TECHNICAL NOTE	
Project	Pitsford Road Manchester
Subject	Technical Addendum - LPA Queries
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This technical note provides additional information to Bellway Homes Ltd (Manchester) and Manchester City Council to be read in conjunction with the environmental noise assessment (R2249-REP02A-JW dated 6 June 2024).

Following preparation and submission of the environmental noise assessment it is understood that the following queries have been raised by Manchester City Council.

With regard to Figure B2, what fencing height would need to be used to achieve 55dBA or below in the garden spaces of all plots?

Figure B2A below shows the model prediction to garden spaces with the required fencing heights to achieve 55dBA or below. The noise model has also been updated to the latest proposed ground and floor slab heights across the site which have been developed further since the production of the environmental noise assessment. An increase to 4.5m would be required to 2 plots at the Westernmost extremes of the site and 4 plots would require the boundary fencing to increase to 2.2m. As the exceedances above 55dBA for these plots were marginal, this was not proposed in the initial environmental noise assessment.

With regard to figure B7, there are no areas with significant adverse impact prediction, however Section 8.0 of the report discussed 19 plots and 10 garden spaces with significant adverse impact.

This is an error in this part of the text. Figure B7 correctly shows the prediction of impact. Figure B7A has been produced to provide an update to the noise model output to take account of the updated ground and floor slab heights as discussed above. This results in minimal changes to the noise impact prediction but the relevant summary paragraph of noise impact to plots and gardens is now as follows.

The acoustic barrier also provides protection to the proposed dwellings in terms of commercial noise impact and the proposed residential layout assessed within this report has also incorporated re-orientation and re-location of plots to protect

external amenity and facade noise levels as far as is practicable. As shown in Figure B7A, the proposed layout and acoustic barrier is predicted to prevent significant adverse impacts to the dwellings. The impact with the recommended minimum 4m barrier will be reduced to 36 plots experiencing low impact to facades and 33 low impact garden spaces. 33 plots will experience the potential for adverse impact to facades with 44 gardens potentially adversely impacted. 19 plots and 11 gardens will experience adverse impact. These impacts can be reduced further by increasing the barrier height and it is recommended that this be increased as far as it practicable above 4m if possible.

Although L_{AFmax} measured levels are not used within the assessment of daytime noise impact, can this data be presented for information purposes?

L_{AFmax} data is typically excluded from the presented data as this makes visual assessment more difficult, however this data was measured and Figures 3.2 - 3.5 of the environmental noise assessment are reproduced below in Figures 3.2A - 3.5A below with the daytime L_{AFmax} data included.

Figure 3.2A - Survey Results MP1 - Updated to Include Daytime L_{AFmax} for Information

