Appendix 11.2 Policy, Standards and Guidance

Appendix 11.2

POLICY CONTEXT

National Planning Policy Framework (December 2024)

The National Planning Policy Framework (NPPF) replaces the previous version of the NPPF and the Planning Policy Statements (PPS) and Planning Policy Guidance (PPG), including the Department of the Environment's Planning Policy Guidance Note 24: 'Planning and Noise' (PPG 24), which was published in 1994. The main reference to noise within the latest version of the NPPF is at Paragraphs 187 (e) and 198:

> 'Para.187 (e). "Planning policies and decisions should contribute to and enhance the natural and local environment by:
>
> (e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and."
>
> 'Para.198. 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 life72;
> (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.; and
> (c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

The reference number 72 cross references the National Policy Statement for England (2010) Explanatory Note.

Although some qualitative guidance on noise has been provided in the web-based Planning Practice Guidance document, there has been no alternative quantitative guidance proposed by the Government as a direct replacement for PPG24. This was due to the recognition that every site is different and that there is no single acceptable noise level, suitable for all applications.

National Planning Policy Guidance (2019)

The NPPG-Noise provides guidance on the assessment of noise, the needs to be considered when new developments may create additional noise and when developments would be sensitive to the prevailing acoustic environment.

The acoustic environment should be taken into account in the planning of new development and decision making should take the following into consideration:

- ‘whether or not significant adverse effect is occurring or likely to occur;
- whether or not an adverse effect is occurring or likely to occur; and
- whether or not a good standard of amenity can be achieved.’

It then cross-references the Noise Policy Statement for England (2010) for further clarification on how to assess the overall effect of noise exposure.

The Noise Policy Statement for England (2010)

The Noise Policy Statement for England (NPSE) was published in March 2010 and is the overarching statement of noise policy for England and applies to all forms of noise other than occupational noise, setting out the long-term vision of Government noise policy which is to:

‘Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.’

The vision is supported by the following aims which are reflected in paragraph 1.7 of the Noise Policy Statement for England:

‘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.’

The Explanatory Note to the NPSE introduces three concepts to the assessment of the potential effects of noise:

- ‘NOEL – No Observed Effect Level: This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.
- LOAEL – Lowest Observed Adverse Effect Level: This is the level above which adverse effects on health and quality of life can be detected.
- SOAEL – Significant Observed Adverse Effect Level: This is the level above which significant adverse effects on health and quality of life occur.’

Unlike the now redundant PPG24, the three levels are not defined numerically in the NPSE, and for the SOAEL the NPSE makes it clear that the noise level is likely to vary depending upon the noise source, the receptor and the time of day/day of the week, etc. The need for more research to investigate what may represent a SOAEL for noise is acknowledged and the NPSE asserts that not stating specific SOAEL levels provides policy flexibility in the period until there is further evidence and guidance.

Local Planning Policy

City and District of St Albans District Local Plan 1994

Planning policy for the area is contained in the City and District of St Albans District Local Plan Review 1994 (Adopted 30 November 1994) Saved and Deleted Policies Version (July 2020).

The following policies are contained within the document and considered relevant to this application:

POLICY 9 NON - RESIDENTIAL USES WITHIN RESIDENTIAL AREAS

Within areas primarily residential in character, the Council will not normally disturb lawfully existing non-residential uses, provided such activities are environmentally acceptable in terms of their visual impact, noise, smell, safety, health or traffic generation.

Within towns and specified settlements (see Policy 2), small scale new non-residential development and redevelopment or extensions to existing sites will normally be permitted in residential areas, where they will not adversely affect their amenity and character by reason of such factors as noise, smell, safety or excessive traffic (see also Policy 24).

Acceptable uses may include:

- public open space and leisure uses (see Policy 90) which do not generate unacceptable vehicular traffic;
- local shops and services;
- schools;
- community facilities such as libraries and small scale doctors and dentists surgeries serving the health care needs of the neighbourhood and small scale facilities serving the religious needs of the neighbourhood;
- small scale residential accommodation for people in need of care and other uses within use class C2 (residential institutions) - (see Policies 10 and 62).

Within Green Belt settlements (see Policy 2), non-residential uses will not normally be permitted unless they are required to meet the local facilities and service needs of the settlement.

Footnote (1) Doctors and dentists surgeries will be encouraged to: a) locate as near as possible to neighbourhood or local shopping centres which possess a dispensing chemist and adequate car parking; b)provide a dispensary only where the surgery adjoins or forms part of a neighbourhood or local shopping centre.

