

Planning Advice Note Good Practice Guide on Basement Developments

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I. INTRODUCTION

1.1 PURPOSE OF THIS GUIDE

- 1.1.1** This Guide provides detailed advice on both planning as well as non-planning matters for developments that propose a new basement or an extension to an existing basement. It also provides guidance on when planning permission is required and when planning permission is not required.
- 1.1.2** Applying for planning permission requires the submission of a variety of information to provide us with a basis for determining planning applications; please refer to the Council's [Local Validation Checklist \(www.richmond.gov.uk/make_a_planning_application\)](http://www.richmond.gov.uk/make_a_planning_application). The level of information will depend on the scale, location and complexity of the scheme.
- 1.1.3** This guide also provides information on other requirements including engagement with neighbours and the party wall act, highway licences and traffic orders, water and land stability, structural impacts, managing local amenity during construction.
- 1.1.4** This Guide has been produced as a result of the recommendations and outcomes of the [LBRuT Basement Developments - Review of Planning Implications \(www.richmond.gov.uk/local_development_framework_research\)](http://www.richmond.gov.uk/local_development_framework_research) a study carried out by Peter Brett Associates on behalf of the Council in 2014. For further information on basements and lightwells, see also the [House Extensions and External Alterations SPD \(www.richmond.gov.uk/supplementary_planning_documents_and_guidance.htm\)](http://www.richmond.gov.uk/supplementary_planning_documents_and_guidance.htm).

GUIDANCE FOR NEIGHBOURS

This Guide has been designed to provide useful information for neighbours as well as those proposing basements. If the advice in this Guide is followed, the uncertainty around the impacts of basement developments on neighbours will be minimised.

This Guide contains text boxes with a summary specifically aimed for neighbours to help you orientate yourself.

If you share a party wall with your neighbour who is proposing a basement, you will need to seek further advice than is presented in this Guide.

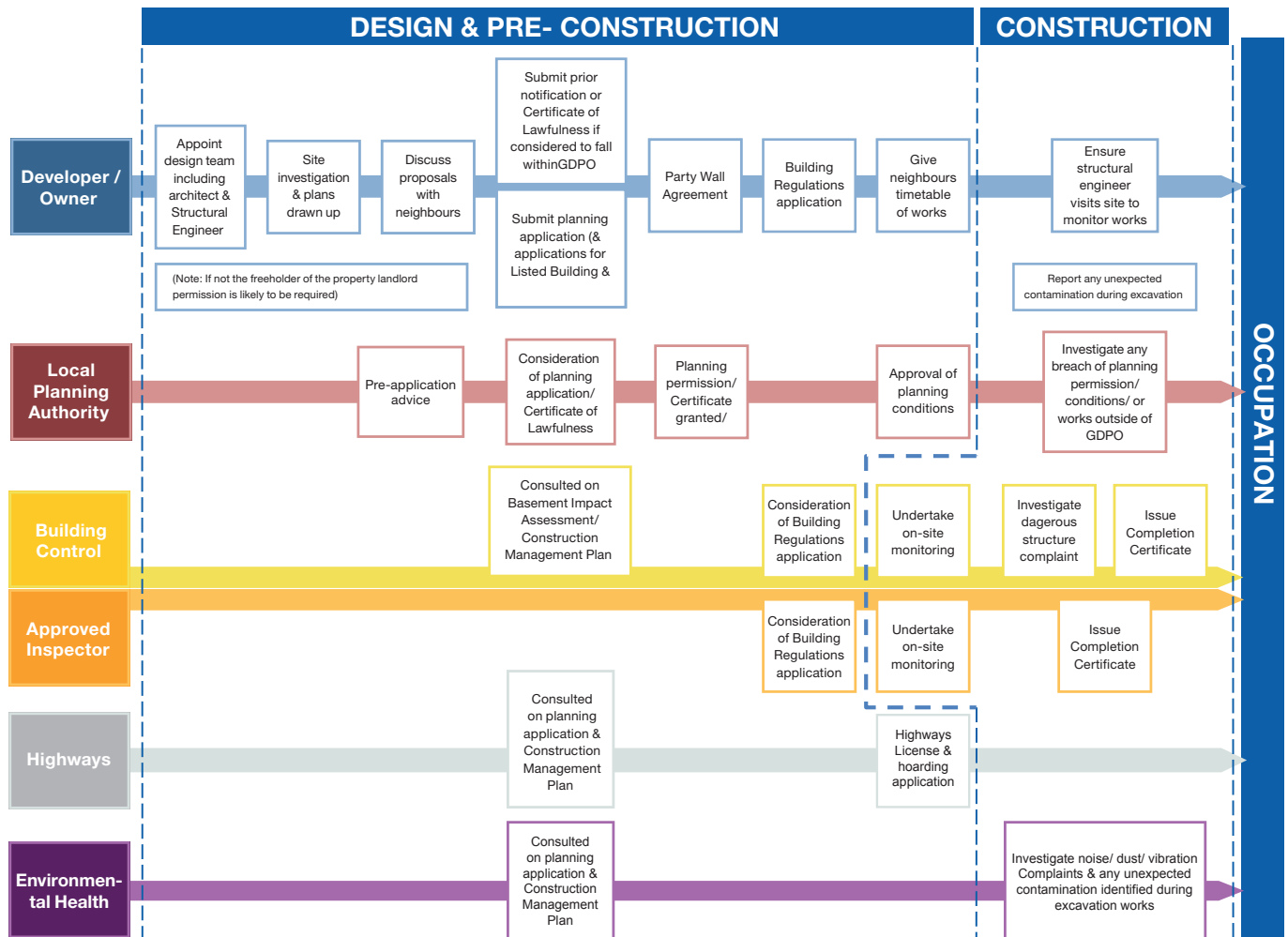
1.2 KEY ISSUES AND LEGISLATIVE ROLES

The table below sets out the key issues relating to basement developments and their construction and how they relate to the different planning and buildings legislature (LBRuT Basement Developments - Review of Planning Implications, 2014).

