

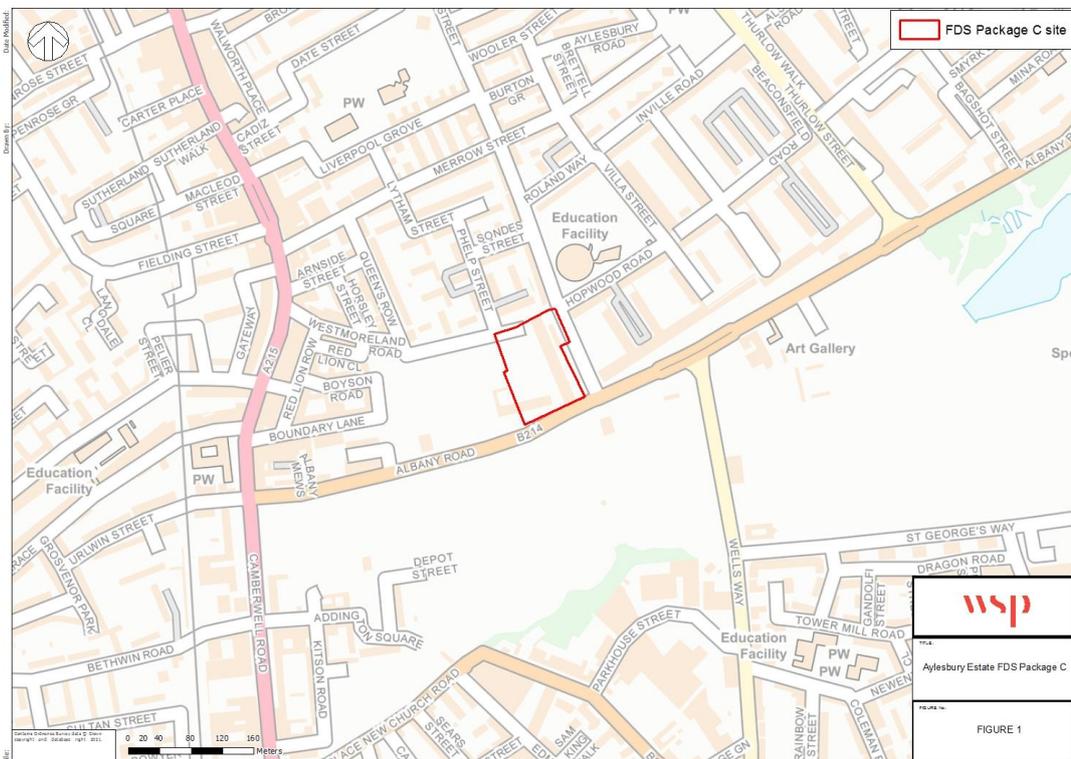
TECHNICAL NOTE 1

DATE:	31 January 2022	CONFIDENTIALITY:	Public
SUBJECT:	Proposed design changes: noise and vibration impacts		
PROJECT:	Aylesbury Estate FDS Package C	AUTHOR:	Sarah Whydle
CHECKED:	Steve Fisher	APPROVED:	Steve Fisher

INTRODUCTION

This technical note considers the potential implications of proposed changes to the consented Aylesbury Estate First Development Site (FDS) development on the conclusions drawn in 2014 Environmental Statement.

Figure 1 shows the location of the FDS Package C site, which is bounded by the B214 Albany Road to the south, Westmoreland Road to the north, Portland Street to the east, and the wider Aylesbury Estate development to the west. The site is located in the London Borough of Southwark.



PLANNING HISTORY

The FDS was granted detailed planning permission by the London Borough of Southwark (LBS) (Ref No:14-AP-3843) on 5 August 2015. The development comprised:

“Demolition of existing buildings and redevelopment to provide a mixed use development comprising a number of buildings ranging between 2 to 20 storeys in height (9.45m - 72.2m AOD), providing 830 residential dwellings (Class C3); flexible community use, early years facility (Class 01) or gym (Class D2); public and private open space; formation of new accesses and alterations to existing accesses; energy centre; gas pressure reduction station; associated car and cycle parking and associated works.”

