# EXHIBIT LIST

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Petitioner: Little Ingestre Care  
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1. Your Petitioners, own and manage Little Ingestre Care Home at Little Ingestre, Stafford. The Care Home is home to and provides services for 15 adults with physical or learning disabilities. This includes provision for residents with complex health needs including head injury, cerebral palsy, visual impairment and autism amongst other conditions. The Care Home has been home to some residents for over 30 years.

2. The Care Home provides employment for 21 full time staff, some of whom have worked at the Care Home for over 20 years. The Care Home also employs 4 part time staff. The Care Home is almost unique in the sector for not needing to employ agency staff. The stability of the staffing at the Care Home adds to the sense of community and attraction of the home.

3. The Care Home is fully occupied and on occasions when beds do become available they are filled quickly making this a successful business. As a small Care Home with high staffing needs of 1 to 2 per resident, the Care Home cannot continue to operate at profit if rooms/beds remained unoccupied due to potential resident’s families being put off by HS2’s construction activity.

4. The Care Home is not within the safeguarding Zone. However it is surrounded on all sides by construction activity. AP1 (AP002/002) brings further construction activity even closer to the home. The Care Home are concerned to ensure that HS2 does not suggest any further Additional Provisions which move construction impacts any closer to the Care Home than they are already proposed.

5. The Care Home is accessed via Ingestre Park Road, which is a no through road and the only highway access into and out of Ingestre to the main highway network. Highways works, construction activity and access to construction compounds are planned in this location. A number of construction traffic routes converge in this area and the bottom part of Ingestre Park Road is a construction traffic route up to the Satellite construction compound. All visitors, including future occupiers, will access along this route.

6. Access for emergency services is required 24 hours a day, seven days a week due to the high usage of these services particularly ambulance services. The Care Home also require constant vehicular access for staff and families and community visits.

7. The Care Home are concerned about the health impacts of the construction activity on the residents of the Care Home who are particularly sensitive receptors given their range of complex health needs. The Care Home has instructed Sharpe Redmore Noise Consultants who have advised that due to “the extreme sensitivity of some residents to noise and/or change, a broad approach to the assessment of impacts and effects [as used in the environmental statement] is clearly not appropriate for Little A348 (1)
Ingestre House”. They also conclude that “It therefore seems reasonable to conclude that the nominated HS2 criteria for construction noise and operational noise significantly understate the potential impacts and effects on the residents”. A more detailed assessment is required based on an alternative methodology in order to properly understand the impacts on the residents of the Care Home and any appropriate mitigation required.

8. The Care Home is concerned that the high level of visible and audible construction activity in the vicinity of the Care Home when rooms become available that there may be difficult to re-fill during the construction period of HS2. If the Care Home cannot remain substantially full throughout the construction period, then a successful business could be lost with consequent loss of jobs. The loss of residents long term home would be extremely disruptive for residents. This is a human rights issue and the equalities impact assessment did not consider the impact of the loss of the Care Home on the community. A financial commitment from HS2 to compensate the home for losses during the construction period arising from HS2’s impacts is required to ensure business continuity in the exceptional and unique circumstances here.
Presentation to House of Commons Select Committee

Little Ingestre Care Limited

HS2 AP1 - 024
Site Location Plan
What is required from HS2

- Regular engagement and meetings to resolve concerns and help keep residents/families updated.
- Assurance that 24 hour emergency service access throughout construction and for staff/families.
- Confirmation of other highways impacts/closures affecting access and traffic volumes on Little Ingestre Road.
- Assurance to agree an appropriate methodology for an assessment of noise impacts on vulnerable residents of Care Home and establish appropriate mitigation including from noise from AP1.
- Assurance that no further Additional Provisions will bring any further construction activity any closer to the Care Home than is currently proposed by AP1.
- Recognising the exceptional and unique circumstances provide financial commitment to protect Care Home from closure during construction phase due to impacts from HS2. Business cannot survive if rooms are vacated or unlettable due to construction impacts resulting in loss of jobs/long term home for residents. HS2 acknowledge adjoining property is unsaleable.
- Fund Care Homes costs for Surveyor and Noise Consultant to assist in securing appropriate mitigation/resolution of Care Homes concerns (excluding petitioning).
Context for Concerns
Little Ingestre Care Home

- Care home services for 15 adults with physical or learning disabilities.
- Some residents long term home for over 30 years
- Complex health needs of residents including head injury, cerebral palsy, visual impairment. All sensitive to the environment.
- Employs 21 permanent staff and 4 part time. Unique in not employing agency staff
- Care Home fully occupied and successful business
- Care Home has to be able to comply with DoLS
Limited HS2 Engagement to date

- Lack of direct contact with Care Home. Letters of Nov/Dec 2015 and Sept 2016 not received.
- Care Home responded to Equalities Impact Assessment in September 2017 aware via Parish Council
- Followed up due to lack of response. Contact with HS2 in Dec 2017
- 1st meeting Jan 2018. Further requests for meetings.
- Promoter provided further material 8th May 2018
- 2nd Meeting 9th July 2018
Impacts of Construction Activity

• Ingestre Park Road is a no through road - only access route to Care Home. Concerns over restriction of access generally and for emergency vehicles, vehicle movements, noise, dust and impact on business.

