



STANFORD HOUSE, HAYES – NOISE STATEMENT OF CASE

LONDON BOROUGH OF HILLINGDON

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1 INTRODUCTION

Anderson Acoustics Ltd was commissioned by London Borough of Hillingdon (LBH) in August 2019 to produce an acoustic statement of case for the appeal application for the refusal of planning application ref. 51175/APP/2018/4260. The proposed development at the Stanford House site, 9 Nestle Avenue, Hayes, UB3 4SA is for the *“Demolition of existing building and redevelopment to provide a building up to 10 storeys, with 868 sq.m of commercial or community space (Use Class B1 or D1) at ground floor level and 81 (44 x 1-bed, 28 x 2-bed and 9 x 3-bed) residential units to the upper floors, with associated landscaping, access, car parking and cycle parking”*. The noise assessment that accompanied the planning application was produced by Mayer Brown¹(MB).

This Statement of Case has been prepared by Adam Glass MIOA, principal consultant at Anderson Acoustics on behalf of London Borough of Hillingdon (LBH).

Section 2 presents a description of the site; Section 3 presents the Meyer Brown Ltd (MB) survey, assessment and findings; Section 4 presents review of the MB Noise and Vibration Assessment (MVA) and additional information provided in the MB Response to LPA Comments² (RLCN) ; Section 5 presents the reason for refusal Section 6 presents the response to statements made in the RLCN and Section 7 presents the conclusions.

2 SITE DESCRIPTION

The proposed development site is located off Nestle Avenue, which is residential in character, and lies to the south of the site. To the west of the site is 7 Nestle Avenue which has a D1 land use and is currently being used as a higher education college. Part of the building has a consented B2 use as a vehicle repair workshop and MOT testing facility. Northwest and north of the site is the Squirrels Trading Estate which is commercial/industrial uses. To the east of the site is the former Nestle Factory Site which has planning permission for a mixed used redevelopment of up to 1,386 dwellings, office, retail, community and leisure uses and commercial floorspace. The land uses are shown in Figure 2.1.

¹ Mayer Brown. Report. 9 Nestle Avenue Hayes London UB3 4SA. Noise and Vibration Assessment. April 2019.

² Mayer Brown. Planning Appeal by Healey Development Solutions (Hayes) Ltd. Response to LPA Comments on Noise. Stanford House, 9 Nestle Avenue, UB3 4SA. September 2019.

Figure 2.1 – Location of site and adjoining land uses



3 MAYER BROWN ENVIRONMENTAL NOISE AND VIBRATION ASSESSMENT REPORT

3.1 Introduction

The purpose of this section is to present information from the NVA and RLCN produced by MB that is relevant to the issue of industrial/commercial noise, from neighbouring land uses.

