



WBC Proof of Evidence - **Rebuttal** **Noise**

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Rule 6 Party
Peel Hall - APP/ M0655/W/17/3178530

NOISE

Satnam Proof of Evidence Rebuttal

1. INTRODUCTION

1.1 This rebuttal statement is submitted in response to the written Proofs of Evidence of Mr. Matthew Wilson of Miller Goodall Ltd on behalf of Satnam Millennium.

1.2 I do not intend to offer a response to all issues raised and where I have not dealt with an issue this does not imply that I agree with it.

1.3 It is difficult to understand why Warrington Borough Council have failed to challenge the appellants noise assessment and the Rule 6 Party will take the opportunity to raise this matter with the relevant Council Officers at the Inquiry. We understand the Inspector will consider all significant issues.

2 The Rule 6 Party does not agree with the Statement of Common Ground, in relation to noise aspects.

3 In his 2019 noise assessment Mr. Wilson excluded any reference to Peel Hall Kennels as part of the baseline acoustic environment. He repeats this once again at 3.2. Peel Hall Kennels are part of the existing acoustic environment, and this fact should be included in all references to site noise.

4 At 3.4 Mr. Wilson noted that all roads have periods of lower flow when vehicles on the road are not audible. There is no evidence of the time of day or day of the week when these observations were made.

5 At 3.6 of his P.O.E. Mr. Wilson states

“Daytime: **55 dB** LAeq, 16h – applicable to private outdoor space (0700 – 2300)”

- 5.1 Mr. Wilson is incorrect, Professional Practice Guidance on Planning & Noise – New Residential Development and BS8233: 2014 states that “the acoustic environment of external amenity areas that are an intrinsic part of the overall design should always be assessed and noise levels should ideally **not be above the range 50 – 55 dB LAeq, 16hr**”.
- 5.2 WHO “Guidelines for Community Noise; these guidelines entitled “Guidance for Community Noise”; were approved by the World Health Organisation and consider guideline values for annoyance in the community. These have been set at 50 dB, which show moderate annoyance, daytime and evening. At 55 dB the noise becomes a serious annoyance.
- 5.3 Warrington Borough Council Environmental Supplementary Planning Document states (6.3.1) For gardens and balconies it is desirable that the steady noise level **does not exceed 50 LAeq, TdB and 55 LAeq, TdB should be regarded as the upper limit.**
- 6 At 3.7 Mr. Wilson refers to a noise survey undertaken in 2019 to characterise the noise levels directly from the M62 during the day and night, the data measured was utilised in a computer model to determine the acceptable stand-off distance from the M62 or a residential receptor in an apartment.
- 6.1 Department for Transport traffic statistics show (2018) the Annual Average **Daily Flow** between junction 9 and 10 of the M62 was 118,832 vehicles, 14,536 of which were heavy goods vehicles and 18,957 light goods vehicles.
- 6.2 Overnight monitoring at only one location, over a boundary stretching almost one mile in length, on just one occasion, is totally inadequate for a noise assessment for 1200 homes alongside a major motorway.
- 6.2.1 The M62 motorway had major road closures throughout the whole night time monitoring period. This is undoubtedly a very serious and significant issue, which should negate the entire noise assessment. An accurate noise assessment is critical when deciding the location of so many homes.
- 6.2.2 Mr. Wilson’s limited real time monitoring was totally inadequate to assess the true noise along the entire north boundary. His survey in 2019;

- Failed to monitor the M62 for a minimum of 24 hours
- Monitored only 3 locations on the entire north boundary of the site, which is almost 1 mile in length
- Failed to monitor the noisiest part of the site for a minimum of 3 hours
- Failed to monitor the body of the site
- Nighttime monitoring was done at only one monitoring location, opposite junction 10 of the M62 East Bound, which was **closed** from Junction 10 to 12. Junction 9 to 12 had lane closures and speed reductions throughout the whole night time monitoring
- Failed to monitor on the busiest day at peak/rush hour times

7 At 3.11 Mr. Wilson says. *“The indicative mitigation calculations show that where noise levels exceed 67dB LAeq, 8hr at night, residential buildings should be avoided. The 67 dB contour line has been predicted as a worst case at 9.0 m, the height of a window on the top of a 4-story residential building, where no mitigation is provided by the motorway barrier. The contour line has been used as the stand-off distance for 4-story residential buildings in the site Parameters Plan.”*

7.1 At 3.12, Mr. Wilson states, *“The stand-off distance is between 40 and 50m from the southern kerb of the M62 and represents the closest possible residential façade to the carriageway. The noise modelling includes a noise barrier of 4.0m on the northern site boundary.”*

7.2 The appellants’ evidence does not identify the true level of noise across the whole of the north boundary. No details are given on how the measurement of 67dB was achieved, or the exact location of the modelled receptor. A modelled receptor close to monitoring point 04 would have an entirely different outcome to one modelled at either MP02 or MP01. The conclusion by Mr. Wilson that residential dwellings are suitable 40-50 metres from the southern kerb of the M62 is unproven. There is no evidence that the noise mitigation measures proposed could be delivered. The proposed noise reduction levels required for a sustainable development cannot be achieved at distances of 40-50 metres from the M62.

