built; absolutely right. Technology has changed

dramatically since then; you see it in your home, we have seen it in the studios. Our recording equipment is a thousand times more accurate than used to be. Our old analogue amplifiers have all been replaced digitally, everything is absolutely spot-on quiet. The other problem is we are not talking about a consistent noise levels; consistent noise levels we can filter out, we can apply technology to get rid them. What we cannot get rid of is intermittent noise. That is what we are dealing with here, intermittent noise, it comes and goes. You probably had not heard the fan until I mentioned it. As soon as I mentioned it, you all heard it. When you have a sound that goes on and off, on and off, that is disruptive and that is the problem we have: a disruptive noise which is at a level that could put us in a situation where we would not be able to operate our studio. I have a very competitive marketplace now where things like not laying out the fruit bowl correctly means you can get an angry American actor coming in who is not happy with the fruit because he wanted star fruit and you have got papayas and he is off, gone and will not come back again. Coming in, sitting down, hearing

---

 The Petition of Stafford Partnership and Mercury Theatres Ltd.
 

---

a noise, they are going to say, "What is that noise? I am not working in this. There is a thousand and one other places I can take my work". They are not going to come back, and not only will they not come back, but word will get back to the studios that the work was not done properly and that has impacts on the rest of my business. The other simple thing is about the groundborne noise. I have come ill-prepared; I was not going to speak. Groundborne noise is that noise you would expect at ground level?

**(Mr Thornley-Taylor)** It is a rumble that comes up from underground railways.

4286. At the ground level, presumably?

**(Mr Thornley-Taylor)** No, in any part of the building.

4287. Even if it is underground? If you are closer to source?

**(Mr Thornley-Taylor)** Yes, if you are closer to source—

4288. It will be louder?

**(Mr Thornley-Taylor)** It will be louder.

4289. My studios are in the basement.

**(Mr Thornley-Taylor)** Yes.

4290. Is that taken into account, groundborne level at ground, surface, street level?

**(Mr Thornley-Taylor)** Yes, most certainly.

4291. Okay. At 30 feet, which is roughly the soil depth between the top of the tunnel and the bottom of my studio, you can keep the noise level less than that fan?

**(Mr Thornley-Taylor)** Yes, much less than that fan.

4292. The impact of that not being the case and me not being able to operate my studio in a professional way, it is too late. You say what would you do to stop it? The first client that comes in, I would have to close that studio. If I went in there and sat down and I could hear a train rumbling at a level less than that fan, it would be pointless for me to invite people to come and use that studio because the badmouthing I would get based on that would impact the rest of my business. It would effectively put my studio out of business for a period of time until the noise issue was abated.

**(Mr Thornley-Taylor)** The needs of the studios are very well understood by me and the Crossrail project, because I hope I managed to explain all the technology is there to meet required noise levels. All my evidence is really about is how we deliver on the commitment. 30 dB(A) which applies to the building itself, any space within the recording studio building, is so quiet that in most rooms you hear nothing. You would only hear anything in a special room designed with a very low background noise, and having been designed for a very low background noise it would also provide additional reductions in sound from the building as a whole into that special space. I can reassure Mr Stafford and his fellow Petitioners that the effect of all these measures will be to cause no harm whatsoever to the use of the studio or the acoustical quality of the spaces that he uses. We understand the needs, the technology is fully available and it is fully intended that it will be implemented and that there will be no harm to the business of the kind that we have just heard.

4293. **Chairman:** That is quite a commitment, is it not?

4294. **Mr Carstairs:** It is. I was going to say, we need this before. Once the work commences, we need a guarantee, 100 per cent, not 99 per cent but 100 per cent that noise levels are met. Those noise levels may be a semantic issue as well because we are talking about frequencies as well as constant tones. It is going to become an issue when somebody comes in, they hear a noise of a train or whatever, they will not come back again and that is the problem I have.

4295. **Chairman:** I fully understand.

4296. **Mr Carstairs:** I need a commitment.

4297. **Chairman:** It is probably the broadest commitment I have heard since we started the hearing. Do you want to ask any more questions?

4298. **Mr Carstairs:** No. I would just like to say if he fails to deliver on that commitment, where do we stand because I suspect he will not be able to deliver on it?

4299. **Chairman:** I am quite sure you will remind him. It will be published verbatim.

4300. **Mr Carstairs:** Thank you very much.

4301. **Chairman:** Mr Mould?

---

---

The Petition of Stafford Partnership and Mercury Theatres Ltd.

---

*Further re-examination by Mr Mould*

4302. **Mr Mould:** I do not want to spoil the party, and I am not looking to do so, but there are just two points, Mr Thornley-Taylor, that we need to note. First of all, if we just scroll down, please, on the IP to 2.9, the commitment that we make and which you have really applied to the current case is one that is expressed in terms of being in all reasonably foreseeable circumstances?<sup>23</sup>

*(Mr Thornley-Taylor)* Yes.

4303. I only make that point because the phrase used by the Petitioner just then was “100 per cent guarantee”. We are not in the business of giving 100 per cent guarantees in relation to any matter. I think that is fair, is it not?

*(Mr Thornley-Taylor)* Yes, and I carefully did not use 100 per cent in my comments.

4304. Can we scroll up again, please, forgive me, the paragraph number has momentarily escaped me, but during the construction phase we have addressed in this information paper that brief period of time when the tunnel boring machine will be passing under premises which lie over the tunnels; is that right?

*(Mr Thornley-Taylor)* Yes.

4305. I think it is paragraph 2.4, just explain the position in relation to that, so there is no suggestion of any misleading going on in relation to the construction phase, please?<sup>24</sup>

*(Mr Thornley-Taylor)* The tunnel boring machine, as we heard the last time I was in the witness chair, is likely to be audible during its passage which, for most buildings, will take place over a period of the order of a week or so.

4306. Yes.

*(Mr Thornley-Taylor)* There will be consultation with all affected people so they know when it is coming, how long it is likely to last and it will be gone. This is a transient effect which is not subject to any of the operational criteria that we have been discussing earlier.

4307. If the Hollywood producer can be persuaded to stay away for that fortnight, all should be well?

*(Mr Thornley-Taylor)* Yes.

4308. Thank you very much. There are no further questions unless the Committee has any.

4309. **Chairman:** Mr Stafford, do you want to make a closing summary?

4310. **Mr Stafford:** I am afraid I do not draw a lot of comfort from the last witness statement. It is difficult for me to understand things like decibels and so on, but could I recommend that the Petitioners meet with Crossrail engineers to thrash this thing out without troubling the members today. We all want to go off and have our lunch. Would that be a possible suggestion?

4311. **Chairman:** Mr Thornley-Taylor, you did indicate before that it would be helpful if you possibly could, on the undertakings in the basement foundation, meet the Petitioners at some point to talk to them.

*(Mr Thornley-Taylor)* Yes, indeed, sir. In order to do what you ask which is to do a level two prediction for these premises, I would need to see these premises anyway.

4312. **Mr Stafford:** Firstly, we need to establish the measure and, secondly, we need to draw up some sort of deed which will say that they will perform the task, we have a recourse.

4313. **Chairman:** Mr Mould?

4314. **Mr Mould:** If necessary, just to clarify the position, certainly Mr Thornley-Taylor has indicated, and I have indicated, that we will meet to investigate the building foundations and carry out the work that was mentioned earlier in relation to that. Mr Thornley-Taylor has helpfully indicated that there can be discussions about matters of concern at that time, if that would be helpful to the Petitioners. What I must make clear is that the suggestion that there should be some formal deed dealing with matters that were raised at the conclusion of Mr Stafford’s presentation is not something that we consider to be necessary or appropriate and so if that is a continuing matter of dispute in the context of this Petition, then it is something the Committee will have to consider and rule upon.

4315. **Chairman:** Mr Mould, can I assure you that how members of the Committee will approach it is that in negotiations between Crossrail and all Petitioners that the doors never close in that respect during the course of the Select Committee hearings. We would expect that to continue. I am not suggesting that Mr Thornley-Taylor go away and strike a deal. I have asked Mr Thornley-Taylor to make himself available to go and examine these premises. He said he has done this in other premises but not this particular one, and responded to the request of Mr Stafford to meet and discuss these things there. Again whether any settlement or a deal should be struck or not, that is really between Crossrail and the Petitioners. All we are suggesting is that it might be helpful if Mr Thornley-Taylor did both things at some point which might help in those proceedings.

<sup>23</sup> Crossrail Information Paper D10, Groundborne Noise & Vibration; p 3, para 2.9 (LINEWD-IPD10-003).

<sup>24</sup> Crossrail Information Paper D10, Groundborne Noise & Vibration; p 2, para 2.4 (LINEWD-IPD10-002).

---

**The Petition of Stafford Partnership and Mercury Theatres Ltd.**

---

4316. **Mr Mould:** Forgive me, I was not intending in any way to cut across your helpful suggestion.

4317. **Chairman:** Can I also assure you that we do not really see any need for Mr Stafford or Mercury Theatres to come back at any point to give us more evidence. If any evidence is needed to that effect, Crossrail will decide to notify the Committee.

4318. **Mr Mould:** It did seem to me, if I may, just helpful to indicate through you—and I would have said this in my closing, but it is perhaps unnecessary to say more than that at this stage—that the arrangement for a deed that was touched on by Mr Stafford is, I think, a misunderstanding of the purpose for which the deed is being offered. It is being offered by Crossrail in the context of the settlement issues that arise; you recall it was something that was mentioned by the professor when he gave his presentation. We do not have a similar arrangement in relation to noise and vibration. The way in which we are seeking to deal with noise and vibration is as has been explained by Mr Thornley-Taylor in his evidence to you today. Subject to clarifying that, I hope for the benefit of the Petitioners then I have nothing more to say. We will seek to co-operate as far as we consider to be appropriate and necessary in order to comply with the Committee's views in relation to that.

4319. **Chairman:** That is very clear to me.

4320. **Mr Binley:** You may have dealt with this before and I may have missed it, if that is the case, I apologise. You did mention the specific period when this tunnelling machine is moving under what is a very sensitive business and I think we all recognise that. Mr Mould you said that the petitioners would know of that and maybe they could arrange their business and so forth. That sometimes is very difficult. I did have a business, I do not have it anymore, where that would be almost impossible in order to meet my customer's requirements. What opportunity for help to the petitioners would be in place in those circumstances if those difficulties pertained?

4321. **Mr Mould:** Sir, what we have said, and Ms Bateson is going to find the relevant paper, but from my recollection, we have indicated we will be giving prior notice of the passage of the tunnel. It is set out, I think, in information F3 and clearly the end is to use the jargon as prevention rather than having to cure the situation if we can give people advance notice of this relatively brief period in the day when the machine is getting passed under that premises. That may give them the opportunity to adjust their commercial commitments and so forth, so take account of that.

4322. **Chairman:** Compensation is available for any losses due in that period, this is what you indicated before.

**(Mr Thornley-Taylor):** I do not think I said anything about compensation, it is not my field. What I think is appropriate to say is that we have taken a very pessimistic view of the methods of the boring machine because of experience on the CTRL where it passed through some very hard sand and was audible over some distance. Most of the tunnelling in Central London is through clay, certainly not through soils of the kind that caused the CTRL boring machine to be so audible. I have to say that when the Jubilee Line extension was bored, I am not aware of anybody detecting the passages with the tunnel boring machine. Tunnel boring in clay is a much quieter business. I remain with the position that it will be audible in the way I described but that is taking a very pessimistic view.

4323. **Chairman:** Mr Stafford, bearing in mind Mr Thornley-Taylor has already agreed to visit the basement of your premises and also to do some testing to the course of that, bearing in mind this Committee always encourages the Promoters and the petitioners to try and reach settlements that goes on while the Committee sits along the lines which Mr Mould here has indicated. Does that satisfy you? Do you want to either ask any questions or in summary conclude?

4324. **Mr Stafford:** If I may just conclude. If the Crossrail works offer settlements, why do they not offer a vibration monitoring service because it is very much in their interests, as we have heard, to monitor the noise that is produced by the railway not when it is being built but ten years further on when the noise levels have increased. This is what I would like to see whether or not you can make that recommendation. I would like to leave it up to you. Thank you.

4325. **Chairman:** What I am prepared to do is to write to you along the lines of the question you put to us to see if it is within our abilities to do that, I am not sure whether it is or not. I will write to you and I may, in the course of that, indicate we will do such a thing because we have to, ultimately, make a decision on the whole Bill and then comment on all the petitioners that have been agreed. We will do that, but is there anything else you want to say?

4326. **Mr Stafford:** No, I am very happy with that. Thank you very much.

4327. **Chairman:** I am grateful to you and I am also grateful to Mr Mould, and also the stenographers and the police for sticking with us, we are now 20 minutes over, but I have some good news for the Members. That concludes the hearing today. The other petitioners which were planned for this afternoon have withdrawn because they have settled, therefore, this Committee does not meet again until Tuesday next at 10am in this room.

Tuesday 14 March 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Mr Philip Hollobone  
Kelvin Hopkins

Mrs Siân C James  
Mr Ian Liddell-Grainger  
Dr John Pugh

---

Ordered: that Counsel and Parties be called in.

4328. **Chairman:** Can I start by reminding everybody here that at around about 11.30 or shortly after I will be suspending the Committee for about 15 minutes so that anybody who is either working or visiting here can go along the corridor to get themselves a cup of tea or coffee. I want to re-emphasise to people that 15 minutes is quite a long time to take out of the Committee so if they can not hang around in the corridor, but really just be back here.

4329. Today the Committee will continue to hear the Petitions of the London Borough of Islington, the Confederation of British Industry, the Union Bank of Switzerland and GMS Estates. Ms Lieven?

4330. **Ms Lieven:** Thank you, sir. I am dealing with the Petition of the London Borough of Islington and I think this is largely a good news story, if I can explain to the Committee where we are. First of all, the Committee will remember what is described as the Flatiron Building at 38 Charterhouse Street, which was otherwise described as Fox and Knot Street. Islington appeared on 7 and 8 February, and on 8 February I indicated to the Committee that the Promoters would go away and consider that part of the project and see whether there was any way of saving the building. The Promoters have indeed done that and have talked to Islington about it, and I am happy to be able to tell the Committee that we have been able to draw up an amended scheme that will allow the building to be saved.<sup>1</sup>

4331. I am afraid I have not checked the transcript to check which Members were here on 7 February, so just to explain very briefly in the light of this drawing, the grey shaded area is 30 Charterhouse Street, the building that the Committee was concerned to see whether it was possible to preserve. The large circle is the escape shaft necessary for the Farringdon Eastern Ticket Hall, and, without wishing to spend too much time on this, what has happened is that the shaft has shifted two metres to the east.

4332. The position is, sir, that engineeringly we are content that that is possible. It will cost more money—we think up to £2 million; it will also,

somewhat unfortunately, require an additional provision because land that was only to be acquired at surface level will now need to be acquired at sub-surface level as well. We have got ministerial approval to seek an additional provision, assuming that that is what the Committee would want us to do. What we would suggest to the Committee, making the assumption that the Committee wants us to save the building through this mechanism, is that we will later in the summer promote an additional provision that will allow us to do this but we will do it in that timescale because we want to try to ensure that any additional provisions that are required are swept up together with any more than are already in the pipeline. When I say “later in the summer” I should make it clear what we mean is before the summer recess. We would hope, at that stage, to be able to put together any additional provisions that are required and do them all in one go. As I understand it, that is a provision that is agreed with Islington and they are content with. We hope that that leaves everybody happy on 38 Charterhouse Street.

4333. Can I then move on to the other issue, which is that Islington were concerned about the level of integration between the Thameslink 2000 and the Crossrail station. That was the issue that they were intending to bring to the Committee this morning. Now, those of the Committee who were here on 7 February may remember my saying, briefly in opening, that there was a very complicated relationship at the Farringdon Western Ticket Hall between Thameslink 2000 and Crossrail. To encapsulate it, when the Crossrail project was being worked up in 2002 it was assumed that Thameslink 2000 would be well under way by the time Crossrail came along. That assumption proved to be incorrect; Thameslink 2000 has been delayed, so the scheme being promoted before this Committee is for a ticket hall for Crossrail at Cardinal House. Islington were concerned that there was insufficient integration, and I am happy to tell the Committee that we have reached an understanding with Islington on various different scenarios that might happen, depending on the timing of the two schemes and on what level of effort will be made to make an acceptable ticket hall.

4334. It is, at the moment, a Memorandum of Understanding. We only reached that agreement about 15 minutes ago. What we would propose to the Committee is that neither side will present

<sup>1</sup> Crossrail Ref: P59, Fox & Knot Street Shaft 38 Charterhouse Street Retained Worksite Layout Stage 2 (ISLNLB-20804-056).

---

**The Petition of the Mayor and Burgesses of the London Borough of Islington**

---

evidence or say any more this morning. That Memorandum of Understanding will be taken away by the lawyers and turned into an undertaking. It was not possible to get it into quite the right legal form this morning. So formally Islington will adjourn that Petition but there are no issues between us—it is literally just turning it into a legal document. The reason I have done this all shortly and orally rather than showing the pictures is that the Committee does not need to concern itself with the rather complicated issues around the two ticket halls. I hope that is a satisfactory way forward.

4335. **Chairman:** Mr Honey, are you okay with that?

4336. **Mr Honey:** Yes, sir. If I can just respond to those two points very briefly. On the first one, in relation to No 38, we are very pleased to note that those proposals have ministerial approval. Indeed, Islington Council supports them as well, so we would therefore urge the Committee to give their assent to that and welcome it as a step forward. As far as that is concerned, we anticipate that there will be an adequate resolution when the additional provisions are promoted, but, sir, we just say that we reserve our position to come back in the unlikely event, for whatever reason, that the additional provisions are not promoted successfully. All I would simply note, at this stage, is that now that the building at No 38 Charterhouse Street does not need to be demolished under these proposals, the other alteration to be made is to omit the building from Schedule 8, which is the list of buildings to be demolished in the conservation area. So that will need to be the other measure which will need to come along as well as the additional provision to the Fox and Knot Street worksite. So, sir, we would urge the Committee, on behalf of those in Islington, to welcome this as a step forward.

4337. On the Western Ticket Hall, I can be very brief on this, sir, and just say simply that we have reached an understanding which we believe can be firmed up into a legally binding undertaking, and expect that can be done. On that basis, we do not believe there is any need to trouble the Committee with the evidence today. Indeed, we hope we would not need to come back at all. On that basis, sir, we would ask for your consent to adjourning the hearing, as the Promoter has suggested, to allow the undertaking to be completed between the Agents, in anticipation of this being an end to the matters that Islington petition.

4338. **Chairman:** Thank you very much indeed. Ms Lieven, can I say, on the last point, we do not have any difficulties at all. On the former point, the £2 million extra provision, I cannot, from the Chair, here today authorise that. We, as a Committee, will meet in private to discuss that and, also, liaise with

the Department, and we will let you know, but I see no reason to delay the Committee at all and accept the proposals put forward.

4339. **Ms Lieven:** Sir, as far as the £2 million is concerned, it is obviously, ultimately, a matter for the Department; it is a matter for ministers to take into account very carefully in deciding whether or not to agree to promote such an additional—

4340. **Chairman:** Technically so, but it is also the prerogative of this Committee to decide whether or not we agree to £2 million of public money.

4341. **Ms Lieven:** I am grateful, sir. In those circumstances, what that means is that you need hear no evidence on Islington's Petition. The CBI are only attending at 11 o'clock, and there seems to be some indication that they wish to talk to us when they arrive. In some sense I apologise for the fact that yet again the Committee is going to have a truncated time this morning. In another sense, it is all to the good because we are doing what the Committee wants, which is talking to people, and, unfortunately, it often happens at the last minute. What Mr Mould, who is appearing for the Promoter on the CBI's Petition, suggests is perhaps the Committee can come back after the morning break at 11.45. That gives time for the CBI to attend and, also, for us to have a quick discussion.

4342. Can I say to the Committee, we have been discussing with Petitioners such as Islington and the CBI very intensively in recent days. I would not want the Committee to think that we have just come here this morning and this is the only time we have talked to them, but there is a reality by which it is only at the door of the Committee room that minds really seem to focus on what can and cannot be argued about.

4343. **Chairman:** And the other two Petitioners?

4344. **Ms Lieven:** Sir, I think Mr Honey wants to say something and perhaps withdraw.

4345. **Mr Honey:** I am sorry to interrupt, but just before we move on to the other matters today, just to make it clear to the Committee that if for whatever reason the Committee does not approve the proposal in relation to No 38 we would like to come back and continue our case on that matter.

4346. **Chairman:** Mr Honey, certainly you have made that point quite clear to us.

4347. **Mr Honey:** Thank you very much, sir.

4348. **Ms Lieven:** Mr Mould is going to tell you about the other two Petitions, sir, because I will get it wrong.

4349. **Mr Mould:** That is a very rash statement! Yes, sir, on the CBI, just to echo the point that has been made by Ms Lieven: the issues between us

---

The Petition of Confederation of British Industry

---

have narrowed considerably. If you were mindful to take the course that has just been suggested—and I say this and I know this is always a hostage to fortune—I do not think that is going to prevent us from dealing with their Petition during the course of today’s proceedings.

4350. As to the other two, my instructions are that both GMS Estates and UBS have been in fruitful discussions with the Promoter and their representatives, and the result of those discussions is that assurances have been offered which we understand are satisfactory and will enable them to withdraw their Petitions. We have not had that formally confirmed to us as yet. It is, of course, ultimately for the Petitioners to indicate formally what their position is in relation to appearances before this House, but that is my understanding. We expect that the representative from each of those Petitioners will either appear later on today to indicate that that is the position, and, subject to formalising the assurances in a formal document between us, that would satisfy their concerns, or alternatively that a formal message to that effect will be relayed to the Committee either by us or through the agents.

4351. **Chairman:** If it is possible for the Promoters to get in touch with them and let us know before the end of this morning’s session that would be very helpful.

4352. **Mr Mould:** I am sure that would be possible. I have already, in fact, asked for indications to be made in order to clarify precisely what the position is.

4353. **Chairman:** Explain to them that today is the first day of Cheltenham, and it would be very, very helpful.

4354. **Mr Mould:** When is the first race of the afternoon?

4355. **Chairman:** Two o’clock.

4356. **Mr Mould:** That certainly gives me an indication of the need for succinctness. I hope that is convenient.

4357. **Chairman:** That is convenient. We will take your advice and we will adjourn until 11.45. Thank you very much indeed.

*After a short break*

4358. **Chairman:** Ms Lieven, the Committee has had a look at your proposal re. number 38, and just to let you know that we are quite happy with that. We have to liaise with the Department but, bearing in mind we have to wait for that, everything seems to be fairly positive, so if you can let your counterpart know that we are minded to approve that, subject to reference from the Department.

4359. **Ms Lieven:** Certainly, sir.

The Petition of Confederation of British Industry.

Mr Richard Harwood appeared on behalf of the Petitioner.

4360. **Chairman:** We will now move on to the Confederation of Business Industry. Mr Mould, do you wish to make an opening address?

4361. **Mr Mould:** Yes, sir. I will just set the scene in the way that we have come to do, and I think I can do it very briefly indeed. The Confederation of British Industry Petitioners occupy and are leasehold owners of the first and second floors at Centre Point, which is a building that will be familiar to the Committee, at the junction at the top of Charing Cross Road and Oxford Street. Their leasehold interests and occupations, as I understand it—and Mr Harwood will confirm this—embrace the first and second floors in the Tower Block at Centre Point, the Podium Block and the Link Block, which is the bridge over St. Giles High Street. I will ask Mr Fry if he will just put up a document, and this is the second document, plan C1.9 in volume 7 of the Environmental Statement.<sup>2</sup> This is a plan which is convenient in that it shows you the finished permanent works at Tottenham Court Road in relation to Crossrail, and indeed the improvement to the London Underground Station, with which the Crossrail scheme interlinks at this point. You can see Centre Point Tower which has the word Centre Point, and you see the footprint of the Tower on that plan. Then you can see St. Giles High Street and you have the Bridge element going across St. Giles High Street. Then the Podium block is the block which is shown to the east of St. Giles High Street, and although it is not marked you can just see to the east of that, at the top right hand corner of the plan, there is an entrance to a street, unmarked, and that is Earnshaw Street, which you may hear mention of in the course of the hearing today. So that gives you a sense of the *locus quo*.

4362. So briefly to summarise the position in relation to the permanent works, what you need to know for today’s purposes is that in this location the Crossrail project is combined with improvement works to the Tottenham Court Road Underground Station, and you are familiar with that station and you will know that it is a much merited station for improvement. The London Underground ticket hall will be replaced with a new ticket hall and with new entrances to be provided near Centre Point itself, with an additional bank of escalators leading to the Northern Line and Crossrail platforms and improvements to make the station accessible for the mobility impaired. You can see the new entrances at street level on this plan and you can see, moving from the west, the new St.

---

<sup>2</sup> Environmental Statement, Volume 7, Plan C1.9, [billdocuments.crossrail.co.uk](http://billdocuments.crossrail.co.uk)

---

**The Petition of Confederation of British Industry**

---

Giles Circus entrance which is at the at the corner of Oxford Street and Charing Cross Road. Then two new entrances just to the east of Centre Point Tower itself, the Southern Plaza entrance, which is being marked now, and I think what ought to be the North Plaza entrance but also marked the Southern Plaza entrance. Then the Dominion Theatre entrance, which is an existing entrance, that is to be retained just to the north of New Oxford Street. The Hornes Corner entrance, which Members may be familiar with, which is just on the other side of Tottenham Court Road at that point, is an existing entrance to the London Underground Station, is going to be removed as part of the improvement works.

4363. Sir, as is clear from that, the area just to the east of Charing Cross Road and the west of Centre Point Tower itself is going to be subject to substantial works, but the effect of that is to improve the quality of access to the underground station and indeed to Crossrail, which will be served by those same escalators to the eastern ticket hall, and it will provide the opportunity to make improvements to the public realm generally because part of the process is that that area should be comprehensively landscaped for the public benefit; and, indeed, just to the south, just along the line where the Southern Plaza entrance is, there is an existing highway known as Andrew Borde Street. That highway is proposed to be stopped up to enable the public realm improvements to be implemented. So the message is that there is a good deal of work to be done at this location, both in relation to the London Underground improvement scheme and Crossrail eastern ticket hall proposals. The outcome of that is expected to be considerably beneficial, both in terms of improvements to the transport infrastructure here, to the travelling public, to the public realm generally and of course—and I know that this is a point that the CBI will themselves make—it will obviously improve the transport links and accessibility and the environment here for those who occupy premises in the vicinity.

4364. Sir, the only other point to make is that in order to achieve that result it will be necessary to carry out substantial works. If I could ask Mr Fry to put up Map.C5(ii) in volume 4a, the Environmental Statement?<sup>3</sup> Sir, we have enlarged on to the junction of Oxford Street and Charing Cross Road and you can see Centre Point marked, shaded in the purple shading, and just to the east of that you can see the worksite arrangements that are proposed to enable the London Underground and Crossrail works to be carried out. That is in the grey cross hatching, and you will see that there are effectively three worksites: to the west of Charing Cross Road there is the Astoria worksite to the north and the Goslett Yard worksite to the south; then to the east of Charing Cross Road and indeed extending across Charing Cross during the

course of the construction works is the Charing Cross worksite itself, which is immediately adjacent to Centre Point.

4365. This brings us finally to some of the issues that you are going to be hearing today. One of the effects of operating those works is that there will be a period of some years—I think the overall period of the construction pace here is some five to six years—and for a fairly substantial part of that time Charing Cross Road itself will be stopped up to the traffic, and it will be necessary to have a series of transport phasing arrangements, which will enable traffic to circulate in this area, which is a busy part of Central London. Mr Anderson is going to explain to you in a little more detail later what is effectively an eight-stage phasing process that will enable traffic to circulate and access to be gained to properties in the vicinity, and I will leave that to him. Just to give you a flavour at this stage of, if you like, the scale of activity, I hope that the plan and what I have just said is an indication of that.

4366. Sir, that is all I want to say by way of brief introduction to this Petition and I will hand over to Mr Harwood to set out the issues.

4367. **Mr Harwood:** Thank you. Mr Chairman, the Confederation of British Industry is the UK's "voice of business"; we represent some 200,000 firms across the country. In that capacity we strongly support the Crossrail project. We appear in front of the Committee to ensure that we can continue our role effectively by protecting our headquarters at Centre Point. The CBI occupies, as Mr Mould has said, as leaseholder the first and second floors of the Tower, the Link and the Podium buildings—you can also see that at CBI 7.<sup>4</sup> The Link building, which bridges St Giles High Street, is where the CBI's conference facilities are based; and in the Podium block, also referred to as Centre Point House, the first and second floors there, there is residential accommodation, not connected to us, which is above that. The CBI facilities are used as offices, for meetings with businessmen and senior politicians and as a conference centre. The Centre Point Plaza and a set of stairs at the front of the building, where there is access to the first floor, will be acquired for the project and Centre Point and CBI will be next to the Tottenham Court Road worksite for some five years, and works, including highway works, will be taking place around all sides of the Tower at different stages.

4368. We will call two witnesses, Sir Digby Jones, the Director General of the CBI, and Mr Simon Handy of Waterman Environmental.

4369. Sir, I want to briefly explain where we have reached in discussions with the Promoter and the issues which we bring to the Committee. The CBI

---

<sup>3</sup> Crossrail Ref: P10, Tottenham Court Road Station; construction works and impacts (LINEWD-ES16-026).

<sup>4</sup> Committee Ref, A51: Plan demonstrating the current layout of Centre Point—CBI 7 (CAMDLB-6705-007).

---

**The Petition of Confederation of British Industry**

---

sent a proposal for settlement on 14 February, which is document CBI 13. Following a meeting the Promoter replied on 6 March, their document number one. We then sent a draft undertaking to the Promoter on Friday 10 March, reflecting what we had understood to be agreed and certain matters which we wanted to secure. That document is CBI 14. Just after 6 p.m. last night we received a further letter from Crossrail. What was perhaps unfortunate about that letter was that a number of the matters which had been agreed, as we understood it, had seemed to be withdrawn and a number of issues were left unclear. There have been further discussions outside the Committee this morning and they have clarified issues somewhat, and I will pick those up as I go through.

4370. Turning to our first issue, which is access. Adequate and attractive access has to be maintained to the Centre Point Tower for pedestrians, vehicles and, in particular, for the dropping-off of VIPs, including politicians. The Crossrail 6 March letter confirmed, “Vehicular/pedestrian access will be maintained throughout construction.” The 13 March letter merely says that the nominated undertaker will “use reasonable endeavours to maintain vehicular access to the premises, including ‘reasonable endeavours to allow deliveries at pre-arranged times where round-the-clock vehicular access cannot be made available’”. The assurance on maintaining pedestrian access to the Tower has been replaced by the reference to the Crossrail Bill’s requirement of reasonable access if there would otherwise be no access. That does not explain quite what is meant because what is important to the CBI is access through the current main entrances, which are on the ground and first floor of the Tower. There is a car park access from Earnshaw Street and that goes under St. Giles High Street, but that is not an attractive access; and also potential accesses which are not used through the Podium—that simply links into the CBI rather than anything else. But proper access has to be via the ground and first floor of the Tower. We had been told on 6 March that this pedestrian access could accommodate over 400 people per hour entering and leaving the building, but that point is not addressed now by Crossrail. The specifications that we propose for the temporary footways are described by the Promoter as “premature”, so we do not know whether these routes will comply with the Disability Discrimination Act—the width of the routes, whether they will be illuminated, whether CCTV will be provided or whether the footpaths will be suitably built and drained. In addition, the Promoter has merely proposed reasonable endeavours to provide vehicle drop-off points.

4371. 4371. On noise and vibration the CBI is concerned about the effects of airborne and groundborne noise and vibration on its operations, including conference business. Crossrail have agreed that the CBI will be a special case for the purpose of the Noise and Vibration Mitigation

Scheme; that it is a particularly sensitive structure in relation to airborne noise; that a Noise Mitigation Package will be prepared; and that the lecture theatre level will apply to the conference centre. That that standard will be applied to the construction of the railway and to the permanent railway when that is in operation.

4372. The outstanding issues are whether the Promoter will ensure that the lecture theatre standard is met or merely undertake reasonable endeavours to meet that standard, and whether Crossrail would be prepared to relocate the CBI if noise and vibration could not be satisfactorily resolved in practice.

4373. On dust the CBI are content with Crossrail’s general proposals.

4374. On settlement, Chairman, part of the Centre Point Tower and the Podium will suffer more than ten millimetres settlement. Following discussions this morning it is apparent that Crossrail will be prepared to enter into a settlement agreement with the CBI. What is not now agreed is that Centre Point should be a Risk Category 3 building. Our concern on that is the effects of differential settlement on the Link building, which is supported at two ends by the Tower and Podium. If one element goes down we consider that the risks of damage to the Link building are increased, and that that has not been properly considered. The reason we want the Category 3 is because that allows protective measures to be agreed between ourselves and Crossrail under the Settlement Deed.

4375. The final matter we would raise on our proposal is to ensure that we have protection for ongoing repairs. It is important to maintain the quality of the conference centre and the quality of the rooms used for important meetings. So there should be ongoing repairs while settlement is progressing. We have discussed that outside the Committee and how the Deed allows a mechanism for that to be done, subject to expert determination, and we will be content if the Promoter acknowledges that there are particularly sensitive uses which require a high standard of internal finishing. Chairman, the issue that really remains between us on settlement is Risk Category 3.

4376. Turning to environmental protection, the Bill authorises the carrying out of works which are described in general terms in schedule 1, within the limits of deviation shown on the deposited plans. For Centre Point it simply says that there will be two railways in tunnels and a station at Tottenham Court Road. The Environmental Statement contains vastly more detail about the design scheme, how it will be built and how adverse environmental effects will be mitigated. But the Bill does not require the scheme to be designed in that fashion, or built in that way, or environmental effects to be mitigated as proposed. Many potential Petitioners will have been reassured by the

---

**The Petition of Confederation of British Industry**

---

Environmental Statement, and for those who have not much of their time and much of the time of this Committee will be spent on the scheme and the impacts described in the Environmental Statement.

4377. The Environmental Impact Assessment process requires the developer to explain at the outset, so that the public can comment on the effects and an informed decision can be reached. Environmental Impact Assessment only has value if what is built is based on what it says. Mr Justice Sullivan who, when he was at the Bar, promoted the Channel Tunnel Rail Link Bill, said this in the leading Environmental Impact Assessment case of *R. v. Rochdale Metropolitan Borough Council ex parte Milne*, and the Judge said, "... the development which is described and assessed in the Environmental Statement must be the development which is proposed to be carried out, and therefore the development which is the subject of the development consent and not some other development." The Court of Appeal subsequently emphasised, in a case *Smith v. Secretary of State*: "Constraints must be placed on the planning permission within which future details can be worked out, and the decision-maker must form a view about the likely details and their impact on the environment." So, Mr Chairman, the consent for the project should fix the scheme in sufficient detail that the likely significant effects cannot be changed. This is often done in planning permission and was done in the *Milne* case, by planning conditions fixing the main parts of the design and requiring mitigation to be carried out in accordance with the Environmental Statement.

4378. The Promoter does point on this topic to the power of local authorities to approve measures under schedule 7, but those measures may be different to those in the Environmental Statement and relate to a different design. The Environmental Minimum Requirements do not require the design and mitigation to be as assessed. The Secretary of State merely expressed this as a heavily caveated intention that the impact be assumed in the Environmental Statement. Those requirements are not enforceable by anyone other than the Secretary of State in any event.

4379. We therefore propose an amendment to require the project to be carried out in accordance with the Environmental Statement, except as amended by Parliament, by undertakings given in the course of these proceedings, or in a limited fashion by subsequent approvals from the local authorities. These reflect the practice of Environmental Statements in planning matters. Mr Chairman, this amendment, and our other amendments, is in the document CBI 15.

4380. Turning to the final issue of compensation, the CBI is concerned that the Crossrail works would harm the value of its lease and, in particular, the conference centre business. These conferences are usually not connected with the CBI and take

place in a competitive market for Central London conference venues, where the amenity of the area is important. If this loss is caused—a loss of conferences, for example—by an impact that the CBI could have sued over if there was not statutory authority, for example a noise at such a level in such a way as to be a nuisance, then compensation under section 10 of the Compulsory Purchase Act 1965 could be recovered. The Committee will recall discussing that compensation on Smithfield Market Traders' Petition two weeks ago. The CBI's fear is that considerably lesser impacts could make the conference centre unattractive and increase other costs.

4381. Mr Chairman, if part of a piece of land is acquired the owner may recover compensation for the loss in value of the remaining land adjacent to that, caused by the works of the project, or their use under section 7 of the Compulsory Purchase Act 1965. The remaining land is called in the jargon "other land". By the Land Compensation Act 1973 the loss need not have been caused by the works on that particular piece of acquired land, but can be caused by the project as a whole. Section 7 compensation does not rely on actionable harm, something that could otherwise have been sued upon, but merely any effect of the scheme. Part of Centre Point is being acquired, that is the Plaza and the stairs to the front mezzanine entrance. The freehold owners, who are Centre Point, would therefore be able to make a section 7 claim if the value of the remainder of Centre Point fell because of the Crossrail works. So if the owner of Centre Point was hiring out the Link for the conference centre business and that business suffered because of the works then they would be entitled to section 7 compensation for the loss and value of that part of the building. However, the CBI, as leaseholder of that particular part of the building, the Link, would not be entitled to section 7 compensation, despite suffering the same loss to the conference business from the same cause. Mr Chairman, this is an anomaly which is unfair and can be simply and modestly corrected. Again, we have produced an amendment to do this.

4382. The second compensation amendment note relates to the loss of profits, which includes increase in expenditure as well as loss of income. A loss of profits will not be fully reflected in a diminution in the value of the land, as there will be income, expense and profit associated with carrying out the activity as well as the hire of the property. So, for example, catering by the CBI at its conferences generates an income and there may be additional costs incurred by CBI, for example for staff retention, which do not increase income, arising from these works. So, sir, we suggest as the second element of compensation proposals that section 7 compensation should be extended to provide directly for the loss of profit.

---

The Petition of Confederation of British Industry

---

Mr Chairman, unless I can help you further at this stage I propose to call the CBI's first witness, Sir Digby Jones.

---

Sir Digby Jones, Sworn

Examined by Mr Harwood

4383. **Mr Harwood:** Are you Sir Digby Jones?  
*(Sir Digby Jones):* I am.

4384. Could you explain your role at the CBI, please?

*(Sir Digby Jones):* Yes. I came to the role something like just over six years ago, having been a senior partner of a commercial law firm, Edge Ellison, and then worked for KPMG for 15 months in corporate finance, and then joined this job on 1 January 2000. My job is the Chief Executive of a not for profit membership organisation, entirely funded by membership subscriptions and commercial income from seminars, conferences and dinners, surveys and the like, and we promote socially inclusive wealth creation wherever a business operates in the world and particularly companies that operate in Britain, regardless of where their headquarters are, or British companies operating in all of the overseas markets in the world.

4385. Thank you, Sir Digby. What is the CBI's view in general terms of the Crossrail project?

*(Sir Digby Jones):* We are very supportive of the project—indeed, lobbied Parliament and ministers to get to this stage. We see it as hugely important and vital to the long-term interests, and a much-needed improvement to transport infrastructure both in London and also around the country by virtue of the fact that London is so important to the UK economy. The issue of who bears the cost of the project has not been resolved amongst my members yet, and there are some concerns from different sectors, but we are keen to see the completion of the enabling legislation for the construction. But the reason we are here today and we are petitioning on the Crossrail Bill is that, as you have heard, the construction is going to impact seriously on our main headquarters, situated in Centre Point, adjacent to the tube station. It is solely the impact of the construction and the operation of Crossrail on our use of our home that concerns us here, not whether it is a good or bad thing.

4386. Could you explain what the CBI's interest is in Centre Point?

*(Sir Digby Jones):* We are a tenant. We have been there since 1979. We are the flagship tenant. Whenever you read of Centre Point in the newspapers, it always says, in parentheses, "the home or headquarters of the CBI". At one stage we occupied nearly all the building; we now occupy two floors, and we are, if you like, the lead

covenant of the building. The office complex consists of the tower—which everybody knows; the one shown on the plan CBI—and also the additional office space around the loop in Centre Point House. That is to the east and separated from the tower across St Giles High Street. The bridge across—and if you work in the building you do not even think of it as a bridge, to be honest—is part of our tenanted premises.

4387. We can see that on CBI 4.<sup>5</sup>

*(Sir Digby Jones):* Yes. If you are inside that bridge, you would have a very good view out, across, to bottom left, the plaza. People would be in there, attending receptions, listening to seminars. It is very much used by members of the business public coming for various events.

4388. Is there anything special about the way in which the CBI uses Centre Point?

*(Sir Digby Jones):* Yes, it is different. Someone once said that if the CBI did not exist someone would invent it. We have about 170 staff there. It is important for people to realise that it is just not a normal office where people go to work every day. Firstly, because people are kind enough to say we are the voice of UK business and because we are internationally recognised in many markets, we do have a very large number of VIP visitors attending on almost a daily basis. It is public knowledge that on Thursday this week we have His Royal Highness the Prince of Wales coming for a lunch. He is going to be in that bridge that you can see there and I will welcome him on precisely that plaza which you were showed earlier. That is a very good example of what will happen. Easily once a week, dignitaries will attend: prime ministers, chancellors, presidents of other countries, commissioners from Europe—you name it, they come to the CBI—and either I or my President will welcome them outside, usually with the press very much in attendance and the cameramen. It is important to them for their domestic audience, back in whichever country they come from, and so there is a little bit of advertising for Britain in an overseas market if such a politician or leader from another country visits us. That is not unusual for us. We tend not to think of it as something which makes us unusual: it is our normal day-to-day work. The problem is that in a case like this we are seen as a tenant with tenant's issues. We have far more than tenant's issues, actually: I would say the country has a problem because of the very special nature of what we do.

---

<sup>5</sup> Committee Ref, A51: View of Podium taken from St Giles' High Street—CBI 4 (CAMDLB-6705-004).

---

 The Petition of Confederation of British Industry
 

---

Secondly, we have a very special type of staff. I run it as a “business”. Because it is not-for-profit, we do not actually run it to make a profit. It is members’ money, not ours, and we have no shareholders, but we do attract very, very clever, hardworking people as policy advisers, as specialists in their field. What I would call the people who run it day-to-day, it is probably 10/15 people out of 170—it us under 10 per cent of our overhead—and then everybody else, in one way or another, is linked into the policy work that we do, which you read about in newspapers everyday or indeed in the relations one way or another which the membership has with all types of businesses. The problem we have is that it is a place of research, it is a place that needs quiet, it is a place that needs considered reflection, and, frankly, what is being proposed is absolutely the antithesis of that. Also, people work at the CBI for reasons other than money. Every day, so many of my people get offers from the private sector, for often double what they are on to go and do much the same job in the City or elsewhere. They do not. One of the reasons they do not is the environment in which they work. It is the quality of what they do, it is where they live, it is how much they are appreciated, but it is about the environment in which they work. If this is to happen, the only way I would get them to stay for a five-year period is a serious increase in the dosh we offer, so that they would not be tempted away. That would add to the cost of the CBI to the point where, frankly, the CBI would not exist in its present form at all. It is the nature of such a person, who comes to work everyday in that building, that I hope would be appreciated. The other point you have already heard this morning is that that bridge to the left of it and the first part of the tower is a premier quality conference centre. We rent it out. I would say that a vast majority of the events that happen there are ones that are of a commercial basis. We do not have a say over the content of them. They use it for seminars and conferences and lunches. It is very convenient in so many ways. In fact, I have to say, at the end of the day, one of the reasons the Crossrail project is going to stop off at Tottenham Court Road is because of the fact that it is such a convenient place. That is definitely something which would be prejudiced. You would not see a decrease, because in the highly competitive conference location market in London of that type there would not be a decrease in the amount of bookings and business that comes in, but a fall off the end of the cliff, first day, because people can go somewhere else. Any particular point that puts that choice into the “too difficult” box and they go elsewhere, so, overnight, whatever is planned will kill that conference facility completely—and it is no good thinking about how much would it be reduced by: it just will not exist.

4389. Sir Digby, could you talk us through how Centre Point is accessed, please?

*(Sir Digby Jones):* Staff, guests, members, people coming to our conference centre, and, indeed, all the other tenants in the building which have

nothing to do with CBI, will all come in from the ground floor, which we can see on CBI 3,<sup>6</sup> at the front of the white van which is facing forward, the one in the background. They would then turn right (roughly behind that guy’s head) and into a door there. The visitors to the conference centre would then turn left inside, go back and come up some stairs to the left of the building. The staff would then go right in that entrance. At the far right concrete column, there will be some lifts, and they will take you up to floor 1, 2 and presumably further up for other tenants. There is a drop-off point where you can see that the other white van is parked. They would come in, and drop off there. The plan was for cars to come in there and go right through the front of that porchway, but security, rightly, has dictated that cars are kept away from the immediate vicinity of the building, so they come into there, drop off and come away. Underneath, right down below there, is one of the station accesses for Tottenham Court Road tube station which you saw on an earlier plan. To the left of that white van you can see the steel banister of the stairs coming up from the Tottenham Court Road tube station, so the staff of the CBI and others coming into the building would often come up there and just walk around into the building.

4390. Thank you. You have said quite a bit about the conference centre, but could I ask you one further question: what is the capacity of the conference centre. Do delegates tend to spread out over the day or at particular times?

*(Sir Digby Jones):* They arrive just before the particular conference is due to start. You would have them, by and large, coming in for a nine o’clock start, or, if it was an afternoon conference, at about two or 2.30. Lunch is always involved: you either have it at the end of your conference or the beginning of your conference. The bulk of the use is for day-time independent conferences. We use it a lot in the evenings for the dinners, private dinners. Just last week, on one evening, we had three permanent secretaries and about six or seven heads of multinational businesses at chairman level for a private dinner in that building. That is not unusual. The independent use of the conference centre we would reckon at the moment is contributing about £400,000 to our cost of running the CBI. That would just disappear overnight.

4391. What is the capacity of the conference centre? How many people can it seat?

*(Sir Digby Jones):* If you maxed it out, if you used the Methven Room and the part that is specifically over the bridge, you would probably have about 400 people an hour flowing, but you would have about 200 people into the Methven Room and you could probably get about 50 each into the four smaller rooms.

4392. Can we turn to the petition issues. What issues is the CBI raising?

---

<sup>6</sup> Committee Ref, A51: View of Centre Point taken from Charing Cross Road—CBI 34 (CAMDLB-6705-003).

---

The Petition of Confederation of British Industry

---

*(Sir Digby Jones):* As you heard earlier, we are in deep consultation with the Promoter about our concerns. We are making progress. They understand a lot of the issues: it is not a question of getting them to understand our problems. Our concerns are around access, they are around noise and vibration, settlement and environmental protection, and they are around what are we going to do financially if this happens without compensation. At a detail level, they have already been conducted to a level of the Petitioner description. Our view is that the Bill over which you have such influence should contain specific provision to protect our interest at Centre Point. It is special and it is different. Most of our proposals could be of value to the landlord; they definitely could be of value to other tenants in the building; and they are so special it almost impacts on the delivery of what we can do for British business in the country as a whole.

4393. What are your concerns about access?

*(Sir Digby Jones):* You can probably tell from that that we need 24 hours a day convenient public access to Centre Point. By convenient, I would also use the word “safe” and I would use words that describe encouraging people to come. So often, business is accused of being aloof and not in touch. I have encouraged so many people to come to Centre Point, to come and see the CBI, to get involved. I have said to school kids, “come and see what wealth creation is really about.” It is no good if a promoter says, “I will make a little path available and you will have a bit of temporary lighting, and it will look pretty dreadful in the day time, let alone be safe at night.” That is just not good enough for the emblematic role that we play. Somehow, for five years, we have got to say, if we are going to welcome the president of a major nation, if we are going to welcome the Prime Minister, if we are going to welcome royalty: “Here we are. We are the voice of British business. Welcome to a building site.” That is probably not the way we want the country displayed around the world on television. It has to include something that caters for that issue and it has to be of sufficient capacity and quality to allow access for that conference centre business which is at different times of the day and for different types of consumer. Also that conference business does have a need for equipment. We do not go in for big arctics, cars, excavators and the like, but we certainly go in for a lot of display material and signage—stuff that is just difficult and awkward—and it is somehow going to be able to cater for that as well.

4394. What are your concerns about noise and vibration?

*(Sir Digby Jones):* Anybody who has been in CBI for the last six years would speak as a veteran of noise at Centre Point, because three or four years ago Centre Point underwent substantial refurbishment. The lifts were changed completely, so was the whole of the front of the plaza and inside

as well. Formerly, we used to go up those white bannistered stairs shown on CBI 3, behind the cars, but we do not any more. All through that time—which was some months—the drilling, the vibration, the dust, the muck were dreadful. Absolutely appalling. You could not concentrate. You certainly could not hold meetings. I would probably get a camera crew from a television station coming in to interview me on a weekly basis or to interview one of my senior staff on a weekly basis. They could not do it. You just physically could not have that type of activity. The only reason we held it together—and I have to say we compensated everybody for turning up to work—we did that—was because it was a relatively short, finite period—it was months, not years—and it was awful. If I have to say to my staff, “By the way, you know what you put up with in 2002/03 for a few months, you are going to have it for five years,” I could give them a P45 and that might be a quicker way of doing it.

4395. Can we turn to settlement.

*(Sir Digby Jones):* Could I add one thing on vibration. I am pleased the Promoter is sensitive to the operation of the railway afterwards as to what they do. You did mention in your summary at the start about how they would bring it up to standard. Obviously we would rely on their undertaking to do so and some form of performance criteria and sanction if they do not. At the moment, we have nothing from the Promoter in respect of any form of compensation, accommodation or dealing with the period while they are doing it. Because it is such a long time, that is as big an issue—in fact, in many ways bigger, because by the time it is over I will not have a staff left.

4396. On settlement, what are CBI’s concerns?

*(Sir Digby Jones):* We think settlement and damage to space would be probably more serious than envisaged by the Promoter. This is normally a landlord’s concerns, not normally ours, but we are unusually exposed as a tenant because under the terms of our lease we do have a repairing responsibility. If you could go to CBI 4,<sup>7</sup> please, we have repairing responsibility for the glazing on the bridge. Every bit of that glass there is down to our bottom line, and so we do look at that with some concern when we hear there is going to be naturally settlement occurring, movement, distortion—which I guess means we are going to pay for the whole of the replacement of that glass. Secondly, it is essential for the special nature of our conference centre business that we maintain the whole of the building to a very high standard and we think that regular repairs are going to be needed. For less sensitive use, if I may use the words “normal office use”, regular repairs would be acceptable. It is not going to be acceptable, for all the reasons I have already said, if, because of settlement, we are going to have constant regular repair to the fabric of the building.

---

<sup>7</sup> Committee Ref, A51: View of Podium taken from St Giles’ High Street—CBI 4 (CAMDLB-6705-004).

---

**The Petition of Confederation of British Industry**

---

4397. Turning to environmental protection, does the CBI have concerns about the general environmental protection provided by the Bill?

*(Sir Digby Jones):* It places little specific environmental protection on the Promoter. The environmental statement prepared by the Promoter presents a comprehensive view of what I think should happen during the construction of the railway, but there is no requirement for the Promoter to ensure compliance with it. The Promoter proposes the nominated contractors will comply with the Environmental Management Plans, but these are not required to be consistent with the Environmental Statement. So you have a disconnect. You have what they say is good, "Let's do it," but then there is no way in which we sitting there could enforce that and, indeed, there is no compliance mechanism. There is another reason why that matters, because we at the CBI worked very, very hard over the last few years to fight the battle to get people to understand that the average business in Britain does not want to go around throwing muck in the river and contributing to global warming, but, by the very nature of what business does, it is at times environmentally messy. We try very hard to show that we care, we understand, and we go as far as we can—and often, I accept it is not far enough—to be responsible citizens. It is going to be very difficult, being the emblematic keynote tenant of the building, when I am sitting there trying to justify the fact that we have no way of getting contractors to comply with the Environmental Statement. That may seem far flung as a worry, but the point is that perception is reality, and you can take it from me that journalists will be writing that it is our problem, our responsibility and we are to blame, notwithstanding that we are not. Life is like that. If I can head that off at the pass, before we start, I think it would do the whole of businessmen and businesswomen's ambitions in the country quite a lot of good. Our request is that the Crossrail Bill should require that the Promoter's work be more closely tied to the Environmental Statement. I know we have some amendments to the Bill that we are suggesting designed to achieve that, and I would ask that they are taken very seriously. That is probably not the plea you would expect from business, but you would certainly get it from the CBI.

4398. Finally, could you explain what the CBI's concerns are about compensation.

*(Sir Digby Jones):* You have heard that we are a special sort of tenant and, unlike a landlord, as we speak statutorily we have no right of compensation for a diminution in the value of the interest of our property due to the injurious effects from the works. In view of our substantial interest in the building and the way we use it and just who we are, and the fact that we are the tenant who would be most adversely affected as we occupy all the space nearest to the works—we occupy the bit right by it—this has to be, on any criteria, totally inequitable. I notice from the letter from Crossrail of 6 March to our lawyers, that Mr Smith says in paragraph 5: "As I mentioned at the meeting, Crossrail is not able to move outside the provisions of the National Code of Compensation." Of course they are able to move outside the provisions; they just do not want to. We are saying they should be made to. Secondly, our conference centre business will just go away overnight. That is not a suck-it-and-see, wait-and-see. We need not concern ourselves about trying to prove any form of loss; we are talking about the end of the business, period. Thirdly, and I ask you to try to understand the nature of the financial structure of the CBI, we get our income from two places: our membership subscription and our commercial operations of seminars, lectures, annual dinners, national conferences, surveys that we sell and the like. We use all the money. Other than a part on the establishment, we use it on paying high quality people not a lot to come and do a job in which every day they are in a goldfish-bowl of publicity. It is not about a loss of profit, because we do not make one; it is about such an increase in the cost of existing that we will close our building because I will not have any people—and if I do not have people, I do not have the policy work that they do, and if I do not have that, I do not have the bullets to fire for the lobbying job that people are kind enough to say we do quite well. The end of the CBI might be something that at the end of the day certain members of the Select Committee might think is a good thing, but I have to say that I do not, and I am very worried that I would suffer—or it would be my successor who would suffer such a loss of people because of the cost rise of the wage base. That is me done.

4399. **Mr Harwood:** That is you done, unless there are any questions from Mr Mould or other people.

---

Cross-examined by **Mr Mould**

4400. Sir Digby, you have very kindly, in giving your evidence, indicated that CBI strongly supports Crossrail. That is right, is it not?

*(Sir Digby Jones):* It certainly is.

4401. It takes little insight to understand that one of the principal reasons for that support is that the railway, once it is up and running, will generate

substantial employment opportunities, both directly and indirectly, throughout London and the South-East region, through its contribution towards regeneration.