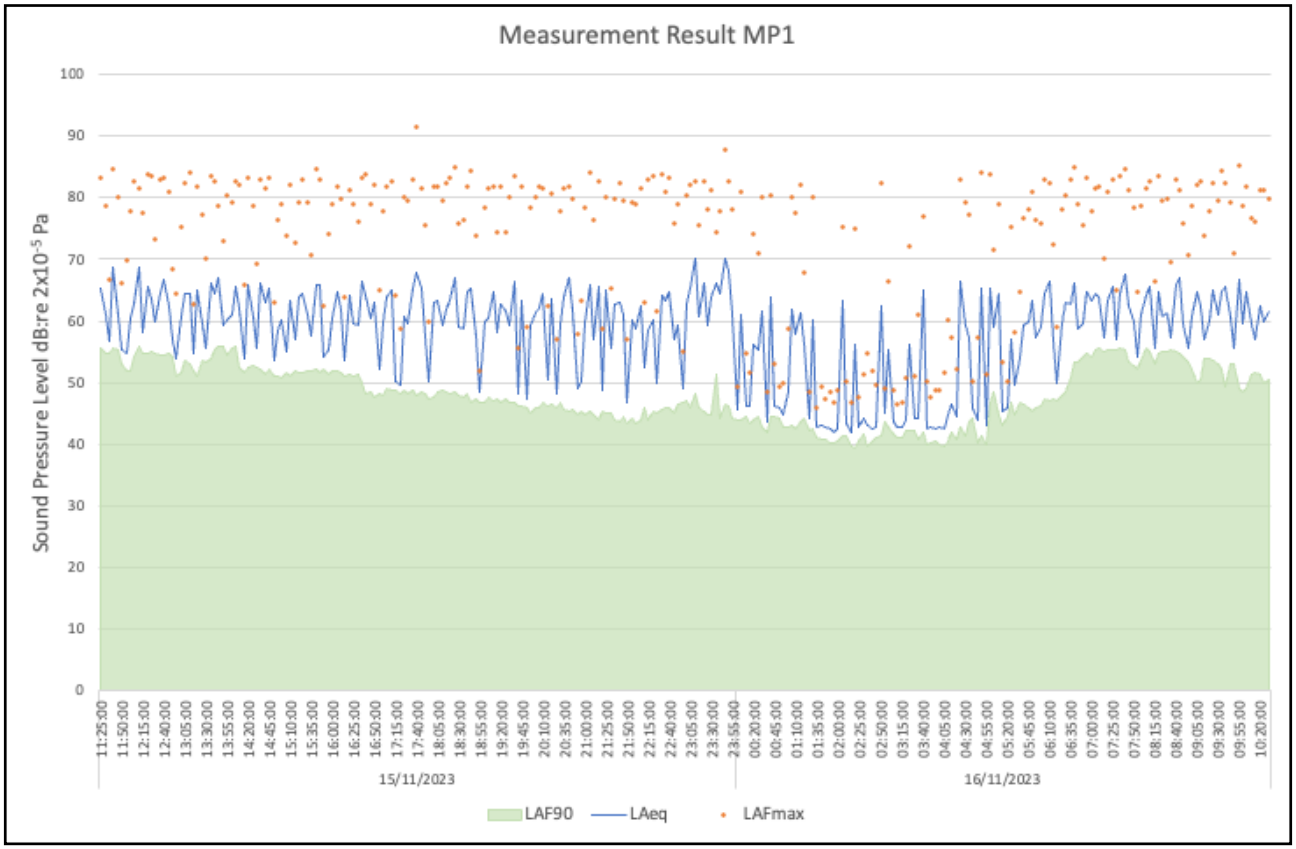


Figure 3.3A - Survey Results MP2 - Updated to Include Daytime L_{AFmax} for Information