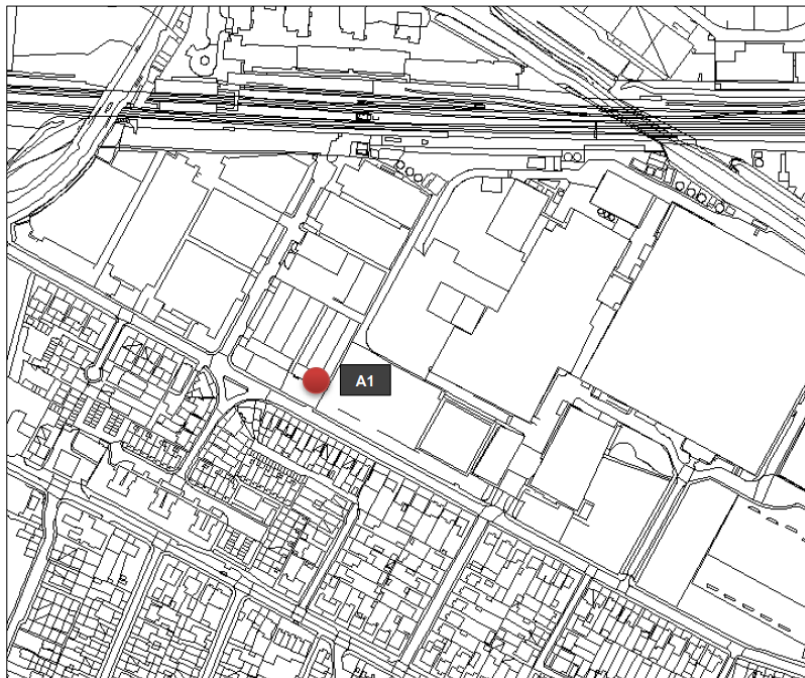
3.2 Mayer Brown Survey

This section discusses the survey report in the MB NVA as reported by them. The Anderson Acoustics (AA) consideration of the survey findings is presented in section 4.2 of this report.

The MB NVA does not provide information on the personnel (or their competency for the measurement of environmental noise. The report does state that the equipment was field verification checked before and after use. The calibration status of the equipment used in the survey is given in the report and the equipment is within the calibration period. The report states that weather conditions were not considered to have adversely affected the measured sound levels.

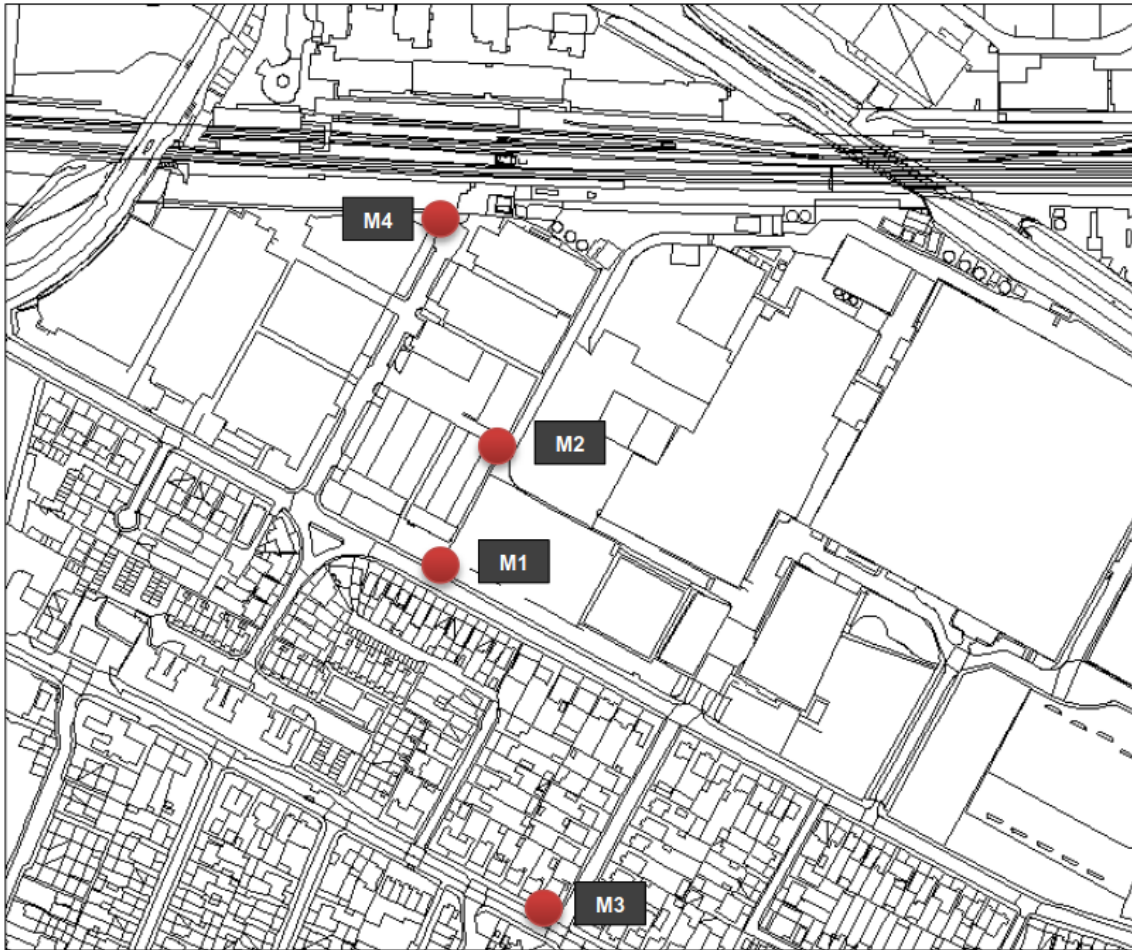
Baseline sound levels were measured between the 13th and 18th of July 2018 at location A1 (as shown in Figure 3.1) and have been used as the baseline for the assessment to be carried out. The baseline sound environment is stated as being dominated by local and distant road traffic and transient noise from train movement on the Great Western Mainline railway.

