



Noise

Supplementary Planning Document

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1.0 Introduction

- 1.1 The Unitary Development Plan (UDP), adopted in 1998, is currently undergoing a process of review. The UDP will be replaced by a Local Development Framework (LDF) which is the new form of development plan under the Planning and Compulsory Purchase Act 2004. It is anticipated that a first set of LDF Development Plan Documents will be in place by 2007.
- 1.2 This Supplementary Planning Document (SPD) has been prepared in anticipation of the development of specific policies in the LDF Core Strategy. In the interim period, this SPD will be taken into account by the Council in determining planning applications as supplementary to relevant policies in the adopted UDP. Relevant policies to which this SPD relate include Policies OE1, OE2, OE3, OE4 and OE5 of the UDP. These policies are set out in full in Appendix 1 of this document. The SPD will be amended in due course to make specific reference to the relevant LDF policies.

2.0 Planning and Noise

- 2.1 Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. In the London Borough of Hillingdon, noise is often a planning issue and arises from a variety of different sources, in particular aircraft (Heathrow Airport & RAF Northolt), major roads (M4, A4 and A40) and railways (London Underground, the Paddington, Marylebone and Heathrow Express lines). The measures put forward in this SPD can be used to successfully manage noise and minimize its impact on sensitive receptors.
- 2.2 The issue of noise is an important consideration when putting forward development proposals. This document contains advice on those noise issues which the local planning authority will take into account when considering a development proposal. You should note however, that guidance on mineral workings noise issues is not included in this document. Specific detailed guidance is contained in MPS 2 "Minerals Policy Statement: Controlling and Mitigating the environmental effects of minerals extraction in England," (Office of the Deputy Prime Minister, March 2005) which the council will have regard to when considering proposals for minerals extraction, along with relevant UDP/LDF policies.
- 2.3 As this document contains detailed technical advice, you may need to seek further advice from a specialist noise consultant. A list of noise

consultants is available from the Council's Environmental Protection Unit or from the Institute of Acoustics website <http://www.ioa.org.uk>. If your proposal does not comply with the adopted development plan and this document, you may find you are refused planning permission.

- 2.4 Please note that, in addition to Planning Permission, you may need Building Regulations Consent for your scheme for example, in relation to the appropriate standards of internal sound insulation.
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3.0 Policy Context

- 3.1 This Noise SPD takes account of the national planning policy guidance on noise in PPG24 "Planning and Noise" 1994, and the regional planning guidance in the London Plan 2004. PPG24 is currently under review by the government and is likely to be reissued as a Planning Policy Statement. Any changes in standards introduced by the new PPS will be incorporated by amendments of this SPD as appropriate.

National

- 3.2 PPG 24 aims to minimise the adverse impact of noise without placing unreasonable restrictions on development. PPG24 provides guidance for Local Planning Authorities on how to best plan for and manage against noise generating development and protect noise sensitive development. In particular this document introduces the concept of Noise Exposure Categories for residential developments. Such categories are likely to be useful when determining appropriate levels of noise in the borough.

Regional

- 3.3 At the regional level the London Plan and the Mayor's Ambient Noise Strategy promote the efficient management of noise in London. Policy 4A.14 of the London Plan, Reducing Noise, seeks to minimize the impacts of noise and separate noise sensitive development from major sources of noise. It is intended that this policy links directly to the objectives of the Mayor's Ambient Noise strategy.
- 3.4 The Mayor's Ambient Noise Strategy was produced in 2004 and reflects guidance within PPG24. The strategy's main aim is to identify noise issues and seek to implement practical actions to effectively manage noise in London. The Mayor intends to work with London boroughs and the government in order to provide resources for noise where they are most needed.

Local

- 3.5 At the local level, Hillingdon produced a Draft Noise Supplementary Planning Guidance Note (SPG) in 2000. The aim of this document was to

manage the impacts of noise through the separation of noise sensitive development and major noise generators and where appropriate mitigate against the impacts of noise. The SPG was not fully adopted but the objectives of it remain important and have been carried through to form this Supplementary Planning Document.

4.0 How to apply Development Plan Policies

4.1 Hillingdon's approach to noise and noise sensitive development is to seek their physical separation through the exercise of land use planning controls. If suitable separation cannot be achieved, Hillingdon will consider whether it is practicable to control or reduce noise levels, or to mitigate the impact of noise, through the use of conditions or planning obligations. This approach applies both where noise sensitive development (such as housing) is seeking to locate in a "noisy" area, and where "noisy" activities are proposed, or exist and proposed to expand, in noise sensitive locations. An example of the latter is a new terminal at Heathrow airport. If noise impact cannot be made acceptable through separation or other noise control measures, planning permission would normally have to be refused.

4.2 Mitigation of the effects of noise can be achieved:

- (i) at the source (through technology to reduce noise emissions at source);
- (ii) at a distance (using for example noise barriers); or
- (iii) by controls over the operations that generate the noise (such as controls over the hours of operation).

Further mitigation can be secured through the use of noise insulation measures which reduce the transmission of noise. The council will seek mitigation through one or more of these means where it will help reduce the effects of noise.

4.3 Noise-sensitive development is considered to be mainly housing, hospitals and schools. Hillingdon will not normally apply planning conditions which seek to protect new hotel and office development from external noise. It is the responsibility of the developer to ensure that noise levels inside hotels and offices meet an acceptable standard. Tables 2 and 3 include guidance on internal noise criteria. However, in the case of noise producing development, it may be appropriate to apply conditions protecting the noise environment inside neighbouring hotels and offices. Also, noise from new hotel and office development affecting the surrounding area would be controlled under the planning legislation.

- 4.4 Policy OE5 of the UDP requires account to be taken of changes in noise levels likely to occur within a 10 – 15 year period when considering planning applications for noise sensitive development. When determining planning applications for development which will be exposed to an existing noise source, Hillingdon will consider both the likely level of noise exposure at the time of the application and any increase that can reasonably be expected in the foreseeable future, for example at an airport.