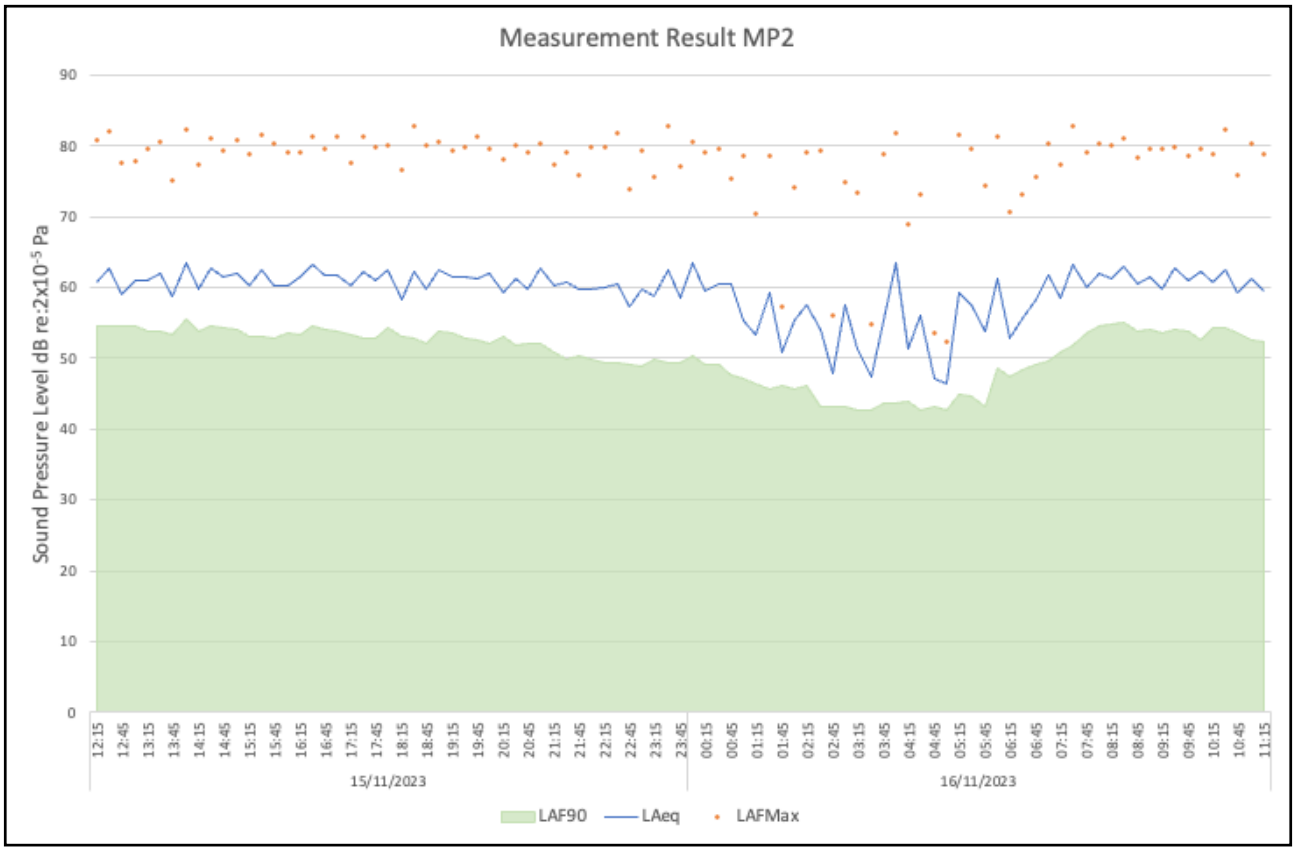


Figure 3.4A - Survey Results MP3 - Updated to Include Daytime L_{AFmax} for Information