*(Sir Digby Jones):* Are you asking me for a yes?

4402. Yes.

*(Sir Digby Jones):* Well, yes. The statement is obvious, but yes.

---

**The Petition of Confederation of British Industry**

---

4403. I am very good at stating the obvious. I will probably do it again. In terms of the construction industry in particular, of course, Crossrail provides a very important opportunity in terms of job creation and in terms of economic advantage, does it not?

*(Sir Digby Jones):* Certainly.

4404. And no doubt those or your members who are within that sector of the industry will be fully endorsing the support that the Confederation as a whole brings to the project.

*(Sir Digby Jones):* Yes. It will not just be construction; it will be leisure, tourism and businesses depending on both ends of it as well, not just in the middle.

4405. Turning from those matters of general interest to the local position: as you touched on in giving your evidence, your employees and also, to a degree, your businesses, depend, as many people do, on the efficiency of the public transport system to get it to and from their place of work or their place of business.

*(Sir Digby Jones):* Yes, they depend on it. I think they have got used to the fact that it is inefficient and therefore they would welcome Crossrail on the basis that it is probably going to be an improvement to getting goods to market and people to work.

4406. I do not know whether you yourself are a regular user of Tottenham Court Road underground station.

*(Sir Digby Jones):* No.

4407. I am sure many members of your staff are.

*(Sir Digby Jones):* They certainly are.

4408. I do not know if you ever have cause to speak to them about it.

*(Sir Digby Jones):* I certainly do.

4409. It is fair to say, is it not, that it is an underground station which is clearly in need of improvement, and, in particular, it is a station which is complex for passengers to use and it is clearly operating on many occasions in the ordinary course of the working day, particularly in peak times at or above capacity?

*(Sir Digby Jones):* Yes.

4410. **Mr Mould:** One of the great advantages that the Crossrail scheme in conjunction with the London Underground proposed improvements will bring is just that increase in capacity for people who are using Tottenham Court Road Underground Station.

*(Sir Digby Jones):* Certainly.

4411. For Members of the Committee there are convenient reference points in relation to that in volume 2 of the Environmental Statement, paragraph 8.7.115, which is to be found on page

164,<sup>8</sup> which indicates the current position that I have just alluded to, which you have kindly agreed to, that is to say the fact of the congestion which spills out from the station on to the surrounding streets—yes?—and the need frequently to undertake station control measures at peak times. Again, that will be familiar to you from your experience from your discussions or conversations with your staff.

*(Sir Digby Jones):* Certainly.

4412. If we go to the next page we see what is proposed to replace that in terms of the plaza.<sup>9</sup> That is an illustration of, I think we can agree, the far more spacious approach to the Tottenham Court Road Eastern Ticket Hall than is currently the position.

*(Sir Digby Jones):* Sure.

4413. In terms of benefits, we get some flavour of that from a further and, I hope, final reference to the Environmental Statement at this stage, certainly. Paragraph 8.7.139, page 168.<sup>10</sup> We there see recited some of the transport benefits offered by Crossrail. I am not sure I shall read it out: “The transport benefits offered by Crossrail will result in an increase in passengers using Tottenham Court Road Station. This increase in passengers will be accommodated by the significant increase in capacity associated with the Crossrail Station, in particular the enlarged ticket hall at Tottenham Court Road Station and new connections between Crossrail and existing Underground lines”, and there is further reference to the physical capacity of ticket halls and the corresponding relief from congestion, and the opportunity to remove station control measures at peak times. Again, we can agree on the advantages offered by those benefits.

*(Sir Digby Jones):* What is your point?

4414. We can agree on the advantages, on the Environmental Statement.

*(Sir Digby Jones):* Certainly.

4415. In order to achieve those benefits, of course, very substantial works need to be carried out in the vicinity of Tottenham Court Road Underground Station.

*(Sir Digby Jones):* Yes.

4416. I put up for the Committee, in my brief opening, a plan which showed the extent of the worksites which are required in order to undertake those works.

*(Sir Digby Jones):* Sure.

4417. I mentioned that those works were expected to take of the order of five to six years.

---

<sup>8</sup> Crossrail Ref: P10, Environmental Statement, Volume 2, Page 164 (LINEWD-ES10-140).

<sup>9</sup> Crossrail Ref: P10, Environmental Statement, Volume 2, Page 165 (LINEWD-ES10-141).

<sup>10</sup> Crossrail Ref: P10, Environmental Statement, Volume 2, Page 168 (LINEWD-ES10-144).

---

**The Petition of Confederation of British Industry**

---

*(Sir Digby Jones):* Sure.

4418. I also mentioned that in the Environmental Statement, in the transport assessment report, again included in the written Petition Response Document that we provided in response to your Petition, there is a careful assessment of a phrased approach to traffic management throughout the course of those constructions works. Have you seen that?

*(Sir Digby Jones):* Yes.

4419. Essentially, there are eight phases of traffic management which will allow for the fact that, amongst other things, Charing Cross Road is, at its northern end, required to be closed for a period of years to enable the work to be undertaken.

*(Sir Digby Jones):* Sure.

4420. The traffic is being rerouted elsewhere within the vicinity. Of course, the effect of the Charing Cross Road worksite, as I think you showed on one of your plans (it may be helpful if we turn to PRD (Petition Response Document) P57), and if we turn to the appendix in the plans, Map C5 (ix), this is the stage C in that eight-stage phase that you see.<sup>11</sup> You can see the Charing Cross Road worksite, the eastern worksite, is there in operation which closes off the current access arrangements to Centre Point, which you described earlier by reference to your plan. Does it not?

*(Sir Digby Jones):* Yes.

4421. So that is stage C. So that effectively remains the position throughout the following phases of the works. As you know, the permanent position is that that Plaza area to the west of Centre Point Tower, which is there largely covered by the worksite hatching, accommodates two new Crossrail underground station entrances and is then subject to landscaping and restoration to public roads.

*(Sir Digby Jones):* So for five years where do I welcome a Prime Minister or a member of the Royal Family?

4422. You understand the permanent position as well, do you not?

*(Sir Digby Jones):* I do. But for five years where would I do it?

4423. I am afraid, it is a convention and the reality is that barristers do not know and they ask questions—they cannot answer. I will leave that to Mr Harwood to pursue.

*(Sir Digby Jones):* I am not going to be concerned after five years; I am concerned for the next five years.

4424. I am going to come to that. The point I am seeking to establish is that it is clear that under this arrangement (I think you are familiar with the

phased plan, as you have indicated) the effect of the works is that you lose your existing access arrangements to the west of Centre Point Tower.

*(Sir Digby Jones):* On a permanent basis?

4425. Yes.

*(Sir Digby Jones):* That little part there, yes.

4426. That includes the existing drop-off point.

*(Sir Digby Jones):* Yes.

4427. The CBI has not proposed, has it, any alternative to Crossrail's detailed phased traffic management arrangements of which this is the third phase? It has not suggested that it could be dealt with any differently or indeed with any less impact on surrounding occupiers and landowners?

*(Sir Digby Jones):* Well, just as it is not for barristers to do that it is not for directors general to prepare that either.

4428. Whatever the whys and wherefores, you effectively, for these purposes, accept that Crossrail's phased arrangement is the way in which it has to be done?

*(Sir Digby Jones):* To the best of my knowledge, I would say that what they are suggesting, frankly, I do not like it but what else do you do?

4429. Quite so. A very fair answer, if I may say so. One feature of these plans, as we can see from this plan, is that St Giles High Street, which you can see running up from the south-eastern corner of this plan on a north-westerly axis and then straight as it comes past the eastern side of Centre Point Tower—do you see that?

*(Sir Digby Jones):* Yes.

4430. That is a feature of the interim access arrangements which continues throughout each of the most intensive phases of work. Yes? We can see that that provides highway access to the eastern side of Centre Point Tower at a point, broadly, where the left-turn filter arrow is shown on this plan. Do you see that?

*(Sir Digby Jones):* I see it.

4431. Is it right, from what you have said earlier and what was said in opening, that your preference would be to maintain the vehicular access to that point—that is to say, to the eastern side of Centre Point Tower—throughout the course of the works and permanently?

*(Sir Digby Jones):* Rather than what?

4432. That is your preferred solution to the temporary and the permanent situation after the Crossrail and London Underground works have been concluded.

<sup>11</sup> Crossrail Ref: P57, Layout plan—C5 (ix) Tottenham Court Road East—Traffic Management Stage C Outline (CAMDLB-6703-004).

---

The Petition of Confederation of British Industry

---

*(Sir Digby Jones):* Rather than?

4433. I am sorry. Is that your preferred solution?  
*(Sir Digby Jones):* It is a solution but it is not one that I am sitting here and saying: "Yes, I would really like that, please." What I am saying is: "Are you offering me a suite of solutions here or are you just saying 'That is the one. Do you like it?'"

4434. Do you have a solution which, on advice or having examined the matter, you would regard as a better solution?

*(Sir Digby Jones):* Have you ever been there?

4435. Could you just answer, please?

*(Sir Digby Jones):* I am about to give you an answer. Have you ever been there?

4436. **Chairman:** Mr Jones, counsel is asking the questions.

*(Sir Digby Jones):* Because under there you have got a bus terminus, you have got a taxi rank, you have a place where, when it gets dark, is not a particularly salubrious place to be. It is certainly not a place where I would have young women who work for me going round there late at night on their own when they finish work. It is not an ideal place for a set-down or pick-up. If you are saying it is the only place I can do this, of course I will say to you then I have to tolerate it; what I am saying is it is not preferred, as your question was: "Is it preferred?" The answer is I do not prefer it because I do not want to be here, but if that is the only one in town then I am going to have to accept it.

4437. **Mr Mould:** Let us be clear. We have agreed that Crossrail is a good thing and Crossrail should happen.

*(Sir Digby Jones):* Yes.

4438. If Crossrail is going to happen we have agreed that there has to be during the construction phase a worksite which will effectively remove the CBI's existing drop-off point to the west of Centre Point Tower.

*(Sir Digby Jones):* Yes.

4439. So an alternative location has to be found.

*(Sir Digby Jones):* Yes.

4440. That is, under the proposals that go hand-in-hand with Crossrail and London Underground improvement, a permanent loss, as we have already established: the area upon which the worksite is to be located will, after completion of the works, provide two new accesses to the underground, and so the existing CBI drop-off point will be permanently lost.

*(Sir Digby Jones):* Yes.

4441. Again, on a permanent basis an alternative arrangement has to be found.

*(Sir Digby Jones):* Yes.

4442. With that context in mind, I put to you one solution, on a temporary and, indeed, permanent basis, would be for the alternative to be at a point immediately to the east of Centre Point Tower, roughly where the left-hand filter arrow is on this plan. I am inviting you to say whether or not that would, all things being equal, be the optimum solution as far as the CBI is concerned.

*(Sir Digby Jones):* As far as the interim period of five years is concerned, it is not in any way suitable but if it was the only place that it could be on a temporary basis we would have to do our best. As far as a permanent solution for post-work is concerned, it would be entirely irrelevant because we will not be there, will we? Because if your clients do not sort something out to help us we will not have a CBI at Centre Point. So it is irrelevant.

4443. Sir, we have handed round some documents. I notice the time and I will ask this question and then stop. P58 is our series of documents. I wonder if we can just put up page 27 of that, please? Sir Digby, if this is material you are not familiar with say so and I will deal with it another way. Whilst Mr Fry is finding this we sent, on Friday, to your agents, a report by a firm called Hawkins Brown. Have you seen this before?<sup>12</sup>

*(Sir Digby Jones):* No.

4444. **Mr Mould:** I will just put the point.

4445. **Mr Harwood:** If it helps, maybe we should ask Mr Handy about that.

4446. **Mr Mould:** I will do that. If I can just ask this one point: that examined a number of alternative options for alternative access arrangements to Centre Point during the course of the London Underground/Crossrail works. Yes?

*(Sir Digby Jones):* If you say so. I have never seen this before.

4447. This was a report carried out by consultants instructed on behalf of London Underground, as I understand it, to carry out that exercise. The option that they favoured as being the most appropriate was Option 6. You see that that identified, essentially, the point about access during the construction phase as I have just put to you. Do you see?

*(Sir Digby Jones):* Yes.

4448. Then it sets out the positive and negative features of that access. Then it explains in the conclusions why that is, as between the other options considered, the preferred option. The only question is this: have you had any advice from consultants to promote positively an alternative arrangement that which we see in this report?

*(Sir Digby Jones):* I do not know. I have not got a clue.

---

<sup>12</sup> Crossrail Ref: P58, Hawkins Brown Report, Option 6, page 27 (CAMDLB-6704-027).

---

**The Petition of Confederation of British Industry**

---

4449. **Mr Mould:** Sir, I have got one or two other questions, but I do not know whether you want me to continue?

4450. **Chairman:** If you just give us a moment, Mr Mould. Ms Lieven, could you advise the Committee on whether or not the Petitioners are going to be called this afternoon?

4451. **Ms Lieven:** No, sir. My understanding is that they will not. I believe Mr Walker is here on behalf of GMS. My clear understanding is they are not going to attend. UBS have not formally withdrawn but I have been told by the senior partner of Dysons that as far as he can tell they cannot possibly be attending because he cannot find anybody to know where they are. So they are clearly not coming this afternoon.

4452. **Chairman:** If you just give us a moment. Mr Walker, can you enlighten us?

4453. **Mr Walker:** My name is Angus Walker from Bircham Dyson Bell, Agents to both GMS Estates and UBS. In both cases we have recently reached agreement in principle with the Promoter and they have addressed our concerns satisfactorily, although in neither case has the agreement been formalised in writing yet. This should happen in a few days. We confidently hope we will be able to withdraw these two Petitions. In the circumstances, we are not appearing before you today, and you will understand that we should be able to inform the Committee of the withdrawal of the Petitions in the next two or three days, I would hope.

4454. **Chairman:** Thank you very much. Mr Mould, how long will you be?

4455. **Mr Mould:** I would have thought perhaps another ten minutes. So I am in your hands.

4456. **Chairman:** What I am going to do is suspend the Committee until 2.30.

*After a short adjournment*

4457. **Chairman:** Mr Mould?

4458. **Mr Mould:** Thank you, sir. Sir Digby, we were just looking at the document that you see on the screen in front of you and you had expressed concerns about the environment that currently exists at that point to the east of Centre Point. A point, indeed, which picked up in the negative aspects—do you see under “negative” there—“quality of environment” as one of the downsides of that particular access?<sup>13</sup> Do you have that?

**(Sir Digby Jones):** Yes, I am looking at that.

4459. If you look at the bold text at the top of the page, one of the points that is made is the possibility of temporary lighting and signage to

enhance the area—a recognition that if this were to be an option for temporary access during the construction phase to Centre Point, that is to say to the east of the Tower, then there is a need for qualitative improvements to be undertaken for that purpose in order to enhance its quality.

**(Sir Digby Jones):** Temporary lighting and temporary signage will not enhance the area to a standard at which you would say that is a quality access for staff for five years.

4460. I understand that your position is that more would be required than that, but it is at least an indication in this report that that is a matter that requires to be considered and to be attended to—that is to say the need to improve the quality of the environment for what is, on any view, a relatively lengthy temporary period of construction.

**(Sir Digby Jones):** Yes, except it is not capable of improvement to the standard we want, whatever you do.

4461. **Mr Mould:** Sir, my final point, really, to Sir Digby is based upon some scribbling I have done during the luncheon adjournment. I wonder if I might just hand that in. We have drawn up—I am afraid it is in manuscript—a series of proposed assurances that we could give to the CBI. I have mentioned these to my learned friend a few moments ago. Sir Digby has not seen them; it might be helpful just to put them through him to you, so you can see what we have in mind.<sup>14</sup>

4462. **Mr Harwood:** I was going to suggest, Chairman, that they be put to Mr Handy, who is our technical consultant who will be dealing with access matters, particularly concerning the specification of access. Also, he has had the advantage of discussion which we have had with my learned friend outside the Committee rather than what is a matter of bringing in front of a witness a document and proposal which he will not have seen at all. So I suggest that Mr Handy may be the more suitable—

4463. **Mr Mould:** I am content to leave it at that, yes. Perhaps, finally, Sir Digby, just to confirm the point: your concern is that during the construction phase there should be pedestrian and vehicular access to Centre Point of a quality which fulfils what you have explained to be your needs and the needs of those who visit you.

**(Sir Digby Jones):** Yes. Points one to five will be dealt with by someone more skilled in this than me, but I would say it is not about whether you can provide, it is about the standard to which you provide, and on that basis it is yes to the question on the basis that it is about the standard as well.

4464. The final point, just to sum up where we were this morning: as I understand your position, you do not yourself put forward for the Committee's

<sup>13</sup> Crossrail Ref: P58, Hawkins Brown Report, Option 6, page 27 (CAMDLB-6704-027).

<sup>14</sup> Crossrail Ref: P61, Seven point note of assurances presented by Promoter's Counsel, Mr Timothy Mould (SCN20060314-001).

---

**The Petition of Confederation of British Industry**

---

consideration any particular point of access to Centre Point which you say either does or can be made to fulfil those criteria during the construction phase.

*(Sir Digby Jones):* I personally do not. That is not to prejudice what those advising us may do. So if I say I am not saying there is a better one than this, that does not mean that the CBI is not saying it; it is just that I personally do not know.

4465. **Mr Mould:** I just wanted to understand your position.

4466. **Mr Harwood:** I have no re-examination.

4467. **Chairman:** There are no queries for Sir Digby. Thank you very much.

*The witness withdrew*

4468. **Mr Harwood:** I would like to call Mr Simon Handy, the CBI's second witness.

Mr Simon Handy, Sworn

Examined by **Mr Harwood**

4469. **Mr Harwood:** You are Simon Handy. Can you tell us your qualifications, please?

*(Mr Handy):* Yes. I am a Chartered Civil Engineer, a Member of the Institution of Civil Engineers and I have 28 years' experience in the construction industry. I am currently the managing director of Waterman Environmental Limited. I graduated with a degree in civil engineering in 1981 and qualified as a Member of the Institution of Civil Engineers in 1985.

4470. What is your role at Waterman Environmental?

*(Mr Handy):* I have been with Waterman for many years and started off in design of buildings and working on major projects in London and the South East and elsewhere in the country. My role is that of a director of a company. I set up a team which is known as Waterman Environmental, a specialist environmental consultancy, in 1992 and have grown that business to deal with ground conditions and environmental consultancy, primarily within the construction industry. I have particularly undertaken a number of site investigations, designs of foundations and assessments of the impact of tunnelling works. In particular I have assessed the impact of the Jubilee Line extension, when it was built, on the Docklands Light Railway at Canning Town, the impact of the Channel Tunnel Rail Link on the Trowbridge Estate in Hackney and the impact of the former Crossrail scheme on Hanover Square. In addition, I have undertaken a number of appraisals on major development schemes in Central London at Paternoster Square and Lyon's Plaza where London Underground tunnels were seriously affected by the development works.

4471. What do you want to explain about the proposed works in the vicinity of Centre Point?

*(Mr Handy):* I suppose I want to, perhaps, briefly recap on some of the important aspects of the scheme. The two tunnels that have been referred to south of the buildings—I think they are on exhibit CBI 12—indicates the proximity of the tunnels, the dotted line on the plans does indicate the position of the tunnels passing just to the south of Centre

Point House and to the south of the Centre Point Tower.<sup>15</sup> We also have ticket hall access points that have been referred to, but in particular there is a very large worksite that has major works proposed in it. I refer to that, I think, in CBI 8, which indicates the proposed worksite.<sup>16</sup> Particularly, within that worksite there is the demolition of the plaza, there is also a major piling operation adjacent to the Centre Point building, a new retaining wall that needs to be constructed along that line to enable the construction of the ticket hall, and significant works to connect down into the London Underground tunnels and the proposed Crossrail scheme.

4472. What effects will these have on access to Centre Point?

*(Mr Handy):* Access will be affected quite severely. It falls into a number of different categories. Vehicular access is going to be affected by the changing of the configuration of the streets around Centre Point, particularly Andrew Borde Street will be stopped up and, for a period of time, if you look at CBI 8, again, here, you can see that access is denied to a number of vehicles through St Giles' High Street. So within that area you have got cycles are permitted, taxis are permitted but a number of other vehicles would not be permitted other than, perhaps, buses. So there are restrictions on access to vehicles. In terms of public access, there are a lot of effects on the streets around Centre Point. You can see on the same diagram the orange areas marked where there are going to be highway works around the buildings. So pedestrian access through those areas will be difficult for periods of time. The drop-off locations are somewhat unclear. The current drop-off (I do not know whether you can see it but it is at that point there, which is marked 3 on the plan) will be encapsulated in the worksite and there is not a facility for drop-off being provided either temporarily on that diagram or,

<sup>15</sup> Committee Ref: A51, Plan demonstrating 10mm settlement contour in relation to Centre Point (CAMDLB-6705-012).

<sup>16</sup> Committee Ref: A51, Tottenham Court Road East—Traffic Management Stage C Outline (CAMDLB-6705-008).

---

**The Petition of Confederation of British Industry**

---

indeed, in the permanent works. In terms of deliveries, again, if you look at this diagram, there is an indication that there may be a delivery point somewhere there, but that is on the far side of the main access into the construction site with the main construction vehicles coming in and out of that site at that point. It is unclear as to whether that would be a suitable delivery point for the building or indeed if it is intended to be a delivery point to the building. The final area that I would be concerned about is the one which Sir Digby mentioned, which is the quality of the access.

4473. What sort of quality of access do you think is appropriate?

*(Mr Handy):* I have given an indication of what I consider to be the important aspects within, I think, what is included as CBI 11, exhibit 11, as an example specification for what might be included for quality of access.<sup>17</sup> Primarily, this deals with the condition of the pavements, the suitability for disabled people, the height of hoardings, the widths of footpaths, the illumination of areas, the security coverage, and so forth. This is intended not necessarily to be exactly the answer but is an example of, perhaps, what might be a suitable specification for access to this building.

4474. Thank you. Can you turn, please, to the Hawkins Brown report, which was referred to by Mr Mould earlier? Would you explain to the Committee what this report is and when it was produced?

*(Mr Handy):* It is a report done in August 2005. I must say I only received it at about 4 o'clock on Friday afternoon, so I have not had very long to look at it and did not have any knowledge of it beforehand. Basically, this document reports on a number of options that might be available during the construction period for accessing Centre Point. I think it covers six different options, and Option 6 is the one that is recommended.

4475. Can we turn, please, firstly, to the executive summary, which is the third page in? What does that explain about the purpose of the report?

*(Mr Handy):* It describes the purpose is to address the owner and occupier concerns by exploring the indicative options. So it is looking at the main entrance to Centre Point during the period of the construction programme.

4476. You said that you had first seen this report at 4 o'clock last Friday. Do you know when the CBI first saw the report?

*(Mr Handy):* I think they had sight of it at some time on Monday. I know they were having difficulty opening certain documents that were sent over. I am not precisely aware. I was in a meeting on Monday when we were trying to talk about these reports, but as you can appreciate some

reports are more difficult to open on e-mail than others. I think some people had difficulty. I did have the privilege of opening it on Friday.

4477. Can we turn to Option 6, which is the option referred to by Mr Mould's questions.<sup>18</sup> Now, Mr Handy, what are your comments on what we see on Option 6?

*(Mr Handy):* On Option 6 the diagram shows that the access will be from the eastern side and this is pedestrian access. It also seems to indicate that the pavements are widened on that side, on the eastern side, of Centre Point and that does marry up with some of the construction proposal drawings that I have seen and referred to earlier. It does appear to be a widening of the pavement there. There is quite clearly a construction site that wraps around both the western and the southern side of Centre Point. I think that is probably somewhat diagrammatic because the more detailed drawings do show it is a phrased approach and that arrangement is not necessarily the position throughout the work. It does change depending on the stage of the construction work. Particularly, it does show that the construction site comes out to the line of St Giles High Street and it does not indicate that there is any facility, really, for vehicles to stop to unload or to deliver people or materials. It is quite a narrow section of road there and I do not think that is particularly addressed in Option 6. There is a reference, under the positive items to "Locality of vehicular drop-off point" but the diagram does not seem to explain that at all.

4478. Can we turn, please, to Mr Mould's seven-point document on access.

*(Mr Handy):* Yes.

4479. **Mr Mould:** This will be document P61.<sup>19</sup>

4480. **Mr Harwood:** Mr Handy, do you want to take us through your views of what is proposed here?

*(Mr Handy):* Yes. I think that the first item is about maintaining access to Centre Point throughout construction, and I think that is very important for statutory purposes, so I would agree with that. I think it is still unclear as to whether it refers to Centre Point Tower or whether it is somewhere else in the building complex, and I do think that that needs to be clarified. The next point deals with maintaining vehicle access to Centre Point throughout the construction: again, it is about getting vehicles there. At the moment there are restrictions placed on the roads in the diagrams that have been submitted which indicate that delivery vehicles, for instance, will not be able to get up to the building, and so perhaps this is clarifying that that restriction will be lifted, and if that is the intention then quite clearly it would need

---

<sup>17</sup> Committee Ref: A51, Specification for Temporary Footways to Centre Point during the Crossrail works to Tottenham Court Road Underground Station (CAMDLB-6705-011).

<sup>18</sup> Crossrail Ref: P58, Hawkins Brown Report, Option 6, page 27 (CAMDLB-6704-027).

<sup>19</sup> Crossrail Ref: P61, Seven point note of assurances presented by Promoter's Counsel, Mr Timothy Mould (SCN20060314-001).

---

The Petition of Confederation of British Industry

---

to be suitable for the range of purposes that the CBI would need to have catered for. The next point is using reasonable endeavours to provide convenient vehicle access, and I think that that does indicate that there is an intent to try and consider the CBI's requirements for access to the building, and I think that the same applies to drop-off and delivery on point 4, using reasonable endeavours. So they will try to provide a drop-off and delivery point for the CBI.

4481. How far do reasonable endeavours to provide convenient vehicular access, drop-off and delivery take the CBI in terms of the concerns that you are putting in front of the Committee?

*(Mr Handy)* I think my concern really would be what is reasonable, and if there was a period of a few hours when access was denied so that you could not get to the building for a VIP or a delivery, then I think it would be reasonable to think that that could be done in consultation to choose the right times to achieve that. If "reasonable" means a period of perhaps two or three months then that might be very difficult for the CBI to operate. So there is a lack of clarity on that wording, and I think it should be more precise in terms of either time of day or duration so that we can understand what the real implication is. It is rather difficult to comment on the actual impact because the range of impact could be quite considerable there.

4482. Any comments on 5 onwards?

*(Mr Handy)*: On point 5 if it is talking about access to the underground station and so forth, I think there are statutory obligations to provide access along footpaths, and I think that this point is a comfort, to make sure that people from Centre Point can access the footpaths and can get to the underground entrances; and I think that the 400 people relates to the flow of people coming out of conferences or perhaps joining conferences, and that does correspond to one of the recommendations I have made in the specification. In terms of light and security and so forth, I think I would purely refer to the specification I have produced and I think that is a little more detailed and would probably be more appropriate, offering a standard that gives reference to British Standards and to good practice rather than a short description like that. So I would prefer to see a longer specification on that.

4483. Is there anything else you want to say about access at this stage?

*(Mr Handy)*: No, I do not think so.

4484. Noise and vibration, please. Does Centre Point give rise to any particular issues on noise and vibration?

*(Mr Handy)*: Yes. There are a number of areas of concern here and I think there are concerns about the permanent operation of the railway and I think there are concerns about the construction of the tunnels. A number of reassurances have been given,

but perhaps they again are not sufficiently clarified to understand precisely what level will be applied to the permanent running of a railway or the temporary construction period. The bigger impact, particularly on the building, will be from the worksite. There will be a very large worksite and the depth of construction within that worksite is something of the order of 13 and a half metres, so major excavation work, major breaking out of concrete and foundations and so forth, and very close to the face of the building of Centre Point including construction of a new piled wall, probably down to a depth of about 20 metres below ground, along the frontage of the western face of the Centre Point Tower. So there are some very major works that are going to be done there, and at the moment there is not a mechanism for dealing with the impact of that noise on the Centre Point business and the CBI's business.

4485. How far has agreement been reached on noise?

*(Mr Handy)*: I think that there is a reasonable amount of agreement; they have offered an undertaking and that is Crossrail exhibit 2, and that has been a useful step forward, I think, in enabling dialogue to occur between the parties to help reach an understanding of the importance of some of the issues to CBI, to engage the two parties in dialogue and to reach an agreement to some extent; but what is not referred to within that document is how the limits will be set, acceptable limits for the lecture theatre and for the business of the CBI. There is not a clear statement on what levels would be applied and whether that would then lead to any recourse or indeed protection or compensation for any other issues that could be triggered by exceeding certain levels or limits that might be discussed. So there is not clarity as to the level that would be acceptable or that would be permitted during the construction works.

4486. Can I turn to the question of settlement? How might settlement affect Centre Point?

*(Mr Handy)*: Centre Point is comprised of three buildings, as you have heard. There is a large Tower, there is the Podium building on the opposite side or the east side of St. Giles High Street, and then you have the Link Bridge that connects the two buildings together. The Link Bridge is clad with large plate glass panels and photograph CBI 4—we have seen examples of that earlier—shows that.<sup>20</sup> These panels are included as features of importance in the Grade II listing of the building. These panels, together with the interface of the Link Bridge with the adjacent buildings, as you can see, tie into buildings on either side and will be very susceptible to damage arising from differential movement of the foundations. As you can see from that photograph, the Link Bridge does have supports; it has some columns at either end—there is a pair at each end of the Link Bridge, which you can probably just about see in the shady bit

<sup>20</sup> Committee Ref, A51: View of Podium taken from St Giles' High Street—CBI 4 (CAMDLB-6705-004).

---

 The Petition of Confederation of British Industry
 

---

that there is a column there—and there are columns on this side here. That Link building then connects to and is supported by the two buildings on either side.

4487. How will the settlement occur? Is it a once and for all event or does it take place over time?

*(Mr Handy):* It will take place over time. There is a contour diagram that the Promoter has produced, CBI 12, and you can see the blue line clips the southern edge of Centre Point House and then goes through Centre Point there—that is the Tower—so it goes through the Tower and clips the southern point there at Centre Point House.<sup>21</sup> So the settlement is generated by a number of activities and it will generally occur in several stages. Settlement will occur during construction, of both the tunnels and the station; it will continue to occur after completion of the construction works; and it will continue on during the operation of the railway. It does take time for settlement to fully occur and show its effects, and for that reason often the monitoring will be undertaken over quite a long period of time. In particular construction activities will generate particular stages of the settlement. The tunnel boring itself, the station box, which will be at a slightly different time, the piled wall within the station box and the bulk excavations themselves will generate settlement effects. Also, there are proposals to link down using escalator shafts from the ticket hall and those themselves could generate some settlement effect. So it will occur in stages over a considerable period of time during the construction period.

4488. If damage is caused by settlement at what point will that be occurring?

*(Mr Handy):* I suppose the key points will be at the interface with the other buildings, at the points of weakness, so you could get differential movement between the Tower and the lower buildings because the foundations are at different depths and they are also experiencing different amounts of settlement, and you have a relatively weak structure; the Link structure has large openings, it has an opening completely underneath and it would be very vulnerable to movement. So you would expect to see cracking and deterioration, if there is movement, at the faces of the Centre Point Tower and faces of the Podium buildings. You would also see distortion to some extent within the Link Bridge—there will be movements there that are likely to affect the glazing because the glazing will only be able to tolerate very small amounts of movements, and the most vulnerable features on the glazing will be the weather tightness of the joints, and as you can see they are very large panels and fairly small movements are likely to cause deterioration of those joints.

4489. How is the potential of settlement assessed in terms of—there is Risk Category 3, so how does it all come together?

*(Mr Handy):* There is a lot of information provided as to how settlement will be assessed and certainly within the documents that have been provided—D12<sup>22</sup> for instance gives a lot of information on settlement and how it is classified. So far, just to give you an idea, what is known as the phase 3 assessment has commenced, the Promoter has undertaken a first iteration of phase 3. Phase 3 assessment will continue on to a second and third iteration as necessary to define, to refine the precise settlement and the effect on the building. They have completed the first stage and within the documentation the buildings have actually been classified. The Tower building has been classified as being subject to building damage Category 1, and building sensitivity Classification 1. The paper D12 describes that you add those two scores together to give it a risk rating of 2. Centre Point Buildings has, on the other hand, been described as Category 2 in terms of building damage, and in terms of the building sensitivity has been classified as zero. Again, adding those scores together you get a score of 2. So on the basis of the information that has been presented to us we can see that the building is placed into Category 2, and there is some concern or doubt about whether a building that is classified as Category 2 would be subject to any further assessment. We have had some verbal reassurances that, yes, actually these buildings will go on to be assessed further, but within D12 it does say that buildings with a score total of 2 or less are predicted to suffer a degree of damage that will be easily repairable and hence no protective measures are required, which indicates that there is not an intention to go on and do any further assessment. So I think we do seek clarification that the buildings will be assessed further because there is a slight conflict in the advice that we have been receiving.

4490. Do you agree with the way in which Centre Point has been classified?

*(Mr Handy):* I do not. I feel quite strongly that Centre Point Buildings being classified as zero in terms of building sensitivity is not right. Information has been presented on the classification of buildings and in paper D12 there is a table 2, and it may be worth calling that up.

4491. Page 11, D12.

*(Mr Handy):* That does state that the Category Zero buildings are not surrounded by other buildings. They have referred to masonry buildings and lime mortar, and particularly deal with typical listed buildings—but we are talking about a newer listed building here. Also, that there are no sensitive features. That is in direct conflict and I think that the photographs we have seen indicate that there is quite a sensitive structure there; there is a Link structure that ties into the Podium buildings. If it was Category 1 it would be a building that is sandwiched between modern frame buildings of some delicate form. Well, the Link Bridge is in that category and those buildings are stiffer and there are substantial

---

<sup>21</sup> Committee Ref: A51, Plan demonstrating 10mm settlement contour in relation to Centre Point (CAMDLB-6705-012).

<sup>22</sup> Crossrail Information Paper D12—Ground Settlement, <http://billdocuments.crossrail.co.uk/>

---

**The Petition of Confederation of British Industry**

---

openings at ground floor level and particularly below the Link Bridge is probably the biggest example. Brittle finishes, I would say that the cladding does fall into that category. It is not stonework, as quoted here, as a typical example, but quite clearly there is doubt in my mind as to whether that score is correct, and I would say that rather than zero there is a chance that the Centre Point Tower, the Podium buildings and the Link Bridge should be classified as 1. The importance of that is that if it is classified as 1 the score moves up, so the score total moves up from 2 to 3, and buildings that score 3 are treated more seriously, the protective measures are considered further. Within the Deed of Settlement the building owner or the building occupier would be given enhanced rights to satisfy themselves that an appropriate assessment has been done and there will be recourse. So I am concerned that there may be an underestimate at the first iteration phase 3, that might lead to protective measures not being implemented, and that would be my concern that it would be overlooked.

4492. Thank you, Mr Handy; is there anything else you want to say on settlement?

*(Mr Handy):* I do not think so.

4493. **Mr Harwood:** Thank you, Mr Handy; would you just wait there, there may be some questions.

4494. **Chairman:** Mr Mould, before you proceed, this document, of Hawkins Brown. The meeting date in Victoria was last August, is that right?

4495. **Mr Mould:** Yes, I think this was a meeting between London Underground—

4496. **Chairman:** I am not trying to blame you personally, but it really is not good enough for documents of this importance to be sent to people last Friday night by email which practically means that the first sight most of us will have of it is Monday morning, the day before. I realise that it is only 24 hours that is the limit, but we really have to try harder on these documents. This is not the first time and we have to get documents to people sufficiently in advance.

4497. **Mr Mould:** Yes. I entirely understand that and I apologise, through you, for the lateness with which that was provided. I perhaps ought to say—and I sought to make this clear before lunch, but just in case it was not—that the reason for putting that document is not that that provides, if you like, the solution; it is indicative of a process which is ongoing.

4498. **Chairman:** I accept that but I have made the point.

---

Cross-examined by **Mr Mould**

4499. **Mr Mould:** Your essential concern is that there is more to do with the settlement risk that may arise in relation to Centre Point, having regard to the structural elements which you have mentioned and the impact of the works, and that, as a result of that, you think there may be a case for the building having a higher risk categorisation than is currently attributed to it, following stage 2 assessment process.

*(Mr Handy):* Yes, the first iteration of stage 3.

4500. If we may set that in the context of the process that we have developed and of which the Committee has some knowledge because it heard from Professor Meyer at an earlier stage about the way in which settlement has been addressed for the purposes of the scheme. If you would turn, please, to page 3, paragraph 2.3.5, in this document. “Buildings assessed as being in risk category 0, 1, 2 after the stage 2 assessment are not subject to further assessment.” That would appear to apply to Centre Point.”<sup>23</sup>

*(Mr Handy):* Yes.

4501. That is the position that has been reached in relation to that building at Stage 2, but it is subject, amongst other things, to paragraph 2.3.7 below, which says, “Any building which does not qualify for further assessment in Stage 2 is subject to a Stage

3 assessment if . . . (b) it is on shallow foundations and is within a distance from a retained cutting, shaft or box equal to the excavated depth of superficial deposits.” Then, in this context, superficial deposits are described. It is true, is it not, that the Promoter wrote yesterday to the CBI to indicate that this proviso would apply effectively to CBI and it would be subject to a Stage 3 assessment.

*(Mr Handy):* Yes, but I was saying that the first iteration of the Stage 3 assessment has been done and I was sent again on Friday two reports, one for each building, that does confirm that the first iteration of Stage 3 has been done, and, as a result of that iteration, the buildings are still classified as I have stated, so they score a total of 2 rather than a total of 3.

4502. I am being reminded, of course, that this is also a listed building, so paragraph (c) would apply.

*(Mr Handy):* Yes.

4503. In relation to what is said about Stage 3, paragraph 2.4.1, page 3, says, “In Stage 3 of the assessment procedure, each building is considered individually in contrast to the first 2 stages where the area of interest is analysed generically.” It refers then to a series of sub-steps, referred to as “iterations” and you have referred in passing to those. If we turn the page, there is reference to a structural survey and then this in paragraph 2.4.4.: “As a result of the Stage 3 assessment, the risk category of the building

<sup>23</sup> Crossrail Information Paper D12—Ground Settlement, <http://billdocuments.crossrail.co.uk/>

---

 The Petition of Confederation of British Industry
 

---

is assessed or reassessed, the requirement for any protective works is established and the design and implementation of any protective works and associated specialised monitoring are determined. These matters are stated in the settlement assessment report for the building.” The process itself provides for an assessment and reassessment through the Stage 3 process and is able to embrace considerations of the kind which you have mentioned, which may or may not lead to the view that the risk categorisation of Stage 2 requires adjustment.

**(Mr Handy):** Yes. As I say, the first iteration of Stage 3 has been commenced. I think that is probably more in accordance with 7.4 of that document, which relates to listed buildings, than the paragraphs to which you refer. Paragraph 7.4 does set out the procedure and does refer to the iterations.

4504. My final point is that it must be right, in order to undertake assessment robustly that what the building deserves in terms of risk categorisation is based upon assessment rather than on an arbitrary attribution of the risk category to the building in question.

**(Mr Handy):** It is assessment. Assessment is also the examination of the building and looking at its sensitivity. The way the assessment occurs is spelt out in 7.4: “In general listed buildings which score a total of 3 or higher are subject to further assessment as part of the Stage 3 iterative process. Buildings which score a total of 2 or less are predicted to suffer a degree of damage which will be easily repairable using standard conservation techniques and hence no protective measures are required.” That does not give me comfort that beyond the first iteration there is definitely going to be proper consideration of the sensitivity of the building as a further iteration.

4505. My instructions are that the building is to be treated in accordance with the paragraphs I have read to you in accordance with the Stage 3 process and that that process is very far from having been completed.

**(Mr Handy):** Right.

4506. I am not sure I can say any more to you than that, or, indeed, to the Committee. Can we leave that and turn briefly to noise and vibration. I am going to ask Mr Thornley-Taylor to address the points of clarification that you mentioned earlier. You will

appreciate that in relation to ground-floor noise the Committee has heard quite a lot of explanation as to how we are proposing to address that temporarily and essentially we have a policy which is set out in paragraph 2.9 of our information paper D10 with which I think the Committee are now so familiar they could probably almost recite it.<sup>24</sup> I will ask Mr Thornley-Taylor to touch on that. In relation to access, you have commented on my scribble. I am reminded by Mr Vine that the document should of course say that the Promoter will require the nominated undertaker to do various things in the usual way. Forgive me for having left that out. It appears to me from what you were saying about this document that there were really two points of concern. One was that you would wish to see items paragraphs 3 and 5 referring respectively to the provision of convenient vehicular access to Centre Point and pedestrian public access to Centre Point. You would wish those to be specifically to Centre Point Tower as opposed to Centre Point as a whole.

**(Mr Handy):** Yes.

4507. We can certainly add those words in. The other point was the practical effect of the phrase “all reasonable endeavours” at various points in the assurances. You will see that in the cases except paragraph 3 where those words occur, the assurances use “all reasonable endeavours to do what is there said at all times” and we are content to add in “at all times” in paragraph 3 as well. When you understand that it is an assurance to use all reasonable endeavours to provide convenient access at all times, then that clearly qualifies the degree to which, as it were, one can derogate from providing that access over a lengthy period of time. Do you take the point?

**(Mr Handy):** Yes. I take the point, but there may have been circumstances whereby the parties could disagree as to what reasonable endeavours means and there is a difference of interpretation there and I guess clarity on that would avoid future uncertainty and perhaps clarity could quite easily be given in my view.

4508. **Mr Mould:** We have explained to the Committee, I think, in relation to earlier petitions those words are necessary in these kinds of contexts because, try as we might, we are unable to give guarantees on some of these matters and we have to qualify our position. I do not think there is anything else. Thank you.

---

---

**The Petition of Confederation of British Industry**

---

Re-examined by **Mr Harwood**

4509. **Mr Harwood:** I have one matter in re-examination. Perhaps the letter of 13 March should be passed to the Committee. It has been referred to but I do not know if the Committee have seen it. I am told it has been given the number P60.<sup>25</sup> If we could turn in that letter to the second page, Clause 3, the final sentence, “The properties will therefore benefit from further iterations of the Stage 3 assessment (in a similar way to that applying to buildings which are in fact classified as risk category 3) even though the risk category designation itself will not be upgraded for the purposes of the settlement deed.” What do you understand that to mean?

**(Mr Handy):** It is not wonderfully clear. I think it is being said that the risk category would be reassessed, because we have been suggesting that an easy way forward might be to consider the buildings as if they were risk category 3, regardless of what further iterations showed them to be, so there is perhaps a

continuing concern that the sensitivity would be classified incorrectly again. That is our concern, that because there has been perhaps a difference in view on the classification in terms of sensitivity, that might persist on further iterations, so I think this is stating that they would not consider it as falling into risk category 3 in terms of the settlement deed so it would not be upgraded.

4510. **Mr Harwood:** Thank you very much.

4511. **Chairman:** Thank you, Mr Handy.

*The witness withdrew*

4512. **Mr Mould:** Sir, I will call Mr Anderson—you have heard from him before—to deal with matters relating to access, and then I will call Mr Thornley-Taylor briefly to explain our position in relation to noise and vibration.

Mr David Anderson, Recalled

Examined by **Mr Mould**

4513. Mr Anderson, you have heard the concerns of the Petitioners centred upon the access to Centre Point during the course of the construction phase. Can you briefly describe how the access at Tottenham Court Road will affect the area around Centre Point?

**(Mr Anderson):** Yes. There is a proposed traffic management regime for the Centre Point area, as set out in the Environmental Statement. We identified eight different phases of traffic management over a period of six years. These phases will affect variously the access arrangements to the Centre Point building. The degree to which access is affected will vary depending on which particular phase the operation is in at that particular time. The most significant effect would be the loss of the main entrance on the west side of the building. At that point, as we have heard already, the proposal would be that at the moment pedestrian access would be provided to the rear of the building in St Giles High Street. There would be a number of other arrangements in relation to the management of traffic that would be introduced in conjunction with those phases.

4514. Could we look at map C5(ix) from the Petitioner’s response document.<sup>26</sup> This is the first stage in the overall stage process. This is the stage at which the work site to the east of Charing Cross Road is established.

**(Mr Anderson):** Correct, and we can see the Andrew Borde Street to the south of Centre Point has been closed and there is construction access there. At that stage, traffic continues on the Charing Cross Road.

4515. It is fair to say that, on this and further iterations of the construction phase through this eight phase process, St Giles High Street is being restricted to buses and taxis only. That is taking traffic up, past the eastern side of Centre Point Tower and then on to Oxford Street, and then left or right as appropriate. If that were found to be the appropriate solution to the needs of Centre Point and the CBI, is there any difficulty with that restriction being extended to the allow access to the front of the premises, along the northern stretch of that street?

**(Mr Anderson):** No, clearly if the proposition is to access the rear of the building, say for deliveries, there would have to be an exception to that restriction.

4516. Thank you. Do we need to look at any further stages in this plan? So far as Centre Point’s existing access, it is right, is it not, that at this stage and thereafter permanently the existing arrangements are displaced?

**(Mr Anderson):** That is correct. It may be helpful to look at C5(xi).<sup>27</sup> We see here, at this stage, that traffic is actually diverted from the Charing Cross Road around to the east of Centre Point and, clearly, to indicate a number of factors that one needs to take

<sup>24</sup> Crossrail Information Paper D10—Groundborne Noise and Vibration, <http://billdocuments.crossrail.co.uk/>

<sup>25</sup> Crossrail Ref: P60, Crossrail letter to CBI, 13 March 2006.

<sup>26</sup> Crossrail Ref: P57, Layout plan—C5 (ix) Tottenham Court Road East—Traffic Management Stage C Outline (CAMDLB-6703-004).

<sup>27</sup> Crossrail Ref: P57, Tottenham Court Road East—Traffic Management Stage E Outline (CAMDLB-6703-006).

---

**The Petition of Confederation of British Industry**

---

into account, if one seeks to secure access from the rear of the building, in this case it will be the free-flow of traffic through the area.

4517. If we turn, finally, to C5 (xv)<sup>28</sup> to see the permanent arrangement that is proposed. We see there—help us with this—to the west of Centre Point Tower the new underground/Crossrail access on the plaza side. We see Andrew Borde Street is closed and we see the traffic passing up from Earnshaw Street and St Giles High Street and into the southbound—  
*(Mr Anderson):* Correct.

4518. In relation to the impact of access to Centre Point itself, I think you can explain how that will be directly affected. Can you just help us with some context for the report that we have been looking at during the course of the proceedings and for work that is in progress in relation to the undertaking for an alternative provision for access to Centre Point for the CBI?

*(Mr Anderson):* Yes. As the project is taken forward and the design is taken forward, as I explained on a previous occasion, there would be traffic management plans developed for this area and the detailed arrangements would also be subject to scrutiny at a detailed consent stage. Obviously, the access arrangements in this area would form part of the development of those plans in those detailed arrangements. Those arrangements are subject to consultation with the local planning and highway authorities and we have a planning forum which is responsible for considering in generic terms, and those matters are dealt with specifically in a highways and traffic sub-group of that forum. There will also be a traffic liaison group forum nearer the time to co-ordinate the traffic. The highway authorities have been through this process which worked, I think with some success, on the Channel Tunnel Rail Link project, which was the previous project.

4519. Thank you. As the Committee has heard, the parties have been in discussion about the provisions to meet the requirements of the CBI and how far we are able to achieve that. Work has been done by the CBI which has been drawn to the Committee's attention. We have been corresponding and this afternoon put in a manuscript document which draws together the strands of what we are offering by way of assurances ourselves. Mr Anderson, just help us with this: what is the position so far as the Promoters are concerned in relation to the guarantees as to achieving the standard of access, both pedestrian and vehicular, which the CBI is seeking to achieve?

*(Mr Anderson):* I think the manuscript showed earlier gives a good indication of the current position we are in. As I have indicated, there will be

significantly more work done on the detail of the access arrangements. There are other interests to consult, particularly highway authorities, in this location, and that process will continue throughout the passage of the Bill and indeed beyond through into the construction phase.

4520. Sir Digby Jones raised concerns about the qualitative matters and standards of lighting and security and so forth. Just help the Committee with that. What is the Promoter's position in relation to addressing those qualitative concerns through the detailed design process?

*(Mr Anderson):* I think point seven in the sheet we were looking at earlier highlights the first of those points, and it is subject to discussion with the various authorities in due course.

4521. Just finally, then, turning away from consideration of access to a point raised by Mr Harwood in opening, that is to say, controls over environmental impacts and the Environmental Statement. The Committee will recall the detailed issues of compliance in giving your evidence to the Committee in relation to the Smithfield Market Traders' Petition. For the record, I can give the reference for that as Day 13, paragraphs 3917 to 3923.<sup>29</sup> Mr Anderson, can we turn, please, finally, to information paper D2.<sup>30</sup> If we turn to the second page of that information paper, Section 2 "Statement of intent". We see, at 2.1: "It is the intention of the Secretary of State to carry out the project so that its impact is as assessed in the Environmental Statement." Then, paragraph 2.2: "This paper sets out the controls contained in the Bill and in general legislation which, along with undertakings given by the Secretary of State, will ensure that impacts which have been assessed will not be exceeded so as to depart from the ES assumptions unless this: results from a change in circumstances which was not likely at the time of the ES; or would not be likely to have significant environmental effects (meaning significant adverse effects where the change is a modification to the current project; or would be subject to a separate consent process (and therefore further EIA if required). This will ensure that where EIA is legally required, works will not take place unless they have been assessed already as part of the Crossrail ES or are subject to a further EIA and consent process." Then it refers to contractual controls on the construction and operation of the scheme by the nominated undertaker. Mr Anderson, that was the position set out in the information paper. Does that remain the position of the Promoter in relation to these matters?

*(Mr Anderson):* Yes, that is correct. The paper goes on to explain the measures that would happen without the Bill, which is somewhere else there.

4522. **Mr Mould:** Thank you.

---

---

The Petition of Confederation of British Industry

---

## Cross-examined by Mr Harwood

4523. **Mr Harwood:** Thank you, Mr Chairman. Mr Anderson, just a few questions on the access issues. First of all, in terms of pedestrian access, do you agree that what is important here is pedestrian access to the Tower from street level rather than access into Centre Point complex from other routes such as through the car park?

**(Mr Anderson):** Yes, I agree that is a desirable aim.

4524. In terms of the standards to be achieved, put up please CBI 12.<sup>31</sup> This is the specification. For example: number two, “All temporary footway routes to be in compliance with Disability Discrimination Act requirements”. Is that an issue for you? Do you accept that?

**(Mr Anderson):** Yes, I think a number of points here are issues to be addressed as we take the detail of the process forward and a number do relate to public highways, and these are clearly matters which the highway authority and planning authority will have a view upon, and these tend, in general, after any discussions and detailed arrangements, to be taken forward.

4525. Does the Promoter accept that temporary footway route should be compliant with the Disability Discrimination Act?

**(Mr Anderson):** Yes.

4526. Do you accept they should be suitably illuminated in the hours of darkness to an appropriate standard such as BS5489?

**(Mr Anderson):** Yes. Item 5. I agree that would be an appropriate standard to consider in the context of the discussions with the relevant authorities. I think one needs to bear in mind here some of these measures could be temporary in their nature possibly for quite short periods, but in general I think this does provide a context for the discussions we would have on the detailed arrangements.

4527. Is there anything in the specifications which the Promoter cannot agree to at this stage?

**(Mr Anderson):** It is not a question of us not agreeing to these matters, I think at this stage we are still working on the detailed proposals, as I have indicated, and I would expect matters such as security, lighting, most of the matters set down here to form part of the discussions with the Highways Authorities, and indeed the freeholder of the building.

4528. Can I turn to questions of vehicular access? Do you accept the need put forward by the CBI for a VIP drop-off point?

**(Mr Anderson):** I accept that there is a facility there which would no longer be available during the construction works and we should seek to provide that and we have offered reasonable endeavours to do that on the east side of the building.

4529. Can we look at the east side, the plan in the Promoter’s response document, C5-ix?<sup>32</sup> Mr Anderson, where would you propose the drop-off or loading facility for the Centre Point Tower to be?

**(Mr Anderson)** In this particular phase?

4530. Yes.

**(Mr Anderson):** I think at this stage the detailed specification point was not identified. I think we can see that there was a generic area for loading shown on St. Giles High Street, and that would be one opportunity. Whether there would be opportunities closer to the eastern entrance of the Centre Point Tower itself, we would obviously have to explore as we take the design forward.

4531. Is your evidence that you do not know whether it is possible to have a drop-off point on the east side of the Tower?

**(Mr Anderson):** My evidence is not that we do not know, my evidence is that we will endeavour to provide such a drop-off point. It may not always be in the same location, depending on the particular phase of the works that are in operation at that particular time.

4532. The drop-off facility in the flow of traffic on the road itself will cause considerable problems though, would it not, with the number of buses and taxis using that route?

**(Mr Anderson):** It could well do, yes.

4533. Could you put up C5-xv, which is the permanent position?<sup>33</sup> If we could zoom in on Centre Point Tower, please? We see on that permanent plan the loading bay on the east side of the Tower, just by the left turn arrow. That is correct in the sense that it is a loading or drop-off point for the Centre Point?

**(Mr Anderson):** I think the term loading is generic there; it was meant to identify that vehicular drop off was included.

4534. Is that able to be provided during the course of the temporary construction works?

**(Mr Anderson):** I think that is subject to further design on the detailed arrangements during the various traffic management phases. I think what we are saying is that we will endeavour to try and provide such a facility but it is dependent on the outcome of that further designing work.

---

<sup>28</sup> Crossrail Ref: P57, Tottenham Court Road East—Traffic Management Permanent Arrangement— Outline (CAMDLB-6703-010).

<sup>29</sup> Smithfield Market Tenants’ Association oral evidence, 28 February 2006.

<sup>30</sup> Crossrail Information Paper D2 Control of Environmental Impacts, <http://billdocuments.crossrail.co.uk/>

<sup>31</sup> Committee Ref: A51, Plan demonstrating 10mm settlement contour in relation to Centre Point (CAMDLB-6705-012).

<sup>32</sup> Crossrail Ref: P57, Tottenham Court Road East—Traffic Management Stage E Outline (CAMDLB-6703-006).

<sup>33</sup> Crossrail Ref: P57, Tottenham Court Road East—Traffic Management Permanent Arrangement— Outline (CAMDLB-6703-010).

---

**The Petition of Confederation of British Industry**

---

4535. When the Promoter offers reasonable endeavours to secure a drop-off point or access, whatever, at all times, are you envisaging that it is not secure at all times; that is it is going to be a matter, as Mr Mould put it to Mr Handy, of a couple of hours on a few occasions by prior arrangement, or a period of perhaps several months when that facility is not available?