Figure 3.1 Baseline Unattended Sound Monitoring Location



Attended noise monitoring was also carried out to gain information on the noise levels from rail, commercial and industrial noise sources. The attended monitoring locations are shown in Figure 3.2.

Figure 4.2 Baseline Attended Sound Monitoring Locations



Location M2 is at the boundary of the site with the Squirrels Trading Estate. No explicit description of the acoustic character of the industrial/commercial noise, at this location, is given in the assessment though the following statement is made *“Intermittent noise from the industrial unit adjoining the western / north-western boundary of the site was also intermittently audible but only close to the boundary, but such noise was not considered to be dominant in the context of general ambient noise levels”*.

The NVA describes the existing uses for the Squirrels Trading Estate *“..appear to include two units manufacturing kitchen/bedroom furniture; a catering distribution company; courier; motor repair workshop and automotive body shop”*.

Noise levels were monitored at the rear of 9 Nestles Avenue directly overlooking the parking forecourt to the Trading Estate (Position M2).

The time-history $L_{Aeq,1min}$ and $L_{AFMax,1min}$ are presented for the M2 location but the $L_{A90,T}$ is not presented so the background sound level is not indicated. Noise events in the time history are neither identified as being industrial/commercial noise or characterised.

The acoustic features of the industrial/commercial noise in terms of intermittency, impulsivity, tonality and other sound characteristics is not given.

Figure 4.3 Time History of L_{Aeq} and L_{AFMax} at the M2 Monitoring Location

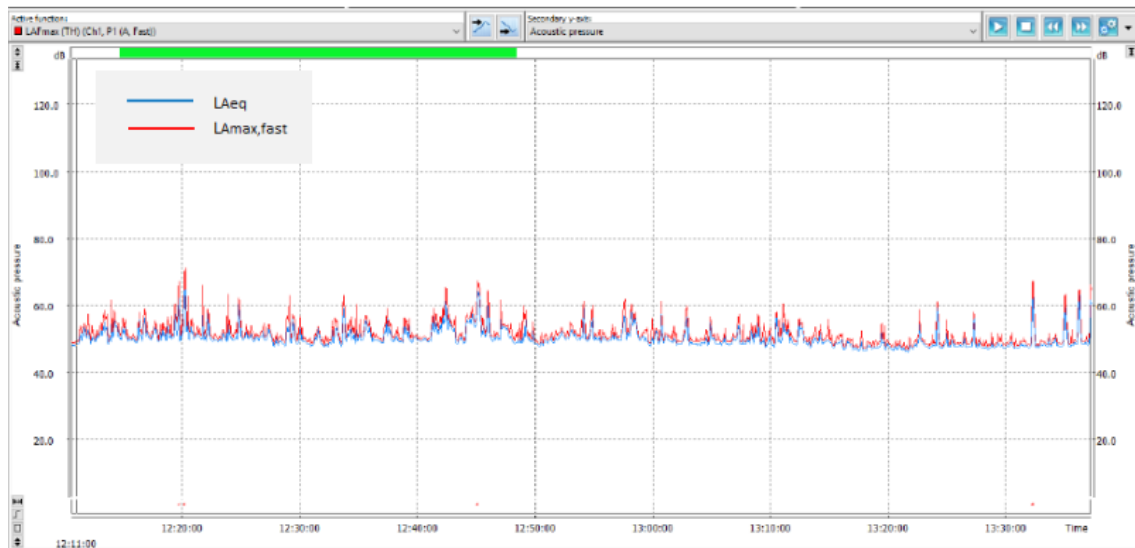


Figure 11.5: Noise Levels Measured at Position M2 (12.00 to 13.45)

No monitoring was conducted at the boundary with the B2 use for vehicle repair and MOT testing at 7 Nestle Avenue.