LEGISLATURE	KEY ISSUES			
Planning (Town and Country Planning Act 1990) (Planning (Listed Buildings and Conservation Areas) Act 1990)	Proposals for basements which require planning permission - design and scale of basement (where not permitted under GPDO).	Impact upon character, appearance and significance of listed building and/ or setting of nearby listed buildings.	Impact on character and appearance of conservation area and area in general	Loss of trees and landscaping.
	Impacts on traffic, road access, parking and servicing for the proposed development when it is completed i.e. basement in front garden which may alter access.	Flood Risk – particularly development within flood zones 2, 3 and areas with Flood Zone 1. Environment Agency consulted where FRAs are required.	Concerns over loss of amenity i.e. overlooking from lightwells within basement developments.	Management of (temporary) construction impacts - conditions appended to planning permissions for control of construction impacts such as hours of construction works and servicing by lorries/ HGVs.
	Planning enforcement - breach of planning conditions or unauthorised works.			
Building Control (Building Regulations)	Approval for building works and issuing Completion Certificates (even where planning permission is not required).		Structural stability of existing property where new basement is proposed (also consulted during planning application and discharge of conditions such as Construction Management Statement).	Structural stability of neighbouring properties (during and post-construction). Also consulted during planning application and discharge of conditions.
Party Wall (Party Wall Act 1996)	Structural stability of neighbouring properties (during and post-construction) (even where planning permission is not required).			
Highways and Licensing	Traffic and highways impacts on surrounding street(s) (consulted during planning application and discharge of conditions such as Construction Management Statement).		Removal of on-street parking during construction - issuing Stopping Up or notices for temporary removal of on-street parking bays.	Obstruction to pavements during construction - issuing skip and hoarding licenses.
Environmental Health (Various Acts and legislation)	Noise from basement plant (also consulted during planning application and discharge of conditions such as Construction Management Statement condition).	Noise during construction (also consulted during planning application and discharge of conditions such as Construction Management Statement condition).	Investigation into complaints about out of hours construction. Liaison with planning enforcement.	Contamination (identified or resulting from excavation).
	Dust from excavation and construction works (also consulted discharge of Construction Management Statement condition/ other related conditions).			
Health and Safety (legislation under Health and Safety Executive)	Public and construction workers safety (note however that current Construction and Design Management Regulations do not require domestic owner occupied projects to be notified to the Health and Safety Executive).			

1.3 ROLES AND RESPONSIBILITIES

The flow chart below illustrates the role of the applicant/developer and the different service lines within the Council, including planning services, and others that are also involved in the basement construction process (LBRuT Basement Developments - Review of Planning Implications, 2014).



1.4 ADVICE FOR NEIGHBOURS

1.4.1 The Council strives to ensure that development takes place with the least disruption to neighbours and local residents. Below are two checklists, one of which is aimed for neighbours and the other one is aimed for those constructing basements, to ensure both parties are aware of each other's concerns and interests.

Checklist for Neighbours

- Ask the owner / developer for a timetable to show what works will be happening and when, and also ask them to notify you when particularly noisy works may occur.
- If the proposal requires planning permission and if you wish to comment on it, follow the guidance in section 3 and only address those issues that can be considered under planning legislation.
- Understand potential temporary impacts, such as construction traffic, parking, noise, vibration or dust (see section 2), and identify what measures are proposed to be minimise those impacts (see section 6 on Construction Management Statement).
- Where relevant, ensure the owner / developer of the basement works instructs and pays for an experienced party wall surveyor (see section 2.4).
- If there are problems during construction, contact the site manager in the first instance and keep a photographic record and log of events.
- Contact the Council's planning enforcement team if the development is not in accordance with the planning permission, or if there is a breach of the conditions set out in the Construction Management Statement (see section 7). Environmental Health officers can also take action if noise, dust and vibration reach unacceptable levels.

Checklist for Developers

- Consult your neighbours prior to submitting the planning application and prior to commencing construction work.
- Liaise closely with your neighbours before and throughout construction and notify them of when work is beginning and how long it will last, when particularly noisy, dusty or vibrational work is being carried out, when skips are delivered, emptied and removed, and any changes in programme.
- Instruct your contractors to arrange noisy, dusty or vibrational work at periods when it least inconveniences neighbours.
- Instruct your contractors to comply with highway licences and traffic orders, adhere to local parking restrictions and not block neighbouring drive and entranceways, not park in residential parking zones without a permit, and not leave caravans or construction materials in roadway over night without a licence.
- Instruct your contractors to sign up to a considerate construction scheme (see section 6).
- Display site manager's contact details and who to contact for any problems and complaints.
- Ensure compliance with approved drawings and planning conditions.
- Party wall agreement: Engage a party wall surveyor experienced in basement developments and give notice to neighbour at least one month before work starts, for all work within 3 or 6 metres of neighbour (see section 2.4).

2. REGULATORY REQUIREMENTS

This section sets out which permissions, permits and other requirements may be required for basement works. It is important to note the different consents and licenses that must be applied for before you start construction works.

2.1 PLANNING PERMISSION

2.1.1 Most basement developments will require planning permission, but there are certain circumstances where it may be 'permitted development' (i.e. where you don't need to submit a planning application). This would usually be where the excavation work is under the footprint of an unlisted building and involves no external alterations. However, permission will always be needed if you live in a flat or listed building.

2.1.2 For detailed advice on permitted development rights, refer to the [Planning Portal \(www.planningportal.gov.uk/permission/\)](http://www.planningportal.gov.uk/permission/) or contact the Council. You can apply for a Certificate of Lawful Development and the Council will make a formal assessment and confirm whether permission is required or not.

2.2 LISTED BUILDING CONSENT

2.2.1 Listed building control, which is in addition to any planning regulations, is a type of planning control, which protects buildings of special architectural or historical interest.

2.2.1 You will need listed building consent before you can alter or extend or demolish a listed building. This applies to works to the inside and the outside of the building, including any works that could affect the setting of the building or its character as a building of special architectural or historical interest.

2.3 BUILDING REGULATIONS

2.3.1 Building Regulations approval will always be required for any basement works. Building Control enforces minimum standards and issues associated with engineering design, structural stability and ensuring construction work undertaken is professional and competent. Before you commence any construction related activities, an application is required to the Council's Building Control department or an 'Approved Inspector'. It is highly recommended that you contact the Council's Building Control service in the first instance to discuss your project.

GUIDANCE FOR NEIGHBOURS

Various permissions, permits and licences are required for basement works. The only part of the process that is subject to public consultation is the planning application, but note that not all basement developments require planning permission.

This section sets out what other permissions and legislation may apply, including highway licences and traffic orders, environmental health (construction noise, dust and vibration).

If you share a party wall with your neighbour who is proposing a basement, you should also familiarise yourself with Building Regulations and the Party Wall Act.