• Due to low ambient noise levels at care home an increase of 10 dB, whilst within threshold levels, would result in subjective doubling of loudness and could “significantly alter the existing acoustic environment”

• Baseline Monitoring Location ML193 500 m to West/South West of Care Home, creates a possibility of underestimation of change in noise level.

• Significance of audible construction noise can only be adequately determined based on clear understanding of individual residents reaction to noise, consideration of internal sound level and consideration of building location/ventilation/insulation. Mitigation needs to be identified thereafter.

• Health Impact on residents not yet understood and Little Ingestre Care cannot therefore reassure residents/families
Impacts of Operational Phase

- HS2 Assessment of a change of -3dB and +3dB does not taken into account increase of 4dB identified during day time,
- Monitoring location ML193 is 500m away from the Care Home and could result in an underestimate of magnitude of change at Care Home,
- Sensitivity of residents at the Care Home means significance of impact should be considered in light of occupants response to acoustic change and internal sound levels and building location/ventilation/insulation. Mitigation needs to be identified
- Health Impact on residents not yet understood and Little Ingestre Care cannot therefore reassure residents/families
Summary consequences of HS2 for Little Ingestre Care Home

• Concerns over Health Impacts on residents due to noise/disruption

• Uncertainty for families and lack of information on actual impacts

• Potential loss of residential occupiers during construction period resulting in closure of business, loss of residents long term homes and jobs

• Equality Impact Assessment did not identify risk of loss of permanent home to this sector of community

• Engagement required from HS2 as to health impacts, mitigation and support to mitigate risks of closure of business.

• Last resort financial support from HS2 to maintain care home during construction, reflecting exceptional and unique impacts
Dear Abigail,

Sharps Redmore were appointed to carry out a review of the Planning documentation published to date in relation to the potential noise and vibration impacts on the premises of your client (Little Ingestre Care Limited) resulting from the construction and operation of the HS2 railway.

Details of the review are presented below.

1. Introduction

Little Ingestre House is situated in a rural setting between the towns of Stafford and Rugeley. Little Ingestre House is registered to care for 15 adults with physical disabilities including 3 who may have associated learning disabilities. The care home has been established for over 20 years and many residents have been there long term.

The home caters for people with a range of disabilities including visual impairment, epilepsy, cerebral palsy, and head injury. We understand that amongst the current 15 residents at least 7 are extremely sensitive to noise and vibration or significant changes to the acoustic environment. This includes complex communication and learning difficulties, epilepsy and anxiety to change.

It is therefore evident that some residents of Little Ingestre House have a particular sensitivity to noise and/or vibration which goes beyond the sensitivity of a typical residential household.

Part of the West Midlands-London HS2 railway is to be constructed in relatively close proximity to Little Ingestre House (500-600m to the south at its closest point). There are potential noise and vibration impacts associated with the construction and operation of the HS2 railway.

The potential noise and vibration impacts of the HS2 (and in particular the section in this area) have been assessed as part of the Planning process. The purpose of our review was to identify the methodology and findings of the existing assessment(s) and establish whether the particular sensitivity of and risks to Little Ingestre House residents have been adequately considered.
2. National Planning Policy Framework

Paragraph 123 of the National Planning Policy Framework (NPPF) states that

“Planning policies and decisions should aim to:

- Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
- Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;
- Recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established.”

Clearly, the NPPF guidance advocates an approach which avoids “significant adverse impacts on health and quality of life” and reduces “to a minimum other adverse impacts on health and quality of life arising from noise from new development”. The methodology of any technical assessment should therefore also adequately protect the amenity of existing sensitive receptors.

The NPPF also recommends that businesses are not unreasonably restricted by developments or changes in land since they were established. Therefore any new development which negatively affects the normal operation and/or commercial productivity of an established development is arguably doing so in direct opposition to the principals of the NPPF.

3. Phase 1 EIA

The methodology and assumptions for the entire HS2 development were established as part of the Environmental Impact Assessment carried out in support of the Phase 1 Planning Application. Details are presented in the HS2 document ‘Volume 5 | Technical Appendices: Methodology, assumptions and assessment (route-wide) (SV-001-000) Sound, noise and vibration’.