3.3 MB Modelling

The baseline noise surveys have been combined road and rail noise model has been produced using the CadnaA noise modelling software. The model does not include industrial/commercial noise sources.

3.4 MB Assessment

This section discusses the findings of the assessment in the MB report, as reported by them, in relation to noise in relation to noise from the neighbouring land uses. The AA assessment of the findings is given in section 4.3 of this statement. The NVA mentions the audibility of industrial/commercial noise, stating it is not dominant but does not describe the character of the specific sound, apply character corrections or conduct a BS4142³ assessment. Noise in external amenity areas is considered against WHO "Guidelines for Community Noise"⁴ and aims to achieve a value of 55dB $L_{Aeq,16hour}$ but recognises this may be challenging as the $L_{Aeq,16hr}$ is above this for areas of the site, in particular the southern area where *"The results of the modelling show that noise levels at the southern boundary of the site are in the order of 60dB $L_{Aeq,16hour}$ daytime and 52dB $L_{Aeq,8hour}$ night-time"*. Mitigation from the building mass and potential mitigation in the form of solid glazed balconies and acoustically treated soffits to minimise reflection of noise from the balcony above is proposed though it is not clear if the external amenity guideline values are met or not with the mitigation in place.

Assessment of the industrial/commercial noise to take into account the specific features and character of industrial/commercial noise has not been made.

³ BSI. BS4142:2014. Methods for rating and assessing industrial and commercial sound. 2014.

⁴ World Health Organisation. Guidelines for community noise. 1999.

4 ASSESSMENT OF MB NVA AND RLCN

4.1 Introduction

This section comments on the findings of the MB NVA in the context of policy, assessment methodology and findings in relation to industrial/commercial noise.

4.2 MB Survey

The measurements and findings of the MB survey have been considered. The noise levels from industrial/commercial sources are not defined, the duration and frequency of such events are not defined, character features of the commercial/industrial noise are not defined, and the background sound level is not summarised.

The RLCN discusses the potential noise emission from the lawful B2 use as a vehicle repair workshop and MOT test centre at the northern end of 7 Nestles Avenue and additional technical evidence to support the judgement, through calculation of a “worst case” specific noise level of around 44dB $L_{Aeq,1hour}$ at receptor locations. No measurements of the noise from the vehicle repair workshop appear to have been made at this location and the character of the noise has not been discussed.

4.3 MB Methodology

The MB methodology for assessment of the noise from neighbouring land uses is based on the industrial/commercial noise not being “dominant in the context of the ambient noise environment” and has not been assessed to BS4142:2014 methodology.

MB state “*This situation is directly addressed in ProPG⁵, paragraphs 2.40 and 2.41 of which state: “In the case of sites exposed to industrial and/or commercial noise: 2.40 To be clear, where industrial and/or commercial noise is present on the site and is considered to be “dominant” (i.e. where the impact would be rated as adverse or greater (subject to context)) then this is outside the scope of this ProPG and regard should be had to the guidance in BS4142:2014.*

2.41 In the special case where industrial and/or commercial noise is present on the site but is not dominant” (i.e. where the impact would be rated as lower than adverse (subject to context) if a BS4142:2014 assessment was to be carried out), its contribution may be included in the noise level used to establish the degree of risk in Stage 1 and may also be included in the consideration of Stage 2 Element 2 Internal Noise Level Guidelines (and if included, this should be clearly stated).”

Neither the survey, the Stage 1 or Stage 2 assessment in the NVA discuss the commercial/industrial noise features. It is therefore not known (from the NVA and RLCN) if the industrial/commercial noise is “dominant” or not.

