Dear Mr Singleton,

The applicant's deadline 5 response to ExQ2 representation (Rep2-178 – attached to this document as Appendix 1) has not addressed parts 2 or 3 of my submission. Sections 2 and 3 of my submission were concerned with specific transport and noise issues along the A449 between the Station Road junction and junction 2 (J2) of the M54.

1- <u>The Chronology of Events:</u>

- On 5th June 2019 during the *'Accessibility and Transport Hearing'* the examining authority [Mr Singleton] asked the applicant to address Rep2-178 as a whole.

- On 11th June 2019 the '*Action List*' for the 5th June 2019 proceedings was published. It stated under point 6 (*likely traffic effects on the A449 south of Station Drive*) the applicant is to respond to REP2-178 by 5th July 2019.

- On 27th June 2019 I wrote to you [Mr Singleton] and Mr Ranger to inform you that the ExQ2 further written questions published on 19th June 2019 had only posed questions from part 1 of my three part ExQ2 submission. Part 1 of Rep2-178 is not transport related; it discusses the overarching planning need and justification for the proposed development.

- On 5th July 2019 the West Midland Interchange (WMI) Development Consent Order case manager Robert Ranger responded to my 27th June 2019 email to say…

  …'I'll pass on your concerns to Mr Singleton… I'm afraid I do not know what the applicant will submit for deadline 5; but we will publish all the submissions on our website as soon as possible.'

  It would appear that the applicant has used the examining authority's 19th June 2019 mistake to stay silent on the specific issues that were raised in parts 2 and 3 of my ExQ2 submission.

2- <u>Analysis of the Applicant's Deadline 5 Rep2-178 Response:</u>

The applicant has not adequately answered the numbered questions from Rep2-178 (please see Appendix 1). Instead the applicant has selectively and partially addressed some of the questions I posed, in other instances the applicant has completely ignored valid questions.

Below I have analysed the response the applicant did provide (the applicant is in red). Because of the response's deficiencies I have been compelled to ask further questions. The questions posed in this deadline 6 document are included in the remainder of this section (section 2) and section 4. For the applicant's benefit and the complete avoidance of doubt I have numbered and clearly identified all of the questions.

> *'The cost of the rail infrastructure as a percentage of the value of the completed development would not provide an impression of the importance of the rail as part of the site's development. The full cost of installing the rail infrastructure is borne earlier and incurred over a shorter period of time than the revenue generated from*

the delivery of the full development is received. The Applicant can confirm that the site wide infrastructure costs are, at the time of assessment, approximately £117m, of which the rail infrastructure is in excess of £40m. The rail infrastructure is therefore a key component of the site's infrastructure and significant in its size.'

The rail terminus will only be borne as a cost after 25% of the site's buildings have been occupied. 25% of the buildings equates to 2 million square feet of B2/B8 warehousing.

QUESTION 1: If 24.9% of the proposed WMI buildings are occupied by operators who go on to decide road-road logistics is preferable, for whatever reason, to road-rail operations, would 1.99 million square feet of B8/B2 warehouse development in the Greenbelt be an acceptable outcome? Yes or no? Please do not answer this question by saying that this will not happen so you cannot or do not need to answer the question.

QUESTION 2: What specific safeguards exist to stop the question 1 scenario (just under 2 million square feet of warehousing being built and permanently occupied by road-road operators) from ever being a possibility? Please do not answer this question by saying that this will not happen so you cannot or do not need to answer the question.

'At least 15 occupiers of the 20 DIRFT 1&2 warehouse units have used rail services representing a major proportion of the occupiers.'

15 of the 20 operators have used rail services - the use of the word have is not the same as are.

QUESTION 3: How many individual operators are using the DRIFT 1&2 warehousing and its rail connection as of July 2019? How many are using just the warehouses? Could you provide company names please?

QUESTION 4: At DRIFT 1&2 in July 2019 - how many of the individual warehouse units are occupied by non-rail users? Could you provide company names please?

QUESTION 5: What is the combined square footage of the warehousing at DRIFT 1&2? As of July 2019 - how much (in square feet or metres) is occupied by non-rail users?

'The level of rail usage at which the WMI would be considered a successful SRFI is subjective once the minimum requirement for an SRFI of 4 trains per day has been achieved, but the WMI has set out clearly its aim of achieving 10 trains per day, which would mean it had achieved as many trains per day as any other SRFI in the UK.'

This statement by the applicant does not help to explain the anticipated correlation between the square footage of the proposed buildings and their rail dependence. 10 trains a day may sound a lot but if they go on to only serve 50% of the buildings for example, the proposed scheme would be severely flawed.

QUESTION 6: In percentage terms – please specify how much of the total/finished B8/B2 floor space would need to be completely rail dependant to be able to deem the WMI a successful use of 650 acres of Greenbelt?

QUESTION 7: In 15 years' time how many warehouse units occupied by road-road only users would render the WMI scheme a failure as a strategic rail freight interchange?

QUESTION 8: In 15 years' time how many warehouse units occupied by road-road only users would render the WMI scheme an inappropriate use of the West Midlands Greenbelt?

'It is premature to be marketing the scheme in advance of a DCO decision; not only would it be presumptuous but occupiers requirements details of the consent, and a level of certainty about delivery and timescales to enable proper business planning – it is generally not for occupiers to take planning and property risk. Nonetheless the Applicant has been in receipt of interest from a number of major companies' links. Interest is commercially confidential but is drawn from all main sectors of B8 logistics.'

In this DCO process the onus is on the applicant to explain and prove beyond reasonable doubt there are 'very special circumstances' for the proposed road-rail infrastructure and the associated 8 million square feet of warehousing in the Greenbelt. Demonstrating market demand is not presumptuous – it is reasonable, achievable and necessary.

Businesses do not keep all of their long term plans and objectives secret all of the time. If the rail-road mode of logistics is cheaper for many B8/B2 business operators and less environmentally polluting than almost all road-road logistic operations, I see no logical reason why companies would not want make non-committal offers of support to the rail-road principals of the scheme.

The fact that a single company cannot be found to publicly say '*we XXX aspire to use/partly use/use more rail in our operations, in the West Midlands region toward the latter part of the next decade, because it's cheaper and less environmentally polluting than purely road based logistic operations*' is quite extraordinary and telling in equal measure.

3- <u>The Outstanding Transport & Noise Issues:</u>

The data provided by '*Technical Appendix 13.5 - Operational Noise Assessment information*' divides the anticipated flows of traffic to the south of the proposed WMI on the A449, and the increases in noise pollution this will create, into northbound and southbound carriageways. Please see the extract immediately below and the text highlighted yellow in Appendix 2 of this document.

Submitted DCO Technical Appendix 13.5 - Operational Noise Assessment information:

Table 13.5.7: Calculated changes in night-time road traffic noise, 2021, free-field LA10, 8hrs dB

Location	2016 baseline	2021 No development[1]	2021 With development[2]
A449 between Station Drive and Brewood Road (northbound)	67.8	67.5 (-0.3)	70.4 (+2.9)
A449 between Station Drive and Brewood Road (southbound)	70.4	70.7 (+0.3)	73.1 (+2.4)

Notes:
[1] the bracketed value is the change in noise level between the 2016 baseline and 2021 No Development scenario
[2] the bracketed value is the change in noise level between the 2021 No Development scenario and the 2021 With Development scenario

This is not how decibels (dB) work, nor is it how people receive or experience sound from a sound generating entity like a single road. At best, the nocturnal noise Standeford's residents will experience (when the noise from the two A449 carriageways is combined) will exceed 3dB. The applicant's submission (paragraph 13.344) is clear; the settlement of Standeford and its residents will experience **significant**, adverse noise in the event of a WMI DCO approval.

Paragraph 13.344 of the submitted Environmental Statement (ES) Chapter 13…

> *'Increases in road traffic noise of just 3 to 5dB would be classed as moderate adverse impacts, which when combined with the high sensitivity of the residential receptors along these roads, would be regarded as moderate adverse effects, which are* ***significant in EIA terms****.'*

As I made explicitly clear in part 2 of my ExQ2 representation (Rep2-178 – please see Appendix 1), the applicant's appendix 13.5 data submission, and the ES Chapter 13 analysis of that data has obscured the noise generating and amplifying effects of a signal controlled junction (School Lane/Old Stafford Road/A449) within a two kilometre stretch of road (identified by the applicant as link 18 - the A449 between the Station Road junction and the Brewood Road junction).

This coupled with the existing 70dB+ baseline levels in this locality (please see the yellow highlighted text in Appendix 2); the nature of the Standeford settlement itself (older 2 and 3 storey road facing dwellings) and how the dwellings reside in close proximity to the A449 (many dwellings predate the construction of the road itself in the 1920's) are critical, nuanced details that have been given absolutely no regard by the applicant's submission. In short, the problem will be far worse than has been advocated.

Following the submission of Rep2-178 on 5th April 2019, the applicant submitted an addendum (13A) to Chapter 13 (noise and vibration) of the ES. At its core the 13A addendum has sought to increase the number of dwellings which will become the beneficiaries of bespoke sound mitigation measures. The increase in the number of eligible dwellings has been brought about by reducing the sound level thresholds which trigger mitigating assistance. Critically, the change in threshold levels is only applicable to dwellings which reside within 300 metres of the order limits as defined by site location plan 4049-10 (Rev. 5).

The applicant has stated that **in all circumstances** dwellings experiencing additional adverse noise (irrespective of its adverse extent) which are located more than 300 metres from the order limits, will not be eligible for mitigating assistance. The applicant has cited that the '*1975 Noise Insulation Regulations*' renders them devoid of all responsibility – this is completely unacceptable.

I also note that the Deadline 5 *Draft Development Consent Obligation (Clean)* caps the financial assistance a property can receive to mitigate adverse sound to a maximum amount of £9000. If financial assistance is offered to properties residing alongside the A499 to the south of the Order limits; £9000 will in many instances be woefully inadequate. In some instances heavy duty acoustic fencing will be required, particularly where affected dwellings reside in close proximity to the highway. The installation of this fencing may need to be many tens of metres in length to be effective and may require the relocation of existing Highway England infrastructure (street lights, road signs etc.), pre and post 'soft' landscaping works, as well as detailed plans and engineering analysis prior to any installation works.

4- Moving Forward:

Could you [Mr Singleton] please ask the applicant to respond in writing to parts 2 and 3 of my ExQ2 submission and could you also ask them to have full regard to the contents and the conclusions I have made in this deadline 6 submission? Could the applicant also directly and systematically answer each of the individually numbered questions I have posed in section 2 of this deadline 6 submission? It

would be very helpful if the applicant could avoid using conflated prose which cherry pick favourable topics and smear out inconvenient ones.

The applicant appears determined to keep citing the *1975 Noise Insulation Regulations* to shirk any responsibility for what will happen along the southern A449 corridor. **I would like to understand where Highways England think the tipping point resides for when and where action/mitigation would be needed in the event of an approval and the inevitable intensification of vehicular (specifically HGV) use along the A449 between Station Road and J2 of the M54.**

Could you [Mr Singleton] also please ask Highways England to respond to parts 2 and 3 of my ExQ2 submission and the contents of this deadline 6 submission which relate to transport and noise issues along the A449 (Station Road to J2-M54)? As the custodians of the strategic road network, future remedial action on and immediately alongside the A449 will become their responsibility and affect the public money they manage.

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APPENDIX 1

TR050005 – The Proposed West Midlands Rail-Freight Interchange – Devolvement Consent Order (Deadline 2) Feedback

Introduction

The purpose of this document is to express the concerns that my family and many of our neighbours have about the proposed West Midland Rail Freight Interchange (WMI) at Four Ashes/Gailey, South Staffordshire. We live alongside the A449 in the village of Standeford (Coven), 1km to the south west of the proposed WMI site.

Section 1: This section covers our concerns regarding the planning justification being used to develop the proposed WMI site. It poses a number of unanswered questions about the need for proposed scheme.

Section 2: This section covers our concerns about the potential impact of the development on the communities that reside to the south of the site. The location specific issues we identify are applicable to many other settlements and roads north, east and west of proposed WMI site.

Section 3: In this section we recommend a number of possible mitigating measures that could help limit the effects and impacts of the issues identified in section 2.