Further advice on Building Regulations is available on the [Planning Portal \(www.planningportal.gov.uk/buildingregulations/\)](http://www.planningportal.gov.uk/buildingregulations/).

2.4 THE PARTY WALL ACT

2.4.1 If you plan to do works to an existing or create a new basement, you will need to consider the Party Wall Act 1996 as it is likely that you will need a Party Wall agreement with your neighbours.

2.4.2 The Party Wall Act is in place to control development on each side of a party wall and maintain its integrity and function. You must give notice to adjoining owners at least one month before works start. The provisions of the Act apply when an adjoining owner is carrying out work in the ground within three metres of the party wall or within six metres if it falls below a line drawn at 45 degrees from the bottom edge of the foundation of the wall.

GUIDANCE FOR NEIGHBOURS

If your neighbour is proposing to undertake works within 3 or 6 metres of the party wall or foundation, they will need a party wall agreement. This is a private matter between neighbours and does not involve the Council.

2.4.3 The Party Wall Act is civil legislation, which means the process is always a private matter between neighbours and the Council cannot get involved in this. The Act can be used by neighbours to address issues where damage occurs and their Party Wall surveyor can request that a sum of money is held in 'escrow' in case of any damage. It is advisable to seek the advice of a structural engineer with experience on party wall matters.

2.4.4 Where problems or disputes arise, Common Law can also provide some protection for occupiers of properties in the vicinity of a development, allowing them to seek injunctive relief or damages through the courts. Neighbours adversely affected by a basement development should take legal advice about their potential remedies.

2.4.5 Further advice on the Party Wall Act for both owners undertaking works and adjoining occupiers can be found on the [Planning Portal \(www.planningportal.gov.uk/buildingregulations/buildingpolicyandlegislation/currentlegislation/partywallact\)](http://www.planningportal.gov.uk/buildingregulations/buildingpolicyandlegislation/currentlegislation/partywallact). In addition, a [booklet \(www.gov.uk/party-wall-etc-act-1996-guidance\)](http://www.gov.uk/party-wall-etc-act-1996-guidance) has been produced by DCLG to explain how the Party Wall etc. Act 1996 may affect someone who either wishes to carry out work covered by the Act i.e. the “Building Owner”, or receives notification under the Act of proposed adjacent work i.e. the “Adjoining Owner”.

2.5 HIGHWAY LICENCES AND TRAFFIC ORDERS

2.5.1 The Highways Act ensures the efficient and safe use of roads and highways. You will need a licence under the Highways Act for any activities on the highway, such as the placing of skips, building materials, the transfer of spoil, erection of hoardings, scaffolding and conveyor belts.

2.5.2 There are restrictions on the number of skips in certain roads, and licences lasts for a maximum of three weeks and only one skip is usually allowed in any one street at a time. Extension of licences is usually declined.

2.5.3 Permission is also required for suspension of parking bays. A daily charge is applied per bay and a limited number of bays may be suspended at any one time. Trader parking permits are required for parking in residential parking zones.

2.5.4 Applications for licences that require a temporary traffic order must be submitted a minimum of six weeks in advance as consultation is required. Traffic orders include closure of pavements, road

space and bus stops (very high Transport for London charge). Applications are considered on a case by case basis.

2.5.5 For most streets you should contact the Council as the Highway Authority but on Strategic roads you need to obtain relevant permissions from [Transport for London \(www.tfl.gov.uk/info-for/urban-planning-and-construction/highway-licences\)](http://www.tfl.gov.uk/info-for/urban-planning-and-construction/highway-licences).

2.5.6 A condition survey of the public pavement is requested before development commences. Should damage be identified that we can attribute to the development we will always undertake to make full repairs and pass costs on. The Council's highways teams may hold a deposit where there is an application for a structure on the highway associated with basement works.

2.6 ENVIRONMENTAL HEALTH: NOISE, VIBRATION, DUST, CONTAMINATED LAND, LIVING STANDARDS

2.6.1 Environmental Health enforces issues related to the Environmental Protection Act 1990 and Control of Pollution Act 1974 (such as noise and vibration). The provisions of the Control of Pollution Act 1974 are the principal mechanisms by which construction noise and vibration is controlled. Section 60 of the Control of Pollution Act 1974 gives the Council authority to serve a notice, prior to, or following the commencement of works to apply conditions to restrict the hours of work, noise and vibration levels emitted from the site and for Best Practicable means to be applied. Section 61 of the Control of Pollution Act 1974 allows those intending to carry out complex or lengthy works to apply for prior consent from the Council. Guidance is given in British Standard BS 5228: 2009 Parts 1 Noise and 2 Vibration entitled ‘Noise control on constructions and open sites’

2.6.2 Piling and other noise and vibration generating work may be restricted by the above legislation.

GUIDANCE FOR NEIGHBOURS

A checklist can be found after section 2.8 for the various licences, orders and permits that are required for the use or closure of pavements, streets or parking spaces, as well as a condition survey of the pavement.

GUIDANCE FOR NEIGHBOURS

If your neighbour is planning a basement development, the guidance encourages them to provide a timetable to show what works will be happening and when, how delivery, removal and parking will be managed, and to notify you of particularly noisy or disruptive works, dust or vibrations, or roadway disruptions. Also see section 6.

The Construction Management Statement should include detail of proposed working hours, the type of piling and relevant noise and vibration control measures that will be applied. It is advisable to communicate and consult with neighbours and other interested parties before work commences. The party wall act requires minimum one month advance notice with neighbour.

2.6.3 In some situations the control of dust in the construction phase can be dealt with by the Environmental Protection Act 1990. However the statutory nuisance regime, does not deal with harm to property; a statutory nuisance must interfere with personal comfort in a manner that affects their wellbeing. For example, dust affecting cars would not be nuisance, but the same dust in a person's eyes or hair would interfere with personal comfort (*Wivenhoe Port Ltd v Colchester Borough Council* 1985).

2.6.4 Under the EPA Part 1, Local Authority Pollution Control (LAPC) for processes (Schedule B) which are less polluting than Schedule A processes but still require authorisation. Local Authorities are responsible for regulating these processes for the purpose of minimising atmospheric pollution such processes include concrete crushers. The Mayor of London has also published Supplementary Planning Guidance on [The Control of Dust and Emissions during Construction and Demolition \(2014\)](http://www.london.gov.uk/priorities/planning/publications/the-control-of-dust-and-emissions-during-construction-and-demolition-2014) (www.london.gov.uk/priorities/planning/publications/the-control-of-dust-and-emissions-during-construction-and-demolition-2014).