The guidance is given fuller context in paragraphs 2.42, 2.43 and 2.44 of the ProPG:

“2.42 However, great care should be taken when considering using the noise level guidelines in Figure 2 in circumstances where industrial and/or commercial noise is present but “not dominant”. Issues that may arise include:

- *Are there particular acoustic features (tones, impulses etc.) in the industrial and/or commercial noise that may increase its effect compared to sounds without such features?*
- *Are there any non-acoustic features that may also have an effect?*
- *Will the time averaging over the 16 hour day or 8 hour night intervals used in Figure 2 lead to underestimation of the impacts of industrial and/or commercial noise that may occur for shorter but still substantial periods at a higher level?*

⁵ Grimwood et al. 2017. ProPG: Planning & Noise. Professional Practice Guidance on Planning & Noise. New Residential Development.

“2.43 Professional judgement will have to be exercised in addressing these sorts of issues. One possible approach may be to apply BS4142:2014 character corrections to the noise level guideline values in order to derive suitable effect thresholds and/or mitigation design targets and to use the same reference time periods recommended in the standard”.

“2.44 It should also be noted that the presence of industrial and/or commercial noise on the site, even if it is “not dominant”, may also raise wider issues that should be addressed under the other elements of Stage 2”.

Given the location of the site overlooking commercial/industrial uses, from the west façade, and the MB NVA assessment for “low” to “medium” risk it is surprising that at least a characterisation of the industrial/commercial noise has not been made to inform the statement that the commercial/industrial noise is not “dominant”.

BS4142:2014 is applicable to the determination of the following levels at outdoor locations:

- a) rating levels for sources of sound of an industrial and/or commercial nature; and
- b) ambient, background and residual sound levels, for the purposes of:
 - 1) investigating complaints;
 - 2) assessing sound from proposed, new, modified or additional source(s) of sound of an industrial and/or commercial nature; and
 - 3) assessing sound at proposed new dwellings or premises used for residential purposes.

Assessment of the sound from the neighbouring land uses has not been made to BS4142:2014 methodology to characterise the noise and as such the impact of noise from neighbouring land uses is not known.

The WHO guideline for community noise state: “...the guidelines do not explicitly consider industrial noise as an environmental noise source, affecting people living in the vicinities of industrial sites. This is mainly due to the large heterogeneity and specific features of industrial noise, and the fact that exposure to industrial noise has a very localized character in the urban population”.

The external area noise assessment does not appear to have considered the industrial/commercial character of the noise in the outdoor amenity area assessment.

The methodology to establish the effect of noise from industrial and commercial sources may be inadequate.

4.4 Assessment

The figures in the MVA showing the measured noise levels at M2 (representative of the boundary with the Squirrels Trading Estate) do not show the $L_{A90,T}$ background sound level. A tabular summary of the noise metrics such as $L_{A90,T}$ is not given for measurement location M2, yet is presented for M1 and M3. The background sound level assumed for the area is not given though the plant noise assessment contains the statement: “In light of this, it is considered desirable and practicable to seek operate and maintain any new plant installations so that the rating level L_A of the fixed installations in normal operation at the worst affected residential receptor, minus the background level ($L_{A90,T}$), is not more than 5 dB, determined in accordance with BS4142:2014”. From this and the values presented Table 4.1 it can be assumed the background sound level is 37 dB $L_{A90,T}$ but this is not clear and the $L_{A90,T}$ may be higher.

Rating Level, $L_{Ar,T}$ dB	
Daytime (07.00 – 23.00)	Night (23.00 – 07.00)
42	38

Table 10.2: Recommend Rating Level ($L_{Ar,T}$) for Process/Fixed Plant

The Stage 2 assessment of the NVA considers that “standard” thermal double glazing and acoustically rated ventilation will allow the development to be effectively integrated with the existing land uses to the north of the site. With standard thermal double glazing and acoustically rated ventilation it is agreed that internal noise levels are likely to be within the BS8233:2014 criteria.

