

SHARPS REDMORE

ACOUSTIC CONSULTANTS ▪ Established 1990



Report

**Rice Bridge, Thorpe Le
Soken, Essex**

Change of Use, Office to
Residential under Permitted
Development


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Date 30th March 2020
Project No 2019524

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This report has been prepared with all reasonable skill, care and diligence commensurate with an acoustic consultancy practice under the terms and brief agreed with our client at that time. Sharps Redmore provides no duty or responsibility whatsoever to any third party who relies upon its content, recommendations or conclusions.

1.0 Introduction

- 1.1 Sharps Redmore has been instructed with respect to a change of use under permitted development to Units 7 and 7A, Rice Bridge Estate, Thorpe Le Soken (The proposal) from offices to residential end use.
- 1.2 The site is currently offices set over two floors with the first floor being a mix of cellular and open plan office accommodation. The brick-built building features existing double-glazed windows. The applicant is seeking prior approval through the permitted development process and consent from Tendring DC. Noise from commercial premises is now considered in the permitted development process with the changes introduced in April 2016 outlined below. Under general permitted development rights, no planning application is necessary in order to change the use of a building between Use Class B1 – Business, and Planning Use Class C3 – Dwelling houses.
- 1.3 On April 6th 2016, changes to the Town and Country Planning (General Permitted Development) (England) (Amendment) Order 2016 came into force. These amendments included changes to prior approval requirements with respect to the change in use from offices to dwelling houses as follows:
- “O.2.—(1) Development under Class O is permitted subject to the condition that before beginning the development, the developer must apply to the local planning authority for a determination as to whether the prior approval of the authority will be required as to—
- (a) transport and highways impacts of the development,
 - (b) contamination risks on the site,
 - (c) flooding risks on the site, and
 - (d) impacts of noise from commercial premises on the intended occupiers of the development,
- and the provisions of paragraph W (prior approval) apply in relation to that application.
- “Interpretation of Class O O.3. For the purposes of Class O, “commercial premises” means any premises normally used for the purpose of any commercial or industrial undertaking which existed on the date of application under paragraph O.2(1), and includes any premises licensed under the Licensing Act 2003(a) or any other place of public entertainment.”.
- 1.4 Sharps Redmore have therefore assessed the proposal site and immediate surrounding area for both impact on likely residential end users from commercial noise and premises where sound from the development may need consideration with respect to the proposed residential end use, to enable meeting national and local planning policy objectives and acoustic standards.
- 1.5 This report is supplied with respect to seeking implementation of Class “O” of the GPDO for the proposed change of use for the offices to residential end use and specifically with reference to noise impact of nearby commercial premises on the intended occupiers of the proposed development.
- 1.6 The relevant assessment criteria for any sound sources identified are broadly set out in Section 2, and the site is described in more detail within Section 3 of this report. Site observations and background sound survey details, results and assessment are presented in Section 4, and the conclusions can be found in Section 5.

2.0 Assessment Criteria

2.1 The legislative context for this assessment is The Town and Country Planning (General Permitted Development) (England) Order 2015, and more recently The Town and Country Planning (General Permitted Development) (England) (Amendment) Order 2016 (GPDO).

2.2 The permitted development and prior approval requirements are set out in the Introduction of this report. The National Planning Practice Guidance (6th March 2014) provides the following advice with respect to the approach and level of details perhaps needed for prior approval:

“The statutory requirements relating to prior approval are much less prescriptive than those relating to planning applications. This is deliberate, as prior approval is a light-touch process which applies where the principle of the development has already been established. Where no specific procedure is provided in the General Permitted Development Order, local planning authorities have discretion on what processes they put in place. It is important that a local planning authority does not impose unnecessarily onerous requirements on developers, and does not seek to replicate the planning application system.”

[\(http://planningguidance.communities.gov.uk/blog/guidance/when-is-permission-required/what-are-permitted-development-rights/\)](http://planningguidance.communities.gov.uk/blog/guidance/when-is-permission-required/what-are-permitted-development-rights/)

2.3 In the absence of specific guidance, it is considered that the principles of National Planning Policy and requirements within Local Planning Policies with respect to noise are relevant.

