

Non-Technical Summary

Project: Birchall Garden Suburb
Subject: Non-Technical Summary to Report 15/0494/R05-2 (13/08/19)
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Date: 22 August 2019
Reference: 15/0494/NTS1 **Revision:** 1 **Approved:** MH

1 Introduction

- 1.1 A new residential led development at Birchall Garden Suburb (BCS) is proposed on land to the east of Welwyn Garden City. A Noise Assessment report (15/0494/R5 revision 2) examines the potential noise effects on the proposed development from noise sources including road traffic and an adjacent aggregates facility known as Burnside, to the south west.
- 1.2 The Assessment sets out design measures to provide a suitable noise environment for the planned BCS development. Technical details of the noise surveys, assessment methodologies and assessment conclusions relating to the noise mitigation strategy, are set out in detail in the Noise Assessment.
- 1.3 A Parameter Plan for the proposed development forms the basis of the assessment of noise, in so far as the layout of the proposed land uses for BCS relates. The forthcoming planning application will be submitted on an Outline basis. Given the Outline nature of the proposals, it is not possible, or appropriate, to assess the noise effects based on a detailed layout. The impact of all the noise sources affecting the site has been considered and mitigation measures have been proposed where necessary. This has included considering the orientation of houses and gardens to provide acoustic screening to external amenity areas, buffer zones where no built development will occur in order to reduce the noise levels at the facades and enhanced façade mitigation and alternative forms of ventilation.
- 1.4 Particular attention has been given to noise from Burnside where an acoustic bund and buffer zone has been used to reduce the noise impact at any proposed dwellings (as discussed further overleaf). The new dwellings located closest to Burnside will be designed in such a way that the facades will front Burnside so as to minimise any impact on residential amenity. This will provide significant acoustic screening to residential gardens.
- 1.5 The level of assessment and detail included in the main report is commensurate with that which would typically be provided in a detailed planning application (where a detailed layout would be available to model). In this case, there is no detailed layout to test or to demonstrate compliance with; the assessment is based upon the feasibility of potential layouts in order to confirm that appropriate constraints and principles of design can be validated for further



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assessment at a more detailed stage. We highlight that mitigation in the form of the site layout is a powerful attribute that can provide mitigation that should ultimately be considered.

2 Assessment Methodology

Industrial Noise

- 2.1 Noise from the Burnside site has been assessed following the guidance provided within BS 4142 – “Methods for rating and assessing industrial and commercial sound”. As required by the standard, the initial impact of the source at the proposed dwellings has been assessed. The initial assessment has shown an adverse impact at some locations close to Burnside without full consideration of the context of the assessment and potential mitigation options.
- 2.2 As required by the standard, the initial estimate of the assessment has been considered in line with the context of the development and modified where appropriate.
- 2.3 One of the factors which BS 4142 considers is the sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions. The design measures which will ensure good internal and/or outdoor acoustic conditions on this site will include enhanced façade insulation treatment and alternative methods of ventilation to habitable rooms where appropriate. The noise impact within gardens has been reduced by locating a buffer zone and acoustic bund between the dwellings and Burnside and by locating the houses between the site and gardens. This has provided a significant amount of acoustic screening to the gardens.
- 2.4 Following the design factors above, the absolute noise levels have been considered, as required by the standard and, with the mitigation measures installed, have been found to be appropriate for a residential development.
- 2.5 Cole Jarman have seen examples of current BS 4142 assessments which only consider the initial impact assessment (comparison of the assessed rating level with the existing background level). However not considering the context of the assessed noise levels and acoustic mitigation installed to new or existing dwellings is an incorrect use of the standard which is likely to overestimate the impact.
- 2.6 The approach Cole Jarman have followed in this case is consistent with that utilised in other recent planning cases that are suitably analogous to the circumstances of this situation. This same approach has successfully been upheld via planning appeal in 2018.

Road Traffic

- 2.7 Noise from road traffic has been assessed in line with BS 8233 – “Guidance on sound insulation and noise reduction for buildings”. The initial assessment has shown that mitigation will be required to some dwellings and gardens located closest to the A414. Road traffic noise is to be reduced to within guidance levels by means of an earth bund close to the road and



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amenity can be provided to external and internal accommodation from this source by use of this bund, building orientation and layout and façade insulation (including appropriate background ventilation).

- 2.8 It is understood that this is not a point of contention to the council's Environmental Health department in terms of setting site parameters and offset distances as currently proposed in the parameter plan.

3 Conclusion

- 3.1 The assessments conducted for the site have shown that it is possible to provide adequate levels of (internal and external) amenity to new residential accommodation that are derived from national planning policy and guidance standards for noise from both the A414 and Burnside facility at a distance of 60m back from the Burnside site.
- 3.2 The use of a bund as part of the inherent landscaping will provide a good reduction in noise levels for the baseline scenario, then further attenuation will be provided through the future detailed layout at later planning stages and then ultimately the use of façade mitigation, including adequate background ventilation.
- 3.3 The inclusion of such measures can effectively be ensured by appropriately worded planning conditions, whereby acoustic information can be provided at a more detailed design stage once the detailed layout has been developed (in accordance with the guidance of the outline noise assessment).

■ End of Section