Section 1: The Planning Justification & Purpose of the West Midland Rail Freight Interchange

One of the principal concerns that we have about the proposed scheme is the possibility that a large portion of the activity at the proposed WMI would end up being solely road-centric freight/logistic operations.

Many businesses would pay a premium to be able to locate themselves on this site as it sits directly at the centre of the UK's strategic road network, irrespective of a whether a rail connection to the West Coast Mainline exists or not. To help allay our concerns we have on multiple occasions asked the developers (and the Planning Inspectorate[1]) the following questions. If the developers could provide unambiguous answers to these questions this would allow us to better understand the risks, benefits and planning rationale for the proposed scheme.

1. In percentage terms what will the proposed rail infrastructure cost to construct, relative to the market value of the finished B8 warehousing?

2. What are those percentage values in monetary terms?

[1] The Stages 2 and 2A Consultations.

3. Chapter 15 of the submitted Environmental Statemen (ES)t[2], the other submitted transport documentation[3] and documentation published in the proceeding consultations make frequent and repeated comparisons between the proposed WMI and the Daventry SRFI (DSRFI) – hypothetically, if the DSRFI were to have its rail links/connectivity removed, what percentage of its activity could continue unaffected? In other words what economic activity goes on there that is not rail dependent?

During a presentation at the Coven Memorial Hall on the 22nd of July 2017 we were told by a Copper Consultancy Ltd. planning consultant acting on behalf of Four Ashes Ltd. that questions 1 and 2 could not be publicly disclosed. We were however given an answer to question 3 – the Copper Consultant stated that only 30% of the Daventry SRFI's operation is partially or completely rail dependant.

4. For the avoidance of doubt could the Inspectorate ask the developers to confirm in writing the DRIFT site's 30% rail dependence figure?

5. Could the developers also clarify what percentage of warehouse (Class B8) rail dependency they would like to attain at the proposed WMI in order to be able to deem its creation a successful and effective use of 650 acres of Greenbelt?

It is quite striking that the developers are to date unable or unwilling to publicly state which companies will be using the proposed B8 warehouse facilities. In the extensive suite of documentation submitted in the DCO application and during the proceeding statutory and non-statutory consultations, not one distribution company has been cited or invoked as an interested partner company. This ambiguity strengthens the suspicion many people have that the veil of a 'green' SRFI is hiding some B8 warehouse construction for non-rail entities.

6. What possible reason could there be not to make information about interested/partner distribution companies public?

7. Is the reluctance to make this public due to the partner companies having very limited or no rail dependency in their current/future business operations?

8. What business/businesses would not want to advertise their intent and ability to expand, invest and create thousands of new jobs? That is not information companies usually like to withhold from their competitors, customers or investors.

9. If the developers are genuinely aspiring to create a rail-freight hub and the market lead approach of 'if we build it, they'll come' fails to generate sufficient uptake by rail dependant businesses, will the reserve option of 'standard' road-road based logistic operations fill the vacant warehouse units?

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[2] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000328-Doc%206.2%20-%20ES%20Chp%2015%20-%20Transport.pdf

[3] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000412-Doc%206.2%20ES%20Trans%20App%2015.1%20-%20Transport%20Ass.pdf

10. Can the Inspectorate 'condition' any future approval so that each parcel of land/warehouse within the designated red site line is built on a case by case basis, with a site specific 'reserved matters' type application to validate each warehouse's rail dependency?

If the WMI is approved and does go on to function with 'extensive' rail based operations, its ability to act as a catalyst for further development is also deeply concerning. The expansion of secondary and tertiary developments around SRFIs is not a farfetched possibility. Many SRFI's across the UK have seen this happen in their hinterlands. A stark example of this is the SRFI at Daventry near Rugby[4].

11. What safeguards are there to ensure this will not happen in the Greenbelt around the proposed WMI site?

Section 2: The WMI and its Connection to the West Midlands Conurbation along the A449

It is advocated by the developers that the proposed WMI will primarily serve the 'Black Country', South Staffordshire and eastern Shropshire (*Source: The Transport Assessment - Tables 24, 25 & 26[5])* - these areas reside to the south and southeast of the proposed WMI site. To connect with those areas the proposed WMI would be completely dependent upon the road link provided by the A449 between the proposed Station Road roundabout in the south west corner of the WMI site and Junction Two (J2) of the M54. The A449 will not become an ancillary road associated with the proposed scheme – it will become the WMI's de facto spinal cord.

The developers' submission recognises the A449 (between the WMI and J2 of the M54) has considerable 'capacity' to support a large increase in vehicle numbers; it is not disputed that the road has capacity. The issue with the developers' proposal is that it completely misrepresents a number of very specific and profound impacts that the intensification of use along the A449 will have on many of the residents living in the villages of Standeford, Coven & Coven Heath to the south of the site. The 'southern settlements' intersected by the A449 are home to many hundreds of people (please see Photographs 1, 2 and 3 and Map 1 to see the locations and nature of these settlements). The southern settlements are also situated on or adjacent to the majority of the junctions that intersect the A449 between the site and J2 of the M54. These again can be seen in Photographs 1, 2 and 3.

The developers' traffic modelling submitted in Chapter 15 of the submitted ES[6] (Table 15.1) anticipates that in the event of an approval by the year 2021 an additional 1569 (154% increase) HGVs would be using 'Link 18' (the A449 between Station Road and Brewood Road) per day. The modelling also

[4] https://en.wikipedia.org/wiki/Daventry_International_Rail_Freight_Terminal?wprov=sfsi1
[5] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000412-Doc%206.2%20ES%20Trans%20App%2015.1%20-%20Transport%20Ass.pdf
[6] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000328-Doc%206.2%20-%20ES%20Chp%2015%20-%20Transport.pdf

estimates an additional 5509 other vehicles also using 'Link 18' as consequence of the proposed scheme.

Large increases in vehicle numbers are also anticipated on 'Link 20' further south along the A449 (the A449 between J2 of the M54 and the Brewood Road), although they are slightly smaller in number compared to the proposed usage in 'Link 18'. By calculating the differences between the estimated numbers of vehicles using 'link 18' and 'link 20' the developers anticipate that an average of 2183 additional vehicles per day (145 of which will be HGVs) will be filtering onto and off of the A449 at the School Lane and Brewood Road junctions. These intersecting roads are narrow, residential streets totally unsuited to serve as 'rat-runs' for an additional 145 HGVs and 2000 car/van movements per day.

The effect of the large increases in vehicle movements along the A449 and intersecting roads would be highly disruptive for the occupants of the many older 2-3 storey dwellings that front the affected highways, particularly those dwellings with principal elevations fronting the various junctions along the A449. The pre-WWI dwellings that line the A449 are vulnerable as they are typically constructed with sub 300mm foundations/footings; have extensive/elevated first floor window fenestrations and are constructed without wall cavities, effective insulation, modern engineered bricks/blocks, efficient insulating window/door materials and adequate boundary treatments. Collectively, these characteristics result in homes ill-suited to mitigating the effects of an intensification in the frequency of highway generated noise.

Chapter 13 (Noise & Vibration) of the ES[7], paragraphs 13.329 – 13.359, has analysed the projected changes in sound levels provided in Technical Appendix 13.5[8] (Operational Noise Assessment Information). The analysis given in paragraphs 13.329 – 13.359 has sought to confirm acceptable sound level increases to long sections of road (several kilometres in length) around the WMI; critically this approach has failed to take account of and represent the effect of signal controlled junctions along the A449. Instead, the increased levels of sound in these locations has been smeared out into the data and hidden.

Signal controlled junctions amplify the frequency and intensity of the most disruptive sounds, such as harsh braking, engine revving, rapid acceleration, blaring radios and refrigeration cooling units being activated on HGVs when cab/engines are stationary at a red traffic lights. Around junctions these types of noise sources are sporadic and intermittent bursts of sound, particularly at night, which could be problematic for the occupants of vulnerable older houses. For example, the constant drone of several passing cars may produce the same average amount of sound as a fully laden HGV slamming its brakes on at a traffic light change. However, the passing cars would not wake a sleeping child, whereas a harshly braking HGV could.

ES Chapter 13 - Paragraph 13.418 best summarises the developers' position on the matter:

[7] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000326-Doc%206.2%20-%20ES%20Chp%2013%20-%20Noise%20and%20Vib.pdf

[8] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000404-Doc%206.2%20ES%20Noise%20App%2013.5%20-%20Op%20Ass.pdf

> *Mitigating off-site road traffic noise is not generally possible as the land is not within the control of the Applicant; the erection of roadside noise barriers could require the purchase of land considerably beyond the Order limits. The use of low noise road surfaces can be effective for free-flowing traffic conditions, however, the traffic movements that lead to the moderate adverse effect are close to junctions, where traffic is unlikely to be free-flowing. Low noise road surfaces are unlikely to provide a material benefit.*

ES Chapter 13 has not only statistically mispresented the impact of an intensification of vehicular use, it has also very cynically asserted that the Noise Insulation Regulations 1975 (as amended 1988) will render the developers devoid of any responsibly for highway generated noise beyond a distance of 300 metres from the site.

Given the lucrative nature of a WMI approval - the developers and the landowner would have more than sufficient financial means to help mitigate (though the Section 106 agreement) the very specific adverse effects we have identified. The developers' initial approach of collating dubious evidence, using statistical skulduggery to make it fit their narrative and then hiding behind 44 year old sound legislation is unfair, immoral, and completely counterproductive to the wider public good this scheme could deliver. Mitigating the impacts of the proposed scheme is unlikely to be problematic if the examining body determines the application with an approval. The assertion that the developers need to take ownership of land and property to install mitigating engineering solutions is nonsense. Affected residents can be given a choice to install or not install engineering solutions to mitigate against the problems. If the engineering solutions need to reside on land owned by Highways England alongside the A499, this could and should to be assessed on a case-by-case basis with the Inspectorate arbitrating the process.

The impact of the proposed scheme on air quality in the southern settlements is also completely noticeable in its absence from the submitted application. The issue appears to have been missed in the EIA scoping given to the developers some years ago. The matter should be fully and robustly examined prior to any consent being granted.

Section 3: Mitigation Measures to Protect the Communities Living Along the Southern Corridor

The proposed WMI would generate substantial profits for the developers and the landowner if it is given consent. It is not fair, nor is it morally right, for that to happen to the detriment of local people without adequate redress for the impact it will have.

It is quite clear that those most severely affected, such as those whose homes will be demolished, will be given substantial financial compensation. However, those affected residents further down the impact spectrum also need adequate redress. This includes the residents affected by the changes in the traffic regimes along the A449.

The following is a list that is by no means exhaustive, of what could be done to limit the impact of the issues identified in the previous section of this document.

- Integrate and phase Highways England's proposed M54 (Junction 1) - M6 link road into the WMI scheme[9]. Given the scale of both schemes and their close proximately, failure to develop the schemes holistically would be a missed opportunity to develop the most efficient and integrated transport network in the West Midlands region for decades to come. It is possible that the creation of a new M54-M6 link road at J1 of the M54 would allow the A449 to be used differently from its proposed role (advocated by the developers of the WMI scheme) as a high-volume, high-speed WMI access and M54-M6 motorway link road. A successfully built new M54 (J1) M6 link road would enable the A449 to move toward becoming a high-volume, low-speed WMI service road, open only to local traffic and WMI-West Midlands HGV movements.

- Create a new junction on the A449 between the Standeford and Brewood Road Junctions. Please see Map 2 for where this may be possible and how it would link to the existing local road network. A new junction would remedy many of the problems identified in Section 2 of this document. A new A449 junction would enable the existing Standeford and Brewood Road junctions to be terminated. This would allow the A449 to pass through the three urban settlements unimpeded. This would increase average vehicle transit times through the settlements, thus reducing the levels of vehicle derived air pollution that would be emitted in these areas and therefore the levels people are exposed to.

- Terminate the existing intersecting A449 junctions to enable a change in the layout of the A449 from a two lane dual carriageway to a single lane road where it passes though the built up areas. This would enable sections of sound proof fencing, such as those shown in Photograph 4, to be installed alongside the roadside in strategically placed sections, essentially insulating the settlements from the increase in sound along the A449. Stretches of single lanes along the A449 would move HGVs away from many house frontages and lessen the severity of the vibration they generate.

- Remove large sections of existing tarmac on the 'outside' of this new fencing to enable the formation of a tree lined 'green corridor' to soften the brutal appearance of the fencing within the Greenbelt landscape.