National Policy

2.4 Though the prior approval system is intended as a light touch process and not to replicate the planning system, the aims of national planning policy with respect to noise are relevant and therefore should be considered for new development.

2.5 The National Planning Policy Framework (NPPF), revised in 2019, 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 relation to noise, paragraph 180 states:

“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

- a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;
- b) Identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.”

2.6 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.”

2.7 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 explanatory 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.”

2.8 It is possible to apply objective standards to the assessment of noise and the design of new dwellings should seek to achieve these objective standards. Such guideline values are given in the World Health Organisation (WHO) document “Guidelines for Community Noise” and within British Standard, BS 8233:2014 which is principally intended to assist in the design of new dwellings.

2.9 The WHO guideline values are appropriate to what are termed “critical health effects”. This means that the limits are at the lowest noise level that would result in any psychological, physiological or sociological effect. They are, as defined by NPSE, set at the Lowest Observed Adverse Effect Level (LOAEL), but do not define the level above which effects are significant (the SOAEL). Compliance with the LOAEL should, therefore, be seen as a robust aim.

2.10 The national interpretation of the WHO guidelines is contained in BS 8233:2014 'Sound Insulation & Noise Reduction for Buildings'. BS 8233 recommends the following desirable guideline values for internal ambient noise:

Table 4 Indoor ambient noise levels for dwellings

| Activity | Location | 07:00 to 23:00 | 23:00 to 07:00 |
|----------------------------|------------------|------------------------|-----------------------|
| Resting | Living room | 35 dB $L_{Aeq,16hour}$ | — |
| Dining | Dining room/area | 40 dB $L_{Aeq,16hour}$ | — |
| Sleeping (daytime resting) | Bedroom | 35 dB $L_{Aeq,16hour}$ | 30 dB $L_{Aeq,8hour}$ |

- 2.11 There is no longer a L_{Amax} standard for bedrooms In BS 8233. However, footnote 4 to Table 4 states that “Regular individual noise events (for example, scheduled aircraft or passing trains) can cause sleep disturbance. A guideline value may be set in terms of SEL or $L_{Amax,F}$ depending on the character and number of events per night. Sporadic noise events could require separate values.” In this case, it is proposed that the previous BS 8233 internal standard (also referenced in World Health Organisation Guidelines for Community Noise) is applied. This is 45 dB L_{Amax} , inside bedrooms.
- 2.12 Although prior approval should be a light touch process as described in national Planning Practice Guidance, the national planning policies with respect to noise and relevant standards should still be applied to the protection of the proposed residential use at the proposal.
- 2.13 The residential criteria within BS 8233:2014 and WHO Guidelines will therefore be considered with respect to noise from commercial premises identified in the vicinity of the development site as per the amendments to the order.
- 2.14 The GPDO, in terms of noise, is restricted to the assessment of impacts of noise from commercial premises on the intended occupiers of the development. Transport sources are not considered under the permitted development process although regard will be taken for local aims further to guidance in the National Planning Practice Guidance.