**(Mr Anderson):** I could not advise on what reasonable endeavours means in that situation but if it got to the position where it was a period of months I would expect us to be in discussions with the various interests of the building to seek an alternative arrangement.

4536. **Mr Harwood:** Thank you very much, Mr Anderson.

*The witness withdrew*

4537. **Chairman:** One matter, Mr Harwood. Can I just say to you that we have been very kind this

afternoon as a Committee. What we have had for the last hour or so has been a continuation of negotiation between outstanding matters in relation to this, and this is not a negotiating body. Really what we want is for you to be as concise as you possibly can be with the issues posed before the Committee. We well understand the technical arguments within that point; we have visited the site, we have been briefed thoroughly. So if you can, if you like, stop the negotiations and really make your point in your summing-up. Mr Mould, do you really need to call Mr Thornley-Taylor?

4538. **Mr Mould:** I was going to. You have not heard from him yet about the process that we are following in relation to airborne noise and it did seem to me that it might be useful to the Committee in this context, just to hear him explain that.

4539. **Chairman:** If you think that, then that is appropriate. As I say, if we could stick with the issues.

---

Mr Rupert Thornley-Taylor, Recalled

Examined by **Mr Mould**

4540. **Chairman:** Just before we start, Mr Taylor, this was not a personal attack on your credibility; we greatly enjoy your advice whenever we get the opportunity.

**(Mr Thornley-Taylor):** Thank you, sir; I took it as a compliment!

4541. **Mr Mould:** Mr Thornley-Taylor, we have here the draft undertaking on noise and vibration, which has been provided to the CBI. I am not going to ask you to read it out, but what I would like you to do very briefly is to explain the process which is encapsulated within this undertaking in relation to controlling and mitigating the impact of airborne noise on construction sites on sensitive receptors such as, in this case, the CBI located within Centre Point.

**(Mr Thornley-Taylor):** It is a two-pronged approach which devotes, on the one hand, effort towards controlling noise from the site through a process which I will explain in a minute, and on the other hand towards assessing the effect that that noise would have on premises which are acknowledged to be sensitive, as this one is, taking into account the noise levels predicted, assessing the sensitivity in the uses of the building and the structure of the building and working out whether any additional noise insulation measures are needed—for example secondary glazing may be needed—and then preparing a noise and vibration mitigation package which will ensure that through the construction process the uses of the building which have been identified as sensitive are not harmed by intrusive noise from a construction site. The other prong that I mentioned is the statutory process set out in section 61 of the Control of Pollution Act, where the contractor is required by

the Secretary of State to go through a process of applying for prior consent for the works, in which he has to set out the plant and machinery he is going to use, the method of working, duration, the locations and it is not uncommon for that to include predicted noise levels. The local authority then either consents to the application as it has been made, or consents to it with conditions, and that consent having been given it is an offence to exceed or breach the requirements of the consent. So it becomes quite clear what future noise levels are going to be because if they are exceeded enforcement action is taken and the contractor has to stop doing what he was doing that was creating the exceedance. And that coupled with the package of measures which are implemented for what is known as the receiver, the building of the premises affected by the noise, ensures that throughout the construction process the noise effect is acceptable.

4542. One other question: can you give the Committee an example of this approach to the control and mitigation of airborne noise apparently working successfully in practice?

**(Mr Thornley-Taylor):** The one that sticks in my mind was when Canary Wharf Jubilee Line Extension Station was constructed, a very large copper damn was created with sheet piles around the outside to excavate deep into the former dock beside the buildings which formed part of phase one of Canary Wharf, the original cluster of buildings around the Tower. I remember actually being called down there because the contractor was exceeding the noise levels in his Section 61 consent. Immediate action was taken to make him stop doing what he was doing, which was trying to insert sheet piles using an inappropriate method, and it was

---

**The Petition of Confederation of British Industry**

---

immediately brought back down below the consented levels. But that is an example of the enforcement process, and, having used the enforcement process, the noise conditions inside the building were such as to enable normal use throughout the construction project.

4543. **Mr Mould:** Thank you very much.

4544. **Mr Harwood:** No questions.

4545. **Chairman:** Are you content?

4546. **Mr Harwood:** Having a noise and vibration package is part of matters which we have agreed and Mr Thornley-Taylor has not given any evidence specifically on Centre Point impacts and I do not propose to invite him to go into that territory.

4547. **Chairman:** Thank you again, Mr Thornley-Taylor.

*The witness withdrew*

4548. **Mr Mould:** Sir, in relation to access, we have shown the Committee the suite of assurances that we now have given to the CBI in relation to their concerns on access. You have heard what Mr Anderson said about them, and I propose to do no more really than to say that in our submission those give proper and adequate comfort at this stage in the process. Of course, there will be a good deal more work to be done through the detailed design stage, as we move forward, but at this stage in the process they provide proper and adequate comfort and security to the CBI too in relation to the matters that they have raised before the Committee.

4549. I do draw attention to the fact that in relation to that point you have not been told that there is any serious concern with the traffic management phasing process that we have proposed in relation to the works at Tottenham Court Road on the part of the CBI and nor have they put forward to you a particular point of access that they say they would wish to see being provided in order to meet their concerns. It is in that context that the suite of assurances we have given provides the comfort that we say is justified.

4550. In relation to noise and vibration, I need say no more than you have heard what Mr Thornley-Taylor has just said in relation to that. The points he has made are encapsulated in the undertaking that we have given to the CBI, which you have seen in the Promoter's papers in relation to this petition.

4551. In relation to settlement, there are two points. First of all, the concern expressed by Mr Handy that the buildings at Centre Point require some reassessment in order to see whether or not the risk categorisation that has been attributed to them thus far sufficiently recognises their sensitivity to settlement. That is dealt with through the process which is set out in our policy, and I have drawn attention to the relevant paragraphs in information

paper D12 which deal with that. In essence, there is an ongoing process of detailed assessment through what we call our Stage 3 process. I have pointed to the paragraphs which address that. That will enable the concerns that Mr Handy has put forward to be taken into account as that process continues.

4552. In relation to the concern about ongoing and recurring expenditure on repairs—you will recall that he made that point in his evidence to you—again, I would simply draw your attention to information paper D12, section 6: “The Promoter will require the nominated undertaker to reimburse property owners for the reasonable cost they incur in remedying material physical damage arising from ground settlement caused by the authorised works . . .” provided that a number of considerations are satisfied.<sup>34</sup> Plainly, in an appropriate case, that will embrace recurring expenditure, if that expenditure can be shown to be reasonable.

4553. That deals with settlement. There is no particular point raised in relation to dust.

4554. It remains just to deal with Mr Harwood's points in opening about controlling impacts by reference to the environmental statement and compensation. In relation to the former point, sir, I simply remind you of what was said by Mr Anderson in response to the Smithfield traders' petition. I have given you the references in relation to that, dealing with the question of compliance with environmental controls, including those within the Bill, those that apply from general legislation, and those that arise under the Environmental Minimum Requirements regime. We have drawn attention today to the key paragraphs in information paper D2 which indicate the Promoter's intention to carry out the project so that its impact is as assessed in the Environmental Statement, and the concomitant statement that the controls contained in the Bill and the general legislation which, along with the undertaking given by the Secretary of State, will ensure impacts which have been assessed will not be exceeded so as to depart from the Environmental Statement assumptions, save in certain specified circumstances.<sup>35</sup> That, in practice, achieves the result that Mr Harwood says is necessary here to give comfort to those affected by the scheme. How that is achieved in practice in any given case, of course, is a matter for consideration through the detailed design.

4555. Sir, the final point is compensation, and I am very reluctant to go into that to any extent because you have heard from Mr Elvin in relation to that and you have seen the information paper. If I can give you the references in relation to the closing submissions on day 14 in response to the Smithfield traders, Mr Dingemans and Mr Elvin's submissions.

<sup>34</sup> Crossrail Information Paper D12—Ground Settlement, <http://billdocuments.crossrail.co.uk/>

<sup>35</sup> Crossrail Information Paper D2 Control of Environmental Impacts, <http://billdocuments.crossrail.co.uk/>

---

**The Petition of Confederation of British Industry**

---

Mr Elvin dealt in detail with the justification for applying what we call the National Compensation Code of Crossrail. Paragraphs 4041 through to 4047.<sup>36</sup> They pick up in particular concerns which have been expressed by these and other Petitioners about the limitations of the code in compensating for the environmental impacts of works from time to time during the construction phase. They also point out that, if access is obstructive as a result of works, the effect of that would, in the absence of the powers given by the Bill, be to give a right of action in common law, then the fact that that obstruction is temporary as opposed to permanent does not prevent the affected landowner from claiming compensation under the code if he can show that his land has been devalued as a result. There is, if you will, that residual comfort to somebody in the position of the CBI who are concerned that they may suffer from an obstruction of their access from time to time. That is something which, whatever its other limitations, the Compensation Code does provide for if the circumstances justify it.

4556. My final point is that there is certainly no justification for extending the Compensation Code so that it provides a compensation remedy for loss of profits or loss of revenue *per se*. The Compensation Code has been in place since the first railways were built in the 1830s and 1840s. Whatever else it may or may not have done and however the vagaries of it exclusiveness or inclusiveness, it has never provided for recovery of items of that kind. We would respectfully submit there is no justification for a change of that radical nature being made, as proposed by the CBI.

4557. Unless there is anything else, those are my submissions.

4558. **Mr Harwood:** Thank you, Mr Chairman.

4559. When Mr Mould was cross-examining Sir Digby Jones on the benefits of the scheme and leading on to the scale of works at Tottenham Court Road he seemed to be, essentially, suggesting you cannot make an omelette without breaking eggs. Well, Mr Chairman, in this particular case we would like the omelette but we are just concerned whether we might be one of the eggs or we might be some broken crockery. It is a matter of protecting, as is the main function of this Committee, interests which are impacted on by the Crossrail scheme. The CBI is in an unusual position in respect of Crossrail, in that its office use at Centre Point has to provide VIP meetings and operate a conference centre there; the Crossrail works will take place, at times, on all sides of the building over a period of five years—there will be work sites around the building for the majority of that time—and whilst part of the Centre Point building will be acquired none of the CBI's legal interest will be.

4560. Can I turn to the environmental effects and the amendments which we put forward as a protective provision into Schedule 14. That is set out in CBI 15 but I want to emphasise the points presently at issue. On access, the CBI asks the Committee to require, first of all, that there should at all times be convenient public access for pedestrians and vehicles to the Centre Point Tower. That is an essential requirement of the CBI being able to operate. That access should include drop-off space for VIPs. The CBI has regular visits from senior politicians, business leaders and occasionally from the Royal Family. It seems to us that the traffic arrangements can be worked to provide a drop-off space around the Tower. The access should be of sufficient capacity and quality to allow effective access for our staff and our visitors to our premises. There seems to be no disagreement really with the specifications we have put forward, merely that they need to be talked about with other people.

4561. The way in which the Promoters put their undertakings, as you know, is in terms of reasonable endeavours. Difficult to enforce, the question is in practice what does that amount to? If it amounts to a couple of occasions or a few hours during the course of the process, then where access is not available or drop-off is not available no doubt that can be worked round. If the outlook in “reasonable endeavours” is that there may be a period of weeks or months where access to Centre Point is at an unacceptable standard, then that is not an appropriate assurance to be given, and that is why we are seeking more clear and precise assurances and amendments to be made to the Bill.

4562. On noise and vibration, the simple points that remain between us are that the Promoters should be required to adhere to the lecture theatre standard during the construction process and if not then compensation can be payable. We certainly hope that conditions do not reach a point where the CBI has to leave Centre Point, but the Promoters should be required to relocate the CBI if that stage is reached. The final matter which remains on settlement is that whilst the Promoter accepts that further assessment is required, it is insisting on Centre Point being in risk category 2 in advance of that work being done—possibly, once that has been done. Mr Handy's evidence set the Promoter's assessment of the building as flawed because it has not properly dealt with the effect of the glazed Link. So if one end of the Link settles to a different depth or at a different time to the other, significant damage may result. So we say, sir, that Centre Point should be in risk category 3, and that would enable the property owners, including ourselves, to agree to protective measures with the nominated undertaker.

4563. Turning to, perhaps, more general points of principle, the first of those is the environmental impact assessment. The Environmental Statement, with its supplements, sets out in some detail the design of the project, the environment which it can affect, the likely significant effects of the project and

---

<sup>36</sup> Smithfield Market Tenants' Association oral evidence, 1 March 2006.

---

**The Petition of Confederation of British Industry**

---

what mitigation is proposed. The problem is that if Crossrail is built none of that has to happen. The Bill merely authorises, in quite general terms, railways and stations and roadworks within particular lines on the plan. So what the Bill tells us about Tottenham Court Road Station is that there will be a station at Tottenham Court Road for Crossrail and it will be within the limits of deviation, the limits of the land to be acquired. It tells us a little bit about road closures in the area at that time, but that is all the Bill tells us about it. The detail, which we have all been debating is actually in the Environmental Statement and there is a disassociation between the Environmental Statement and what is actually being authorised. The Statement is not being tied in in a way which is conventionally done on planning permissions and needs to be done in this case.

4564. If I can turn to what Mr Mould referred to in information document D2, paragraph 2.1, he says: "It is the intention of the Secretary of State to carry out the project so that its impact is as assessed in the Environmental Statement."<sup>37</sup> That is an intention; that is not a commitment, it is not enforceable and it is not required of the undertaker. At paragraph 2.2 it says: "This paper sets out the controls contained in the Bill and in general legislation which, along with undertakings . . . to ensure that there will not be departure from the Environmental Statement assumptions except in those three categories". What is said in 2.2 is not actually carried through in the controls in the Bill, the general legislation and the undertakings, because what that paper then goes on to, and what Mr Anderson's evidence previously has done, is deal with the approval of the detail and the conditions in Schedule 7, but the Bill does not require that those details approved by the local authority are in accordance with or related to what is proposed in the Environmental Statement. So that although the authorities may have regard to the Environmental Statement there is no requirement that those details follow what is in the Environmental Statement.

4565. On the Environmental Minimum Requirements, there are two difficulties: what they require and how they are to be enforced. The Environmental Minimum Requirements contain a series of schemes and processes (the construction code, for example) but do not include design or mitigation of the project. They do not require the ES to be carried out. The nominated undertaker should endeavour to reduce adverse environmental impacts, having regard to cost and to the "tight" programme, but is not obliged to carry out any of the mitigation in the ES.

4566. The other difficulty with the Environment Minimum Requirements is that they are only enforceable by the Secretary of State and the Secretary of State's undertaking to this Committee is not enforceable by anybody else against him. Article 1(5) of the Environmental Impact Assessment

Directive provides that the Directive "shall not apply to projects the details of which are adopted by a specific act of national legislation, since the objectives of the Directive including that of supplying information, are achieved through the legislative process." The legislative process must therefore do the equivalent of an environmental impact assessment, and the details of the project must be fixed in a similar way to planning permissions. At the moment, the details in the Environmental Statement are not approved by the Bill.

4567. The CBI amendment (CBI 15) alters Clause 10 of the Bill, which is the provision for granting deemed planning permission for the works. It makes that planning permission subject to a condition that the development shall be carried out in accordance with the Environmental Statement except as amended by any provision of the Bill (so reflecting a decision in this Committee), an undertaking directly enforceable by a person other than the Secretary of State (so giving effect to the settlement of issues) or otherwise agreed in writing by the relevant local planning authority. That variation by the local planning authority may not make worse any likely significant adverse effects or render proposed mitigation less effective. So, Mr Chairman, that is our proposal for resolving what we see as the Environmental Impact Assessment difficulty.

4568. Turning finally to compensation. In opening I gave the example of a loss of business to a conference centre caused by the works. If the centre was owned by the freeholder, who in this case has the Plaza at Centre Point taken, it would be compensated under section 7 of the Compulsory Purchase Act 1965. If as here, for the CBI, it is occupied by a leaseholder, compensation would not be payable. Similarly, if the rental value of the first floor of Centre Point was reduced by the works, the freeholder could recover any loss on letting the floor as compensation. However, the CBI would not be compensated if the rental value of its first floor fell below the rent it was paying.

4569. Our amendments end this anomaly by modifying the compensation provisions as they are applied in the Crossrail Bill. New section 7A for the Compulsory Purchase Act provides that where the owner of land which has been acquired could recover compensation for the losses to the "other land"—that is the land that is not acquired—held with that land acquired, leaseholders of that other land could recover compensation for any loss they suffer. The new section 7B extends to compensation to loss of profit and it may be helpful to put that up—it is CBI 15.<sup>38</sup>

4570. Section 44 of the Land Compensation Act 1973 provides that the loss recoverable under section 7 includes the loss caused by the entire project and not just that caused by the works on the land

---

<sup>37</sup> Crossrail Information Paper D2 Control of Environmental Impacts, <http://billdocuments.crossrail.co.uk/>

<sup>38</sup> CBI Amendment to the Crossrail Bill (CAMDLB-6705-023).

---

**The Petition of Confederation of British Industry**

---

required. What that means is that when the owner of land is getting compensation in effect for his retained land you are not simply looking at the effect of the works on the bit of land taken off him, but the effect of works generally on the land that is retained. So we propose a consequential modification to the Land Compensation Act provision to bring in that issue.

4571. There has been talk of the National Compensation Code. There is no such thing. There is a mass of legislation, some of which can trace its lineage back 160 years, which has been repeatedly amended and then interpreted by extensive case law. It does not have the clarity, the structure and rigour of a code; its only resemblance to a code is that it is difficult to decipher. The Office of the Deputy Prime Minister said in a consultation paper, *Compulsory Purchase and Compensation: The Government's Proposals for Change*: "The current arrangements for the payment of compensation are convoluted, heavily dependent on case law and not always fair and consistent in their application." There is no one dealing in this field who would disagree with that observation. There is no objection in principle to amending national legislation for the purposes of the Crossrail project because the Bill already does that in quite a number of respects. What we bring forward with what I have described as the "leaseholder amendment" is a principled extension to section 7 compensation. Compensation will be payable for the same land but for different interests. It corrects a position which is unfair and inconsistent, protecting a defined class of persons which includes the CBI. Compensation is intended to be there for those who suffer a loss for the public benefit. This is a situation where a modest amendment can be made to do that, and there is no answer in Mr Mould's submission or anything put forward by the Promoter today to the particular amendment we are proposing in respect of these leaseholds.

4572. The Promoter on another objection, the Smithfield Traders, makes reference to the law and to cases. Judges decide what the law is; Parliament is here to decide what the law should be. The law evolves to reflect changes to our modern life and the situations which arise in practice. To give an example, Centre Point has already changed the law on compulsory purchase. For years after Centre Point had been built in the 1960s the developer, Sovmots Investments, left the maisonettes in the Podium block empty, and ultimately they were compulsorily purchased by Camden Council. But Sovmots said that as the flats had never been occupied there was no right to feed electricity, gas, water and so on through to those flats. The case went to the House of Lords and Sovmots won. So what Parliament did in response to the particular case was

to amend the law to allow a compulsory purchase order to create such rights. That principle is now reflected within the Crossrail Bill.

4573. Today Centre Point throws up another novel issue. Part of a tower block is being acquired. The scheme may harm and cause loss to other parts of the block. As the law stands the freeholder can recover any such loss, but a leaseholder, such as CBI, who has not lost any land, cannot. We consider that that is an anomaly; we consider that is unfair; and we consider that it can be changed.

4574. The second element of our amendment is to fully reflect loss of profit, by which we mean the net effect of changes of income and expenditure because of the scheme in compensation. A loss of profit may affect land value and is already recoverable as far as it does. Our amendment recognises that loss of profit as a general head, as there is income lost or expenditure incurred carrying out the activity, which is the operator's cost rather than the landowner's. The value of the land may go down because the use of it is less profitable, but the person carrying out the activity will make a loss as well, and that loss of profit is actually well recognised, when the land is compulsorily acquired, as disturbance compensation. In this particular situation the use of the CBI conference facilities is reduced or almost entirely lost because of the Crossrail works and there will be a reduction in the value of that part of the CBI leasehold interest and additional reduction in profits of running that business. The reason is that some of the costs directly related to the conference business, such as staff and equipment, may not be able to be reduced in line with the reduction in the business. As you heard, there may be additional costs to the CBI from this project, such as increased pay to retain CBI staff in their working environment. Again, that would not be entirely reflected in the value of the land.

4575. So, Mr Chairman, this proposal will, in conjunction with the leaseholder amendment to section 7 compensation proposed by the CBI, provide a modest increase in the scope of compensation and, we suggest, appropriate protection for the interests of the Confederation of British Industry.

4576. Sir, unless I can help further, those are our submissions.

4577. **Chairman:** Thank you very much indeed, gentlemen. Mr Mould, is there anything urgent that you need to inform the Committee about?

4578. **Mr Mould:** Nothing urgent or non-urgent, no; thank you very much.

4579. **Chairman:** Thank you, gentlemen. The Committee stands adjourned until the next Petition tomorrow morning at 10 o'clock in this room.

Wednesday 15 March 2006

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley  
Ms Katy Clark  
Mr Philip Hollobone

Kelvin Hopkins  
Mrs Siân C James

---

Ordered: that Counsel and Parties be called in.

4580. **Chairman:** Can I remind people that if we are here at 11.30 this morning I am going to suspend the Committee for 15 minutes or so in order that people here, visiting or working, can partake of liquid

refreshments. Today we are going to hear the petitions of British Land plc and Salisbury House Offices Limited. Ms Lieven.

---

The Petition of British Land plc

Mr Neil Cameron appeared on behalf of the Petitioner.

*Bircham Dyson Bell appeared as Agent.*

4581. **Ms Lieven:** Sir, can I start by thanking the Committee very much for the extra time, which I am happy to say has been productive in the case of British Land. British Land were coming to talk about two things this morning: first of all, to give a brief update of where we were in discussions on Liverpool Street, which they still intend to do, which I will leave to Mr Cameron in moment; and also to discuss an issue around service of notice to treat and I understand that the position of British Land on that matter now is that they are content to tell the Committee that they will not be raising it before this House. I will leave it to Mr Cameron to put it in precisely his own words. The time that has been given to us has been useful, sir, and I am very grateful to the Committee.

4582. **Mr Cameron:** I am also grateful, sir, and I suspect that you will be even more grateful that we are not pursuing our point. Sir, can I explain that I appear this morning on behalf of British Land in relation to their remaining petitioning points—and by that I mean the non-Liverpool Street petitioning points. I also appear this morning on behalf of British Land and the City of London Corporation in relation to Liverpool Street. I do not anticipate taking very long on that, it is just to update you on what has actually been happening. Sir, can I deal first with British Land's position and then deal with the Liverpool Street position next? As far as British Land is concerned there are remaining issues between British Land and the Promoter, but agreement has been reached on a substantial number of issues. We have not yet managed to conclude an undertaking but there is a draft in circulation.

4583. Sir, there are four points on which we do not anticipate satisfactory resolution will be achieved. I will tell you what they are but I am then going to tell you that we do not intend to pursue them

in this House, but reserve our position to pursue them in the other House if needs be. There is a parcel of land in front of 100 Liverpool Street, which you will probably remember—it is called parcel 116, but I am not going to refer to the plan—and that is a parcel on which the Promoter requires the right to defer utilities. British Land, so far as their interests are concerned, are prepared to give them the right to do that, and therefore British Land say that there is no need for the Promoter to reserve the right to acquire the land compulsorily, and there is a dispute as to whether the Promoter should reserve the right to exercise compulsory purchase powers, notwithstanding the fact that British Land are prepared to give them the right. Sir, we are not going to pursue that here and we hope that a satisfactory arrangement will be made; if it is not, as I have said, we will pursue it elsewhere.

4584. The other issues which we intend to pursue elsewhere are, firstly, the effect of retaining a protective sleeve along the running tunnels. That is important to British Land because there is an issue of future development rights and whether they would wish to pile down into the area which is covered by the protective sleeve and then an issue of whether they should be allowed to if the engineers say it would not have an adverse effect on the tunnel—again, not pursued before you today.

4585. There is then a potential dispute about whether the Promoter should make a provision for compensation for incidental damage, and that is the damage, other than settlement, that arises as a result of the carrying out of the works. That is not pursued today but it may be pursued later.

4586. The last point which remains in dispute are the arrangements in the Settlement Deed, and in particular the requirement that somebody like

---

 The Petition of British Land
 

---

British Land, who might own a building in multiple occupation which would include a number of different tenants, would have to get all those tenants to sign up in order to get the benefit of the Deed—and that might include somebody running a kiosk or a small shop—and it causes administrative and other difficulties. Again, we do not pursue that here. We understand that other Petitioners may pursue that, so if it is not resolved satisfactorily again we will pursue it elsewhere. Having said that, agreement has been reached on the other petitioning points. The undertaking has not been signed and sealed as yet. We do not pursue those matters on the basis that where the Promoter has said he will agree something we assume that he will, but we would wish to reserve the right to come back before you if—and we do not anticipate he would—he resiled from agreement. I appreciate that you will not want Petitioners popping back and forth, and we do not anticipate we will have to do that, but I would wish to reserve that right.

4587. Sir, I think that is all I have to say on the remaining British Land points, so can I turn to British Land and the City of London Corporation? Sir, the reason that we are here today, as you know, and you will have seen the letter from Mr George Lawrence in reply to your letter—and he apologises for not being here himself today, he is actually appearing in front of another Committee on the London Local Authorities Bill—is that since receiving your letter of 16 February both British Land and the City of London Corporation have attempted to draw up both a scope of work and a programme for doing the work to provide that information. Sir, what I would like to do now is to circulate the note with the scope of the work and a programme. This is not going to be a voluminous document.

4588. **Chairman:** Just before we move forward, Mr Cameron, can I just say that in the light of your comments about the Committee not wishing Petitioners to keep popping backwards and forwards to the Committee, that is exactly the sense of our feeling on this, and we do hope that the agreement can be reached and the Committee's time is not taken up at some time in the future.

4589. **Mr Cameron:** Certainly, sir. Sir, can I explain what the two documents are that you have? One is headed "Further Work" and that, after discussion, has been produced by the Promoter.

4590. **Chairman:** For the record, A54.<sup>1</sup>

4591. **Mr Cameron:** And in a spirit of joint working the programme has been drawn up by SDG, and you will remember that that is Mr Spencer's firm.

4592. **Chairman:** That for the record is A53.<sup>2</sup>

4593. **Mr Cameron:** Sir, I not going to take you through all the items in this document, Further Work, save to say that substantial agreement has been reached between the parties as to what needs to be done and how it should be done. The programme that we have drawn up on the flow chart shows the work that we anticipate needs to be done from the scope of work and when we anticipate it should be done. The two dates which the Committee will be interested in, amongst others, is item 6 on the flow chart, reports to Committee. The first item on the flow chart is the report to the Committee today, and then we anticipate in May coming back to the Committee. Sir, mindful of your remarks that you do not want people coming back unnecessarily, the reason we would like to come back is because you have asked, sir, on behalf of the Committee, for further information, and so we would like to be able to come back to provide you with that information.

4594. **Chairman:** I think that is entirely right, Mr Cameron, but you have raised a number of points and I do not want you to keep coming back on all of them.

4595. **Mr Cameron:** No, sir. What we anticipate in May is that we just come back on Liverpool Street, and what we do is to provide you with the information you have asked for. Also, if there is clarification that you seek then both parties would be able to provide it. Secondly, if there are difficulties between the parties you may require assistance in resolving difficulties and differences. May I explain what I mean by that? It may be that the Promoter concludes that enhanced capacity is necessary, but that enlarging the eastern ticket hall is not the appropriate solution—that is a possible outcome—and if that is the case I have no doubt that the Promoter would want to address you. It may be that there is agreement that enhanced capacity needs to be provided to accommodate predicted future flows, but there is a dispute as to whether the additional capacity should be provided now as a provision in the Bill or it should be put off to some future date. Sir, that may be a substantive dispute because we anticipate from discussions that it may be that the Promoter says it should be left to some other mechanism, and that is a dispute that you will have to resolve. There may be a dispute as to whether it is necessary to provide direct access to the street from any enlarged eastern ticket hall, and again that is a dispute which you would have to resolve and you may want to be assisted on that. Sir, there are many other possible outcomes from this work and the Committee might, as I have already said, require some clarification. So that is what we anticipate will happen until May and what we are asking for is a slot in May so that we can come back. It may be that we will come back and

<sup>1</sup> Committee Ref: A54, Enlargement of Ticket Hall B.

<sup>2</sup> Committee Ref: A53, Liverpool Street Station Options Review—Programme of Works (SCN20060315-001).

---

The Petition of British Land

---

say, “The parties are agreed, this is the further information.” It may be that we say, “We think this is what you wanted, would you like to clarify it?”

4596. **Chairman:** Mr Cameron, we will be as amenable in any way that we can, particularly on such a large issue as Liverpool Street station and all the works that will have to transpire from that. What I do not want to happen—and my colleagues agree to this—is to be drawn into the negotiations. What we want to do is to be helpful in any way we can to finalise the passage of the Select Committee’s work and I may have to come back to you on that matter. I can see that there may be a need for you to return at some point, but I will have to liaise with my colleagues on that and bring back our views on that.

4597. **Mr Cameron:** Sir, what we are asking for, to make it plain, is that we set an end date where we come back, because that has a number of advantages. It means that all the parties have to work together so that they know they have to provide the information by that date, and that has an extremely beneficial effect. It also means, sir, that the parties can come, present their findings, and you can say, “We need to know more about this,” or that or the other.

4598. **Chairman:** I think it is fair to say that we have asked you to go away and do some work and therefore you should be entitled to come back with some point to make in relation to those points. I just reiterate that I do not want us to be drawn into the negotiations on matters, but I accept that because of our request you may need the opportunity to explain the information which we sought. In that respect we can agree that we may have to find time for you.

4599. **Mr Cameron:** Thank you, sir. You have the programme and what we are asking you today is not to get involved in the negotiations or the precise wording, but to give your general endorsement to the fact that further work is carrying on, your general endorsement to the programme, which has an end date in May, and your very helpful indication, which you have already given, sir, that you will hear us at an appropriate time when the work has been done.

4600. **Chairman:** As I say, I will just repeat what I said. I understand your request and bearing in mind that we have requested information from you it may be that the Committee may need to have you back to explain that. If you can get as much of that information to us as possible then we can be the judge of that. As to enabling a slot to be arranged at the present time, I am going to have to talk to the Secretary to see what we can do in respect of that.

4601. **Mr Cameron:** Thank you, sir. The only other issue—and this may not find favour so I am not going to push it as hard as I would—is that we do not anticipate problems, but if there were a

complete breakdown between the parties we do not expect you to get involved in the negotiations. But if the breakdown went to the question of whether the information that you have requested could actually be provided, we would have to deal with it on an *ad hoc* basis, and in those circumstances we would wish to have the opportunity to come back to the Committee earlier so that we do not just come back in May and say, “We are terribly sorry, everything broke down and we have not provided the information.” That is the only other request that we make.

4602. **Chairman:** This is now an open door policy almost. I am afraid I cannot give that. On such a matter of so much importance to the Bill itself I can say that this Committee will always be open, but we cannot have a totally open approach to the diary for the future. If talks do break down and they become almost irrecoverable the Committee will hear the views of both sides and take an opinion on it at that time; that is all I am really able to say.

4603. **Mr Cameron:** That is extremely helpful to us, thank you.

4604. **Chairman:** Can I just say that we are not expecting you to fail; we are expecting you to try and find a solution and report that information back to the Committee. So we will reserve our position on that request.

4605. **Mr Cameron:** Thank you very much, sir.

4606. **Chairman:** Ms Lieven.

4607. **Ms Lieven:** Sir, very briefly, as far as the note is concerned we are quite content with that—it was drawn up jointly—and we are obviously content to do the work which we understood the Committee wanted us to do. So far as the programme is concerned, we are quite happy with it as an indicative programme; we are perfectly happy with the general headings. We do not feel that it is appropriate, to be frank, for this Committee to get into managing negotiations which is, in truth, what is being asked of you, let alone to oversee a programme like this and effectively acting as a County Court issuing directions and then overseeing them. There are some of the sub-headings here where we are not sure that they are necessary; there are other things that we think might be necessary. As a general indication of the kind of things that we are going to be talking about, we are happy; and we are quite happy with the overall programme by which by early May there is a report drawn up that seeks to answer the issues on which the Committee ask for further discussion to be undertaken.

4608. Can I make clear that we do not accept at this stage that there would be any need to come back before the Committee with oral evidence? We are concerned about the programme as a whole and

---

 The Petition of Salisbury House Offices Limited
 

---

we are concerned that if we do get into that situation there is a severe danger of going back over material that the Committee heard in January, at length, if you remember, because it was before we moved to a shorter and more concise approach, and where the Committee may well have already drawn views. It may be necessary to call further evidence but I certainly would not want there to be any acceptance from our side that that will be the case. What there will be is a written report that we are quite happy to present to the Committee and that will hopefully set out those areas that are agreed, and if there are any areas that are not agreed then it will set those out as well. If the Committee then feels that it would help its deliberations to hear further evidence then obviously that will have to be programmed in, but I would not want any acceptance at this stage that there will be a slot in the programme for Liverpool Street to come back, otherwise again one could see that there might be a number of things in parts of the Bill that might want that kind of provision. So, sir, generally we are all in happy agreement, the work is being undertaken and I do not think there are any problems so far with that; but in my

submission the Committee should not commit itself at this stage to rehearing the Liverpool Street issues. I hope that makes sense.

4609. **Chairman:** I am content with most of what you said there. Can I just say that we will look at all the evidence or views which are prevented before us? We do not want argument, we want solution, and I think from the manner in which you have both talked to the Committee this morning I am sure that you can do that. If there is a failure to agree then we will take the information provided by both sides and view it independently in our deliberations. But I agree with you, let us hope that we do not have to come back. If the Committee then in time feels it is appropriate to recall any Petitioner then we are entitled to do so, but we do not want the Committee to keep revisiting what we have heard before, and we certainly do not want to have any repetition of the matters heard before.

4610. **Ms Lieven:** Thank you very much, sir.

4611. **Chairman:** That concludes the hearing this morning in respect of that. We will now move on to Salisbury House Offices Limited.

---

The Petition of Salisbury House Offices Limited

Mr William Hicks QC appeared on behalf of the Petitioner.

Bircham Dyson Bell appeared as Agent.

4612. **Chairman:** Ms Lieven.

4613. **Ms Lieven:** Sir, we now move on to Salisbury House. Very briefly, my understanding of the position is that there are no points of principle between us and Salisbury House left. There are some what I would describe as only minor issues around the Settlement Deed and the undertaking between us and Salisbury House about pretty small process-type points. In those circumstances we are having discussions with other Petitioners about those kinds of points on the equivalent documents, and in those circumstances we have indicated to Salisbury House that we will not press the Committee to hear Salisbury House's substantive issue today. I am very conscious that if the message that comes out from this Committee is that Petitioners are allowed to defer because they have not reached agreement, then the programme will effectively collapse for the next few weeks. You can see the danger. So there is a fine line to be drawn. But from the Promoter's side we are content that we have got so close with Salisbury House and that the issues are so limited and so narrow that for our part we leave it up to the Committee as to how it wants to handle it—we are not pressing the Committee to hear any matters of substance today. I will leave Mr Hicks to explain the detail of where they are, and to persuade the Committee.

4614. **Chairman:** Mr Hicks.

4615. **Mr Hicks:** Good morning, sir. I appear on behalf of Salisbury House Offices Limited. I hope I do not need to detain you more than a very few minutes. With your approval, sir, I can explain the position very, very shortly first; I have a longer version if you want it but I suggest that I try with the very short version first. It is not often you get an offer like that from a lawyer!

4616. **Chairman:** Yes.

4617. **Mr Hicks:** The guts of it is, sir, that we have reached agreement in principle on the substantive issues between us on the basis that an undertaking will be given. That undertaking is in an advanced form and there is an open copy of that undertaking which can be handed in. Sir, there are some very detailed points to be checked; that is one point. The main detailed point is that consideration needs to be given to the best way in which to coordinate arbitration under Schedule 2 of the Bill and adjudication under the Deed relating to the settlement where both relate to the same building.

4618. **Chairman:** Just for the record, this will be A55.<sup>3</sup>

---

<sup>3</sup> Committee Ref: A55, Draft Undertaking for Salisbury House.

---

The Petition of Salisbury House Offices Limited

---

4619. **Mr Hicks:** I am much obliged, sir. This really leads on from the point that Mr Cameron mentioned. It has been agreed between us that we can enter into the Deed of Settlement without signing up all our 50 or so tenants, which makes obvious sense. But that then leaves this possibility of an arbitration under the Act for the tenants and an adjudication under the Deed for us. We only really got to this position very recently because of the way in which our substantive issues have been settled, and we had this open draft last night. We anticipate that these can be sorted, but sorting out how those two arbitration and adjudication systems should coordinate so as not to waste a lot of time is something that is not easy to do overnight in a hurry. I can explain the position in more detail—it will take a little while—but we believe that in this case the best course, given that the matters of principle are now agreed, is to defer and reserve the right to come back on any issues that arise, but it is unlikely that it will be necessary to come back at all. If I could just add this? You have said that you do not want to get involved in negotiations. We have not got to the point where we know whether there is an issue yet on this and because it must be in general in the interests of both us and the Promoter to avoid duplication and confusion on this we strongly believe that it is likely we will reach agreement on it. That is the short version, sir. I can explain the context but if I go further I have to explain the background to you.

4620. **Chairman:** Ms Lieven, you are happy with this programme?

4621. **Ms Lieven:** Yes, on the very specific facts of this very specific case and where we have got to. We are most unhappy, to be frank, about deferring petitions in this situation but we have said to Salisbury House that because the issue is so narrow and simply one of process, and because they have made that clear publicly to the Committee so that the Committee knows that if they come back, we had reached that stage that we are not going to oppose a deferral. I am couching it in those terms, sir, because you can understand that Mr Walker, who is organising the programme, is under a lot of pressure from many other Petitioners to defer for further negotiation and it has proved very difficult to get Petitioners to appear in front of this Committee because they all want to defer. So we are very bothered about the public message that goes out from agreeing to defer Salisbury House, but on these particular circumstances we are not resisting a deferral.

4622. **Chairman:** Bearing in mind that we have the draft in front of us and we are so close it seems sensible to follow that course.

4623. **Chairman:** That being the end of this sitting we now stand adjourned until tomorrow at 10 a.m. in this room.

**Thursday 16 March 2006**

Before:

Mr Alan Meale, in the Chair

Mr Brian Binley

Mrs Siân C James

---

Ordered: that Counsel and Parties be called in.

4624. **Chairman:** Mr Mould, you seem to be the only character here today.

4625. **Mr Mould:** Sir, I will see if I can lose anyway! Sir, the position is that Seymour Investments, I believe, have received a second House undertaking, so that deals with their position as far as this House is concerned. The Petition of National Car Parks is to be resolved on terms, and I think that Miss Jones has been informed of that, so they do not appear today. With regard to SME (Hammersmith) Limited, we have been seeking to find out what their position is through their agent, and I understand from instructions I have that he has not had instructions from his client in recent times. We were obviously waiting to see whether anybody did turn up to present their Petition, and as far as I know that is not the case; so this is their slot and they are not here.

4626. **Chairman:** They have had their opportunity. We are very pleased that you have managed to try and attempt to resolve the other two issues. The Committee will meet next Tuesday at 10 am. Thank you very much.

---

**Tuesday 21 March 2006**

Before:

Mr Brian Binley

Ms Katy Clark  
Mrs Siân C James

Mr Philip Hollobone  
Dr John Pugh

---

In the absence of the Chairman, Mr Binley was called to the Chair

Ordered: that Counsel and Parties be called in.

4627. **Mr Binley:** Can I, as usual, inform the Committee that it is my intention to suspend the sitting for 15 minutes at a convenient point after 11.30 so that everyone may take—and I hope will take—the opportunity to have a coffee in the upper waiting room. I say “will take” because we struggled to get it there and we want to keep it. So help would be much appreciated. Today the Committee will be hearing four Petitions, the first of which is the French Huguenot Church of London Charitable Trust and the French Protestant Church of London. Is there anybody present on their behalf?

4628. **Mr Challis:** Yes, sir. Good morning. My name is Mark Challis, from Bircham, Dyson, Bell. Sir, just to say that the Church will not be appearing today. The reason for that is that the Church has now very substantially, but not completely, agreed an undertaking with the Promoters. Therefore, it was not felt necessary or appropriate for the Church to be here.

4629. **Mr Binley:** We are most grateful to you for that. We give most thanks, quite frankly.

The Petition of EMI Music Publishing Limited.

Mr Gregory Jones appeared on behalf of the Petitioner.

4630. **Mr Binley:** We then move on to the Petition of EMI Music Publishing Limited. Can I, first of all, ask if Counsel for the Promoters wishes to make an opening statement? Mr Elvin?

4631. **Mr Elvin:** Sir, as usual, very brief, just to give you a very short background. Can I have the relevant section put up just to show the Committee what we are dealing with?<sup>1</sup> Sir, EMI owns two premises which are relevant here: 12 Goslett Yard and parts of 127 Charing Cross Road, roughly where you see the arrow pointing to the word “Goslett Yard” in black, in the centre of the screen. 127 Charing Cross Road is just below that. Goslett Yard is just above that. Goslett Yard is to be acquired and demolished for the Eastern Ticket Hall of the proposed Tottenham Court Road Station. 127 Charing Cross Road is above and adjacent to the proposed ticket hall and the

westbound platform tunnel at the proposed Tottenham Court Road Station. As I understand it, from discussion with Mr Jones yesterday, the issues for the Committee relate to compensation, noise, costs and to accessibility and the giving notice of possession. Unless there are any other matters I can assist you with at this stage, I hand over to Mr Jones.

4632. **Mr Binley:** As ever, you are very kind. Can I now call upon Mr Gregory Jones to present the case for EMI Music Publishing Limited?

4633. **Mr Jones:** Good morning, sir. We have a bundle of documents, if I can just give them to the Committee. I have also got a short opening note, which I have reduced to writing. I hope that is of assistance. I know there is a transcript.

4634. **Mr Binley:** May I just interrupt you to tell you that this will then be recorded as A56 on our document list.<sup>2</sup>

4635. **Mr Jones:** Those instructing me are going to pass to your Clerk a copy of the opening note, and also my learned friends.

4636. **Mr Binley:** While that is happening, Mr Jones, might I tell you that that is recorded as A57.<sup>3</sup>

4637. **Mr Jones:** If I could inform the Committee that we are intending to call one witness. His name is Mr Paul Tilley and he is the company’s facilities manager.

4638. Sir, I hope you and your colleagues have copies of my note. Mr Elvin has kindly identified the location of the two premises. Sir, you will see that 12 Goslett Yard is scheduled to be acquired and demolished. As you will see, EMI’s current proposal is to relocate to their other premises across the yard at 127 Charing Cross Road. If I go to my note, the first issue I address is compensation. We are between a rock and a hard place here, because at the time of the announcement of Crossrail, EMI was in the commencement of major refurbishment of its

---

<sup>1</sup> Crossrail Ref: P62, 12 Goslett Yard, 127 Charing Cross Road (Parcel Nos. 674, 677) (WESTCC-8903-001).

<sup>2</sup> Committee Ref: A56, Exhibits from EMI Publishing Limited.

<sup>3</sup> Committee Ref: A57, Proof of Evidence from EMI Publishing Limited.

---

**The Petition of EMI Music Publishing Limited**

---

offices and studios at 12 Goslett Road. It has recording studios there which are acoustically sensitive.

4639. The estimated cost budget, and you will see that in your bundle of documents (and we will come to it in the evidence) was in the region of £½ million. EMI had already incurred in the region of £41,000 to £44,000 in design costs. We will also, with Mr Tilley, take you, sir, to the rather attractive design plans that were in the process of being implemented. Prudently, I may say, EMI, when Crossrail was announced, put off to-date going ahead with the project, but the position is that the Promoters remain of the view that they will not compensate EMI for the costs that have already been incurred in what may be an abortive project. This is because they adhere to the position that no notice of a CPO has been served, so no compensation is payable under the code. Sir, I am sure you are familiar in broad terms with the compensatory provisions.

4640. We say this is not only unfair (and this Committee has an opportunity to correct that unfairness) but it also leads to a curious and, I may be suggesting, nonsensical result because if we are unsuccessful in this Petition we will have to consider our position and if we then go ahead with our £½ million refurbishment costs for the building, so we upgrade the building, then should it be CPO'd (and we know that it is scheduled to be the ticketing area of the Tottenham Court Road Station) we will be entitled to recover the enhanced property value of 12 Goslett Yard as a result of carrying out major refurbishment works. I can give you a reference to the Promoter's response to our Petition: paragraph 4, page 7. Quite rightly, they accept that that is the principle.

4641. We just say that it is absurd for this Committee to encourage us, as a Petitioner, simply because Crossrail are unwilling to compensate us for the £44,000, to go ahead with the £½ million project which would include, as part of that, costs of £44,000 and then we are compensated for the enhanced value. We do say, in any event, that that is a tremendous waste of public money.

4642. At the moment our position is—and we made it known to Crossrail—that we would endeavour to, obviously, relocate our offices from 12 Goslett Yard across to the neighbouring offices at 127 Charing Cross Road. Members may be aware that this is the historic centre for the recording publishing industry—this area around Charing Cross Road. EMI, historically, has been here many years and many of its famous, you will hear, contract signings—whether it is Sting or Victoria Beckham—have taken place on that site.

4643. Not surprisingly, this is a major undertaking, the relocation to 127. You will hear from Mr Tilley that we are going to have to take away the studio and we are going to be putting that in the basement. I will come on to why we are concerned about noise later

on. This may require, undoubtedly, because we are shifting our staff and we are putting two sets of staff into one office, planning permission extensions. The creation of new studios and new offices is a major undertaking. Those of us who have had any experience of building work will know that a time estimate from start to finish of 12 to 18 months is a conservative one. That is what we are advised conservatively it will take. We are prepared to start in advance to relocate in advance of the CPO notice in order that we can get on with it, but again we have approached the Promoters in respect of those disturbance costs. Their position remains: “No, you are only entitled to the disturbance costs following service of the notice. So if you seek to facilitate the relocation and actually work in advance of the CPO notice those costs will be irrecoverable”—and that is right under the code because there will be no steps taken to compulsory purchase.

4644. If the Promoters are not prepared to compensate us for the disturbance costs for us going ahead, then we look to them to give us proper notice so that we if we are to move under the CPO procedures we get proper notice. Again, we have asked for 12 months but I am advised that 12-18 months is the appropriate conservative figure. We are saying if you are not going to compensate us for moving early in order that we can ensure that we can move and not be left with a demolished building and nowhere to move to we need 12 to 18 months. The Promoters will only agree to three months. I have not seen it seriously suggested—it may be seriously suggested but I would be surprised—that anyone could expect the relocation of EMI's premises and studios to 127 Charing Cross Road to be done in a three-month period.

4645. Turning then to the other issue which follows on, and that is noise, the Committee I hope will not be surprised to hear that EMI Music is rather sensitive to the issue of noise. 127 Charing Cross Road, you will see, will be adjacent to the major construction worksite works (you have probably heard some evidence about them) and that will be going on for some years in respect of the Tottenham Court Road Station.<sup>4</sup> We are going to be, because that is our premises to the south, adjacent to it. That premises will then have an acoustically treated recording studio and it is a noise sensitive premises.

4646. The Bill, as Members will be aware, removes our common law and statutory rights to take action in respect of nuisance or statutory nuisance because Parliament has otherwise given us a recourse under statutory nuisance, but this Bill (and I have given the references) removes those rights. That is, by any measure, Draconian. However, it may, in my submission, be acceptable if there is a comfort offered in return for the removal of those rights—and a comfort by terms of a commitment that you can enforce. We do not have that. There are three areas where noise arises. There is noise from the

---

<sup>4</sup> Crossrail Environmental Statement, Volume 4a, Map C5(ii) (LINEWD-ES16-026).

---

**The Petition of EMI Music Publishing Limited**

---

temporary railway. The obligation on the nominated undertaker is to endeavour to ensure that a level (which the Promoters accept is the appropriate level) of 30dB is met. "Endeavour to ensure", as Members will be aware, is practically meaningless in terms of any enforceability. There should, at the very least, be a requirement to use, at the very least (we do not say this is satisfactory), best endeavours, and that is a term that is well-known to the law and is readily enforceable by the courts. "Endeavour to ensure" is not.

4647. Similarly, there is no undertaking or commitment as to the achievement of noise levels during the operation period. We have no commitment at all that the noise levels will be achieved. Then, no obligation is given at all in respect of the level of noise from construction site works. I do respectfully ask the Committee to consider this because the commitment is all related to the need to obtain a consent under the Control of Pollution Act. That is a consent procedure. There is no commitment to any noise level. So a consent can be granted for 40 dB or 45 dB and this House has no control over that. I will be inviting this Committee, at the very least, to require the equivalent of an undertaking that the undertaker will not seek a CoPA consent which will allow levels above 30dB at Charing Cross Place. We say even that is not satisfactory, but it is at least better, and it does not place an unduly arduous burden on the undertaker because under the CoPA scheme there is a relaxation of the requirement to meet any specified noise level if the operator can show that he has been employing best practicable means not exceeding excessive costs.

4648. Let us be clear about this: the Promoter champions BPM as if it is an additional safeguard; it is, in fact, a relaxation of any requirement. So the Committee should be clear that any CoPA consent that puts a noise level is still subject to a defence for the undertaker that they can breach that noise level as long as they say they are using best practicable means. We are asking, at the very least, respectfully, that the Committee require that an undertaker should not seek a consent above 30dB. They have still got their BPM defence in any event. The result of the Bill otherwise, in our respectful submission, would be, as we know, to deprive EMI without compensation and without an enforceable noise limit of rights it would otherwise have. We respectfully suggest that this is unreasonable and disproportionate and, therefore, in breach of Article 1 of the First Protocol of the European Convention on Human Rights.

4649. Turning then, further, on the question of noise, I know this Committee has already been addressed by other objectors as to the adequacy of the Environmental Statement on noise. However, in our respectful submission, the Environmental Statement is inadequate for a number of reasons.

Therefore, it is consequently in breach of the European Union's Directive on environmental impact assessments, and I give the reference in the note. That requires the Environmental Statement assessment to address the likely environmental effects flowing from the development proposals. I just outline for the Committee some of the problems with this assessment. The Environmental Statement has been carried out on the basis of assumptions which are not committed to by the Promoters, and we see that in the Promoter's Response Document, which again is contained in our papers that this Committee has (and we have given the reference), "that, where necessary the potential impact is mitigated". That is the assumption in the Environmental Statement. It is on the assumption, therefore, that the 30dB limit will be reached.

4650. However, unless that commitment is made to achieve those levels the assessment has been conducted on a false basis. It has been conducted on the basis that something will happen without a commitment that it will.

4651. Turning then to construction noise, in particular, the Environmental Statement contains no assessment of likely noise levels to be experienced at 127 Charing Cross Road, and the same is true of noise assessment from operations. It is a fundamental obligation that those should be assessed. If I may say in simple terms, what we are saying in respect of construction noise, for example, is that if you look at the Environmental Statement you will look in vain, unless we missed something, for something that actually predicts what the noise level is likely to be during all these construction works at 127 Charing Cross Road. What has happened is everything has been put off on the basis that a CoPA consent will be granted. With respect, that is not good enough. This Committee needs to know, as a decision maker, what is being said about the likely noise level.

4652. We are disappointed (and this is slightly departing from my note) that we have not been offered, given our particular case and our sensitivity, any similar offers in terms of acoustic protective measures that are offered in respect of residential accommodation. We do say we are not like normal commercial premises.

4653. Finally, we do say we have behaved prudently and, as you will hear from Mr Tilley, we have sought meetings and co-operated with Crossrail. Sometimes, unfortunately, Crossrail representatives have not turned up to meetings, which has been disappointing. I have to say my clients have been left with the feeling that our particular concerns have not been properly considered by the Promoter's with perhaps their usual diligence elsewhere. I hope that is of assistance to you. I would like to call, if I may, Mr Tilley.

---

 The Petition of EMI Music Publishing Limited
 

---

**Mr Paul Tilley**, Sworn

*Examined by Mr Jones*

4654. **Mr Jones:** Mr Tilley?

**(Mr Tilley)** Good morning. My name is Paul Tilley. I am the facilities manager for EMI Music Publishing, and have been so since December 2002. I look after, manage and maintain the three premises that are occupied by EMI Music Publishing: 127 Charing Cross Road, 12 Goslett Yard and premises we have not mentioned today, which is 1 Evelyn Yard.

4655. You have already kindly explained who you are. Could you just explain, first of all, something about what is at 12 Goslett Yard? It may be helpful for the Committee if one takes up the bundle of documents. The Committee will see, at tab 3, there is a plan similar to the plan that was on the screen which sets the location of the two premises. Tab 8, also, focuses in on the two premises, Goslett Yard and 127 Charing Cross Road.<sup>5</sup> Mr Tilley, could you just explain what goes on at the moment at 12 Goslett Yard?

**(Mr Tilley)** Certainly. EMI Music Publishing lease two floors within the multi-tenanted building that is 12 Goslett Yard. We occupy the first and second floor rears of the building. On the first floor we have approximately 24 staff and the floor is made up of cellular and open-plan accommodation, where we have an IT department and we also have our recording studio there currently. We also have our music library situated on the first floor. On the second floor we have approximately 25 staff and we have our royalty and tracking departments up there—again, made up of cellular and open-plan office accommodation. There is a computer room on this floor. Both floors are in reasonable decorative condition. We maintain regularly the accommodation and the services on both floors within the building. Also, we have use of a garage which forms part of 12 Goslett Yard as well, and we have recently acquired the use of a bike store to encourage our staff to ride into work as well. That forms part of the 12 Goslett Yard building.

4656. If you could briefly indicate, because I think it is up on the Committee's screen, the garage and the bike store?

**(Mr Tilley)** Yes. The garage is actually at the far end of Goslett Yard. So you can see where you have a dog-leg section, that is where the garage is there. The bike store is just to the right of the garage location.

4657. We will come on to the scheme for improvement. If you could just briefly introduce the Committee to what is at 127 Charing Cross Road at the moment.