- Reduce the speed limit from 60 mph to 40 mph on the A449 where the road passes through sensitive areas to reduce noise, vibration and pollution levels. A change from two to one lanes, with a reduction in the overall vehicle speed limit has been undertaken by Worcestershire County Council on several stretches of the A449 between Kidderminster and Worcester in recent years (see Photographs 5 and 6). The road modifications there have reduced noise and vibration levels and improved road safety where a large truck road passes through small rural communities. Transferring the approach to the A449 to the south of the proposed WMI would be a sensible measure.

[9] https://highwaysengland.citizenspace.com/he/m54-to-m6-m6-toll-link-road/results/preferred-route-announcement.pdf

- Enforce new speed limits with strategically place fixed speed cameras or average speed cameras. It is noted (in Paragraph 7.5 of Appendix I - The Site Wide HGV Management Plan[10]) that the developers wish to use such an approach in the town of Penkridge to the north of the proposed WMI in order to restrict HGV transit through that settlement.

- Fund the upgrade of windows, doors and the boundary structures of older properties with 'modern' and more robust/efficient materials.

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[10] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050005/TR050005-000421-ES%20TR%20App%2015.1%20-%20TA%20App%20I%20-%20Site%20Wide%20HGV%20Man%20Plan.pdf

Photographs:

Photograph 1: Coven Heath.

Photograph 2: Coven and the Brewood Road Junction.

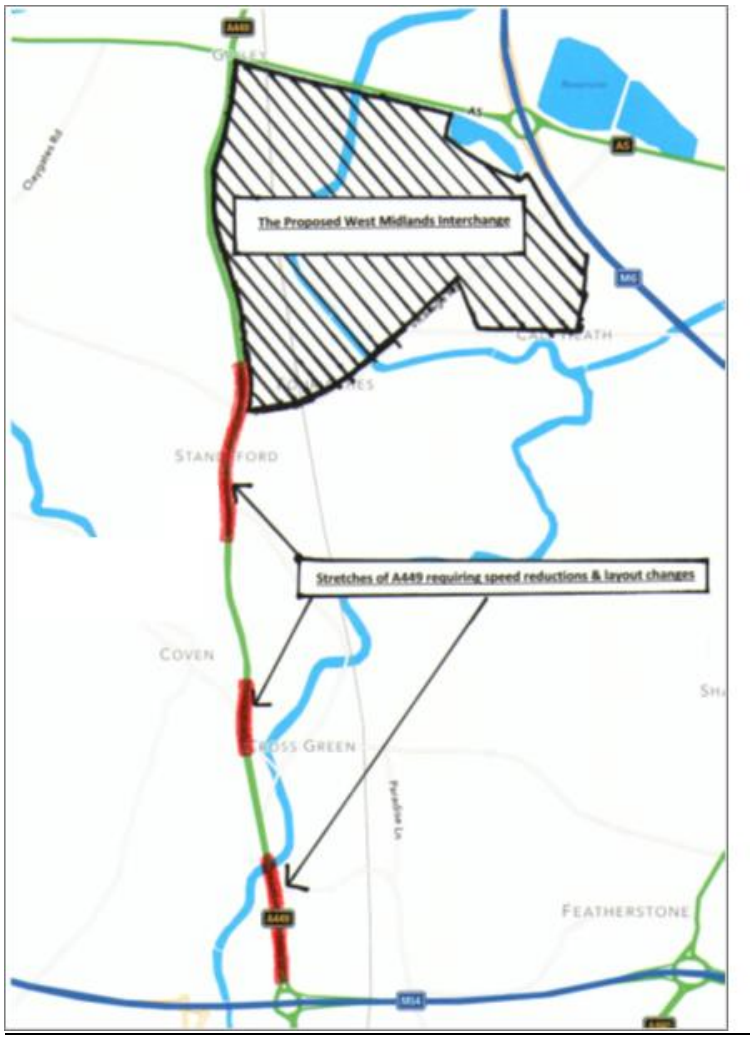
Photograph 3: Standeford (Coven).

Photograph 4: An example of sound proof fencing.

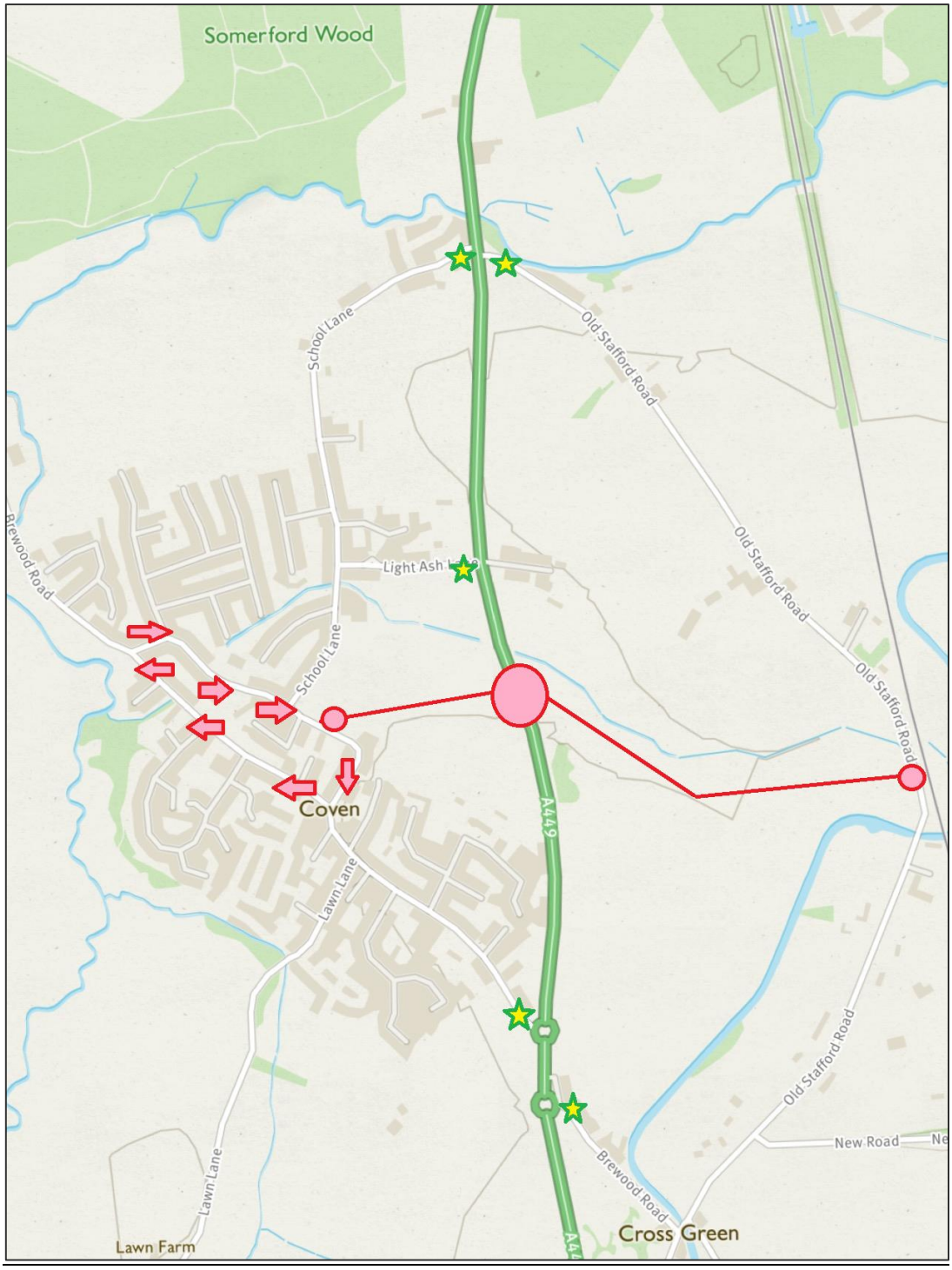
Photograph 5: The image shows a section of the A449 at Ombersley, Worcestershire (looking south). The dual carriageway has been reduced to one lane by Worcestershire County Council.

Photograph 6: The image shows a section of the A449 at Ombersley, Worcestershire (looking north). It has had its speed limit lowered and the road has been reduced in size from two lanes to one by Worcestershire County Council.

Maps



Map 1: The map shows the A449 between the A5 and M54. Areas along that stretch of road with concentrated clusters of housing, businesses, pedestrian crossings and small junctions that would benefit from a reduction in the speed limit are shown in red.



Map 2: The map shows the location along the A449 between the School Lane and Brewood Road junctions where a new roundabout could be created. Positioning a single multipurpose junction here would help transfer the increased levels of exhaust emissions and noise pollution away from almost all of the sensitive residential areas in Coven and Standeford. The red circle and red lines show the possible location of a new roundabout and connecting roads. The red arrows show a possible one way system in the village of Coven to allow local buses to turn. The green and yellow stars show the intersecting junctions along the A449 which could be removed.

APPENDIX 2

Document 6.2

The West Midlands Rail Freight Interchange Order 201X

Technical Appendix 13.5 - Operational Noise Assessment information

Regulation 5(2)(a)

Resound - July 2018

West Midlands Interchange

Four Ashes Ltd

Technical Appendix 13.5: Operational Noise Assessment Information

Table A13.5.1: Off-site daytime road traffic flows – 2021

Road	2016 baseline	2021 No development	2021 With development
M6 between Junction 13 and 14 (northbound)	64,931 (20.2)	80,202 (15.9)	80,579 (16.1)
M6 between Junction 13 and 14 (southbound)	64,322 (21.3)	83,765 (15)	84,586 (15.3)
A449 between M6 J13 and Pinfold Lane	13,794 (2.9)	16,997 (6.7)	19,001 (7.4)
Teddesley Road between Marsh Lane and Penkridge Road	3,371 (0.6)	3,521 (0.6)	3,521 (0.6)
Cannock Road between Wolgarston Way and A34	11,626 (1.3)	16,924 (6.7)	17,532 (7.9)
A5 between M6 Junction 12 and Proposed Site Access	20,898 (12.4)	23,153 (6)	32,828 (15)
A5 between Vicarage Road and M6 J12	18,795 (21.5)	19,851 (15.2)	23,982 (18.4)
M6 between Junction 9 and 10 (northbound)	89,882 (18.6)	131,524 (11.8)	132,228 (12.3)
M6 between Junction 9 and 10 (southbound)	82,497 (15)	106,575 (13.4)	108,165 (14.2)
A5 between Vicarage Road and A4061 Wolverhampton Road	20,468 (15.6)	22,632 (12.3)	25,425 (13.5)
A5 between A449 and Proposed Site Access	20,239 (15.1)	21,451 (7.1)	21,091 (11.6)
A5 between A449 and A41	14,047 (4.3)	18,840 (5.7)	20,039 (7.4)
A5 between A41 and A4640 Redhill Way	8,447 (4.3)	11,571 (10.1)	11,766 (11.3)
A449 between A5 and Gravelly Way (northbound)	9,228 (16.2)	11,842 (4.2)	12,237 (8.8)
A449 between A5 and Gravelly Way (southbound)	9,695 (15.2)	11,119 (3.6)	10,460 (9.2)
A449 between Gravelly Way and Station Drive (northbound)	9,888 (8)	10,737 (3)	15,698 (6.9)
A449 between Gravelly Way and Station Drive (southbound)	9,652 (9)	12,132 (3.1)	14,601 (10.7)
Vicarage Road between Site Access and A5	6,594 (6.8)	6,574 (7.4)	8,503 (21.9)
Straight Mile between Vicarage Road and Oak Lane	1,719 (0.6)	1,802 (1.4)	1,822 (1.8)
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	8,217 (5.3)	6,416 (7.4)	5,472 (11)
Station Drive between A449 and Enterprise Drive	9,604 (2.5)	10,299 (6.5)	9,084 (8.3)
Four Ashes Road between A449 and Claygates Road	2,048 (0.5)	2,163 (2.7)	2,289 (3.5)
A449 between Station Drive and Brewood Road (northbound)	13,987 (4.6)	16,030 (3.4)	18,644 (6.8)
A449 between Station Drive and Brewood Road (southbound)	15,129 (4.8)	15,957 (3.6)	18,561 (9)
Old Stafford Road between A449 and New Road	2,483 (2.4)	2,593 (2.4)	2,593 (2.4)
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	3,612 (0.5)	3,772 (0.5)	3,772 (0.5)
Poplars Farm Way between A449 and Lawn Lane	9,143 (0.6)	8,434 (2.6)	8,706 (2.4)
Lawn Lane between Brewood Road and Wobaston Road	4,860 (0.9)	5,075 (0.9)	5,075 (0.9)
A449 Stafford Road M54 J2 to Brewood Road (northbound)	11,535 (17.7)	14,074 (3.8)	16,415 (7.2)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	11,637 (16.5)	14,727 (4)	16,742 (9)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	15,413 (14.9)	18,161 (3.7)	20,035 (6)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	17,901 (13.9)	21,867 (3.5)	23,196 (5.9)
Wobaston Road between Stafford Road and The Droveway	21,284 (6.4)	27,688 (1.8)	27,947 (1.7)
A449 Stafford Road between Wobaston Road and A460	29,281 (13.7)	37,997 (2.7)	40,764 (5.2)

