

Memorandum

To: Steve McBurney; Mark Jones
From: Tom Zarebski and Matthew Heyes
Project: Dearne Hall Road, Low Barugh
Subject: Additional Note on Commercial Noise
Reference: 14/0561/M01-2
Date: 3 February, 2016

1 Noise Assessment Scenarios

- 1.1 A noise mitigation strategy for the proposed residential development at Low Barugh has been carefully developed and submitted after detailed liaison with the Environmental Health department of Barnsley MBC. The potential impact of noise was thoroughly considered by Barnsley MBC at the outline planning application stage. Barnsley MBC was satisfied that, with appropriate mitigation measures, any potential noise impacts would not be unacceptable and therefore duly granted outline planning permission (ref. 2013/0280) on 23 January 2014. This note has been prepared to support the subsequent reserved matters application (ref. 2015/0891) and should be read in conjunction with the conditions imposed on the outline planning permission and our Planning Noise Assessment report (ref. 13/0190/R01-6).
- 1.2 This note aims to assist decision makers by providing the necessary comfort to assuage the recent concerns raised in relation to the potential effects of a potential intensification of operations at the commercial units adjacent to the development site.
- 1.3 It is noteworthy that as part of the reserved matters application process it cannot be considered reasonable to expect an assessment to be undertaken to evaluate the notional noise effects of all the potential operational scenarios that may or may not occur in the future from an existing commercial operation. There is no means to establish what should be evaluated as a reasonable indication of what could happen and in turn there is therefore no means to develop a rational noise control strategy for such a case. It can only be reasonable to expect an evaluation of the existing operations that currently occur or for the future operations of a well-documented proposal that forms part of a planning application or planning permission (i.e. commitment). The evaluation of anything else would simply be conjecture.
- 1.4 Planning conditions to suitably protect the proposed development at Low Barugh, Barnsley have already been agreed as part of the outline planning permission on a 'reasonable' basis as is required by Paragraph 206 of the National Planning Policy Framework, and so there is not considered to be any further requirement.



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- 1.5 Notwithstanding the above and on a 'without prejudice' basis (as we do not wish the undertaking of the following approach to set any precedent or to be incorrectly considered to be an approach endorsed by Cole Jarman); we have undertaken some additional assessment work which assumes that the existing daytime operations and general daytime ambient noise levels at the facades of the nearest proposed residential units would also prevail during the night-time period. The aim of this is to enable a sensitivity test to be undertaken for this potential/theoretical scenario to assess whether there is capacity for reasonable intensification for the operations at the commercial units without a breach of the acoustic design criteria that form the noise related planning criteria.
- 1.6 Section 2 of this memo describes our original assessment and Section 3 the assessment of a notional intensified operation.

2 Submitted Noise Assessment

2.1 Assessment

- 2.1.1 A full assessment of the impact of the existing noise sources on the proposed new dwellings has been conducted as part of the outline planning application. Full details of this assessment are provided with the Planning Noise Assessment report ref 13/0190/R01-6.
- 2.1.2 The acoustic assessment has taken account of the measured noise levels from the existing roads, industrial area and electrical substation.

2.2 Acoustic Criteria

- 2.2.1 As part of the original assessment suitable noise criteria, for internal noise level from external sources, have been set within habitable rooms based on relevant British standards. The criteria have been set for noise from road traffic, trains and the industrial area. The limits are repeated below:
 - Daytime $L_{Aeq,16h}$ to all habitable rooms no greater than 35 dB.
 - Night time $L_{Aeq,8h}$ to all bedrooms no greater than 30 dB.
 - Night time typical L_{Amax} to all bedrooms not normally greater than 45 dB (excluding atypical events).
- 2.2.2 The limits above have been agreed with Barnsley MBC and form the basis of the outline planning permission through the imposition of appropriate planning conditions.

2.3 Mitigation

- 2.3.1 In order to achieve the noise limits stated above acoustic glazing and trickle ventilation performance requirements have been proposed, the performance of which has been agreed with Barnsley MBC. Full details of the proposed ventilation and glazing performance is provided within section 8 of our Planning Noise Assessment report. However, the detailed scheme of mitigation will need to be submitted to and approved by Barnsley MBC as part of a



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discharge of condition application in due course as required by the outline planning permission.

- 2.3.2 With the acoustic mitigation installed on site the noise levels within habitable rooms near the industrial area have been calculated to be significantly below the internal noise criteria. This is based on the measured noise levels around the site, as detailed within the Planning Noise Assessment report.

3 Additional Noise Assessment - Notional Scenario

3.1 General

- 3.1.1 In order to assess if the noise criteria within the proposed dwellings will be exceeded if the units within the industrial area were to implement 24 hour operations a noise break in assessment has been conducted.
- 3.1.2 The updated assessment assumed that the night time noise levels across the site would be the same as the measured daytime noise levels. This assessment would allow continual 24 hour industrial operations.
- 3.1.3 The measured daytime levels during the noise survey were affected by road traffic noise and so are in fact higher than the noise levels from the industrial area alone. This will make the assessment more robust than just assessing the industrial noise alone. In other words, this assessment is based on a theoretical 'worst case' scenario that is highly unlikely to occur in reality.

3.2 Assessment Noise Levels

- 3.2.1 The noise levels measured during the survey are detailed within sections 4.2 and 5.1 of the Planning Noise Assessment report. For ease of reference the daytime L_{Aeq} and L_{Amax} near to the industrial area are repeated below:
- 54 dB $L_{Aeq, 16h}$
 - 74 dB $L_{Amax, F}$

- 3.2.2 The updated night time assessment has been based on the noise levels shown above.

3.3 Results

- 3.3.1 The predicted noise levels within the closest bedrooms to the industrial area, at night based on the originally proposed mitigation measures and the measured daytime noise levels, are shown in the table below:



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	Calculated Noise Level, dB(A)	Noise Criteria, dB(A)
$L_{Aeq, 8h}$	26	30
$L_{Amax,F}$	45	45

T1 Calculated Noise Levels

- 3.3.2 The table above shows that the noise criteria will be achieved within the worst case bedrooms with the increased noise levels.
- 3.3.3 The resultant ambient noise levels are 9 dB below the daytime ambient noise criteria (L_{Aeq}). This means that the industrial yard could increase its operation by 8 times before the daytime limits would be exceeded.

4 Conclusion

- 4.1 An updated assessment has been conducted to assist decision makers by providing the necessary comfort to assuage the recent concerns raised in relation to the potential effects of a potential intensification of operations at the commercial units adjacent to the development site.
- 4.2 The assessment has shown that if the industrial units were to operate at night in the same way that they currently operate in the day and also increase their current daytime operations by a factor of 8, the internal noise criteria which have previously been agreed with the Environmental Health department of Barnsley MBC, would still be achieved within the proposed new houses using the currently proposed mitigation measures.
- 4.3 So in summary, the results of the assessment demonstrate that even with a very significant intensification of operations at the existing commercial site the proposed dwellings will still be suitably protected against unacceptable noise impacts. Even based on this theoretical 'worst-case' scenario, the planning conditions imposed on the outline planning permission can be easily met.

■ End of Section