Key Point 1: Location of Residential Development

General Considerations

- 4.5 The following approach to assessing sites according to various categories is derived from the approach set out in Annex 1 of PPG 24 “Planning and Noise” (September 1994). The guidance below takes account of PPG 24 and local circumstances.
- 4.6 When assessing a proposal for residential development subject to transport related noise, the Local Planning Authority will use Table 1 to determine which of the four Noise Exposure Categories (NECs) A to D the proposed development site falls, taking account of both day and night-time noise levels. Values in Table 1 refer to average noise levels determined for an open site at the position of the proposed dwellings, well away from any existing buildings. Noise levels should be determined at a height of 1.2m to 1.5m above ground at the position of the proposed dwellings, and also at upper or lower floor levels if significant differences in noise exposure are found at the various proposed floor levels. Where the average falls on the boundary between NECs B and C, it will be for the local planning authority to determine the more appropriate NEC for the proposal. Where sites are affected by existing buildings, bunds or screens, specific advice should be sought from the Council’s Environmental Protection Unit.

**TABLE 1: NOISE EXPOSURE CATEGORIES FOR
NEW DWELLINGS NEAR EXISTING NOISE SOURCES**

Noise Exposure Categories	Times (hrs)	L _{Aeq,T} dB	L _{Aeq,T} dB	L _{Aeq,T} dB	Mixed Sources	Advice
		Road	Rail	Aircraft	L _{Aeq,T} dB	
A	07:00 – 23:00	< 55	< 55	< 57	< 55	Noise need not be considered as a determining factor in granting planning permission, although the noise level at the high end of the category should not be regarded as a desirable level.
	23:00 – 07:00	< 45	< 45	< 48	< 45	
B	07:00 – 23:00	55 – 63	55 – 66	57 – 66	55 – 63	Noise should be taken into account when determining planning applications and, where appropriate, conditions imposed to ensure an adequate level of protection against noise to meet the Council's recommended outdoor and indoor noise levels.
	23:00 – 07:00	45 – 57	45 – 59	48 – 57	45 – 57	
C	07:00 – 23:00	63 – 72	66 – 74	66 – 72	63 – 72	Planning permission should not normally be granted. Where it is considered that permission should be given, for example because there are no alternative quieter sites available, conditions should be imposed to ensure a commensurate level of protection against noise to meet the Council's recommended outdoor and indoor noise levels.
	23:00 – 07:00	57 – 66	59 – 66	57 – 66	57 – 66	
D	07:00 – 23:00	> 72	> 74	> 72	> 72	Planning permission should normally be refused.
	23:00 – 07:00	> 66	> 66	> 66	> 66	

Source: Derived from PPG24, 1994

Note:

- (i) Values in the above table refer to noise levels at the position of the proposed dwelling.
- (ii) The noise levels used should be representative of typical conditions. This may include predictions of noise. This could include predictions about various operating conditions but also the effect of proposed buildings adjoining the site.
- (iii) Sites where night time noise events (23.00 - 07.00) regularly exceed 82 dBL_{Amax,Slow}, several times in any hour should be treated as being in category C (except where the L_{Aeq} level already puts the site in category D).
- (iv) For aircraft noise, daytime values accord with contour values which relate to levels measured 1.2m above ground.
- (v) L_{Aeq,T} the equivalent continuous sound level - the sound level of a notionally steady sound having the same energy as a fluctuating sound over a specified measurement period (T).
- (vi) L_{Aeq,T} is used to describe many types of noise and can be measured directly with an integrating sound level meter.

- 4.7 The Local Planning Authority will have regard to the advice in Table 1 for the appropriate noise exposure category. These levels will be used in any initial discussions. In applying the standards in Table 1 the dominant noise source should be determined. To check if any individual noise source is dominant the noise level from individual sources should be determined and then combined by decibel addition. If the level of any one source lies within 2 dB(A) of the calculated combined value, that source should be taken as the dominant one and the site assessed against the appropriate NEC for that source, rather than using the mixed source NECs. If the site is affected by industrial noise then special considerations will apply. Further guidance is given in Key Point 6.
- 4.8 Further detailed residential noise standards are given in Table 2: Residential Noise Criteria (see section 5) and refer to predicted noise levels for the development following any mitigation measures, such as those outlined in Key Point 10.
- 4.9 The noise exposure categories values for mixed sources refer to where there is no dominant noise source. Noise effects from mixed sources could combine in a way that increases their overall effect. Sites adversely affected by a number of sources will need an assessment of combined impacts. Specific advice should be sought from the Council's Environmental Protection Unit. If the site is affected by industrial noise or noise with particularly annoying features and characteristics then special considerations will apply. Regard should be given to the characteristics of the noise source involved in each case. Further guidance is given in Key Point 6.
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Key Point 2: Aircraft Noise

- 4.10 Maps 1 and 2 in Appendix 2 give daytime aircraft noise contours for Heathrow Airport and RAF Northolt. They show that aircraft noise is a significant issue in the determination of planning applications around Heathrow Airport and RAF Northolt, although a number of measures have been implemented to minimise the impact of aircraft noise on surrounding areas.
- 4.11 Maps 1 and 2 provide broad guidance. It is worth noting that the pattern of aircraft movements can cause noise exposure to be significantly higher or lower than shown in average noise contours. The contours for Heathrow do not reflect the benefits to residents of runway alteration which is intended to provide predictable periods of relief from aircraft noise. In addition, detailed site considerations can dramatically affect the levels of

noise experienced. For instance, ground conditions and screening can significantly affect levels of noise.