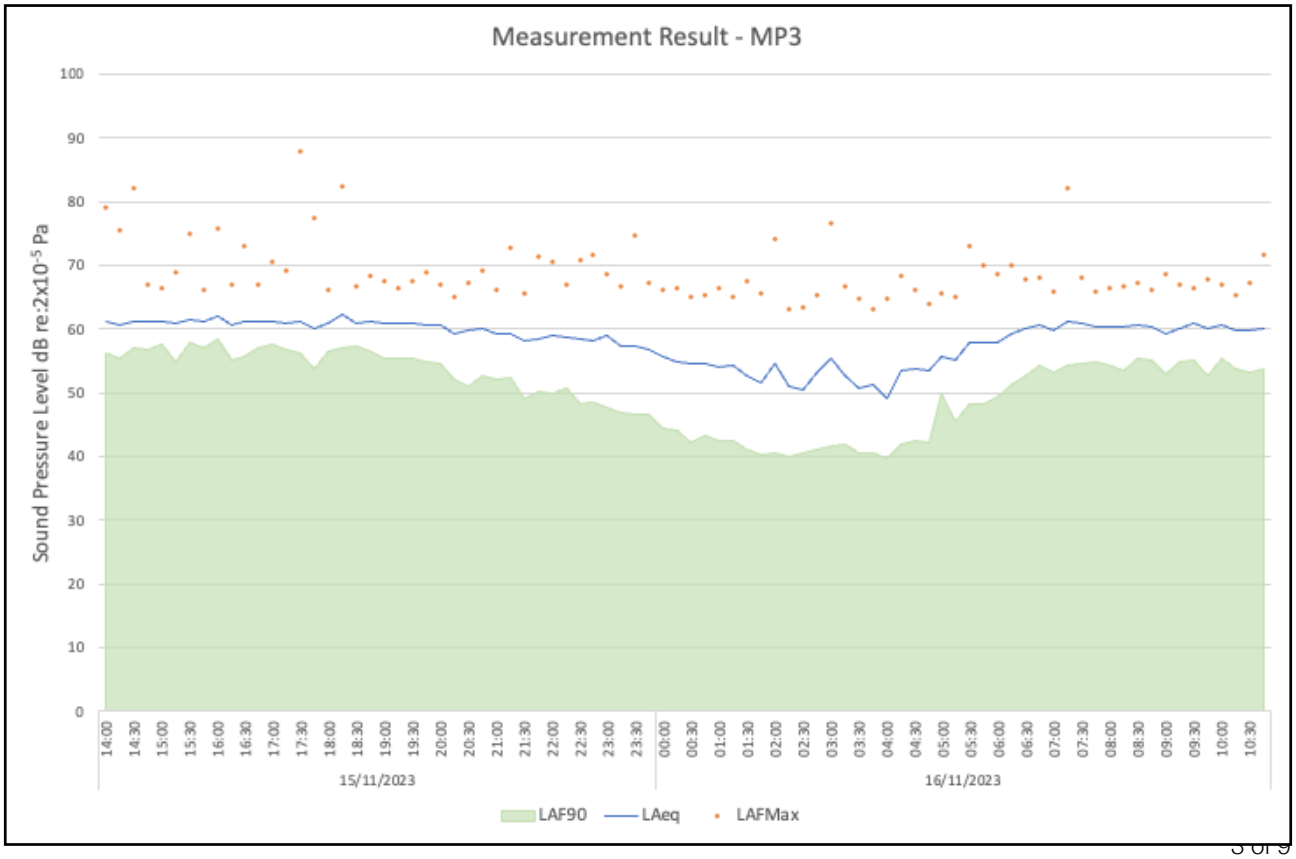