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The Environmental Statement (ES, dated 8 October 2014) submitted with the planning application, addressed noise and vibration impacts within Volume 1 Chapter 12. The chapter considered the potential effects on human receptors within and surrounding the site, in terms of:

- Noise and vibration from demolition and construction
- Noise from changes in road traffic attributable to the Comprehensive Development (this includes the site Wide Development Option and the FDS Development Option); and
- Noise from building service plant associated with the Comprehensive Development.

Further to the above, an assessment of the noise levels affecting the site was also undertaken, with the aim of determining the need for, and extent of, any mitigation to ensure that a suitable noise climate will exist for future residents.

For the FDS, the ES Volume 1 Chapter 12 determined the following:

- With respect to demolition and construction noise, effects of mostly minor negative significance are expected following the implementation of mitigation measures, although occasional effects of moderate to major negative significance are likely to occur during some activities when works are at their closest to nearby sensitive receptors.
- With respect to demolition and construction vibration, residual effects of mostly minor negative significance are anticipated when works are at their closest to nearby vibration sensitive receptors.
- The increase in road traffic noise arising during demolition and construction works is expected to result in an effect of negligible significance along all roads.
- Operationally, there would be no change in road traffic noise as a result of the FDS Development Option and therefore no mitigation measures are considered necessary and residual effects remain unchanged.
- Fixed plant noise emission criteria were set and, subject to these being achieved, residual effects are anticipated to be negligible.
- With respect to the suitability of the site for noise sensitive uses, it has been demonstrated that subject to appropriate mitigation measures being applied, the daytime and night-time noise levels required by LBS, can be achieved. Consequently, it is concluded that the site is suitable for the proposed uses and that an appropriate noise climate will exist for future residents.

A planning application detailing a minor amendment to include an additional 12 residential units (from 830 to 842 units) was then granted permission by LBS on 14 February 2019 (Ref No: 17/AP/3885). This application was accompanied by an ES Addendum (dated February 2015), which determined the following:

“The proposed changes do not result in a significant change in the trip generation estimate reported in the October 2014 ES.

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The proposed changes do not alter the assessment of effects or the resultant requirement for mitigation. The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Noise and Vibration Assessment. There will be no change in the traffic data used for the assessment of noise, and the energy centres in both the FDS and Masterplan Application remain the same. Therefore, the original assessment reported in the 2014 ES remains valid and no further assessment is considered necessary.”

PROPOSED CHANGES TO THE CONSENTED DEVELOPMENT

The proposed changes to the consented development related to FDS package C and comprise:

- An increase of 60 residential units across Plots 3 & 4 (from 842 to 902 units);
- An overall uplift of 9 social rent units (and 53 social rent habitable rooms);
- An overall uplift of 18 shared ownership units (and 63 shared ownership habitable rooms);
- An overall provision of affordable housing (social rent and shared ownership) across the FDS of 65.70% (which has increased from 64.40%) when measured by habitable rooms;
- Proportional increase to both shared ownership and social rent provision when measured by habitable rooms;
- The tower on Plot 4 is proposed to increase from 20 storeys to 23 storeys (AoD increase from 72m to 82.65m);
- Plot 3 has increased in height from a maximum of 6 storeys to 7 storeys;
- Reduction in both the number and proportion of single bedroom units and the delivery of a greater number of larger family-sized units; and
- Significant uplift in the provision of cycle parking to meet the requirements of the new London Plan standards for the entirety of FDS package C.

None of the above changes are considered to fundamentally change the assessment methodology or results, as set out in the 2014 ES.

With respect to operational road traffic data, the project’s traffic consultant has confirmed that:

“The proposed development is predicted to result in a net increase of 34 total person trips in the morning peak and 22 total person trips in the evening peak based on the application of the consented total person trip rates.”