2.6.5 Environmental Health is also responsible for issues related to contamination. Where development involves excavation the applicant should consider if there could be any source of contamination, including oil storage tanks.

2.6.6 Habitable accommodation must meet fitness standards, including those set out in the Housing Health and Safety Rating System (HHSRS) under the Housing Act 2004. Advice on these and other standards for use of basement areas as living space e.g. room height (min 1.9m), ventilation levels, avoiding dampness etc. can be obtained from the Environmental Health. Where it does not meet these standards, the dwelling may be considered for action under the Housing Act 2004 and Environmental Health would have the power to require works to improve natural light and the view to the affected rooms (which may require planning permission) or alternatively, where this is not practicable, to prohibit the use of those rooms.

2.7 FREEHOLDER PERMISSION

2.7.1 If you are not the freeholder of the property, then the freeholder's permission will also be required. You should always contact the freeholder prior to submitting a planning application and ensure you have complied with their requirements before submitting an application.

2.8 UTILITIES, NETWORK RAIL AND TRANSPORT FOR LONDON PERMISSIONS

2.8.1 You must get [Thames Water's agreement \(www.thameswater.co.uk/developers/592.htm\)](http://www.thameswater.co.uk/developers/592.htm) to carry out any building work over or within 3 metres of a public sewer to ensure that no damage is caused to it or restrictions made to the way sewers are used or maintained.

2.8.2 It will also be the applicant's responsibility to ascertain whether any existing underground services including electric, gas or telecommunications services will be affected by works and notify utility companies and relevant parties of any impacts.

2.8.3 Network Rail and Transport for London should be contacted to confirm that works will not interfere with any of their infrastructure.

Highway Licences and Traffic Orders Checklist

Obtained from the Council if not specified. Fees and charges apply. See also section 2.5.

- **Scaffolding Licence** – If need to place on pavement.
- **Hoarding Licence** – Required if fixed to public road, pavement, grass verge or lane.
- **Skip Licence** – Maximum three weeks; usually only one skip licence issued at a time in one street; extensions usually declined.
- **Building Materials Licence** – If need to leave on highway, usually last for [one] month.
- **Parking Suspension** – Charged per day per space, maximum two weeks.
- **Temporary Traffic Orders** – Minimum six weeks advanced notice as consultation required:
 - **Pavement** – Declined if no alternative pavement/route
 - **Roadspace** – Issued only if absolutely necessary
 - **Suspension of bus stop** – Very high TfL charge
- **Trader Parking Permits** – Required for parking in residential parking zones.
- A Condition Survey of the pavement is required before work commences.

3. PLANNING REQUIREMENTS

The impacts on the built and natural environment will vary depending on the size, scale and design of your basement. Generally, the design and size of a basement have to take account of the size and design of existing buildings, gardens, and external spaces, existing trees, biodiversity and rain water management. Listed buildings, conservation areas, building of townscape merit and the basement's living environment require special attention.

3.1 OVER-DEVELOPMENT

3.1.1 Just as overly large extensions above ground level can dominate a building and contribute to the over-development of a site, an extension below ground can also be of an inappropriate scale. With basement developments, the only visual features may be lightwells and skylights, with the bulk of the development concealed wholly underground and away from any public view.

3.2 TREES AND ROOT PROTECTION

3.2.1 The presence of tree and tree roots is an additional factor that may mean new or expanded basements would constitute over-development. This can include harm caused to any trees on or adjoining the site, street trees and the required root protection zone of the trees, where the development would restrict future planting and mature development of trees typical to the area, and any impact to the water environment.

GUIDANCE FOR NEIGHBOURS

If a planning application is required, the Council can only address issues known as 'material considerations'. Therefore, when commenting on a basement application, you need to focus on:

- design and appearance
- impact on amenity
- trees and landscaping
- traffic, access, parking and servicing (of the completed development)
- flood risk, ground water, ground conditions and land instability
- impacts on a heritage asset

See also the Council's [House Extensions and External Alteration SPD](http://www.richmond.gov.uk/supplementary_planning_documents_and_guidance.htm) (www.richmond.gov.uk/supplementary_planning_documents_and_guidance.htm) for more information and guidance on basements, lightwells and skylights.

3.3 GARDEN AND BIODIVERSITY

3.3.1 Proposals for basement development that take up more than half the front and / or half the rear garden of a property are unlikely to be acceptable. The Council will seek to ensure that gardens maintain their biodiversity function for flora and fauna, and that they are capable of continuing to contribute to the landscape character of an area, so that this can be preserved and enhanced.

3.4 RAINWATER AND SUSTAINABLE DRAINAGE SYSTEMS

3.4.1 The basement development should provide an appropriate proportion of planted material to allow for rainwater to be absorbed and/or to compensate for the loss of biodiversity caused by the development. A minimum amount of soil has to be provided above a basement that extends beyond the footprint of the building, and this layer of soil has to enable and allow for garden planting and contribute to sustainable drainage (SuDS).

3.5 BUILT HERITAGE

3.5.1 If the building is listed, listed building consent and a structural impact statement are always required. Special regard to the impacts of lightwells and other above ground structures and installations as well as planting will always be taken into account, but may be especially restrictive in conservation areas and adjacent to listed buildings and structures.

3.5.2 In the case of listed buildings and adjacent to these, applicants will be required to demonstrate how their proposed basement and underground development preserves the existing fabric, structural integrity, layout, interrelationships and hierarchy of spaces, and any features that are architecturally or historically important.

GUIDANCE FOR NEIGHBOURS

In determining a planning application, the Council cannot take account of:

- effects/loss of property values
- party wall, land or boundary disputes
- nuisance from construction works or number of construction projects going on at the same time
- any issues that are covered in other legislation and regimes (such as Building Regulations)

3.5.3 Listed buildings and buildings of townscape merit form an intrinsic element of the character of conservation areas. Basement development which harms the special architectural and historic interest of a listed building is also likely to fail to preserve or enhance the character or appearance of the conservation area in which it is located.

3.6 BASEMENTS AS LIVING ACCOMMODATION

3.6.1 The Local Plan and the [Residential Development Standards SPD \(www.richmond.gov.uk/supplementary_planning_documents_and_guidance.htm\)](http://www.richmond.gov.uk/supplementary_planning_documents_and_guidance.htm) seek to ensure a high quality living environment with a good standard of sunlight/daylight, outlook and privacy. [The Mayor of London's Housing Supplementary Planning Guidance \(www.london.gov.uk/priorities/planning/publications/housing-supplementary-planning-guidance\)](http://www.london.gov.uk/priorities/planning/publications/housing-supplementary-planning-guidance) (2012) provides a range of standards, including minimum space standards for internal accommodation and garden space.