7.3 The southern kerb of the M62 varies in width to the site boundary from 2.5 metres to 25 metres. The topography of the site varies by 10.5 metres, Parts of the site are below the height of the M62 whilst others are higher than the M62 Noise monitoring by the appellant failed to include these variances, the noise report fails to include all of the relevant information required for a sound assessment.

8 At 3.13, Mr. Wilson reiterates information contained in his noise assessment:

11.6.6

"It is proposed that a noise barrier of at least 4.0 m in height will be located along the northern boundary of the site. It is intended that a 4.0 m fence be erected along the northern boundary, which will be designed to avoid conflict with the existing National Grid infrastructure.

8.1 The exact location of the National Grid infrastructure, i.e. High Pressure Gas Main, has not been clearly identified by the appellant in any of the reports. A 12-metre easement prevents any development above the gas main and National Grid also requires access at all times.

8.2 There are no structures above the gas main in its entire route through Warrington a clear indication that no structures will be allowed above the high-pressure gas main at Peel Hall.

8.3 United Utilities have a pumping station within the site, located between the site boundary and the National Grid infrastructure. United Utilities have an easement requiring access at all times to this facility.

8.4 Highways England, overhead footbridge protrudes into the site 25 metres from the M62 kerb edge.

8.5 Highways England owns the north boundary fencing and has an easement requiring access at all times. Highways England has not been consulted on the impact of a barrier along this one-mile M62 boundary. The health and safety of traffic on the M62 has not been considered in this application.

8.6 Other areas of the site prevent the construction of a noise barrier. The appellants identifies construction exclusion zones of 6 metres either side of Spa Brook and Ditch one (Appellants Drawing: 1820-A7-01). The noise assessment is based on a continuous barrier, with no evidence to support this claim. A change in noise level can be related to the percentage of air gaps, these large gaps would invalidate the noise attenuation levels quoted.

8.7 Mr. Wilson does not mention extending the noise barrier beyond the site boundary. WBC Supplementary Planning Document, 6.4.2. says barriers should usually extend well beyond the site boundary to ensure adequate protection is offered.

8.8 Mr. Wilson refers to evidence in his acoustic report:

The barrier is to be constructed from continuous, imperforate material with a minimum mass of 12 kg/m² and is to extend from the existing ground level at minimum height of 4.0 m. Close-boarded or overlapped timber paneling would also be suitable. Alternatively, a proprietary acoustic fence with a minimum weighted sound reduction index of 25 dB Rw would be appropriate.

8.9 The assumption that basic timber fences could be used as adequate barriers against traffic and other noise sources, such simple designs have been proved to be mostly ineffective, particularly where noise with significant low frequency content is present, due to inadequate account being taken of the density of different species of timber, leading to selection of timbers which warped, with gaps widening under hot weather conditions.

8.10 The height of the barrier across the site has not been confirmed. To clear a height of 4 metres in line with the motorway, in the center of the north boundary, the barrier would need to be 6.5 metres in height.

8.11 Environmental barriers in the United Kingdom have been provided on road schemes variously in the form of earth banks, timber fences, concrete panel fences, and brick walls. Earth banks have been constructed up to 5m high where sufficient land has been acquired. The height of other types of barrier was generally been restricted to 3m because it was judged that vertical faces taller than this would be **visually intrusive**.

Structural constraints normally limit the maximum height of simple fence type barriers to about 5 metres. (Design Manual for Roads and Bridges- Volume 10,- 2.24 and 2.18).

8.12 To accurately measure any attenuation value from a barrier you need:

- An accurate noise assessment
- The exact location of a barrier in relation to the noise source
- The exact construction details of the barrier to be used and its noise attenuation properties
- The exact distance between the barrier and the closest receptor
- Impact of gaps in fencing

8.13 Mr. Wilson is suggesting several different types of construction for the barrier; however, they would not all give the same noise attenuation. Mr. Wilson used the value of one such barrier in his calculation methodology, but this information is not contained within in his report

8.14 The assumption that the barrier is indefinitely long is unreasonable and substantially overestimates the potential mitigation provided by the proposed barrier. This undermines the Appellants conclusions and methodology.

9 11.6.9

It is proposed that all plots immediately south of the barrier be four stories tall, and in a tight configuration to allow building massing to provide a further noise barrier. Private outdoor amenity spaces, such as gardens, should be designed in areas with protection from the proposed building massing (south facing).