The RLCN does not present a BS4142:2014 assessment of the existing commercial/industrial noise and the character of the noise is not described or character corrections given so the effect of the noise in external amenity areas is not known.

The character of the noise from the B2 Use of 7 Nestle Avenue is not described and character corrections are not given. The RCLN states “...it is expected that noise break-out during a “worst case” 1 hour period would give a specific noise level of around 44 dB $L_{Aeq,1hour}$ ”. The specific sound level of 44dB $L_{Aeq,1hour}$ is above the rating level recommended for the design of plant in the NVA assessment and 7dB above the assumed background sound level, from the fixed plant noise assessment. This is also prior to the consideration of character corrections for the specific sound. As such an adverse effect may be indicated to be present though the significance of the effect is not certain. With character corrections applied there may be a significant adverse effect in external amenity areas.

As such the significance of the effect of the noise from neighbouring land uses has not been established and a significant adverse effect may or may not be present as assessment of the character corrected noise has not been made to inform the statement of the significance of the effect.

4.5 Agent of Change

The RLCN provides discusses the neighbouring land use industrial commercial noise and concludes that it is not apparent there is a significant adverse effect and even if there was a significant adverse effect suitable mitigation could be applied.

Without the character considered for the industrial/commercial noise or a BS4142:2014 assessment of the existing industrial/commercial noise it is uncertain if there is a significant adverse effect of not. It is therefore uncertain if there is an unacceptable co-location of uses, which would result in a significant adverse noise impact on the proposed development requiring additional mitigation to discharge ‘Agent of Change’ obligations imposed by paragraph 182 of the NPPF.

4.6 Mitigation

It is agreed mitigation is required to be considered to reduce the effect of noise. It is agreed that good acoustic design measures have been discussed for the design of the building such as the blank north facade facing the Squirrels Trading Estate and acoustic ventilation. The RLCN discusses potential mitigation measures for the external amenity areas such as glazed screens or enclosed winter gardens.

With suitable mitigation (if required) in place significant adverse effects can be avoided. Without the character correct industrial/commercial noise assessment or BS4142:2014 assessment the need for, or extent of, the mitigation is not known.

5 REASON FOR REFUSAL

5.1 Reason

The refusal reason 5 is as below

“The development provides a high proportion of single aspect dwellings and dwellings with their sole aspect facing towards Strategic Industrial Land. The development fails to provide sufficient separation from the western boundary of the site to mitigate against a potential noise generating use on the neighbouring site and as such, the proposal fails to take responsibility for mitigating impacts from existing noise-generating activities or uses on the proposed new noise-sensitive residential development and thereby fails to provide a suitably high quality of residential amenity for future occupiers contrary to Policy BE1 of the Local Plan: Part One (November 2012); Policy OE1 of the Local Plan: Part Two (November 2012) and Policy 7.15 of the London Plan (2016) and Paragraph 182 of the NPPF (2019).”

5.2 Reasoning

The western boundary of the site is adjacent to a B2 use as a vehicle repair workshop. The western boundary also overlooks the Squirrels Trading Estate, which contains vehicle body shops, kitchen manufacturers, couriers and a catering wholesaler. No measurement of noise has been made at the western boundary or the industrial/commercial noise sources measured and the noise features have not been characterised. The Stage 1 and Stage 2 Detailed Assessment in the NVA do not consider the industrial/commercial noise and so the effect of industrial/commercial noise sources to the west is unknown and mitigation of this noise was not discussed or applied in the application or supporting information.

6 RESPONSE TO LPA COMMENTS

6.1 Introduction

The response in section 2 of the RLCN contains the following statements by MB:

“(a) No technical evidence is presented by the LPA which indicates what noise levels external amenity spaces are alleged to be exposed to”; Response: It is the role of the applicant to measure and assess the commercial/industrial noise levels to appropriate guidance, to inform the determination of the planning application.