4.12 The aircraft noise contours give an indication of aircraft noise levels to be used for determining NEC category. It should be noted that:

- Noise levels determining NEC categories are dependent on whether aircraft noise, road traffic noise or railway noise is dominant or whether there are mixed noise sources.
- The aircraft noise contours may not be current for the development proposed. The latest aircraft noise contours for Heathrow Airport are available at the Department for Transport website <http://www.dft.gov.uk>.
- The aircraft noise contours relate only to daytime noise, where as NEC categories are determined by both daytime and night-time noise levels.

4.13 For the above reasons, it may be necessary to supplement information from the noise contours with information from a noise measurement survey specific to the application site. Furthermore, as stated in paragraph 4.4, it is necessary to take into account changes in aircraft noise levels that can reasonably be expected in the foreseeable future.

4.14 Whilst Table 1 uses aircraft noise levels taken from PPG24, the following additional factors may be taken into account when considering new planning development and proposals for mitigating aircraft noise:

- The noise levels in PPG 24 are not based on a conclusive study which supports the view that aircraft noise is less annoying than noise from other sources.
- Residential areas located close to the airport, including Longford, Harmondsworth, Sipson, Harlington and Cranford Cross are affected by aircraft noise with unpleasant characteristics including that emitted by aircraft on the ground. The published noise contours do not account for the combined impact of noise from all sources of airport noise
- Residential areas located north of the airport are not typically affected by aircraft noise transmitted from above, due to the current flight paths of aircraft approaching and taking off from the airport. Therefore the 2 dB correction incorporated in PPG24 noise levels may not be justified.

Key Point 3: Road Traffic Noise

- 4.15 Maps 3A, 3B and 3C in Appendix 2 indicate road traffic noise levels in Hillingdon Borough. The maps are taken from the London Road Traffic Noise Map and indicate road traffic noise levels in terms of the noise indicator L_{den} . This noise indicator indicates noise levels in dB averaged over the 24 hours period incorporating weightings of +5 dB and +10 dB for evening and night respectively.
- 4.16 The maps 3A, 3B and 3C give a useful indication of the areas in the borough where road traffic noise can be a significant issue for noise sensitive development. However, there is no simple relationship enabling L_{den} values to be used to derive the $L_{Aeq,T}$ day and night values used for determining NEC category for residential development. The latter are determined without weightings over different time periods and at different receiver heights, and should therefore be obtained by alternative means.
- 4.17 The precise determination into which NEC category a development proposal falls should be supported by a detailed acoustic report. The detailed levels of noise can be affected by the following:
- road gradient
 - texture of the road surface
 - nature of the ground between the road and measurement point,
 - barriers and cuttings
 - angle of view of the road
 - reflections at the edge of the affected site
 - reflections from buildings opposite the site

Key Point 4: Amenity/Internal Noise Levels

- 4.18 Policies Pt1.10, Pt1.15, OE1, OE5, H7 and BE14 of the Unitary Development Plan cover the issue of residential amenity. This issue is a broad one and covers a variety of environmental impacts, of which noise is one. An acceptable level of residential amenity must therefore meet a range of environmental standards. Table 2 (section 5) indicates the Council's noise criteria for judging acceptable levels of noise. These criteria reflect standards that Hillingdon expects for housing.
- 4.19 In achieving the above standards the Council will require details of mitigation measures. Internal design criteria for dwellings should be met on the basis of windows being open. If the criteria cannot be met in all cases, the Council's officers will make a judgement having regard to the number of dwellings affected and whether all reasonable steps have been taken to control and mitigate the noise. Further guidance is given in Key Point 10.

Key Point 5: Schools and Hospitals

- 4.20 60 $L_{Aeq,T}$ dB should be regarded as a desirable upper limit for major new schools and hospitals. When determining applications for new or replacement schools, hospitals, clinics and other community facilities, the Local Planning Authority will have regard to recommended internal noise criteria. Table 3 (section 5) gives guidance on internal noise criteria in schools. More detailed advice is available as referred to below.
- 4.21 The revised approved document E of the Building Regulations came into force in July 2003 and was amended and clarified in July 2004. It covers the constructional standards for acoustics of new school buildings, as required by DfES Building Bulletin 93 “Acoustic Design of Schools”, February 2003. Section 1 of the bulletin specifies suitable indoor noise levels in occupied spaces in schools having regard to contributions from external sources such as road, rail and air traffic. Building Control Officers of the Council have responsibility to ensure that the standards are complied with. The Building Regulations do not apply to all alteration and refurbishment work in school buildings. Noise from schools to surrounding areas is still controlled under the planning legislation.

Key Point 6: Industrial Uses

- 4.22 Industrial uses will require particular attention as they can often cause severe noise problems due to both the character of industrial noise and its level. Sudden impulses, irregular noise or noise which contains a distinguishable continuous tone will require special consideration.
- 4.23 In considering new industrial development, the Council will apply policies OE1 and OE3 of the UDP and will have regard to, amongst other considerations, the British Standard 4142:1997 “Method for rating industrial noise affecting mixed residential and industrial areas”, and internal and external noise criteria. Specific consideration will also be given to the features and characteristics of the noise.
- 4.24 British Standard 4142:1997 gives advice on measuring and assessing the noise from machinery or plant, and is relevant if surrounding residential areas might be affected. Developments with a BS4142 assessment of marginal significance or above would not ordinarily be permitted. Consequently, the development should be controlled such that the rating level of the noise from the proposed development determined according to BS4142 is at least 5 dB below the background noise level $L_{A90,T}$. Ideally, the assessment of noise should give a positive indication that complaints are unlikely.