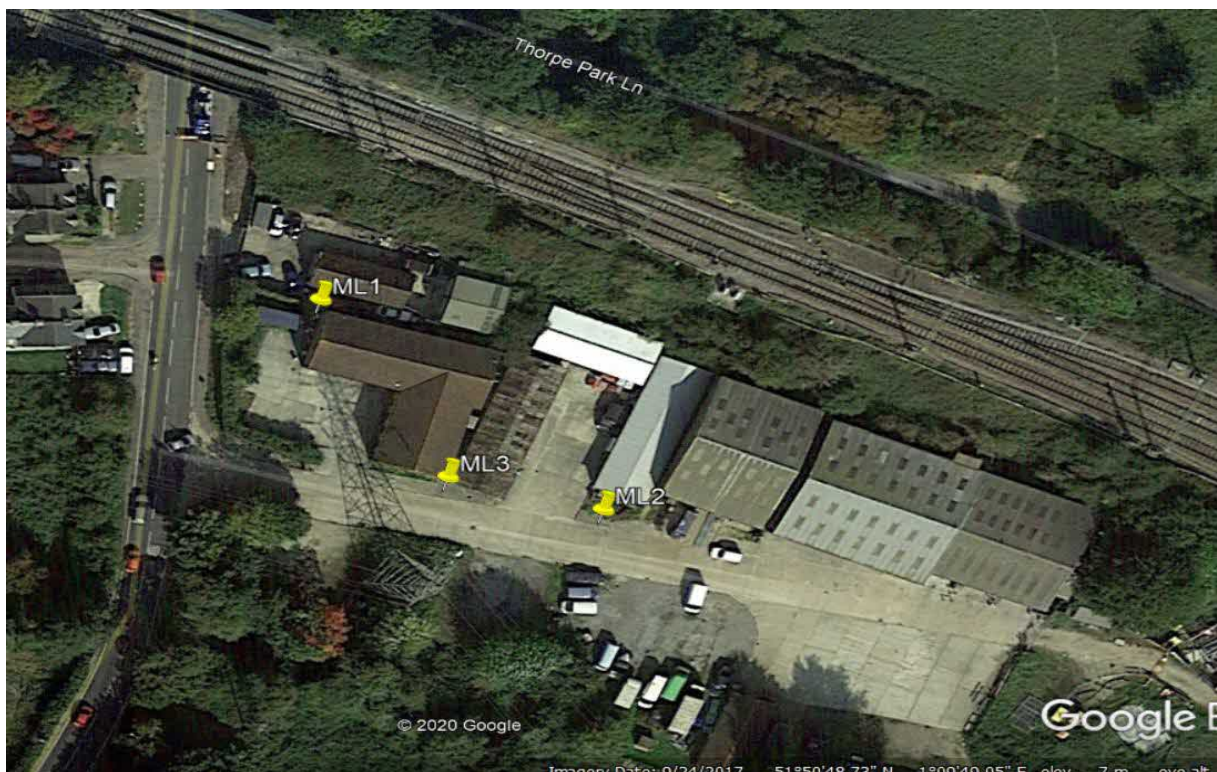
3.0 Site Description

- 3.1 The starting point for this assessment was to identify possible commercial and industrial premises in the immediate area surrounding the proposal. Existing properties are also considered. This was then followed by a visit to the site and noise survey over the 23rd - 24th March 2020.
- 3.2 The site is located on Rice Bridge Industrial Estate, Station Road, Thorpe le Soken. The estate contains a MOT testing centre which has its own access onto Station Road, a motorbike repair unit, a commercial vehicle repair and paint shop and a self-storage facility at the eastern end of the estate. All operations are daytime only and the site secured in the evening.
- 3.3 There are existing established residential properties immediately to the west on the opposite side of Station Road. The site is approximately 150m to the east of Thorpe le Soken railway station. Trains will either be arriving or departing the station at low speeds from or to Frinton on Sea and Walton on Naze. There are no through high speed trains or any night time freight trains.
- 3.4 In terms of commercial premises for the purposes of the GPDO, the premises outlined above will be considered and were assessed at the time of the site visit.
- 3.5 The existing relevant noise sources of a commercial nature are outlined above. Road traffic noise along Station Road is the dominant steady ambient noise source at the proposal.

4.0 Survey Details and Assessment

- 4.1 The proposal and immediate surroundings were surveyed over 23rd-24th March 2020.
- 4.2 The weather conditions were dry throughout the survey with acceptable conditions throughout the survey period. The temperature was approximately 14°C, with light SW breeze suitable for noise measurements.
- 4.3 As identified in the site description, the nearest commercial premises are on the industrial estate. Short term activities such as power tools/jet washing activity were audible on the site with occasional vehicle arrivals and train pass bys. Road traffic noise from Station Road dominated the ambient noise climate.
- 4.4 A long term (24 hour) survey position at ML1 was considered representative of the most sensitive elevation and was sited to capture activity and road noise during the day and for rail pass bys in the evening /night when the site is closed. ML2 and ML3 were shortened manned surveys to consider levels from a worst case jet washing activity in the yard area. These are shown below in figure 4.1 as ML1, ML2 and ML3.