POLICY 57 SERVICE USES

Applications for service uses (i.e. Use Classes A2 and A3 and other uses appropriate to shopping areas) will be assessed against the following criteria:

i. General acceptability of service uses

Primary shopping frontages(1)	Acceptable if proposals do not involve the loss of dwelling space

Secondary shopping frontages (1) Class 'A' Frontages (1) Local Centres (2)	contrary to Policy 10 or retail floorspace contrary to Policy 56
Elsewhere in towns and specified settlements (3)	Not normally acceptable except for changes of use from B1 (except on employment areas listed in Policy 20); from AI (subject to Policy 56); and from A2 to A3
Green Belt settlements (4)	Acceptable if meets the service needs of the settlement

ii. Car parking may be required. See Policies 46 and 47;

iii. A window display should be provided;

iv. Use Class A3 (food and drink). Proposals should not detract from the visual character of areas or cause serious problems in respect of the following:

a) traffic and parking;

b) noise, fumes, smell and general disturbance;

c) litter;

d) residential amenity;

e) impact on conservation areas (see Policy 85), in particular in the vicinity of the Cathedral (i.e. - the George Street, Heritage Close, High Street, Holywell Hill area) but without prejudicing conservation areas in general.

Furthermore, the Council will seek to ensure that serious problems do not arise from an over-concentration of A3 uses in a particular area.

Planning conditions (for example, to control hours of opening or to require provision of a litter bin outside the premises) may be imposed to render a proposal environmentally acceptable. Arrangements for the ventilation of working areas must be shown in planning applications and must not detract from the appearance of the building or the visual or other amenity of nearby residents;

v. Amusement Centres will not be permitted if noise and disturbance is likely to affect nearby housing, including flats above shops, or if the proposal is likely to affect the visual amenity of a conservation area.

Footnotes

(1) As defined in Policies 52 (St. Albans City Centre), 53 (Harpenden Town Centre) and 54 (neighbourhood centres).

(2) As defined in Policy 55.

(3) Refers to individual shops and small groups of shops outside the defined local centres.

(4) As defined in Policy 2.

POLICY 65 EDUCATION FACILITIES

…

Proposals for new schools, extensions to existing schools or changes of use to schools will be assessed against the following:

A. Within towns and specified settlements (see Policy 2)

(i) where a loss of dwellings is proposed, Policy 10 (iv) shall be complied with;

(ii) the impact on the amenity of the surrounding area in terms of visual impact, design, noise and disturbance, road access and traffic generation;

(iii) sufficient on-site parking and servicing shall be provided;

(iv) provision shall be made for the setting down and picking up of pupils, by car or public transport, in a safe and acceptable manner.

B. Within the Metropolitan Green Belt (see Policy 1) including Green Belt settlements (see Policy 2)

(i) criteria A. (i)-(iv) above shall be complied with;

(ii) the impact on the ecology, natural beauty and amenity of the countryside will be assessed. In particular, the siting and scale of new buildings or extensions shall be modest in size and well related to existing buildings. New landscaping will normally be required, particularly where proposals involve the development of urban edge sites;

(iii) New schools will be permitted only if very special circumstances can be demonstrated. It must be shown that no suitable location is available in areas excluded from the Green Belt and that there is an overriding need for the proposal to cater primarily for children living within the District;

(iv) Changes of use will be assessed against Policy 77.

Footnote

(1) PM = Proposals Map Sheet. See Preface (Figure 1).

We understand that Policy 82 and 83 have been withdrawn, but were previously directly relevant to the impact of noise from noise generating sites and from road traffic on to new houses.

Paragraphs 8.40 and 8.41 within the supporting text remain within the document and state the following:

8.40 The District Council will advise on noise levels in accordance with British Standard BS 4142 in relation to proposals for noise sensitive developments. For example, dwellings, schools, hospitals, churches and hotels in locations where they are likely to be subject to excessive noise annoyance from industrial premises or other fixed installations. The Council will also advise on noise in relation to new commerce and industry in accordance with Circular 10/73 and the standards established in BS.4142.

8.41 Noise from roads, railways, aircraft and some industrial and commercial premises has a detrimental effect on the quality of the environment, particularly in housing and other noise sensitive areas. Aircraft noise levels in the District do not at present justify refusal of planning applications (see Policy Intention 9). Circular 10/73 provides guidance on road noise and this forms the basis for Policy

83. There is no official guidance on rail noise, but proposed developments close to railways will be considered on their merits.