**(Mr Tilley)** Of course. 127 Charing Cross Road is deemed as the headquarters building for EMI Music Publishing UK. It comprises a ground floor reception area which was recently refurbished by the landlord at landlord cost. We occupy all of the offices on the

first, second and third floors of the building. On the ground floor, if I could just go back to that, the rest of the ground floor is actually made up of retail units. There currently is in situ Superdrug and soon to be The Engine which will be occupied by Starbucks, and that is an on-going construction project with that particular tenant. In the basement of the building, we share that. We have a plant area down there and a storage area. I would like to correct Mr Jones when he said that the studio was going down there. That is not actually correct; we are intending to put our computer room in the basement. I just wanted to make that point clear. The recording studio, actually, is planned to be on the first floor of the building. The basement is also occupied by a nightclub called the Borderline Nightclub. So we share that accommodation with them. The top floor, the fourth floor of the building, is made up of a plant room area and telecoms as well, which is for the sole use of EMI Music Publishing. Within the office areas are our executives and our managing directors. We have our A&R department, which is the mainstream blood of the company; they are the ones who actually listen to music, bring in bands, listen to bands, etc. So it is very important that they work within an environment where they can hear music and they can actually make decisions on whether that music is good and is going to be a good investment for EMI Music Publishing.

4658. Just in case it is suggested by the Promoters: "You are complaining about noise, but we see you have a nightclub in your basement. What is all that about?" Just help us on that.

**(Mr Tilley)** The nightclub actually operates outside of our working hours. We have no disturbance at all from the nightclub itself.

4659. Notwithstanding the reputation of rock and roll, you do actually keep normal office hours?

**(Mr Tilley)** We do. We operate between the hours of eight o'clock in the morning to eight o'clock in the evening. Borderline Nightclub, I think, actually starts really getting going round about eleven o'clock.

4660. We will leave it to Mr Elvin to explore the hours of the Borderline Nightclub.

**(Mr Tilley)** I am sure we can provide some complimentary tickets!

4661. He probably already knows it. I do not know. Can we move on then, because we have got some nice design pictures of what was happening at the time the Crossrail announcement came about—just to show the scheme? If we go to tabs 4 and 5, Mr Chairman, tab 4 sets out the costs, which we will come to very briefly later. If I could take you to tab 5,<sup>6</sup> Mr Tilley, could you explain what would be proposed, first of

<sup>5</sup> Committee Ref: A56, Goslett Yard Site Plan (SCN20060321-001).

<sup>6</sup> Committee Ref: A56, Petitioner's bundle—Tab 5 refurbishment design proposals (Morey Smith) (SCN20060321-002).

---

 The Petition of EMI Music Publishing Limited
 

---

all, and then if you want to take the Committee to some of the designs. I think the Committee, if they wish, can look at some of them in their own time.

*(Mr Tilley)* By all means. Back in 2004 EMI had taken the decision to look into refurbishing our buildings at 127 Charing Cross Road and the two floors within 12 Goslett Yard. At the time, the second floor of 12 Goslett Yard was not of the same standard of decoration as the other floors within 127 and, also, the first floor of 12 Goslett Yard. So we actually looked into starting off with the refurbishment of the second floor of 12 Goslett Yard. There is an overall plan scheme, open-plan areas as the typical layout, which actually shows you what the intended layout of the floor would be. What we proposed to do was to start off with the refurbishment of the second floor, then roll the scheme out and carry out the refurbishment of 127 Charing Cross Road, and then finish off in the first floor of 12 Goslett Yard, the first floor being the most recently refurbished floor which was refurbished back in 2001, I believe. We therefore employed a design company called Morey Smith, who spent considerable time developing the scheme and, also, working with the staff on the second floor of 12 Goslett Yard. We actually put together a working party with the staff to look at designs, went to various others sites that Morey Smith had designed and even went so far as to start looking at different types of furniture. At this point we had incurred costs in the region of approximately £41,000. At that point we received potential notification of a CPO of that building, and at that point we ceased all works on the design of 12 Goslett Yard until we could investigate further as to what the implications would be on EMI and our property strategy.

4662. I do not think we need to go through them, but just so the Committee know, at tab 4 we have the various invoices for the work carried out by Morey Smith and we also have, at the end, the cost budget for the whole scheme and a covering letter saying that EMI should set aside £½ million for the full scheme. Can I just ask, very, very briefly, please, Mr Tilley, about the designers, Morey Smith? They may not be familiar to all of us, so could you say something about them very briefly?

*(Mr Tilley)* Morey Smith is quite a well-established design and architectural practice that have won numerous design awards. They were used by our parent company EMI Group to design and build the head office for the EMI Group which is situated at 27 Wight's Lane, Kensington. They have also carried out work for companies such as Sony and Channel 4 and they are reputable and well-known, within the building industry, as a reputable design company. Because of the nature of our business and, also, with regard to the way that our business is moving forward, it was deemed that we needed to look at how our buildings are laid out and have more of an open-plan feel to promote better communication within the building. This is why we were actually looking at not only improving the look of our premises internally but, also, changing the actual layout of the way that we actually run and maintain our buildings.

4663. Let us then, if we may, leave that aspect and just move to the consideration that EMI has given to what would happen to its operations if Crossrail should go ahead and 12 Goslett Yard be demolished, and the relocation to 127 Charing Cross Road. I hope I got this right in my opening: the historic significance of this part of London to the music publishing industry and to EMI in particular.

*(Mr Tilley)* Yes, that is correct, Mr Jones. EMI has been within the area for over 20 years. We actually occupied premises in a building directly across the road from where the company is at the moment, and before that we were just on the other side of Soho as well. Numerous people, quite famous groups, have actually come to our site and know us to be there.

4664. Can you just give us an indication of people (I have given two, both of them envisaging all ranges of the spectrum, but fill the middle in between the two) who have signed in those buildings?

*(Mr Tilley)* We have had people like Eminem who have come in, who is quite a famous international rap star. Sting has come in, Dave Stewart has come in and still comes in now; we have got new up-and-coming bands and solo artists—James Blunt, who is one of our very successful artists at the moment. Arctic Monkeys, who also are quite a new up-and-coming group, who are doing exceptionally well as well. Texas is one of our large bands and they have also been to sign. So even though we are not from the record side of the business, we are dealing with music publishing, but we still get quite a few artists that come in and know us to actually be where we are. So a lot of our support agencies and services are located within the area as well.

4665. Soho media centre is adjacent to the area as well.

*(Mr Tilley)* That is correct.

4666. Could you help the Committee with the two matters you have touched on? I have described the recording studio as acoustically sensitive. Could you just explain, obviously, whether that is right and why it is, and then I will ask you also just to explain something about the bands that come and play at the premises and why that is done? If you start with the acoustic equivalent that is going to go into 127 Charing Cross Road.

*(Mr Tilley)* I mentioned on the first floor of 12 Goslett Yard, at the moment, we have a music library. In part of that music library, they mix and master CDs of music that go out to clients. So in essence it is not a recording studio where you would have bands that come in and play; our third site, which is Evelyn Yard, is an actual recording studio where we have sound booths, etc, for that. The recording studio that we have at 12 Goslett Yard is a room that is acoustically treated to ensure that the sound quality that is generated from the different tracks which are laid down on to CDs is not interfered with at all by external noise. The actual positioning of the speakers and the sound quality within the room, we have spent quite a bit of money on. The room is acoustically treated with fabrics on the walls which are proud of

---

 The Petition of EMI Music Publishing Limited
 

---

the actual structure of the room itself to ensure that we try and maintain as crystal clear a sound quality as possible. That is an actual commercial part of our business, that we ensure that we maintain the acoustic nature of that room. If that room actually was to transfer from 12 Goslett Yard into 127 Charing Cross Road we would have to ensure that the room was of the same quality and would be in the same environment as it currently is at the moment.

4667. The Promoters seem to accept, although the difference between us is whether they commit to it, that for our premises as a noise sensitive location the noise levels should be either the existing noise level or 30dB, whichever is the highest. If, for shorthand, we refer to 30dB (I do not think it has been suggested that it is noisier than that at the existing premises) just explain to me what sort of comfort you would have in terms of exceedences of 30dB in terms of 127 Charing Cross Road. Is that something that does not really bother you, in terms of noise disturbance, or what?

*(Mr Tilley)* The noise disturbance that actually bothers EMI is resultant from the actual construction of the project. We have been assured of the actual running, once Crossrail has been built, in terms of build, that we would not hear anything more than currently what we hear at 12 Goslett Yard, because I understand that there are some rail tracks that actually run underneath there, which do not actually disturb us. We are concerned about airborne noise and, also, subterranean noise generated from the actual construction of the station units and, also, the tunnel. We have experience quite recently; we have gone through a number of construction projects either associated with our premises or with adjoining premises and we are very much aware of the impact of noise upon our business and disruption to our business, which does cause us great problems. Being a music company, we need to be able to listen to music; that is the life-blood of the company, and if we are going to be within an environment where we have got an on-going construction project for a number of years then that is going to cause us some serious problems and impact upon the running of our business.

4668. But if there could be a guarantee that 30dB would be met, would that provide you with that comfort?

*(Mr Tilley)* That would provide us with comfort.

4669. I wonder if you could turn on again. The reason bands come to play, if they are not plugging a CD or something, why are they coming to play at these buildings?

*(Mr Tilley)* EMI Music Publishing is an organisation that is made up, as per most companies, of numerous, different departments which all have to work together to ensure that the company is successful and moves forward. We have been awarded the Music Publishers' Association of the Year Award for years and years and years; we are a very successful and productive music publishing company. ...

4670. What is that in relation to?

*(Mr Tilley)* Basically we look after the rights of the writers of music and to do that we have numerous departments that basically have to listen to music, sign bands to the company, track the use of music and support departments, such as facilities, IT, finance, et cetera, to support the whole process. To ensure that everybody works and knows exactly what we are doing as a company, we often have new talents that come to showcase exactly what EMI Music Publishing is doing and we operate in-house performances of these groups. Quite recently we had one of our newest artistes called Luke Toms who did an excellent set for us. Basically it just generates a better understanding about the company and what it is that we do, so it is not just the A&R people who have access to the music side of the business, and it is quite important that we maintain that.

4671. In terms of that, is the noise climate significant? I suppose it depends on your view of the music being played, but, assuming that you want to hear the music, is the noise climate important?

*(Mr Tilley)* The noise climate is very important not only for in-house performance, but for our A&R Department and our Film and TV Department and various marketing departments to actually operate within the environment where not only can they listen to music and the bands that actually come in with a view to being signed, but also on a day-to-day routine. We get numerous CDs and music recordings that come in which have to be listened to. They could be the next big band that could obviously not only generate a lot of money for the artistes, but also generate money for EMI Music Publishing. That is how we operate as a business and if we cannot do that, if we are subject to airborne noise and subterranean noise for a period of time, then that is really going to affect our business. I am sure that people will actually agree that you have to be able to work within a reasonable environment to do the job and when your job actually requires you to listen to music, you need a certain amount of quietness to be able to do that.

4672. There was another issue on the availability of access, but just so that the Chairman and the Committee know, we have been offered undertakings and you will find the correspondence on that at tab 11 from Messrs Winckworth Sherwood, for the Promoters, and my learned friend indicated that he will give that undertaking in closing. You will see from the documentation that being raised, so I am not going to take time up with it now. Could I just, Mr Tilley, ask you this: you have been involved with negotiations, and I indicated in opening that we were a little bit disappointed with maybe some of the attention which had been given to this, but could you just explain very briefly the position?

*(Mr Tilley)* Certainly. When we received notification of the proposal of compulsory purchase of 12 Goslett Yard, we obviously put on hold all of our plans at the time to refurbish that building and we sought advice as to what we should actually do. We spoke to our landlord and we

---

 The Petition of EMI Music Publishing Limited
 

---

actually made remarks in talking to Bircham Dyson Bell with regards to how we should act appropriately, so we formed a Petition and obviously tried to start up dialogue links with Crossrail to discuss how we could possibly come to some sort of arrangement to ensure that EMI is not adversely affected by the Crossrail scheme. We had a meeting set up for 16 December which unfortunately only one member of the Crossrail team attended. We then subsequently rearranged to have another meeting in the New Year.

4673. Did you indicate whether that was urgent or not urgent?

*(Mr Tilley)* It was urgent because obviously we had submitted a Petition and we were awaiting an official response, but we wanted to actually discuss the content of the Petition with Crossrail to see if they would maybe allay some of our fears with regards to the impact upon our business, so it was important that we actually sat down and discussed these matters with them. With no disrespect to Mr Lawson who actually attended on 16 December, he was not in a position to actually answer a lot of our questions which we had at the time, so there was a promise that there would be various experts drawn in to deal with noise, vibration, et cetera who would be able to discuss our concerns with us.

4674. Just pausing there, just for the Committee's benefit, the letter from those instructing me who were acting for you, Messrs Bircham Dyson Bell, is at tab 9 which recalls what happened and refers to the meeting of the 19<sup>th</sup> and seeks an urgent meeting.<sup>7</sup> Then what happened?

*(Mr Tilley)* We arranged via our lawyers, Bircham Dyson Bell, to attend another meeting with the representatives from Crossrail.

4675. To meet with the noise experts?

*(Mr Tilley)* That is correct, at the Crossrail offices in January, which we turned up for and attended. Unfortunately we were left sat in a meeting room for approximately 25 minutes with nobody turning up and in the end a couple of members from the Crossrail team did turn up and reported that the

experts we needed to speak to would be unable to attend the meeting because they had another one to attend. At that point I actually made the decision that we should not actually proceed with the meeting and that we should rearrange to meet with them to discuss all of the points that we had concerns over.

4676. So then a fourth meeting was arranged?

*(Mr Tilley)* No, a third meeting, Mr Jones. A third meeting was arranged to be held again at the Crossrail offices. Myself and our Chief Finance Officer, Andy Mollett, were actually en route to the offices when we received a telephone call from our lawyers about 20 minutes before we were due to attend the meeting, cancelling the meeting again because Crossrail were unable to attend, all of the members of their team were unable to attend. Then, I believe on 17 February, we actually finally met with Crossrail at the Bircham Dyson Bell offices and went through our concerns with them and discussed these at length.

4677. And the Committee will see the position that we have now reached. Mr Tilley, is there anything you would like to add at this stage?

*(Mr Tilley)* I would just like to reiterate the point that I just want to make sure that people are aware that EMI Music Publishing have tried to act responsibly as much as possible to try and safeguard our business and that what we are asking for is not for the benefit of our business, but it is to safeguard our business. We will obviously work with whatever organisation as much as possible. We realise the importance of the Crossrail scheme, but we also need to safeguard our business and to ensure that we can operate for the duration of the scheme and that, with any impact with regards to the displacement of our staff, we cannot just incur those costs and we need to ensure that we receive some kind of compensation for that because it will be quite expensive to accommodate nearly 50 per cent of our organisation to our main headquarters building.

4678. **Mr Jones:** Thank you very much, Mr Tilley.

---

 Cross-examined by **Mr Elvin**

4679. **Mr Elvin:** Mr Taylor has some questions on the noise-specific issues, so he will deal with the noise aspects and I will deal with some of the more general ones, if that is convenient. Mr Tilley, are you under the impression that you will receive no compensation for the costs of having to move to 127 Charing Cross Road, the costs of fitting out those new premises, the costs of moving your staff

and the costs to your business of being displaced from Goslett Yard? Is that your understanding?

*(Mr Tilley)* My understanding is, as my barrister pointed out in his opening statement, that we would have to wait until Crossrail actually received Royal Assent before we actually were in a position to receive any type of compensation.

4680. Yes, in other words, you will get compensation, but you cannot jump the gun and get compensation before Parliament and the Queen have signified their assent to the project going ahead.

---

<sup>7</sup> Committee Ref: A56, Petitioner's bundle—Tab 9 Correspondence from Bircham Dyson Bell to CLRL 23 December 2005 (SCN20060321-004).

---

**The Petition of EMI Music Publishing Limited**

---

*(Mr Tilley)* I do appreciate that, but also, as our barrister pointed out, the actual time-frame of three months which is given to us to accommodate our staff in the building is totally unworkable. We have 50 staff in there and we have services that maintain the infrastructure of the company, voice and data, as well as the recording studio and, as my barrister actually pointed out, a three-month time period is just totally unworkable.

4681. EMI is a substantial, well-known company. You have not carried out the conversion works to the basement at Goslett Yard to upgrade it. You have incurred professional fees, but you stopped the works at a particular point, did you not?

*(Mr Tilley)* I am sorry, if I can just correct you, there are no refurbishment works to the basement of 12 Goslett Yard at all.

4682. Well, to whichever part of Goslett Yard it was. It was not clear.

*(Mr Tilley)* It was to the first and second floors of 12 Goslett Yard. The second floor of 12 Goslett Yard, we were developing a design scheme, as I showed you in the pack, to improve the decorative and lay-out features of the floor.

4683. The Committee has got the invoices and I am not going to weary them with going through invoices and the like, but they are invoices which cover a period at least up until the end of 2004, possibly early 2005. The Secretary of State announced the Crossrail Bill in July 2004 and reissued the safeguards directions at the same time. When did you actually decide to stop spending money?

*(Mr Tilley)* When we received notification of potential compulsory purchase on 12 Goslett Yard from the parliamentary agents who were acting on behalf of Crossrail.

4684. When was that?

*(Mr Tilley)* That was 12 February 2005.

4685. You mean you only stopped work when the Bill was deposited?

*(Mr Tilley)* We stopped work when we were notified that 12 Goslett Yard was being considered for potential compulsory purchase.

4686. Were you aware that the route had been announced by the Secretary of State in July 2004?

*(Mr Tilley)* No. We had received various documents on Crossrail, asking us about our premises within the area which we completed and sent back.

4687. Had you participated at all in the various information rounds which had taken place before in the years leading up to the Secretary of State's announcement and afterwards because there were big publicity campaigns which I outlined to the Committee when I opened this case two months ago? Did you participate at all in those to inform yourself—

*(Mr Tilley)* I have never actually been involved in them at all. I had received information from Crossrail, asking me for details with regards to our premises, but was never actually notified about these information rounds at all.

4688. These information rounds were public participation exercises. It is up to those who are affected. There were big publicity campaigns, the information was there for the asking, so did you actually ask or were you just waiting for someone to come up and tell you all about it?

*(Mr Tilley)* I actually spoke to Crossrail on several occasions with regard to specifically which buildings would actually be potentially affected and compulsorily purchased and even once we were notified about 12 Goslett Yard, even at that period of time I was enquiring about 127 Charing Cross Road and I was told that they were unable actually to confirm whether 127 Charing Cross Road at that time would be part of this compulsory purchase notice, so the information I received from Crossrail was not particularly specific and we acted accordingly on the information that was actually given to us at the time, but I received it on 12 February.

4689. Of course the position, Mr Tilley, as you well know, is that 127 is not required as such, but the ticket hall will be in the ground beneath and the eastern ticket hall will be under those premises, so 127 is not required and that is where you are decanting your activities from Goslett Yard and Goslett Yard is required, so the information you were given was actually accurate.

*(Mr Tilley)* No, the information I was given in February was actually relating to 12 Goslett Yard. The information I received, I do not know if there are records of this, but I did contact Crossrail on several occasions with regards to 127 and it was not confirmed at that particular time.

4690. So you knew about Goslett Yard and it is Goslett Yard which you have spoken to in relation to the need to move your activities. Had you sought information on the information rounds as to what the likely impact was going to be before you actually started incurring costs?

*(Mr Tilley)* I would keep up to date with regards to Crossrail and the information they would send through to my business, ie, EMI Music Publishing. I did not actually attend any of the information rounds or seek any other detailed information because I was being kept in regular correspondence via the Crossrail scheme because I was furnishing them with information with regards to our buildings.

4691. So you knew the likelihood was that at least some of your property would be affected in that location?

---

The Petition of EMI Music Publishing Limited

---

(*Mr Tilley*) No.

4692. So you were giving them information, but you were not assuming that you were going to be affected?

(*Mr Tilley*) They were asking us for information with regards to our property within the area and I gave them information with regards to all three of our properties and at that time there was no indication from Crossrail whether or not any particular property would actually be affected and it was only once I received notification on 12 February 2005 that it was actually stipulated that 12 Goslett Yard would be potentially compulsorily purchased as part of the scheme.

4693. So would it be fair to put it this way: that you knew there was publicity and information rounds, you knew Crossrail was asking you about your various properties, but you did not ask Crossrail whether or not it was prudent to go ahead with works, whether there was a likelihood that, say, Goslett Yard would be affected before you started those works? You did not ask that question?

(*Mr Tilley*) As I said to you, I did actually contact Crossrail and I spoke to them and they said that they were unable to confirm at the time. As I said to you, I actually was enquiring about 127 Charing Cross Road and they could not confirm at the time. They said that the scheme was being changed all the time and it was just not possible. EMI Music Publishing would not have embarked on committing this amount of money to a refurbishment scheme had we known that there was a possibility that one of our buildings was actually going to be taken away from us in effect.

4694. Were you aware that the general location of the proposed Crossrail tracks and the proposed station was planned for Tottenham Court Road?

(*Mr Tilley*) Yes, I was aware that there were works required within Tottenham Court Road, but if you look at the drawing at the moment there is a fine line of Goslett Yard with one building that is going to be affected and one that is not, so at the time it was impossible, as far as I was aware, to actually put a line as to which of our premises were actually going to be drastically affected by the works and which were not.

4695. **Mr Binley:** If I may make a comment, as I understand it, the Petitioner is not obliged to do anything, and most would not know what Crossrail was going to do, until they are given the local notice. That is what I am informed and I understand the point that I think you are trying to make, but I think we have understood that as a committee.

4696. **Mr Elvin:** Well, I will move on, if that is the case. Mr Jones raised a point on environmental impact assessment this morning. I have just

checked your Petition again, but can I have your confirmation that you have not raised this point in your Petition?

(*Mr Tilley*) I would need to check that in the actual Petition itself.

4697. **Mr Binley:** I think the Committee would really like to ask any questions which they may have on the compensation element to the witness; that would help the Committee. I certainly have some, but I just wonder if the Committee have any questions on the compensation at this stage.

4698. **Mr Elvin:** I was going to proceed to ask some further compensation questions, but if the Committee would prefer—

4699. **Mr Binley:** Okay, please carry on. I am happy with that.

4700. **Mr Elvin:** Mr Tilley, it is not a point that is raised in your Petition, is it?

(*Mr Tilley*) Sorry, could you ask the question again please?

4701. Yes. Mr Jones raised a point concerning failure to comply with the requirements of the environmental assessment in the context of noise. I have looked at the noise sections of your Petition and indeed the whole of your Petition and noise starts at paragraph 19, but it does not seem to us that EMI has raised this issue in its Petition. I just wanted your confirmation that that is so.

(*Mr Tilley*) We raised the issue about noise during the construction of the proposed work, as you quite rightly say, in section 19. The whole process that we have committed to with regards to the Petition is ongoing from our point of view and it is a subject which has come to light since then—

4702. So the answer to my question is that yes, it is not in your Petition?

(*Mr Tilley*) Well, if I could just finish, the actual concerns we have raised on noise are in there and the fact that it has actually been expanded upon just adds to our concerns basically.

4703. I am sorry, Mr Tilley, but it is a very simple question and I know you are anxious not to answer it, but it is not in your Petition, is it?

(*Mr Tilley*) Not specifically, no.

4704. **Mr Jones:** I will address the Committee on this; it is a legal submission.

4705. **Mr Elvin:** Can I go to the question of the relocation, and the bits of the operation which are being displaced from Goslett Yard, to 127 Charing Cross Road. Are you aware that costs spent prior to compulsory purchase, but which are fairly attributable to compulsory purchase are in principle recoverable, providing you can demonstrate they arise from the compulsory purchase once the land has actually been taken, in other words, costs prior to vesting, if they are

---

The Petition of EMI Music Publishing Limited

---

properly flowing from the consideration of compulsory purchase, can be recoverable? Were you aware of that?

4706. **Mr Jones:** It is a matter of law. My learned friend is making a submission as a matter of law.

4707. **Mr Binley:** Let us let Mr Elvin finish and then you will have a total opportunity to come in, Mr Jones.

4708. **Mr Elvin:** Mr Tilley?

**(Mr Tilley)** Are you referring to the £41,000 we have already spent?

4709. Mr Tilley, the concern, as I understand it, is that there is money that you have wasted and there is the money that you would have to spend putting 127 into order so that you can decant the operations that are currently at Goslett Yard into 127. Is that right?

**(Mr Tilley)** That is correct.

4710. Because, as I understood your complaint from your evidence, it is that you are worried that you will not get the money which you have to expend before we take possession?

**(Mr Tilley)** That is correct. We are seeking comfort to ensure that not only can we be compensated for the abortive costs which we have already spent, but also for the costs that we will have to incur to accommodate our staff within 127 Charing Cross Road.

4711. And those are costs which will arise directly from the fact that in due course the land at Goslett Yard will be acquired? Is that right?

**(Mr Tilley)** Yes.

4712. So it is purely the costs of going from Goslett Yard into 127 and the refitting of 127 so that you can accommodate the staff and activities that have been moved from the one to the other?

**(Mr Tilley)** Correct.

4713. I will just ask you again: are you under the impression, because if you are I will make submissions to the Committee in due course, that those costs are not compensatable?

**(Mr Tilley)** I am not under the impression that the costs are not compensatable. The problem, as Mr Jones pointed out, is the fact that we require compensation for these costs, but also that we are given time to carry out the necessary refurbishment. If we carry out the refurbishment in advance of Crossrail, then we are in danger of not being able to receive compensation for those costs and if we wait for Crossrail to receive Royal Assent, then the current standard is that we will be given three months' notice which would be impossible to carry out the refurbishment requirement for 127 Charing Cross Road to accommodate the staff within the building.

4714. Well, you are aware presumably on the notice question that Crossrail has said to date that it can definitely give three months' notice, that it cannot commit to a longer period at the moment, but it will strive to give more notice than the three months.

**(Mr Tilley)** Striving to give more notice does not really give us comfort because, as our barrister has pointed out, we have estimated between 12 and 18 months to actually carry out the works required to accommodate the staff within 127 Charing Cross Road.

4715. You will not get the compensation until after the property vests in the Secretary of State. That is the way the Compensation Code works. You are going to have to start the work in advance of getting the compensation in any event.

**(Mr Tilley)** We were actually led to believe from our meetings with Crossrail that if we started the works in advance we would be in danger of not being able to be compensated for those works.

4716. If, for some reason, Royal Assent were not granted or the scheme did not go ahead, then, like everyone else, you take a risk, so if you decide to act in advance, you may do so at your own risk, but if the scheme goes ahead, then works which are fairly attributable to the fact that we are taking your property, as far as I am aware, are properly recoverable as compensation in law, as per our information papers.

**(Mr Tilley)** That is something that has not actually been communicated very well to us during our meetings and we were actually advised during our meetings that if we started the works beforehand, then they would be deemed as improvement works to EMI and not attributable to the Compensation Code.

4717. Well, I think in that case, there is a misunderstanding as to the legal position and I do not think I need to pursue that any further. If it helps the Committee, I will explain my understanding of the legal position.

4718. **Mr Binley:** Mr Elvin, if there is a legal misunderstanding, you might be able to help the Committee because it seems to me that there are two issues here. The first concerns the £41,000 expended on design work for the £½ million of work which did not go ahead because of Crossrail, and the second seems to be with regard to the time-frame to be given to allow EMI to do what seems to me to be a bit of a technical job anyway because of the equipment and so forth they have. Are you now saying that the £41,000 is perfectly compensatable, but at a later time?

4719. **Mr Elvin:** I am not sure that the £41,000 is compensatable under the National Compensation Code. If it affects the value of the land, and I suspect it probably does not if no works were actually carried out to the property, then it would not be compensatable under the National

---

The Petition of EMI Music Publishing Limited

---

Compensation Code in any event. It is the sort of risk that Parliament has always said that landowners should bear in the case of such projects. With regards to works carried out for sorting out the move, fitting out the new parts of the premises to accommodate, that compensation will be payable if, as a matter of fact, they can show at the time it is properly attributable to the compulsory purchase, even though the works might have started before the property vests in the Secretary of State, and if the Committee wants it, I can give you the legal references.

4720. **Mr Binley:** So there is no misunderstanding between the Promoters and the Petitioner over the £41,000?

4721. **Mr Elvin:** That is unlikely to be recoverable.

4722. **Mr Binley:** So the first point, I think we have arrived at that.

4723. **Mr Elvin:** Indeed.

4724. **Mr Binley:** The second point I want to arrive at is that there is a difference of opinion as to the time that EMI might need to move and the notice that Crossrail might give to allow them to undertake that move. There is still a difference there, I assume.

4725. **Mr Elvin:** To which the point is that EMI can move whenever it wishes, but until the Bill receives Royal Assent and the project is given the green light, there is a risk of course that the property will not be acquired and compensation will not be payable. That is again a perfectly normal situation under the Code, but what happens is that if it does get the green light and goes ahead, any advance work of that nature which is attributable to acquisition, even though it is before it, can be the subject of the Compensation Code.

4726. **Mr Binley:** I not understand that the misunderstanding is now clarified, so thank you, I am grateful. Would you like to continue?

4727. **Mr Elvin:** In that case, I will ask Mr Taylor to ask any questions about noise. Those are the only questions I have.

4728. **Mr Binley:** Well, would it be helpful to Mr Jones if he re-examines on the points you have just made?  
Re-examined by Mr Jones

4729. **Mr Jones:** I think, sir, you have already dealt with the major part of my learned friend's cross-examination on the extent to which EMI had to search out the route of Crossrail. Mr Tilley, can you just take up the bundle that we gave in. I think it may be helpful if the Committee see what the Promoters, through Transport for London, were

actually saying as of 16 January this year at tab 6.<sup>8</sup> You have been asked about your understanding. Have you seen this letter before? It was sent to your parliamentary agents. Have you seen this letter of 16 January?

**(Mr Tilley)** Yes.

4730. Can we just go to the fourth paragraph. It is from Transport for London, dealing with the various meetings and then it responds: "Your client's concerns regarding costs involved with relocating staff from 12 Goslett Yard is noted as is the request for an undertaking that CLRL will underwrite such costs. Regretfully at this time I cannot see the necessity now for relocation (due to the scheme) since the project does not have Royal Assent", and of course we do not stop with Royal Assent, "nor consequent upon such agreement has any Notice to Treat or Notice of Entry been served", which is what Mr Elvin, I think, euphemistically refers to as the 'green light'. "As mentioned at meeting liability for costs follows from such events having taken place and as these matters are some years off and by no means certain, I cannot agree a recommendation that would make CLRL liable at this time." Does that accord with your understanding of the position which was being put by the Promoters?

**(Mr Tilley)** Yes, that is correct.

4731. Tell me this: if the position were that the Promoters were to offer an undertaking to pay your relocation costs prior to notice of entry first of all or notice to treat, can you see any difficulty in actually assessing what those costs are likely to be? Is there any problem, as far as you can see, in working out what those costs are likely to be?

**(Mr Tilley)** No. We have actually done some provisional work with regards to how much it would cost to refurbish our building and to accommodate the staff at 12 Goslett Yard within the building and we have used a fair proportion of those costs which have actually been included within the information that we have passed on to Crossrail with regard to what we would consider to be fair and reasonable compensation for the relocation of staff into 127.

4732. Mr Elvin's position is if you have got to get up and running and you cannot do it within three months, any commercial risks of moving early of the green light should be borne by EMI and not the Promoters of the Bill and that is a risk that he says you should take. Let us just put that to one side and let us assume even that he is right or that the Committee feel that it is right and fair that the burden should fall on EMI and not the Promoters of the Bill, in determining, would you have any comfort if an undertaking was given by the Promoters that they would at least agree that the costs that you were proposing to undertake in your relocation would, if the scheme went ahead, be

---

<sup>8</sup> Committee Ref: A56, Petitioner's bundle—Tab 6 Correspondence between Bircham Dyson Bell and Transport for London (SCN20060321-005/6).

---

**The Petition of EMI Music Publishing Limited**

---

attributable to the scheme, even though you did not have the guarantee, which we want and are asking the Committee for, but even if you did not have that, would it be possible in terms of an agreement to at least seek an undertaking from Mr Elvin's clients that if it went ahead, there would not then be an argument which said, "Oh, we're sorry, this is not attributable to this scheme"? Would that at least give you some comfort?

*(Mr Tilley)* It would do. We have actually asked for that before at our meetings with Crossrail, so it is of some surprise to me today that the position was not communicated very well to us, but yes, that would give us comfort.

4733. So your understanding is that when you asked Crossrail that even if they would not guarantee those costs until the Crossrail scheme went ahead and the various notices were served, could they at least agree that these would be attributable if it went ahead, and they refused that as well?

*(Mr Tilley)* It would be agreeable to EMI if we could have an agreement in principle on the costs.

4734. Yes. Thank you very much.

---

*Further examined by Mr Taylor*

4735. **Mr Taylor:** I would like to take you, if I may, to a letter from Bircham Dyson Bell to Winckworth Sherwood of 23 February 2006 which is in our information lodged and it is at tab 10 of the bundle lodged by yourselves.<sup>9</sup> We can see that on the first page of this letter your solicitors indicate that they are writing further to the meeting of 17 February and the second paragraph indicates: "You will recall that we concentrated upon three main issues about which EMI has concerns and in respect of which it seeks further undertakings or assurances from the Promoter." Can you see that?

*(Mr Tilley)* Yes.

4736. So this letter sets out, does it not, the undertakings that EMI are seeking from Crossrail?

*(Mr Tilley)* It sets out the results of our meeting with Crossrail that was held on 17 February.

4737. And it sets out the undertakings that you are seeking to meet the concerns in your Petition? That must be right, must it not, Mr Tilley?

*(Mr Tilley)* Can I review the document? I am not refusing to answer your question. It actually covers three of the points in here, the access point, the noise point and also the compensation point. As I have mentioned before, the other concern that we have is obviously with regards to the actual notice as well. Without reading every single word in here, I do not know whether or not the essence of that is also included in here.

4738. It is, but I am concerned with the noise point. As far as the noise is concerned, we can see at page 2 to page 3 the points which are raised and on page 2 under the heading "Noise", we can see that the concerns raised relate to the sound recording studio which will need to be relocated.<sup>10</sup>

*(Mr Tilley)* That is correct.

4739. And the particular concerns that are raised are in relation to the potential effect of groundborne noise on the relocated sound recording studio.

*(Mr Tilley)* Yes.

4740. We can see, when we turn to page 3, that there are three assurances that are sought.<sup>11</sup> The first relates to: "that during the construction phase a resilient ballast mat will be placed under any temporary track used for construction purposes", so you are looking for a resilient ballast mat underneath the temporary construction railway?

*(Mr Tilley)* Yes.

4741. The second undertaking sought is that the noise levels within 127 Charing Cross Road in essence should not exceed 30dBL during construction.

*(Mr Tilley)* Yes.

4742. And if they do, then construction work should cease?

*(Mr Tilley)* That is correct.

4743. Now, in respect of that undertaking that you seek, the 30dBL level, that relates again, does it, to groundborne noise?

*(Mr Tilley)* That actually relates to any noise as a result "beneath or in the vicinity of the premises", it states.

4744. Now, that 30dBL level you are seeking, what indices is that measured on? Is that an  $LA_{Max}$  or  $LA_Q$ ?

*(Mr Tilley)* I am not a noise expert. That is stated as 30 decibels. I cannot answer that question.

4745. The "30" that is mentioned in (2) we can relate, can we not, back to page 2 of this letter, at the bottom, where the last sentence at the bottom

---

<sup>9</sup> Crossrail Ref: P63, Correspondence from Bircham Dyson Bell to Winckworth Sherwood, 23 February 2006 (WESTCC-8904-004).

<sup>10</sup> Crossrail Ref: P63, Correspondence from Bircham Dyson Bell to Winckworth Sherwood, 23 February 2006 (WESTCC-8904-005).

<sup>11</sup> Crossrail Ref: P63, Correspondence from Bircham Dyson Bell to Winckworth Sherwood, 23 February 2006 (WESTCC-8904-006).

---

The Petition of EMI Music Publishing Limited

---

of the page refers to EMI receiving some assurance "... from yourselves at the meeting that it is unlikely that the 30dB level mentioned in Table 1 of Information Paper D10 will be exceeded . . ." and it looks to me as if the "30" in point two relates to the 30 level mentioned in D10.

*(Mr Tilley)* Yes.

4746. So that is the 30 dBL(A)<sub>Max</sub> slow indices that relate to groundborne noise; are you aware of that?  
*(Mr Tilley)* I make the reference here. The point that you are making here is with regard to the 30 decibel level and we have actually quite clearly stated that construction works beneath or in the vicinity of the premises should cease. I do not actually understand what point it is that you are trying to make.

4747. Are you aware of what the current level of dL(A)<sub>Max</sub> noise is experienced within 127 Charing Cross Road?

*(Mr Tilley)* No, I am not; we have taken no particular measurements.

4748. Have you engaged an acoustic consultant to take measurements or give you any advice in relation to your petition?

*(Mr Tilley)* Not currently, no.

4749. Your third undertaking relates to consultation, and I will come back to that. Let me ask you some questions about the studio. You explained that although it is described in the letter as a sound recording studio, in fact the sound is not recorded within it, is that right?

*(Mr Tilley)* The sound is actually listened to within the studio and sound in the format of master tapes is actually recorded within the studio itself, but you are correct that you do not have somebody standing there singing or operating musical instruments.

4750. As I understand what is done, that the tracks of the particular tapes being recorded are in essence mixed together in a particular way and you will need to have a particular acoustic environment to be able to do that properly.

*(Mr Tilley)* Correct.

4751. Is the current studio within 12 Goslett Yard soundproofed?

*(Mr Tilley)* It is acoustically treated, as I said, with fabrics which are designed to ensure that the sound generated within the room is not intruded on by external noise.

4752. So it is not soundproofed, it is acoustically treated?

*(Mr Tilley)* It is acoustically treated; there are acoustic tiles within the ceiling, acoustic fabric on the walls, et cetera, and other dampening effects are used—polystyrene blocks, et cetera—to ensure that the room is adequately acoustically treated to ensure that the work can be carried out in there.

4753. When you have bands playing as part of your business do they perform in the studio or are they performing in other parts of the building?

*(Mr Tilley)* No, they record in other parts of the building.

4754. In other parts of the building?

*(Mr Tilley)* Correct.

4755. Do you have a performance theatre?

*(Mr Tilley)* No.

4756. Whereabouts is it that the bands perform?

*(Mr Tilley)* The bands generally perform within our boardroom.

4757. Within the boardroom, so within a meeting room?

*(Mr Tilley)* Right.

4758. **Mr Taylor:** Let me take you to the commitments that have been made in the Information Papers in relation to construction noise. Firstly, can we turn to Information Paper D1, which is the Construction Code, at page 20 of 45, paragraph 5.1.1?<sup>12</sup>

4759. **Mr Binley:** Mr Taylor, can I interrupt just for a second because it seems to me that the point we are arguing is the difference between a recording studio and an area that is not a recording studio. Forgive me if that is incorrect, you will correct me. It seems to me that you have given the same level of noise to theatres as well and it seems to me that this is a sensitive operation from which this country gains great benefit because it is one of the major exporters of music and the value that that creates. Bearing in mind that you have already given an agreement for 30 decibels and bearing in mind that you have a clause which says if it is unreasonable, if the request is unreasonable at the time then you do not have to proceed with that, I do not understand why you do not have the protection to simply say that you will accept what the Petitioner is saying.

4760. **Mr Taylor:** I was going to set the scene by showing the Committee again what we are committed to.

4761. **Chairman:** The Committee has had an awful lot of noise about noise and we need to move on a little.

4762. **Mr Taylor:** I will take it very briefly, sir. Mr Tilley, you are aware that in the Draft Construction Code there is a commitment to use best practicable means in relation to all construction activities to mitigate the effects of noise and vibration?

*(Mr Tilley)* Yes, I think "endeavour to ensure" is the phrase which we are concerned about.

---

<sup>12</sup> Crossrail Information Paper D1—Construction Code: Noise and Vibration (LINEWD-IPD1-023).

---

**The Petition of EMI Music Publishing Limited**

---

4763. If you look at the screen in front of you, paragraph 5.1.1 of the Draft Construction Code, and read that paragraph, you will see the commitment that has been given.

*(Mr Tilley)* Yes, I have read that.

4764. That commits the Nominated Undertaker to apply the most practicable means to all construction activities, does it not?

*(Mr Tilley)* From that paragraph, yes.

4765. Given that that is the case it would mean that, during the construction activities relating to Crossrail, all that can be reasonably done to mitigate noise and vibration will be done.

*(Mr Tilley)* I think it brings you back to the point that in the other sections—and I do not have them in front of me—the term “endeavour to ensure” is used, which is of concern to us. If you are saying that that section of the paragraph actually overrides that, then that does give us greater comfort.

4766. Have you read that paragraph before, Mr Tilley?

*(Mr Tilley)* I cannot confirm that I have definitely read that before; I have read so many documents relating to this whole process.

4767. Let us turn to Information Paper D10, paragraph 2.7, and I think this is the paragraph that causes you concern, page 3 of Information Paper D10.<sup>13</sup> One can see in paragraph 2.7 that: “The Nominated Undertaker will endeavour to ensure that the groundborne noise from the operation of the temporary construction railway ... will not exceed levels greater than those it is already subject to ... or the levels listed in Table 1.”

*(Mr Tilley)* Yes.

4768. It is the phrase “endeavour to ensure” that gives rise to your concerns?*(Mr Tilley)* It does.

4769. Your first undertaking, as you see it, requires the provision of a particular form of mitigation, does it not?

*(Mr Tilley)* Sorry, can you repeat that, please?

4770. Your first paragraph, your first undertaking in relation to noise, requires the provision of a resilient ballast mat, does it not?

*(Mr Tilley)* Yes.

4771. That is what you are after.

*(Mr Tilley)* Yes.

4772. If it were the case that there is a better form of mitigation available you would presumably prefer that to be used?

*(Mr Tilley)* The reason why we put that forward was that that was the method of restricting noise that was actually advised—actually brought up as

being used by Crossrail to actually combat this, and that is why we have actually included that in the response.

4773. It is a method, is it not, but it is not the only method?

*(Mr Tilley)* It is not the only method but this is based upon the information that we received from Crossrail themselves and the people that are actually responsible for dealing with the reduction of noise generated from the Crossrail scheme.

4774. Why, given the commitment to do all that can be reasonably done to mitigate noise and to endeavour to ensure that groundborne noise does not exceed 30L(A)<sub>Max</sub> from groundborne noise in the building, is it necessary to specify now the particular mitigation that has to be provided?

*(Mr Tilley)* If that was the case then why cannot that document change to “best endeavours” which, as our barrister has actually said, is more of a legal term, to give us comfort?

4775. I hear your question but I am afraid it is my turn to ask the questions at the moment, Mr Tilley. I will ask the question again and see if I can get an answer. Why is it necessary to specify now the type of mitigation that has to be provided in the context of the assurances to which I have just drawn your attention?

*(Mr Tilley)* Because we are trying to protect our business against noise intrusion.

4776. What track is the resilient ballast mat to be laid under to secure your acceptance that proper mitigation has been provided?

*(Mr Tilley)* I am not a railway expert so I cannot answer that question.

4777. Has EMI taken advice on the length of track it would have to go under?

*(Mr Tilley)* No, we have not but we have actually spoken to Crossrail with regard to the measures which they have in place and they have actually said that they have used this resilient ballast mat in areas where noise could potentially be a problem to the people that actually occupy the space above that section of track.

4778. **Chairman:** Mr Taylor, I do apologise again. I recognise that you have a very important job to do, but time is moving on. You said that you were not there to answer the questions; I am afraid you are to me, so I will ask you a question to see if we may come to some agreement upon this which allows us to take some coffee—forgive me for being so frivolous. Are you willing to use the term “best endeavours” as opposed to “endeavour to assure”?

4779. **Mr Taylor:** In the context of the commitments that we have already given we are committed to applying best practicable means, and in essence to go beyond that is completely unnecessary. We are already committed to do all that can reasonably be done, and it would appear,

<sup>13</sup> Crossrail Information Paper D10—Groundborne Noise and Vibration (LINEWD-IPD10-003).

---

**The Petition of EMI Music Publishing Limited**

---

we would submit, that perhaps EMI were unaware of that particular commitment given the answer that I got from Mr Tilley about whether he had read that particular paragraph.

4780. **Chairman:** What I am going to do is to break for coffee to allow the two of you learned gentlemen to get together to see if we can form together a form of wording, bearing in mind that I think that EMI have tried very hard to meet with Crossrail and have been frustrated to some extent in that respect. I would like you, if you would, to possibly try to use the 15 minutes and maybe come to some agreement on this very fine point, from a layman's point of view, and that will allow us to get some coffee. So use your "best endeavours" to come to some agreement! That means that we will break for coffee for 15 minutes and we will be back at 11.48.

After a short break

4781. **Mr Binley:** Are we all assembled as we should be?

4782. **Mr Taylor:** I am here! I am not sure where we got to, I am afraid.

4783. **Mr Binley:** If they wish a little more time then we are more than happy to give them more time.

4784. **Mr Taylor:** I think we have probably reached an impasse.

4785. **Mr Binley:** Then while we are waiting let me put on record—and I am sure the Committee would wish me to do so—that of course this Committee will consider all the cases put to it. However, we do expect the Promoters and the Petitioners to negotiate in advance of the Committee to try to reach mutual agreement, and we deprecate time wasting by either side and expect Crossrail to act professionally when conducting meetings and make sure that meetings are adhered to. We were disappointed to hear of the record with regard to this particular matter, and I hope that we will not be hearing a similar story again. I am sure we will not, and I am sure that that information will be passed back to the Promoters.

4786. **Mr Taylor:** It will indeed.

4787. **Mr Binley:** If you would like to continue.

4788. **Mr Elvin:** Can I just give an indication, sir? The concern that has been raised with regard to "endeavour to ensure". I am not in a position to give a more general undertaking such as is sought, but what I can do is this—which I hope goes sufficiently far to clarify the position—at 5.1.1 of the Construction Code, which is part of the IPs, which is the best practicable means test, I can give an assurance to the Committee that that is intended to be the overarching requirement, not the endeavour to assure—that is the sub-part of the

construction issues.<sup>14</sup> The overriding requirement is the best practicable means which is to do all that is reasonably practicable, in other words. Therefore, that is the governing requirement. That stands free of any consents obtained under the Control of Pollution Act; it is the policy of the Secretary of State, as set out in the Information Papers put to the Committee and to Parliament. Although the definition of best practicable means is taken from the Control of Pollution Act, this assurance in 5.1.1 is freestanding and stands above it. Sir, I know the concern on the "endeavours to ensure" and I just want to make it absolutely clear that our position on the overriding test is the more rigorous test of best practicable means, and that is a scheme-wide policy.

4789. **Mr Binley:** Might I call upon Mr Jones, just to respond to that bearing in mind that I did ask you if you would have words?

4790. **Mr Jones:** Yes, we did have some words. That recent point was conveyed to me by my learned friend just before we went in, so this is almost my immediate reaction. Obviously we are grateful for the clarification. However, there are concerns and if I can flag them up very briefly so that the Committee knows? Number one, we need to know—and I am sure the Committee may already have this assurance—I do not know what status the Construction Code has. Is it subject to a formal undertaking? That is number one. Number two, in terms of the overriding obligation to act as far as reasonably practicable, there are two concerns. First of all, that does not indicate an objective in itself. You act as far as reasonably practicable, but we have no indication from the Promoter what the expected noise levels are going to be as a result of being reasonably practicable. What we would have liked to have seen in the Environmental Statement but also in the evidence—it does not matter in that sense about the Environmental Statement—is an indication from the Promoters as to what the likely noise level was to which they were using reasonably practicable means to achieve that. The second question is that "reasonably practicable" is not the highest obligation that a Promoter may be under, and we would still prefer a requirement that requires them to take best endeavours. Reasonably practicable is quite a low threshold, it does not require them to do everything that they could do, but everything that the ordinary industry practice says is reasonable and practicable. We do say that we are a special case and that we do require something above the ordinary, and we require the best endeavours. Obviously there is a disagreement between the Promoters and ourselves on that, but we require best endeavours rather than the ordinary course of events. I do not know if that is of assistance to the Committee but that explains our position.

---

<sup>14</sup> Crossrail Information Paper D1—Construction Code: Noise and Vibration (LINEWD-IPD1-023).

---

 The Petition of EMI Music Publishing Limited
 

---

4791. **Mr Binley:** Thank you very much, we are grateful for that. Can I ask Mr Taylor if you would like to continue to cross-examine Mr Tilley?

4792. **Mr Taylor:** Yes, just a few short points. Mr Tilley, when the studio is moved from 12 Goslett Yard in to 127 Charing Cross Road, you will be able to design it to take into account the potential impact of the construction activity of Crossrail, will you not?

**(Mr Tilley)** We would obviously bear in mind any type of noise intrusion into the studio to ensure that, as far as we can economically commit, it runs as a productive studio. If that meant that we would have to incur major costs to ensure that any noise intrusion from the construction works did not interfere with the actual studio activity then that is something that we would need to take up further with Crossrail.

4793. The studio could be made to be acoustically isolated, could it not?

**(Mr Tilley)** I would assume so but, as I said, I do not know what the financial implication of that would be.

4794. Because the studio has to be moved because 12 Goslett Yard is being compulsorily required, is it your understanding that costs incurred in providing the new studio would be the subject of compensation?

**(Mr Tilley)** The costs of actually transferring the people and facilities from 12 Goslett Yard into 127, it is my understanding that that would be part of the compensation settlement. I do not know the detail of exactly what costs are acceptable to Crossrail and what are not.

4795. As far as the performance by bands is concerned, you explained before that that was carried out in the boardroom at 12 Goslett Yard, but presumably there are other meetings in 127 Charing Cross Road that could be used for that purpose?

**(Mr Tilley)** No, the boardroom is quite a large meeting room.

4796. I will rephrase that question. When you carried out your refurbishment at 127 Charing Cross Road and redesigned that to accommodate the decanted staff and the various facilities at 12 Goslett Yard, that particular activity of bands performing could be carried out within a boardroom or some similar sized room within 127 Charing Cross Road, could it not?

**(Mr Tilley)** The actual planned layout of the building has not actually been committed to as yet because obviously we have put a hold on the process until we know exactly where we stand with regard to this whole process. The initial sketches of the building actually committed to a boardroom facility. The boardroom is quite a large room to accommodate members of staff to come over to actually view bands, et cetera. I just want to make the point that this is a concern but it is not a key

concern because we were trying to get across the fact that we do have bands that come in to perform to staff, as this is the type of company we are. Our major concern regards the day to day activity with regard to groups coming in on a one to one session with our A&R managers, and the actual day to day activity of our A&R managers and other associated personnel, by EMI being able to listen to music without that activity being intruded upon by construction noise from the Crossrail project.

4797. That activity at the moment is undertaken within the open plan office, is it, that you currently operate at 12 Goslett Yard?

**(Mr Tilley)** Are you referring to listening to music, listening to bands?

4798. Yes.

**(Mr Tilley)** It is actually carried out within an office based environment within our A&R department.

4799. Is that an open place space environment?

**(Mr Tilley)** No, they are offices because obviously you have two or three groups that come in.

4800. The glazing at 12 Goslett Yard as it currently exists, is it double glazed?

**(Mr Tilley)** No.

4801. Is 127 Charing Cross Road double glazed?

**(Mr Tilley)** There is secondary glazing along the front elevation of the building, the Charing Cross elevation of the building, and certain of the offices, the corner offices on the Goslett Yard elevation of the building.

4802. So if, when you are doing your reconfiguration of 127 Charing Cross Road, it is important to place particular noise sensitive activities in close proximity to the double glazing to attenuate the noise, then you have had the opportunity?

**(Mr Tilley)** We have had the opportunity obviously because we are redesigning the building to take into consideration the requirements of the business as to what actually works for EMI Music Publishing. We would not, however, be designing the building to take into consideration impact from the Crossrail scheme if that caused us to dramatically alter our plans for the building itself, because what is fundamental to us is to ensure that we have a suitable layout to enable the running of EMI Music Publishing as opposed to negating any adverse impact from the actual Crossrail scheme itself.

4803. The last point I have relates to consultation. Are you aware of the Information Paper F3, Community Relations, and the Undertaker to provide in that relating to provision of information regarding the measures to be taken to minimise or mitigate adverse effects of the construction works?  
**(Mr Tilley)** I have seen this; I do not know it word for word.

---

The Petition of EMI Music Publishing Limited

---

4804. Perhaps I can draw your attention to paragraph 2.5(ii) on page 1 of F3?<sup>15</sup> This is an undertaking that, “The Nominated Undertaker will be required to produce information sheets of the works to be carried out, detailing expected disruptions and the measures being taken to minimise or mitigate adverse effects of these works, at least two weeks prior to the construction activity taking place. Information sheets will also be distributed in the case of overrunning, unplanned works or emergency operations.” Then (iii), a similar undertaking to provide information relating to tunnel boring. Does that undertaking to provide information regarding the mitigation measures to be provided meet your concerns about consultation, which is raised in the third undertaking set out in the letter?

*(Mr Tilley)* This is obviously a generic response to try and cover as many situations as possible. What we are looking for is a greater comfort to deal with our specific concerns, and I have brought it up before in the past in our meetings with Crossrail that when you are in a situation and you are trying

to run a business, if you do not have a control measure actually in place that you can enforce to protect your business, and you have to go via a local authority route, or whatever, that can obviously delay any response to the actual problem that has arisen. Our concerns were that we wanted to ensure that we are safeguarded in the first place through soundproofing, et cetera, of ballast mats for track and having agreed noise level restrictions, et cetera. So that the contractor is actually aware of our requirements, and should we actually exceed the agreed specified noise levels that we actually have a streamlined and efficient way that we could ensure that our business can continue, and it would not actually continue to be interrupted from the noise resulting from the Crossrail project.

4805. **Mr Taylor:** Thank you, those are my questions.

4806. **Mr Binley:** Mr Jones, would you like to re-examine?

4807. **Mr Jones:** Sir, I will be very brief.

---

*Further re-examined by Mr Jones*

4808. **Mr Jones:** Mr Tilley, you were asked a question by Mr Reuben Taylor in respect of whether you had commissioned any noise readings in respect of the noise climate within 127 Charing Cross Road as it currently stood; do you recall that?

*(Mr Tilley)* Yes, I do.

4809. Have you seen any information presented to you by the Promoters that they have carried out an exercise as to what the current internal noise level is at 127 Charing Cross Road?

*(Mr Tilley)* No, not at all.

4810. In your discussions have the Promoters indicated to you what they estimate the noise levels to be during the construction phase—just the construction phase—when they say that the operators will use the best practicable means, or whatever, and what those noise levels are that you could expect at 127 Charing Cross Road? Have they mentioned any noise levels to you—

*(Mr Tilley)* No.

4811. . . . in respect of construction noise?

*(Mr Tilley)* Not specifically, no.

4812. **Mr Jones:** Thank you, sir.

4813. **Mr Binley:** Thank you very much Mr Tilley; the Committee is most appreciative.

*(Mr Tilley)* Thank you very much.  
The witness withdrew

4814. **Mr Elvin:** Sir, we will call Mr Rupert Thornley-Taylor, who the Committee has seen before, and I am going to ask Mr Thornley-Taylor to take him through his evidence, which relates simply to the noise issues.