“(b) Whilst asserting that noise levels will be “above guidance values”, the LPA has not set out what “guidance values” have been adopted in reaching that conclusion; Response: The guidance values are those presented in section 4.37 and 7.42 of the NVA. There is not an assertion that the rating levels are above the criteria for a significant adverse impact but there is indication of a potential exceedance of the section 4.37 criteria presented in the RLCN for noise from the lawful B2 use as a vehicle repair and MOT testing facility and uncertainty compliance with the 4.37 criteria from noise from the Squirrels Trading Estate. Section 7.44 of the NVA also discusses compliance with the WHO guidelines values for external amenity areas and states that achieving them may be difficult and as such MVA have presented technical evidence that guidance values have been exceeded.

“(c) The LPA has not considered the ‘significance’ of the alleged exceedance (i.e. whether such noise is above a “Significant Observed Adverse Effect Level” (SOAEL))”; Response: Without assessment of the character corrected noise, to the guidance in ProPG, it is uncertain to the effect from the noise from the existing uses and the significance of the effect is not known.

“(d) The LPA’s conclusion relating to potential harm to neighbouring uses does not appear to take account of the context of the site”; Response: The meaning of this statement is not clear. The context of the development is introducing noise sensitive residential receptors into proximity to existing noise sources, including industrial/commercial noise from adjacent land uses.

“(e) It can therefore be seen that comments made by the Council’s Noise Specialist in relation to Squirrels Trading Estate actually relate to a matter that is not included within the reason for refusal (which specifically deals with alleged harm to the existing use of land to the west of the site)”. Response: The matter of noise from the Squirrels Trading Estate was raised in addition to the LPAs existing concerns, following review of the NVA and concerns over the noise from the estate and the cumulative effect of the noise. It is further noted that with the blank northern façade of the proposed development the issues relating to industrial/commercial noise pertain to west of the site which is the cumulative effect of the industrial/commercial noise from the B2 vehicle workshop at 7 Nestle Avenue and MOT testing station and the uses on the Squirrels Trading Estate. Both of which are overlooked by the west façade of the proposed development.

7 CONCLUSIONS

7.1 Conclusions

The following conclusions are made:

- Good acoustic design has been followed for the design of the buildings with mitigation measures such as blank north façade and acoustic ventilation;
- The presence or an adverse or significant adverse effect from existing industrial/commercial noise on external amenity areas is not certain as a BS4142:2014 assessment of the noise has not been conducted and no character correction for the noise sources is discussed or applied as is indicated to be required by ProPG;
- The MB reasoning for not conducting the BS4142 assessment is that the industrial/commercial noise is not “dominant”. In the context of the ProPG planning guidance “dominant” means “*where the impact would be rated as lower than adverse (subject to context) if a BS4142:2014 assessment was to be carried out, its contribution may be included in the noise level used to establish the degree of risk in Stage 1 and may also be included in the consideration of Stage 2 Element 2 Internal Noise Level Guidelines (and if included, this should be clearly stated)*”. The NVA and RLCN do not present suitable information and analysis to indicate if the industrial/commercial noise would be considered adverse, if a BS4142 assessment were to be conducted and as such the effect of the existing commercial/industrial noise is not known;
- The Stage 1 and Stage 2 assessment do not discuss the industrial/commercial noise other than to say it is “not dominant”;
- Noise from the existing lawful B2 use of 7 Nestles Avenue may, or may not, cause a significant effect but is indicated to potentially cause an adverse or significant adverse impact, from information presented in the RLCN;
- Noise from the Squirrels Trading Estate may, or may not, cause an significant adverse effect in external amenity areas;
- The cumulative effect of the industrial/commercial noise sources has not been assessed;
- With an apparent indication of an adverse effect from the existing lawful B2 use of 7 Nestles Avenue and uncertainty of the significance of the effect from industrial/commercial noise is uncertain. If there is an unacceptable co-location of uses, which would result in a significant adverse noise impact on the proposed development requiring additional mitigation to discharge ‘Agent of Change’ obligations imposed by paragraph 182 of the NPPF.
- Suitable mitigation is discussed in the RLCN in the form of screens or enclosed winter gardens. Suitable mitigation could be secured by planning condition. The extent and design of mitigation required would need to be informed by a BS4142:2014 assessment of the industrial/commercial noise sources.