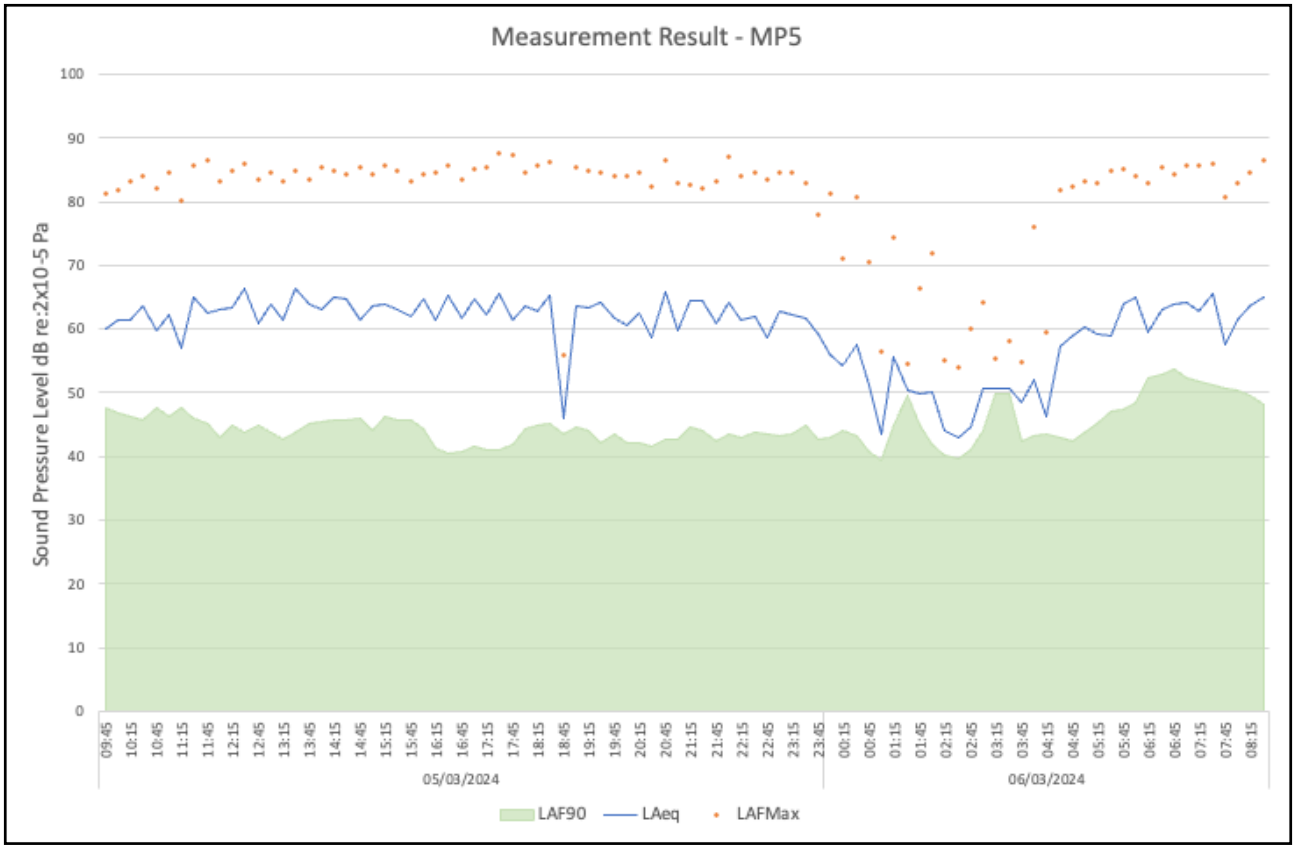