Mr Rupert Thornley-Taylor, Recalled  
Examined by Mr Taylor

4815. **Mr Taylor:** I am going to call you Mr Thornley-Taylor because I notice that that is the convention Mr Mould has adopted, for obvious reasons! Mr Thornley-Taylor, so far as the proposal to relocate the sound recording studios is concerned, what mitigation measures can be adopted in the design of the relocated studio to ensure that the noise levels within it will be acceptable?

*(Mr Thornley-Taylor)* The normal approach to designing a sound recording studio is to place the floor of the studio on vibration isolators and then construct the walls and roof on that floor so that it is isolated from the main structure, and it is then possible to achieve very low noise levels inside the studio, probably even lower than is needed for the kind of use that is applicable here.

4816. If that were done and if no mitigation was provided with regard to the track running through the tunnels, what level of noise would you anticipate would arise within a studio designed in that way located, as it is proposed, on the first floor of the building in 127 Charing Cross Road?

*(Mr Thornley-Taylor)* Without difficulty a studio of that kind could meet the most demanding requirements of studios, below 35dBA required. Of

---

<sup>15</sup> Crossrail Information Paper F3—Community Relations (LINEWD-IPF3-001/2).

---

**The Petition of EMI Music Publishing Limited**

---

course the Northern Line, as we know, runs up Charing Cross Road, and although Mr Tilley did indicate that it is not a problem in 12 Goslett Yard, I would imagine that in constructing a new studio, because of the presence of the Northern Line, it would be appropriate to apply the kind of measures that I have just mentioned.

4817. So if the studio is going to be moved the sorts of levels that we have been discussing— $30\text{dB}(\text{A})_{\text{Max.S}}$ —can be obtained within that studio without even requiring any mitigation work to the running tunnels of Crossrail, is that the position?

*(Mr Thornley-Taylor)* Even, hypothetically, if Crossrail were constructed like the Northern Line, which it will not be, there would be no difficulty.

4818. Obviously we know that there are mitigation measures that can be applied to the running tunnels of Crossrail, both during the operation of the construction of the railway and indeed during the operation of the railway. What is your view as to the appropriateness of specifying at this stage precisely the nature of the mitigation which should be provided in relation to the construction railway and the prolongation of groundborne noise?

*(Mr Thornley-Taylor)* I think it would be curiously constraining for the contractor because there are many different ways in which the effect of the temporary construction railway can be mitigated, one of which is actually not to have a temporary construction railway at all but to use rubber tyre vehicles instead. Conventional railways are quite common but there are several ways of providing vibration isolation between the track and the tunnel in its temporarily constructed state, and while it is perfectly true that a resilient under ballast mat is one of the measures it is by no means appropriate for all locations, and I would not recommend specifying it precisely at this stage.

4819. If it were suggested that the noise environment within 127 Charing Cross Road should be controlled during the construction operations relating to Crossrail—and I am not just confining this to groundborne noise, it comes in airborne noise as well—that the construction should be constrained to the noise levels within the building as a whole, not just

within the sound recording studio, and are kept to below  $30\text{dB}(\text{A})_{\text{Max}}$  what would be your response to that suggestion?

*(Mr Thornley-Taylor)* I think it is a very impractical thing to try to do because the norm for construction noise control is to specify and monitor and control noise levels outside the façade. If for some special reason you move the point of monitoring and control inside it becomes almost impossible to do anything about it because obviously activity goes on inside the building; that is why there is concern about noise level, and that activity itself generates noise. So you would never be able precisely to check whether or not it was being achieved, unless for protracted periods the activity inside the building ceased, so that you could do noise measurements, and that would defeat the object. I have not come across, except in possibly very special circumstances, any case where it has been practicable, has been possible to control construction noise by using internal noise elements.

4820. What sort of noise level would one expect normally within an office building?

*(Mr Thornley-Taylor)* A typical office building has average levels around about the  $50\text{dB}(\text{A})$  mark, when somebody is talking, and depending on the distance from the person the levels would be 60, 65. Sometimes if it is a very peaceful office with people not talking on the telephone, not using computers, it could be less.

4821. So a commitment to  $30\text{dB}(\text{A})_{\text{Max}}$  within 127 Charing Cross Road would mean that the Nominated Undertaker would have to stop people talking on the telephone and having a conversation with each other, would it?

*(Mr Thornley-Taylor)* For the general office area it would be completely un-implemental, I think. If you applied it to the studio itself that would be slightly easier, but the difficulty is that you would be committing the contractor to limit something over which he did not have control because the studio, having its sound insulation treatment, if the owner of the studio did something to the studio itself that caused the noise level to go up you could not very well hold the contractor responsible for that.

4822. **Mr Taylor:** Thank you very much; those are all the questions I ask.

4823. **Mr Binley:** Mr Jones, would you like to cross-examine?

4824. **Mr Jones:** Thank you.

---

*Cross-examined by Mr Jones*

4825. **Mr Jones:** Mr Thornley-Taylor, can you help the Committee with this? Have you visited the recording studio at Goslett Close?

*(Mr Thornley-Taylor)* No, I have not.

4826. Have you taken it upon yourself via my clients to receive instructions as to the technical nature and specifications of the acoustic treatment within the premises, albeit that you have not visited it?

*(Mr Thornley-Taylor)* I have relied on the description given to me at the meeting that I attended with the EMI Music Publishing, which Mr Tilley attended as well.

4827. So you have not considered it necessary to approach it on a more expert basis by actually visiting the site in question?

---

The Petition of EMI Music Publishing Limited

---

*(Mr Thornley-Taylor)* We will not be affecting the studio because of course it will go, so, no, I have not.

4828. You are relying on the current arrangements—or your Counsel have been—as by way of assistance to the community in this respect. Can I ask you this, in respect of construction of this—and we will come on to the issue of whether one measures it inside or outside the building—I do not find in the documentation presented by the Promoters of Crossrail any indication of any noise limits that the Undertaker will be obliged to meet, whether outside or inside—and let us just stay outside of the building—in terms of construction noise in respect of 127 Charing Cross Road; is that right?

*(Mr Thornley-Taylor)* That is correct. I have explained to the Committee previously—and I perhaps will not take up time in repeating the procedure.

4829. One of our concerns is about the lack of the enforceability of this, and it is right to say, therefore, that in the Environmental Statement of the assessment there was no assessment done against any predicted noise levels?

*(Mr Thornley-Taylor)* As a general principle commercial development was scoped out of the Environmental Statement on the basis that normal modern offices have sound insulation sufficient to result in a non-significant effect inside the office during the period of the construction work concerned. So it is only in the case of special buildings that it is necessary to look more closely, using the procedures which are set out in IPD9.

4830. So the answer to my question is no, no assessment was done; that is your answer?

*(Mr Thornley-Taylor)* Yes.

4831. But is there not a problem, even on your own justification—whether it is right or wrong is not a matter for me to debate with you as to the matter of the law there, whether it is right to scope it out—on any view it is the case that these premises, 127 Charing Cross Road, are going to be special premises, are they not, in terms of acoustic sensitivity?

*(Mr Thornley-Taylor)* It currently is an office development and has been treated as such. It is not normal to anticipate future changes of use in that process.

4832. Just so that the Committee understand, the approach that has been taken in terms of noise assessment, Mr Taylor, is that the assessment, such as it was, excluded 127 Charing Cross Road because it was not regarded as special or acoustically sensitive, because that was something that was going to happen in the future. Can we agree this, though? We do agree, however, that if 127 Charing Cross Road was operating, as you have heard it is my client's intention that it should operate, I think we can agree that it would be regarded as a special case, would it not?

*(Mr Thornley-Taylor)* I think it would, yes.

4833. Yes, and no doubt has been expressed in cross-examination of Mr Tilley, and there was no suggestion by the Promoters, that EMI are flying a kite here when they say that they are going to 127 Charing Cross Road. You do not understand there to be any doubt about that, do you?

*(Mr Thornley-Taylor)* I cannot really comment on matters of that kind.

4834. So the situation we have and the Committee has is there has been no noise assessment, either in the Environmental Statement or in any of the evidence, as to what the likely noise climate will be in respect of construction noise in the vicinity of 127 Charing Cross Road. I do not know if you are familiar with the location of that building in respect of the works that are going to go on at Tottenham Court Road Station.

*(Mr Thornley-Taylor)* Yes, I am.

4835. There has been no assessment, has there?

*(Mr Thornley-Taylor)* Of external construction noise? No.

4836. If we look at the question, therefore, in terms of external construction noise, we need to know, first of all, do we not, before we can make an assessment as to its impact on my client's property, what the likely level of noise is going to be from construction noise? We need to carry out that assessment, first of all, do we not?

*(Mr Thornley-Taylor)* We need to know, from the point of view of commercial premises, generally, what the levels of noise are likely to be; whether there is anything unusual about the works that would require anything other than the standard approach to commercial premises' proximity to Crossrail worksites.

4837. Let us work on this assumption, and the Chairman will accept I am asking you, Mr Thornley-Taylor, to work on this assumption: we agree that if my client's proposal goes ahead, 127 Charing Cross Road will be regarded as a special case, not like other commercial offices. Can we just assume, therefore, that the move does go ahead? Just assume that. In order for the Committee then to form a view as to whether my clients would be properly protected in terms of noise, we would need, would we not, some noise assessment in order to demonstrate, as you have done elsewhere, presumably, in front of this Committee, in other special cases, as to the likely noise climate that takes place as a result of the construction works.

*(Mr Thornley-Taylor)* The procedure exists, which I have explained previously, which does not deal in terms of present day numbers, as far as noise is concerned. It sets out a framework for assessing the likely noise level in the existing fabric of the building, as I have previously explained.

4838. That has not been done.

*(Mr Thornley-Taylor)* It is not done; the procedure is to do it in the future.

---

 The Petition of EMI Music Publishing Limited
 

---

4839. The problem with doing it in the future is that the Committee can have no assurance as to the acceptability or otherwise of the noise levels, both in respect of sensitivity of the site and, also, for the office workers working there. They are going to be next to the Tottenham Court Road works. How long is that predicted to go on for, the construction works in relation to Tottenham Court Road Station?

*(Mr Thornley-Taylor)* Different parts of the work go on for different periods of time. It is not possible to single out—

4840. Works are going to be going on on the site adjacent, are they not, in and around 127 for one to three years possibly?

*(Mr Thornley-Taylor)* There are various different variations, yes.

4841. The Committee will know. One to three years next to my client's sensitive site; no assessment has been carried out in respect of that construction noise; no evidence presented either in the Environmental Statement or to this Committee as to the likely level of noise, and you are saying to the Committee, as I understand it, "Trust us, we will carry out the noise assessment later".

*(Mr Thornley-Taylor)* It is a little bit more than saying: "Trust us". There is a formal procedure which I have explained to the Committee when we were hearing previous Petitions very nearby.

4842. The problem is, Mr Thornley-Taylor, when the assessment is carried out to find out the noise climate, it is then one needs to address whether there is sufficient protection. One can only address whether the protections being offered with its various caveats is sufficient or not if one knows the level of noise that is needed to be treated. First you have to make the assessment and then you have to look at what is needed to deal with it.

*(Mr Thornley-Taylor)* No, the critical thing is to know the use of the building. The present day use of 127 Charing Cross Road is not the same as it would be assessed in the future after the studio has moved from 12 Goslett Yard.

4843. It is too late then, is it not, so far as my client is concerned, as to any protection they may be given in this Committee by terms of an amendment of this Bill, because the matter will have already been passed and the assessment comes up afterwards?

*(Mr Thornley-Taylor)* It is very opportune that it will be possible in re-siting the studio at 127 Charing Cross Road to take the measures which I described earlier which will be proof against construction noise as they will be proof against traffic noise and other noise intrusion. I do not see it as a major problem. It is not technically difficult and it is not administratively difficult, as far as I can see.

4844. You do not see it as a problem but there is nothing I can say that will change your mind. That is why we are on different sides of the room. I am going to be suggesting that this approach is flawed because we have a circumstance in this case where we know

(there is no suggestion otherwise) that should this go ahead we are relocating to that site (there is no suggestion otherwise) and it should have been treated in noise assessment in the same way that you treat and have treated other existing special cases, and you carry out a noise assessment now.

*(Mr Thornley-Taylor)* We have not assessed buildings on the basis of what might happen in the future, which might affect their sensitivity.

4845. I think we can see the difference between us on approach on that. I think there is very little difference between us on the external monitoring of construction works for a noise level, for example, from the boundary or the facing wall of 127 Charing Cross can be done. The issue that you take is whether there should be any internal noise control.

*(Mr Thornley-Taylor)* I am certainly recommending against any commitment for control of construction noise by putting internal noise limits in.

4846. You mentioned in evidence—and I wondered if you can help clarify for my note and, perhaps, the Committee—in answer to Mr Taylor's point that you recommended against it, but you are aware of very special circumstances where that type of monitoring does take place or has taken place. I just wonder if you could give us some examples to which you referred.

*(Mr Thornley-Taylor)* I said that to make sure I did not say anything untrue, but I cannot actually think of any examples.

4847. So you said you were aware but you were not actually. In terms of the noise limits in terms of securing the recording studio, first of all, if there was an internal noise level that had to be achieved by the person carrying out the construction works, if the noise was actually being caused by another source as you rightly said they would not be held responsible and they would not be in breach of their undertaking, would they?

*(Mr Thornley-Taylor)* Correct.

4848. So the point that you raise, that there is a problem with the internal noise because it may be EMI making a lot of noise, would not be a problem because it would be attributable to the EMI person and not the construction person. They had not caused noise which breached the code.

*(Mr Thornley-Taylor)* It would be a problem because the attribution would be impossible to achieve.

4849. It is not impossible to achieve in noise terms because you can identify particular noise characteristics and types of noise. So, for example, if it was a noise caused by someone talking you can attribute that, can you not, by noise readings or you can put in spikes? You can tell that is a different noise to construction work.

*(Mr Thornley-Taylor)* Of the many types of noise sources occurring in all rooms I cannot confirm that it is not possible beyond doubt to attribute events to external construction activities and be absolutely sure they are not from internal activities. A lot of time will be spent in tribunals of one kind or another trying

---

The Petition of EMI Music Publishing Limited

---

to prove something did or did not exist instead of following the normal and very successful procedure of controlling construction noise by outside measures.

4850. In terms of the obligations that are being offered, first of all let us deal with the free-standing obligation “as far as reasonably practicable” to limit noise. Again, that obligation does not have a target, does it? You are familiar with CoPA, the Control of Pollution Act?

*(Mr Thornley-Taylor)* I participated in the drafting of the Control of Pollution Act.

4851. That sets out a series of consents which very often sets noise limits. Does it not?

*(Mr Thornley-Taylor)* Yes.

4852. Then the concept of, for example, best practicable means or doing everything reasonably practicable is effectively a defence to any breach of a consent. Is it not? That is how the system operates.

*(Mr Thornley-Taylor)* No, it is not. The way the system operates is that the contractor makes an application for a consent and if the consent is refused or conditions are applied against which the contractor wishes to appeal, then clearly set out grounds of appeal is the best practicable means being used. If the contractor, having received a consent, with or without conditions, breaches it he is guilty of an offence and it is not a defence then to say: “I may have breached this notice but I used the best practicable means”. That opportunity has passed.

4853. The opportunity comes earlier in the consent procedure, but best practicable means, that is not exceeding excessive costs, is it not? There is a costs consideration that is taken into account.

*(Mr Thornley-Taylor)* It is set out in Section 72 of the Control of Pollution Act. Costs is one consideration—

4854. There are a number of factors that are taken into account that qualify that obligation. What other factors are taken into account?

*(Mr Thornley-Taylor)* The engineering considerations are one of them. It is a balance between what is achievable and what is reasonable and at a reasonable cost. If it is helpful we can provide the full wording of Section 72.

4855. There is a difference, is there not, between an obligation to do best practicable means or “reasonably practicable” and an obligation to use your best endeavours rather than “reasonably practicable” as defined under the Act with its qualifications.

*(Mr Thornley-Taylor)* I will answer the question, sir, but I think it is really one for a lawyer. I do know that if you delete the word “reasonable” then certainly you would be requiring people to do things which might be at unreasonable cost.

4856. The question, therefore, arises, at the end, does it not, Mr Thornley-Taylor, if we look at the construction noise level, whatever noise level comes about, we do not know what that is going to be at present in terms of 127 Charing Cross Road but, in any event, how easy do you think it will be, for example, for EMI when construction noise is taking place to be able to form a view? EMI will not be able to take any action, will they, if they consider that the undertaker is not acting reasonably and practicably in carrying out his works? There is nothing EMI can do about it.

*(Mr Thornley-Taylor)* The duty to enforce a breach of a Section 61 consent would lie with the local authority. If they failed to carry out their statutory duty (which we assume they will not because this is a responsible local authority) then EMI could take action through the courts to force them to do so.

4857. I do not want to get you into the law, but is it your understanding that there would be a duty to prosecute rather than a discretion?

*(Mr Thornley-Taylor)* If breach of a Section 61 consent takes place an offence has been committed, and the contractor—

4858. It is a discretion for the local authority, is it not? It is not a duty to prosecute.

*(Mr Thornley-Taylor)* When an offence has been committed there is no discretion.

4859. It is a matter of law and I will make submissions on that. That happens to be a misunderstanding on your part, Mr Thornley-Taylor, but that is your understanding and I will make submissions on it. Can we then turn to the question of what noise limit would be acceptable? Have you formed any view, having heard the evidence today—and I know it has been considered before—as to what noise level of construction works this Committee should consider is acceptable to be experienced, even measured externally, at 127 Charing Cross Road when it is operated as a recording studio? Have you formed a view as to what that level should be?

*(Mr Thornley-Taylor)* We cannot form that view because we do not have the design for the new studio.

4860. Well, I am dealing with internal sound, but just pausing there, there is a studio issue and there is also the amenity for the people working in the offices as well. The Committee has no evidence at all from the Promoters as to what the noise levels are that those people will be experiencing. Have you formed any view at all and, if so, please indicate where you have set it out or where it is set out in the evidence, what that noise level will be?

*(Mr Thornley-Taylor)* Well, the general position which underlies the system-wide approach to commercial buildings of a modern kind is that typical external construction noise limits which are usually in the range of 75 to 80dB(A) produce internal sound levels in the low 50s which are not such a cause of significant effect in the type of building which is why it was scoped out of the Environmental Statement.

---

The Petition of EMI Music Publishing Limited

---

4861. In terms of the groundborne noise in terms of the operation of the temporary construction railway, again am I right, and you heard Mr Elvin, that the limit of the obligation that is going to be required of the undertaker is again what is now said to be an overriding obligation which is to employ best practicable means or reasonably practicable? Is that your understanding now?

*(Mr Thornley-Taylor)* Mr Elvin, who, I am sure, will jump up if I have got it wrong, was pointing us to paragraph 5.1.1 of the information paper on construction mitigation, D1, I think, and that was setting out the position regarding the Control of Pollution Act and section 61.<sup>16</sup> That is not the same as the issue relating to groundborne noise from the construction and operation of the underground railway.

4862. So what is the qualification that you understand to the obligation for groundborne noise?

*(Mr Thornley-Taylor)* We find that in information paper D10.<sup>17</sup> I think that is where the words “endeavour to assure” are to be found.

4863. Yes. I had thought Mr Elvin’s clarification was to say that 5.1 would override 2.7. Am I misunderstanding that? I think Mr Taylor may have misunderstood the clarification. I am looking to him. I do not want to spend time on this, but I understood Mr Elvin’s clarification was that 5.1 overrode what was being said in D10 at 2.7 which was an obligation to endeavour to ensure.

4864. **Mr Binley:** Mr Jones, I think that is what we understood too. Could Mr Elvin clarify that?

4865. **Mr Elvin:** That is what I said, sir.

4866. **Mr Jones:** Mr Thornley-Taylor, the obligation, therefore, is no longer to “endeavour to ensure”, but to use “reasonably practicable” and “best practicable means”.

*(Mr Thornley-Taylor)* I hear what is said, sir.

4867. So again in terms of that obligation, I will not repeat it, but it is subject to the same qualifications that you have already indicated when we explored this phrase earlier. That is right, is it not, as far as you understand it?

*(Mr Thornley-Taylor)* The Committee will remember, or possibly not, the session we had on groundborne noise, the position at Camden, and I set out our position then at some length.

4868. Well, I do not know about that because I was not here then, but the position seems to have changed because unless Mr Elvin has changed, we now move from “endeavour to ensure” to an overriding obligation to use “best practicable means”, so I just want to focus on today. I asked you some questions about the limits and caveats of “best practicable

means” which the Committee has just heard and I do not want to ask them again, but the Chairman can recall that the same caveats would apply to this application of groundborne noise as well.

*(Mr Thornley-Taylor)* I think it has the same effect. If you look at it negatively, nobody would require the nominated undertaker to do something which was either unreasonable or at unreasonable costs or which was impracticable.

4869. **Mr Binley:** You should not expect learned counsel to know what might have happened in these proceedings beforehand and you really ought to answer the questions he asks rather than allude to previous ones.

*(Mr Thornley-Taylor)* I apologise. I am very happy to repeat the evidence, if it helps.

4870. **Mr Jones:** I would just suggest to you, Mr Thornley-Taylor, and then I will leave it, that it is not actually the situation that you reverse the obligation, as you have done, and say that anything other than what is reasonably practicably requires something which is on its face unreasonable because what I will be suggesting is that something that requires best endeavours is not unreasonable, but it is a higher standard than the ordinary standard of reasonably practicable or with all those caveats and best practicable means. I am just suggesting to you that it is not right to flip it round the other way, as you have approached it, and say that anything else would be of itself unreasonable.

*(Mr Thornley-Taylor)* I recall very clearly when Sir Hilary Scott was chairing our committee when we were drafting those sections of the Control of Pollution Act that in section 72 defining “best practicable means” as “reasonably practicable”, with the insertion of “reasonably” was a very big qualification of the meaning of the term and I, as a mere mortal, do look at things both ways because it helps me to understand them and I do not recommend that we require the contractor do anything unreasonable.

4871. I am not suggesting that they be required to do anything unreasonable. I am suggesting they use their best endeavours. Thank you very much, Mr Thornley-Taylor.

Re-examined by Mr Taylor

4872. **Mr Taylor:** When EMI move from 12 Goslett Yard into 127 Charing Cross Road, they have the opportunity to reconfigure the use and the facilities provided within 127 Charing Cross Road, do they not?

*(Mr Thornley-Taylor)* They do.

4873. Now if we are concerned about the potential impacts on the uses within that particular building of construction noise, particularly airborne noise, we need to bear in mind the current level of noise experienced by that building, do we not?

<sup>16</sup> Crossrail Information Paper D1—Construction Code: Noise and Vibration (LINEWD-IPD1-023).

<sup>17</sup> Crossrail Information Paper D10—Groundborne Noise and Vibration (LINEWD-IPD10-003).

---

The Petition of EMI Music Publishing Limited

---

(*Mr Thornley-Taylor*) Indeed.

4874. I have in front of me the Environmental Statement, volume 2, and I want to turn to page 169 and perhaps we can look at table 8.17 on this page, Mr Thornley-Taylor, which I am sure is burnt on your memory.<sup>18</sup> We can see a number of receptors where, as I understand, noise measurements have been taken in the Tottenham Court Road area.

(*Mr Thornley-Taylor*) Yes.

4875. If we look at WE27, Goslett Yard, we can see a daytime LA<sub>Q</sub> 12-hour measurement of 67dB(A).

(*Mr Thornley-Taylor*) Yes.

4876. And we can see at 138 Charing Cross Road 75dB(A) and indeed night-time LA<sub>Q</sub> eight-hour figures of 64 for Goslett Yard and 73 for 138 Charing Cross Road.

(*Mr Thornley-Taylor*) Yes, we have.

4877. Now, what sort of noise environment is that? Is it a quiet environment, a noisy environment or an average one?

(*Mr Thornley-Taylor*) The Charing Cross Road noise levels are comparatively high. They are representative of frontages on heavily trafficked roads in London, as you would expect. Goslett Yard is a bit quieter because it is a side-street with a virtually negligible amount of traffic in it.

4878. If we turn the page in the ES to page 170, volume 2, we look at paragraph 8.7.151, vibration and groundborne noise from underground construction activity.<sup>19</sup> The Environmental Statement explains that in the location of Tottenham Court Road, “Adherence to the measures set out in Appendix B1 will ensure that no significant adverse impacts will occur due to the movement of equipment and excavated material trains in the tunnel. These measures include fastening the rail to sleepers using resilient rail pads, or adequate elasticity to the support of the track system between the rail foot and the sleeper, or tunnel invert where reasonably practicable”.

(*Mr Thornley-Taylor*) Yes.

4879. You were asked whether or not there be any assessment of the impact of, amongst other things, groundborne noise from the construction activity upon the property at 127 Charing Cross Road in the Environmental Statement.

(*Mr Thornley-Taylor*) Yes.

4880. What does that statement in 8.7.151 indicate?

(*Mr Thornley-Taylor*) Well, it has general application for the route window concerned and, therefore, to these premises, although they are not specifically referred to here.

4881. If we turn on to page 171, paragraph 8.7.147, we can see that we are under the heading, “Noise from surface construction activity at Tottenham Court Road Station and Fisher Street ventilation shaft”, and there is an indication in 8.7.147 of a number of properties that would be affected by significant construction noise impact from station works, and it concludes that: “However, although it has not been practicable to determine the effectiveness of noise insulation at each individual property, it is likely that noise insulation will be sufficient to mitigate the noise impact of surface construction activity in most cases”.<sup>20</sup>

(*Mr Thornley-Taylor*) That is right.

4882. Now, given the noise environment in this area, given the fact that there is the opportunity to reconfigure 127 Charing Cross Road in whatever acoustic manner one chooses and given the conclusion in 8.7.147, what is your view of the likely impact of construction activity upon, firstly, the office use of 127 Charing Cross Road and, secondly, the studio use that is proposed within that building?

(*Mr Thornley-Taylor*) In the event there will be no significant effect from these works.

4883. When you met EMI, I think you were present at a meeting in February. Is that correct?

(*Mr Thornley-Taylor*) Yes, I was.

4884. Was any issue raised at that meeting relating to the potential effect of construction arising from airborne noise?

(*Mr Thornley-Taylor*) It may have been mentioned. It does not stick in my mind as one of the principal issues.

4885. **Mr Taylor:** Thank you. Those are all the questions I have.

4886. **Mr Binley:** Thank you very much. We now call upon either Mr Elvin or Mr Taylor to make your final statement on this.

4887. **Mr Elvin:** We are doing Tweedledum and Tweedledee today, so I think it is my turn. I think Mr Taylor wants to know which of the two he is!

4888. Sir, can I start firstly with the noise issue. Sir, the position is clear. You have just seen the relevant sections of the Environmental Statement, volume 2, pages 169 to 171, and you have had Mr Thornley-Taylor’s expert view on the issue. Given that the Committee is not being asked to consider the impact on existing premises, Goslett Yard will go and 127 will be changed, the question is: given the existing environment and given the likely construction activities, will there be a significant effect on the reconfigured 127? His view is that it is straightforward to accommodate EMI’s requirements because they will be reconfiguring 127 in any event. In my submission, providing EMI do not plate the walls with gold or do something

---

<sup>18</sup> Crossrail Environmental Statement Volume 2; page 169 Baseline Noise Measurements at Representative Noise-sensitive Receptors (LINEWD-ES10-145).

<sup>19</sup> Crossrail Environmental Statement Volume 2; page 170 section 8.7.1.1 (LINEWD-ES10-146).

<sup>20</sup> Crossrail Environmental Statement Volume 2; page 171; section 8.7.147 (LINEWD-ES10-147).

---

 The Petition of EMI Music Publishing Limited
 

---

unreasonable, any reasonable works which EMI seek to carry out in order to accommodate their move because Crossrail displaces them from Goslett Yard to 127, those will be disturbance costs which will be properly recoverable under the National Compensation Code. Therefore, in my respectful submission, this really is a storm in a teacup because the issues about noise that EMI are concerned with, it can easily deal with and providing it does not over-egg the pudding and act unreasonably in the works it does to move its studio from Goslett Yard to 127, then it should be able to recover those amounts in compensation.

4889. Of course we cannot agree them in advance because we do not know yet what works are going to be done or what works EMI will consider to be necessary, but the principle, in my submission, is absolutely clear. So, in my submission, there is therefore no concern.

4890. So far as the issue of best practicable means, I gave the position—and I have double-checked that I have not misunderstood my instructions from the Secretary of State—and the way I put it to the Committee is the correct way. 5.1.1: the use of best practicable means is the overriding criteria. D10 is dealing with the specific case of taking additional steps for sensitive properties, but the overriding requirement is a requirement which Parliament itself devised, and that is best practicable means—to do what is reasonably practicable—and no one, in my respectful submission, could say it would be fair or sensible to require something to be done which was unreasonable. So the debate about best endeavours, endeavour to ensure and the like, in my respectful submission, simply falls away. We are using a concept which Parliament itself has thought appropriate to apply; we are using it as the overriding requirement. If I could just remind the Committee, without asking for the document to be put up, what 5.1.1 of the Construction Code says is: “The Nominated Undertaker will apply Best Practicable Means ... to all activities.” Unqualified.

4891. The Construction Code—so that Mr Jones has it from me, and the Committee has the reassurance—is part of the EMRs, the Environmental Minimum Requirements, and the Code itself says this at paragraphs 1.1.3 and 1.1.4. And I gave an undertaking on behalf of the Secretary of State to this Committee on the first day of the hearings, and it is paragraph 112 of the transcript for 17 January, that the Secretary of State will take such steps as are reasonably necessary to secure compliance by the nominated undertaker with those Environmental Minimum Requirements. So the EMRs, which include the Construction Code, are already secured by an undertaking I have given to this Committee on behalf of the Secretary of State. As Mr Thornley-Taylor has explained to you in evidence, what is needed to be done here is nothing unusual and nothing difficult.

4892. I turn therefore briefly to the compensation position. Can I respectfully remind the Committee that I set out the general position when I dealt with the Smithfield Market Traders? I will give you the transcript references so that they can be read into the record. It is the transcript for 1 March, day 14 of the Committee hearings, paragraphs 4042 to 4051, repeated by Mr Mould on 14 March in paragraphs 4024 to 4025, and it is set out in C2. The position with regard to the £41,000 was money expended; and I do say this, that in the light of the knowledge that Crossrail was going ahead—although without the details of the Bill at that stage—it is simply part of the scheme which Parliament has approved that such items which are entitled “blight” I suppose, one might call it, are not recoverable by commercial occupiers. And we simply come back to the position that we set out on a number of occasions to this Committee and in Information Paper C2, that the Secretary of State considers it is appropriate that the position which Parliament has considered should apply to everybody under the compensation provisions should apply to those affected by Crossrail, and that there is nothing unfair in applying the normal rules to everybody rather than creating special cases. In any event, the issue with regard to monies which were expended in 2004 does not apply to the works required to relocate to 127. Sums only become due when the Bill achieves Royal Assent and eventually the land is taken, but the works can be done in advance—admittedly with a degree of risk. But if EMI do not start the works until it knows at least that Crossrail is going ahead, even if the works have not been started, works which are reasonably attributable to the taking of the property and the fitting out of the new property at Charing Cross Road, in my respectful submission, providing they are reasonable they properly fall within the compensation principles. If the Committee wants the relevant legal reference—and I am sure it will fascinate the Committee as usual—the case that sets this out is a case called the *Director of Buildings and Land v. Shun Fung Ironworks*—another name that sticks in the mind!—and it is set out in footnote 11 to Information Paper C2, so that the shorthand writer will know how to spell it!

4893. **Mr Binley:** Thank you.

4894. **Mr Elvin:** Sir, we simply say of the compensation provisions that the main aspect, which is the fitting out of 127 to accommodate the move, to accommodate the need to have a properly sound insulated studio should, providing it is reasonable, be compensatable, should be recoverable under the Code providing, again, that it is reasonable. Therefore, if one looks at the noise issues and the compensation issues, other than the £41,000 which was incurred at the time when EMI, we say, could have suspended matters until they found out what exactly was happening with Crossrail, given that they knew that Crossrail was proceeding, given that they knew that there had been information provided and that Crossrail was asking for details of their

---

**The Petition of EMI Music Publishing Limited**

---

properties, in any event it is not a position which the Committee ought to support; but in any event it is not covered by the Compensation Code.

4895. So far as advanced notice is concerned, the Secretary of State has said that three months at least can be given. We will do our best to improve on that but at this stage in the design of the project it is impossible to give any greater certainty than that. All I can say to the Committee is that there is an incentive on the Nominated Undertaker and the Secretary of State to do better than three months because not to do so might aggravate the compensation flow. So there is a financial incentive on the Secretary of State as matters proceed to improve on the three months, and we will certainly do so if at all possible.

4896. Sir, I was given an amended undertaking which I was going to give to the Committee on access. I will read it out. It is the one I think which is referred to in correspondence. Mr Jones need not worry about the reference he heard to “amended” because we put together a draft version overnight and we asked Winckworth’s just to check that we had done it correctly, and they were amending our version not the version that was necessarily discussed between them and Bircham’s. The undertaking, such as it is, is this: “(1) The Nominated Undertaker shall, so far as is reasonably practicable, be required during construction of the works to maintain vehicular access to Goslett Yard between the hours of 8 am and 12 pm, Monday to Friday, and to restrict the closure of Goslett Yard to weekends. (2) The Nominated Undertaker shall give EMI Music Publishing Limited at least 14 days’ notice of the closure of Goslett Yard and shall consider all reasonable requests made by EMI Music Publishing Limited regarding deliveries during such a closure. (3) The Nominated Undertaker shall consult with EMI Music Publishing Limited regarding any proposed closure of the vehicular access to Goslett Yard on a weekday.” I will show this to Mr Jones, sir. I think that reflects what was agreed in correspondence.

4897. **Mr Jones:** Sir, yes it does. If there is any point I think I can deal with it as appropriate.

4898. **Mr Binley:** Thank you, Mr Elvin. Do you wish for Mr Taylor to add any comment?

4899. **Mr Elvin:** No, sir.

4900. **Mr Binley:** Can I just ask, on a slightly separate issue, whether you know whether Liberty Asset Management Limited or City Parochial Foundation Trustees will be appearing today?

4901. **Mr Elvin:** Our best information is that they will not be appearing. We have not heard from Liberty one way or the other, I gather from Mr Walker. They are in receipt of a draft and we were told that they were favourably considering it, but we have not received any confirmation either of acceptance or withdrawal of the Petition, or indeed if they will turn up.

4902. **Mr Binley:** Mr Jones, before I call you to make your final submission, can I ask how long you intend to take?

4903. **Mr Jones:** Sir, I hope to be between five and ten minutes.

4904. **Mr Binley:** Let me converse with the Committee. The Committee will be happy to extend the time beyond one o’clock in order to complete that task, and we will then have to proceed with the other matters as we see fit at that time.

4905. **Mr Jones:** I am very grateful, sir. Can I deal with compensation first? It is really a simple issue; it is whether this Committee, exercising its powers in respect of what I will be submitting is fairness and commonsense, in the special circumstances of this case, will recommend an exception to the normal procedure that would operate under the statutory Compensation Code. The question really comes down to, who fairly in this particular case should bear the burden? Should it be the Promoter bearing the burden of risk or should it be EMI? That is really the question. Mr Elvin says, unfortunate as it is, terribly sorry, but EMI must bear the burden of taking the risks on any relocation. We say that that is unfair, and that this is an unusual case.

4906. In terms of the money that we have already expended, that is something that was not our fault, and I do have to suggest, with all respect to my learned friend’s forensic cross-examination of my witness, that it is simply unreasonable for Crossrail to suggest that our client should somehow have ferreted out, at a time when even those instructing my learned friend did not know what land was going to be required for the Crossrail, anything more. You may feel—and I will be suggesting to you—that EMI, through Mr Tilley, took extraordinary steps to keep abreast of the position, and was actually was told that he could not, until he received that letter, know whether any and which of the properties might be CPO’d. In that case—and it is an exceptional case—the burden, in my respectful submission, should fall on the Promoters, otherwise it would lead to the situation where those instructing me would actually be encouraged to go ahead with the scheme which in any sense should not really proceed when there is a threat of a CPO.

4907. The next question of where the burden should fall is on relocation. Sir, I do ask you and your colleagues to note the heavy reliance that is now placed by Crossrail, through Mr Taylor and also through Mr Elvin, about the steps that my client should take in reconfiguring 127 Charing Cross. That has been put forward as a panacea to all the holes in the assessment procedure that we have found in terms of noise. This is an exceptional case, for this reason: 127 is to be a sensitive location. Ordinarily the Promoters will have assessed it and given it special treatment, if it was existing. The reason it has not had that treatment is because it is said to be a future occupation. Given that there is no doubt about its

---

 The Petition of EMI Music Publishing Limited
 

---

future occupation and no doubt has been raised by the Promoters about it, this is an exceptional case where the Promoters could be expected to agree, first of all, the reasonable costs in relocation before the service of the CPO notice, and undertake to pay them, or at the very least to agree to what are the reasonable relocation costs. Mr Elvin, beguiling as he may be, is saying, “I am sure this will all work out.” I suggest that you only have to see Mr Elvin’s cross-examination of my witness on the forensic level of detail as to what notice he should have read or should not have read, will see that there is a recipe for disaster if the particular relocation of this sensitive site is not agreed beforehand. There is nothing to stop the Promoters giving an undertaking that they will use their best endeavours to agree the type of relocation that is acceptable that we can claim. We do not want to have the risk of going ahead with something only to find that we are told we have gone beyond what is reasonable and we have “gold plated” it, to use Mr Elvin’s words. So we say that we should get compensation upfront but if we are not to get that we should at least have the comfort of knowing what is going to be compensated for.

4908. The last thing I would say is this: that becomes even more pressing if the Promoters are not prepared to give more than three months’ undertaking. We see no clear, cogent case as to why they cannot give a 12-month or an 18-month notice to us. It has just been referred to that things are all floating in the air, at the moment. Or terms to that effect. A longer notice period would at least give an opportunity for the burden to be shifted away from my clients.

4909. Finally, I would say it is simply unfair to expect (this is on compensation) them to bear a burden of financial costs in order to secure their recording position within the centre of London, and that they have to take the risk because not enough notice is going to be given to them. Finally, on noise, I just say this: I have already hinted that the big problem—and I repeat what I set out in my opening note without repeating it, you will be pleased to know—is that the Environmental Statement is inadequate. It is

supposed to be looking forward, it is the likely significant environmental impact. We have a noise-sensitive location that was not assessed because a mistake was made only to assess existing locations. So that is a flaw and that makes this procedure unlawful.

4910. However, it is more important than that. This Committee does not have the necessary evidence as to what the noise level and noise climate will be. When we look at the Environmental Statement that was taken in re-examination by my learned friend (it is 8.7.147)<sup>21</sup> it is dealing with those buildings that were assessed. 127 Charing Cross Road is not included within it and I draw your attention to the last words, the caveat: “It is likely that noise insulation will be sufficient to mitigate the noise impact of surface construction in most cases but not all.” Even in those that they have assessed, not all of them will be mitigated sufficiently, and our one has not even been assessed. We do ask that best endeavours must be an overall requirement rather than best practicable means—it is not asking for something that is unreasonable; it is something that it is in contractual terms up and down the country. If the courts thought it was unreasonable I would be struck out as an unreasonable term. We ask for special treatment but we do consider we are special—humbly. I have nothing further to add, unless there is anything?

4911. **Mr Binley:** Thank you, Mr Jones. Are there any questions for Mr Jones? Thank you very much. Can I say that I assume that we still have Liberty Asset Management Limited and City Parochial Foundation Trustee?

4912. **Mr Elvin:** We think City Parochial have withdrawn, in fact.

4913. **Mr Binley:** We are told that they might be in the process of resolving, and it seems to me that we cannot therefore continue. I shall therefore make the point that the Committee will stand adjourned until Thursday 23 March at 10.00 am.

---

<sup>21</sup> Crossrail Environmental Statement Volume 2; page 171; section 8.7.147 (LINEWD-ES10-147).

Thursday 23 March 2006

Before:

Mr Brian Binley

Ms Katy Clark  
Mrs Sian C James

Dr John Pugh

---

In the absence of the Chairman, Mr Binley was called to the Chair.

Ordered: that Counsel and Parties to be called in.

Mr David Elvin QC appeared on behalf of the Promoter.

The Petition of the British Board of Film Classification.

Mr Neil Cameron appeared on behalf of the Petitioner.

*Sharpe Pritchard appeared as Agent.*

4914. **Mr Binley:** May I welcome everybody this morning. Today we are hearing the petitions of the British Board of Film Classification, Grand Central Sound Studios Limited and the Antique Hypermarket Limited.

4915. I will call upon Mr Elvin for the Promoter and ask him if he wishes to make any opening remarks.

4916. **Mr Elvin:** As usual, sir, a short one to set the scene with BBFC. Mr Taylor will be dealing with Grand Central, when they are separately represented—and Antiques Hypermarket we will see who is left.<sup>1</sup>

4917. BBFC, as you will be aware from your site visit, has premises which run from 3 Soho Square, which is its frontage, through to 7 Dean Street, at the rear.<sup>2</sup> The British Board of Film Classification obviously discharges a statutory function in terms of film classification. It is located above and between the proposed running tunnels of Crossrail and adjacent to the proposed Tottenham Court Road Station western ticket hall. On the map you can see the running tunnels and the blue line which comes up under the building is where there would be an escalator coming up towards the surface.<sup>3</sup> The Petitioner's main concerns relate to the effect of airborne noise on the upper part of the premises, from construction work particularly; the effect of dust from construction; and the effect of ground-borne noise from construction and operations on the basement film theatre—all of which I think the Committee viewed.

4918. There is no issue between us that Crossrail will have a significant effect on the BBFC's premises; the issue is what the appropriate approach to take is to deal with it. Let the Committee not be under any doubts: Crossrail is not suggesting there will not be a significant impact. Indeed, to that end, undertakings have been offered to the BBFC which they are satisfied with, leaving one issue.

4919. We have put forward undertakings which deal with noise to the upper premises. We are proposing at both Soho Square and Dean Street for there to be additional works, both in terms of glazing, if necessary, and new air-conditioning, which will enable the upper premises to be shielded from noise. There will be tier 3 dust mitigation works—which is the highest level of protection, as the Committee will know from Smithfield. So far as the basement theatre is concerned, we have presented two options to BBFC, neither of which they seem willing to take: one of which is a specially constructed and insulated escalator which will prevent noise and vibration from being a significant issue, and, more holistically, we have suggested that the Secretary of State would pay to have installed in the film theatre, effectively, an acoustic cocoon, which would line the theatre and which would provide insulation from noise and vibration for both construction and operational noise.

4920. Effectively, the only issue which the Committee is now going to be asked to deal with is the best means of dealing with the film theatres in the basement, as the other matters are now agreed. It is a very narrow point for the Committee this morning.

4921. **Mr Binley:** Mr Cameron, would you like to make the case for British Board of Film Classification, assuming on this very narrow point?

4922. **Mr Cameron:** Yes, sir. The point has been narrowed. It is not quite as narrow as Mr Elvin suggests, in one respect only. Could I explain what the concerns are and then I will tell you precisely what it is we seek you to resolve.

---

<sup>1</sup> Crossrail Ref: P64, Promoter's Response Document to the Petitions of British Board of Film Classification (BBFC), Grand Central Sound Studios Ltd, and Antique Hypermarket Ltd.

<sup>2</sup> Crossrail Ref: P3, British Board of Film Classification Site Plan, 3 Soho Square and 7 Dean Street (Parcel No. 615) (WESTCC-14803-01).

<sup>3</sup> Crossrail Ref: P3, Tottenham Court Road Station, Transport and Access, Environmental Statement, Volume 4a, Map C5 (iv) (WESTCC- 14803-002).

---

**The Petition of the British Board of Film Classification**

---

4923. Sir, you and other members of the Committee will know that the British Board of Film Classification has a role in classifying films, videos and DVDs. It is an independent, non-government body and it is funded by the fees paid by filmmakers and distributors for classification. These are statutory functions.

4924. The way that the system works, in brief, is that, under the Licensing Act 2003, premises are licensed for the exhibition of films, and there is a mandatory condition that is imposed requiring the omission of children to the exhibition of any film to be restricted. That is in part why a film distributor has to get the film classified. The classification takes place in accordance with the recommendations by the film classification body, the BBFC. There are similar provisions for video works—and the video works now include DVDs as well as videos. The president and vice-president of the BBFC are designated as the people responsible for classifying video works.

4925. All the works are subject to full and thorough examination. They have to be viewed in full; video games have to be played at length. It sounds an interesting job, and no doubt it is, but probably when you have played a video game time after time it is not quite as interesting when you started!

4926. Sir, you will be familiar with the guidelines and in the bundle of exhibits you have Mr Johnson's exhibits.

4927. **Mr Binley:** The number for that is A58.<sup>4</sup>

4928. **Mr Cameron:** Thank you. In that bundle are the familiar classifications, at page 12 is U, and then PG, 12A, 15 and 18—but you are familiar with those and are 18.<sup>5</sup> Examiners have to examine the content of each work with great care and they have to take account of sound, vision and context. This is an important point to the issue in dispute: the films and videos which are examined have to be watched and listened to in conditions which reflect the conditions in which they will be viewed by the public, because you then get an idea of context. Films, as distinct from video works, are viewed in a dedicated film review theatre, and that cinema screen and auditorium is large enough to allow examiners to make an informed judgment on the impact the film might have on viewers. That is an important point, which goes to the heart of the matters now in dispute.

4929. **Mr Pugh:** Could I point out that Mr Cameron is listing things, which we have all seen for ourselves. We have visited the site premises and understand what we are dealing with.

4930. **Mr Binley:** I am sure Mr Cameron will take note of that.

4931. **Mr Cameron:** Yes: Get a move on. Certainly.

4932. I appreciate that you have taken the trouble to go and see the premises, and we are very grateful for that, but the point I am trying to make at the moment is that when examining these films it is very important to have conditions, which are similar to those when these films will be viewed.

4933. Could I also make the point—and I do not know whether you will have observed this when you went to visit the premises—that when one is watching a 35 mm film, if one is interrupted, it is very difficult to rewind. You cannot rewind a 35 mm film.

4934. **Mr Pugh:** We do know that, yes.

4935. **Mr Cameron:** Good. Thank you very much, sir.

4936. When you have had a chance to look at the documents you have been given, you will notice that one of the important factors is the language used. The language used can effect classification. BBFC carried out an opinion survey, which is included in the bundle that you have been given. That indicates that, amongst the factors that the public consider to be important or quite important, is the use of swearing and strong language. As a result, it is very important for those classifying films to be able to listen to the film carefully, hear the words, and not only to hear the words precisely but to be able to hear them in context. One misplaced word can result in a film getting the wrong classification.

4937. Sir, the only other issues I would like to emphasise about the work of BBFC at this stage are these. The films and videos are often submitted to the BBFC at short notice; they may even be accompanied by security guards from the film distributor because they are worried about piracy. The reason that is important is because a distributor can and often does insist that the film is viewed on the BBFC premises and not taken somewhere else. Piracy is a significant issue. These activities are sensitive to noise, vibration and dust, and classification is particularly sensitive to noise.

4938. Sir, so far as the premises are concerned, you have seen them so I am not going to describe them. I would only like to say that it is important that BBFC's work is carried out on a single site for reasons of security, teamwork and to avoid piracy.

4939. The advent of the DVD format has led to a substantial increase in work. Just as an example, in 1997 the total annual submission of video works was 5,259, which has gone up to 16,965 in 2005. It is not yet clear whether the trend will continue. The reason I am telling you about this is because of a point that the Promoter may take. Another factor is that the BBFC have a large archive of videos, and, because the video format is going out of use, they have to consider whether to digitise their library. As a result of increased workload and a potential project for

<sup>4</sup> Committee Ref: A58, British Board of Film Classification Exhibits.

<sup>5</sup> Committee Ref: A58, British Board of Film Classification Guidelines (WESTCC-14805-001, 008-012).

---

**The Petition of the British Board of Film Classification**

---

digitising the video library, BBFC have been looking at its accommodation requirements. I say that quite openly. However, no decision to move has been made. It is most important that they retain their position with the film-making business cluster in Soho, because that is where their customers—which is probably the wrong word—or those submitting films for classification are.

4940. As far as the impact of Crossrail is concerned, Mr Elvin has explained that the new western ticket hall for the Tottenham Court Road Station will be close by and an escalator will be directly under the BBFC's premises. In order to carry out those works, there is going to be a work site at Fareham Street, which will affect the Dean Street end of the premises (the back of the site); in the northwest corner of Soho Square, a grout shaft will be constructed, which is very close to 3 Soho Square; work will take place in 2-4 Dean Street; and, as I have already said, an escalator shaft will be constructed directly under the premises.

4941. The Promoter has carried out a noise survey and a noise report, and it is probably worth just running through what the effect of the report is in summary. Mr Thornley-Taylor says—and this is entirely based on the Promoter's case, before we get into the dispute about noise, over which there is a minor dispute—I say minor, it may turn into major—that vibration attributable to demolition activities will exceed the ES significance criteria; that airborne noise attributable to construction activities to the rear of the premises will lead to a noise impact on 7 Dean Street; that airborne noise attributable to the construction and operation of the grout shaft in Soho Square will have an adverse effect on noise at groundfloor level and above for the rooms that face on to Soho Square—so there will be an effect above the groundfloor level and that is capable of mitigation—that groundborne noise attributable to the demolition works will cause unacceptable noise levels in the film theatre—and this is the precise point where it is said there may be disagreement—and that that may also be the case for viewing rooms on the upper floors—so that groundborne noise could have an effect on upper floors as well as the film theatre, but that is during demolition works.

4942. Mr Thornley-Taylor says that for a period of three to six months, groundborne noise caused by construction work at the basement of 2-4 Dean Street is likely to cause unacceptably elevated noise levels within the film theatre; and that may also be the case for viewing rooms in the upper floors—so that is an effect other than on the film theatre, but that is during construction work.

4943. On Mr Thornley-Taylor's predictions, for a period of six months during the construction of the escalator shaft beneath the BBFC premises, groundborne noise levels will be intrusive in the film theatre; and groundborne noise attributable to the

construction and operation of the grout shafts in Soho Square will also have an adverse effect on the film theatre.

4944. His last point is that, once Crossrail is constructed, the operation of the escalator beneath the BBFC premises will have an unacceptable effect on noise levels in the film theatre—so that is not just a construction and demolition effect, but a permanent effect of the proposed works.

4945. It is the BBFC's case that the Rupert Thornley-Taylor predictions may be underestimates, but, in some ways, although that is a matter of importance to BBFC it is not central to your determination because the Promoter accepts there will be an adverse effect.

4946. It is also our case that, when judging whether impact is acceptable, it is appropriate to take account of the environment considered appropriate and the criteria applied when considering noise emitted by mechanical systems in film review rooms, and a British Standard gives guidance on that issue. That is a matter of dispute as to the appropriate criteria to use when examining impact.

4947. Whether or not Mr Thornley-Taylor's predictions are underestimates, he predicts a very significant noise impact on the BBFC's activities during construction and operation of Crossrail. So there is no dispute that there will be an adverse impact, although there is some dispute as to the extent of the impact, but the essence of the dispute turns on what is the solution.

4948. In his report, Mr Thornley-Taylor suggested a number of mitigation measures that could be adopted. I am not going to run through those now, because matters have moved on, but, in essence, what he said was: "Yes, there will be an effect from construction noise, but work could cease, either at the BBFC or from those who are constructing the works, so that the BBFC can continue to carry out their activities." That is wholly impractical because the BBFC carry out their activities throughout the day and I have no doubt that Crossrail would not have to stop construction throughout the day.

4949. Sir, matters have moved on. Other solutions are offered, but can I just run through the solutions which are acceptable to the BBFC. Mr Thornley-Taylor says that airborne noise attributable to activities in Soho Square can be mitigated by the installation of noise insulation and associated ventilation. As we understand it, that is also offered to cover airborne noise at 7 Dean Street. Both those proposals would be acceptable to BBFC for airborne noise—for airborne noise alone.

4950. Sir, as far as groundborne noise is concerned, the proposal for rescheduling has, in effect, been superseded by other suggestions. As I understand it, the film theatre could be isolated, and, if it were isolated, it is said by the Promoter that the effects of

---

**The Petition of the British Board of Film Classification**

---

groundborne noise, both during construction and during operation, could be mitigated. The alternative solution offered by the Promoter, which would only deal with operational noise during the period when Crossrail is working/is in operation, would be to mitigate the effect of the use of the escalator by isolating the escalator itself. That would not deal with construction impacts, so there would have to be temporary relocation of the film review theatre during construction.

4951. Those solutions do not deal with the impact that there would be above the level of the theatre from groundborne noise—that is one difficulty—and there might have to be temporary relocation during those construction works which caused an adverse effect by groundborne noise above the theatre level.

4952. What do BBFC say in answer to this? BBFC say that there is a very simple solution and this is the solution that we are going to press before you. Rather than take all these measures—which would be noise insulation on the windows for airborne noise; the potential of either isolating the escalator shaft, which is untried, untested and may not work; and providing isolation for the basement film theatre—the simple solution is to tell Crossrail that, if they are to cause this admitted adverse effect on this noise sensitive and important organisation, they should acquire the premises and enable the BBFC to relocate. If they did that, it would completely avoid all this disruption and all these problems. We are putting that before the Committee as the appropriate solution in this case. I have no doubt it will be resisted by the Promoter. It is a simple

solution which deals with all the problems, and you do not have to take a view as to whether technical solutions which are put forward will be achievable or not. No doubt it will be said, “Well, BBFC are contemplating moving anyway and all they are doing is to ask Crossrail to pay for it” but that can be guarded against, because, if BBFC have moved by the time Crossrail comes along, the obligation will fall away.

4953. There is only one other matter I would like to address you on at the moment and that is dust. The Promoter has now offered tier 3 dust mitigation and that would solve the dust problems. Therefore, it comes down to: What is the appropriate solution for the adverse effects as a result of groundborne noise during construction and demolition and during operation? Is it the solution put forward by Crossrail, which is a combination of different mitigation measures, or is it the simple solution put forward by BBFC? That is the question.

4954. As far as the complicated solution put forward by the Promoter is concerned, even if the Promoter could provide isolation for the theatre, it would reduce the size of the theatre to an unacceptable degree and BBFC would not be able to carry out its work in simulating the conditions which would apply in a film cinema because the screen would become too small—once you have put the isolation in, the room size is reduced. There would also be an effect on the amount of people you could seat in the film cinema.

4955. That is what I wish to say in opening. If I may, I would like to call Mr Johnson from the BBFC.

---

**Mr Peter Johnson, Sworn**

*Examined by Mr Cameron*

4956. Mr Johnson, you are Peter Johnson, is that right?

*(Mr Johnson)* That is right.