9.1 Mr. Wilson has failed to consider the numerous gaps where no massing is possible. The build out of the site could take over 10 years, with multiple companies involved. The indicative highways build out plan shows development adjacent to the M62 with 7 different plots with an indicative build out in years 1,3,4,5, 8 and 10. Massing may never take place across the entire length of the M62.

- 9.2 The gaps between the buildings will allow the noise to penetrate into the site, they will also produce tunneling, which itself will cause noise issues, and the appellant has not investigated this.
- 9.3 There is a real danger this site will become a piecemeal development with no noise attenuation measures being implemented.
- 10 At 3.14 Mr. Wilsons says
External living conditions will be mitigated to below 55 dB LAeq,16h using building massing to protect private outdoor spaces. This value is taken from the criteria detailed above, it is the upper guideline value for private amenity areas. Plots in close proximity to the M62 will require appropriate orientation at detailed design stage. Each wider parcel of land to be developed will utilise good acoustic design to shield gardens and other private amenity spaces such as balconies.
- 10.1 The aim of external amenity space should be 50 db.
- 10.2 Mr. Wilson has already said, 67dB contour line has been predicted at the height of a window on the top of a 4 story residential building, where the motorway barrier provides no mitigation. There are several factors to consider in this regard:
- If this 67dB measurement is accurate, and we challenge this assessment, the external noise far exceeds WBC Warrington Borough Council Environmental Supplementary Planning Document, it states. "For gardens and balconies it is desirable that the steady noise level **does not exceed 50 LAeq, TdB and 55 LAeq, TdB should be regarded as the upper limit.**
 - Mr. Wilson does not explain how the amenity space of these 4 story apartments is to be shielded from the noise.
- 10.3 It appears the proposal for the site is for each plot to be built in a fortress style.
- 10.4 The Framework includes as a core planning principle that planning should always seek to secure a high quality design and a good standard of amenity for all existing and future

occupants of land and buildings. The design proposed for Peel Hall is not in keeping with the surrounding communities. The massing proposal is for individual plots to be enclaved, which will not secure a high quality design or a good standard of amenity for existing or future residents.

11 At 3.15 Mr. Wilson says:

*“In my ES chapter at Paragraph 11.6.14 [Appendix 5], I conclude that noise would be **a significant effect** if not appropriately mitigated, i.e. internal ambient noise levels would be predicted to be above the thresholds set out in BS8233:2014. Table 11.9 of the ES [Appendix 6] sets out the appropriate criteria for day and night against the relative Magnitude of Impact.”*

11.1 There is no sound evidence that the proposed mitigation measures are capable of achieving the noise reduction claimed by the appellant. There is a chain reaction to the proposals for noise reduction, none of the links in this chain have been considered or investigated.

- We do not know the true level of noise from the M62, across the entire north boundary.
- We do not know the distance between the noise source and the barrier, the further the distance the less the noise can be attenuated. The variation in the embankment width and height across the entire north boundary has not been factored in.
- The high-pressure gas main, Highways England and United Utilities assets and easements have been brushed over, indicating these can be moved to suit the appellant, a supposition that is totally without foundation.
- We do not know the type of barrier or its benefits that would be used. Barrier noise reduction could have marginal benefit; there is no evidence whatsoever within the appellants noise report that substantiates a reduction of 25 dB anywhere across the north boundary.
- We do not know how high the barrier needs to be at various points along the north boundary; this important fact has been omitted from the noise assessment.
- Each stage of these failings impacts on the next; the information is critical to the complete

layout of the site. Noise attenuation on all plots across the site is reliant on noise from the M62 being adequately attenuated.

- 12 At 3.17 Mr. Wilson refers to paragraph 13.4 of the Inspectors Report, but fails to mention paragraph 13.2 and 13.3.

13.2 “ At the start of the Inquiry, one of my main considerations was: “whether the appeal scheme would provide appropriate living conditions for future occupiers, with regard to highway noise and air quality”.

13.3” Such matters, should, in my view, be addressed before the reserved matters stage, so that there is a clear basis on which to take forward detailed design. This would certainly seem prudent given the site’s proximity to the M62.”

- 13 It is clear the appellants noise report lacks the evidence needed to support the proposed noise mitigation.

- 14 From 3.19 to 3.22 Mr. Wilson mentions Peel Hall Boarding Kennels, advising that the closest receptors to the kennels would be approximately 40-55 metres to the west and comprise of apartment buildings up to 12.0m in height.