Road	2016 baseline	2021 No development	2021 With development
Church Road between A449 Stafford Road and Three Tuns Lane	959 (0.4)	1,001 (0.4)	1,001 (0.4)
Bargate Street, Brewood	2,772 (0.8)	2,895 (0.8)	2,895 (0.8)
Sandy Lane / The Pavement, Brewood	3,275 (0.6)	3,420 (0.6)	3,420 (0.6)
Coven Road, Brewood between The Pavement and Tinkers Lane	5,089 (0.6)	5,315 (0.6)	5,315 (0.6)
B5012 Wolgarston Way between Cannock Road and A449	9,298 (1.5)	8,195 (5.9)	8,927 (5.5)
A449 between B5012 Boscomoor Lane and Pinfold Lane	17,751 (4.2)	13,947 (9.7)	15,872 (8.5)
A449 between B5012 Boscomoor Lane and A5	20,929 (2.4)	23,763 (3.9)	25,352 (5.9)
Camp Road between Penkridge Bank Road and A34	3,796 (0.5)	3,964 (0.5)	3,964 (0.5)
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	5,329 (2.1)	5,565 (2.1)	5,565 (2.1)
A5 between A4601 Wolverhampton Road and M6 Toll	21,509 (7.1)	26,617 (15.1)	27,000 (15.8)
A4601 Wolverhampton Road between A5 and M6 Toll	16,151 (3.1)	19,336 (14)	19,431 (14.1)
A4601 Wolverhampton Road between A5 and Longford Road	15,995 (1.4)	16,142 (7.9)	16,365 (8.4)
Bursnips Road	9,295 (7.8)	9,884 (7.8)	9,884 (7.8)
M6 between Junction 10 and 10a (northbound)	65,938 (15)	106,332 (14.9)	107,915 (15.5)
M6 between Junction 10 and 10a (southbound)	65,319 (15.7)	100,505 (15.9)	102,556 (16.7)
M6 between Junction 12 and 13 (northbound)	55,282 (13.9)	74,917 (13.7)	76,274 (13.8)
M6 between Junction 12 and 13 (southbound)	54,763 (14.7)	80,561 (14.6)	82,427 (14.6)
M6 between Junction 11a and 12 (northbound)	61,415 (16.3)	73,071 (13.8)	76,953 (15.1)
M6 between Junction 11a and 12 (southbound)	60,839 (17.2)	75,796 (14.6)	79,352 (15.9)
M6 between Junction 10a and 11 (northbound)	47,615 (18.5)	61,541 (18.3)	63,490 (19.1)
M6 between Junction 10a and 11 (southbound)	47,169 (19.5)	57,444 (19.3)	59,692 (20.4)
A5 between A34 and B4154	27,668 (12.2)	29,014 (13.2)	29,018 (13.4)
Notes: All roads are two-way, unless stated otherwise. Data presented in the form of 18 hour AAWT flows with the percentage of HGVs in brackets			

Table A13.5.2: Off-site daytime road traffic flows – 2036

Road	2016 baseline	2021 No development	2021 With development
M6 between Junction 13 and 14 (northbound)	64,931 (20.2)	90,039 (15.9)	90,369 (16.1)
M6 between Junction 13 and 14 (southbound)	64,322 (21.3)	94,039 (15)	94,859 (15.2)
A449 between M6 J13 and Pinfold Lane	13,794 (2.9)	18,399 (6.7)	20,537 (7.3)
Teddesley Road between Marsh Lane and Penkridge Road	3,371 (0.6)	3,831 (0.6)	3,831 (0.6)
Cannock Road between Wolgarston Way and A34	11,626 (1.3)	18,320 (6.7)	18,937 (7.9)
A5 between M6 Junction 12 and Proposed Site Access	20,898 (12.4)	25,279 (6)	35,346 (14.5)
A5 between Vicarage Road and M6 J12	18,795 (21.5)	21,674 (15.2)	25,923 (18.1)
M6 between Junction 9 and 10 (northbound)	89,882 (18.6)	147,655 (11.8)	148,222 (12.3)
M6 between Junction 9 and 10 (southbound)	82,497 (15)	119,646 (13.4)	121,192 (14.1)
A5 between Vicarage Road and A4061 Wolverhampton Road	20,468 (15.6)	24,710 (12.3)	27,527 (13.4)
A5 between A449 and Proposed Site Access	20,239 (15.1)	23,420 (7.1)	22,843 (11.4)
A5 between A449 and A41	14,047 (4.3)	20,394 (5.7)	21,611 (7.3)

Road	2016 baseline	2021 No development	2021 With development
A5 between A41 and A4640 Redhill Way	8,447 (4.3)	12,525 (10.1)	12,706 (11.1)
A449 between A5 and Gravelly Way (northbound)	9,228 (16.2)	12,930 (4.2)	13,267 (8.5)
A449 between A5 and Gravelly Way (southbound)	9,695 (15.2)	12,140 (3.6)	11,300 (9)
A449 between Gravelly Way and Station Drive (northbound)	9,888 (8)	11,723 (3)	16,969 (6.8)
A449 between Gravelly Way and Station Drive (southbound)	9,652 (9)	13,246 (3.1)	15,771 (10.5)
Vicarage Road between Site Access and A5	6,594 (6.8)	7,154 (7.4)	8,864 (21.3)
Straight Mile between Vicarage Road and Oak Lane	1,719 (0.6)	1,961 (1.4)	1,982 (1.8)
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	8,217 (5.3)	6,982 (7.4)	5,831 (10.8)
Station Drive between A449 and Enterprise Drive	9,604 (2.5)	11,209 (6.5)	9,768 (8.2)
Four Ashes Road between A449 and Claygates Road	2,048 (0.5)	2,354 (2.7)	2,491 (3.5)
A449 between Station Drive and Brewood Road (northbound)	13,987 (4.6)	17,502 (3.4)	20,152 (6.7)
A449 between Station Drive and Brewood Road (southbound)	15,129 (4.8)	17,423 (3.6)	20,074 (8.8)
Old Stafford Road between A449 and New Road	2,483 (2.4)	2,822 (2.4)	2,822 (2.4)
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	3,612 (0.5)	4,105 (0.5)	4,105 (0.5)
Poplars Farm Way between A449 and Lawn Lane	9,143 (0.6)	9,179 (2.6)	9,452 (2.4)
Lawn Lane between Brewood Road and Wobaston Road	4,860 (0.9)	5,523 (0.9)	5,523 (0.9)
A449 Stafford Road M54 J2 to Brewood Road (northbound)	11,535 (17.7)	15,367 (3.8)	17,739 (7.1)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	11,637 (16.5)	16,079 (4)	18,110 (8.8)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	15,413 (14.9)	19,801 (3.7)	21,724 (5.9)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	17,901 (13.9)	23,842 (3.5)	25,198 (5.8)
Wobaston Road between Stafford Road and The Droveway	21,284 (6.4)	30,575 (1.8)	30,862 (1.7)
A449 Stafford Road between Wobaston Road and A460	29,281 (13.7)	41,589 (2.7)	44,411 (5.1)
Church Road between A449 Stafford Road and Three Tuns Lane	959 (0.4)	1,106 (0.4)	1,106 (0.4)
Bargate Street, Brewood	2,772 (0.8)	3,197 (0.8)	3,197 (0.8)
Sandy Lane / The Pavement, Brewood	3,275 (0.6)	3,776 (0.6)	3,776 (0.6)
Coven Road, Brewood between The Pavement and Tinkers Lane	5,089 (0.6)	5,869 (0.6)	5,869 (0.6)
B5012 Wolgarston Way between Cannock Road and A449	9,298 (1.5)	9,049 (5.9)	9,805 (5.5)
A449 between B5012 Boscomoor Lane and Pinfold Lane	17,751 (4.2)	15,265 (9.7)	17,134 (8.4)
A449 between B5012 Boscomoor Lane and A5	20,929 (2.4)	25,724 (3.9)	27,336 (5.8)
Camp Road between Penkridge Bank Road and A34	3,796 (0.5)	4,314 (0.5)	4,314 (0.5)
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	5,329 (2.1)	6,056 (2.1)	6,056 (2.1)
A5 between A4601 Wolverhampton Road and M6 Toll	21,509 (7.1)	29,021 (15.1)	29,288 (15.8)
A4601 Wolverhampton Road between A5 and M6 Toll	16,151 (3.1)	21,164 (14)	21,250 (14.1)
A4601 Wolverhampton Road between A5 and Longford Road	15,995 (1.4)	17,667 (7.9)	17,867 (8.3)
Bursnips Road	9,295 (7.8)	10,699 (7.8)	10,699 (7.8)

Road	2016 baseline	2021 No development	2021 With development
M6 between Junction 10 and 10a (northbound)	65,938 (15)	119,373 (14.9)	120,909 (15.4)
M6 between Junction 10 and 10a (southbound)	65,319 (15.7)	112,832 (15.9)	114,870 (16.6)
M6 between Junction 12 and 13 (northbound)	55,282 (13.9)	84,106 (13.7)	85,550 (13.7)
M6 between Junction 12 and 13 (southbound)	54,763 (14.7)	90,441 (14.6)	92,442 (14.6)
M6 between Junction 11a and 12 (northbound)	61,415 (16.3)	82,033 (13.8)	86,006 (14.9)
M6 between Junction 11a and 12 (southbound)	60,839 (17.2)	85,092 (14.6)	88,787 (15.7)
M6 between Junction 10a and 11 (northbound)	47,615 (18.5)	69,089 (18.3)	71,036 (19)
M6 between Junction 10a and 11 (southbound)	47,169 (19.5)	64,489 (19.3)	66,751 (20.3)
A5 between A34 and B4154	27,668 (12.2)	31,678 (13.2)	31,612 (13.4)
Notes: All roads are two-way, unless stated otherwise. Data presented in the form of 18 hour AAWT flows with the percentage of HGVs in brackets			