Annex A sets out the methodology and criteria used for all forward assessment of HS2 impacts. The stated brief is to assess likely noise and vibration effects arising from the construction and operation of the HS2 on both residential (on both an individual dwelling and a community basis) and non-residential sensitive receptors.

The general approach is stated to reflect the requirements of the EIA Directive and Government noise policy (as defined in Defra’s Noise Policy Statement for England, NPSE) and the emerging (at the time) National Planning Practice Guidance (NPPG). The assessment method is also claimed to be consistent with Planning good practice such as that set out in the NPPF.

Noise and vibration impacts are assessed against ‘significance criteria’ which drive the need to consider mitigation depending on the significant of impact, in accordance with the EIA Directive.
The significance criteria for airborne sound are stated to take into account a number of different factors, including the level and character of the existing sound environment, any unique features of the source or receiving environment and the duration of the adverse effect (for construction).

The significance criteria for ground-borne vibration and re-radiated sound seem to be based on current guidance and recent precedents (including Crossrail) and are generally in line with the appropriate British Standards including BS 6472 Part 1: 2008 ‘Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting’.

Significance criteria for noise and vibration are presented for ‘individual dwellings’ and further qualitative guidance is provided on the assessment of community noise impacts. It is stated that assessment of community impact takes into account the level and character of the existing sound environment and any unique features of the source or receiving environment in the local area.

**Annex B** sets out the approach for identifying the receptor locations and completing the baseline acoustic monitoring used for the assessment. Section 1.2 states that discussions were held with environmental health practitioners from the relevant county and local authorities covering appropriate assessment and monitoring locations and any areas identified as ‘quiet’ or ‘tranquil’.

**Annex C** contains further information on the assessment methodology for construction noise and vibration, generally considering guidance in TRL Reports 429 and 53 and guidance in BS 5228:2: 2009 ‘Code of practice for noise and vibration control on construction and open sites. Vibration’. This is considered to be the most appropriate technical approach.

**Annex D1** contains full technical details of the methodology for assessing operational ground-borne sound and vibration. **Annex D2** contains technical details of the methodology for assessing operational airborne sound. In either case the approach is considered technically appropriate.

### 3. Phase 2a ES

The Environmental Statement prepared in support of Phase 2a of HS2 includes assessment of noise and vibration impacts associated with this phase. This includes the area known as Community Area 2: Colwich to Yarlet (CA2) encompassing Little Ingestre House.

We have reviewed the following ES documents relating to the noise and vibration impact on CA2 (among others):


- **Supplementary Environmental Statement and Additional Provision Environmental Statement - Sound, noise and vibration report (SV-002-002) (March 2018)**
ES Volume 5 primarily details the assessment locations and results.

Section 2.2 of the ES Volume 5 sound, noise and vibration report states that as well as engaging with Local and County authorities on methodology and locations for survey and assessment, engagement with local stakeholders through the working draft EIA consultations provided the opportunity to suggest assessment locations and discuss individual building uses. We understand that there was no direct engagement with Little Ingestre House during this process.

4. CA2: Baseline Monitoring and Assessment Locations

Section 3 of the Volume 5: Sound, Noise and Vibration Report describes the results of the baseline sound monitoring surveys completed to provide representative sound levels at each assessment location within the study area; in this case CA2. Maps showing the monitoring and assessment locations are included in the Volume 5: Sound, Noise and Vibration Map Book.

Assessment location 12073 ‘Home For The Disabled, Ingestre’ represents Little Ingestre House and identifies it as a residential property.

ML193 is the nearest monitoring location. ML193 is around 500m to the west/south-west.

It is not explicitly clear from Section 3 how the noise climate surrounding Little Ingestre House is characterised, but the descriptions of the noise climate in and around Great Haywood indicate that the existing sound environment is “dominated by local and distance road traffic” with “local neighbourhood sources and natural sounds also contributing”. This would support the logical conclusion that noise emissions from the A51 (approximately 500m to the north) and to a lesser extent from local passing traffic are the most likely dominant sources of noise affecting the site.

Table 1 presents the existing baseline sound levels to be used in assessment. For location ML193 average noise levels range from 43-44 dB $L_{A_{eq,1}}$ during the day to 35 dB $L_{A_{eq,2}}$ during the night, with night-time maximum noise levels not typically exceeding 66 dB $L_{A_{p_{max}}}$. In our experience this is quieter than is typical for a semi-rural setting in relatively close proximity to a main traffic route.