City and District of St Albans Draft Local Plan 2041

Within the Draft Local Plan, there is a section specifically on Air and Noise Pollution, paragraphs 13.6 through to 13.11, with Policy HW1 being particularly pertinent to this project. It states;

> "Development proposals, including those for new residential dwellings, schools, nurseries and care homes and other uses which are noise and pollution sensitive, or in areas which may exceed national legislative air quality pollution limits, must carry out suitable assessments for noise / air pollution.
>
> Proposals which are found to be affected by noise or air pollution must demonstrate suitable mitigation, including as required:
>
> a) Maintaining distances between road and other sources of noise and air pollution (including odour pollution) and people;
>
> b) Using green infrastructure, in particular trees, where this can create a barrier or maintain separation between sources of pollution and receptors;
>
> c) Appropriate means of filtration, ventilation and soundproofing on affected buildings;
>
> d) Effective control of dust and emissions from construction, operation and demolition;
>
> e) Use of optimal layout and orientation to promote avoidance of elevated pollution without mitigation which will reduce the level of mitigation where necessary;
>
> f) Air quality and / or noise assessments at the earliest stage of development.
>
> Development proposals that would generate new noise and air pollution in proximity to residential and other noise-sensitive uses must demonstrate and put in place measures to avoid or mitigate any such impacts."

LEGISLATIVE CONTEXT

Control of Pollution Act

Part III of the Control of Pollution Act 1974 (CoPA) is specifically concerned with the control of pollution. With regard to noise, the CoPA covers construction sites; noise in the street; noise abatement zones; codes of practice; and Best Practicable Means (BPM).

Under Part III Section 60 'Control of Noise on Construction Sites' and Section 61 'Prior Consent for Works on Construction Sites' discusses the requirements on how works should be undertaken and in particular about the method by which they will be carried out, including the steps proposed to be taken to minimise noise resulting from the works.

BRITISH STANDARDS

The following is a list of the most relevant British Standards that have been used to inform this assessment:

- BS 7445-1:2003 Description and measurement of environmental noise;

- BS 4142:2014 Method for Rating and Assessing Industrial and Commercial Sound;
- BS 4866:2010 Mechanical vibration and shock – Vibration of Fixed Structures – Guidelines for the Measurement of Vibrations and Evaluation of their Effects on Structures;
- BS 6472-1:2008 Guide to Evaluation of Human Exposure to Vibration in Buildings. Vibration sources other than blasting;
- BS 5228-1:2009(+A1:2014) Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1: Noise;
- BS 5228-2:2009(+A1:2014) Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 2: Vibration;
- BS 8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings;

Other Relevant Guidance

- Department of Transport – Calculation of Road Traffic noise (CRTN); and
- The Highways Agency – Design Manual for Roads and Bridges (DRMB) LA111 Noise & Vibration Revision 2.
- World Health Organisation – Guidelines for Community Noise

BS 4142:2014+A1:2019

The British Standard 4142:2014 (BS 4142) describes methods for rating the sound of an industrial and/or commercial nature to assess its likely effects on people who might be inside or outside a dwelling or premises used for residential purposes upon which the sound is incident.

BS 4142 specifies that an initial estimate of the impact of the specific sound can be obtained by subtracting the measured background sound level from the rating level and then considering the following;

- Typically, the greater this difference, the greater the magnitude of the impact;
- A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context;
- A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context;
- The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact; and
- Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.

1.28 The rating level is defined in BS4142 as the sound level of the source plus any penalties for the characteristic features of the sound, such as tonality and impulsivity, intermittency and any other acoustical features which make the sound distinguishable.

BS 6472-1:2008

In terms of vibration levels, the table below shows the criteria followed in terms of vibration dose values. These values represent the best judgement currently available and may be used for both vertical and horizontal vibration, provided that they are correctly weighted. This table has been obtained from the standard BS 6472-1:2008.

Place and Period	Low Probability of Adverse Comment ($m/s^{1.75}$)	Adverse Comment Possible ($m/s^{1.75}$)	Adverse Comment Probable ($m/s^{1.75}$)
Residential Building 16h Day	0.2 to 0.4	0.4 to 0.8	0.8 to 1.6
Residential Building 8h Night	0.1 to 0.2	0.2 to 0.4	0.4 to 0.8

Table 1: Vibration Dose Value Ranges Which Might Result in Probability of Adverse Comment Within Residential Buildings

BS 5228-1:2009 (+A1:2014)

Guidance relating to the prediction and assessment of the demolition and construction phase noise effects has been taken from BS 5228-1: 2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites' Part 1: 'Noise' which provides recommendations for basic methods of noise control relating to construction and open sites where work activities/operations generate significant noise levels.

Amongst other things, the annexes to BS 5228 provide information on the following;

- Relevant legislation (Annex A);
- Typical noise sources and advice on mitigating them (Annex B);
- Sound level data for use in the prediction methods described in the standard (Annexes C and D);
- Assessing the significance of noise effects (Annex E);
- Estimating noise levels (Annex F); and
- Implementing noise monitoring (Annex G).

BS 5228-2:2009 (+A1:2014)

Guidance relating to the prediction and assessment of the construction phase vibration effects has been taken from BS 5228-2: 2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites' (BS 5228) Part 2: 'Vibration' which provides recommendations for basic methods of vibration control relating to construction and open sites where work activities/operations generate significant vibration levels.