3.7 PLANNING APPLICATIONS AND MATERIAL CONSIDERATIONS

3.7.1 If a planning application for a basement development is submitted, the Council must address only the issues which can be considered under planning legislation, which are known as 'material considerations'. Issues that are covered in other legislation and regimes (such as Building Regulations) are not material planning considerations. In general terms this means focusing on the appearance and uses of buildings and land.

3.7.2 Planning considerations in relation to basements are as follows:

- The design and appearance of the proposal;
- The impact on amenity, such as permanent noise generated by plant and machinery;
- Issues regarding trees and landscaping;
- The impact on traffic, road access, parking and servicing (of the completed development);

- Whether flood risk, ground water, ground conditions and land instability mean the development is not a suitable use of the site (serving the completed development);
- The impact on the significance of a heritage asset.

3.7.3 Government legislation says that we cannot consider non-planning issues such:

- A loss of property value,
- Party wall, land and boundary disputes,
- The applicant's personal circumstances or identity,
- The number of different construction projects going on at the same time or
- Issues controlled by other legislation and regimes such as building regulations, including means of escape and structural integrity during the course of works.

3.7.4 Whilst the Council cannot refuse planning permission because construction works may cause noise and disturbance, it can request a Construction Management Statement and apply conditions to reduce their impact, for example restricting hours of work specific to basement construction. The Council as a whole also has a wide range of powers to take enforcement action on other issues.

GUIDANCE FOR NEIGHBOURS

Noise and disturbance caused by construction works is not a valid reason for refusing a planning application.

The Council will however request a Construction Management Statement to manage and reduce construction impacts.

Required to be submitted with all basement planning applications *

- Application Form
- Design & Access Statement if over 100m² in conservation area or listed building
- Fee
- Plans *
- Ownership Certificate *
- Construction Management Statement *

* See the [Council's Local Validation Checklist \(www.richmond.gov.uk/make_a_planning_application.htm\)](http://www.richmond.gov.uk/make_a_planning_application.htm) for thresholds and further information.

Required to be submitted with basement planning applications depending on location, size and site constraints *

- Archaeological Statement if in an archaeological priority area
- Community Infrastructure Levy Liability Form for all developments
- Energy Report and Sustainable Construction Checklist if creating 1 dwelling unit or more, and for extensions of more than 100m²
- Flood Risk Assessment for all developments within flood zones 2 and 3; and within flood zone 1 where there is evidence of a risk from surface water, groundwater or sewer flooding
- Heritage Statement if affecting a heritage asset (e.g. listed building, building of townscape merit, conservation area)
- Land Contamination Assessment if within 50m or a potential contaminated land site
- Residential Standards Statement if creating 1 unit or more outlining room and external amenity sizes
- Landscaping Scheme if loss of trees
- Tree Survey & Constraints Plan; Arboricultural Impact Assessment & Arboricultural Method Statement if there are trees on or adjacent to the site
- Structural Impact Assessment if adding basements, to or adjacent to Listed Buildings or lowering floor levels of Listed Buildings

* See the [Council's Local Validation Checklist \(www.richmond.gov.uk/make_a_planning_application.htm\)](http://www.richmond.gov.uk/make_a_planning_application.htm) for thresholds and further information.

4. GROUNDWATER AND FLOODING

- 4.1** All basement developments should take into account ground conditions, land instability, flooding and drainage. Adequate site investigation information, prepared by a competent person, should be provided to demonstrate that these impacts have been understood. Building Control and associated Regulations determine whether the detailed design of buildings and their foundations will allow the basement to be constructed and used safely.
- 4.2** Although the design and construction of basement developments can be challenging, it is likely to be feasible in most locations provided that suitable structural and technical assessments are undertaken, that the basement is designed and constructed in accordance with current industry guidance, and that the works are carried out by experienced and qualified engineers and contractors.

A. GROUNDWATER

- 4.3** Basements constructed just above or below the groundwater table could act as a barrier in the ground, thereby diverting groundwater flow around them. A basement constructed below the groundwater table may locally obstruct the natural flow, and depending on the geology and topography, this could result in a local rise in the groundwater level. However, for small isolated basements this impact is likely to be very localised because a basement has a small building volume in a large expanse of aquifer. Therefore, groundwater will still be able to flow around and potentially below the basement, and thereby it would not affect the overall groundwater table. In general, a small basement is unlikely to have a significant effect on the groundwater regime of a local area.
- 4.4** A flood risk assessment that specifically considers groundwater may be required as part of a planning application where evidence of groundwater flooding exists.

B. LAND STABILITY

- 4.5** An important factor in relation to land stability is the local topography. As a rule of thumb, slopes at steeper angles than 8 degrees to the horizontal and comprising soils of the London Clay and the Claygate Member are potentially unstable.

However, most of the borough has ground slopes shallower than 8 degrees. Locally steeper slopes are only present along the western edge of Richmond Park, of which only the western part of Richmond Hill is used for residential development. Changes to the groundwater regime, excavation into weak sidelong ground, and removal of vegetation as part of basement construction can affect the inherent stability of the ground and that can increase the risk of large scale ground instability such as landslide.

C. FLOODING AND DRAINAGE

- 4.6** National and local policies require development to be steered away from areas at highest risk of flooding and, where development is necessary, it should be made safe without increasing flood risk elsewhere.
- 4.7** If a basement is proposed in an area at risk of flooding, a site-specific Flood Risk Assessment should be submitted with a planning application. It is important that the design and construction of a basement takes account of all sources of flooding, including tidal, fluvial, groundwater, surface water and sewer flooding, to ensure that the basement itself is safe from flooding and water ingress (through the base or walls or water inundation through overtopping of property thresholds), and that the basement does not increase flood risk elsewhere. In addition, basements should have adequate mitigation measures such as non-return valves or pumped sewage devices to prevent back-flows from the system during sewer flooding.

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The information on ground water, land stability, flooding and drainage outlined in this section may be of relevance to you, depending on where you live in the borough.

