

## **APPENDIX 2**

Technical Note – Noise by Joynes Nash

# Technical Note - Noise

Conversion of Offices to Residential

36 Salisbury Square, Hatfield, AL9 5AE

## Joynes Nash

Acoustics · Environmental · Public Health





Client Templewood Securities Ltd  
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# Technical Note

## 1 Introduction

- 1.1 Joynes Nash Ltd has been instructed by Templewood Securities Ltd, to prepare this noise assessment to accompany a prior approval application for the change of an existing offices building, to residential use.
- 1.2 The application is made in accordance with the requirements of the *"Town and Country Planning (General permitted Development) (England) (Amendment) Order 2016"*. The Order permits certain changes to use class of premises, subject to the condition that before beginning the development, the developer must, where prescribed, apply to the local authority for a determination as to whether the prior approval of the authority will be required.
- 1.3 With regard to development under Class O, the matters for which prior approval may be required includes *"the impacts of noise from commercial premises on the intended occupiers"*.
- 1.4 The term 'commercial premises' refers to any premises normally used for the purposes of any commercial or industrial undertaking, which existed on the date of the application and includes any premises licensed under the Licensing Act 2003, or any other place of public entertainment.
- 1.5 Impacts from general transportation noise are not due considerations in respect of this matter.

## 2 Proposed Development

- 2.1 The prior approval application seeks the permitted change of use of the existing 2 storey office buildings (Use Class B1) to residential use (Use Class C3), providing for 16 residential units.
- 2.2 The ground floor will continue to provide for mixed office use. Undercroft parking will remain.

## 3 Site Location

- 3.1 The subject property is 36 Salisbury Square, Hatfield, AL9 5AE.
- 3.2 The location of the proposed development in relation to its surroundings is shown in Figure 3.1.
- 3.3 Land usage in the immediate vicinity of the site is a mix of commercial and residential.
- 3.4 To the East is Salisbury Square, where a terrace of commercial units, with residential properties above exists. The commercial units include a small convenience store, launderette, barbers and several food takeaway outlets. The remainder of Salisbury Square provides for residential use.
- 3.5 To the North is The Great Northern Public House which includes an outdoor terrace and garden which wraps around the property. In close proximity are residential properties on Arm and Sword Lane and those located above the commercial units backing onto Salisbury Square.

- 3.6 To the immediate South of the proposed site is a mixed-use development consisting of an Indian Restaurant on the ground floor with residential units on the upper floors.
- 3.7 To the west is the Great North Road, Car Park and Hatfield Railway Station.



Figure 3.1: Proposal in relation to its local surroundings

## 4 Planning Policy Context

### NATIONAL PLANNING POLICY FRAMEWORK (NPPF) & NOISE

- 4.1 The NPPF sets out the Government's economic, environmental and social planning policies for England and "these policies articulate the Government's Vision of sustainable development". In respect of noise, Paragraph 123 of the NPPF states the following:

- *Planning Policies and decisions should aim to:*
  - *Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of development;*

- *Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions, whilst recognising that many developments will create some noise; and*
- *Identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.*

4.2 The NPPF reinforces the March 2010 DEFRA Publication “Noise Policy Statement for England” (NPSE), which states three policy aims, as follows:

*“Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government Policy on sustainable development:*

- *Avoid significant adverse impacts on health and quality of life;*
- *Mitigate and minimise adverse impacts on health and quality of life; and*
- *Where possible, contribute to the improvement of health and quality of life”*

4.3 Together, the first two aims require that no significant adverse impact should occur and that, where a noise level which falls between a level which represents the lowest observable adverse effect and a level which represents a significant observed adverse effect, then according to the exploratory notes in the statement:

*“.... all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life whilst also taking into consideration the guiding principles of sustainable development. This does not mean that such effects cannot occur”*

## PLANNING PRACTICE GUIDANCE

4.4 The planning practice guidance considers noise and provides the following guidance in terms of the effect level hierarchy.