Table A13.5.3: Off-site night-time road traffic flows – 2021

Road	2016 baseline	2021 No development	2021 With development
M6 between Junction 13 and 14 (northbound)	8,246 (48.1)	10,191 (37.8)	10,366 (37.8)
M6 between Junction 13 and 14 (southbound)	9,456 (42.5)	12,322 (30)	12,563 (30.2)
A449 between M6 J13 and Pinfold Lane	1,051 (8)	1,295 (18.2)	1,529 (20.4)
Teddesley Road between Marsh Lane and Penkridge Road	176 (0.5)	181 (0.5)	181 (0.5)
Cannock Road between Wolgarston Way and A34	649 (1.5)	945 (7.7)	1,103 (9.4)
A5 between M6 Junction 12 and Proposed Site Access	1,482 (67.1)	3,402 (15.4)	5,418 (30.1)
A5 between Vicarage Road and M6 J12	3,678 (41)	3,884 (28.9)	4,972 (30.7)
M6 between Junction 9 and 10 (northbound)	11,069 (37.3)	14,524 (26.2)	14,932 (26.9)
M6 between Junction 9 and 10 (southbound)	14,221 (28.9)	20,512 (23.4)	21,010 (24.5)
A5 between Vicarage Road and A4061 Wolverhampton Road	2,240 (38)	2,508 (31.9)	3,293 (29.5)
A5 between A449 and Proposed Site Access	3,896 (42.3)	4,129 (19.3)	4,264 (25.2)
A5 between A449 and A41	1,104 (8.9)	1,482 (11.7)	1,789 (16.1)
A5 between A41 and A4640 Redhill Way	624 (8.5)	856 (20)	948 (24.8)
A449 between A5 and Gravelly Way (northbound)	398 (16.2)	1,703 (11.3)	1,911 (19)
A449 between A5 and Gravelly Way (southbound)	326 (20.1)	1048 (6)	1,249 (16.7)
A449 between Gravelly Way and Station Drive (northbound)	839 (16.7)	912 (6.2)	1,732 (12.9)
A449 between Gravelly Way and Station Drive (southbound)	1,201 (24.7)	1,511 (8.6)	2,137 (23.3)
Vicarage Road between Site Access and A5	541 (14.9)	540 (16.2)	1,643 (29.9)
Straight Mile between Vicarage Road and Oak Lane	88 (0.9)	93 (2)	98 (2.5)
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	629 (11.8)	492 (16.5)	732 (18.9)
Station Drive between A449 and Enterprise Drive	735 (5.6)	789 (14.3)	994 (16.2)
Four Ashes Road between A449 and Claygates Road	100 (0.4)	106 (2.2)	112 (2.8)
A449 between Station Drive and Brewood Road (northbound)	1,187 (9.6)	1,188 (7.5)	1,885 (13)
A449 between Station Drive and Brewood Road (southbound)	1,883 (13.1)	2,277 (9.5)	2,970 (19.3)
Old Stafford Road between A449 and New Road	136 (3.8)	140 (3.8)	140 (3.8)

Road	2016 baseline	2021 No development	2021 With development
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	150 (0.5)	154 (0.5)	154 (0.5)
Poplars Farm Way between A449 and Lawn Lane	512 (0.3)	472 (1.3)	553 (1)
Lawn Lane between Brewood Road and Wobaston Road	258 (0.9)	266 (0.9)	266 (0.9)
A449 Stafford Road M54 J2 to Brewood Road (northbound)	1,170 (35.3)	1,427 (7.5)	2,062 (12.7)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	1,148 (24.1)	1,453 (5.8)	2,016 (14.5)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	2,042 (17.9)	2,407 (4.4)	2,877 (7.8)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	1,709 (15.9)	2,087 (4)	2,419 (8.4)
Wobaston Road between Stafford Road and The Droveway	1,843 (8.9)	2,398 (2.4)	2,420 (2.4)
A449 Stafford Road between Wobaston Road and A460	2,997 (17.6)	3,889 (3.4)	4,600 (7.8)
Church Road between A449 Stafford Road and Three Tuns Lane	45 (0)	47 (0)	47 (0)
Bargate Street, Brewood	72 (0.6)	74 (0.6)	74 (0.6)
Sandy Lane / The Pavement, Brewood	123 (0.5)	127 (0.5)	127 (0.5)
Coven Road, Brewood between The Pavement and Tinkers Lane	182 (0.4)	187 (0.4)	187 (0.4)
B5012 Wolgarston Way between Cannock Road and A449	482 (1.8)	1,077 (5.8)	1,259 (5.9)
A449 between B5012 Boscomoor Lane and Pinfold Lane	1,358 (10.7)	640 (11.8)	869 (16)
A449 between B5012 Boscomoor Lane and A5	1,601 (6.3)	1,819 (9.9)	2,226 (14.7)
Camp Road between Penkridge Bank Road and A34	298 (0.1)	306 (0.1)	306 (0.1)
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	355 (3.2)	365 (3.2)	365 (3.2)
A5 between A4601 Wolverhampton Road and M6 Toll	2,059 (23.2)	1,781 (43.4)	2,192 (39)
A4601 Wolverhampton Road between A5 and M6 Toll	1,718 (5.4)	1,680 (50)	1,729 (49)
A4601 Wolverhampton Road between A5 and Longford Road	1,638 (2.1)	1,735 (14.7)	1,849 (15.1)
Bursnips Road	989 (13.7)	1,041 (13.7)	1,041 (13.7)
M6 between Junction 10 and 10a (northbound)	8,374 (35.6)	9,508 (22.9)	10,049 (24.2)
M6 between Junction 10 and 10a (southbound)	9,603 (31.5)	8,649 (24.9)	9,266 (26.6)
M6 between Junction 12 and 13 (northbound)	7,020 (33.2)	9,520 (32.6)	9,799 (32.4)
M6 between Junction 12 and 13 (southbound)	8,051 (29.3)	11,851 (29.3)	12,242 (28.8)
M6 between Junction 11a and 12 (northbound)	7,799 (38.8)	9,285 (32.9)	10,298 (33.8)
M6 between Junction 11a and 12 (southbound)	8,944 (34.3)	11,150 (29.2)	12,019 (30.7)
M6 between Junction 10a and 11 (northbound)	6,047 (44)	7,820 (43.6)	8,393 (43.5)
M6 between Junction 10a and 11 (southbound)	6,934 (38.9)	8,450 (38.5)	9,090 (39.3)
A5 between A34 and B4154	2,943 (21.5)	4,610 (26.4)	4,719 (26.1)
Notes: All roads are two-way, unless stated otherwise. Data presented in the form of 8 hour AAWT flows with the percentage of HGVs in brackets			

Table A13.5.4: Off-site night-time road traffic flows – 2036

Road	2016 baseline	2036 No development	2036 With development
M6 between Junction 13 and 14 (northbound)	8,246 (48.1)	11,441 (37.8)	11,609 (37.8)
M6 between Junction 13 and 14 (southbound)	9,456 (42.5)	13,833 (30)	14,074 (30.2)
A449 between M6 J13 and Pinfold Lane	1,051 (8)	1,402 (18.2)	1,646 (20.1)
Teddesley Road between Marsh Lane and Penkridge Road	176 (0.5)	197 (0.5)	197 (0.5)
Cannock Road between Wolgarston Way and A34	649 (1.5)	1,023 (7.7)	1,182 (9.3)
A5 between M6 Junction 12 and Proposed Site Access	1,482 (67.1)	3,715 (15.4)	5,770 (29.7)
A5 between Vicarage Road and M6 J12	3,678 (41)	4,241 (28.9)	5,352 (30.6)
M6 between Junction 9 and 10 (northbound)	11,069 (37.3)	16,306 (26.2)	16,698 (26.8)
M6 between Junction 9 and 10 (southbound)	14,221 (28.9)	23,028 (23.4)	23,517 (24.3)
A5 between Vicarage Road and A4061 Wolverhampton Road	2,240 (38)	2,739 (31.9)	3,526 (29.7)
A5 between A449 and Proposed Site Access	3,896 (42.3)	4,508 (19.3)	4,602 (25)
A5 between A449 and A41	1,104 (8.9)	1,604 (11.7)	1,913 (15.8)
A5 between A41 and A4640 Redhill Way	624 (8.5)	926 (20)	1,017 (24.3)
A449 between A5 and Gravelly Way (northbound)	398 (16.2)	1,859 (11.3)	2,059 (18.6)
A449 between A5 and Gravelly Way (southbound)	326 (20.1)	1,144 (6)	1,328 (16.3)
A449 between Gravelly Way and Station Drive (northbound)	839 (16.7)	996 (6.2)	1,840 (12.8)
A449 between Gravelly Way and Station Drive (southbound)	1,201 (24.7)	1,649 (8.6)	2,283 (23.2)
Vicarage Road between Site Access and A5	541 (14.9)	587 (16.2)	1,672 (29.6)
Straight Mile between Vicarage Road and Oak Lane	88 (0.9)	101 (2)	106 (2.5)
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	629 (11.8)	535 (16.5)	759 (18.8)
Station Drive between A449 and Enterprise Drive	735 (5.6)	859 (14.3)	1,047 (16)
Four Ashes Road between A449 and Claygates Road	100 (0.4)	115 (2.2)	122 (2.8)
A449 between Station Drive and Brewood Road (northbound)	1,187 (9.6)	1,297 (7.5)	1,997 (13)
A449 between Station Drive and Brewood Road (southbound)	1,883 (13.1)	2,486 (9.5)	3,186 (19.1)
Old Stafford Road between A449 and New Road	136 (3.8)	152 (3.8)	152 (3.8)
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	150 (0.5)	168 (0.5)	168 (0.5)
Poplars Farm Way between A449 and Lawn Lane	512 (0.3)	514 (1.2)	595 (1.1)
Lawn Lane between Brewood Road and Wobaston Road	258 (0.9)	289 (0.9)	289 (0.9)
A449 Stafford Road M54 J2 to Brewood Road (northbound)	1,170 (35.3)	1,558 (7.5)	2,196 (12.7)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	1,148 (24.1)	1,586 (5.8)	2,151 (14.1)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	2,042 (17.9)	2,624 (4.4)	3,101 (7.7)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	1,709 (15.9)	2,276 (4)	2,611 (8.2)
Wobaston Road between Stafford Road and The Droveway	1,843 (8.9)	2,648 (2.4)	2,673 (2.4)
A449 Stafford Road between Wobaston Road and A460	2,997 (17.6)	4,257 (3.4)	4,973 (7.6)
Church Road between A449 Stafford Road and Three Tuns Lane	45 (0)	51 (0)	51 (0)
Bargate Street, Brewood	72 (0.6)	82 (0.6)	82 (0.6)

Road	2016 baseline	2036 No development	2036 With development
Sandy Lane / The Pavement, Brewood	123 (0.5)	140 (0.5)	140 (0.5)
Coven Road, Brewood between The Pavement and Tinkers Lane	182 (0.4)	207 (0.4)	207 (0.4)
B5012 Wolgarston Way between Cannock Road and A449	482 (1.8)	1,189 (5.8)	1,374 (5.8)
A449 between B5012 Boscomoor Lane and Pinfold Lane	1,358 (10.7)	700 (11.8)	927 (15.5)
A449 between B5012 Boscomoor Lane and A5	1,601 (6.3)	1,969 (9.9)	2,378 (14.5)
Camp Road between Penkridge Bank Road and A34	298 (0.1)	333 (0.1)	333 (0.1)
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	355 (3.2)	397 (3.2)	397 (3.2)
A5 between A4601 Wolverhampton Road and M6 Toll	2,059 (23.2)	1,942 (43.4)	2,345 (39.4)
A4601 Wolverhampton Road between A5 and M6 Toll	1,718 (5.4)	1,838 (50)	1,887 (49.1)
A4601 Wolverhampton Road between A5 and Longford Road	1,638 (2.1)	1,899 (14.7)	2,010 (15.1)
Bursnips Road	989 (13.7)	1,127 (13.7)	1,127 (13.7)
M6 between Junction 10 and 10a (northbound)	8,374 (35.6)	10,674 (22.9)	11,211 (24)
M6 between Junction 10 and 10a (southbound)	9,603 (31.5)	9,710 (24.9)	10,326 (26.4)
M6 between Junction 12 and 13 (northbound)	7,020 (33.2)	10,687 (32.6)	10,978 (32.4)
M6 between Junction 12 and 13 (southbound)	8,051 (29.3)	13,304 (29.3)	13,715 (28.9)
M6 between Junction 11a and 12 (northbound)	7,799 (38.8)	10,424 (32.9)	11,448 (33.7)
M6 between Junction 11a and 12 (southbound)	8,944 (34.3)	12,517 (29.2)	13,406 (30.5)
M6 between Junction 10a and 11 (northbound)	6,047 (44)	8,779 (43.6)	9,351 (43.5)
M6 between Junction 10a and 11 (southbound)	6,934 (38.9)	9,486 (38.5)	10,128 (39.2)
A5 between A34 and B4154	2,943 (21.5)	5,034 (26.4)	5,131 (26.1)
Notes: All roads are two-way, unless stated otherwise. Data presented in the form of 8 hour AAWT flows with the percentage of HGVs in brackets			

Table 13.5.5: Calculated changes in daytime road traffic noise, 2021, free-field $L_{A10,18hrs}$ dB