As for the 2015 ES Addendum, such a small number of additional trips does not result in a significant change to the results of the assessment presented in the 2014 ES.

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CHANGES TO LEGISLATION, POLICY AND GUIDANCE

LEGISLATIVE FRAMEWORK

The legislative framework, as presented in paragraph 12.2.1 of the 2014 ES has not changed.

NATIONAL PLANNING POLICY

A summary of key national policy documents was summarised in the 2014 ES in paragraph 12.2.2. Whilst there have been some updates to national planning policy, including the NPPF¹ and PPG² since 2014, none of the changes would materially affect the assessment methodology or the conclusions of the 2014 ES.

LOCAL PLANNING POLICY

The current local plan for the London Borough of Southwark is made of the Saved Southwark Plan (2007) and the Core Strategy (2011). Therefore, there have been no changes since the publication of the 2014 ES. The supplementary planning document *Design and Construction (2009)* has not been updated since the 2014 ES.

LONDON BOROUGH OF SOUTHWARK GUIDANCE

The London Borough of Southwark has two key technical guidance documents relevant to the assessment of noise and vibration.

The first is the *Technical Guidance for Demolition and Construction*, published in September 2016. This guidance document supersedes the Environmental Code of Construction Practice (2001) referenced in the 2014 ES. The purpose and content of the 2016 technical guidance document, however, is broadly aligned with the 2001 Code of Construction Practice including typical working hours, noise and vibration levels that might be adopted, good practice measures to control noise and vibration, and suggesting that the contractor should contact the local planning authority regarding the need to apply for formal prior consent for works in accordance with Section 61 of the Control of Pollution Act. The revised guidance does not alter the approach to the assessment nor the conclusions drawn in the 2014 ES.

The second is the *Technical Guidance for Noise*, published in November 2019. This 2019 technical guidance document presents a summary of the national and local planning policy with respect to noise, as well as the guidance and standards that should be adhered to when assessing the impacts of noise and vibration within the jurisdiction of the London Borough of Southwark. These guidance documents were, on the whole, referenced in the 2014 ES and any changes to relevant guidance documents or standards since the 2014 ES are summarised in the next section.

¹ The National Planning Policy Framework (NPPF) was updated in July 2021.

² The Planning Practice Guidance (PPG) was updated in June 2021.

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GUIDANCE DOCUMENTS AND BRITISH STANDARDS

A summary of the guidance documents used to underpin the noise and vibration assessment presented in the 2014 ES is set out below. Comment is also provided on any changes in guidance since 2014 and whether this would alter the conclusions reported:

- BS 5228: 2009 +A1: 2014 *Code of practice for noise and vibration control on construction and open sites* – Part 1: *Noise* provides recommendations for basic methods of noise control relating to construction sites where work activities/operations generate significant noise levels.
 - This guidance document has not been updated since the 2014 ES was published.
- BS 5228: 2009 +A1: 2014 *Code of practice for noise and vibration control on construction and open sites* – Part 2: *Vibration* is a companion standard for Part 1, providing recommendations for basic methods of vibration control relating to construction and open sites where work activities / operations generate significant vibration levels, including industry-specific guidance.
 - This guidance document has not been updated since the 2014 ES was published.
- *Calculation of Road Traffic Noise (CRTN)* describes procedures for predicting and measuring noise from road traffic.
 - This guidance document has not been updated since the 2014 ES was published.
- HD 213/11, revision 1, Design Manual for Roads and Bridges (DMRB), Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques, Part 7 *Noise and Vibration*. This advice note prepared by the Highways Agency, provides guidance on the assessment of the effects on noise and vibration that a road project might have.
 - This advice note has been replaced by the DMRB LA 111 *Noise and Vibration Revision 2*, which was most recently updated in May 2020. The guidance in this most recent standard compares reasonably well against the previous version (particularly with respect to the assessment of noise change) and would not alter the approach to the assessment of the significance of effect as presented in Table 12.5 in the 2014 ES. Consequently, the update to this standard would not alter the conclusions as presented in the 2014 ES.
- BS 4142: 1997 *Method for rating industrial noise affecting mixed residential and industrial areas* describes methods for determining and assessing noise levels from fixed plant with a view to determining the likelihood of complaints.
 - This British Standard has been superseded by BS 4142: 2014+A1: 2019 *Methods for rating and assessing industrial and commercial sound*. There are some differences between the two standards; however, there was an expectation in the 2014 ES that a planning condition would be set for any external fixed plant items to adhere to, given the lack of information available (for example the exact location, orientation or source data for the plant) at the time of writing. The London Borough of Southwark *Technical Guidance for Noise* sets out a draft planning condition