Location ML193 appears to be significantly closer to Mill Lane (linking Igestre / Great Haywood) than Little Ingestre House is in reality, so there is a strong likelihood that sound levels measured at this location are measurably higher than they would have been at Little Ingestre House itself. This would have the effect of underestimating any change in noise level (and subsequent impact) and thus may significantly alter the conclusions of the assessment.

5. CA2: Effects During Construction

Both the ‘Direct’ and ‘Indirect’ effects of construction are considered. The direct effects relate to noise generated by construction processes and machinery, i.e. by the construction process itself. The indirect effects relate to consequential noise emissions, primarily from construction traffic.
Direct Effects

Table 5 of the Volume 5: Sound, Noise and Vibration Report presents the worst-case assessment results for direct ground-borne sound and vibration effects during construction. Receptor 12073 is not shown in the table, although a low impact is predicted at the next closest receptor (12067). The results indicate insignificant impacts at this distance from the works, which in our experience and from an objective technical standpoint is likely to be accurate.

Table 6 of the Volume 5: Sound, Noise and Vibration Report presents the results for assessment of direct construction noise impacts at residential receptors. This presents the highest typical month outdoor noise level during construction at location 12073 as 50/55 dB $L_{Aeq}$ at the façade. This has been assessed in general accordance with the ABC Method from BS 5228-1 as having no significant effects with no mitigation effects identified as being required.

The ABC Method involves threshold values which correspond to potential significant effects and are determined depending on the existing ambient noise levels. For relatively quiet sites the most stringent possible threshold values are used, with a potential significant impact indicated when the noise levels arising from construction exceeds the nominated threshold level(s).

In this case the prevailing ambient noise levels at Little Ingestre House are low meaning the site falls into the most stringent Category A under the ABC Method. However, the threshold values for Category A (65 dB $L_{Aeq,T}$ day / 45 dB $L_{Aeq,T}$ night / 55 dB $L_{Aeq,T}$ evenings and weekends) are significantly higher than the prevailing ambient noise levels at Little Ingestre House meaning that construction noise could be below all three threshold values and still be as much as 10 dB higher than prevailing ambient noise levels, which would be clearly audible at the façade of the building.

In reality, construction noise 10 dB above prevailing ambient levels would be a significant increase (a 10 dB increase represents a subjective doubling of loudness) and could significantly alter the character of the existing acoustic environment.

Indirect Effects

Little Ingestre House is outside of the three main areas where significant indirect effects are predicted. There are no reasonable technical grounds on which to question this conclusion.

6. CA2: Effects During Operation

Table 12 of the Volume 5: Sound, Noise and Vibration Report presents operational ground-borne sound/vibration levels, noise and vibration impacts and effects on CA2 from operation of HS2. Receptor 12073 is not explicitly shown, but the table indicates insignificant and/or negligible ground-borne sound/vibration levels at this distance. Table 13 presents a summary of the operational ground-borne noise and vibration impacts. Considering the significance criteria used and our experience of similar situations there are no obvious technical grounds to question this.

Table 15 of the Volume 5: Sound, Noise and Vibration Report presents the operational airborne sound (direct) noise impacts an effects on noise-sensitive receptors, including receptor 12073. For
the ‘Do Something’ scenario (i.e. predicted operational noise levels combined with projected future baseline noise levels) a 4 dB increase in day-time average noise levels ($L_{Aeq,T}$) is predicted, compared with a 3 dB night-time increase. No significant increase in night-time maximum levels is identified (predicted to be at least 10 dB below the baseline which would likely be inaudible).

This is identified in Table 15 as falling into effect Category A: “Sound levels from HS2 exceed Lowest Observed Adverse Effect Level (LOAEL): the significance criteria set out in Appendix SV-001-000, Annex A, Section 1.3 are considered when establishing significant effects” based on an assessment as a residential property with a typical design.

This has been deemed a ‘negligible’ airborne noise impact according to the agreed classifications corresponding to a difference between -3 dB and +3 dB compared to prevailing ambient levels. However, this would seem misleading and/or erroneous considering that an increase of 4 dB is predicted during the day which falls into the ‘minor adverse’ category (a 3 dB to 5 dB increase).

Receptor 12073 was not identified as qualifying for mitigation based on the assessment results.

7. Discussion

We understand that the operators of Little Ingestre House have raised concerns that the findings of the assessment do not adequately represent the actual likely impacts and effects arising from construction and operation of HS2 in light of the very particular sensitivity of its residents.

This raises two overarching questions:

1. Do the methodology, assumptions and assessment adequately represent the potential impacts and effects on the residents of Little Ingestre House?