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not noticeable	No Effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; closing windows for some of the time because of the noise. Potential for non-awakening sleep disturbance. Affects the	Observed Adverse Effect	Mitigate and reduce to a minimum

	acoustic character of the area such that there is a perceived change in the quality of life.		
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. having to keep windows closed most of the time, avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

## 5 Discussion and Observations – Existing Noise Climate

- 5.1 Joynes Nash conducted a subjective noise assessment of the area on the 20<sup>th</sup> May 2017 between the hours of 22.30 to 23.30hrs. The purpose was to supplement our significant knowledge of the area obtained in recent years, when conducting other projects in the immediate vicinity.
- 5.2 Observed noise at front of the building (the facade orientated towards the Great North Road) during the daytime is dominated by road and rail traffic. No other commercial activities make any significant contribution to the observed daytime noise levels. During the night, no significant relevant commercial noise sources were identified which impact on this facade of the building.
- 5.3 Traffic and rail noise continue to dominate the rear facade of the building in Salisbury Court despite the shielding offered by the structure. The neighbouring mixed use units (commercial and residential) were generally anonymous within the general composition of the noise climate.
- 5.4 The only exception to the transport noise, is that associated with human vocal noise. This is associated with people leaving the station, taxis, pick up and drop offs and noise arising from those attending the Public House and commercial units. However, it was not possible to distinguish between noise of those people passing through the locality on foot as a result of the transport connections or with those attending the commercial premises. The general noise climate is described as a general ‘hubbub’ of people noise from many contributing sources.

- 5.5 The outdoor area of the Public House was being used by several patrons (approximately a dozen) up until 23.30. These were positioned on the front terrace and faint vocal noise was audible but only below the ambient noise level at the proposed development, despite direct line of sight. The noise was observed to have a greater impact on the nearest residential properties on Great North Road and Arm and Sword Lane, upon which the main smoking area for the public house is also located.
- 5.6 Noise from the extract systems serving commercial units was not observed at the development.
- 5.7 Noise from air condition / refrigeration plant at both the convenience store and Public House are shielded from the development by existing structures and remained inaudible throughout.

## 6 Sound Insulation to Structurally Attached Premises

- 6.1 The ground floor commercial office will remain and therefore the floor / ceiling junction will need to offer adequate sound insulation.

### APPROVED DOCUMENT E

- 6.2 Approved Document E (ADE) of the Building Regulations 2010 requires that party walls and separating floors provide a 'reasonable resistance to sound. For dwellings created by a material change of use, ADE requires that party / separating floors maintain a minimum sound insulation value of  $DnTw + Ctr$  of 43dB. However, ADE also cautions that:

*"a higher standard of sound insulation may be required between spaces used for non-domestic purposes and communal or non-domestic purposes. In these situations, appropriate level of sound insulation will depend on the noise generated in the communal or non-domestic space. Specialist advice may be needed to establish if a higher standard of sound insulation is required and, if so, to determine the appropriate level"*

- 6.3 Unfortunately, whilst ADE highlights the need for sound insulation between commercial and residential uses to be "uplifted". It does not provide any guidance on appropriate uplift values, nor are such values promoted in other industry standard guidance documents.
- 6.4 The current use of the ground floor (offices) is characterised by modest levels of operational noise (human speech, office equipment, etc.) and it is assumed that such use will only ever be likely to take place during daytime hours. On this basis, it is suggested that uplifting the ADE design target by 5dB would offer a noticeable improvement in sound insulation compared with the minimum ADE requirements and provide an adequate level of acoustic protection. In quantitative terms, this would mean an airborne sound insulation target of 48dB  $DnT,w + Ctr$ .

## 7 Conclusion

- 7.1 Subjective noise monitoring has been undertaken to consider the existing noise climate.
- 7.2 The noise climate is dominated by transportation noise which is not subject to any form of control under the permitted development rights.



- 7.3 Any observed noise above the transportation noise is typical of a low key mixed use urban environment, whereby the noise forms part of the character and ambience of the area and is typical of many similar situations observed nationally.
- 7.4 Other noise is predominantly vocals from people who reside in the area, make use of the local facilities or are simply passing through the area. No one individual source is dominant or attributable to a specific commercial premise.
- 7.5 No mechanical or fixed plant noise was observed at the proposed residential units.
- 7.6 Existing residents currently live in close proximity to the identified commercial uses without undue disturbance and many of these are more likely to be affected by noise. Indeed, any future occupiers will not be adversely affected to any greater extent than existing residents.
- 7.7 Existing commercial activities are already restricted by current residential units in the vicinity.
- 7.8 The proposed commercial (office) to residential separation does not raise any acoustic difficulty with regard to the principle of the proposed development. Any conversion would meet the appropriate standards set out above. The whole premises are also under the control of our client and therefore, there are no difficulties posed in terms of upgrading the internal structure.
- 7.9 There is no subjective evidence to suggest the need to proceed to any detailed study of noise. The observed noise is not expected to cause a change in behaviour or attitude of future occupiers and there is no likely significant impact on the future occupiers of the proposed residential units.
- 7.10 It is considered that the development accords with the principles of sustainable development.