If you are particularly concerned about groundwater or flooding, further information and technical advice can be found in Appendix D: Ground and Groundwater and Appendix E: Flood and Floodwater of the [LBRuT Basement Developments - Review of Planning Implications](http://www.richmond.gov.uk/local_development_framework_research) (www.richmond.gov.uk/local_development_framework_research).

5. STRUCTURAL IMPACT ASSESSMENTS

- 5.1** A Structural Impact Assessment (SIA) is required for basements under or adjacent to Listed Buildings, and it must be prepared and signed off by a Chartered Civil Engineer (MICE) or Structural Engineer (MI Struct.E).
- 5.2** We recommend that a structural engineer with expertise in historic buildings (CARE accredited) is appointed for works to or adjacent to a listed building or a building of townscape merit.
- 5.3** The SIA should be submitted in the form of a report and supporting drawings. Written confirmation that the applicant will pay for the SIA to be independently assessed will be required. The level of content required will depend on the site. The following list is to assist in the preparation of your SIA:
- A.** A thorough desk study to include the site history, age of the property, site survey, geology, historic river courses and underground infrastructure, including utilities services, drains and tunnels. This should also identify other basement developments in the area, so that cumulative effects can be considered.
 - B.** An appraisal of the existing structure including drawings to show the arrangement of the existing structures. The appraisal should identify previous alterations and any obvious defects. It should also assess the condition and location of the building with adjoining buildings. This should include opening up works to investigate the existing structure, which should be summarised on a set of drawings.
 - C.** A site investigation which can be demonstrated to be relevant to the site together with trial pits to show the existing foundations and the material they are founded on, for all walls which may be impacted by the proposals. If groundwater is present, the levels should be monitored for a period of time.
 - D.** Details of the engineering design which should be advanced to detailed proposals stage. Relevant drawings should be provided to show how the designers have addressed the following:
 - ground conditions and groundwater
 - existing trees and infrastructure
 - drainage
 - flooding
 - vertical and horizontal loading
 - structural engineering general arrangement and details; drawing showing underpinning, piled wall etc.
 - E.** An analysis of the Upper Aquifer (when it exists) and how the basement may impact on any groundwater flow.
 - F.** An assessment of ground movements expected and how these will affect adjoining or adjacent properties. This needs to include both short term and long term effects. The design and construction should aim to limit damage to all buildings to a maximum of Category 2 as set out in CIRIA Report 580.
 - G.** Details of sequences of construction and temporary propping to demonstrate how the basement can be built to prevent movements exceeding those predicted. It should show how the horizontal and vertical loads are supported and balanced at all stages of construction and consider the interaction between permanent works and temporary works.

GUIDANCE FOR NEIGHBOURS

A Structural Impact Assessment is required for basements under or adjacent to a listed building.

You may need to engage a Party Wall Surveyor and the owner undertaking the development is normally responsible for your costs of such engagement (see section 2.4).

6. MANAGING LOCAL AMENITY DURING CONSTRUCTION

6.1 A Construction Management Statement is required to be submitted with all planning applications for basement works. It seeks to mitigate or maintain the amenity of neighbouring residents during construction, as well as guide the use of the highway and minimise noise and air pollution.

CONSTRUCTION MANAGEMENT STATEMENT

6.2 The Construction Management Statement (CMS) should be site-specific and include sufficient information to demonstrate that you have followed the guidance in this section including, as a minimum, the following details (where appropriate):

1. The size, number, routing and manoeuvring tracking of construction vehicles to and from the site, and holding areas for these on/off site
2. Site layout plan showing manoeuvring tracks for vehicles accessing the site to allow these to turn and exit in forward gear;
3. Details and location of parking for site operatives and visitor vehicles (including measures taken to ensure satisfactory access and movement for existing occupiers of neighbouring properties during construction);
4. Details and location where plant and materials will be loaded and unloaded;
5. Details and location where plant and materials used in constructing the development will be stored, and the location of skips on the highway if required
6. Details of any necessary suspension of pavement, roadspace, bus stops and/or parking bays;
7. Details where security hoardings (including decorative displays and facilities for public viewing) will be installed, and the maintenance of such
8. Details of any wheel washing facilities;
9. Details of a scheme for recycling/disposing of waste resulting from demolition and construction works (including excavation, location and emptying of skips);
10. Details of measures that will be applied to control the emission of noise, vibration and dust including working hours. This should follow Best Practice detailed within BS5288:2009 Code of Practice for

- Noise and Vibration Control on Construction and Open Sites;
11. Details of any highway licenses and traffic orders that may be required (such as for licences for any structures / materials on the highway or pavement; or suspensions to allow the routing of construction vehicles to the site);
 12. Details of the phasing programming and timing of works;
 13. Where applicable, the Construction Management Statement should be written in conjunction with the Arboricultural Method Statement, and in accordance with British Standard BS5837:2012 'Trees in relation to design, demolition and construction – recommendations', in particular section 5.5, 6.1, 6.2, 6.3 and 7;
 14. A construction programme including a 24 hour emergency contact number;
 15. See also TfL guidance on Construction Logistics Plans.
- 6.3** Where appropriate, details such as hours of work may be assured through planning condition and, in some instances, a more detailed Construction Management Statement may be required where adequate detail is not available at planning application stage.
- 6.4** Developers of basements are encouraged to sign up to a [Considerate Construction Scheme \(www.ccscheme.org.uk\)](http://www.ccscheme.org.uk).

QUESTIONS TO INFORM BEST PRACTICE

6.5 The following list of questions has been prepared to help applicants understand some of the main issues they will need to consider in relation to construction management and may assist in the preparation of any construction management statement. This list is not exhaustive and is provided for guidance purposes only, to help promote good practice.

GUIDANCE FOR NEIGHBOURS

If your neighbour is planning a basement, the guidance encourages them to provide a timetable to show what works will be happening and when, how delivery, removal and parking will be managed, and to notify you of particularly noisy or disruptive works, dust or vibrations, or roadway disruptions. This should all be set out in a Construction Management Statement.

A. Management Arrangements, Communication and Neighbour Liaison

Who will have responsibility for management of the site and communications with neighbours and the council? Are they aware of the range of legislation they must comply with and who they must contact in relation to different issues? Have you consulted neighbours and residents groups in drawing up this plan and taken on board any issues raised?

B. Other Codes, Freeholder Permissions and Requirements

Who is the freeholder? What other codes, guidance or good practice will you adhere to?

C. Timetable and Programming of Works

How long do you estimate works will last and when will noisy works take place? Are there other schemes proposed in the vicinity at the same time and, if so, can you work with them to minimise disruption?