4957. Could you tell us what your position is and your role is at the BBFC.

*(Mr Johnson)* I am currently Head of Policy at British Board of Film Classification and have been since last summer. I have over nine years experience of the board, first as an examiner and then as a senior examiner. During those nine years, I have spent many thousands of hours examining film and video materials for the purposes of classification.

4958. I would like to ask you about the BBFC's role, first of all. The Committee have indicated that they are familiar with it, but can you explain what you do and what the conditions are, the conditions you require in order to carry out your tasks.

*(Mr Johnson)* The process of examination is to view each and every work submitted in full in the conditions that we expect the national public audience to view them, so cinema films are viewed in

the cinema in cinema conditions, and videos are viewed on VCRs and normal TV monitors. The process is that a team of examiners will view a work from beginning to end in real time. At the end of the examination they will discuss what the appropriate classification is and what the appropriate consumer advice to go with that classification is. If there is a point of dispute, they will often review and look at scenes again before coming to a decision. In many circumstances, where different points of view might be taken or where the work might be controversial, the work will be seen again by another team or by people higher up the hierarchy within the board, sometimes a director, sometimes even the president and vice-president will view. On occasions we will need to get expert advice on particular points, so the work may then be screened for an expert either in the legal field or in psychological fields.

4959. You have produced some exhibits. The members of the Committee will be very familiar with classification, which you have set out in these

---

 The Petition of the British Board of Film Classification
 

---

guidelines, but can you explain to the Committee how the BBFC goes about the process of classifying films.

**(Mr Johnson)** An individual film will be submitted by the company who intends to distribute it within the UK. We undertake to view such films within 48 hours of them being booked in. We require that the film is delivered to the premises the day before screening takes place, so that we do not waste time if they do not turn up. A programme of film screenings will be sent down for the day, and often one viewing team will view in the morning and another viewing team will view another range of films in the afternoon. Again, the examiners will view the work from start to finish, taking notes as they go and reaching a decision at the end of the film. After the film has been viewed and examiners have reached their view, they will write reports which are then read by senior examiners, who, on the basis of those reports, will either approve the work of classification recommended or they may choose to review all or part of the film or to refer the film on to other members of the board or for other expert advice. If cuts are required—nowadays usually because a company require at a particular classification, rather than because the board is insisting (different classifications have a very great commercial impact on the success of a film; for instance, achieving a 12A rather than a 15 can be very important to some distributors)—we will write a list of cuts necessary to achieve the category and that will then be communicated to the company. They will go away and physically make the cuts on the print, resubmit the print to us, and then we will then check that the cuts have been made to our satisfaction. When we are satisfied that the cuts have been made, we will then approve the work and issue a classification certificate and a black card which you see on the front of every film. That black card then has to be shot into a piece of film and that piece of film spliced on to the front of the print before it can be shown in cinemas. This all happens, on occasions, within three days, because some distributors are working very, very close-up to the wire, especially those distributing Bollywood product from India.

4960. Could I ask you next to explain the process, and the conditions required in order to examine films in particular.

**(Mr Johnson)** It is important that we experience what the audience is going to experience. It is important that we can appreciate the details of sound and vision the audience is going to appreciate and that we appreciate those in the context in which the audience is going to appreciate them. The impact that a film has on the audience and therefore on the appropriate classification is not just about isolated details, it is also about the tone and the atmosphere that a film develops over time. For instance, with a scary film it is quite often difficult to pinpoint an image or a sound that made it scary; it is often an accumulation of tone and atmosphere through the film, so it is very important that we are able to engage in the film, as examiners, in the same way that the audience becomes transfixed in the cinema, staring

at the screen in a darkened environment, without interruption, without distraction, and most certainly without noise which masks what is occurring on screen. Anything which detracts from our ability to hear and to appreciate the atmosphere that is being generated by the filmmaker in a raft of subtle ways is going to detract from our ability to gauge accurately the impact that the film is going to have on an audience, and in particular on a child audience, which is often spooked by very, very subtle differences in a film. We have to judge that and, in order to be able to judge that, we need to experience it in certain conditions.

4961. You mentioned language. Could you take up the exhibits, the guidelines. As an example, I take page 17, 12A.<sup>6</sup> We can see under each of these categories that there are various criteria, one of which is language. How important is it that you hear individual words used?

**(Mr Johnson)** Language is absolutely vital. I think you mentioned in your opening remarks that the public regard it as one of the most important determinants of the classification. I think 86 per cent regarded it as very or quite important in determining a classification of a work. It is important down to the individual word. It is not uncommon at all for a single word to affect the classification of a work. For instance, last year one of the most successful films in this country was the animation *Madagascar*, which was clearly aimed at young children and family audiences. In the original version submitted to us there was a character—and I will have to be careful how I phrase this—who had a dialogue line which included the use of a truncated swear word. You did not hear the whole thing, but it was very important for us that we could ascertain exactly how much of that swear word was audible to an audience, because if a lot of it was audible that would have placed *Madagascar* at 15 or above, which would have completely denied its natural audience and would have completely ruined its commercial prospects in the UK and prevented a lot of children from having a lot of fun watching it. Because we have good listening conditions at the moment, we were able to be confident that the public would only hear enough to know that a joke was being made, without hearing enough to be offended, so we offered the company a PG on that basis. We said to them, “If you want to remove that whole joke about that language, then you can have a U, because we think that will be appropriate for everybody in that case,” and the company took the decision to remove even the truncated language in order to achieve the U and *Madagascar* went on to make £22 million in UK cinemas. Certainly achieving a U was a key part of the company’s strategy in distributing the film, and our hearing, of not even a word but part of a word, was key to deciding the category of the film in the end. In *Robot*, another children’s film released last year, comic wordplay based on a particular character using a particular accent made a word which would normally be innocent, sound to some

---

<sup>6</sup> Committee Ref: A58, British Board of Film Classification Guidelines (WESTCC-14805-008).

---

 The Petition of the British Board of Film Classification
 

---

ears as if it was very far from innocent. It sounded like possibly the strongest swear word we can think of in the English language.

4962. **Mr Elvin:** A question springs to mind!

**(Mr Johnson)** Yes. I think I can tell you without causing offence that the innocent use of the word was “count”, as in an aristocratic title. We had to listen to that a number of times. Indeed, it was appealed and it went as far as the director, whose ears were called into play, so that we could be absolutely confident that the audience were not going to hear this as other than “count”, because that would have caused a great deal of offence, especially as the accent itself was being employed for comic effect, so some people may have thought that bad language was being used for comic effect. We had to satisfy ourselves that we were not going to cause widespread offence to family audiences in the UK through that piece of language. This is a common occurrence. In the first few weeks of 2006, a trailer was submitted to us for *Kidulthood*, a tale of London school children getting up to mischief and getting their comeuppance which has achieved some interest. We have a policy on trailers that we only allow one use of strong language at 15. Our reason is that research into public attitudes has revealed some tolerance for occasional strong language, bad language at 15, but an objection to wall-to-wall bad language, especially when it comes unbidden in a trailer at the start of a film—because obviously you choose to go to see the feature, and what you get before the feature you have not chosen to view. For many years, we have operated a fairly simple view, which is that, if you want a 15 for your trailer, you cannot have more than one use of strong language. This film had a dialogue track which was quite muffled, it was very pacily edited, so you had snippets here and there. We were confident that there was one use of strong language in the trailer and there was another possible use, but the version they submitted to us was technically a bit of a rough copy, so we had to ask the company to submit a cleaner copy of distribution quality so that we could be clear whether the second use did exist or not. We concluded, once we had that clean copy, that it did not exist, and that enabled the *Kidulthood* to be trailed to the audience for whom the film was aimed, 15-year olds. Otherwise, it would have been an 18, which would mean it could not have been advertised to its target audience. So single words in works have an enormous impact on our classification and in consequently on the possible success of the distributors’ work.

4963. **Mr Pugh:** At what volume do you listen to these films? Whenever I go to the cinema and they have Dolby sound systems, *Armageddon* could be taking place outside and I would not hear a word. Do you simulate that sort of experience, or do you deliberately turn the volume down? What is different from the cinema-goers’ experience?

**(Mr Johnson)** We mimic the cinema-goers’ experience.

4964. It is very loud.

**(Mr Johnson)** It depends on the film whether it is very loud or not. Some films use silence very carefully. Most films use a combination of very loud sound effect in some parts and very quiet moments in other parts for contrast. Yes, if you go to see the film *Armageddon*, there is a lot of noise going on there and we do listen to that loud. The impact of that noise on the audience is going to be a key determinant of whether it is going to scare the life out of very young children, so we have to have it loud enough in order to hear that. But an awful lot of films are not all crash, bang, wallop; an awful lot of moments rely on quiet moments, rely on dialogue, rely on snatched pieces of overlapping dialogue in which being able to hear in quiet conditions is very important indeed.

4965. Even with the volume set at very loud, there would be times during the course of the film where ambient noise outside would override it.

**(Mr Johnson)** Absolutely.

4966. **Mr Cameron:** Mr Johnson, you have mentioned during the course of your last answer the research conducted at BBFC. Could I ask you to turn to your exhibit 2, which, if you have it in the same bundle as I do, is in divider 1—just to keep us on our toes!<sup>7</sup> There is a table at the top of page 10: “Percentages attaching degrees of importance to 9 issues in ratings films”. Could you explain where you get your 86 per cent from.

**(Mr Johnson)** Yes, it comes from 49 per cent regarded swearing and strong language as very important an issue in rating films, and 37 per cent regarded it as quite important. If you add those numbers together, you get 86 per cent. Only 12 per cent thought it was not very important, interestingly.

4967. You think it is important, the public think it is important. You have explained how you go about the exercise. What effect would or does intermittent noise have on the process of film classification?

**(Mr Johnson)** It potentially has a number of effects. Firstly, if you are working with video, intermittent noise would cause you to have to stop and rewind the tape. If you are dealing with film, obviously you cannot do that, so you would have to go back and play the whole reel again at the end, which with the symptom of intermittent noise would be very time consuming and would result in delays which would have a serious impact on our clients—we do call them clients, by the way—who are working to extremely tight deadlines. I have mentioned before that you can have work submitted on a Wednesday that is going to be on screen in cinemas on Friday, so even very small delays can have a serious impact, especially if cuts are required. You cannot fit delays into the process without causing problems for our clients. At worse, intermittent noise could cause us to miss the word entirely, and we would not know that we had missed it and we would classify the work with language which would make it inappropriate

---

<sup>7</sup> Committee Ref: A58, British Board of Film Classification Guidelines (WESTCC-14805-018).

---

The Petition of the British Board of Film Classification

---

for the target audience, causing widespread offence in the UK and undermining the board as a trusted guide to the moving image, which is what we claim to be. It is also important, as I think I touched on earlier, that examiners can assess the tone of the work. The atmosphere that a work generates is really important. An example is something like *The Others* which works by building up atmosphere. All you have is a woman and children wandering around a house, but it has an effect which is very scary and unsettling. That sense of foreboding and fear and anxiety is created incrementally throughout the film. You have to be drawn into the film in order to appreciate the effect that is going to have on the public. If you view it in a very detached way, stopping and starting, you will not get that sense of foreboding. We know, for instance, from research we have done subsequently, that a film like *The Others* was particularly scary to children: they were not worried about monsters and things; it was the unknown, the creepy atmosphere which got to them. If we are stopping and starting and getting interrupted, we will not appreciate that. We will see a pale woman wandering around the house in the dark and you could pass that PG and result in an awful lot of scared children.

4968. **Mr Binley:** Mr Cameron, the Committee is well aware and most grateful for the work that the board does. We genuinely are most appreciative but we would like now to move on to that matter which is at the heart of your particular concern, what you would like the Promoter to do.

4969. **Mr Cameron:** Thank you, sir, for that guidance. Can we move to your premises at 3 Soho Square. I outlined in a very broad manner the noise effects that the Promoter acknowledges that Crossrail will have during construction and then during operation. First of all, can we move to the issue which is at the heart of the dispute and that is how to mitigate against the effects of groundborne noise. Can we deal with the period of construction first and then the period of operation. The Promoter now is offering insulation against airborne noise during construction and demolition and, as I understand it, that would meet your concerns. Is that right?

**(Mr Johnson)** It would meet our concerns about airborne noise, yes, that is correct.

4970. The Promoter has suggested that tier 3 mitigation measures be adopted for dust and, as I understand it, that would meet your concerns about dust during construction. Is that right?

**(Mr Johnson)** That is correct.

4971. So we move to groundborne noise during the construction period and there appear to be two options available: one, to relocate your activities during construction; and, two, install an isolated chamber in the basement of the film review theatre to avoid the effects of groundborne noise. What is your view on those two suggestions?

**(Mr Johnson)** Well, the view on relocation is that it is not clear at all that the suggested isolation of the escalator, which is, as I understand it, a completely novel and untested suggestion to isolate an escalator in the manner suggested, and this is outside my area of expertise—

4972. I think that the difficulties arising from the operation of the escalator arise during the operation of Crossrail. By all means, deal with all together, but what I was going to ask you was about the construction period and then the period of operation. Are you happy to deal with it in those two parts?

**(Mr Johnson)** Yes, that is fine. In terms of relocation during construction of the viewing theatre, the acceptability of that to the Board would depend on exactly what relocation would involve. As we have set out, there are security issues involved in our operation and many of our clients are very sensitive about their prints, which, pre-release, are worth millions and millions of pounds to pirates being handled in premises which are not under the sole control of BBFC. We have accreditation by the fact that there are copyright theft procedures at 3 Soho Square and many of our clients do not allow us to screen their works at other premises, so a relocation of the viewing theatre during construction would need to be to a theatre which was under the sole control of the BBFC and which was in the local area because we have already explained how important it is for our operation to be within that business cluster of the film and video industry of the UK and that is a very important point. It would also need to be of sufficient size and scale to be fit for our purpose. It would need to be able to house the specialist equipment that we use to check details of sound and vision under a cold lamp because that does allow you to run backwards and forwards. It would need to be able to house a film bench with film counting facilities because we provide a detailed measurement of each film as part of the control of ensuring that the film released is the same one that is classified. It would also need to have secure storage facilities for at least 72 reels of film and, as you know, those are quite large. All that would need to be located very close to our existing premises so that we could have the staff going backwards and forwards between the two. That is our position on the temporary relocation.

4973. The isolated film cinema in the basement, as I understand, is put forward as a solution to construction noise and operational noise, so we will deal with that next and then we will move on to isolating the escalator. If it was possible, and subject to any advice which you receive on noise, to construct some chamber within the basement film theatre to isolate it in order to avoid the adverse effects of both construction noise and of operational noise, would that be acceptable to BBFC?

**(Mr Johnson)** Well, my understanding, and events have been moving very quickly over the last 24 and 48 hours, is that that would not in any case deal with groundborne noise on the ground floor and above,

---

**The Petition of the British Board of Film Classification**

---

so it would leave those issues outstanding. However, for the viewing theatre, the concern, and we have only had this proposal really in the last few hours, is that it would not actually be possible to provide sufficient insulation in the viewing theatre without reducing the size of that space to a degree which would require a substantial, significant reduction of the screen size which would then have a serious impact on our ability to make a reasonable judgment as to the impact of the image on audiences, especially child audiences, when it is out in the average multiplexes. Our screen is currently, we think, just about large enough in order for us to make a reasonable, professional judgment as to the impact it would have on a child when faced with a larger image in the average multiplex. We are very, very concerned that reducing the size of that screen at all would lead to very great difficulties in us being able to judge the impact of the experience on especially child viewers, but also adolescents as well. Just by way of example, there was a Disney computer-animated film called *Dinosaurs* a short while ago in which one of the key issues in moving that to 'PG' rather than the 'U', which a Disney film would normally get, was the sheer scale of the dinosaurs on the big screen, looming over the audience in low-angle shots, and you do not get a sense of that from a small screen, so you need to have sufficient scale in order to be able to make a judgment as to how the four-year-old or three-year-old sitting in front of that cinema screen is going to feel when this great big image looms up over them. You just do not get that on the small screen and that is really important.

4974. On that point, if it was suggested to you that the reduction in room size would be 200mm along each of the room surfaces, and in particular the walls, though I do not know about the ceiling, but certainly the walls and probably the ceiling and floor, would a reduction of that order have an adverse effect on your ability to examine the films?

**(Mr Johnson)** My understanding is that yes, it would. The screen occupies the maximum space that it can within the existing parameters of the room, so any reduction within the size of the room would result in a reduction in the size of the screen. That is my understanding at present.

4975. If it was a reduction of that extent, 200mm in each direction, so to speak, would that prevent or inhibit you from carrying on your examining activities?

**(Mr Johnson)** Yes, I believe it would. I think 200mm all round would be a very significant reduction.

4976. And if that is the case and if the isolation would involve a reduction of that extent, would that be acceptable to the BBFC and could you continue your activities?

**(Mr Johnson)** No, it would not be acceptable to BBFC. We would not be confident of being able to make reasonable, professional judgments on the impact of the viewing experience, especially on young children. We would be concerned that we

would be guessing too much about what that impact would be with possible significant results on children post-viewing.

4977. Turning to the other issue which I said I would ask you about, the escalator, what is offered there is that the Promoter will ensure that the nominated undertaker, ie, the contractor who is going to do the works, installs some sort of isolation mechanism to ensure that the escalator does not have the predicted adverse effects. Would that solution be acceptable?

**(Mr Johnson)** I think the difficulty we have with that proposal is that nobody knows whether such a solution would actually work. As I understand it, it has never been done before. Now, obviously if the escalator did not make any noise or significant noise which affected our viewing, then that would deal with our concerns. Our problem at this stage in accepting that undertaking is what happens if it does not work? Are we supposed to just stop classifying films in the UK for a few months while we find somewhere else? If it was accompanied with an undertaking not to bring it into use until the sound levels in our viewing theatre were at the appropriate level, then that would be acceptable to us, or if an undertaking was given to move us if it did not meet those agreed criteria, that would be acceptable to us, but we are concerned that a novel and untested design solution will not necessarily achieve what it sets out to achieve.

4978. What is it that the BBFC says is the appropriate solution to these acknowledged problems?

**(Mr Johnson)** On the basis of the information currently available, there is rather a lot of uncertainty and a lot of concern over the operation of the escalators once in service. That is the long-term problem. We believe that the answer must be relocation because even if the temporary construction problem was sorted out, that long-term problem of the escalators would remain. We believe that relocation is the appropriate solution because it would also solve at a stroke the problems that arise from the conflict between our operation and Crossrail's works during the construction work, so we think it is a simple and total solution to both the problems that will arise on Crossrail's own case from the construction and demolition work and also from the operation of the railway and, in particular, from the operation of the escalators.

4979. On that issue, can I ask you to turn to your exhibit 3, which is in divider 2, I think. It is minutes of a meeting held on 1 December 2005 and that is the Finance Committee of the British Board of Film Classification, and then there is a minute from the Council of Management of 8 December 2005.<sup>8</sup> Can you just explain what these minutes are and what the Board's position is on accommodation?

---

<sup>8</sup> Committee Ref: A58, British Board of Film Classification Minutes of Finance Committee Meeting, 1 December 2005 (WESTCC-14805-022), and Minutes of Council of Management Meeting, 8 December 2005 (WESTCC-14805-023).

---

The Petition of the British Board of Film Classification

---

*(Mr Johnson)* The Council of Management is the part of the management of the Board which is concerned with business affairs, so obviously they deal with things like accommodation conditions and finances. The first minute is from a Finance Committee meeting, which is a sub-committee of the Council of Management, which was looking at accommodation issues. There are a number of issues which have arisen recently not least because, as was mentioned earlier, we have had a vast increase in our workload over recent years and we have engaged in works to adapt the building to accommodate that, and there is also the question of the digitisation project. Now, this project, firstly, it is not certain that it will go ahead at all yet, although we are out to tender and we expect to go ahead, but even if it goes ahead, we have not yet reached a decision on whether it should be done in-house or contracted out. Now, if it goes ahead and if it is done in-house, then we will need to house it somewhere and the discussion of the Finance Committee looked at whether we might need additional sites in order to do that, and that if that was looking like the solution, then it might be preferable to relocate the Board rather than operate from three sites. However, that is simply a discussion of options and no decision has been made. As you can see from the minutes, all that has been recommended is that a strategic committee be set up to look into the matter and to look into the options available to the Board. In the next minute, which is from the subsequent full Council of Management meeting, you can see in the final sentence that it was noted that accommodation continued to be pressing and it was agreed that a working group be set up to look at the possibility of relocation. For us, it is merely a possibility at present. We do not know whether accommodation issues from the workload will continue to press. In particular, the curve of DVD submissions has been a quite steeply rising curve in the last few years, but that rising curve has been caused because of a new format coming into being and a format which the industry fears will not have that long a shelf-life. The major players, the major Hollywood companies who provide most of our submissions, have been mining their back catalogues aggressively, so they have been going through all the works they own going back decades and decades and decades, pulling out all the ones that they think they can make money on in DVD, submitting them to us for classification so that they have got those there and out while DVD is still a runner, with the fear that it may be overtaken by video-on-demand in the future. We have had this great upswell of work over the past few years, but some of those companies now tell us that they have now finished mining their back catalogues and their future submissions are going to be lower. Others are at a slightly different stage. We think that we are probably near the peak, so we expect at some point in the not too distant future for that curve to start on a downward trajectory, so it may be that the pressures from workload which are causing us to consider accommodation may ease off actually quite quickly in the near future and we are looking carefully at that. As I said, the digitisation project

may or may not go ahead and may or may not be done in-house, so the pressures on accommodation arising from that may also not come to pass. We are only looking at our options at the moment and we have not made any decisions at all.

4980. If it was suggested to you, as it might be, on the part of the Promoter that the only reason that you are putting forward the solution and asking them to pay for you to move is because you are intending to move anyway, what would your reaction be?

*(Mr Johnson)* I would reject that completely. If we have moved before Crossrail takes place, then all our concerns would fall away. That is what we have suggested, that an undertaking is given to us to relocate us, if we are still there and if Crossrail goes ahead. That is all we are asking for. Obviously if we move in the next six months, then the case will be closed and there will be no mitigation or relocation required because we will have gone.

4981. Do you have, and you may not, Mr Kahn's exhibits to hand?

*(Mr Johnson)* No.

4982. If you have not, you will be given them. Sir, I think you have these.

4983. **Mr Binley:** Could I just inform you that this will be noted as A59.<sup>9</sup>

4984. **Mr Cameron:** Thank you, sir. Exhibit 3 is actually the report from Mr Thornley-Taylor, the Promoter's noise consultant, but attached to the back of that report is what is called 'Appendix C: BBFC Information', the last part of the bundle. In Appendix C is a letter from Mr Ian Sutherland of the BBFC of 3 May 2005 and attached to that letter is a summary of the issues of concern to BBFC. Do you have that?

*(Mr Johnson)* I do.

4985. If you go to the last page of that document, there is a heading on the last page of 'Vibration'.<sup>10</sup> Do you have that?

*(Mr Johnson)* Yes.

4986. The third sentence under 'Vibration' says: "After Crossrail is built, we may have to move the theatre to another floor depending on noise vibration levels from the tracks, elevator and loudspeaker systems". Now, is moving the theatre to another floor an option which you would contemplate?

*(Mr Johnson)* No, it is not. It is unfortunate that this letter was sent. It was sent by the building maintenance officer unfortunately without consulting anybody involved in an actual examination of the works. I think it was sent in good faith in an attempt to be helpful, but it does not represent what is actually a reasonable possibility

<sup>9</sup> Committee Ref: A59, British Board of Film Classification, Noise and Vibration from Construction Exhibits.

<sup>10</sup> Committee Ref, A59, British Board of Film Classification, Appendix C (WESTCC-14805-111).

---

**The Petition of the British Board of Film Classification**

---

for us. The way that the building is constructed, the only space in the building which is large enough for a cinema of sufficient scale is the basement which is why the cinema is in the basement. All the other floors have stairwells going through them which prevent us having the width and the shape of room

that we need in order to project an image of suitable size. That is why it is in the basement and not anywhere else and we cannot move it anywhere else.

4987. Thank you very much. I have no other questions for you.

---

*Cross-examined by Mr Elvin*

4988. **Mr Elvin:** Mr Johnson, can we get one matter out of the way. You repeated to the Committee a number of times what you understand to be the uncertainty of the novel solution of the escalator. You are merely repeating what you have been told by your consultant and it is not a matter of your own expertise, is it?

**(Mr Johnson)** That is correct.

4989. So I can leave that to the noise experts, can I?

**(Mr Johnson)** Yes.

4990. Can we come then to the question of the theatre. It is correct, is it not, with regard to your relocation plans, and we can actually go back to your third exhibit, that the first formal confirmation we have had from the BBFC that this was a possibility was when we received this evidence yesterday afternoon? That is right, is it not?

**(Mr Johnson)** I would have to review all the correspondence which there has been.

4991. I have the correspondence and I am not going to waste the Committee's time in going through it, but although we had suspicions, and indeed I think I mentioned them to Mr Cameron, the first formal time the Committee was ever told that the BBFC has ever gone on record as saying that it is looking at the alternative to move was yesterday afternoon when we got this evidence. Are you aware of any other correspondence in which you, as a public authority, drew your plans to our attention?

**(Mr Johnson)** I am not aware of any, no.

4992. Let us just examine this situation because you are asking the public, through the Department for Transport, to spend money on buying all of your premises rather than carrying out limited works to make them noise-proof. Do you know what the value of your premises is and the costs of relocation that you are asking the public to incur because that is the consequence of what you are asking the Committee to do?

**(Mr Johnson)** I do not have those figures to hand, no.

4993. What is the length of your lease?

**(Mr Johnson)** It is 125 years from 2003.

4994. So a 125-year lease in Soho is going to be worth many millions of pounds. We can all work that one out, can we not? Then there is the cost of relocating, actually moving all your equipment and fitting out new premises and that is what effectively

you are asking the Secretary of State and the public purse to bear by your request that we buy you outright.

**(Mr Johnson)** The Board is funded purely by the fees and charges on its clients.

4995. Yes, the private sector pays your fees.

**(Mr Johnson)** Our view is that if relocation is forced upon us by Crossrail, then Crossrail should bear the costs.

4996. I am sorry, but just stick to my question. You are suggesting that we buy you out. You are funded by the private sector because they pay effectively a levy for the privilege of having their films classified for public exhibition; it is a self-funding exercise.

**(Mr Johnson)** That is correct, yes.

4997. What you want is for the public to pay for you to relocate at the cost of many millions of pounds.

**(Mr Johnson)** We are asking for the costs of relocation to be met.

4998. As opposed to acoustic insulation works which are likely to cause some hundreds of thousands of pounds worth of cost as opposed to millions of pounds worth. Does that seem right to you?

**(Mr Johnson)** We do not believe that the acoustic insulation solutions proposed in the last day or so will actually enable us to carry out our tasks, so we cannot accept that.

4999. I am very sorry, Mr Johnson, but I am sure the Committee would quite like an answer to my question rather than your spin which is that what you are asking is for the expenditure of public money in the order of millions rather than in the order of hundreds of thousands which is what the Secretary of State is offering so that you can carry out your statutory functions. Now, whether you think that will work or not we can debate in a moment, but that is the order of the magnitude that is involved, is it not?

**(Mr Johnson)** I do not have to hand the relative costings for either solution and I would dispute that one of those is actually a solution because it will not allow us to discharge our statutory function to a satisfactory standard which is why we are suggesting that relocation is the preferable option.

5000. Let us move on, you have had your opportunity. Let us go please to the minutes of the meetings of 1 December and 8 December in your

---

**The Petition of the British Board of Film Classification**

---

exhibits behind tab 2, but actually it is Exhibit 3.<sup>11</sup> It is right to say that you are not a member of either of these committees?

*(Mr Johnson)* That is correct.

5001. Your name does not appear, you were not even an attendee.

*(Mr Johnson)* No, I was not.

5002. What has happened since 8 December? Clearly there was a meeting to discuss this on 1 December and this was endorsed or reported on on 8 December. Well, we are now in March, so what has happened?

*(Mr Johnson)* What has happened is that a relocation committee has been set up and has met and has looked at various accommodation options. However, it has not reached any conclusions as to how we should take the matter forward.

5003. Is there any reason why you have not disclosed the minutes of those meetings? The impression one might get from reading this is that you have got no further at all, but the fact is that it has been advanced. How many meetings have there been since 8 December?

*(Mr Johnson)* I believe there have been two.

5004. Can you provide us with copies of those minutes at lunchtime?

*(Mr Johnson)* Yes, I can.

5005. So no decision as yet. What time-frame are they working to for a decision?

*(Mr Johnson)* I do not believe that they have been set a timetable to come to a decision. They will report on their recommendations at the Council of Management meetings as they fall throughout the year.

5006. What is the expected timetable? If they have not set themselves one, what is the BBFC working to in practical terms, in terms of when it is likely to have a solution or a view?

*(Mr Johnson)* We cannot come to a firm view until a number of issues have been resolved. One of those is an expectation of what our likely workload is going to be over the next few years. Now, we have commissioned research from industry specialists to try and give us some insight into when we can expect DVD submissions to tail off. We expect to receive that report in the second half of April of this year. That will provide us with part of the answer. We are also currently investigating, as I have said, the proposal to digitise our archive. Now, we have not yet come to a conclusion as to whether to go ahead with that project or whether to house it in-house. The result of those decisions will also have an impact on our accommodation options.

5007. Mr Johnson, I understand all of that and you have made that clear. I asked you the question which I think the Committee may find helpful which is roughly what timescale are you working to? All right, we have got a report in April, but do you expect to have a better idea of what you are likely to do in May, or is it June, or is it next year? I am not asking you to give a figure which is not going to change, but what is the expectation of the BBFC as to the timescale?

*(Mr Johnson)* The picture is not clear enough at present for us to have come to a clear view on when we will have to make a final decision on whether we can remain at 3 Soho Square. As I have explained, there are a number of variables—

5008. Yes, and you do not need to go through them again. I am just concerned to know whether you have any timescale and the answer is that you do not. If the Committee would not mind just looking again at the minute of 1 December, the previous page, digitisation is something which requires a third site.<sup>12</sup> In fact the report says that you require two new sites of which the digitisation site, if it goes ahead, is the third. Even without digitisation, you need another site.

*(Mr Johnson)* No, that is not what the minute says.

5009. Well, it says “to accommodate new recruits”. It says, “Furthermore, a third site would also be required if a decision is made to undertake the digitisation project in-house”, so a second site is clearly required in any event, regardless of whether you digitise in-house.

*(Mr Johnson)* It is not clear. This is a report of the options being considered. One of the options being considered is the provision of serviced offices for certain tasks to be conducted in. Another option is to site the digitisation project, if it goes ahead, externally. It says clearly that a third site would also be required “if a decision is made to undertake the digitisation project in-house”. No such decision has been made.

5010. I am sorry, Mr Johnson, but you strike me as trying to evade the question. This report, and you are not the writer of it, says “a third site for digitisation”, so it seems to be quite clear to me that the BBFC is saying, “We’re going to need a second site in any event and mainly serviced offices would be a good option, but then we need to look at the possibility of another site if we do digitisation in-house and then it might be better to operate from one site rather than three”. Am I misreading that?

*(Mr Johnson)* I do not know whether you are misreading it. We are considering a number of options which include taking on serviced offices very, very close to 3 Soho Square in which certain tasks can be carried out, but with staff still based at 3 Soho Square, and we are also looking at the options for housing the digitisation project which may not go ahead.

---

<sup>11</sup> Committee Ref: A58, British Board of Film Classification Minutes of Finance Committee Meeting, 1 December 2005 (WESTCC-14805-022), and Minutes of Council of Management Meeting, 8 December 2005 (WESTCC-14805-023).

---

<sup>12</sup> Committee Ref: A58, British Board of Film Classification Minutes of Finance Committee Meeting, 1 December 2005 (WESTCC-14805-022).

---

 The Petition of the British Board of Film Classification
 

---

5011. So there are two new sites, possibly one, depending on digitisation. Can I ask you about digitisation please. You have told the Committee that the film studios are seeking to load the digitisation market for DVD to maximise their ability to transfer to that format. This is a process, and the Committee will be well aware of this, as we all are, where both the music and the film industries capitalise because every time a new format comes out, we go through the process of getting everything again. We went from reel-to-reel tape and LPs to cassettes, then we went to CDs and now we have got MP3, and it constantly renews the market in rebranding the same products and the film industry is the same, is it not? We had the battle between VHS and Betamax and then we went to DVD and there is a new format already out, which is a small tape thing, though I am not sure what the name of it is, but I noticed that the new *Harry Potter* film was in that format. That is right, is it not, that there is a new format out?

(**Mr Johnson**) There are new formats coming out. You may be referring to the UMD—

5012. I have not gone that far myself at this stage.

5013. **Mr Binley:** Mr Elvin, I am delighted to know that you look at *Harry Potter* films!

5014. **Mr Elvin:** Given the choice between reading evidence! I will not ask questions of the Committee as to which they would prefer! However, there are new formats like UMD, but new formats simply mean that the cinema industry begin the process again, do they not?

(**Mr Johnson**) Not exactly, no. There is a crucial difference between the move from VHS to DVD and the move from DVD to the next format.

5015. Because of the—

(**Mr Johnson**) Well, if you will let me finish, I will explain what the difference is. The difference is that the VHS format altered the cinema film so that it would fit on standard TV screens. That is a process called panning and scanning, so when you bought your VHS tape and you put it in your machine, you did not see what you saw at the cinema, but you saw generally the centre two-thirds of the image because they chopped off left and right.

5016. The 4:3 ratio?

(**Mr Johnson**) Exactly, the 4:3 ratio. When the works were classified for VHS release, they were classified in that 4:3 ratio format. Now, we classify the work, not the distribution medium, so if you had your version of *Casablanca* classified in 4:3 format for VHS release and you wanted to release it in the same format for DVD, there would be no requirement for you to submit it to the Board again for reclassification; you have got the classification certificate for that work and it does not restrict you from one format to another. What happened with DVD was that it allowed, and this is one of the big selling points of the DVD, for people to buy films in the state in which they were created for the cinema.

People have moved to wide-screen televisions now and DVD allows the wide-screen format of the film to be shown. Now, we have not classified that format, so in order to release on DVD in the full-aspect ratio, the work must be resubmitted to us and a great deal of our work at the moment is involved in watching these things again in the full-aspect ratio. Now, when it moves again to a new format, we have already seen the full thing, so there will not be a new aspect ratio, so there will not be a new spurt of extra work, like we have seen with DVD. It simply will not happen.

5017. Continuing my role as the resident *Harry Potter* expert before the Select Committee, I have noticed that we get sold DVDs in multiple format, what is called the 'vanilla release' which has only the film on it, and then we get varying forms of special editions, director's cut, additional special features and the like. Do they all require separate consideration so that you know that the special features which may be shown to children and, I suppose, for the adults that watch them as well, do they also require consideration?

(**Mr Johnson**) Unless any of the elements are exempt from classification, they all need to be classified.

5018. So if I go to a new digitised format, the mere fact that it is a wide-screen, pan-and-scan issue may be relevant if that includes some new feature which is classified or you will have to do the process again? (**Mr Johnson**) We would have to do the process only for that new feature.

5019. **Mrs James:** I bought *The Lord of the Rings* director's cut and it had seven commentaries on it. Would you have to check every one of those commentaries?

(**Mr Johnson**) We do check commentaries, yes.

5020. **Mr Elvin:** I think there were six or seven on the director's cut. Sorry, I am taking Mr Taylor's role as the resident anorak!

(**Mr Johnson**) In actual fact, the directors' commentaries have often increased the category of the disk because quite often the director of a family film will use strong language when describing why he chose that particular shot rather than another one, so we have had a number of examples where a director's commentary, just the use of single words, has resulted in an increase in classification for the disk as a whole.

5021. **Mr Binley:** Mr Elvin, I am amazed you have time to do your job!

5022. **Mr Elvin:** Can we come now to the theatre please. The screen, and the members have already seen the screen, does it take up the space from floor to ceiling and from wall to wall or does it have a surround and other fittings?

(**Mr Johnson**) A cinema screen has to have a matt black frame around it, as I understand the technical requirements. It does not reach the floor because if

---

**The Petition of the British Board of Film Classification**

---

it did, you would not be able to see it from the seats. It is as big as we can accommodate in that area. If we could make it any bigger, we would.

5023. Let us just have a look at the floor plan which is, I think, in Mr Thorney-Taylor's appendices, which is A59, tab 3,<sup>13</sup> and it is the floor plan right at the back, the first of the floor plans. Is this the surround we see separated by the line?

**(Mr Johnson)** I believe so.

5024. There is also space before you get to the exit, is there not, where the wall juts out, before you get to the exit?

**(Mr Johnson)** Yes.

5025. Which is at least approximately the depth of one of the surrounds?

**(Mr Johnson)** From that plan, yes.

5026. Is it not possible that there could be some adjustment to the location and the framing of the screen to make sure that the screen can be moved just a little to accommodate the works? Have you looked at it and measured it?

**(Mr Johnson)** In the time that I have had since the proposal to insulate the theatre was put to us, I believe, yesterday afternoon—

5027. Yesterday morning, in response to a report we received at four o'clock on Tuesday.

**(Mr Johnson)** In the time since then, the advice that I have had from those who understand engineering issues far better than I do, it is not my area of expertise, is that it would not be possible to provide sufficient insulation in the theatre without reducing the screen size.

5028. That is on the assumption that you cannot move the screen or reduce the surrounds. The black frame, is there any legal requirement for it to be of any particular size or could it be reduced, not completely, but to a degree, to allow the screen to be accommodated?

**(Mr Johnson)** I am not an expert on the technical fitting out of the cinema screen. However, my understanding and the best of my knowledge is that the screen that was installed was the maximum size that could be accommodated in the space available and we believe that that size was just about sufficient for our purposes.

5029. What is the space shown here for? Is that just the gap between the seats and the screen?

**(Mr Johnson)** Yes, if you get too close to the screen, as you will have experienced sometimes if you have sat in the front row of a very large cinema, it makes it impossible to watch.

5030. I just wanted to explore this possibility because it seems to us that you are being unnecessarily defeatist about what appears to us to be a sensible

solution. The gap between the seats and the screen, and the Committee will have seen the gap for itself, is far greater than the gap you will get in a multiplex cinema where you would find a screen of comparable size for viewing by members of the public. That gap is quite a big gap for the size of the screen.

**(Mr Johnson)** I am not sure that I would accept that.

5031. Well, the members of the Committee have seen it for themselves and they will form their own view. Is there not a possibility of moving the screen forward slightly, not a huge degree, to accommodate it, even if there were a small reduction in the screen size needed, to make up for the reduction in size, so the screen is moved slightly closer to those viewing? **(Mr Johnson)** I can only repeat that the evidence I have received in the last 24 hours is that such a solution would not be possible. As I say, I am not an expert on engineering solutions for the fitting out of cinemas.

5032. Who did you get the advice from? Who did you speak to?

**(Mr Johnson)** I have spoken to our sound expert in terms of the amount of insulation required and also to our surveyor.

5033. Have you spoken to anybody though about the possibility of moving the screen slightly closer? Have you spoken to anybody about what the minimum black frame is needed for the screen?

**(Mr Johnson)** Not in the last 24 hours, no.

5034. So that remains a possibility which you cannot preclude, does it not?

**(Mr Johnson)** I presume so.

5035. This number of seats, I have counted 38. Is that right?

**(Mr Johnson)** It is in that region, yes.

5036. We have some figures from you about maximum numbers attending from Sharpe Pritchard yesterday which I am not going to trouble the Committee with by giving them more documents, but my count in that letter, if you had a maximum attendance of the council of examiners, plus the children's board, you could not accommodate them in any event in this theatre because you would have 40-odd attendees.

**(Mr Johnson)** We do not use that combination of viewing.

5037. So in that case, on the figures you have given us, the maximum is 27. Is that right?

**(Mr Johnson)** I think in the figure I gave you the maximum was 29 which is when work is screened for the entire examining body, including—

5038. So the loss of a few seats is not going to impair the ability of all 29 to get in there because we have 38 seats?

<sup>13</sup> Committee Ref: A59, British Board of Film Classification, Existing Floor Plans—Basement Plans (WESTCC-14805-114).

---

**The Petition of the British Board of Film Classification**

---

*(Mr Johnson)* That is true.

5039. So there is room in that case perhaps for taking out the front row of seats without necessarily losing the accommodation you need and moving the screen as well. Have you considered that option in order to try and make a solution work rather than spend millions of pounds on a property?

*(Mr Johnson)* My advice to date is that we cannot achieve the effect within the space if you make the space smaller.

5040. The Committee has heard what advice you have taken. There are seven seats, so that leaves you with 31, which leaves you with two seats more than you actually need for the maximum number of attendees. Is that right, as a matter of arithmetic?

*(Mr Johnson)* We are not disputing that we could cope with a smaller number of seats than we have. What is in dispute is whether we can cope with a smaller screen than we currently have.

5041. If you take that row out, you could move the screen that much closer to the row at the back without actually bringing it any closer to that row at the back in proportion to the distance to the row in front and you might be able to reduce the screen.

*(Mr Johnson)* I am not an expert in the fitting out of cinemas. However, there are also issues to do with the siting of the projection equipment and the impact on the screen. I am not in a position to say whether what you are suggesting would or would not be a solution at this point. My advice on receiving the suggestion from Crossrail yesterday was that this did not appear to be an achievable solution without compromising the size of the screen and that is the advice that I have to pass on to the Committee.

5042. You are concerned that we only received Mr Kahn's report on Tuesday afternoon, though you have had Mr Thornley-Taylor's since 17 February. Is that right?

*(Mr Johnson)* I believe that is correct.

5043. As far as the sensitivity about replay is concerned and the use of language, as I understood your example about Madagascar and the possibly half-heard, half swear word, with that sort of situation you are going to have to replay anyway to check that you cannot hear it.

*(Mr Johnson)* We do have to replay. However, replaying in those circumstances is done in a number of ways. It is done on specialist equipment so that we can isolate the scene and play it over and over again. We also have to replay it on the big screen so that we have Dolby sound as well. On occasions like Madagascar where it is one word and one film in every however many, that is fine. We can cope with that. We are not suggesting there is a problem. If Crossrail is going to make a sound once every three or four weeks, we would not be here. If we are going to have repeated interruptions so that we are repeatedly missing words, we cannot go back and repeatedly check every couple of minutes to see

whether we have missed something. That is not a practical proposition and we cannot watch films like that.

5044. Let us deal with your concern about the noise from demolition and the upper floors. That is for a very short period of time, is it not, a week or so? It is the breaking out of the ground. It does not say in Mr Thornley-Taylor's report.

*(Mr Johnson)* It does not, no.

5045. I am telling you what Mr Thornley-Taylor will tell the Committee so that you know.

*(Mr Johnson)* The ground borne work at 2-4 Dean Street is for several months.

5046. That is not the noise which is the problem. The noise which is the problem is the hydraulic breaker that is referred to on page 21 of the report. In any event, you are not aware of the period involved. If it is a period of a week or so, that is relatively easy to cope with, is it not, in terms of making temporary arrangements and it is certainly not proportionate, if that is the level of disruption, if it is a matter of weeks even—even if it were more than a week—to insist on the payment of many millions of pounds of public money rather than seek some temporary solution.

*(Mr Johnson)* If it was a question of a week, we would not be here but it is not a question of a week.

5047. That is your understanding.

*(Mr Johnson)* That is my understanding.

5048. **Mr Binley:** I notice the words "Escape Stairs". It seems to me that 29 people plus a projectionist in a situation of a problem would all have to go down those escape stairs, or are there other exits?

*(Mr Johnson)* You can exit either through the entrance into the theatre out into Soho Square or through the escape exit which is just at the side of the screen. Those are the only two ways out.

(After a short break)

5049. **Mr Elvin:** I had finished but I have been handed the minutes that I asked for and I have a few questions.

5050. **Mr Cameron:** If it helps Mr Elvin's questioning, we have copies of the minutes which we can circulate.

5051. **Mr Binley:** The minutes of 11 January will be A60 and the minutes of 9 February will be A61.<sup>14</sup>

5052. **Mr Elvin:** I wanted to pick up the latest minutes because that gives us the latest information. We see at the second bullet point that subject to sorting out an IT issue negotiations to start on the hire of four offices for three days a week begin in

---

<sup>14</sup> Committee Ref: A60, British Board of Film Classification Minutes of Accommodation Committee Meeting, 9 February 2006 (SCN20060323-001), and Minutes of Accommodation Committee Meeting, 11 January 2006 (SCN20060323-002).

---

**The Petition of the British Board of Film Classification**

---

May so what you said earlier is not accurate. You are going ahead, subject to sorting out the IT problems, with hiring additional premises.

**(Mr Johnson)** We are going ahead with negotiating the possibility of hiring.

5053. We all have some idea of how the commercial world operates. You do not waste money on negotiating if you do not want them.

**(Mr Johnson)** At the moment, we anticipate we will need those, although it is not certain. We have not signed anything.

5054. We now understand what you mean by certainty being 100 per cent, no doubt whatsoever. We can see in the third bullet point, "IS". That is Ian Sutherland. Who is Mr Sutherland?

**(Mr Johnson)** He is the building maintenance officer.

5055. He says that there was lots of space available in the vicinity.

**(Mr Johnson)** That is for a housing digitisation project.

5056. Where does it say that?

**(Mr Johnson)** If you continue to read, that is specifically for a housing digitisation project.

5057. There is still lots of space for facilities. Assuming it is in the vicinity, it does not necessarily mean it has to be used only for digitisation.

**(Mr Johnson)** The requirements for digitisation are different from the requirements for the other aspects of the Board's work. That is a statement that there is lots of space available in the vicinity for a housing digitisation project.

5058. On the previous minute, A60, 11 January, the first bullet point is about the training of examiners. That would have to be done in a meeting room. "... therefore all meetings would have to be held at outside locations." Is that right? All BBFC examiners' meetings are anticipated to take place in different premises now?

**(Mr Johnson)** The weekly meeting on Wednesday meeting would take place at offices two doors down.

---

*Re-examined by Mr Cameron*

5059. On that last point, can you explain to the Committee what these four offices to be hired for three days a week at the beginning of May are going to be used for?

**(Mr Johnson)** If they are hired, I believe the plan is to use them for viewing video works on a daily basis, three days a week.

5060. Do the examiners' meetings that you were asked about involve viewing works or some other meeting?

**(Mr Johnson)** The structure of the examiners' meeting is based around discussion and information provision. However, occasionally we view excerpts of works for discussion and that is done on monitors. A room in an external location is appropriate for that because what we are doing is watching something that has already been examined and we are just having a wider discussion on a particular point raised.

5061. If you are able to meet your occasional needs in the way described in these documents, does it make it more or less imperative to move from 3 Soho Square?

**(Mr Johnson)** It makes it less imperative, if we can meet our needs in relation to merely the number of employees, to move from Soho Square, if our needs were met in relation to the meeting.

5062. You said at the beginning of your cross-examination when asked about solutions that you disputed that one of them was a solution. "It would not allow us to discharge our statutory functions to a satisfactory standard." Which solution were you referring to?

**(Mr Johnson)** I was referring to the provision of insulation in the viewing theatre on the basis that such insulation would, on the advice I have received, lead to an unacceptable reduction in the size of the screen.

5063. The second question relates to the size of the screen. You were asked about the frame and you said, "A cinema screen has to have a matte black frame. It does not reach the floor. It is as big as we can accommodate." As far as the frame is concerned and the screen, are there any changes or differences made to the screen to accommodate viewing different formats of film?

**(Mr Johnson)** Yes. Films are filmed in different aspect ratios. Sometimes you get cinemascope which looks like a letter box effect. Most French films are made in a much narrower format. The black frame around the screen moves in order to accommodate the different ratios. You need that frame in order to make the different size screen. Otherwise, if you were showing a narrow ratio with the screen set up in wide screen format, you would get white at the sides and you would get the edges that are not supposed to be seen. If you think of top and bottom, you would sometimes get the boom mike in which is on the print but it is not intended to appear on the screen. It is intended to be hidden in the black masking area around the outside of the screen.

5064. You said the frame moves. How does it move? Is there some mechanical or other process?

**(Mr Johnson)** It is motorised runners which move like that, from side to side and from top to bottom.

---

**The Petition of the British Board of Film Classification**

---

5065. Mr Elvin asked you about the masking around the edge. Is it practical to reduce that if you need to have this mechanical system?

**(Mr Johnson)** To the best of my knowledge, we have the masking that is necessary to perform the function.

5066. The third point was where you referred to service offices very close where certain tasks can be carried out. I think you have answered that.

**(Mr Johnson)** Yes.

(The witness withdrew)

---

**Mr Simon Kahn, Sworn**

*Examined by Mr Cameron*

5067. Are you Simon Kahn?

**(Mr Kahn)** I am.

5068. I would like you to tell the Committee something about yourself. In short, your professional qualifications and experience and your current position, please.

**(Mr Kahn)** I am a chartered engineer with the Institute of Acoustics and the Institution of Electrical Engineers and I have been working in the field of acoustics and electro-acoustics for over 25 years, including working in recording studios, broadcasting studios and theatres. I am a principal acoustic consultant with Capita Symonds Limited, a member of the Association of Noise Consultants, which is a firm of independent noise and vibration consultants. My current work includes advising clients on the suitability of premises as commercial recording studios, the acoustic requirements for cinemas and sound insulation requirements for commercial, public, educational and entertainment buildings.

5069. You have prepared and the Committee has A59 and at the front of that bundle you have a series of slides. They were going to form the basis for your evidence. Things have moved on slightly since you prepared that and I am sure the Committee will not thank us if we go through every slide. I am going to ask you to help the Committee on the main areas of difference. If we look through the slides, rather than look at the sensitivity of BBFC activities to external noise, as the Committee have already heard evidence on that, you have produced in these documents a response to Mr Taylor's report. Your exhibit three is a copy of Mr Taylor's report. You have added paragraph numbers for Mr Taylor as he had not done that. In your exhibit two, you have provided a written response to his report.

**(Mr Kahn)** That is correct.

5070. As a result of that, unless somebody is going to tell me that I need to do so in order to get it on the transcript, I do not need to go through your response to Mr Taylor because you have it in writing, sir.

5071. **Mr Binley:** Yes, we have it, thank you.

5072. **Mr Cameron:** Can we go to SK5, please, "Standards and Criteria for BBFC examining rooms"?<sup>15</sup> I would like to ask for your view as to the appropriate standard to be applied when considering noise environment in a film review theatre.

**(Mr Kahn)** The appropriate standard to be applied, I believe, is British Standard ISO 9568 which sets the noise levels for various types of cinemas.<sup>16</sup> It is an international standard. It is almost identical to the recommended practice by the Society for Motion Picture and Television Engineers, the SMPTE, the lead body on film technology. The standard sets noise levels in noise criteria which were standards originally proposed in 1957 in America and are still used to this day for the specification of noise in theatres. The noise criteria are different from dBA emissions because they set a maximum sound level in each octave band of the frequency range; whereas dBA is for the overall frequency range. The principal difference is that you can have any number of different sounds which will have the same dBA rating and you can have any number of sounds which will have the same NC rating, but you cannot predict whether one particular sound with a dBA rating will have a particular NC rating. The international standard is set in an NC rating. The NC rating curves are shown in slide seven which are extended from the original NC rating curves down to lower frequencies and up to higher frequencies. At each vertical line there you have an octave band centre frequency so you measure those frequencies and compare against those curves. The highest line curve which is above the measurement you have made is the NC rating.

5073. **Mr Binley:** Could we go into the graph a little because we need to convert from the ratings we have been accustomed to to what you are now introducing, which is a slightly different rating, and I would like to understand that.

---

<sup>15</sup> Committee Ref: A59, Standards and Criteria for BBFC examining rooms (WESTCC-14805-033).

<sup>16</sup> Committee Ref: A59, British Standard ISO 9568—Noise Criteria Curves (WESTCC-14805-035).

---

The Petition of the British Board of Film Classification

---

5074. **Mr Cameron:** Would you like to do that now, Mr Kahn? Take us slowly through it. You must remember the Committee Members may not have seen this graph before.

**(Mr Kahn)** This graph was proposed in 1957 and has been used continuously since, and particularly it is still used for the rating of noise in cinemas. It has a series of curves and a series of octave bands. The numbers at the bottom are the centre frequencies of the octave band rating. You need to make a series of measurements at each of those frequencies, plot them on that graph. The curve which contains below it all those measurements is the NC rating. That is the way it is done and set in the standard. That is different from a dBA rating because in a dBA rating, if you do all those individual measurements, you would weight them according to their frequency and add them all up into a single number. Once you have that single number, you do not know what is going on in each individual frequency. Slide 14 shows the two criteria which are set for review rooms by this international standard, which are NC20 and NC25.<sup>17</sup> NC25 is the higher one. These are the standards that we need to compare against. On slide 16 there are two measurements of background noise in the theatre that we are considering.<sup>18</sup> The brown measurement is the measurement made by Crossrail and the green measurement is the measurement made by ourselves. By coincidence, both these measurements have the same dB rating but you can see that they come at different bands and different curves according to the different frequency ratings and they have different NC ratings.

5075. If the criteria which you are referring to is NC20 to NC25, while we have slide 16 in front of us, on your reading and on Mr Thornley-Taylor's reading, how does the theatre perform at present?

**(Mr Kahn)** The theatre is performing just within the specification as shown on the background noise measurements, the L90S. Slide 15 is showing two different parts of the measurement made by Crossrail.<sup>19</sup> These measurements are taken from figure four in the Rupert Taylor Report, which you also have. They show a number of different percentage measurements. L90 is the level exceeded for 90 per cent of the time. L10 is the level exceeded for ten per cent of the time. You can see that L10 is above the NC25 so it is slightly higher than it should be but the measurements made by Crossrail were made with a dehumidifier running so there was some fan noise in addition and the dehumidifier does not run when examinations are being made. It is a bit like the projector noise you have here. We can see at the low frequency that noise coming in and making a difference in the NC curve, even if it might not necessarily make a difference to the dBA curve.

<sup>17</sup> Committee Ref: A59, Standards and Criteria—Viewing Theatre (WESTTCC-14805-042).

<sup>18</sup> Committee Ref: A59, Standards and Criteria—Viewing Theatre. Levels measured by Crossrail and BBFC (WESTTCC-14805-044).

<sup>19</sup> Committee Ref: A59, Standards and Criteria—Viewing Theatre. Levels measured by Crossrail (WESTTCC-14805-043).

5076. You were explaining that the NC20 to 25 criterion is appropriate for film review theatres. We went on to see what conditions were like in the BBFC theatre. Can we come back to your slide five?<sup>20</sup> You have two bullet points there, the second giving the criteria that you have referred to. What is the first bullet point?

**(Mr Kahn)** That is the scope of ISO 9568 which says, “specifies measurement methods and maximum ratings for indoor background sound pressure levels in theatres, review rooms and dubbing rooms.” This international standard is intended for building services noise rather than external noise.