- 4.25 In addition to being applied to straightforward cases where fixed industrial plant is used, BS4142 provides a useful assessment method for the following cases, and the Council adopts these categories:
- Premises, such as warehouse distribution premises, where delivery lorries are driven and manoeuvred, and are loaded or unloaded by forklift trucks etc;
 - Premises where there are manoeuvring lorries on which on-board refrigeration plant is run;
 - Loaders, dumpers and haulage vehicles operating in yards handling building materials or at waste disposal sites.
- 4.26 In support of this use of BS4142, it should be noted that the stated scope of the standard is for assessing noise levels from “factories, or industrial premises, or fixed installations, or sources of an industrial nature in commercial premises”.
- 4.27 A dictionary definition ¹of industry is “*all branches of manufacturing and trade*”, with the definition of industrial being “*relating to, concerned with or suitable for industry*”. The categories of premises mentioned above are therefore believed to fall within the scope of the standard. What is important is the noise experienced by residents living in the vicinity of the premises. Whether the noise source is in a factory premises or warehouse distribution premises is largely irrelevant to the likelihood of complaint, as is whether the noise source is moving or fixed. Also, the standard does not restrict its applicability to fixed noise sources.
- 4.28 If the surrounding area is not residential, controls on noise from noise generating development may still be required if the existing noise environment is already significantly affected or where the existing noise environment is prized for its amenity value. Depending on the circumstances of the case, the Local Planning Authority may require that no detectable increase in background level takes place, or it may allow a small increase in background level, generally no more than 2 dB. Further guidance is given in Key Points 8 and 9.
- 4.29 Before the proposed use commences, the local planning authority may require that a noise control scheme is agreed. This will need to have regard to the British Standard 4142:1997 and internal noise criteria.
- 4.30 To ensure that the proposed use does not have an unacceptable impact, conditions may be required.

¹ Chambers 21st Century Dictionary

Key Point 7: Airport Buildings

- 4.31 Airport operational development is permitted by Part 18 of the Town and Country Planning (General Permitted Development) Order 1995 subject to consultation with the Local Planning Authority. Therefore all designs for buildings should take account of and implement current planning policy guidance. Due regard should be given to PPG24 "Planning and Noise" and BS 4142: 1997.
- 4.32 When the Council's Environmental Protection Unit provides advice, it may refer to BAA's Acoustic Standard, July 2001. This standard describes BAA's acoustic performance requirements for both the interior and exterior of buildings and provides design advice on achieving them. Further information can be obtained from BAA Design (tel. 01293 502394).

Key Point 8: Character of Area

- 4.33 The Unitary Development Plan contains a number of policies which deal with the issue of the character of an area. An important facet of some areas is the fact that they are relatively quiet. In terms of noise, the character of area is most important with regard to the areas of open land within the borough, but some of the developed area will also fall within the remit of this section.
- 4.34 The Unitary Development Plan Policy OE1 states that Planning Permission will not be granted where there would be a detrimental effect on the character of the area. This is given further detail in relation to the open land policies OL14 and OL15 and in residential areas in policies Pt1.10, Pt1.15 and H7. Equally important is the fact that some areas within the borough are exposed to unacceptable levels of noise exposure. New noise sensitive uses will not be permitted in such areas. Also, planning permission will not normally be granted for developments which would have any adverse impact within areas which are already affected by unacceptable noise levels.

Key Point 9: Countryside

- 4.35 Special consideration is required where noisy development is proposed in or near designated sites of importance for nature conservation, such as National Nature Reserves (Ruislip Woods), Sites of Special Scientific

Interest (SSSIs) and those of Metropolitan Importance. In such circumstances Policies EC1 and EC3 will apply.

- 4.36 In some cases, noisy development may have a serious effect on the welfare of livestock on nearby farms. The degree to which different species will be affected can vary and therefore when considering applications which could affect livestock, the Council may consult English Nature and/or Countryside Agency.

Key Point 10: Detailed Housing Design Measures

This section offers guidance options for applicants and is not to be regarded as specifying prescriptive design measures. The guidance is based on “Sound Control for Homes”, (Building Research Association and Construction Industry Research Association) 1993.

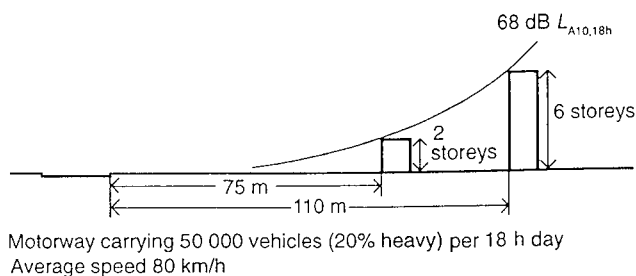
Mitigation through Design

A1 Noise control measures fall into three categories: at source, on the transmission path and at the receiver. This section will primarily cover noise mitigation through the design of schemes, but also covers noise control at the receiver.

Control of Noise on the transmission path

A2: Location of the building on the site: On a clear site, the main factors which control the noise level at any point are: distance between source and receiver, whether the ground cover is hard or soft, and height of the receiver. Distance attenuation is greatest where there is soft-ground cover (such as grassland) and the receiver is near the ground. Therefore, low rise housing can be built closer to a noise source than high-rise housing. These principles are outlined in Figure 1 below.

Figure 1



©Source: Sound Control for Homes (Building Research Association & Construction Industry Research Association) 1993.

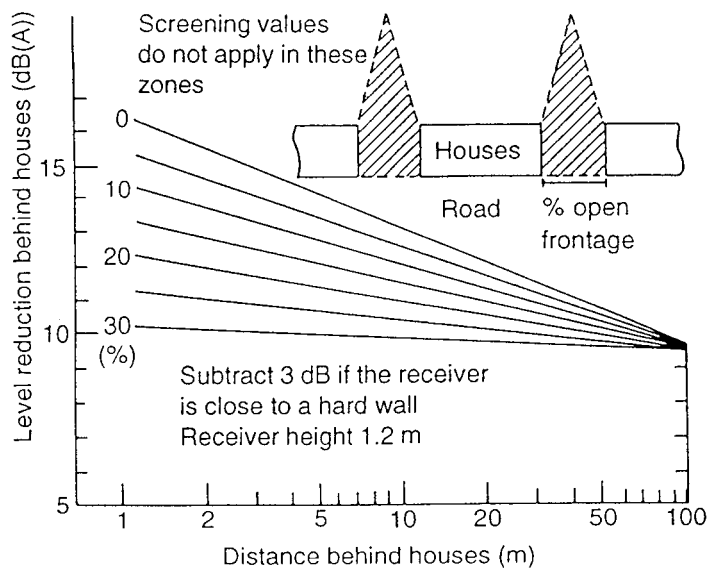
A3: Screening of the Site: Barriers or screens can reduce noise levels. There are the following types: an existing feature (for example a railway cutting or embankment); a purpose designed feature (either a solid boundary fence or an earth mound); a purpose designed feature of the building (for example a courtyard); or a purpose designed building (for example a barrier block). The main points to bear in mind when designing barriers are:

- * They are most effective when located close to source or receiver
- * They protect low-rise housing better than high rise
- * Generally the taller the barrier the better, but the effectiveness diminishes the taller the barrier.
- * They should usually extend well beyond the ends of the site to be protected. ‘

A4: Building form and Orientation: Detailed consideration to the design of schemes will be needed in terms of how buildings alter noise transmission through a site. Below are some examples of how building form and orientation can affect noise levels

(a) General Considerations

Figure 2



©Source: Sound Control for Homes (Building Research Association & Construction Industry Research Association) 1993.

- * In a scheme of low-rise dwellings, those closest to the noise source can give some protection to the remainder of the site.
- * Figure 2 above gives approximate values for the shielding given by two-storey houses built parallel to a main road. Even if the gaps between the houses amount to as much as 30% of the frontage length, 10 dB (A)

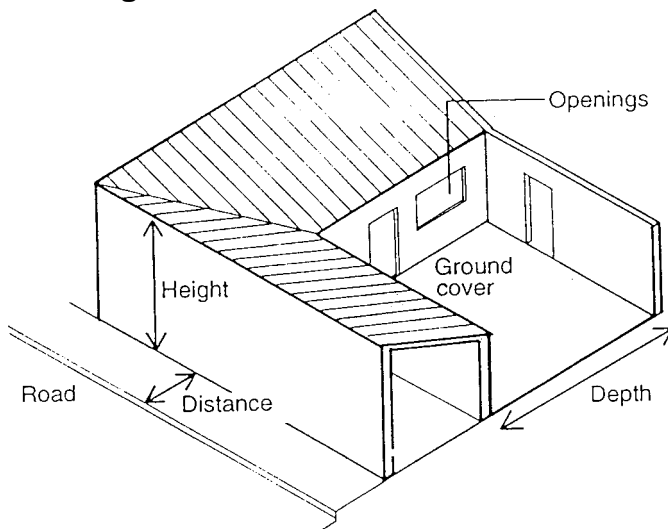
attenuation can be provided over much of the site.

- * On sites where a small reduction in external noise is all that is required, it may prove sufficient to locate self-protecting dwellings, as described below, closest to the source to provide shielding to the remainder of the site.

(b) The courtyard house

- * Another example of how building form and orientation can affect noise levels is shown below in Figure 3. This shows a house which overlooks an internal courtyard with external walls which are windowless, providing visual and acoustic privacy.
- * The attenuation of external noise depends on the following design features: wall height - the higher the better; distance between the source and the external wall - the shorter the distance the better the attenuation; courtyard depth - the deeper the better; and courtyard ground cover and openings in the courtyard walls - the more absorption the better.

Figure 3

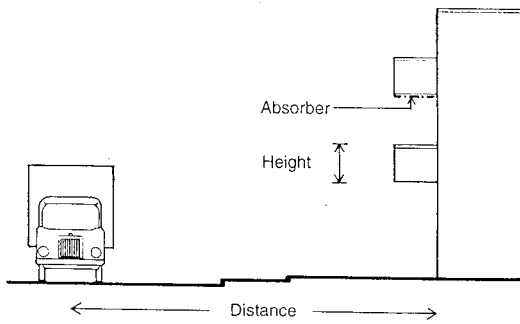


©Source: Sound Control for Homes (Building Research Association & Construction Industry Research Association) 1993.

(c) Balconies

- * A room facing a noise source can be given some protection by an external balcony (see Figure 4). This can reduce the received level by approximately 5 dB (A).

Figure 4

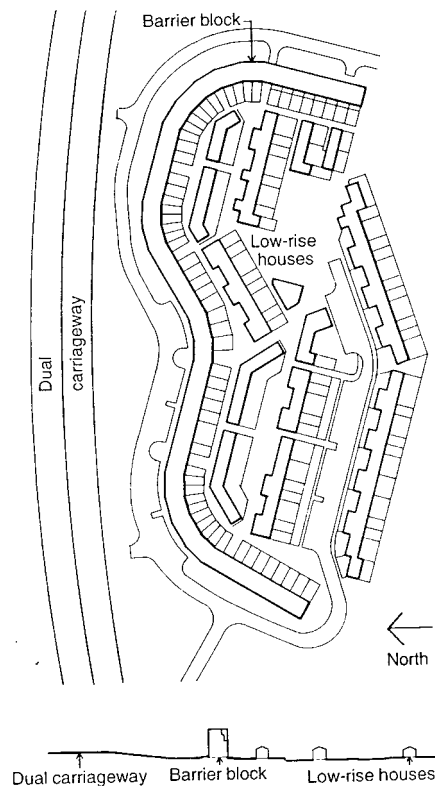


- * For road traffic noise, maximum protection is afforded when the building is close to the road. The balcony front and sides should be imperforate and as tall as possible. If stacked vertically, the underside of each balcony above should have a sound-absorbing finish, such as sprayed vermiculite.

(d) Barrier Blocks

- * A barrier block is a building which itself forms a noise barrier. It consists of a continuous barrier situated close to and parallel to the noise source. As it will usually be taller than a purpose-built barrier, it is more effective and often able to reduce noise levels over the remainder of the site.