- 14.1 The Statement of Common Ground on Noise agreed between the appellant and Warrington Borough Council says:

*‘A noise assessment shall be undertaken at the Boarding Kennels at Peel Hall Farm **prior to submission of any reserved matters application within 250 m of the existing kennels.** The assessment shall assess noise levels arising from the kennel use at proposed residential receptors and consider standards contained in BS 4142:2014, WHO, Guidelines for Community Noise (1999) and BS8233:2014 and/or any other relevant guidance specified by the Local Authority. The assessment methodology shall be agreed with the Local Authority prior to commencement. The noise assessment shall identify all necessary mitigation measures to protect both residential amenity and to ensure no adverse impacts to the*

operation of the Peel Hall Farm kennels. Once agreed with the Local Planning Authority, any relevant reserved matters application shall implement fully the agreed mitigation measures prior to first occupation.'

- 14.2 Mr. Wilson was aware of the Statement of Common Ground before presenting his proof of evidence, it is concerning that the appellant has signed an agreement with Warrington Borough Council to ensure no adverse impacts to the operation of Peel Hall Kennels, but immediately proposes 4 story 12 metre high apartments within 40-55 metres of Peel Hall Farm, without any evidence of suitability.
- 14.3 Mr. Wilson ignored the presence of Peel Hall Kennels when compiling his noise assessment, and no noise assessment at the kennels has ever been undertaken by the appellant. It is extremely difficult therefore to understand how the distance of 40-55 metres from the kennels can be assessed as suitable for residential dwellings.
- 14.4 Once again Mr. Wilson proposes building massing to shield the outdoor amenity space from activity within the boundary of Peel Hall Farm and it's boarding kennel business.
- 14.5 National Grid High Pressure Gas main runs adjacent to Peel Hall Farm, it is extremely doubtful a noise barrier could be located in this location, and certainly not at the height proposed by the appellant.
- 14.6 Mr. Wilson has failed to recognise that no building massing can take place for minimum 230 metres at the rear of Peel Hall Farm, any proposal for residential dwellings 45 -55 metres west of the kennels will be subject to the direct noise from the M62 motorway.
- 14.7 Mr. Wilson has concluded, without doing any noise assessment, that there would not be a significant impact on the residents due to noise emissions from the kennels. This is pure guesswork, without any foundation and is symptomatic of his entire noise assessment.
- 14.8 Mr. Wilsons said at 3.23 - *"It is my view that the site is suitable for residential development and that with appropriate mitigation designed into each dwelling, an appropriate noise environment on site can be achieved.*

- 14.9 Mr. Wilson has not proven in any of his evidence that this can be achieved. The evidence submitted is not substantiated. There is no documentary evidence that any of the claims made for adequate noise reduction across the whole length of the north boundary could be achieved.
- 14.10 The proposed fortress type development would have a detrimental impact on the character and appearance of the area contrary to Warrington Borough Council Core Strategy policies.
- 15 At 3.28 Mr. Wilson refers to the new road link over the existing playing fields at Mill Lane/Blackbrook Avenue, he admits that there will be a significant effect, as noise levels would increase above 3db.

- 15.1 At 3.29 Mr. Wilson quotes from his noise assessment 11.1.7

At this location it will not be possible to remove or replace the proposed new traffic noise source and as such the best form of mitigation will be a barrier along the north side of the new road. This should be 2.0 m in height and can be formed of a bund, acoustic fence or a combination of the two. An indicative location is identified on Figure 11.5.

11.7.8

Where a fence is required it is to be constructed from continuous, imperforate material with a minimum mass of 12 kg/m² and is to extend from the existing ground level, or top of a bund to a minimum height of 2.0 m above the existing ground level. Close-boarded or overlapped timber paneling would also be suitable. Alternatively, a proprietary acoustic fence with a minimum weighted sound reduction index of 25 dB Rw would be appropriate.

Once again this area had no “real time monitoring” and Mr. Wilsons evidence is based on modelling. Dundee Close would be particularly affected by the noise from the proposed roundabout in this location, yet no mitigation is proposed for this area.

- 16 At 4.6 Mr. Wilson refers to existing residential areas adjacent to the proposed development site, which are exposed to noise directly from the M62 and says they are likely to be benefited by the proposals. This is unproven and not substantiated with sound

detailed evidence that the proposed noise reduction would be achieved. On the contrary, to develop a large open greenfield site and use extensive massing in an attempt to reduce noise is of no benefit to either present or future residents.

- 16.1 Mr. Wilson's claims are based on his inaccurate and minimal noise measurements. The lack of credible information to support his unrealistic noise attenuation proposals risks unacceptable adverse impact on the amenities of new residents and neighbouring properties and residents in the surrounding area.
- 16.2 The size of the Ecology Park is measured using the appellants proposed noise barrier position, until an accurate location of any barrier is confirmed the size of the Ecology Park is in doubt.
- 16.3 Noise from the site represents a material detriment, which is contrary to saved Local Plan Policy Q.E.6 & Q.E.7. There is no evidence that noise from the M62 can be mitigated sufficiently for residential dwellings to be considered in this area.