Figure 3.5A - Survey Results MP5 - Updated to Include Daytime L_{AFmax} for Information



The barrier attenuation appears to differ between Figure B7 and the remaining Figures. Why is this?

Figure B7 has been presented to show commercial noise impact specifically from the aggregates crushing business while the remaining figures show all noise impact which is driven mainly by noise from trains. As the train tracks are closer to the recommended barrier, the barrier attenuation is more effective against train noise than the aggregates business which is further away. Barrier performance is dictated primarily by the proportion of additional noise pathway that the barrier creates and this is affected by the distance of the source and receiver from the barrier.

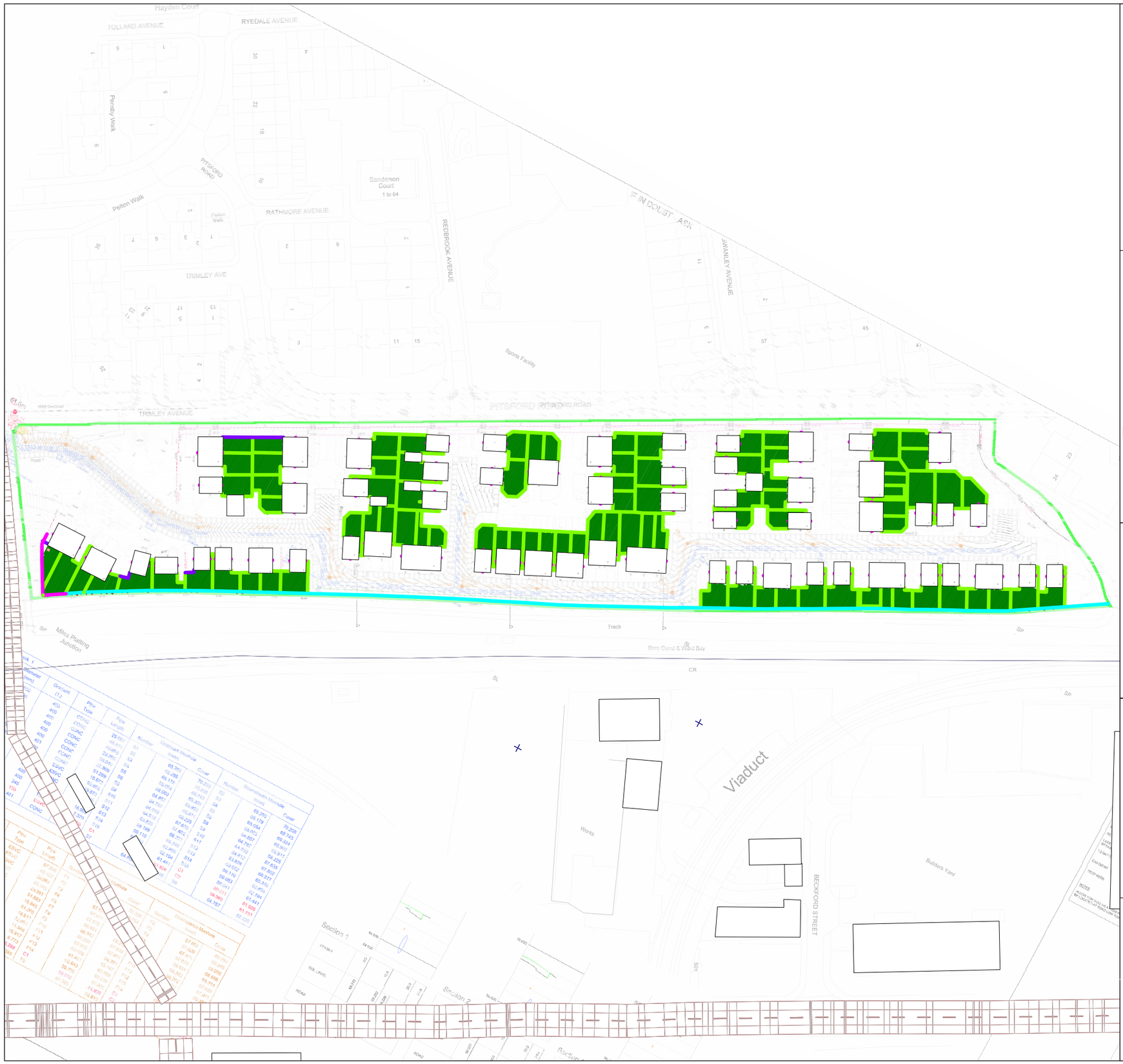


Figure B2A: Garden Noise Level Prediction Daytime LAeq,16hr

Updated for Technical Addendum T01

Drawing Notes

Daytime garden noise levels meet 50-55dBA target with barrier along boundary as indicated.

Acoustic barrier details to be confirmed, however a high mass acoustic fence is recommended. Exact proposed ground heights to be confimed prior to insalling barrier to ensure expected level of acoustic protection.

Plot shows absolute levels including roads, trains and both areas of waste/aggregates procesing.

Barrier Height Key:

- 1.8m Barrier
- 2.2m Barrier
- 4.0m Barrier
- 4.5m Barrier

Impact Map Key dBA:

- <=55
- <=56
- <=57
- <=58
- >58

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Figure B7A: BS4142:2014+A1:2019 Results - Waste Sorting and Aggregates Processing

Updated for Technical Addendum T01

Drawing Notes

The results shown indicate the additional level of commercial noise impact in line with the guidance in BS4142. This includes a +9dBA penalty onto the absolute levels for highly perceptible impulsivity.

Where adverse impact is indicated in red colours, the glazing recommendation has been uprated to account for the amount of additional impact. +5dB Rw and +10dB Rw has been added to the glazing recommendation as needed on a facade by facade basis to account for impact above the baseline BS8233 glazing recommendation. This is incorporated into the outputs in Figures B3-B6.

Impact Map Key:

- <=43 up tp 48 (Low Impact)
- 48-53 (Potential for adverse impact indicated)
- 53-58 (Adverse impact indicated)
- 58-63 (Significant adverse impact)

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