D. Working Hours

What are the proposed days and hours of site operation? Have neighbours been informed and consulted?

E. Storage of Materials and Equipment and Use of the Highway

Where will any plant, equipment and materials needed be stored on site? Will any structures or equipment be located on the highway? Will parking bays need to be suspended or waiting/ loading restrictions put in place? Have licences, trader parking permits and temporary traffic orders been applied for well in advance?

F. Access, Parking, Traffic Management and Deliveries

Has the impact on the surrounding highway network been considered? How will access to the site be managed to safeguard existing parking, rights of way and public safety? How will deliveries and collections be managed to minimise congestion and prevent obstructions to the highway? Are roads en route suitable for the size of vehicles to be used? Is a trial of access with the vehicle along local roads necessary? How will you protect neighbours and pedestrians from the construction works, including vulnerable users? Are routes before 9 am or between 2:30 and 3:30 pm to schools, near schools or past schools affected?

G. Handling Materials and Waste

What arrangements have you made for recycling and transportation of construction waste? Has a licence been applied for?

H. Managing Environmental Impacts, Noise, Vibration and Dust

What steps will you take to reduce noise emission and prevent nuisance from dust and smoke when carrying out building work? Will vehicle wheel wash facilities be provided and where will they be sited? What best practice measures will you implement to protect the amenity of neighbouring occupiers? Do you adhere to the Mayor of London Supplementary planning guidance on Control of dust and emissions during construction and demolition? Type of piling to be used: Low Vibration methods such as Continuous Flight Augured or Hydraulic piling are preferred methods. Percussive piling is generally not appropriate.

GUIDANCE FOR NEIGHBOURS

Once work starts, contact the builder or the site manager if any problems arise and keep a photographic record and log of events.

- The Council's planning enforcement team can help where works are not in accordance with the planning permission.
- Environmental Health officers can take action if noise, dust or vibration reaches unacceptable levels (see section 2.6).
- If you have concerns about parking, pavement or roadway obstructions, contact Highway & Transport (see section 2.5).

7. EXAMPLES OF PLANNING CONDITIONS AND INFORMATIVES

CONDITIONS

7.1 In certain instances it may be necessary to attach planning conditions to planning permissions, where these meet the six tests of the National Planning Policy Framework:

- Necessary,
- Relevant to planning and
- To the development to be permitted,
- Enforceable,
- Precise, and
- Reasonable in all other respects.

GUIDANCE FOR NEIGHBOURS

See section 3 for further information on planning applications and material considerations.

7.2 Typical conditions for developments incorporating basements are outlined below. However, the list is not exhaustive, and the wording is not fixed, whereby the use and content of the conditions will be subject to the characteristics of the site and/or the proposal. In addition, informatives are also often secured on decisions providing advice to the applicants, and samples of these are outlined below.

A. CONSTRUCTION MANAGEMENT STATEMENT

7.3 No development shall take place, including any works of demolition, until a Construction Management Statement (to include any demolition works) has been submitted to and approved in writing by the Local Planning Authority. The approved plan shall be adhered to throughout the construction period. The Statement shall provide for:

1. The size, number, routing and manoeuvring tracking of construction vehicles to and from the site, and holding areas for these on/off site
2. Site layout plan showing manoeuvring tracks for vehicles accessing the site to allow these to turn and exit in forward gear;
3. Details and location of parking for site operatives and visitor vehicles (including measures taken

to ensure satisfactory access and movement for existing occupiers of neighbouring properties during construction);

4. Details and location where plant and materials will be loaded and unloaded;
5. Details and location where plant and materials used in constructing the development will be stored, and the location of skips on the highway if required
6. Details of any necessary suspension of pavement, roadspace, bus stops and/or parking bays;
7. Details where security hoardings (including decorative displays and facilities for public viewing) will be installed, and the maintenance of such
8. Details of any wheel washing facilities;
9. Details of a scheme for recycling/disposing of waste resulting from demolition and construction works (including excavation, location and emptying of skips);
10. Details of measures that will be applied to control the emission of noise, vibration and dust including working hours. This should follow Best Practice detailed within BS5288:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites;
11. Details of any highway licenses and traffic orders that may be required (such as for licences for any structures / materials on the highway or pavement; or suspensions to allow the routing of construction vehicles to the site);
12. Details of the phasing programming and timing of works;
13. Where applicable, the Construction Management Statement should be written in conjunction with the Arboricultural Method Statement, and in accordance with British Statement 5837:2012 'Trees in relation to design, demolition and construction – recommendations', in particular section 5.5, 6.1, 6.2, 6.3 and 7;
14. A construction programme including a 24 hour emergency contact number;
15. See also TfL guidance on Construction Logistics Plans.

Reason: In the interests of highway and pedestrian safety together with the amenity of the area.

B. FOUNDATIONS

7.4 No material start shall take place on the development hereby approved until written notice of the intention to commence work has been sent to the Development Control department of the Council. Such notice shall be sent to

that department not less than 21 days prior to a material start on the development and shall give details of the intended method of constructing the foundations, including method and equipment for piling, if applicable. (Informative 'Details of Piling' on this notice gives advice on foundation construction that minimises nuisance to neighbours).

Reason: To ensure that the local planning authority has sufficient notice of the commencement of work and the methods of foundation construction to enable measures to be taken, if appropriate, to protect the amenities of neighbouring occupiers

C. BASEMENT ACCOMMODATION

7.5 The basement extension hereby permitted shall not be used as sleeping accommodation.

Reason: The building is located within a designated flood plain where basement sleeping accommodation would increase the risk of flooding to inhabitants.

D. STRUCTURAL METHOD STATEMENT:

7.6 The development hereby approved shall not be implemented other than in accordance with the approved Structural Method Statement, unless otherwise previously agreed in writing with the Local Planning Authority.

Reason: To safeguard the architectural and historic integrity of this heritage asset.

E. HIGHWAY CONDITION SURVEY

7.7 (a) Prior to commencement: Not less than 21 days prior to the commencement of development hereby approved, written notice of the start date for the commencement of development shall be sent to the Local Planning Authority.

(b) Prior to occupation: Not less than 21 days prior to the first occupation of the basement hereby approved, written notice of the occupation date shall be submitted to the Local Planning Authority.

Reason: To allow the Council to undertake a condition survey prior and post development of the public pavement and highway.