Figure 4.1



- 4.5 A Norsonic 118 type 1 sound level meter was used. The meter was mounted on a tripod at approximately 3.5m in free field conditions for the longer survey and on a 1.5m high tripod for the manned measurements. The meter was calibrated at the start of the survey and checked at the end with no drift noted. The meter logged periods over the survey period L_{Aeq} , L_{Amax} and L_{A90} parameters. The results are summarised below in table 4.1 and 4.2 and the 24-hour survey is summarised graphically at Appendix 1. (Full Survey data is available)

- 4.6 The existing noise climate to the front facing Station Road (ML1) consisted mainly of road traffic together with occasional slow-moving trains and individual noise events from the MOT Centre and vehicle washing activity. At ML2/3 noise climate consisted of manned survey measuring a jet wash as a worst-case activity. This activity is over a short period, typically 10-15 minutes. No contribution in noise levels was noted from any other commercial operations. The commercial vehicle paint shop carries out its activities within indoor bays with extraction systems designed in accordance with environmental protection and permitted process legislation.
- 4.7 No sound from any other premises in the area as witnessed was considered likely to cause any disturbance to future residential occupants of the office proposal. Sounds from the commercial activities would not require further façade insulation or other mitigation to residential end use, over and above that required to satisfy the requirements of BS 8233:2014 or the WHO guidelines which would be needed to mitigate road traffic noise to the front elevation ML1.

Table 4.2: Summary of typical existing ambient and background survey results adjacent the proposal (dB).

| Site | L _{Aeq} | L _{Amax} | L _{A90} |
|-----------|------------------|-------------------|------------------|
| ML1 Day | 62 | 77 | 43 |
| ML1 Night | 56 | 71 | 30 |

Table 4.3: Summary of external worst case jet wash activity.

| Site | L _{Aeq} | L _{Amax} | L _{A90} |
|-------|------------------|-------------------|------------------|
| ML2/3 | 62 | 67 | 50 |

- 4.8 It is considered that the site will be suitable for residential end use in line with similar developments and there will be no adverse impact from noise from the proposal in accordance with the GPDO. A planning condition on this proposal requiring certain internal design standards to be met as discussed in 2.10 above in accordance with BS 8233:2014 and a glazing scheme to achieve that performance to be submitted for prior approval by the local authority could be appropriate.
- 4.9 Given the sound levels measured during the surveys, it is considered that window systems which would comply with the thermal requirements of Building Regulations would be adequate to achieve that performance. This is a typical value; detailed calculations will consider room and glazed area dimensions. This report must not be used for detailed design or procurement purposes.

5.0 Conclusions

- 5.1 A sound assessment has been made with respect to commercial premises in the proximity of the proposal and a permitted development application to change the use to residential under the Town and Country Planning (General Permitted Development) Order 2016.
- 5.2 The commercial premises within the immediate vicinity of the proposal have been identified for their potential to emit noise. Assessment has subsequently been made to determine whether these sources are likely to require consideration in terms of noise mitigation measures in any final design of the residential proposals.
- 5.3 Residential dwellings already exist in proximity to commercial premises. Following an attended site survey, it is considered that commercial sources of sound will be very unlikely to give rise to adverse noise impacts on the use of the proposal for residential purposes.
- 5.4 Subjective and quantitative assessments have determined that traffic noise is dominant to the front elevation. It is suggested that that habitable rooms would have to comply with the relevant criteria within BS 8233:2014 and WHO guideline values as outlined above in 2.10 and 2.11 rather than any impact from commercial noise.
- 5.5 As stated in National Planning Practice Guidance, “prior approval is a light-touch process which applies where the principle of the development has already been established”. In this case, it is considered that the proposal could be permitted to change to residential end use (Planning Use Class C3) with no mitigation measures being necessary with respect to commercial sound. Noise from existing commercial premises will not cause significant harm from adverse impacts on health and quality of life of future residents in accordance with the policy aims of the National Planning Policy Framework (NPPF paragraph 170 and 180), NPSE and local policy.

APPENDIX A

Graphical Summary of 24-Hour Survey 23rd -24th March 2020

24 Hour Summary 23rd-24th March 2020: Ricebridge Thorpe Le Soken