Location	2016 baseline	2021 No development[1]	2021 With development[2]
M6 between Junction 13 and 14 (northbound)	82.6	83.0 (+0.4)	83.0 (0)
M6 between Junction 13 and 14 (southbound)	82.6	83.1 (+0.5)	83.1 (0)
A449 between M6 J13 and Pinfold Lane	72.5	74.2 (+1.7)	74.8 (+0.6)
Teddesley Road between Marsh Lane and Penkridge Road	65.1	65.3 (+0.2)	65.3 (0)
Cannock Road between Wolgarston Way and A34	68.6	71.5 (+2.9)	71.9 (+0.4)
A5 between M6 Junction 12 and Proposed Site Access	73.5	72.8 (-0.7)	75.9 (+3.1)
A5 between Vicarage Road and M6 J12	74.4	73.7 (-0.7)	75.0 (+1.3)
M6 between Junction 9 and 10 (northbound)	83.8	84.6 (+0.8)	84.7 (+0.1)
M6 between Junction 9 and 10 (southbound)	83.0	83.9 (+0.9)	84.1 (+0.2)
A5 between Vicarage Road and A4061 Wolverhampton Road	73.9	73.9 (0)	74.6 (+0.7)
A5 between A449 and Proposed Site Access	73.8	72.7 (-1.1)	73.4 (+0.7)
A5 between A449 and A41	72.2	73.8 (+1.6)	74.4 (+0.6)
A5 between A41 and A4640 Redhill Way	70.0	72.5 (+2.5)	72.7 (+0.2)
A449 between A5 and Gravelly Way (northbound)	73.6	72.9 (-0.7)	73.8 (+0.9)
A449 between A5 and Gravelly Way (southbound)	73.7	72.5 (-1.2)	73.2 (+0.7)
A449 between Gravelly Way and Station Drive (northbound)	72.8	72.3 (-0.5)	74.6 (+2.3)
A449 between Gravelly Way and Station Drive (southbound)	72.8	72.8 (0)	74.9 (+2.1)
Vicarage Road between Site Access and A5	67.5	67.6 (+0.1)	70.9 (+3.3)
Straight Mile between Vicarage Road and Oak Lane	61.5	62.0 (+0.5)	62.1 (+0.1)
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	68.1	67.5 (-0.6)	67.5 (0)
Station Drive between A449 and Enterprise Drive	66.1	67.6 (+1.5)	67.5 (-0.1)
Four Ashes Road between A449 and Claygates Road	62.5	63.4 (+0.9)	63.9 (+0.5)
A449 between Station Drive and Brewood Road (northbound)	73.7	74.1 (+0.4)	75.4 (+1.3)
A449 between Station Drive and Brewood Road (southbound)	74.1	74.1 (0)	75.7 (+1.6)
Old Stafford Road between A449 and New Road	64.1	64.3 (+0.2)	64.3 (0)
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	61.1	61.3 (+0.2)	61.3 (0)
Poplars Farm Way between A449 and Lawn Lane	65.1	65.6 (+0.5)	65.6 (0)
Lawn Lane between Brewood Road and Wobaston Road	66.9	67.0 (+0.1)	67.0 (0)
A449 Stafford Road M54 J2 to Brewood Road (northbound)	74.8	73.6 (-1.2)	74.9 (+1.3)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	74.7	73.8 (-0.9)	75.2 (+1.4)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	71.8	70.2 (-1.6)	71.2 (+1.0)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	72.3	70.9 (-1.4)	71.8 (+0.9)
Wobaston Road between Stafford Road and The Droveway	70.7	70.4 (-0.3)	70.5 (+0.1)
A449 Stafford Road between Wobaston Road and A460	74.4	73.1 (-1.3)	74.1 (+1.0)
Church Road between A449 Stafford Road and Three Tuns Lane	Unreliable	54.5	54.5 (0)

Location	2016 baseline	2021 No development[1]	2021 With development[2]
Bargate Street, Brewood	59.9	60.1 (+0.2)	60.1 (0)
Sandy Lane / The Pavement, Brewood	60.7	60.9 (+0.2)	60.9 (0)
Coven Road, Brewood between The Pavement and Tinkers Lane	62.6	62.8 (+0.2)	62.8 (0)
B5012 Wolgarston Way between Cannock Road and A449	65.6	66.4 (+0.8)	66.7 (+0.3)
A449 between B5012 Boscomoor Lane and Pinfold Lane	69.3	69.7 (+0.4)	70.0 (+0.3)
A449 between B5012 Boscomoor Lane and A5	69.5	70.5 (+1.0)	71.4 (+0.9)
Camp Road between Penkridge Bank Road and A34	65.7	65.9 (+0.2)	65.9 (0)
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	67.5	67.7 (+0.2)	67.7 (0)
A5 between A4601 Wolverhampton Road and M6 Toll	72.7	75 (+2.3)	75.2 (+0.2)
A4601 Wolverhampton Road between A5 and M6 Toll	68.5	72.0 (+3.5)	72.0 (0)
A4601 Wolverhampton Road between A5 and Longford Road	67.9	69.9 (+2.0)	70.1 (+0.2)
Bursnips Road	71.1	71.4 (+.3)	71.4 (0)
M6 between Junction 10 and 10a (northbound)	82.0	84.1 (+2.1)	84.2 (+0.1)
M6 between Junction 10 and 10a (southbound)	82.1	84 (+1.9)	84.1 (+0.1)
M6 between Junction 12 and 13 (northbound)	81.1	82.4 (+1.3)	82.5 (+0.1)
M6 between Junction 12 and 13 (southbound)	81.2	82.8 (+1.6)	82.9 (+0.1)
M6 between Junction 11a and 12 (northbound)	81.9	82.3 (+0.4)	82.7 (+0.4)
M6 between Junction 11a and 12 (southbound)	81.9	82.6 (+0.7)	82.9 (+0.3)
M6 between Junction 10a and 11 (northbound)	81.0	82.1 (+1.1)	82.3 (+0.2)
M6 between Junction 10a and 11 (southbound)	81.1	81.9 (+0.8)	82.2 (+0.3)
A5 between A34 and B4154	74.7	75.1 (+0.4)	75.1 (0)
Notes: [1] the bracketed value is the change in noise level between the 2016 baseline and 2021 No Development scenario [2] the bracketed value is the change in noise level between the 2021 No Development scenario and the 2021 With Development scenario [3] Traffic flow below validity of CRTN			

Table 13.5.6: Calculated changes in daytime road traffic noise, 2036, free-field $L_{A10,18hrs}$ dB

Location	2016 baseline	2036 No development[1]	2036 With development[2]
M6 between Junction 13 and 14 (northbound)	82.6	83.5 (+0.9)	83.5 (0)
M6 between Junction 13 and 14 (southbound)	82.6	83.6 (+1.0)	83.6 (0)
A449 between M6 J13 and Pinfold Lane	72.5	74.5 (+2)	75.1 (+0.6)
Teddesley Road between Marsh Lane and Penkridge Road	65.1	65.7 (+0.6)	65.7 (0)
Cannock Road between Wolgarston Way and A34	68.6	71.9 (+3.3)	72.3 (+0.4)
A5 between M6 Junction 12 and Proposed Site Access	73.5	73.1 (-0.4)	76.1 (+3.0)
A5 between Vicarage Road and M6 J12	74.4	74.1 (-0.3)	75.3 (+1.2)
M6 between Junction 9 and 10 (northbound)	83.8	85.1 (+1.3)	85.2 (+0.1)
M6 between Junction 9 and 10 (southbound)	83.0	84.4 (+1.4)	84.6 (+0.2)
A5 between Vicarage Road and A4061 Wolverhampton Road	73.9	74.2 (+0.3)	74.9 (+0.7)
A5 between A449 and Proposed Site Access	73.8	73.1 (-0.7)	73.7 (+0.6)

Location	2016 baseline	2036 No development[1]	2036 With development[2]
A5 between A449 and A41	72.2	74.1 (+1.9)	74.7 (+0.6)
A5 between A41 and A4640 Redhill Way	70.0	72.8 (+2.8)	73.1 (+0.3)
A449 between A5 and Gravelly Way (northbound)	73.6	73.3 (-0.3)	74.2 (+0.9)
A449 between A5 and Gravelly Way (southbound)	73.7	72.9 (-0.8)	73.5 (+0.6)
A449 between Gravelly Way and Station Drive (northbound)	72.8	72.6 (-0.2)	74.9 (+2.3)
A449 between Gravelly Way and Station Drive (southbound)	72.8	73.2 (+0.4)	75.2 (+2.0)
Vicarage Road between Site Access and A5	67.5	68.0 (+0.5)	71.1 (+3.1)
Straight Mile between Vicarage Road and Oak Lane	61.5	62.5 (+1.0)	62.6 (+0.1)
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	68.1	67.9 (-0.2)	67.7 (-0.2)
Station Drive between A449 and Enterprise Drive	66.1	68.0 (+1.9)	67.8 (-0.2)
Four Ashes Road between A449 and Claygates Road	62.5	63.8 (+1.3)	64.3 (+0.5)
A449 between Station Drive and Brewood Road (northbound)	73.7	74.5 (+0.8)	75.7 (+1.2)
A449 between Station Drive and Brewood Road (southbound)	74.1	74.5 (+0.4)	76.0 (+1.5)
Old Stafford Road between A449 and New Road	64.1	64.7 (+0.6)	64.7 (0)
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	61.1	61.7 (+0.6)	61.7 (0)
Poplars Farm Way between A449 and Lawn Lane	65.1	65.9 (+0.8)	66 (+0.1)
Lawn Lane between Brewood Road and Wobaston Road	66.9	67.4 (+0.5)	67.4 (0)
A449 Stafford Road M54 J2 to Brewood Road (northbound)	74.8	74.0 (-0.8)	75.2 (+1.2)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	74.7	74.2 (-0.5)	75.5 (+1.3)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	71.8	70.6 (-1.2)	71.5 (+0.9)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	72.3	71.3 (-1.0)	72.2 (+0.9)
Wobaston Road between Stafford Road and The Droveway	70.7	70.9 (+0.2)	70.9 (0)
A449 Stafford Road between Wobaston Road and A460	74.4	73.5 (-0.9)	74.5 (+1.0)
Church Road between A449 Stafford Road and Three Tuns Lane	Unreliable	55.2	55.2 (0)
Bargate Street, Brewood	59.9	60.6 (+0.7)	60.6 (0)
Sandy Lane / The Pavement, Brewood	60.7	61.3 (+0.6)	61.3 (0)
Coven Road, Brewood between The Pavement and Tinkers Lane	62.6	63.2 (+0.6)	63.2 (0)
B5012 Wolgarston Way between Cannock Road and A449	65.6	66.9 (+1.3)	67.1 (+0.2)
A449 between B5012 Boscomoor Lane and Pinfold Lane	69.3	70.1 (+0.8)	70.3 (+0.2)
A449 between B5012 Boscomoor Lane and A5	69.5	70.8 (+1.3)	71.7 (+0.9)
Camp Road between Penkridge Bank Road and A34	65.7	66.2 (+0.5)	66.2 (0)
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	67.5	68.1 (+0.6)	68.1 (0)
A5 between A4601 Wolverhampton Road and M6 Toll	72.7	75.4 (+2.7)	75.5 (+0.1)
A4601 Wolverhampton Road between A5 and M6 Toll	68.5	72.4 (+3.9)	72.4 (0)
A4601 Wolverhampton Road between A5 and Longford Road	67.9	70.3 (+2.4)	70.5 (+0.2)

Location	2016 baseline	2036 No development[1]	2036 With development[2]
Bursnips Road	71.1	71.7 (+0.6)	71.7 (0)
M6 between Junction 10 and 10a (northbound)	82.0	84.6 (+2.6)	84.7 (+0.1)
M6 between Junction 10 and 10a (southbound)	82.1	84.5 (+2.4)	84.6 (+0.1)
M6 between Junction 12 and 13 (northbound)	81.1	82.9 (+1.8)	83.0 (+0.1)
M6 between Junction 12 and 13 (southbound)	81.2	83.3 (+2.1)	83.4 (+0.1)
M6 between Junction 11a and 12 (northbound)	81.9	82.8 (+0.9)	83.2 (+0.4)
M6 between Junction 11a and 12 (southbound)	81.9	83.1 (+1.2)	83.4 (+0.3)
M6 between Junction 10a and 11 (northbound)	81.0	82.6 (+1.6)	82.8 (+0.2)
M6 between Junction 10a and 11 (southbound)	81.1	82.4 (+1.3)	82.7 (+0.3)
A5 between A34 and B4154	74.7	75.5 (+0.8)	75.5 (0)
Notes: [1] the bracketed value is the change in noise level between the 2016 baseline and 2021 No Development scenario [2] the bracketed value is the change in noise level between the 2021 No Development scenario and the 2021 With Development scenario [3] Traffic flow below validity of CRTN			