Figure 5



©Source: Sound Control for Homes (Building Research Association & Construction Industry Research Association) 1993.

(e) Internal Planning of the building -Consideration will be given to the prospective occupant of the development in the design of appropriate amenity areas. Where possible amenity areas should be screened from the major noise source.

Control of noise at the receiver

A5 The final line of defence against external noise is the building envelope but there are two major drawbacks in relying on it for noise control:

- It does not shield the site from noise, so public areas and private gardens remain noisy
- In order to achieve maximum sound insulation from the building envelope, it would be necessary to close windows. This causes ventilation problems so that alternative ventilation would be required. To avoid this drawback, every attempt should be made to meet internal design criteria for dwellings on the basis of windows being open. Wherever possible, external noise should be controlled by site and building planning. Also, insulation of the building envelope should be a last resort.

5.0 Environmental Protection Unit Advice

5.1 To ensure an acceptable environment for all, the Council applies the following standards for judging noise levels for various types of development. They should be used in conjunction with the detailed advice set out in the preceding sections.

TABLE 2: RESIDENTIAL NOISE CRITERIA

		Recommended Noise Level (dB)
Daytime Noise (07:00 - 23:00)	Outdoor living areas	As low as practicable, and < 50 $L_{Aeq,T}$ *(free field)
	Indoor living areas	< 35 $L_{Aeq,T}$ *
Night-time Noise (23:00 - 07:00)	Outside bedroom windows	< 45 $L_{Aeq,T}$ *(façade) < 60 $L_{Amax,Fast}$ (façade)
	Inside bedrooms	< 30 $L_{Aeq,T}$ * < 45 $L_{Amax,Fast}$

Source: Derived from BS8233:1999 and "Guidelines for Community Noise", World Health Organisation, 1999

* Time base T should be appropriate for the circumstances, typically 1 hour day and 5 minutes night

TABLE 3: SCHOOL AND OFFICE INTERNAL NOISE CRITERIA

Type of Development	Area	$L_{Aeq,1h}$ (dB)
Schools	Lecture theatre	30 - 35
	Classroom	35 - 40
	Library	40 - 50
	Outdoors playground	< 55
Offices	Executive office, Meeting room	35 - 40
	Cellular office	40 - 50
	Open-plan office	45 - 50

Source: Derived from BS8233:1999 and "Guidelines for Community Noise", World Health Organisation, 1999

5.2 In addition to the standards above, the Environmental Protection Unit of the Council has the following statutory powers to control noise existing outside the planning system. The granting of planning permission does not remove the need to comply with these controls. The major legislative instruments are:

Environmental Protection Act 1990

Part III (as amended by the Noise and Statutory Nuisance Act 1993), requires local authorities to serve abatement notices where the noise emitted from any premises, or from vehicles, machinery and equipment in the street, constitutes a statutory nuisance.

Control of Pollution Act 1974

Part III gives local authorities powers to control noise from construction sites. It also introduced the concept of the Noise Abatement Zone (NAZ).

Noise Act 1996

London Local Authorities Act 2004

Fixed penalty for nuisance

Anti-Social Behaviour Act 2003

Clean Neighbourhoods and Environment Act 2005

Crime and Disorder Act 1998

British Standard Institution Codes of Practice

You should also refer to:

- British Standard 8233:1999 “Sound insulation and noise reduction for buildings – Code of practice”
- British Standard 6472:1992 “Guide to evaluation of human exposure to vibration in buildings (1Hz to 80 Hz)”
- British Standard 4142:1997 “Method for rating industrial noise affecting mixed residential and industrial areas”

5.3 The issue of minimum perceptible noise change often arises in the assessment of the noise impact of new planning development. The glossary of PPG24 “Planning and Noise” refers to decibels measured on a sound level meter, and states that a change of 3 dB(A) is the minimum perceptible under normal conditions.

5.4 It is important to appreciate the difference in meaning between the terms “sound level” and “noise index”. The latter is defined in the glossary of PPG24 as “a measure of noise over a period of time which correlates well with average subjective response”.

5.5 Because a noise index uses a single number to measure fluctuating sound level over a period of time, a lot of detailed information on the way the sound level fluctuates during that period is lost. Consequently, changes in

a noise index of much less than 3 dB(A) can be perceptible depending on the cause of the change, e.g. changes in numbers of events or other changes in the time pattern of the noise². For example, if there were 50 lorries traveling past an observer in an hour, a doubling of the number of lorries traveling within the same period would be expected to result in a 3 dB(A) increase in a 1 hour noise index. However, to the observer, an increase much fewer than 50 lorries may well result in a perceptible change.

5.6 The Council accordingly takes the view that a proper interpretation of the guidance in the glossary of PPG24 is:

- a change of 3 dB(A) is the minimum perceptible change in a sound level under normal conditions (e.g. outdoors).
- this does not mean 3 dB(A) is the minimum perceptible change, in general, in a noise index (e.g. $L_{A10,T}$, $L_{Aeq,T}$)

5.7 Detailed advice and information on noise issues such as the control of noise from construction work and from pubs and clubs is available from the Council's Environmental Protection Unit or on the Council website: <http://lbho.hillingdon.gov.uk/environment/epu/index.php>.