5077. The standard is intended for building services noise. Is that noise that comes from the outside or noise from within the building?

**(Mr Kahn)** That is the noise from within the building, from the equivalent machinery that is operating within the building, when it is in its normal function.

5078. When we are dealing with Crossrail, we are dealing with groundborne noise. Is that from within the building or outside the building?

**(Mr Kahn)** It is from outside the building.

5079. Why are we then looking at this standard?

**(Mr Kahn)** We are looking at this standard because, if you look at slide eight, slide eight is appendix A3 of this standard and it explains why the noise levels are set at particular levels.<sup>21</sup> It says, “With too much noise, detail is obscured and, ultimately, intelligibility suffers. With too little noise, intermittent intrusive noise may become audible and annoying; therefore it is advisable to use reasonable background noise levels to mask intrusive noise sources.” We need to make sure that the noise is not so loud that we miss whether a word is half said or not said when we are doing a critical examination for the British Board of Film Classification. The background noise levels from the building services has to be reasonably low but it also specifies that it should not be too low because otherwise you will be distracted by noise from outside and intrusive noises from groundborne noise. It sets the level of between NC20 and NC25. If we look again at slide 15,<sup>22</sup> we can see that it has set the noise level between 20 and 25 in order to mask or hide noise from intrusive noise services. You can see that if noise from intrusive services in any of those individual measurements, which are the triangles, dots and squares, are above the noise level there they are quite likely to be heard and, if they are not heard as clear sound they could still be distracting because somebody could lose their attention and think: “What was that noise? What was that rumble?”

<sup>20</sup> Committee Ref: A59, Standards and Criteria for BBFC examining rooms (WESTTCC-14805-033).

<sup>21</sup> Committee Ref: A59, Standards and Criteria—Viewing theatre (WESTTCC-14805-036).

<sup>22</sup> Committee Ref: A59, Standards and Criteria—Viewing Theatre. Levels measured by Crossrail (WESTTCC-14805-043).

---

 The Petition of the British Board of Film Classification
 

---

5080. **Mr Binley:** I need to try to understand the relationship between the decibel and this new measure. It would seem to me that when we were talking about theatres and recording studios we were talking about attempting to create a noise level with an upper limit of 25 decibels, as I understand it; and yet on these measurements up to 500 octave band, we are sizeably over that level. Can I ask how much of the noise climate is underneath that 500 octave band, or does that not matter? Is that not the way it is looked at?

**(Mr Kahn)** In rating noises for noise criteria, it does not matter how much underneath the band it is. On the NC25 rating, the only measurement that is above the NC25 rating is the 250 octave band for the L10 measurement. All the others are below the NC25 rating.

5081. **Mr Cameron:** If you look at that diagram, the scale along the left hand side is marked in dB. If one looks at that, the recorded levels are those lower frequencies where the octave band is shown on the left hand side?

**(Mr Kahn)** Yes.

5082. The lower frequencies appear to be above the 25dB LA max S. What I hope will be useful for you to do is to explain. If you take up Mr Taylor's report, you can see his assessment criteria, paragraph 7.2 in your exhibit three, page 13 of Mr Taylor's report.<sup>23</sup>

**(Mr Kahn)** Yes.

5083. You have his assessment criteria. As I understand it, the Committee are familiar with the Crossrail criterion which is 25dB LA max for theatres. What I would like you to do, please, is to explain the relationship in NC20, NC25 and the 25dB LA max.

**(Mr Kahn)** I do apologise, I understand what you are saying now. The dB(A) weighting is a single number combining all the measurements weighted, so that although the dB, which does not have an (A) after it, on the left-hand side there, is a high number, when it is weighted with the (A) weighting it becomes a smaller number, which is added together logarithmically to make the overall dB(A) weighting. So the dB(A) weighting—I cannot remember off the top of my head—for those are given in figure 3 over the page. If you look at figure 3 on Mr Thornley-Taylor's report on page 15 it shows the third octave individual frequency measurements, and after that it has a dB(A) measurement as a single figure and an NR rating as a single figure.<sup>24</sup> So it is a single number.

5084. **Mr Binley:** So just to clarify what you are saying, the amalgamation at every point in this graph will come to 25 or below, as an amalgamation?

**(Mr Kahn)** It may or it may not.

5085. I see, that is your case.

**(Mr Kahn)** The whole point I am trying to make is that a dB rating gives you one number for the characters of sound whereas an NC rating characterises the sound across all the frequencies, so gives you more control, and that is why the NC rating is still used for cinemas because it is the appropriate rating to use for cinemas and has been since 1957.

5086. **Mr Binley:** I think my colleagues and I have that; thank you very much.

5087. **Mr Cameron:** Thank you very much for explaining that difference. If we can then move on from that point and what I would like to do is to move on to look at the solutions which are now offered by Crossrail, to ask you about your view as to their acceptability. So we will jump from your criteria and we will jump from your actual measurements and we will go on to mitigations. If you go to your slide 27, and this is one of the points that is offered on slide 27, which is the suggestion that during operation the escalator can be isolated.<sup>25</sup> What is your view on the prospects for achieving appropriate sound levels with that course of action?

**(Mr Kahn)** My view is that it may be possible to do it but it is an unusual and untried solution. I would not rule it out as a solution, I am just nervous because in my experience of using isolation where the main body is at an angle or where there are risks of an angle—because in this case the escalator is being isolated within a descending shaft. Where you have a building or a bridge or a studio which is rested by gravity on the ground and you put the isolation in the way and gravity holds it in place and the springs or pads stop it from isolating, then it is relatively stable. But if you imagine that you have an escalator which is descending down a shaft and you put that on springs then that is more difficult. It is not impossible. We had a meeting and I spoke to Mr Thornley-Taylor and I said, "Have you done it before? Has it been done before?" and they said that it had not been done before, and we said that we would like to see details of it, and we asked if there was a report that would give us confidence that it could be done. Then we said, "If you cannot give us any report that gave us confidence that it had been done before or that it could be done and shown that it could be done well," then we would say, that, yes, that is a great idea, but if it fails to perform because something unexpected has got something wrong then it should not be brought into service until it has been made to work because, by Crossrail's admission, it would completely interfere with the operation of the theatre. So we do not rule it out as a solution but it must be suitably protected, that it must be guaranteed to work, and not be used until it does work.

<sup>23</sup> Committee Ref: A59, Report by Mr Thornley-Taylor, Assessment Criteria, para 7.2 (WESTCC-14805-078).

<sup>24</sup> Committee Ref: A59, Report by Mr Thornley-Taylor, Figure 3, Existing background noise levels in the film theatre (WESTCC-14805-080).

<sup>25</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Mitigations (WESTCC-14805-055).

---

The Petition of the British Board of Film Classification

---

5088. Thank you. So that is the escalator. Although I was looking forward to “no knocking chits” we had better move on from that. I am going to ask you about the solution which is now put forward by the Promoter, which is to provide a cocoon, I think it is described as, or an isolation chamber or isolation cocoon, if that is the right word. First of all, I would like to ask you about the practicalities of that and the consequences of it. So, first of all, the practicalities. Can it be done?

*(Mr Kahn)* In terms of acoustics an isolation shell is the term that acoustic consultants used to use. There is confusion with the term “conclude” because it could mean an isolation shell that stops noise from outside getting in, or it could be an internal treatment that makes the sound inside better but does not do very much to the sound from outside. I have spoken to Mr Taylor and he has assured me that we are actually talking about an isolation shell, and this is a completely separate shell isolated inside, similar to the solution they are offering for the escalator, but it has the advantage that it is not trying to slope down a tunnel, it is sitting on the ground. The disadvantage is that Mr Taylor and Crossrail have suggested that it could be achieved by losing 200 millimetres from each of the surfaces of the room. Our experience is that 300 or 400 millimetres is typical, and I would have said at this stage, at the planning stage, that 300 millimetres is more likely. That is necessary in order to provide the isolation, especially from low frequency noise which would otherwise be unacceptable. The difficulty then is that in the cinema that we have there, you saw earlier—it is in the report and it is in this bundle—you saw a plan of the cinema and we discussed the width, and currently the screen and its masking and the mechanism to move its masking, which is all one complete shell and one complete piece, is currently at the edges of what is possible at the moment, giving room for the fire exit. So you can see that the screen is fitted in there in the space that is available next to the fire exit. First of all, if we lose space from the ceiling to isolate the ceiling and if we lose space from the floor then I doubt if the viewing angles for the tiered seating that we saw will be satisfactory to have proper sight lines. So you would have to dig down underneath the foundations, which of course would then move it closer to the tunnel, which could become self-defeating, but would probably be possible to get sufficient height to fit in the screen and the viewing angles required. The depth is not too much of a problem. The other problem is that—I am not an expert, I am not an architect or expert on all the current buildings regulations and conditions—I strongly suspect that if the theatre was changed now it would have to comply with current building regulations and the Disabled Disability Act, which would mean that the fire escape, far from being able to nudge up further to the corner of it, would have to be widened to allow wheelchair access. There would also need to be an escalator on the outside and there may be other building regulation requirements which I have not had a chance to look at, which means that overall the size of the screen would be a

size which for the British Board of Film Classification Advisers would be impractical for their viewing assessments.

5089. Mr Johnson has given his evidence on the size of the screen. What I would like to ask you about is the practicalities of the isolation shell. I want to understand this. You have given a figure of 300 millimetres—and I was told by somebody that the width of a piece of A4 paper is about 210 millimetres—so from where will these 300 millimetres have to be taken, so that we understand? The Members of the Committee have seen the theatre; from where is it taken?

*(Mr Kahn)* I think it is useful at this point to say that where one is performing isolation against low frequency noise because it is quite difficult to reliably predict low frequency noise, especially not knowing the details of an historic building and not knowing the details of all things, the normal thing we do when, for example, we are considering an isolation shell for a recording studio is to make an actual survey of the real noise levels. In this case we are not going to be able to do this because this is proposed as mitigation for the construction phase prior to the completion. So we are going to have to work on estimates of the noise. The normal process will be to do a detailed calculation to work out exactly what size the air gap needs to be and the mass needs to be and the normal process is to build a slab, a new floor slab which is isolated on springs or pads from the building structure floor and then to build the walls on that new base and the ceiling on that so that you have a completely isolated shell. That method can work acoustically but it will produce a smaller space inside. Exactly how small it is would depend on the detailed design, and without having spoken to architects and surveyors and structural engineers, and without having double checked that all the detailed calculations of the likely noise and vibration, including ... I am not certain, but I would expect that Crossrail are not proposing that this isolation shell be designed to the level that would protect it from the tunnel boring machine, is that correct?

5090. Yes. Just on the practicalities of it, as I understand it what you are saying is that you effectively have to introduce a box within the existing room and that box is placed on springs and the effect of that will be to come roughly 300 millimetres out from either wall, the ceiling and floor; is that right?

5091. *(Mr Kahn)* Yes, that is right. In British Standard A233, which is the Guidance to Noise in Buildings and gives general guidance, the general guidance is the estimate of the distance between the plasterboard for cinema walls at 450 millimetres, and that is in the British Standard as general guidance. Looking at this and with our experience we think that we would probably be able to do it for 300. If we had all the data we may be able to do it in 200 but we would not possibly be able to comment

---

The Petition of the British Board of Film Classification

---

on that unless we actually had the detailed construction methods, which will not be known until the Nominated Undertaker has made the decision.

5092. So in terms of your expectation I have asked you about the practicalities and the next is the consequences. The consequence, if you take 300 millimetres from each side of the room, is that you lose 600 millimetres in the width of the room.

**(Mr Kahn)** Absolutely, yes, the room would be smaller.

5093. And the same with ceiling height and floor?

**(Mr Kahn)** Yes, in all dimensions the room will be smaller, so Crossrail are proposing that the overall size of the room will be at least 400 millimetres smaller but we think it will be about 600 millimetres smaller—and 600 millimetres is about two feet. The problem is not with the accommodation of people particularly—and we can get around the problem of the height by digging down, although that is very expensive—but the problem is the size of the screen, which is limited by the need for the fire escape.

5094. Thank you very much. Can I move from that point to another point, which is the effect of groundborne noise, not on the film theatre but on the upper floors? Do you remember that it was put to Mr Johnson that this will be for a very short period?

**(Mr Kahn)** Yes.

5095. And it was put to him that it was not in Mr Thornley-Taylor's report but that was the evidence that he was going to give, and reference was made, I think, to excavation with a hydraulic breaker.

**(Mr Kahn)** I believe so, yes.

5096. If you take up Mr Thornley-Taylor's report, which is in your exhibit 3, and you go to the Appendix B.<sup>26</sup> There is a simplified construction programme with plant data and noise assessment and have you been able to discern from this how long excavation with a hydraulic breaker is likely to take place—and it may be that different operations take place in different places, but Mr Thornley-Taylor will be able to explain that.

**(Mr Kahn)** I can see it on my screen but I cannot read it clearly on the screen up there. On the first section below the grey line it says "demolition" and in the second line on that demolition it has "excavator with hydraulic breaker", which I am guessing is the demolition with the hydraulic breaker. And if we move along it shows that from July 2007 to November 2007, which I do not think are current start and finish dates but give you an indication of the activity. Also, just before those columns of dates there is a column of percentage on-time, which shows 90 per cent on time. So my understanding from this is that there will be groundborne noise and vibration for the upper floors for 90 per cent of five months during the day.

5097. Mr Kahn, of course we do not know from that, or do we, whereabouts on the Fareham Street site that hydraulic breaker is being used and therefore the consequences for 3 Soho Square? Have I understood that correctly? Just from that table alone we do not know where the hydraulic breaker is being used on that worksite?

**(Mr Kahn)** I certainly do not know that. This sheet was used for calculations of airborne noise and the British Standard gives us a method that allows me to make assumptions as to where it is on the site. But that does not give you guidance for groundborne noise.

5098. And the solutions offered by the Promoter, namely isolate the escalator or construct the isolation shell, would either of those deal with the problem of groundborne noise in the upper floors?

**(Mr Kahn)** No. Isolating the escalator would deal with the problem of vibration on the upper floors because it would isolate the escalator from the whole building. In terms of the construction or demolition noise it would not isolate it at all because obviously the escalator would not be built at that point. I think at that point, dare I say it, we might be down to "no knocking chits".

5099. That is a system for halting work, is it?

**(Mr Kahn)** Yes. Mr Taylor suggests in his report that mutual cooperation is a method of allowing noisy works to go on with other works, and he is quite right. I have had experience of this. For example, in the BBC in the 1980s the noise of doing alteration works to studios was often audible in other broadcasting studios, and so they operated a system of if somebody heard the noise while they were making a recording they should issue a "stop knocking chit", a "no knocking chit" or whatever, to tell the contractor to stop work. My problem, as being an engineer responsible for refurbishments, is that it puts an enormous cost and time premium on doing the works, and the rough estimate was that about 50 per cent of the cost of the work was due to "no knocking chits" in Broadcasting House. I have been cautioned about this but I am not sure that no knocking chits in Soho would operate in the same way as in Broadcasting House. But we have a big problem because the British Board of Film Classification is doing critical assessment work most of the time, and so there is not time in a recording studio, when they are recording a pop song, or recording in a broadcasting studio. When rehearsing and preparing broadcasts there are often periods of rehearsal when they are not so sensitive to noise, but in the British Board of Film Classification where they spend significant, or most of their time in viewing days viewing material and examining it where every word, where every part of the word is critical, there is very little time when they can say, "Actually this film is not very important". And they do not even get very much notice—48 hours' notice—so we could have Crossrail hanging around waiting for 48 hours' notice to say, "Okay, this one is not important you can make a bit of noise now." So that five months, 90 per cent of the time they want

<sup>26</sup> Committee Ref: A59, Simplified Construction Programme with Plant Date for Noise Assessment—Fareham St Site (Deep Shaft) (WESTTCC-14805-103).

---

**The Petition of the British Board of Film Classification**

---

to be making their hydraulic breaking, would stretch for an unreasonable length of time. We have had brief discussions and I think now both Crossrail and ourselves agree that although it is a solution in some cases it is not going to be a practical solution for this particular project because of the sensitivity and importance both of Crossrail and the British Board of Film Classification.

5100. Before coming on to your solution, as you have criticised the Promoter's solution, there is one other point that I want to ask you about. Can you go to Mr Taylor's report, your exhibit 3, paragraph 9.32 on page 23? <sup>27</sup>Mr Taylor is there dealing with groundborne noise from the operation of the railway. Do you have any concerns about groundborne noise from the operation of the railway—that is, not the operation of the escalator but the running of the trains?

**(Mr Kahn)** Yes, I am concerned. I think that this would probably be quite capable of being resolved, but this actually illustrates a good example here on the question that you were asking earlier about the difference between the low frequency noise numbers being high in the NC curve and comparing them with the (A) rating. In Mr Taylor's report he notices that the  $L_{AMax,S}$  noise level for the passage of one train is expected to be 21 dB, which is obviously lower and would be great and wonderful. But he goes on to say that in terms of 1/3 octave band levels the highest predicted level is 47 dB at 50Hz, which are the similar sorts of numbers that were worrying you on the screen earlier. So here again this is a single frequency measurement of 47dB, which is different to a dB(A) rating of  $L_{AMax,S}$ . He points out that the 47dB is a level that he measured being exceeded for ten per cent of the time. But actually he is predicting that the passage of a single train will be at the level that the current theatre environment is below for 90 per cent of the time, and if two trains cross he has predicted that the groundborne noise would be raised by 1 dB as measured, and I am concerned that that might be significant in terms of the distraction the British Board of Film Classification make in their examinations.

5101. In terms of the solutions, presumably any works to the escalator shaft are not going to make any difference to that. The isolation chamber, would that deal with it

**(Mr Kahn)** Yes, the isolation chamber would deal with that problem because it would be designed to cope with all the foreseeable problems and that level of noise would be quite easy to attenuate in an isolation chamber, if you could fit one into the space and get a screen that was the right size.

5102. You have explained your views on the isolation chamber, if I can call it that, and your view that it is unacceptable. Can we then turn back to your slides, and go right to the end of them? Would

you go to 32 and can you take us through what it is that you recommend is the best and appropriate solution for BBFC and why you recommend that?<sup>28</sup>  
**(Mr Kahn)** I think the best solution for the British Board of Film Classification is to relocate to alternative premises on a permanent basis. I think that that has the principle advantage with a large number of unknowns about the actual noise and vibration, and quite a lot of difficulty in the proposed mitigated solutions and at the moment there is no mitigated solution and no proposed mitigation to the noise of demolition groundborne noise to upper floors at all—none has been offered. The best solution is, in a way, to separate the noise-generating activities and the noise-sensitive activities because that provides a permanent solution for everybody. I appreciate that the costs are high but I would not have expected the costs to be the total cost of the building because the building would still be fit for purpose for a number of other uses and would still have value unless Crossrail got their calculations enormously wrong and the noise and vibration in that building was unacceptable for any use at all. That would be the preferred option.

5103. If you go to 33 you have an alternative: "To continue operating during construction and operation BBFC require . . ." And your first bullet point we come back to your NC20 criteria.<sup>29</sup>

**(Mr Kahn)** Yes.

5104. So how would this work, this alternative to moving out lock stock and barrel? How would these alternative solutions work?

**(Mr Kahn)** My advice to the British Board of Film Classification is that if they are continuing to work and perform their statutory duties in that area they need to ensure that the external noise from outside, like a helicopter going past or anything like that, is below the NC20 guideline, which is the lowest level that is recommended for the services noise, in order to mask the noises that are heard from outside, which could be distracting. The NC20 criteria is the criteria to use because, as we have explained and seen earlier, you can have very high numbers in an individual octave band in dB which makes the dB(A) level look quite low but actually an individual octave band and the way that we hear sounds is individual octave bands, so certain noises distract because you hear them in a particular octave band.

5105. So you say below NC20 equipment not to be brought into use until agreed design standards met; prior notice given for any noisy work; temporary relocation to suitable premises and facilities whenever significant disturbance is predicted; and a package of carefully designed sound insulation installed prior to the commencement of the works. But, as I understand it, your primary option is—move?

**(Mr Kahn)** Yes, that is correct.

<sup>27</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Groundborne Noise from the Operation of the Railway, Para 9.32 (WESTTCC-14805-088).

<sup>28</sup> Committee Ref: A59, British Board of Film Classification—Undertakings Sought (WESTTCC-14805-060).

<sup>29</sup> Committee Ref: A59, British Board of Film Classification—Undertakings Sought (WESTTCC-14805-061).

---

**The Petition of the British Board of Film Classification**

---

5106. Is there anything else you would wish to add now before the cross-examination?

**(Mr Kahn)** I think the main point is that there are some significant uncertainties and with that the design risks are quite high for both parties.

5107. **Mr Binley:** Thank you, Mr Cameron. Mr Elvin, I intend to continue until ten past one to make up the time we lost. So that may be helpful to you.

5108. **Mr Elvin:** I am very grateful.

---

*Cross-examined by Mr Elvin*

5109. Mr Kahn, I am curious in the way you presented your case because the one thing you have not done is show to the Committee the whole crux of your case, which is the standard that you say applies, the NC20 and NC25. We have had an elaborate edifice of explanation of its relationship to the standard methods of rating noise; you have been asking the Committee to grapple with this new standard, but it is interesting that you have not actually shown the Committee where the standard applies. You touched upon it but we have not seen it, and perhaps I could put it on the projector?<sup>30</sup> The second paragraph is something you did mention. “It applies to noise emitted by heating, ventilating and air conditioning systems, intrusive noise from the projector(s) associated with the theatre and noise emitted by any other mechanical equipment in the theatre building. It is intended for application when the background noise is essentially a steady-state sound, without strong time-varying components. It does not apply to intrusive noise from other sources outside the theatre, such as aircraft, highway traffic, or adjacent theatres, or to noise resulting from the operation of the sound system in the theatre, or the vibration of the theatre.” So the standard itself specifically only applies to in-theatre equipment and does not apply to intrusive noise from the outside. That is right, is it not?

**(Mr Kahn)** Yes, I did say that in my evidence very clearly and that is why I brought up Appendix A3 to explain the relevance of that to external noise.<sup>31</sup>

5110. I am sorry, A3 is the discussion of a standard which does not apply to external intrusive noise.

**(Mr Kahn)** A3, if you read it, refers to intrusive noise; it says “intrusive noise” in it.

5111. A3 is part of the standard which says it is not dealing with external noise. All A3 is saying is that it should not be too quiet because if it is too quiet you will hear intrusive noise from outside; it does not say that the standards apply to intrusive noise. All it is making is the obvious point, if you keep it too quiet you are going to be disturbed by things that would not ordinarily disturb you. Is that right?

**(Mr Kahn)** No, that is not right. If you read the first paragraph it says, “The International Standard specifies measurement methods and maximum ratings for indoor background sound pressure levels in theatres, review rooms and dubbing rooms.” It is

a standard for measurement and rating; the measurement and maximum ratings deal with noise emitted by heating and air conditioning systems.

5112. Mr Kahn, it says what it applies to and what it does not apply to. We plainly fall in the category of what it does not apply to, which is external noise sources. I have read paragraph 3 correctly, have I not?

**(Mr Kahn)** You have read paragraph 3 correctly. However, you need to read paragraph 3 in conjunction with the guidance given on Appendix A3, which says that the reason it is specifying a minimum as well as a maximum for review theatres is because intrusive noise may become audible and annoying with too little noise. The clear implication in that is that you should specify services noise between 20 and 25 to ensure that intermittent intrusive noise will be masked by it and in order to be masked by it the intermittent and intrusive noise has to be below it in each octave band.

5113. Mr Kahn, that is just gobbledegook. It does not explain the point at all. Section A is informative, it is additional information. A3—and interestingly you missed out the first sentence in your quote, which is “Too little noise in a theatre or review room can be a problem as well as too much. With too much noise, detail is obscured and, ultimately, intelligibility suffers. With too little noise intermittent intrusive noise may become audible and annoying.” All this is saying is the commonsense point, if it is too quiet things that would otherwise would not disturb you will disturb you.

**(Mr Kahn)** Yes. Can I make another comparison?

5114. **Mr Elvin:** Sorry, am I—

5115. **Mr Binley:** I am sorry, Mr Elvin, but I must hold to parliamentary etiquette in this place—

5116. **Mr Elvin:** I take back “gobbledegook”.

5117. **Mr Binley:** That we do not use the word “gobbledegook” certainly, we get into trouble for that. But equally we do not override the answer to the question.

5118. **Mr Elvin:** I do apologise for that. I was trying to get on too quickly.

<sup>30</sup> Committee Ref: A62, Standards and Criteria—Viewing rooms—Scope (SCN20060323-003).

<sup>31</sup> Crossrail Ref: P65, International Standard—Additional information: A3 (SCN20060323-004).

---

**The Petition of the British Board of Film Classification**

---

5119. **Mr Binley:** I understand. Mr Kahn.  
**(Mr Kahn)** I am trying to explain. I omitted the section about too much noise because I did not think we were disputing about too much noise. The question was why was too little noise specified and the answer was to mask intrusive noise. But another comparison of why this is appropriate, Mr Taylor in his report also referred to the British Council of Offices Guide 2005, and if you look at tab 2 I have included the extract from that. This is a general guide for the construction of offices and such like. Do you have this, tab 2?<sup>32</sup>

5120. **Mr Elvin:** I was asking you about the standard rather than some other document but if you think it is necessary for us to look at it I am sure we can look at it.

**(Mr Kahn)** If we look at that. In that document, for general purposes, not this specific specified application, this guidance is on external inclusion noise for open plan offices and cellular offices, NR35 and NR38; and it also gives on the next page building services internal residual noise comparable to this standard at exactly the same level, so that shows that for offices the current practice is the 2005 guide. For offices the building services noise and external services noise are rated at exactly the same level, so that is a practice for offices in 2005 and I do not think that is an unreasonable practice for cinemas.

5121. I am sorry, it is a different question to say whether there is some other guidance you are looking at to actually apply the British Standard. Let me understand this: you are saying to this Committee that you should be supported in applying this standard which—let us ignore the other guidance—on its own face says it does not apply to external noise sources. That is what you are saying to this Committee, is it not?

**(Mr Kahn)** I am saying that we should be applying this standard for internal noise services and we should use that to inform the level which should be set for external noise.

5122. **Mr Elvin:** I am sure, sir, that the Committee has my point.

5123. **Mr Binley:** Thank you; I think so.

5124. **Mr Elvin:** The fact is that too low a noise is deprecated for reasons I have already indicated, and if we look at the performance of the theatre at the minute it has that very effect, does it not? If we look at your first exhibit, SK-15 and 16, at the lower frequency levels, which is what you said we are concerned about, in fact both the measured L90 by you and Mr Thornley-Taylor, SK-16, are

significantly below both the standards.<sup>33</sup> So at the moment, whether it is Mr Thornley-Taylor's measurement with the humidifier on or your own measurement it does not matter, it is actually breaching the standard. So the theatre at the moment is operating the standards which you say apply.

**(Mr Kahn)** I think you are misunderstanding the interpretation of the standard. The standard applies for a rating of all the measurements, i.e. all the dots on the graph.

5125. The dots are below the dots of blue and red for the octave band set for the standards.

**(Mr Kahn)** Neither of those two graphs on SK-16 are all the dots below the blue band, for either the green or the brown thing. At low frequency they are below it and it may be that the low frequency noise levels from the trains is higher than the current background noise level below the standard, and then it will be up to the British Board of Film Classification to increase the level of low frequency services noise to mask that noise. That would be our advice and that will be what they were intending to do.

5126. Mr Kahn, you told the Committee just half an hour ago that you had to adhere to these standards, and you make the point about too little noise on your slide. Let us look at SK-16, let us take your measured L90, which is the green line, it actually does not come close to the standard until the octave band 2000. It is below all the way along and then at 2000 it then exceeds it, so it is a fact that the measurable noise in the theatre at the moment, as you measured it yourself, is either too quiet or too noisy depending on which octave band you take it at, so the theatre does not conform to standards.

**(Mr Kahn)** I repeat the answer I gave before, you have failed to understand the method of performing this rating. If any of those individual ratings are above the blue curve the blue curve does not apply because the green curve is above the blue curve at 4000 and 8000, and the rating for that noise is NC25. On the brown curve, at 250Hz it is just on—I think it is fractionally over but let us not argue about a fraction of a dB—it is on the curve so the rating of NC25 will or will not apply.

5127. Mr Kahn, you can argue like that as much as you like, but the fact is that for a vast proportion of the curve your green measured line is below the lowest curve and therefore does not comply with the NC20 standard or the NC25 standard, and so that argument gets you nowhere.

**(Mr Kahn)** Quite the opposite, the argument that you are making gets nowhere because what you have to do is apply it on the highest excursion of the background noise spectrum compared to the noise criteria curves, the noise criteria rating. That is the

<sup>32</sup> Committee Ref: A59, BBFC Initial Noise and Vibration Report, p3 (WESTTCC-14805-125).

<sup>33</sup> Committee Ref: A59, Standards and Criteria—Viewing Theatre. Levels measured by Crossrail (WESTTCC-14805-043), and Committee Ref: A59, Standards and Criteria—Viewing Theatre. Levels measured by Crossrail and BBFC (WESTTCC-14805-044).

---

**The Petition of the British Board of Film Classification**

---

method, that is how it is done, and it does not matter in the noise criteria rating what the lower . . . The difference between ... It is not a comparison, that is the difference between dB(A) and then C curve.

5128. Mr Kahn, I am afraid I am going to have to put it to you that you are completely misapplying this standard. Let us look at paragraph 5 of the standard, which sets out sound pressure level classifications. 5.1: “Dubbing rooms, review rooms,” which is what we are dealing with, “shall have a minimum rating of NC20 and a maximum rating of NC25.”<sup>34</sup>

**(Mr Kahn)** Yes.

5129. You have to come between the red and the blue lines to comply with the standard for a review room.

**(Mr Kahn)** Not exactly, you do not have to come between—

5130. Have I understood paragraph 5.1 of the British Standard correctly?

**(Mr Kahn)** This is the third time I am telling you no.

5131. So when it says that the minimum is N20, which is the lower line, and the maximum N25 which is the upper line, to a plain speaking sort of person, Mr Kahn, that strikes me as meaning that it has to fall between the red and the blue lines on your graphs.

**(Mr Kahn)** It means that the highest measurement has to fall between the red and the blue line but it does not say that every octave band measurement has to fall between the red and the blue lines.

5132. I am going to ask Mr Thornley-Taylor to give the Committee his views on your interesting interpretation of standards, Mr Kahn. Can I move on? If we keep SK-16 there, you will recall that you made a point about the noise of the 50 octave band from the escalators or from the trains.

**(Mr Kahn)** Yes.

5133. At the 50 octave band it is between 63 and 31.5, far left of your table, is it not?

**(Mr Kahn)** Yes.

5134. That is the point at which at the moment the measured noise levels are well below the blue line.

**(Mr Kahn)** Yes.

5135. At that point a 1 dB increase is actually going to make it closer to the standard than it is at the moment; it needs a slightly noise environment to comply with the standard of that frequency, does it not?

**(Mr Kahn)** For the fourth time, the standard is complied with overall and not as individual frequencies. I just said earlier that if the train noise was audible and below the standard it would be necessary to increase the background noise to mask it. I am sorry, this sound is a complicated issue and I am trying to explain it as clearly as possible. The correct way to design masking sound to cover these

things is a complex issue and low frequency noise is particularly difficult and complex. I am sorry to complicate it, I am sorry it is not as clear but I am trying to make it as clear as I can. But, yes, it may be that it would be necessary to increase the services and there is the scope to do that and still comply with the standard because the standard is an overall rating of the whole system.

5136. Mr Kahn, I am a simple man, I understand your point although I do not accept it, that the standard (a) applies, (b) you are interpreting it correctly, and (c) its overall compliance, but let us just examine it very briefly and then we will move on because I am sure that the Committee will not want to hear much more about this. Let us examine the 50Hz issue. Increasing the noise levels by one decibel at 50Hz is not going to make the theatre less compliant with standards than it is at the moment.

**(Mr Kahn)** That is correct, but the issue is raised because if you go on to apply the NC standards, if you are going to compare it with dBA, it will be judged to be significant.

5137. The British Standard that Mr Thornley-Taylor has specifically has a paragraph which advises on cinema design, does it not, and the standards to apply to cinema design?

**(Mr Kahn)** When you say the British Standard that Mr Thornley-Taylor has, are you referring to BS8233?

5138. Yes. At paragraph 7.6.8.1, it has the design limits for cinemas. It does it in terms of dBA.<sup>35</sup>

**(Mr Kahn)** Are you referring to table nine?

5139. I am referring to the text: “To ensure reasonable listening conditions, this should be limited to 35dBA.” That is dealing with some noise from services.

**(Mr Kahn)** Yes. This is general guidance.

5140. Which specifically applies to the design of cinemas.

**(Mr Kahn)** No.

5141. This section is headed “Cinemas”, is it not?

**(Mr Kahn)** Yes, but can you read me out the scope of the standard, please, at the beginning? Section one.

5142. I think it will be easier to ask Mr Thornley-Taylor to do it.

5143. **Mr Binley:** My colleagues and I have enough information to understand the point that is being made and maybe Mr Thornley-Taylor will be able to clarify it when he appears.

5144. **Mr Elvin:** You referred to the tunnel boring machines in a throw away remark. You have read the information papers on construction?

---

<sup>34</sup> Crossrail Ref: P65, International Standard—Additional information: Section 5.1 (SCN20060323-005).

<sup>35</sup> Crossrail Ref: P65, British Standard BS8233—Cinemas: Design Limits, Para 7.6.8.1 (SCN20060323-008).

---

The Petition of the British Board of Film Classification

---

*(Mr Kahn)* Yes.

5145. You know that the station is being constructed not using tunnel boring machines but the sprayed concrete lining methodology which does not use dBA. That is information paper D23, paragraph 1.1.<sup>36</sup>

*(Mr Kahn)* I was simply making the point that I believe the tunnel boring machine will be passing through at that stage. We were agreed that we were not expecting the tunnel boring machines, so yes.

5146. It will be pulled through. It will not be drilling because there will be a space for it to be pulled through, so it will not be in operation.

*(Mr Kahn)* Absolutely. That was a throw away comment.

5147. On the question of the hydraulic breaking, if you go to Mr Thornley-Taylor's report, your comments are reliant on the information he has supplied, are they not?

*(Mr Kahn)* Indeed.

5148. Therefore, if he gives the assumption he has made about the impact of the hydraulic breaking on these premises in particular, you are reliant on that assessment?

*(Mr Kahn)* My comment agreeing with his information was on the activities and the durations.

5149. The duration you quoted is for the entire works. If you go to page 15, paragraph 9.2, what you are looking at is the most conservative case whereby the vibration is caused by the use of the breaker at the foundations of buildings where the breaker operates at ground level at the boundary of the work site closest to each receptor.<sup>37</sup>

*(Mr Kahn)* We have totally accepted that. 9.2 is demolition and vibration. If you return to 9.20, which is groundborne demolition noise, page 21—<sup>38</sup>

5150. It says that it is currently predicted that the use of a hydraulic breaker as described above, which is why I took you to 9.2 to start with because that is where it is described. What you are looking at is the bit of the works closest to the building, not the works of a hydraulic breaker all over the station site. Is that right?

*(Mr Kahn)* At the foundations of the buildings where the breaker operates.

5151. **Mr Binley:** We will reconvene at 2.30.

*After a short adjournment*

5152. **Mr Elvin:** Mr Kahn, could we turn to the issue of the escalators. The point you made to the

Committee this morning was that there was uncertainty because it had never been tried before and you had a concern because the escalator was on a slope. Is that right?

*(Mr Kahn)* That is correct.

5153. You are aware that the construction of escalators means that it has horizontal elements at both top and bottom. If you take the escalators at Portcullis House, for example, or going down to the Jubilee Line at Westminster Station, there are level sections at the top and the bottom, and it is at the horizontal level that the acoustic insulation would be provided. In fact, the issue about the escalator being on a slope does not matter because the acoustic elements that will absorb the vibration from the escalators will be on a horizontal plane.

*(Mr Kahn)* If that is the case, and if the whole of the structure between those two horizontal elements is able to be supported by the vertical elements and if there are no transverse loads when the escalator starts up or stops and whilst it is in motion, then that would be the case.

5154. **Mr Elvin:** That is from Mr Berryman. I am sorry about the doodle on the left-hand side.

5155. **Chairman:** I am sure there will come a time when it is worth a lot of money!

*(Mr Kahn)* It is not signed, I notice. Looking at it, if the escalator is isolated in that way, then there would be less of a problem from transverse loads. There may still be a problem from transverse loads and there would be complexity in supporting that length of structure over that sort of distance at the two ends. Again, I asked the question if it had been done before and if there could be a report to give us confidence, and so far the best information we have had is this sketch here.

5156. **Chairman:** We are going to heighten the impact of this document by giving it an official number. I am told it is A62.

5157. **Mr Elvin:** Can we call it P62 instead.<sup>39</sup>

5158. **Chairman:** We will accept that. Is the 'P' for Python?—Monty?

5159. **Mr Elvin:** Do not start! The element we are talking about, here and here, are common to the construction of escalators generally. There should not be any issue about transverse loads; that is how escalators are built, are they not, Mr Kahn?

*(Mr Kahn)* I am going on the information that I had on another project where there were minor transverse loads to ensure that there was not occasional movement which created problems. In the light of that, in a meeting with Crossrail I asked

<sup>36</sup> //billdocuments/crossrail.co.uk (/) Check

<sup>37</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Predicted Noise Levels: Demolition Vibration, Para 9.2 (WESTTCC-14805-080).

<sup>38</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Groundborne Demolition Noise, Para 9.20 (WESTTCC-14805-086).

<sup>39</sup> Crossrail Ref: P62, Rough sketch of the proposed specially constructed and insulated escalator (SCN20060323-006).

---

 The Petition of the British Board of Film Classification
 

---

for more information and confirmation that this was not a problem, or information that this had been done before. Crossrail said to me that it has not been done before and they also said to the parliamentary agents that there was no report to support it. Whilst some elements of the sketch you have there do represent the way that an escalator may be now, I am going on evidence from Crossrail previously that it has been done before. With all respect, that is not really a technical explanation. If there is a detailed technical explanation of the method that can give me assurance, I would be very happy to accept it. That is all we have asked for and that is all we want.

5160. Mr Kahn, you are not a civil engineer and you are not a railway engineer, and you will forgive me for saying that Crossrail contains many people who are used to designing escalators; indeed, we have many escalators within this project.

*(Mr Kahn)* Absolutely.

5161. If you receive an assurance that it can be built, have you any reason to doubt it? You do not have the expertise to discuss it, but if you were looking for reassurance why would you doubt that reassurance?

*(Mr Kahn)* For the reasons that I gave you before. I would want to see the technical details that they have properly considered the problems involved, rather than a sketch to say it should not be a problem. You said earlier that the little bit at the top and the little bit at the bottom were common to all escalators, in which case they would be something that had been done before. When I asked Crossrail if it had been done before they said no, so you cannot rest on the precedent that Crossrail have had lots of engineers who have done lots of things before.

5162. Mr Kahn, as before, you are confusing things, with respect.

*(Mr Kahn)* Possibly.

5163. You are asking for a report about whether these acoustic insulators have been used before—and you are right in saying no. The load-bearing issue, which is the issue you raised, is common to all escalators. This is not a technical drawing. I have put it in, partly to amuse the Committee—

5164. **Chairman:** You have succeeded.

5165. **Mr Elvin:** —but also to inform them at least as to where the insulating elements go, just to illustrate the point. The fact is that the loading question is common to all escalators, is it not?

*(Mr Kahn)* Normally the load would be distributed along the length. I think that if there is some technical information we would probably be very happy to accept it. We have always said that. But, in the absence of technical information, I think it is not a matter between an acoustician and a lawyer; it is probably a matter for structural engineers.

5166. I will tell you what: talk to Mr Berryman after you have finished giving evidence and then you can let us know whether there is anything that remains.

Can I ask you about the theatre, the issue of the acoustic insulation, the lining. You say 300 or 400 mm; Mr Thornley-Taylor, who has designed and been involved in the insulation of an EMI studio in St John's Wood in a Victorian building—which you can imagine poses some problems in this respect—is satisfied that 200 mm is achievable, possibly even down to 150 mm. As I understand your evidence, you are not suggesting this is unachievable, you are just concerned, is that right?

*(Mr Kahn)* I have very strong doubts that 150 mm, full thickness of the isolation shell and the internal acoustic treatment that will be required—

5167. To achieve the thickness, you use metal sheeting which increases the density of the shielding.

*(Mr Kahn)* Yes.

5168. That would mean that you could have a thinner layer, would it not, because the metal would be more dense?

*(Mr Kahn)* Yes, it would, but you still need to be sure ... The metal has a certain amount of structure, and that would take up thickness as well. In addition, you would need a void. It is not a simple equation between the amount of the mass and the void. You would need—this is where there was some ambiguity about the cocoon—some acoustic treatment on the inside as well, in order that you had satisfactory acoustic environment for the critical listening function that is required.

5169. I am going to let Mr Thornley-Taylor deal with this side. Are you bringing forward any reason as to why the screen could not be moved closer to the seats? Or is that a matter that has to be covered by the BBFC witness?

*(Mr Kahn)* As I say, the positioning of the screen and everything else is principally not an acoustic issue, but my experience in designing and considering theatres, viewing rooms and dubbing and mixing suites, and also generally in designing rooms, is that, particularly in cinemas, where the film itself is flammable and there is quite a significant risk of fire, there is a requirement for a fire escape and so there needs to be a clear corridor along the room.

5170. I am sorry, Mr Kahn, do not misunderstand me. I am not suggesting interfering with the fire exit; I am talking about moving the screen slightly a little bit that way.<sup>40</sup> Are you able to point to any standards as to the minimum distance, or is that a matter that I can only put to the BBFC witness?

*(Mr Kahn)* The minimum distance as a standard is not an acoustic issue.

5171. In that case, I took that as far as I could with the witness this morning.

*(Mr Kahn)* Yes.

5172. **Mr Elvin:** Thank you very much.

---

<sup>40</sup> Committee Ref: A59, British Board of Film Classification, Existing Floor Plans—Basement Plans (WESTCC-14805-114).

---

The Petition of the British Board of Film Classification

---

Re-examined by **Mr Cameron**

5173. Mr Kahn, you were asked about the British Standard 8233. Do you remember those questions?  
(*Mr Kahn*) I do, yes.

5174. And you were asked about the applicability of that standard to cinemas. This was the standard which Mr Elvin had on Mr Thornley-Taylor's computer but was not able to put it on the screen at the time.  
(*Mr Kahn*) Yes.

5175. **Mr Elvin:** I can now.

5176. **Mr Cameron:** That is extremely helpful.  
(*Mr Kahn*) Could I suggest that I have a slide—

5177. No, I would like, if I can, to take it this way. The pages I need, if Mr Elvin is volunteering, are pages 1 and 24.<sup>41</sup>

You were asked about 7.6.8.1. I think you referred to the scope but then did not have the document to hand. It is now going to come up on the screen. The British Standard gives recommendations for controlling noise in and around buildings and suggests appropriate criterion limits in different situations: "These criteria and limits are primarily intended to guide the design of new or refurbished buildings undergoing a change of use, rather than to assess the effect of changes in the external noise level." As far as the scope of this guidance is concerned, what is its primary purpose?

(*Mr Kahn*) I think, as it says there, explicitly—and I had this on my slide 9—"These criteria and limits are primarily intended to guide the design of new or refurbished buildings undergoing a change of use, rather than to assess the . . . changes in the external noise level."

5178. So that it is read properly, ". . . rather than to assess the effect of changes in the external noise level."

(*Mr Kahn*) Sorry. It also says, if I may go on a little bit longer: "It covers room acoustics for simple situations, but not the design of buildings where the acoustics are critical, such as auditoria." I would have said that for the critical listening and examination of films in this case for a statutory purpose, the acoustics are critical.

5179. **Chairman:** The document you have just presented to us will be A62.

5180. **Mr Cameron:** Thank you. Mr Kahn, in the light of your last answer, could I invite you to tell the Committee whether or not you think this standard is directly applicable to the concerns which are put before the Committee today.

(*Mr Kahn*) In a strict interpretation of the scope, I would say that they are not directly applicable—no more, for example, than the NC standard.

5181. I am sorry?

(*Mr Kahn*) No more so than the ISO NC standard to which we were referring earlier.

5182. Could I just understand that answer, please.  
(*Mr Kahn*) Yes.

5183. **Mr Cameron:** As I understood it, the evidence you were giving before was that the NC standard—

5184. **Mr Elvin:** You need to be careful about this

5185. **Mr Cameron:** Yes, I appreciate that. Mr Kahn, I want to understand the remark you have just added. You were cross-examined on the NC standard and the scope of it.

(*Mr Kahn*) Yes.

5186. You acknowledged the wording of the scope and you then referred to A3 in the annex.

(*Mr Kahn*) Yes.

5187. I do not think I have trespassed at all so far. Mr Kahn, can you just tell the Committee, please, whether or not you consider the NC criteria which you referred to this morning to be applicable when determining appropriate noise criteria for a film review cinema.

(*Mr Kahn*) Yes, I do consider them to be applicable.

5188. Could we then go back to BS8233 and to page 24.<sup>42</sup> At 7.6.8.1, perhaps you could read the last sentence into the record and then I will ask you a question about it.

(*Mr Kahn*) "Cinema design, however, normally requires specialist acoustic advice."

5189. If cinema design requires specialist acoustic advice, is there any guidance as to whether or not film review cinemas require such advice?

(*Mr Kahn*) In the case of this standard, I think cinema is a generic description and you would need to refer to the specialist cinematography standards, where they would give separate requirements for what cinemas call "theatres", which are for the projection of films to most people, and review rooms, which is particularly this case.

5190. Does it give specific guidance for review rooms?

(*Mr Kahn*) No, it does not.

5191. **Mr Cameron:** Thank you very much. I have no other questions for you.

5192. **Chairman:** Thank you, Mr Kahn, we are most grateful.

The witness withdrew

5193. **Mr Cameron:** That completes the evidence I wish to call.

---

<sup>41</sup> Committee Ref: A62, British Standard BS8233—Scope, p1 (SCN20060323-007).

<sup>42</sup> Crossrail Ref: P65, British Standard BS8233—Cinemas: Design Limits, Para 7.6.8.1 (SCN20060323-008).

---

 The Petition of the British Board of Film Classification
 

---

5194. **Mr Elvin:** I call Mr Thornley-Taylor.

**Mr Rupert Thornley-Taylor** recalled

*Examined by Mr Elvin*

5195. Good afternoon, Mr Thornley-Taylor. Can I start by asking you to give, in a brief way, your views about the use of the standard Mr Kahn has adopted, the NC 20 and 25 standards, as compared to the British Standard, and your view about the approach which has been taken.

*(Mr Thornley-Taylor)* Yes. I think we have learned today that the BS ISO standard, the first one to which Mr Kahn referred, gives you guidance on the noise levels you would achieve from the continuous running of equipment in the studio, and it quite wisely says it must be not be too high, it must not be too low. It does explicitly limit its scope to continuous noises for a very important reason, and it goes to the heart of the reason why, in assessing groundborne noise from an underground railway, we are using the dBA scale and not the NC system. The reason for that is that, as a train goes by, not only does its sound level rise and fall, but its spectrum shape changes. Mr Kahn explained how you need to look at the spectrum: you do a detailed assessment of which NC curve applies to it. But, of course, if the spectrum is changing all the time, it would make a nonsense to change the NC level all the time, and to use the NC for this purpose you would need to sit down and write an extra standard to say: Do you take the highest level reached in any band during the passage of the train or do you look at how the overall NC changes and take the highest NC level? You get a different answer according to which way you do it. Given that we can achieve wholly acceptable conditions using the dBA approach, where that problem is taken account of in the nature of the scale, provided that we choose the dBA design criterion correctly, the acoustical engineer—who has responsibility for everything and not just the trains underneath but also the equipment running in the studio and all the things about which he has to be concerned—can apply the relevant sources and achieve an acceptable overall environment.

5196. I think it would be helpful if you could explain—and please put it in terms that I can understand, in case I need to ask you any other questions—why, in terms of the types of noise source with which we are dealing, the dBA scale is a suitable one.

*(Mr Thornley-Taylor)* You often see in evidence about these units, reference to a point which I explained when we had a section on generic issues at the beginning of the Committee's deliberations: that the human ear is quite bad at picking up sounds towards the lower end of the spectrum, and, in order that sound level meters more or less follow the same characteristic, they have what is known as a weighting and an adverse reduction in the response of the meter towards the low end of the

spectrum to give a response that approximates to the way the human ear hears the sound. If you look at a weighting curve—which is like those curves Mr Kahn showed on the NC system, only actually upside down—you will find that the adverse weighting of the A curve is not as great as the NC curve.<sup>43</sup> The NC curve is worse, if I may put it that way, than the dBA system in discriminating against low frequency sounds. In the annex to the ISO standard, curiously, the writers having produced the standard saying use the NC curve, it actually draws attention to the fact that you end up with too much low frequency noise and too much high frequency noise. So the dBA curve is slightly better than the NC curve in that respect.

5197. **Mr Elvin:** If it would be helpful to the Committee, I can put up the dBA standard.

5198. **Chairman:** If it would help you, I most certainly would like to see it.<sup>44</sup>

*(Mr Thornley-Taylor)* “The noise criteria curves are for use in rating indoor noise levels. The curves, if followed as design criteria, do not result in neutral sounding background noise spectra. Many listeners observed that an NC spectrum sounds too ‘rumbly’ and too ‘hissy’ having too much very low-frequency and very high-frequency energy.” It then goes on to suggest a better shape, nothing to do with NC, although this is only an informative part of the standard. “A constant sloped spectrum at -5dB per octave from low- to high-frequencies has been observed as producing a more neutral sounding spectrum and is probably more suitable for design purposes.” To the extent that it matters, if it is put that there is something wrong with the dBA scale, down at these levels NC20 and 25 (it is not true at higher levels, but down at these levels) A weighting is less susceptible to this too ‘rumbly’ criticism than is the NC system.

5199. **Mr Elvin:** In terms of the noise with which the Committee are concerned so far as this building is concerned, where on the spectrum does the concern originate?

*(Mr Thornley-Taylor)* It falls in the lower two bands that we saw on the chart that Mr Kahn exhibited.

---

<sup>43</sup> Committee Ref: A59, British Standard ISO 9568—Noise Criteria Curves (WESTCC-14805-035).

<sup>44</sup> Committee Ref: A59, Standards and Criteria—Viewing Theatre (WESTCC-14805-042).

---

The Petition of the British Board of Film Classification

---

5200. On the left-hand side,  
(*Mr Thornley-Taylor*) Yes.

5201. In terms of the sort of noise the Committee are concerned with, what is your view about the usage of the dBA scale?

(*Mr Thornley-Taylor*) It is a better approach, not only for the reasons I have mentioned but also from the point of view of the nominated undertaker and his contractor when he comes to design the underground railway. He has no control over all the other sources within the studio that have to be taken into account when deciding if you are above or below this band between 20 and 25. He just has to meet the sub-specification that applies to the underground railway—one of the things, as I say, that the studio engineer takes into account, and he must be given a target which applies to his noise source only, easily achievable through design, and will bring about the required result.

5202. Finally, before getting on to the escalators, if we use the design criterion that is being used for Crossrail in this location, which is the 30 dBA criteria.

(*Mr Thornley-Taylor*) For the film theatre at BBFC it is 25 dBA.

5203. If that design criteria is being used, what are the prospects of there being any problems caused within the basement film theatre?

(*Mr Thornley-Taylor*) There are no concerns about the consequences being harm to the film theatre. The noise levels would be low enough to achieve the standards which Mr Kahn would like achieved.

5204. Can we then move to the question of the escalators. Mr Kahn does not say it is impossible, but is concerned at the verification for what is proposed for one of our two solutions, which is the escalator, which has a form of acoustic pads to prevent the transmission of noise and vibration through the structure of the shaft around the escalator. What is your view about the reliability of that proposal? Can you explain to the Committee why you have reached that view?

(*Mr Thornley-Taylor*) We have been a bit distracted by the fact that it is not usual to have to do this for escalators, but if you reach for any handbook on noise control engineering it will always have a section on what is known as an inertia block isolation system, where you place a machine on a concrete base and have spring-like isolators for the concrete base. It is a very common engineering practice. I have done it many times with all kinds of machines, presses, pumps, printing machinery. The only thing which is not done frequently—I have not done it before—is to use an isolated block of this kind for an escalator foundation, but there is no other difference.

5205. Are you aware of there being any difficulty in installing it for use in escalators?

(*Mr Thornley-Taylor*) Care is required in the design and the construction—like all engineering designs—but no fundamental difficulty.

5206. Can I ask you now about the hydraulic brake, the demolition noise. In your report—and we have seen the relevant pages—there is reference to some concern during construction demolition. Of the numbering that Mr Kahn gave to your report, it was passage 9.20: “It is currently predicted that during the use of a hydraulic breaker as described above, there will be significant groundborne noise in the film theatre ...” I would like to pick up with you the length of time at which that problem will occur.

(*Mr Thornley-Taylor*) This will only occur when demolition is taking place at the closest part of the worksite. That is for a duration of the order of a week. That is the information which I gave, and I have double-checked it with engineers at Crossrail and they are quite comfortable that I have said that.

5207. The table which Mr Kahn went to which showed a number of months, what does that indicate?

(*Mr Thornley-Taylor*) That is covering the duration of that part of the project across the whole of the site—which is fairly large—and for most of the time will be much more distant from BBFC.

5208. My final question relates to the theatre, which is our second solution: the acoustic cocoon. Can I first ask you whether you have experience of installing and designing such matters?

(*Mr Thornley-Taylor*) Yes, I have.

5209. I mentioned an EMI studio. Can you give the Committee some brief details about that?

(*Mr Thornley-Taylor*) Yes. This was a studio which was built inside a building in St John's Wood. The late Mickey Most, the musician, constructed what were then his own studios, RAK Studios, and we set about preserving not just the basic building but its windows to the outside world. We wanted to have a studio inside without in any way changing the appearance of the building but maximising the space within the limited size of the rooms there. We did it by a dry system, involving, particularly in the case of the first floor studio that we did—and there were three there—a floating floor. To minimise the thickness we used steel plates that were damped and sandwiched together, to get mass without too much thickness—and then, on the floating floor, to erect a metal frame to support double/triple plasterboard linings. It was done three times, as I say. It is the first-floor room that has the floating floor as well as the floating walls. It was acquired by EMI sometime later and I do not know who currently owns it. Mickey Most died recently. It is a very good example of the kind

---

**The Petition of the British Board of Film Classification**

---

of construction that I have in mind for the cocoon. That was an internal shorthand word we were using, and it seems to have got out. It is not a technical term, but it is quite a good way, in one word, of explaining what we are doing.