BS 8233:2014

BS 8233:2014 Guidance on sound insulation and noise reduction for buildings provides criteria for the assessment of noise affecting various uses, including residential dwellings.

BS 8233: 1987 has been withdrawn and replaced firstly by 8233:1999, and more recently BS 8233:2014 Sound insulation and noise reduction for buildings. The current BS 8233:2014 standard has revised the 'good' and 'reasonable' noise level criterion that were set out in BS 8233:1999, and replaces it with a recommendation of a single standard as detailed in the table below:

Activity	Location	07:00 to 23:00 dB $L_{Aeq,16h}$	23:00 to 07:00 dB $L_{Aeq,8h}$
Resting	Living Room	35	-
Dining	Dining Room / Area	40	-
Sleeping (Daytime Resting)	Bedroom	35	30

Note: Where development is considered necessary or desirable, despite external noise levels above WHO guidelines, the internal target levels may be relaxed by up to 5 dB and reasonable internal conditions still achieved.

Table 2: BS 8233:2014 Indoor Ambient Noise Levels For Dwellings

It also suggests that:

> 'for traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 dB LAeq,T, with an upper guideline value of 55dB LAeq,T which would be acceptable in noisier environments. However, it also recognized that these guideline values are not achievable in all circumstances where development might be desirable.'

Part III of the Control of Pollution Act 1974 (CoPA) is specifically concerned with the control of pollution. With regard to noise, the CoPA covers construction sites; noise in the street; noise abatement zones; codes of practice; and Best Practicable Means (BPM).

OTHER RELEVANT GUIDANCE MATERIAL

Calculation of Road Traffic Noise

The Calculation of Road Traffic Noise (CRTN) describes the procedure for predicting and measuring the noise from road traffic in terms of L_{A10} and is suitable for environmental assessments of proposed developments where road traffic noise may have an effect on proposed or existing sensitive receptors.

Design Manual for Roads and Bridges

The Calculation of Road Traffic Noise (CRTN) describes the procedure for predicting and measuring the noise from road traffic in terms of LA10 and is suitable for environmental assessments of proposed developments where road traffic noise may have an effect on proposed or existing sensitive receptors.

The LA111 Rev 2 'Noise and Vibration' provides the guidance for the environmental assessment of construction noise and operational noise levels. The Lowest Observed Adverse Effect Level (LOAEL), the Significant Observed Adverse Effect Level (SOAEL) and the magnitude of impact are clearly defined. Tables 3.54a and 3.54b of the LA111 document detail the various magnitudes of change for both short and long term periods respectively, as shown in the Table below;

Magnitude	Short Term Noise Change dB $L_{A10,18h}$ or L_{Night}	Long Term Noise Change dB $L_{A10,18h}$ or L_{Night}
Major	Greater than or equal to 5.0	Greater than or equal to 10.0
Moderate	3.0 to 4.9	5.0 to 9.9
Minor	1.0 to 2.9	3.0 to 4.9
Negligible	Less than 1.0	Less than 3.0

Table 3: Magnitude of Change As Defined in Tables 3.54a and 3.54b

The DMRB LA111 document also considers the effect of vibration from construction activities. The document assumes that new roads being constructed would be clear of defects and well maintained and therefore the operational vibration from road traffic would not have the potential to lead to likely significant adverse effects.

The following table shows how the average human perceives the change in vibration levels from construction related activities.

Data Source	Reference
Major	Above or equal to 10 mm/s PPV
Moderate	Above or equal to SOAEL (1 mm/s PPV) and below 10 mm/s PPV
Minor	Above or equal to LOAEL (0.3 mm/s PPV) and below SOAEL (10 mm/s PPV)
Negligible	Below LOAEL (0.3 mm/s PPV)

Table 4: Magnitude of Change As Defined in Table 3.33 of DMRB LA111

WHO Guidelines for Community Noise

World Health Organisation (WHO) 'Guidelines for Community Noise' provides criteria for the assessment of internal and external noise levels affecting various used including residential dwellings.

The WHO Guidelines for Community Noise include guideline values for community noise in specific environments, as specified in the table below:

Specific Environment	Critical Health Effects	dB $L_{Aeq,T}$	dB $L_{AMax,Fast}$
Dwelling Indoors	Speech intelligibility and moderate annoyance	35	-
Inside Bedrooms	Sleep disturbance, night time	30	45
Outdoor Living Area	Serious annoyance, daytime and evening	55	-

	Moderate annoyance, daytime and evening	50	-

Table 5: WHO Guideline Values for Community Noise

The WHO Guidelines for Community Noise document refers to research conducted by Vallet & Varnet which states:

'For a good sleep, it is believed that indoor sound pressure levels should not exceed approximately 45 dB LAmax more than 10-15 times per night, (Vallet & Varnet 1991).'