² "Perception and significance of transportation noise changes", C.Cobbing and M.F. Rickaby, Proc. I.O.A. Vol 20 Part 1 (1998)

6.0 Council Services and other information

(i) Council Services

PLANNING AND TRANSPORTATION

Civic Centre
High Street
Uxbridge
Middx UB8 1UW

Web: www.hillingdon.gov.uk

Tel: 01895 250574/250384

Policy & Environmental Planning Team

Tel: 01895 277568

Fax: 01895 277042

Email: pep@hillington.gov.uk

Development Control

Tel: 01895 250400 01895 250765 01895 250401

Urban Design and Conservation Team

Tel: 01895 250536

Building Control

Tel: 01895 250804 01895 250805 01895 250808

ENVIRONMENTAL PROTECTION UNIT

Civic Centre
High Street
Uxbridge, Middx UB8 1UW

Web www.hillingdon.gov.uk/environment/epu

Tel: 01895 250155

Fax: 01895 277443

Email: environmentalhealthepu@hillington.gov.uk

(ii) Other related Supplementary Planning Guidance and Documents (SPG's) (SPD's)

- SPG on Air Quality
- SPG on Land Contamination
- SPG on Planning Obligations
- SPG on Affordable Housing
- SPD - Hillingdon Design and Accessibility Statement

(iii) Making a complaint

If you wish to make a complaint about any aspect of the service you receive from Hillingdon's Planning Service, you should address your complaint to the Director of Planning and Transportation, at the above address. If you are unhappy with this response and do not feel that the Council has dealt satisfactorily with your complaint you can write to:

The Local Government Ombudsman
21 Queen Anne's Gate
London SW1H 9BU

Appendix 1 - Relevant Development Plan Policies

Chapter 6: Other Environmental Considerations

Policy OE1 PLANNING PERMISSION WILL NOT NORMALLY BE GRANTED FOR USES AND ASSOCIATED STRUCTURES WHICH ARE, OR ARE LIKELY TO BECOME, DETRIMENTAL TO THE CHARACTER OR AMENITIES OF SURROUNDING PROPERTIES OR THE AREA GENERALLY, BECAUSE OF:

- (i) THE SITING OR APPEARANCE;
 - (ii) THE STORAGE OR DISPLAY OF VEHICLES, GOODS, EQUIPMENT OR OTHER MERCHANDISE;
 - (iii) TRAFFIC GENERATION AND CONGESTION;
 - (iii) NOISE AND VIBRATION OR THE EMISSION OF DUST, SMELL OR OTHER POLLUTANTS;
- UNLESS SUFFICIENT MEASURES ARE TAKEN TO MITIGATE THE ENVIRONMENTAL IMPACT OF THE DEVELOPMENT AND ENSURE THAT IT REMAINS ACCEPTABLE.

Policy OE2 THE LOCAL PLANNING AUTHORITY WILL REQUIRE, WHERE APPROPRIATE, THAT AN ASSESSMENT OF ENVIRONMENTAL IMPACT BE MADE FOR ANY PROPOSED DEVELOPMENT WHICH WOULD HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT, SUCH AN ASSESSMENT TO BE SUBMITTED TO THE LOCAL PLANNING AUTHORITY BEFORE CONSIDERATION IS GIVEN TO THE RELEVANT PLANNING APPLICATION.

Policy OE3 BUILDINGS OR USES WHICH HAVE THE POTENTIAL TO CAUSE NOISE ANNOYANCE WILL ONLY BE PERMITTED IF THE

IMPACT IS MITIGATED WITHIN ACCEPTABLE LEVELS BY ENGINEERING, LAYOUT OR ADMINISTRATIVE MEASURES.

Policy OE4 IN THE CASE OF NEW OR IMPROVED ROADS OR RAILWAYS THE LOCAL PLANNING AUTHORITY WILL WISH TO BE SATISFIED THAT AS FAR AS PRACTICABLE MEASURES ARE TAKEN TO MITIGATE THE EFFECTS OF NOISE AND VIBRATION ON NEARBY BUILDINGS SO THAT INTERNAL SOUND LEVELS CONFORM TO ACCEPTABLE CRITERIA.

Policy OE5 PROPOSALS FOR THE SITING OF NOISE SENSITIVE DEVELOPMENTS SUCH AS FAMILY HOUSING SCHOOLS OR CERTAIN FORMS OF COMMERCIAL ACTIVITY WHERE THE OCCUPIERS MAY SUFFER FROM NOISE OR VIBRATION WILL NOT BE PERMITTED IN AREAS WHICH ARE, OR ARE EXPECTED TO BECOME, SUBJECT TO UNACCEPTABLE LEVELS OF NOISE OR VIBRATION. WHERE DEVELOPMENT IS ACCEPTABLE IN PRINCIPLE, IT WILL STILL BE NECESSARY TO ESTABLISH THAT THE PROPOSED BUILDING OR USE CAN BE SITED, DESIGNED, INSULATED OR OTHERWISE PROTECTED FROM EXTERNAL NOISE OR VIBRATION SOURCES TO APPROPRIATE NATIONAL AND LOCAL STANDARDS. ACCOUNT WILL BE TAKEN OF ANY CHANGES LIKELY TO OCCUR IN NOISE LEVELS WITHIN A 10-15 YEAR PERIOD FOLLOWING THE DATE OF SUBMISSION OF ANY APPLICATION FOR PLANNING PERMISSION.

(ii) Chapter 7: Housing

Policy H7 THE LOCAL PLANNING AUTHORITY WILL REGARD THE CONVERSION OF RESIDENTIAL PROPERTIES INTO MORE UNITS AS ACCEPTABLE IN PRINCIPLE PROVIDED THIS CAN BE ACHIEVED WITHOUT CAUSING DEMONSTRABLE HARM TO THE RESIDENTIAL AMENITIES OR CHARACTER OF THE AREA OR THE AMENITY OF ADJOINING OCCUPIERS AND THE FOLLOWING CRITERIA ARE MET:-

- (i) IT CAN BE DEMONSTRATED THAT ADEQUATE SOUND INSULATION IS PROVIDED;
- (ii) CAR PARKING TO THE STANDARDS ADOPTED BY THE LOCAL PLANNING AUTHORITY CAN BE PROVIDED WITHIN THE CURTILAGE OF THE SITE AND CAN BE ACCOMMODATED WITHOUT SIGNIFICANT DETRIMENT TO THE STREET SCENE;
- (iii) ALL UNITS ARE SELF CONTAINED WITH EXCLUSIVE USE OF SANITARY AND KITCHEN FACILITIES AND WITH INDIVIDUAL ENTRANCES, AND INTERNAL STAIRCASES ARE PROVIDED TO SERVE UNITS ABOVE GROUND FLOOR LEVEL; AND
- (iv) ADEQUATE AMENITY SPACE IS PROVIDED FOR THE BENEFIT OF RESIDENTS OF THE PROPOSED DEVELOPMENT.