5210. In terms of the thickness of what is being termed the cocoon, Mr Kahn was looking at 200 to 400 mm. It has been suggested from our side something less than that. Can you give and explain your view to the Committee, please?

*(Mr Thornley-Taylor)* The beauty of the physics is that there is a very simple formula which enables you to trade cavity depth against weight per square metre, and you can go on raising the weight and reducing the cavity in direct proportion, limited only by the space you need for a framework to hold it up. There are proprietary metal stud systems, 100/150 is a common size, to which you need to add the thickness of the lining. But if you are adding steel plates sandwiched between plasterboard, that is of the order of 30 to 40 mm. I actually think it could be done in a bit less than 200, but that is a suitable assumption to make for present purposes.

5211. If this were the correct way forward, could this be installed in time to prevent any noise from the construction works impinging on the theatre?

*(Mr Thornley-Taylor)* The beauty of a dry system, no wet trades involved, would be that it could be designed and all the components pre-fabricated off site, so the installation would be merely the temporary removal of the seating and removal of any lining and temporary removal of the screen, installation of the pre-fabricated components and reinstating the decoration. And the internal finishes would be the same as they are at present. Mr Kahn was concerned about additional acoustic treatments that might be needed for the internal acoustics, but I am assuming that what they have at present is what would be acceptable in the future.

It would require good project management. Based on my experience I think the work could be done in about a four week period.

5212. **Mr Elvin:** To pull that together, can we look at Mr Kahn's report, A59, tab 2. At 7.5 on page 3, he says, "BBFC's current facilities are a compromise between idealistic and examining conditions ..." and he says, "acoustic conditions are just acceptable and marginal increases in noise levels can and do result in complaints from examiners."<sup>45</sup>

5213. **Mr Cameron:** Do you mind reading the first bit of that.

5214. **Mr Elvin:** The Committee can now see it: it is on the screen. I am trying to deal with this quickly. Mr Thornley-Taylor, at 9.13 page 6, in conjunction with the grout shaft, we see reference to: "... BBFC currently operate in less than ideal conditions ..." and I have already put to Mr Kahn the L90 and L10 noise levels on his own graphs which do not correspond with the NC standards he is putting forward.<sup>46</sup> If the acoustic cocoon were put in, will the situation be better, worse or the same than it is at present?

*(Mr Thornley-Taylor)* It will, because I noted—

5215. I am sorry, it will be what?

*(Mr Thornley-Taylor)* I am sorry: it will be better than it is at present. I am covering all possibilities! It will be better, because, as I note in my report, during my last survey I was quite conscious of the noise of footfalls in other parts of the building which do in fact intrude quite badly into the film theatre. All that kind of thing would be attenuated by the cocoon along with Crossrail related noise sources.

5216. **Mr Elvin:** Thank you very much. I have no more questions.

---

*Cross-examined by Mr Cameron*

5217. You do not purport to be an expert in the examination of films, do you?

*(Mr Thornley-Taylor)* I very rarely watch a film.

5218. I think the answer is that you do not purport to be such an expert.

*(Mr Thornley-Taylor)* I do not purport to be an expert.

5219. You have no particular expertise in the screen size required to carry out film examinations.

*(Mr Thornley-Taylor)* No.

5220. I will move on to the subject of noise. I obviously do not want to waste time on issues which are not in dispute, but I would like your confirmation on a number of matters, so that the Committee are clear that the record is straight. As far as airborne noise is concerned—and I will take this collectively—the airborne noise attributable to ground shaft construction and operation and the airborne noise associated with construction and demolition works at Fareham Street, so that is Soho Square side of the building and Dean Street side of the building—is such that you recommend noise insulation should be provided. Is that right?

*(Mr Thornley-Taylor)* Yes.

5221. That is both on the Soho Square frontage and the Dean Street frontage.

<sup>45</sup> Capita Symonds Response to Crossrail Report: BBFC Noise and Vibration, Para 7.5, March 2006 (WESTCC-14805-125).

<sup>46</sup> Capita Symonds Response to Crossrail Report: BBFC Noise and Vibration, Para 9.13, March 2006 (WESTCC-14805-125).

---

The Petition of the British Board of Film Classification

---

*(Mr Thornley-Taylor)* Yes.

5222. We can turn from airborne noise to groundborne noise. Do you have a copy of your report to hand with Mr Kahn's numbering on it?  
*(Mr Thornley-Taylor)* I have Mr Kahn's exhibit, tab 3, yes.

5223. You deal with groundborne demolition noise is concerned, you deal with that at 9.20.<sup>47</sup>  
*(Mr Thornley-Taylor)* Yes.

5224. You say: "It is currently predicted that ..." and then you give a prediction. Would the Committee be right in understanding, if they go back to 3.9 and 3.10, that some of these predictions and those particular predictions are based on what you describe at 3.10 as "using expert judgment and experience".<sup>48</sup>  
*(Mr Thornley-Taylor)* Yes.

5225. They are not numerical calculations but based upon your judgment. Is that right?  
*(Mr Thornley-Taylor)* The groundborne demolition noise assessment is based on expert judgment and experience.

5226. It is your judgment at 9.20 that the adverse effect will not be limited to the basement film theatre but may extend to the higher floors during the course of demolition, and that is the one week period you spoke to in examination-in-chief, is that right?  
*(Mr Thornley-Taylor)* Yes.

5227. Could we go to 9.23, please: "Groundborne noise from work in the basement of 2-4 Dean Street may also cause intrusion in the upper floors of 3 Soho Square/7 Dean Street to an extent that can be established by the on-site tests described above." This is under construction rather than demolition. Is that additional to the demolition?<sup>49</sup>  
*(Mr Thornley-Taylor)* This is the work that is necessary in the basement of 2-4 Dean Street preparatory to grouting for the construction of the other escalator further north than BBFC. Because that will mean breaking out the existing concrete floors in 2-4 Dean Street, depending on the way the breaking out is done, it is necessary to describe the potential effect in these words. On previous Crossrail projects in the early 1990s, we had an analogous problem in another building and did in fact set about their floor with various forms of breaking equipment to measure the comparative effect of different methods in terms of received groundborne noise levels in sensitive rooms, and we did find there is a very wide variety of effects from

different methods of cutting and breaking. I am recommending here that the same should be done, so that we can establish that if you use diamond sawing it does not have an effect on BBFC; if you use a Kanga hammer it does. There are many ways of doing it and this particular source is much more capable of mitigation than the previous one we were considering at 9.20.

5228. The answer to my question is that it is additional to the source mentioned at 9.20.  
*(Mr Thornley-Taylor)* It is, yes.

5229. At the moment, it may also cause intrusion to the upper floors. If it did, it would be in addition to the one week period that you identified in examination-in-chief. Is that right?  
*(Mr Thornley-Taylor)* If it did, it would be. I do not think it will be because of the mitigation options I have described.

5230. Have you considered over how long a period such disruption would occur? We know how long the work will take place there because you have given us a period in 9.21 of three to six months.  
*(Mr Thornley-Taylor)* Well, my discussions with engineers since writing this report indicate that the need to use percussive methods is minimal. Even if it should be necessary, the duration would be of the same kind of order.

5231. So of the undertakings or the elements of the matters that you say you will carry out, can we add to those matters that, when carrying out work to 2-4 Dean Street, the sawing method which you just described will be used?  
*(Mr Thornley-Taylor)* Well, it all goes back to the fundamental approach to construction noise control which I have addressed to the Committee in evidence about before, the section 61 process, which brings about the use of the best practicable means, and the choice of the different methods of cutting and breaking that I have been describing most certainly fall within that test of best practicable means. It is not really necessary to add any further assurance or undertaking.

5232. But if undue disturbance is to be avoided, then such methods will have to be adopted, whether you are prepared to give a specific undertaking or not?  
*(Mr Thornley-Taylor)* Well, the undertaking is given generically through the approach using section 61 and it will be necessary to use the best practicable means.

5233. Can we then move on to construction of the escalator shaft. If we go to your 9.25, the prediction there is that during construction of the escalator shaft, the likely level of groundborne noise during excavation is 55dBL<sub>Amax</sub> and, as you say, this would be clearly intrusive in the basement film

<sup>47</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Groundborne Demolition Noise, Para 9.20 (WESTTCC-14805-086).

<sup>48</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Construction of the Escalator Shafts, Paras 3.9 to 3.10 (WESTTCC-14805-070).

<sup>49</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Work in the Basement of 2-4 Dean Street, Para 9.23 (WESTTCC-14805-086).

---

The Petition of the British Board of Film Classification

---

theatre over a period of six months and would exceed your criterion and be wholly unacceptable in the basement film theatre. Is that right?<sup>50</sup>

*(Mr Thornley-Taylor)* Yes.

5234. What we do about it we will come on to in a moment. The construction and operation of the grout shafts in Soho Square, if we go to 9.28, you say, “The potential for groundborne noise during construction of the grout shafts is of the same order as that for the grouting work in the basement of 2-4 Dean Street”, and that again gives rise to elevated and unacceptable noise levels in the basement film theatre.<sup>51</sup> Is that right?

*(Mr Thornley-Taylor)* Purely the use of the breaking through of the paving surface, but the grouting itself is a comparatively quiet operation and does not give rise to the levels that were described for the breaking out of concrete paving before the grout shaft is sunk or the grouting begins.

5235. During that part of the construction activity, there will be unacceptably elevated levels of noise?

*(Mr Thornley-Taylor)* It will be exactly the same as any other utility breaking the road surface outside, which I am sure happens from time to time.

5236. As far as operational noise is concerned, this is at 9.34, unless mitigation measures are taken, the operation of the southern bank of escalators will lead to an ‘exceedence’ above the standard that you consider appropriate?<sup>52</sup>

*(Mr Thornley-Taylor)* Yes.

5237. As a result of that analysis, there is no dispute between us that solutions must be found. Is that right?

*(Mr Thornley-Taylor)* That is right.

5238. As far as your suggestions are concerned, in this report you make a number of suggestions about the sequence of works, stopping of work and the like, but they have now all been superseded by the suggestion of an isolation shell. Is that right?

*(Mr Thornley-Taylor)* Yes. ‘Shell’ is not quite the word, it is a floating foundation for the escalator.

5239. I think I called it an ‘isolation chamber’.

*(Mr Thornley-Taylor)* It does not enclose the escalator, it is a floating foundation for the escalator truss.

5240. I think we are talking at cross purposes. I am not asking about noise during the operation of the railway, but during construction, and the solution that you put forward in your original report for

construction noise was that work should stop either at BBFC or work by the contractor should stop and that is superseded by the offer of the isolation shell or whatever you like to call it. Is that right?

*(Mr Thornley-Taylor)* It is certainly true that the isolation shell is offered. It does not mean to say that the other possibilities are not still available.

5241. Because, as far as the escalator isolation is concerned, that may or may not solve the problem during the operation of the railway, but it is not going to mitigate the effects of construction, is it?

*(Mr Thornley-Taylor)* No, it is not.

5242. These alternative arrangements that are offered, if you did not go for the isolation shell, would be the temporary use of alternative viewing facilities and that would certainly have to apply during the construction of the escalator shaft, would it not?

*(Mr Thornley-Taylor)* It would if there are the effects I have reported here, and I have mentioned that they make a very pessimistic assumption about the necessity for the grouting in that location.

5243. But it is six months of ‘exceedencies’ which you have already told the Committee would be unacceptable for the operation of the theatre?

*(Mr Thornley-Taylor)* That is right.

5244. As far as the operational noise is concerned while the railway is running, particularly from the escalator, which you deal with at 9.35, this approach of mounting the escalator on blocks, you say that it has not been done for an escalator before, but you have done it for other engineering exercises, such as pumps and printing machinery.<sup>53</sup>

*(Mr Thornley-Taylor)* Yes. I have not done it for escalators before. I cannot speak for everyone installing escalators, but I have not seen one.

5245. We have this helpful diagram up again!<sup>54</sup> This is the current state of Crossrail’s examination of this problem, is it not?

*(Mr Thornley-Taylor)* We have advanced a little from that.

5246. Have you? There is another one, is there?

*(Mr Thornley-Taylor)* This is a very graphic, conceptual indication of the physical principles involved.

5247. Seriously though, there is no report that you can put before the Committee to demonstrate to them that this solution will be effective, is there?

*(Mr Thornley-Taylor)* There is not. I am slightly baffled by Mr Kahn’s reaction to this because, as I said earlier, any handbook you reach for on the

---

<sup>50</sup> Committee Ref: A59, Mr Thornley-Taylor’s Report—Construction of the escalator shaft beneath 3 Soho Square/7 Dean Street, Para 9.25 (WESTTCC-14805-087).

<sup>51</sup> Committee Ref: A59, Mr Thornley-Taylor’s Report—The construction and operation of grout shafts in Soho Square, Para 9.28 (WESTTCC-14805-087).

<sup>52</sup> Committee Ref: A59, Mr Thornley-Taylor’s Report—Groundborne noise and vibration from the operation of the escalators, Para 9.34 (WESTTCC-14805-088).

<sup>53</sup> Committee Ref: A59, Mr Thornley-Taylor’s Report—Groundborne noise and vibration from the operation of the escalators, Para 9.35 (WESTTCC-14805-088).

<sup>54</sup> Crossrail Ref: P62, Rough sketch of the proposed specially constructed and insulated escalator (SCN20060323-006).

---

The Petition of the British Board of Film Classification

---

shelf will show you all about inertia blocks for machinery bases. It is item number one in vibration isolation studies.

5248. What you say in your report is that potential mitigation would be the provision of vibration isolation for the escalator motors running, although escalators are highly sensitive to misalignment and flexibility in plant-mounting may increase the risk of misalignment, but, subject to an engineering study, once detailed information is available, it is likely that sufficient noise reduction can be achieved. Now, if I am the BBFC, who are told by you that there is going to be an exceedence, I am told here that the escalator is highly sensitive to misalignment and it is only subject to an engineering study that it is likely, you say, that sufficient noise reduction can be achieved. Now, we have not got the engineering study, have we?

*(Mr Thornley-Taylor)* We have the benefit of my report of the discussions we have had with engineers and in particular an engineer from an escalator manufacturer who has brought me up to date. Whereas it used to be true that the truss on an escalator, if supported, was very sensitive to misalignment, we now have adjustable trusses and it is no longer a problem. At that same session, we were able to establish that the diameter of the escalator shaft is big enough to make it possible to put the floating foundation in that I have been describing, so admittedly we are only relying on my report of those discussions, but I am content that we can do the approach that I have been describing.

5249. Your report of those discussions, but nothing in writing that you would be good enough to supply to BBFC?

*(Mr Thornley-Taylor)* I did explain to the BBFC at our last meeting that in the time available it was not possible to produce the standard of report which would be needed to be more helpful than the verbal assurances which I am able to give.

5250. What happens, and what reassurance can BBFC have, if your optimism is not borne out and either during the course of the design it proves impossible to achieve the desired standard or, worse still, the escalator is in place and the desired standard is not achieved? It is then too late, is it not?

*(Mr Thornley-Taylor)* If the desired standard is not achieved, there will have been an error of construction and it will have to be rectified. With a matter of this kind, it will be explicitly set out in the specifications against which the contractor bids and which he contracts to install.

5251. So will you go so far as to indicate to the Committee that, and I am not trespassing into MC levels, if the level that you indicate is appropriate of 25dBLAmax is not achieved in the film theatre and if other measures have been taken, you will give an assurance that the escalator will be rectified and, if necessary, rebuilt?

*(Mr Thornley-Taylor)* The Secretary of State is the Promoter and I, I am pleased to say, am not the Secretary of State, but I can say from my experience of contract administration that if a requirement is specified in the contract and a design error occurs, it is necessary to rectify the error to achieve the specified performance.

5252. But would you recommend to the Secretary of State that he give BBFC that assurance?

*(Mr Thornley-Taylor)* I recommend to the Secretary of State that he provides for the setting up of contracts in a way which secures the performance objectives which we need.

5253. So the answer is no, you would not give that specific recommendation?

*(Mr Thornley-Taylor)* I would be trespassing outside my field if I said more than I have said.

5254. As far as the cocoon is concerned, which I think is your internal word, the example that you gave is of a studio in St John's Wood where you have had experience. When was that work carried out?

*(Mr Thornley-Taylor)* It was in the 1980s.

5255. What you are proposing here, the cocoon, is in effect, in my rather crude terms, a box the shape of the room mounted on some kind of springs, though that is probably too crude a word for it, is it?

*(Mr Thornley-Taylor)* An ideal word. They will not necessarily be helical steel springs, but they will perform the same.

5256. But that is the effect of it, if I have understood the cocoon correctly?

*(Mr Thornley-Taylor)* Yes.

5257. And the precise dimensions of the cocoon cannot be known because nobody has worked it out. Is that right?

*(Mr Thornley-Taylor)* I have advised, and we have not had a serious challenge to the assumption, that we should work on 200mm being lost from the walls and ceiling, and it can be less for the floor.

5258. Now, that solution, if it was possible in terms of operation of the film theatre, of which you are not expert, it does not deal with adverse conditions on upper floors and in effect if the effect became so great as to amount to an exceedence, which it will do for a period, people would have to move out of the upper floors for that period. Is that right?

*(Mr Thornley-Taylor)* If noise levels reach unacceptable levels, they would have to move out, yes.

5259. What I want to ask you about now is the BBFC alternative. The BBFC alternative is that they should be granted an option to require the Promoter to acquire the premises. Now, I do not ask you, because you are not in a position, to comment on issues of cost and the like, but I would

---

**The Petition of the British Board of Film Classification**

---

like to ask you this: if the building was acquired by the Promoter and sold on to an office user, there would be no need to install specialist noise mitigation measures to accommodate specialised uses? Is that right?

*(Mr Thornley-Taylor)* I think the same issues would arise for airborne noise. The basement, we assume, would not be a film theatre and the low noise levels we have been canvassing from whatever units we choose would not then arise, but the building already has, what BBFC call, 'bullet-proof glass' on the Soho Square side and also the Dean Street side of the ground floor and the same considerations which have led to my recommendations about sound insulation of the offices, I think, would still be there.

5260. So, if that is the case, there would be two consequences from that. The first consequence is that any undertaking given to BBFC in relation to airborne noise insulation should not be personal to BBFC because it would apply to future users and it would be necessary for future users. Is that right?

*(Mr Thornley-Taylor)* I do not think I am the person to talk to the nature of the undertakings and who the beneficiaries are; that is outside my field.

5261. In terms of your noise field, you have just said to the Committee that an office user would require the same amount of noise insulation from airborne noise. Is that right?

*(Mr Thornley-Taylor)* I can best answer the question by relating what happened on the Jubilee Line extension where a building was affected, an artists' studio, and JLE acquired the building and they used it themselves without installing any mitigation. I am not saying that Crossrail would move into 3 Soho Square, but all things are possible.

5262. Well, there is a thought! You have just come up with the solution!

*(Mr Thornley-Taylor)* We could even watch films in the basement!

5263. As far as the work to the basement is concerned, if an occupier was an office user, as you have pointed out, it would not be necessary to install the cocoon in the basement and, as a result, the scope of works necessary would be reduced if the BBFC moved out. Do you agree?

*(Mr Thornley-Taylor)* It would not be necessary to achieve the objectives we currently have in front of us for a film theatre in the basement if another occupier did not have a film theatre in the basement.

5264. So if one was comparing, just from a noise point of view, the amount of noise work that is concerned, the costs of relocation of BBFC, which is not a matter for you, could be offset no doubt in part against the fact that it would not be necessary to install the cocoon in the basement. Do you agree?

*(Mr Thornley-Taylor)* We could probably leave the escalators installed in a normal unisolated fashion. The effects that I have described about noise from the breaking out of the floor in 2-4 Dean Street would remain an issue and we would still have the best practicable means necessity and there would still be the same requirement to minimise disturbance not only to BBFC, but to all other properties in the vicinity of that particular piece of work. That would be unaffected.

5265. Then a similar question to the one Mr Elvin asked of Mr Johnson: have you considered the additional cost to Crossrail of isolating the escalator?

*(Mr Thornley-Taylor)* I have made mental estimates of what, from my experience, I think it would be.

5266. Are those firm figures, the Crossrail figures, or merely mental figures that you would like to keep in your head?

*(Mr Thornley-Taylor)* Crossrail have obviously considered cost matters, as Mr Elvin put questions to Mr Kahn and Mr Johnson, and I would ask that if the Committee would like more information on costs, we can put in a note or whatever is the appropriate way of doing that.

5267. I am grateful for that, but I would ask of course, and I am sure it would be, that we would be given copies of that note and obviously have a chance to see it and put our own note in if we so wished. The last point I would like to ask you about is this: that all the questions I have put and answers obtained so far have been on the basis of your own analysis, and in your own analysis you have judged noise impact on the basement film theatre against your chosen criterion of 25dBLAmax. Is that right?

*(Mr Thornley-Taylor)* It is a little more than my chosen criterion; it is a figure in IPD10 for spaces of this kind throughout the Crossrail project.

5268. The Crossrail-chosen figure rather than yours.

*(Mr Thornley-Taylor)* No, I have been Crossrail's noise adviser since the project was first conceived, but it has been adopted by Crossrail as a system-wide assessment criterion which is not specific to BBFC.

5269. So it is your figure, so I think I was right in the first place. Let us go back to 7.2.2 of your report where we can see that the 25dBLAmax appears for theatres.<sup>55</sup> What you are saying is that there is a problem which needs a solution, applying your own criterion, before the Committee even have to consider the MC point. Is that right?

---

<sup>55</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Assessment Criteria, Para 7.2.2 (WESTTCC-14805-078).

---

 The Petition of the British Board of Film Classification
 

---

*(Mr Thornley-Taylor)* Yes.

5270. If that is the case, I probably do not need to spend time on the MC point; the Committee have probably heard quite enough about that. As far as 7.2.3 is concerned, you note that the consensus is that background noise levels of the order of NR25 are desirable for film theatres, and NR of course is a different method of assessment from MC, as I understand it, of a similar approach, but not the same, and you are not ruling out that form of approach, are you, because you refer to the NR approach yourself?<sup>56</sup>

*(Mr Thornley-Taylor)* I am ruling it out as an approach to use for groundborne noise from the passage of trains for the reasons I explained earlier on.

5271. Thank you very much, Mr Thornley-Taylor. I think I will leave it at that.  
Re-examined by Mr Elvin

5272. **Mr Elvin:** I think there is just one point I want to make clear. Crossrail is taking this approach to assisting BBFC with the perceived, and indeed assessed, likely significant effects of noise and vibration on the premises. Has the significance of the statutory role of BBFC had a role to play in the approach that Crossrail has taken?

*(Mr Thornley-Taylor)* It certainly has. Nevertheless, it is the actual uses of buildings that we look at when determining what are appropriate design criteria for noise levels.

5273. Thank you. Do the Committee have any questions?

5274. **Mr Binley:** No, thank you.

5275. **Mr Elvin:** Sir, I offer you Mr Berryman, if you want Mr Berryman to give you evidence about the feasibility of building the escalator. Mr Berryman is quite happy to explain that to you if you feel it is necessary.

5276. **Mr Binley:** I think my colleagues feel that they are well-equipped to handle that particular problem.

5277. **Mr Elvin:** I just want to make it clear that Mr Berryman is happy to confirm the points if you need that.

5278. **Mr Binley:** No, thank you. Would you like to proceed with your final statement.

5279. **Mr Elvin:** Yes, I would, sir, if that is convenient. Sir, BBFC has a statutory function to discharge with respect to the classification of films, as you know, and these are clearly important matters. We accept that Crossrail would have a significant effect upon that function and, therefore,

we have agreed measures which deal with airborne noise to the upper parts of the premises and to deal with dust. The remaining issue effectively of short-term impacts from demolition, which will last no more than a week or so, is the question of the basement theatre which is part of BBFC's statutory function.

5280. We accept that if BBFC remain in these premises, some mitigation is required and, as the Committee know, we have put forward two means of dealing with this. One is the escalator solution which, for the reasons Mr Thornley-Taylor explained to you, is entirely feasible, and the second is what we have called the 'acoustic cocoon' within the theatre itself. This is against a background where it is acknowledged that the theatre and the premises are less than ideal. You have seen Mr Kahn's own report, but, more than that, we know that BBFC are looking actively at options of either taking additional premises or moving. I have to say to the Committee that BBFC have been less than open with regard to their plans for the premises. You will recall my putting it to Mr Johnson this morning, and his acceptance, that until we saw the minutes yesterday, we had no formal indication from BBFC that they were even considering taking other premises, and he told you that it was completely unclear as to when that was going to happen. Yet, when we saw the minutes that I asked to see later on in the morning, it was clear that they are negotiating for new premises even as we speak, so BBFC have not exactly put their cards on the table either to Crossrail or to the Committee with regard to its plans for the future. We say there must at least be a high degree of risk that BBFC want to move and Mr Johnson's suggestion, "Well, now we're negotiating for a bit of extra office space, we may not have to", does not actually answer the point because if you go back to the earlier minutes in December, the point that is being made is that, "It might be better, if we are having to take a bit of office space here and a bit of office space there, ultimately to amalgamate all of those in one place". You already heard from Mr Johnson this morning that the BBFC would prefer to have a single set of premises which are secure, which can be policed and in which all their activities can take place.

5281. There must, therefore, be a clear risk, given the level of activity that is taking place at the moment, that BBFC will want to go and we are, therefore, very concerned as to BBFC's suggestion that we should be forced to purchase them for two reasons. Firstly, we think it is disproportionate because clearly we are proposing mitigation measures which should be entirely effective and cost a few hundred thousand pounds as opposed to acquiring a property in Soho on a 125-year lease which is clearly worth millions of pounds, plus paying the costs of disrupting the business and moving BBFC to other premises. Clearly, the costs of mitigation versus the BBFC solution are a difference in magnitude, millions as opposed to hundreds of thousands perhaps. We say in the

<sup>56</sup> Committee Ref: A59, Mr Thornley-Taylor's Report—Assessment Criteria, Para 7.2.3 (WESTTCC-14805-078).

---

**The Petition of the British Board of Film Classification**

---

context, given that there is an adequate solution, one of two that remain open to BBFC to accept at any time, the disproportionate nature of BBFC's solution we suggest ought to lead the Committee to reject the view that the Secretary of State should be forced to acquire or to give them an option.

5282. If one asks oneself the question, what incentive will there be on the BBFC to expend the money which they derive from the private sector in carrying out the film classifications and finding premises which clearly they need, as opposed to sitting tight, waiting and getting the benefit of public money to be spent on an option which they want, there is no incentive in the arrangements which BBFC suggest which would force them to get a move on and avoid having to expend public money. We are concerned from that point of view.

5283. However, we put forward two solutions, both of which have been explained to you by Mr Thornley-Taylor as being perfectly satisfactory in achieving the noise mitigation measures. So far as the cocoon is concerned, BBFC, given the option of dealing with it, did not field a witness who knew anything much about the minimum distances to screens, what can be done with regard to perhaps moving the screen or adjusting its dimensions. We are not talking about the physical area in which the screen is being viewed but the installation in which it is located.

5284. From the fact that there is scope to take out at least eight seats because they have more seats than the maximum needed—38 seats and they only need 29 at most—there is scope to move the screen further into the premises because the front row of seats will be taken out. There is some scope for adjustment within the theatre. The suggestion therefore that this ought to be rejected in favour of the acquisition of the property at many millions of pounds, in our submission, is disproportionate.

5285. We submit, for the reasons Mr Thornley-Taylor has put forward which ought to be preferred over Mr Kahn who chose to rely for reasons which we do not understand on an inapplicable standard to take an approach of extreme caution which was not warranted to the other methods, that provides the Committee with sufficient assurance that the Secretary of State is willing to take reasonable steps to secure the statutory function of BBFC, not to underwrite at the cost of the public purse BBFC's own plans to move.

5286. **Mr Binley:** I do not wish to prejudice any issue whatsoever but the fact that you will expend millions of pounds you made a point of. Are not those millions recoverable by simply selling on the building to other users who do not need the particular requirements of the Board?

5287. **Mr Elvin:** Can I make two points in respect of that? The Committee, who are very familiar with the business sector, will be aware of this: firstly, you

have the financing costs. You have to carry the capital costs of the building. Secondly, while the works are going on, the chances of reletting the premises may be severely reduced. It may be possible ultimately to resell the premises but you are effectively gambling public money and financing from public sources against the length of time that you would have to hold on to the property while the western ticket hall was being excavated underneath.

5288. Do not forget, sir, what you have seen from the latest minute from the Property Steering Group is that there are plenty of premises in the vicinity. We do not know what the property market is like. I understand the point but you will similarly understand that it is not simply a question of taking it and reselling it straight on.

5289. **Mr Binley:** I am grateful.

5290. **Mr Cameron:** I am going to make my submissions under four headings. First, the extent of the dispute. Then, the BBFC solution. Then, the promoter's solutions and my conclusion.

5291. First, the extent of the dispute. There is no dispute that both the construction and operation of Crossrail will cause unacceptable noise in the BBFC premises. That is the starting point. The dispute turns on the solution.

5292. I turn secondly to the BBFC solution. I have four points under this heading. First, what is the solution? The solution is that the Promoter should be required to purchase the premises if BBFC request him to do so. The Compensation Code would apply and the compensation payable would include compensation for disturbance—i.e., relocation. The second point is the solution is simple and protection against adverse consequences is guaranteed.

5293. The third point is that it would not be what Mr Elvin calls a disproportionate cost. The reason for that is that the elements of compensation would come under two main headings. One, the value of the land and, two, the costs of relocation. The value of the land would be recovered, as you pointed out, sir, just now by selling the building on. Mr Elvin's many millions for acquiring the lease would not be irrecoverable. It is unattractive in the extreme for a promoter who is going to cause severe disruption to say, "We could not sell it on because of the disruption that we are causing." It is a serious point. The Petitioner is meant to suffer that disruption.

5294. Secondly, the disturbance element. Yes, they would have to pay for relocation. They would not get that money back but what they would save is the cost of the escalator works. We do not know how much they would be. Mr Elvin has bandied about certain figures for cost of works to our

---

The Petition of the British Board of Film Classification

---

building. I am not going to indulge in the same bandying about of figures because you do not have the evidence.

5295. On the escalator, Mr Taylor said that one of the benefits of moving BBFC is they probably would not have to do the works to the escalator. They would save that. They would save the cost of any isolation shell and that could be offset against the relocation. The millions suddenly disappear and there is nothing disproportionate about balancing out not having to isolate the escalator, not having to provide a box and paying for the relocation of the people you are causing problems for.

5296. The fourth sub-point under my second point is, yes, BBFC are considering a move but the additional space they have just acquired is for different purposes and, if they acquire additional space, they will be able to stay in their main building. The fact that BBFC are looking for other premises is a red herring because BBFC are unsure about it. They have disclosed the minutes. There is not a lack of frankness. They have given you the minutes which show exactly what their position is. Where they were asked for two further minutes, they produced them.

5297. They are unsure about the move and no doubt they are unsure about whether Crossrail will happen at the same time, so they are going to have to make up their minds. If they move, Crossrail are in a good position because they do not have to do anything. The BBFC solution is practical, simple and it is not disproportionate in cost.

5298. My third heading is the Promoter's solutions. BBFC agree on dust and airborne that the adverse effects from dust and airborne noise could be mitigated against by the proposals now put forward yesterday or today, tier three mitigation for dust and noise insulation at the back and front of the premises.

5299. As far as their solution for groundborne noise is concerned, it is twofold. It is either the isolation shell or the isolation of the escalator. As far as the isolation shell is concerned, that is unacceptable to BBFC. BBFC are the only people here who have given you evidence on the conditions required for a film screen. They had the offer of the cocoon yesterday morning. Mr Johnson has

responded immediately. It is not appropriate to say they did not provide a witness on those matters. They did. Mr Johnson.

5300. On the other side of the coin, the Promoter provided no witness. He only witness you have on whether it would be possible to have a smaller screen is Mr Johnson. He says that it would not be. He is an expert in that matter. What that means is that the isolation cocoon is an unacceptable solution because it is impractical for BBFC carrying out their statutory functions. If it is impractical, it is not an appropriate solution.

5301. As far as the escalator isolation is concerned, that will not help for construction noise for the six month period of construction of the escalator shaft so it is fraught with problems. No engineering report has been put before you nor any definite solution. Mr Taylor was not prepared to say to you, "If it does not work, we will not operate the escalator." They are inadequate solutions.

5302. My fourth area is my conclusion. It is the Promoter who seeks powers to introduce a significant noise generating activity. This is not a case where the Promoter says that there will not be an effect. The Promoter accepts that if you, Parliament, grant him the powers there will be an adverse effect on BBFC. The Promoter should be prepared to take appropriate action to avoid the consequence of the exercise of those powers. The least he should be required to do is to agree to acquire the BBFC premises and to pay compensation in accordance with the statutory code.

5303. There is a reasonable position for BBFC who say, "Yes. Compulsorily acquire our premises or give us the option to require you to do so. If we have already moved, you will not have to."

5304. Those are my submissions. I do not know whether I can assist on any questions?

5305. **Mr Binley:** No. We are most grateful.

5306. **Mr Elvin:** Would the Committee like a brief note on costs?

5307. **Mr Binley:** I think that would be helpful.

5308. **Mr Elvin:** We will try and provide it before the Committee rises for the Easter recess.

---

---

**The Petition of Grand Central Sound Studios**

---

The Petition of Grand Central Sound Studios.

Sharpe Pritchard appeared as Agent.

Mr Clive Newberry, QC, appeared on behalf of the Petitioner.

5309. **Mr Binley:** We can now move on to Grant Central Sound Studios.

5310. **Mr Taylor:** I have had some discussions with Mr Newberry outside because we were concerned about the timing in relation to this Petition. If we were to start it today, we would not complete it today and there are difficulties in terms of the availability of counsel and witnesses next week. We were wondering whether the Committee might stand this Petition out so that it can be fixed for a date to be agreed in the future.

5311. **Mr Binley:** We would be very keen to utilise the time we have and I am sure that your clients might be keen to do that too. Do you think that at least we could proceed with opening statements at this stage?

5312. **Mr Taylor:** We could. The other alternative would be to proceed to the third petition which is Antiques Hypermarket.

5313. **Mr Binley:** We have agreed with the third Petitioner that we would put his matter back. He needs to seek additional advice having seen the professionalism of your colleagues. Consequently, we are not in a position to proceed in that respect or that is what we would have done. We would be grateful if we could have the opening statements.

5314. **Mr Taylor:** Grant Central Sound Studios Limited is the leaseholder of part of 51 to 53 Great Marlborough Street. The property is located above the proposed westbound route about 250 metres west of the proposed Tottenham Court Road Station. You can see that on the plan in front of you.<sup>57</sup> The building is coloured in a beige hue. It is currently occupied and used as the name suggests as a sound recording studio. That was all I was going to say in opening. The issues are particularly related to groundborne noise and you will be pleased to hear concern the application of the NC rating standard.

5315. **Mr Newberry:** This does concern a sound recording studio and, as you see from the plan, the line of the tunnel goes directly under the sound recording studios. It is not just a sound recording studio; it is a world class sound recording studio and indeed this part of the area is a centre of excellence on an international scale. I am going to ask you, when you are looking at the evidence, to bear that in mind.

5316. The company with which you are concerned has a range of activities taking place within its studio but one of the areas concerns advertisements shown at the cinema and I am looking forward to Mr Elvin's dissertation on the adverts he watches as well as the films that he watches.

5317. That particular area of expertise does involve something that you will hear about in due course called a Dolby licence. One of your colleagues who did a runner earlier on mentioned that, you may recall. One of the interesting aspects of the Dolby licence is that, quite independently of the NC aspect that you have heard about, Dolby specify levels that accord with the NC as part of their licence. If you do not comply with their requirements you do not get the licence and if you do not get the licence you do not get the work. That licence is of international significance. Although we hope not to go into too much of the standards as such, that is the important ramification of the NC standard so far as this case is concerned. We will be calling in due course Mr Bell who builds these studios both in London and internationally. He has built almost half the studios of this standard in Soho, and both nationally and internationally the standard that he has to build his studios to is the NC standard. When we come to it, that is the context in which I shall be asking you to look at that particular standard.

5318. So far as what we require is concerned, it is set out in our Petition but perhaps I can just outline what we are concerned about. Obviously we need to be assured during the construction of the tunnel that the level of sound that we operate in now continues because what we will be telling you in due course is that, if you get the imposition of what I will call foreign sound within the studio, it is not something that can be rubbed out. It infects the work that they are carrying out and it is ruined. The notion that one can have interspersed activity of Crossrail while they are building this and it does not matter if they have a day or so of causing this groundborne noise does not apply because the piece of work concerned is ruined. You will be told about that. Obviously, after Crossrail is constructed, the same applies. We cannot be put in a situation whereby groundborne noise levels entering the studio are adversely affected.

5319. I gather that your Committee has been to the Petitioners' premises. I do not know whether you have had the opportunity of visiting what I call a world class sound recording studio. If you have not, I extend an invitation and you may find it instructive.

5320. **Mr Binley:** We will consider that and let you know the next time we meet.

---

<sup>57</sup> Crossrail Ref: P67, Grand Central Studios Ltd, 51-53 Great Marlborough Street (Parcel No. 493) (WESTCC-9303-001).

---

**The Petition of Grand Central Sound Studios**

---

5321. **Mr Newberry:** We are asking that the Bill should include fairly extensive consultation with us in terms of the works that have to be done. There is going to be a dispute between ourselves and Mr Taylor as to the level that should be adopted but the cure for the problem is in the work that has to be done to the railway itself, as to the type of rail, the type of clips etc., whether it is a single welded rail and so forth.

5322. We would like an undertaking that work of the highest quality in terms of effecting the sound reductions should be carried out in these special circumstances because this is a use which cannot tolerate the adverse impact of noise.

5323. Unless we can get an adequate assurance that the work will be done to a level which guarantees us the noise climate we are currently living and working in, it is not a situation that can be retrospectively sorted out, we do not think. If however things do go wrong—and we live in a world where things can go wrong—the issue then arises as to whether or not Crossrail will sort out the problem they have created, as to whether or not works to the tunnel or the rails can be rectified or alternatively whether or not work can be done within the studios if the problem cannot be cured below ground. We will need to have a debate on whether or not that can arise.

5324. **Mr Binley:** This document we have just been handed will be classified A63.<sup>58</sup>

5325. **Mr Newberry:** That is a picture of the outside of the studios and in due course we will be taking you on a tour inside the studios. In short, we hope that the Promoters, particularly in the inevitable adjournment that is going to occur, will look at the impact upon our studios against the background that I have set out of the extreme sensitivity of the use which is taking place. You will hear from Mr Taylor and Mr Bell that in the real world the levels

which they are going to talk about are the industry levels. It does not matter whether it comes with a British Standard. It does not matter what you call it. That is how these premises are built and if they are not built to that level you do not get the business. It is as simple as that. You lose your status. If this was to be applied throughout studios in the United Kingdom, that you did not build them, you would not have a centre of world excellence in Soho for sound recording studios. It is as stark as that. We do need assurance that the current noise climate that we are working in is retained and not worsening.

5326. That is all I wanted to say in opening.

5327. **Mr Binley:** Thank you. Might I ask Mr Elvin, I fear in vain, whether he is willing to give that assurance?

5328. **Mr Elvin:** We will certainly negotiate. Can I draw Mr Newberry's attention and the Committee's to the fact that with regard to some of the methods that he has just referred to—for example, continuously welded rail—in information paper D10, paragraph 2.8, that is the assumption for the construction of the scheme and there are a number of matters in there which we are already committed to doing.<sup>59</sup>

5329. **Mr Newberry:** I do not think that quite answers your question.

5330. **Mr Elvin:** Perhaps Mr Newberry will leave the interrogation to the Committee.

5331. **Mr Binley:** I understand the position.

5332. **Mr Elvin:** That is not to say we will not continue to have discussions with the Petitioner during the adjournment.

5333. **Mr Binley:** We are delighted to hear that.

---

**Mr Ivor Taylor, Sworn**

*Examined by Mr Newberry*

5334. You are Ivor Taylor. Can you tell us what your position is within the company?

**(Mr Taylor)** I am one of the founders and shareholders for Grant Central Studios. My current role in the company is technical and finance director. I have been involved in the design of the studios, both in these premises and the previous premises about 200 metres away, at all levels from the very beginning of finding the property to seeking the permission and the licensing.

5335. Tell us a little bit about 51 to 53 Great Marlborough Street, when you acquired it and so on. What sort of work have you had carried out within it?

**(Mr Taylor)** Acquiring the facility was very difficult. It is very hard to find buildings in Soho that have the necessary ceiling height for a studio with isolated shells. Because isolated shells can be very heavy, there are also structural issues. There was a period of about three years searching for the building and a couple of years negotiating and starting the build. It was a very long process. The building when we acquired it was unoccupied. We occupied the basement and the ground floor. We completely gutted the basement and the ground floor. In the basement we installed three studios,

---

<sup>58</sup> Committee Ref: A63, Grand Central Studios Ltd (WESTCC-9305-001).

<sup>59</sup> Crossrail Ref: P3, Information Paper D10, Groundborne Noise and Vibration, Para 2.8 (LINEWD-IPD10-003).

---

 The Petition of Grand Central Sound Studios
 

---

two of which are Dolby and one of which is a non-Dolby studio. On the ground floor we introduced three studios, again two of which are Dolby studios. One is a stereo studio and one of those studios on the ground floor is classed as a Dolby premier studio, a new classification that came in approximately two years ago for Dolby. All of the studios were built to the noise and performance criteria but we have only gone for certification at the high level of certificate for that one studio. As far as I am aware, it is the first one of two or three currently in Soho.

5336. You mentioned Dolby. Can you explain to the Committee the significance of that term? Who are Dolby? What do they do? What do they regulate? Can you go on to explain why you need to have a Dolby licence?

*(Mr Taylor)* Dolby were originally a British company. Now they are floated on the New York Stock Exchange. Ray Dolby built his background and noise control reduction techniques for tape recorders. He did some very pioneering work in cinema in improving the sound quality for cinema sound. Dolby was the first company to try and set criteria to improve the sound in the cinema. That has led to Dolby being the only certification authority of significance to certify the sound aspect of films. They also cover some of the quality of picture aspects of films as being suitable for delivery worldwide. This is not the creative content or the suitability as the BBFC look at it. It is whether the picture looks good; is the picture of high quality; does the sound work correctly; is the sound properly delivered; can you hear the speech; when the sound goes around, does it go around the right way; is it too loud; is it too quiet. Dolby have become the *de facto* standard worldwide for that on behalf of virtually every single territory, as far as I am aware, where there is control of distributive cinema rights. You can find Dolby when you go to the cinema, you can find Dolby on your DVDs—you can find Dolby virtually everywhere. Part of the Dolby process is trying to set standards from the very start of the creation of the sound, through the delivery of the sound in the mixed dubbing stage, how it is balanced, how it is put together, what the noise performance is, what the clarity is, always focusing on trying to make sure that when it is delivered to the end user it sounds correct and it works correctly. Our contact with Dolby is that we are in the creation of the process. We will record voice, we will manufacture sound effects, we will bring in music, we will alter and edit music, and we will build all of that into a cinema commercial, and that cinema commercial has to have a Dolby licence, it has to have a maximum level so that it is not too loud for the audiences in the cinema; it has to have a certain intelligibility in speech requirements and in order to make that a practicable workable standard Dolby has set, for all Dolby certified studios who attempt to do Dolby cinema commercials or Dolby themes or Dolby theatrical releases, criteria which we have to design the facility to. Our acousticians who we retain to

design studios, put it into the best criteria but Dolby have always used NC criteria. In fact I had a conversation with one of the experts at Dolby about why they use NC and not any other criteria and his response was that you would never think of using any other kind of criteria for our kind of environment. Other criteria elsewhere—obviously that is not an issue—but leaving aside the sound, dubbing, mixing and recording environment Dolby use NC criteria and Dolby use the NC standard as the basis for their licensing. It does not mean they take every single aspect of the NC standard but they use the outline of the criteria to perform the performance levels that we have to meet in the studios. It is important to note that when my business partner, Karen Humphrey and I, were specifying to White Mark, the studios, we were very specific that they had to have Dolby certification, and after the original layouts and designs were done, which is a very complex process, my understanding is that White Mark took those designs to Dolby to get approval that we would get the licensing requirements we required.

5337. Just explain who White Mark are.

*(Mr Taylor)* White Mark are design consultants that we used for this facility; we used them previously for the first facility built in 1994 and they have designed, as far as I am aware, inside Soho, which is the area we work in, almost half of the rooms that are used for recording sound, voice, film dubbing, sound editing. We consider them as one of three pre-eminent companies inside the UK who do this work to be the best, and that is why we retained them. One of the things we were trying to do was to build a world-class facility.

5338. You mentioned that you need the Dolby licence for cinema commercials, but could you just explain to the Committee how large the network of what I will call Dolby cinemas is; is it just one or two or is it national, international?

*(Mr Taylor)* As far as I am aware any cinema in the UK that is taking national distribution—so that is virtually every single cinema—has to be Dolby certified. The critical thing is that every single film going out, again as far as I am aware, to fit into that system has to be Dolby certified. World-wide Dolby does not certify cinemas. You will see when you go into UK cinemas, in some of the cinemas you will see that it is a Dolby Digital Cinema, and you will see that placard up. Our involvement in Dolby's licensing involvement is to make sure that the film leaving the process it is of sufficient quality to meet their criteria and fits into the Dolby distribution chain; that Dolby authorise the Dolby licence. I think for cinema commercials where we work you cannot actually send out a commercial unless it has been through the Dolby quality assurance process.

5339. If as a result of Crossrail the noise climate within the studios was not to the Dolby standard, what would be the consequence of that?

---

 The Petition of Grand Central Sound Studios
 

---

*(Mr Taylor)* We would lose our Dolby licence. Dolby come and check our studios on roughly a yearly basis. Whenever we do any work of any significance in the studio we have the studio recertified. If there was a reason that Dolby felt that our sound isolation insulation had been compromised I would expect Dolby to come and check that we were still meeting the noise criteria that they lay down, which is the NC criteria. If we were found to be in breach of that criteria and if we were unable to take remedial action within that criteria they would withdraw our licence. That is my understanding and I have no reason to believe otherwise.

5340. Do you get international companies coming to your studios, for example American companies?

*(Mr Taylor)* Yes. If you look at GCS IDT-7 that is one of our studios—in fact the west bound tunnel, I believe it is, passes directly underneath that studio.<sup>60</sup> On the screen is a *Nike* advert. We all know that *Nike* make trainers and they are a huge, worldwide brand. We work for *Nike* and for various other international brands, via their advertising agencies—we never work directly, always via an advertising agency. Inside our facility we get representatives from *Nike* coming in to listen and to approve their commercials for cinema release in Europe. We have done work for cinema releases worldwide—America is an emerging market—and it goes into America as well. In America the cinema commercial is almost non-existent; it is the very, very early start of it. When they started doing commercials in American cinemas people would walk out and complain it was an intrusion—that they had not paid to see the commercial, they had paid to see the film—and they would leave. So America is a huge emerging market that is just starting to arrive. One of the reasons why we have committed as a company so heavily to having the cinema classrooms is that the American market and the world market will mature as digital cinema arrives and that will make it very, very easy to put commercials into cinemas. Whether one likes it or not is a different issue, but that is the market that will grow enormously, and we have positioned our company to be in a position where as it emerges we are in an ideal position to take advantage of it, and that is a UK issue, a European issue and a worldwide issue.

5341. For example the Americans, when they instruct you to do work, are they interested in whether or not you have a Dolby licence?

*(Mr Taylor)* To be blunt you would never get asked the question directly, because the people we are talking to are booking the studios. If you go to Dolby's website you will see who are approved studios or otherwise. I am quite sure that all of our major clients who would be looking to do cinema releases will have checked or had assurances or asked us in one way or another whether we have a Dolby licence. If we attempted to do this work for

*Nike* for example, and we did not have a Dolby licence, or they found that our licence was invalid or had lapsed or been rescinded then we would be in the position of having to put out a commercial, Dolby would refuse to do the transfers—which is what would happen—and then *Nike* would miss all of the dates in the cinema and we would be very rapidly out of business—it is as simple as that.

5342. Whilst that slide is up on the screen can you outline to us what we are looking at there and what you do and cross referencing that to slide 6.<sup>61</sup> That is a booth, is that right?

*(Mr Taylor)* That is the voice over booth; that is the voice over booth in studio 8 which is the booth that goes with the studio in the next slide.

5343. Just tell the Committee of the lengths you instruct your designers to go to in order to create the environment that has to pertain in that booth?

*(Mr Taylor)* They have to be built to even stricter criteria than Dolby. Dolby criteria is NC25, the voice over booth is NC20 or lower. The reason for that is to record a voice you have to be able to catch every single nuance of that voice. A voice recording is an acting of a script and what you are trying to do in creating a commercial is create an illusion and that illusion depends upon having no extraneous interference at all. So in order for us to assemble that illusion we need elements that are not contaminated with any sounds at all; we only want the sounds that we want. The sound might be a train, to be quite honest, but if it is not a train we do not want it!

5344. We take it that Crossrail will not be needed for that! Tell us about the generality.

*(Mr Taylor)* So we record the voice, we record the voice with huge precision. A voice recording starts with the script and the script is on the right hand side of the actor there and the picture is on the screen to the left. That booth is completely isolated, as best as we can on a commercial basis, and bearing in mind you can always go to another level this is a commercial balance that we have set. We record the voice, the actor is rehearsed, the actor is instructed by the recording engineer and the actor is instructed by the director; the creative writers may be in the recording studio itself; the creative writers may change and edit the words in the script. You are trying to create an illusion and any intrusion of unwanted sound into that illusion will completely destroy the space you are trying to create in somebody's head when they watch a commercial. Commercials are often viewed as not having much creative skill, often viewed as not being very difficult to do, and we would challenge that and say that our belief is that commercials are the pinnacle of sound recording, the pinnacle of editing and the pinnacle of production. In a film you will have many, many minutes, if not hours, to create an illusion. A commercial is a 60-second maximum attempt to grab you, tell you about something and sell it to you, and that relies upon the best in the world, and you

<sup>60</sup> Committee Ref: A63, Editing and Music Effects Studio (WESTCC-9305-007).

<sup>61</sup> Committee Ref: A63, Voiceover Booth (WESTCC-9305-006).

---

 The Petition of Grand Central Sound Studios
 

---

can see that by numerous directors who film editors who started in commercials—and there is a long, long list of them—and it is the standard place where you learn your skills. So we record the voice in that booth and once the recording of the voice in the booth is done we use that voice recording inside the main studio with all the other elements to make the commercial soundtrack which we need.

5345. So we have the scene of the booth having to be constructed in a way which creates a very hard arena for the voice to be spoken. Can you just give the Committee any practical examples of what sort of construction or lengths you go to in order to ensure that objective?

*(Mr Taylor)* The booth is a complete room in its own right, completely isolated. It floats on rubber. It has walls approximately in those booths about 500 millimetres thick. The actual construction is a massive amount of wood, a massive amount of plasterboard, a massive amount of plywood. All the plywood and plasterboard is cross-lapped so that there is no sound path through. Every single joint is glued, Mastic'd. Inside our facility, for example, in those six studios, there is approximately—and it is a belief based on watching the lorries arrive—between 6000 to 7000 sheets of plasterboard, which is a huge quantity of material to go into a very small building. When the rooms were being designed we had to employ structural engineers because there is so much weight in the voice over booth and in the main rooms as well, so that we have to make sure that they are not going to damage the structure of the building, and before we can sign the lease we had to have a structural analysis to make sure that the building could take the weight. All of that weight is in there to give a very, very high level of sound isolation. The air conditioning systems that feed the air in and out of the rooms have to have specialised isolators on them; where they pass through the walls they have to be on rubber joints so that there is no way the air conditioning can transmit noise into the booth. We have to make sure that there is no noise from the main room that can come via the air conditioning into the booth. The light dimmers have to be special dimmers that do not create any electrostatic noise and also do not create any mechanical noise. If you dim down a dimmer you often hear a little buzz and that would be completely unacceptable for us. You will sometimes get a light bulb that buzzes—I know that sounds very silly—and we would have to change it because the engineer will hear it immediately. The monitor that we use has to be made sure that that does not buzz. You have to put the script up off the table so that it does not rustle—that would be enough to ruin a voice recording.

5346. Is that why we see the script on a clipboard?

*(Mr Taylor)* Yes, that is why; absolutely. The chair the person sits on has to be checked for squeaks, it will not have castors. Before we try our chairs we actually sit in them and we do this—and do they squeak, do they not squeak?

5347. Perhaps the shorthand writer can record, “witness rotates in chair”!

*(Mr Taylor)* The table in front is specially designed to be acoustically absorbing. The microphone is the most expensive microphone you can buy, the Nouman U87—almost the most expensive—and it is universally recognised as the best microphone for recording a voice. To give you an idea of the level that we go to we have the same microphones everywhere—we do not use any other microphone for recording voice, that is the only microphone that we will pass as being suitable for recording. One, it gives us the highest possible standard but, two, it also gives us absolute consistency because the voice over may come in and may record a bunch of lines, they will go away and come back in again and they have to use the same microphone. We will try and put them in the same booth with the same engineer in the same set-up, because even though all the booths are designed to a very high standard they all sound slightly different—minutely so. To give you an idea of how complex a voice recording session can be we did one where we had the privilege of doing Julie Andrews. Julie Andrews came to the UK, to come to the Palace to get her damehood and she had a three-hour slot to record what we call dialogue replacement for a commercial that she was doing in America. The commercial had been shot in New York; a lot of the video graphic replacement work was being done in the UK. It was the osteoporosis charity commercial—because she just never does commercials—and she came in and she had a three-hour slot in which she had to replace 60 seconds or thereabouts, 60 seconds of talking to the camera. It was engineered by my director of sound engineering, Raja Sehgal, who is a very, very experienced engineer, world-class engineer, and she did over 300-plus voice takes in a three-hour period. What you are doing is you are taking the script, you are looking at the lip movement, you are listening to the intonation and the delivery, the character of the voices, and you are often picking the right delivery there and the right delivery there and you are stitching these all together to make it appears that Julie Andrews is walking down a New York street and she is talking to the camera, and the voice is perfect. The fact that there are people walking past, cars going past, cabs going past, there is wind noise, you are in an illusion and lost in that illusion. The sound they shoot on location is used as a guide and it is completely useless apart from as a guide. If you saw that with the original sound transmitted you would not take it seriously; you would not buy into the osteoporosis charity commercial which she did for the society in America.

5348. **Mr Binley:** Mr Taylor, can I say how much I admire your enthusiasm and we shall leave this place with the sound of music in our ears! Can I thank you, Mr Newberry, I think we have had a very good introduction and we have used our time very usefully. I just remind you that the Committee will stand adjourned until Tuesday 28 March at ten a.m.