Table 13.5.7: Calculated changes in night-time road traffic noise, 2021, free-field $L_{A10,8hrs}$ dB

Location	2016 baseline	2021 No development[1]	2021 With development[2]
M6 between Junction 13 and 14 (northbound)	80.0	80.2 (+0.2)	80.3 (+0.1)
M6 between Junction 13 and 14 (southbound)	80.2	80.4 (+0.2)	80.5 (+0.1)
A449 between M6 J13 and Pinfold Lane	66.2	68.7 (+2.5)	69.7 (+1.0)
Teddesley Road between Marsh Lane and Penkridge Road	Unreliable	Unreliable	Unreliable
Cannock Road between Wolgarston Way and A34	59.3	63 (+3.7)	64.1 (+1.1)
A5 between M6 Junction 12 and Proposed Site Access	71.0	70.2 (-0.8)	74.0 (+3.8)
A5 between Vicarage Road and M6 J12	73.2	72.4 (-0.8)	73.6 (+1.2)
M6 between Junction 9 and 10 (northbound)	80.5	80.7 (+0.2)	80.9 (+0.2)
M6 between Junction 9 and 10 (southbound)	80.9	82.0 (+1.1)	82.2 (+0.2)
A5 between Vicarage Road and A4061 Wolverhampton Road	70.8	70.8 (0)	71.7 (+0.9)
A5 between A449 and Proposed Site Access	73.6	71.6 (-2)	72.4 (+0.8)
A5 between A449 and A41	66.0	67.9 (+1.9)	69.3 (+1.4)
A5 between A41 and A4640 Redhill Way	62.6	66.2 (+3.6)	67.3 (+1.1)
A449 between A5 and Gravelly Way (northbound)	Unreliable	69.7	71.2 (+1.5)
A449 between A5 and Gravelly Way (southbound)	Unreliable	66.6	69.0 (+2.4)
A449 between Gravelly Way and Station Drive (northbound)	66.9	65.9 (-1.0)	70.0 (+4.1)
A449 between Gravelly Way and Station Drive (southbound)	69.7	68.8 (-0.9)	72.1 (+3.3)
Vicarage Road between Site Access and A5	60.8	61 (+0.2)	68.8 (+7.8)
Straight Mile between Vicarage Road and Oak Lane	Unreliable	Unreliable	Unreliable
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	61.3	60.4 (-0.9)	63.3 (+2.9)
Station Drive between A449 and Enterprise Drive	59.3	61.7 (+2.4)	63.3 (+1.6)
Four Ashes Road between A449 and Claygates Road	Unreliable	Unreliable	Unreliable

Location	2016 baseline	2021 No development[1]	2021 With development[2]
A449 between Station Drive and Brewood Road (northbound)	67.8	67.5 (-0.3)	70.4 (+2.9)
A449 between Station Drive and Brewood Road (southbound)	70.4	70.7 (+0.3)	73.1 (+2.4)
Old Stafford Road between A449 and New Road	Unreliable	Unreliable	Unreliable
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	Unreliable	Unreliable	Unreliable
Poplars Farm Way between A449 and Lawn Lane	55.2	55.0 (-0.2)	56.0 (+1.0)
Lawn Lane between Brewood Road and Wobaston Road	Unreliable	Unreliable	Unreliable
A449 Stafford Road M54 J2 to Brewood Road (northbound)	70.5	68.4 (-2.1)	70.7 (+2.3)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	69.4	68.2 (-1.2)	70.9 (+2.7)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	67.6	65.7 (-1.9)	67.3 (+1.6)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	66.5	65.0 (-1.5)	66.7 (+1.7)
Wobaston Road between Stafford Road and The Droveway	64.8	64.1 (-0.7)	64.1 (0)
A449 Stafford Road between Wobaston Road and A460	69.2	67.5 (-1.7)	69.3 (+1.8)
Church Road between A449 Stafford Road and Three Tuns Lane	Unreliable	Unreliable	Unreliable
Bargate Street, Brewood	Unreliable	Unreliable	Unreliable
Sandy Lane / The Pavement, Brewood	Unreliable	Unreliable	Unreliable
Coven Road, Brewood between The Pavement and Tinkers Lane	Unreliable	Unreliable	Unreliable
B5012 Wolgarston Way between Cannock Road and A449	55.4	61.5 (+6.1)	62.3 (+0.8)
A449 between B5012 Boscomoor Lane and Pinfold Lane	63.8	59.9 (-3.9)	62.5 (+2.6)
A449 between B5012 Boscomoor Lane and A5	63.5	64.9 (+1.4)	66.8 (+1.9)
Camp Road between Penkridge Bank Road and A34	Unreliable	Unreliable	Unreliable
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	Unreliable	Unreliable	Unreliable
A5 between A4601 Wolverhampton Road and M6 Toll	69	70.3 (+1.3)	70.8 (+0.5)
A4601 Wolverhampton Road between A5 and M6 Toll	63.6	69.4 (+5.8)	69.5 (+0.1)
A4601 Wolverhampton Road between A5 and Longford Road	62.4	65.7 (+3.3)	66.0 (+0.3)
Bursnips Road	66.2	66.5 (+0.3)	66.5 (0)
M6 between Junction 10 and 10a (northbound)	79.2	78.6 (-0.6)	78.9 (+0.3)
M6 between Junction 10 and 10a (southbound)	79.4	78.4 (-1)	78.8 (+0.4)
M6 between Junction 12 and 13 (northbound)	78.2	79.5 (+1.3)	79.6 (+0.1)
M6 between Junction 12 and 13 (southbound)	78.5	80.1 (+1.6)	80.2 (+0.1)
M6 between Junction 11a and 12 (northbound)	79.1	79.4 (+0.3)	79.9 (+0.5)
M6 between Junction 11a and 12 (southbound)	79.3	79.9 (+0.6)	80.3 (+0.4)
M6 between Junction 10a and 11 (northbound)	78.4	79.5 (+1.1)	79.8 (+0.3)
M6 between Junction 10a and 11 (southbound)	78.6	79.4 (+0.8)	79.8 (+0.4)
A5 between A34 and B4154	70.4	72.9 (+2.5)	72.9 (0)

Notes:
[1] the bracketed value is the change in noise level between the 2016 baseline and 2021 No Development scenario
[2] the bracketed value is the change in noise level between the 2021 No Development scenario and the 2021 With Development scenario

Location	2016 baseline	2021 No development[1]	2021 With development[2]
[3] Traffic flow below validity of CRTN			

Table 13.5.8: Calculated changes in night-time road traffic noise, 2036, free-field $L_{A10,8hrs}$ dB

Location	2016 baseline	2036 No development[1]	2036 With development[2]
M6 between Junction 13 and 14 (northbound)	80.0	80.7 (+0.7)	80.8 (+0.1)
M6 between Junction 13 and 14 (southbound)	80.2	80.9 (+0.7)	81.0 (+0.1)
A449 between M6 J13 and Pinfold Lane	66.2	69.1 (+2.9)	70.0 (+0.9)
Teddesley Road between Marsh Lane and Penkridge Road	Unreliable	Unreliable	Unreliable
Cannock Road between Wolgarston Way and A34	59.3	63.4 (+4.1)	64.5 (+1.1)
A5 between M6 Junction 12 and Proposed Site Access	71.0	70.6 (-0.4)	74.2 (+3.6)
A5 between Vicarage Road and M6 J12	73.2	72.8 (-0.4)	74.0 (+1.2)
M6 between Junction 9 and 10 (northbound)	80.5	81.2 (+0.7)	81.4 (+0.2)
M6 between Junction 9 and 10 (southbound)	80.9	82.5 (+1.6)	82.6 (+0.1)
A5 between Vicarage Road and A4061 Wolverhampton Road	70.8	71.2 (+0.4)	72.1 (+0.9)
A5 between A449 and Proposed Site Access	73.6	71.9 (-1.7)	72.7 (+0.8)
A5 between A449 and A41	66.0	68.2 (+2.2)	69.6 (+1.4)
A5 between A41 and A4640 Redhill Way	62.6	66.6 (+4)	67.6 (+1.0)
A449 between A5 and Gravelly Way (northbound)	Unreliable	70.1	71.5 (+1.4)
A449 between A5 and Gravelly Way (southbound)	Unreliable	67.0	69.3 (+2.3)
A449 between Gravelly Way and Station Drive (northbound)	66.9	66.3 (-0.6)	70.3 (+4.0)
A449 between Gravelly Way and Station Drive (southbound)	69.7	69.2 (-0.5)	72.4 (+3.2)
Vicarage Road between Site Access and A5	60.8	61.6 (+0.8)	68.8 (+7.2)
Straight Mile between Vicarage Road and Oak Lane	Unreliable	Unreliable	Unreliable
Station Road / Vicarage Road between Enterprise Drive and Proposed Site Access	61.3	61.0 (-0.3)	63.5 (+2.5)
Station Drive between A449 and Enterprise Drive	59.3	62.2 (+2.9)	63.5 (+1.3)
Four Ashes Road between A449 and Claygates Road	Unreliable	Unreliable	Unreliable
A449 between Station Drive and Brewood Road (northbound)	67.8	67.9 (+0.1)	70.6 (+2.7)
A449 between Station Drive and Brewood Road (southbound)	70.4	71.1 (+0.7)	73.4 (+2.3)
Old Stafford Road between A449 and New Road	Unreliable	Unreliable	Unreliable
Coven Road / Brewood Road / Poplars Farm Way between Lawn Lane and Tinkers lane	Unreliable	Unreliable	Unreliable
Poplars Farm Way between A449 and Lawn Lane	55.2	55.6 (+0.4)	56.5 (+0.9)
Lawn Lane between Brewood Road and Wobaston Road	Unreliable	Unreliable	Unreliable
A449 Stafford Road M54 J2 to Brewood Road (northbound)	70.5	68.7 (-1.8)	71.0 (+2.3)
A449 Stafford Road M54 J2 to Brewood Road (southbound)	69.4	68.5 (-0.9)	71.1 (+2.6)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (northbound)	67.6	66.1 (-1.5)	67.6 (+1.5)
A449 Stafford Road M54 J2 to Station Road/ Wobaston Road junction (southbound)	66.5	65.3 (-1.2)	66.9 (+1.6)

Location	2016 baseline	2036 No development[1]	2036 With development[2]
Wobaston Road between Stafford Road and The Droveway	64.8	64.5 (-0.3)	64.6 (+0.1)
A449 Stafford Road between Wobaston Road and A460	69.2	67.9 (-1.3)	69.6 (+1.7)
Church Road between A449 Stafford Road and Three Tuns Lane	Unreliable	Unreliable	Unreliable
Bargate Street, Brewood	Unreliable	Unreliable	Unreliable
Sandy Lane / The Pavement, Brewood	Unreliable	Unreliable	Unreliable
Coven Road, Brewood between The Pavement and Tinkers Lane	Unreliable	Unreliable	Unreliable
B5012 Wolgarston Way between Cannock Road and A449	55.4	62 (+6.6)	62.7 (+0.7)
A449 between B5012 Boscomoor Lane and Pinfold Lane	63.8	60.5 (-3.3)	62.8 (+2.3)
A449 between B5012 Boscomoor Lane and A5	63.5	65.3 (+1.8)	67.0 (+1.7)
Camp Road between Penkridge Bank Road and A34	Unreliable	Unreliable	Unreliable
Penkridge Bank Road between Broadhurst Green Road and Marquis Drive	Unreliable	Unreliable	Unreliable
A5 between A4601 Wolverhampton Road and M6 Toll	69.0	70.6 (+1.6)	71.1 (+0.5)
A4601 Wolverhampton Road between A5 and M6 Toll	63.6	69.8 (+6.2)	69.8 (0)
A4601 Wolverhampton Road between A5 and Longford Road	62.4	66.1 (+3.7)	66.4 (+0.3)
Bursnips Road	66.2	66.9 (+0.7)	66.9 (0)
M6 between Junction 10 and 10a (northbound)	79.2	79.1 (-0.1)	79.4 (+0.3)
M6 between Junction 10 and 10a (southbound)	79.4	78.9 (-0.5)	79.3 (+0.4)
M6 between Junction 12 and 13 (northbound)	78.2	80 (+1.8)	80.1 (+0.1)
M6 between Junction 12 and 13 (southbound)	78.5	80.6 (+2.1)	80.7 (+0.1)
M6 between Junction 11a and 12 (northbound)	79.1	79.9 (+0.8)	80.4 (+0.5)
M6 between Junction 11a and 12 (southbound)	79.3	80.4 (+1.1)	80.8 (+0.4)
M6 between Junction 10a and 11 (northbound)	78.4	80.0 (+1.6)	80.2 (+0.2)
M6 between Junction 10a and 11 (southbound)	78.6	79.9 (+1.3)	80.3 (+0.4)
A5 between A34 and B4154	70.4	73.3 (+2.9)	73.3 (0)