2. If not, what would be the most reasonable parameters for assessment?

The nominated criteria for assessing impacts and effects on Little Ingestre House are all based on the assumption that it can be grouped with and treated identically to other residential receptors. Considering the extreme sensitivity of some residents to noise and/or change, a broad approach to the assessment of impacts and effects is clearly not appropriate for Little Ingestre House.

This would seem to put the assessment methodology and results at odds with the overarching noise policy aims of the UK Government as set out in the NPPF. There is insufficient evidence that construction and/or operation of HS2 will not give rise to “significant adverse impacts on health and quality of life” because the sensitivity of the residents has not been adequately considered. Simply put, the parameters for ‘health and quality of life’ have not been sufficiently considered and developed in this case to reach this conclusion for Little Ingestre House.

The NPPF also states that new development should not place “unreasonable restrictions” on existing businesses. The existing assessment represents a risk in terms of ongoing operations, because if significant impacts or effects occur which were not identified during the assessment,
this might affect the ability to properly care for individual residents. This may in turn affect the ability of the care home to continue to provide continued care in this location.

It therefore seems reasonable to conclude that the nominated HS2 criteria for construction noise and operational noise significantly understate the potential impacts and effects on the residents.

### Construction Noise

The assessment of direct airborne construction noise is based on the ABC method from BS 5228. This method intends to provide an all-encompassing approach to assessment for a range of sites. For Category A, all receptors where ambient noise levels are below the given threshold values are grouped in one category, with a potential significant impact only identified where the noise level arising from construction exceeds the threshold value.

In this case the measured ambient sound levels at ML193 (circa 500m from Little Ingestre House) are at least 10 dB below the threshold values for Category A. As a result, construction noise could be as much as 10 dB above prevailing ambient levels without causing a ‘potential significant effect’ according to the ABC method. In reality, construction noise 10 dB above prevailing ambient levels would be a significant increase (a 10 dB increase represents a subjective doubling of loudness) and could significantly alter the character of the existing acoustic environment.

The difference could in fact be even greater given that the baseline monitoring location ML193 is 500m to the west/southwest which may lead to an underestimation in the change in noise levels.

Furthermore, in this case the significance of audible construction noise can only be adequately determined based on a clear understanding of the way that individual residents reach to noise.

### Operational Noise

The significance of airborne sound impacts at sensitive buildings has been assessed based on relative changes to the existing ambient noise levels.

A change of between -3 dB and +3 dB against existing ambient levels is considered “Negligible”. Under most circumstances this is entirely reasonable since a change of 3 dB is typically accepted as the minimum perceptible change in sound levels under ‘normal’ conditions. Therefore under most circumstances a change of this magnitude would not be perceptible, and thus is negligible. However, considering the varying individual sensitivity of residents at Little Ingestre House it is clearly inappropriate to assess impacts based on humans’ typical responses to acoustic changes.

Some residents may react adversely to any audible change in the acoustic environment, whereas others might be significantly more tolerant. While this is true of all residential scenarios to some extent, the nature of Little Ingestre House means that it is not a typical residential situation and an assessment based on generalised human response is clearly not an appropriate methodology.
8. Alternative Methodology

The most appropriate assessment would clearly be ensured by developing criteria based on the very particular sensitivities of each individual. This would require close engagement between the individual or organisation carrying out the assessment and the operators of Little Ingestre House.

By understanding an individual’s response to sound and/or acoustic changes, it is possible to identify thresholds at which a significant adverse effect or impact might occur. Based on our understanding of residents’ conditions, these threshold are likely to be lower than those used for the assessment for airborne sound from the construction and operation of HS2.

Furthermore the assessment criteria are based upon external rather than internal sound levels. Most of the time it will be the noise levels inside the building which will determine whether there is a significant impact on residents. This is not considered using the nominated external criteria. An appropriate assessment would therefore include consideration of the relationship between external and internal levels. This in turn would require consideration of building sound insulation; openable windows; the orientation of bedroom windows and so on.

A more focused assessment could and should also include consideration of possible options for mitigation, should this be required as a result of a more appropriately stringent assessment. Mitigation options might include enhancements to external windows/doors, relocation of the most acoustically-sensitive residents and internal sound masking.

9. Conclusion

While the scale and nature of the assessment work for large infrastructure projects carries an obvious need for generalised criteria, there is clearly a need to focus more carefully on specific receptors where it is clearly inappropriate to group it all with all the other residential receptors. Any earlier scrutiny of Little Ingestre House and its residents would have identified this.

As things stand the potential impacts and effects (adverse or otherwise) on Little Ingestre House are unclear and the assessment would seem to be inconclusive in terms of that specific location.

Please contact me should you have any questions.

Kind regards,

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