(iii) Chapter 11: Aviation

Policy A1 THE LOCAL PLANNING AUTHORITY WILL OPPOSE ANY PROPOSALS FOR DEVELOPMENT WHICH EXTEND HEATHROW AIRPORT ON LAND TO THE NORTH OF BATH ROAD (A4(T)) OR OTHERWISE INCREASE THE AIRPORT RUNWAY CAPACITY, WHICH RESULT IN SIGNIFICANT HARM TO THE LOCAL ENVIRONMENT AND, SUBJECT TO THE LIMITATIONS OF CIRCULARS 11/95 AND 1/97, FAIL TO INCLUDE SUFFICIENT MEASURES TO MITIGATE OR REDRESS THE EFFECT OF THE AIRPORT ON THE LOCAL ENVIRONMENT.

Policy A2 PLANNING APPLICATIONS FOR PROPOSALS WITHIN THE BOUNDARY OF HEATHROW WHICH ARE LIKELY TO (a) INCREASE DEMAND SIGNIFICANTLY FOR OFF-AIRPORT DEVELOPMENTS OR (b) HAVE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACT SHOULD BE ACCOMPANIED BY A JUSTIFICATION OF THE NEED FOR THE DEVELOPMENT AND, WHERE APPROPRIATE, A FULL ENVIRONMENTAL ASSESSMENT. SUBJECT TO THE LIMITATIONS OF CIRCULARS 11/95 AND 1/97, THEY SHOULD INCLUDE SUFFICIENT MEASURES TO MITIGATE FOR OR REDRESS THE EFFECTS OF THE AIRPORT ON THE LOCAL ENVIRONMENT. WHERE APPROPRIATE, PROPOSALS SHOULD INCLUDE NEW PUBLIC TRANSPORT CAPACITY FOR PASSENGERS AND EMPLOYEES ABLE TO USE PUBLIC TRANSPORT AND SO MINIMISE ADDITIONAL ROAD TRAFFIC DEMAND. TO THIS END, THE LOCAL PLANNING AUTHORITY WILL SEEK ASSURANCES THAT THE NECESSARY CAPACITY IS AVAILABLE AT THE TIME THE DEVELOPMENT IS BROUGHT INTO USE. IN APPROPRIATE CASES THE LOCAL PLANNING AUTHORITY WILL SEEK A FINANCIAL CONTRIBUTION FROM THE DEVELOPER TO SECURE THE NECESSARY IMPROVEMENTS IN PUBLIC TRANSPORT.

Policy A3 AT NORTHOLT AERODROME, WITHIN THE AREA OF OPEN CHARACTER IDENTIFIED ON THE PROPOSALS MAP, PLANNING PERMISSION WILL NOT BE GRANTED EXCEPT FOR DEVELOPMENT ESSENTIAL FOR AIRCRAFT OPERATIONAL PURPOSES, OR FOR SAFETY, OR THE PURPOSES OF NATIONAL DEFENCE. SUBJECT TO THE OTHER POLICIES OF THE PLAN, OUTSIDE THE DEFINED AREA OF OPEN CHARACTER, PLANNING PERMISSION WILL NORMALLY BE GRANTED FOR DEVELOPMENT AT RAF NORTHOLT ONLY IF IT IS DIRECTLY ASSOCIATED WITH MILITARY OR CIVILIAN AVIATION OR FOR THE PURPOSES OF NATIONAL DEFENCE.

Policy A4 NEW DEVELOPMENT AT AIRPORTS SHOULD INCORPORATE, WHERE APPROPRIATE, RESTAURANT, SHOPPING, LEISURE, SPORTS, CRECHE FACILITIES AND OTHER SERVICES FOR PEOPLE WORKING AT THE AIRPORT. HOWEVER, THESE SHOULD NOT BE DESIGNED OR BE OF SUCH A SCALE AS TO ATTRACT PEOPLE FROM OUTSIDE THE AIRPORT.

If you need a justification or an explanation of the policies given here, please refer to the UDP itself. You can see the UDP at Planning and Transportation Reception, Level 3, Civic Centre, Uxbridge, Hayes One-Stop or at any library in the Borough. The UDP can be downloaded via the Council's website at <http://lbho.hillingdon.gov.uk/environment/udp/index.php>.

Appendix 2 – Maps 1, 2, 3A, 3B and 3C

If you would like a copy of this publication in large print, Braille or cassette tape please contact the Policy and Environmental Planning Team on 01895 250844

If you require a translation please contact:

Arabic	إذا كنت بحاجة إلى خدمة الترجمة، يُرجى الاتصال: 07753 600281
Bengali	আপনার যদি অনুবাদের দরকার হয়, এখানে যোগাযোগ করুন 07776 184247
Gujarati	જો તમને ભાષાંતરની જરૂર હોય તો, કૃપા કરીને સંપર્ક કરો: 01895 250286
Hindi	अगर आपको हिन्दी में अनुवाद चाहिए, तो कृपया सम्पर्क करें: 01895 250045
Punjabi	ਜੇ ਤੁਹਾਨੂੰ ਤਰਜਮੇ ਦੀ ਜ਼ਰੂਰਤ ਹੋਵੇ, ਤਾਂ ਮਿਹਰਬਾਨੀ ਕਰਕੇ ਸੰਬੰਧ ਕਰੋ: 01895 250045
Somali	Haddii aad u baahatid turjumad, faddllan la xidhiidh: 07956 570536
Urdu	اگر آپ کو اس کے ترجمے کی ضرورت ہے تو براہ مہربانی رابطہ کیجئے: 01895 250045