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and it is anticipated that this could be adopted to ensure that the conclusions set out in the 2014 ES, that residual effects of negligible significance (at worst) are anticipated, would remain valid.

- BS 8233: 2014 *Guidance on sound insulation and noise reduction for buildings* provides criteria for the assessment of internal noise levels for various uses including dwellings and commercial properties.
 - This guidance document has not been updated since the 2014 ES was published.
- The World Health Organisation (WHO) document *Guidelines for Community Noise (2000)*; provides criteria for the assessment of internal and external noise levels affecting (amongst others) dwellings.
 - This guidance document has not been updated since the 2014 ES was published.

Since the preparation of the 2014 ES, two new guidance documents have been prepared that are relevant to this noise and vibration assessment. These are summarised below:

- Professional Practice Guidance (ProPG) *Planning and Noise – New Residential Development* was published in May 2017. The ProPG was produced to provide guidance on a recommended approach to the management of noise within the planning system in England and encourages adopting good acoustic design from the outset. The criteria set out in the ProPG for habitable rooms and external amenity areas are the same as those presented in BS 8233 and the WHO Guidelines. Consequently, it is considered that the conclusions regarding the assessment of the suitability of the site for residential use, as set out in the 2014 ES, remain valid.
- Acoustics, Ventilation and Overheating – Residential Design Guide (AVOG) was published in January 2020. The AVOG provides an approach as to how the competing aspects of thermal and acoustic comfort can be managed. At this stage, a detailed assessment of overheating has not been undertaken. However, the 2014 ES acknowledged that internal ambient noise levels would increase when windows are open to manage overheating, and that an alternative means of enhanced ventilation for summer cooling should be considered during the detailed design phase, particularly for south facing facades where the demand for summer cooling is likely to be higher.

CHANGES TO NOISE BASELINE

An environmental noise survey was undertaken in June 2014 at a number of positions around the site. It is acknowledged that the results from the survey are now 8 years old; however the site suitability assessment was based on the results of a 3D digital noise model which accounted for future traffic patterns including traffic associated with committed and other developments in the area as well as with the Comprehensive Development. Consequently, any changes to the baseline noise environment during this time have effectively been accounted for in the original assessment presented in the 2014 ES.

It is also noted that the surrounding area is predominantly residential, indicating further that this site is appropriate for its intended use.



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CONCLUSIONS

This technical note sets out any changes to the legislation, policy and guidance, as well as baseline noise conditions, since the preparation of the 2014 ES, which was submitted to support the planning application for the Aylesbury Estate First Development Site. Whilst there have been some changes to national planning policy and guidance documents, none of the changes would materially change the approach to the assessment nor the conclusions in the noise and vibration chapter in the Environmental Statement. Furthermore, the assessment of the suitability of the site for residential use was based on a future noise climate, including traffic associated with committed and other developments in the area as well as with the Comprehensive Development. Consequently, any changes to the baseline noise environment since the noise survey was undertaken in 2014 have effectively been accounted for in the original assessment presented in the 2014 ES.

It is anticipated that planning conditions would be set by the London Borough of Southwark for any external fixed plant items associated with the development as well as a detailed scheme of sound insulation for the external façade, with a view to ensuring that the target internal noise levels for habitable rooms are achieved.

Consequently, based on the above, it is considered that the conclusions drawn in the 2014 ES remain valid.