Notes:
[1] the bracketed value is the change in noise level between the 2016 baseline and 2021 No Development scenario
[2] the bracketed value is the change in noise level between the 2021 No Development scenario and the 2021 With Development scenario
[3] Traffic flow below validity of CRTN

Table A13.5.9: Noise Insulation Regulations Assessment – Road

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Roads	Contribution from Unaltered Roads	>68dB?	>1dB Change?	>1dB Contribution?	Qualify?
1	1 Croft Lane	50.8	51.7	50.3	46.1	No	No	YES	
2	2 Croft Lane	50.4	51.6	50.3	45.7	No	YES	YES	
3	3 Croft Lane	50.3	51.6	50.4	45.4	No	YES	YES	
4	4 Croft Lane	50.7	51.8	50.7	45.3	No	YES	YES	
5	5 Croft Lane	49.7	50.5	49.6	43.2	No	No	YES	
6	180 Station Drive	67.7	69.4	49.4	69.4	YES	YES	No	
7	181 Station Drive	73.6	75.4	36.7	75.4	YES	YES	No	
8	182 Station Drive	68.2	69.7	31.9	69.7	YES	YES	No	
9	183 Station Drive	68.1	69.6	31.8	69.6	YES	YES	No	
10	219 Gatesford Lane	56.7	58.6	55.6	55.6	No	YES	YES	
11	221 Gatesford Lane	57.6	59.3	56.3	56.3	No	YES	YES	
12	221a Gatesford Lane	57.6	58.9	56.3	55.4	No	YES	YES	
13	221b Gatesford Lane	55.4	56.6	52.7	54.3	No	YES	YES	
14	221c Gatesford Lane	54.3	55.8	52.4	53.1	No	YES	YES	
15	221d Gatesford Lane	55.0	56.3	52.7	53.8	No	YES	YES	
16	221e Gatesford Lane	54.3	55.4	51.7	53.0	No	YES	YES	
17	221f Gatesford Lane	55.5	56.7	53.8	53.6	No	YES	YES	
18	221g Gatesford Lane	56.3	58.1	55.3	54.9	No	YES	YES	
19	221h Gatesford Lane	59.6	61.1	58.4	57.8	No	YES	YES	
20	221i Gatesford Lane	57.8	59.2	56.6	55.7	No	YES	YES	
21	Allendalle	54.4	53.6	50.3	50.9	No	No	YES	
22	Anberlea	67.1	68.5	38.6	68.5	YES	YES	No	
23	Angalla	53.8	53.0	50.6	49.3	No	No	YES	
24	Avenue Cottages	63.5	66.2	56.0	65.8	No	YES	No	

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Roads	Contribution from Unaltered Roads	>68dB?	>1dB Change?	>1dB Contribution?	Qualify?
25	Comox	54.3	57.5	55.5	53.2	No	YES	YES	
26	Eastfield	67.6	70.4	55.9	70.2	YES	YES	No	
27	Edelweiss	67.2	68.6	38.6	68.6	YES	YES	No	
28	Evergreen	71.3	71.8	62.8	71.2	YES	No	No	
29	Gailey House	52.3	52.7	48.1	50.9	No	No	YES	
30	Goldthorne	67.2	68.7	30.6	68.7	YES	YES	No	
31	Hamerton House	75.7	75.6	49.2	75.6	YES	No	No	
32	Hollybyre	74.6	75.0	62.6	74.7	YES	No	No	
33	Homestead	71.5	72.3	67.5	70.6	YES	No	YES	
34	Inglewood	74.1	76.0	41.9	76.0	YES	YES	No	
35	Little Kinvaston	68.3	71.0	52.7	70.9	YES	YES	No	
36	Plough Farm	73.7	73.7	60.4	73.5	YES	No	No	
37	Longacre	67.7	70.5	55.5	70.4	YES	YES	No	
38	Marsh Farm	64.3	64.7	59.1	63.3	No	No	YES	
39	Menkani	66.5	68.0	30.7	68.0	YES	YES	No	
40	Oak View	53.1	53.2	51.2	48.9	No	No	YES	
41	Perrinthorpe	55.3	54.7	51.4	52.0	No	No	YES	
42	Pool House	78.0	80.8	55.1	80.8	YES	YES	No	
43	Roma	71.9	71.7	47.3	71.7	YES	No	No	
44	Stafford Road	78.0	78.4	61.5	78.3	YES	No	No	
45	Salwyn Green	52.8	53.4	51.8	48.3	No	No	YES	
46	Silverthorne	67.3	68.8	30.6	68.8	YES	YES	No	
47	Sunnyside	60.5	62.8	60.3	59.2	No	YES	YES	
48	The Bunglalow	51.5	52.2	50.1	48.0	No	No	YES	
49	The Cottage (Croft Lane)	55.9	54.8	52.2	51.3	No	No	YES	

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Roads	Contribution from Unaltered Roads	>68dB?	>1dB Change?	>1dB Contribution?	Qualify?
50	The Poplars	57.0	59.6	53.0	58.5	No	YES	YES	
51	The Poultry Farm House 1	60.3	62.6	58.7	60.3	No	YES	YES	
52	The Poultry Farm House 2	55.7	57.7	57.2	48.1	No	YES	YES	
53	The Villa	72.4	74.8	73.6	68.6	YES	YES	YES	YES
54	The Woodlands	74.1	76.1	34.9	76.1	YES	YES	No	
55	Trewern	72.0	71.9	46.7	71.9	YES	No	No	
56	Wharf Cottage	78.4	78.3	66.1	78.0	YES	No	No	
57	Wharf House	65.6	65.0	55.2	64.5	No	No	No	
58	Wheatcroft	72.0	71.9	46.9	71.9	YES	No	No	
59	Heath Farm	72.1	75.7	63.1	75.5	YES	YES	No	
60	Heath Farm 2	69.4	73.0	39.5	73.0	YES	YES	No	
61	Heath Farm 3	56.5	60.6	39.0	60.6	No	YES	No	
Note: [1] – For receptor locations, see Figure 13.4									

Table A13.5.10: Noise Insulation Regulations Assessment – Railways Daytime

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Railways	Contribution from Unaltered Railways	>68dB?	>1dB Change?	>1dB Contribution?	Qualify?
1	4 Station Drive	59.7	59.9	26.4	59.9	No	No	No	
2	182 Station Drive	52.2	49.9	25.6	49.9	No	No	No	
3	183 Station Drive	50.7	46.4	25.6	46.4	No	No	No	
4	Amadora	63.8	64.1	26.4	64.1	No	No	No	
5	Anberlea	58.8	58.9	25.7	58.9	No	No	No	
6	Chase View (Bungalow)	56.7	57.0	15.1	57.0	No	No	No	
7	Chase View (House)	53.8	54.1	17.4	54.1	No	No	No	

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Railways	Contribution from Unaltered Railways	>68dB?	>1dB Change?	>1dB Contribution?	Qualify?
8	Christchurch Cottage 1	47.8	48.1	14.1	48.1	No	No	No	
9	Christchurch Cottage 2	43.8	44.1	14.8	44.1	No	No	No	
10	Craigmore (Bungalow)	65.4	65.5	20.8	65.5	No	No	No	
11	Denson House	48.6	48.7	25.0	48.7	No	No	No	
12	Dunrobin	69.7	70.0	22.2	70.0	YES	No	No	
13	Edelweiss	59.5	59.7	25.9	59.7	No	No	No	
14	Gailey House	40.1	37.0	24.1	36.8	No	No	No	
15	Goldthorne	56.4	55.9	25.7	55.9	No	No	No	
16	Holy Thorn Cottage	44.0	44.3	17.6	44.3	No	No	No	
17	Leacroft	66.4	66.6	18.2	66.6	No	No	No	
18	Longfield	39.0	38.7	22.4	38.6	No	No	No	
19	Menkani	55.5	54.8	25.8	54.8	No	No	No	
20	Oakleigh	70.5	70.7	13.5	70.7	YES	No	No	
21	Roundabout Cottage	41.8	42.1	20.8	42.1	No	No	No	
22	Scholers Gate	43.0	43.3	17.7	43.3	No	No	No	
23	Silverthorne	56.9	56.7	25.6	56.7	No	No	No	
24	St Clare (Bungalow)	59.6	59.9	24.5	59.9	No	No	No	
25	The Cottage (A5)	47.7	47.9	18.7	47.9	No	No	No	
26	The Elms	62.6	62.9	29.1	62.9	No	No	No	
27	Thurja	40.3	40.2	22.8	40.1	No	No	No	
28	Wheslynn	50	50.2	19.0	50.2	No	No	No	
29	Yonda	39.3	39.0	22.7	38.9	No	No	No	

Note: [1] – For receptor locations, see Figure 13.5

Table A13.5.11: Noise Insulation Regulations Assessment – Railways Night-time

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Railways	Contribution from Unaltered Railways	>63dB?	>1dB Change?	>1dB Contribution ?	Qualify?
1	4 Station Drive	59.1	59.5	27.5	59.5	No	No	No	
2	182 Station Drive	51.7	49.5	26.7	49.5	No	No	No	
3	183 Station Drive	50.1	46	26.7	45.9	No	No	No	
4	Amadora	63.3	63.6	27.5	63.6	YES	No	No	
5	Anberlea	58.3	58.4	26.8	58.4	No	No	No	
6	Chase View (Bungalow)	56.2	56.6	16.2	56.6	No	No	No	
7	Chase View (House)	53.3	53.8	18.5	53.8	No	No	No	
8	Christchurch Cottage 1	47.3	47.7	15.2	47.7	No	No	No	
9	Christchurch Cottage 2	43.3	43.7	15.9	43.7	No	No	No	
10	Craigmore (Bungalow)	64.8	65.1	21.9	65.1	YES	No	No	
11	Denson House	48	48.2	26.1	48.2	No	No	No	
12	Dunrobin	69.2	69.5	23.3	69.5	YES	No	No	
13	Edelweiss	59	59.3	27	59.3	No	No	No	
14	Gailey House	39.5	36.7	25.2	36.4	No	No	No	
15	Goldthorne	55.9	55.5	26.8	55.5	No	No	No	
16	Holy Thorn Cottage	43.5	43.9	18.7	43.9	No	No	No	
17	Leacroft	65.9	66.2	19.3	66.2	YES	No	No	
18	Longfield	38.5	38.3	23.5	38.2	No	No	No	
19	Menkani	55	54.3	26.9	54.3	No	No	No	
20	Oakleigh	69.9	70.3	14.6	70.3	YES	No	No	
21	Roundabout Cottage	41.2	41.8	21.9	41.8	No	No	No	
22	Scholers Gate	42.5	42.9	18.8	42.9	No	No	No	
23	Silverthorne	56.4	56.3	26.7	56.3	No	No	No	
24	St Clare (Bungalow)	59.1	59.4	25.6	59.4	No	No	No	

ID	Receptor[1]	Prevailing Noise Level	Relevant Noise Level	Contribution from New or Altered Railways	Contribution from Unaltered Railways	>63dB?	>1dB Change?	>1dB Contribution ?	Qualify?
25	The Cottage (A5)	47.2	47.5	19.8	47.5	No	No	No	
26	The Elms	62.1	62.5	30.2	62.5	YES	No	No	
27	Thurja	39.8	39.8	23.9	39.7	No	No	No	
28	Wheslynn	49.6	49.9	20.1	49.9	No	No	No	
29	Yonda	38.7	38.6	23.8	38.5	No	No	No	
Note: [1] – For receptor locations, see Figure 13.5									