F. DEVELOPMENT WITHIN 1M OF THE PUBLIC HIGHWAY

7.8 No excavation shall take place within 1m of a boundary with any public highway / footway, unless a structural report and accompanying drawings demonstrating how the scheme will allow for the structural retention of the public highway and footway adjacent to the site for the duration of the development works and thereafter, has been submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with the approved scheme.

Reason: To safeguard the structural integrity of the public highway and footway.

INFORMATIVES

G. BACK FLOW

7.9 Thames Water Utilities Limited requests that the Applicant should incorporate within their proposal, protection to property, for example non-return valve (or other suitable device) to avoid the risk of backflow at a later date, on the assumption that the sewerage network may surcharge to ground level during storm conditions.

H. SURFACE WATER DRAINAGE

7.10 With regard to surface water drainage it is the responsibility of a developer to make proper provision for drainage to ground, water courses or a suitable sewer. In respect of surface water it is recommended that the applicant should ensure that storm flows are attenuated or regulated into the receiving public network through on or off site storage. When it is proposed to connect to a combined public sewer, the site drainage should be separate and combined at the final manhole nearest the boundary. Connections are not permitted for the removal of groundwater. Where the developer proposes to discharge to a public sewer, prior approval from Thames Water Developer Services will be required. They can be contacted on 0800 009 3921.

I. GROUNDWATER

7.11 Where a developer proposes to discharge groundwater into a public sewer, a groundwater discharge permit will be required. Groundwater discharges typically result from construction site dewatering, deep excavations, basement infiltration, borehole installation, testing and site

remediation. Groundwater permit enquiries should be directed to Thames Water's Risk Management Team by telephoning 020 8507 4890 or by emailing wwqriskmanagement@thameswater.co.uk. Application forms should be completed on line via www.thameswater.co.uk/wastewaterquality. Any discharge made without a permit is deemed illegal and may result in prosecution under the provisions of the Water Industry Act 1991.

J. DETAILS OF PILING

7.12 The attention of the applicant is drawn to the requirements of section 60 of the Control of Pollution Act 1974 in respect of the minimisation of noise and vibration on construction and demolition sites. Application, under section 61 of the Act for prior consent to the works, can be made to the Environmental Health Department. Where developments include foundations works require piling operations it is important to limit the amount of noise and vibration that may affect local residents.

7.13 There are a number of different piling methods suitable for differing circumstances. Guidance is contained in British Standard BS 5228 Noise control on Construction and Open Sites - Part 4: Code of Practice for noise and vibration control applicable to piling operations.

7.14 Where there is a risk of disturbance being caused from piling operations then the council under section 60 Control of Pollution Act 1974 can require Best Practicable Means (BPM) to be carried out. This may entail limiting the type of piling operation that can be carried out.

7.15 The types of piling operations which are more suitable for sensitive development in terms of noise and vibration impact are;

- Hydraulic Piling
- Auger Piling
- Diaphragm Walling

K. FLOOD RESILIENCE MEASURES

7.16 The applicant is advised to consider flood resilience measures as recommended by the Environment Agency. Details of any flood proofing / resilience and resistance techniques, to be included in accordance with 'Improving the flood performance of new buildings' CLG (2007).

L. CONSIDERATE CONSTRUCTORS SCHEME

7.17 The applicants are encouraged to become members of the Considerate Constructors Scheme. Further details can be found on: www.ccscheme.org.uk/

M. HIGHWAY CONDITION INFORMATIVE

7.18 Should damage be identified that the Council can attribute to the development hereby approved; the Council will undertake to make full repairs and pass cost on the developers.

8. FURTHER INFORMATION AND CONTACTS

LONDON BOROUGH OF RICHMOND UPON THAMES – BASEMENT RESEARCH

[LBRuT Basement Developments - Review of Planning Implications](#) (www.richmond.gov.uk/local_development_framework_research), carried out by Peter Brett Associates (2014); including technical notes on:

- Appendix D: Ground and groundwater conditions,
- Appendix E: Flood and floodwater

STRUCTURAL AND CONSTRUCTION ISSUES

- [BRE Digest 250 Assessment of Damage in Low-Rise Buildings](#); www.brebookshop.com/details.jsp?id=745
- [CIRIA C580 Embedded Retaining Walls: Guidance for Economic Design](#); www.ciria.org
- [CLG Guidance](#) on Party Wall Etc. Act 1996; www.gov.uk/party-wall-etc-act-1996-guidance
- [Considerate Contractors' Scheme](#); www.ccscheme.org.uk

- [ASUC Guidelines](#) on Safe and Efficient Basement Construction directly below or near to existing structures; www.asuc.org.uk/specialist_underpinning_subsidence_publications.html
- Mayor of London (2014) [Control of dust and emission during construction and demolition SPG](#); www.london.gov.uk/priorities/planning/publications/the-control-of-dust-and-emissions-during-construction-and

FLOODING, SUSTAINABLE DESIGN AND DRAINAGE

- [LBRuT Delivering SuDS in Richmond](#), Planning Guidance Document (2015); www.richmond.gov.uk/sustainable_drainage_systems.pdf
- [Sustainable Drainage 'Susdrain'](#); www.susdrain.org
- Mayor of London (2014) [Sustainable Design and Construction SPG](#); www.london.gov.uk/priorities/planning/consultations/draft-sustainable-design-and-construction
- [A Natural Choice: Natural Ventilation](#); www.carbontrust.com/media/81365/ctg048-a-natural-choice-natural-ventilation.pdf

LOCAL BOROUGH CONTACTS

Council Unit	Issues Considered	Contact
Planning Policy	Queries related to planning policy & guidance	Planning Policy & Design Ldf@richmond.gov.uk Tel 020 8891 7117
Development Control	Queries related to when planning application is needed and pre-application advice	Development Control planning@richmond.gov.uk Tel 020 8891 1411
Planning Enforcement	Reports of unauthorised development or breach of planning permission or conditions	Development Control PlanningEnforcement@richmond.gov.uk
Building Control	Queries related to building control process Reports of dangerous structures Non-compliance with building regulations	buildingcontrol@richmond.gov.uk Tel 020 8891 7117
Highways & Transport	Works to highways, licensing of skips, temporary structures license (hoarding, scaffolding etc.) Parking suspensions, Obstructions on the Highway (See Transport for London in relation to Red Routes)	highwaysandtransport@richmond.gov.uk Tel 020 8891 1411
Environmental Health	Enforcement and Complaints related to noise, vibration and dust from construction works Contaminated land Advice on enforcement of housing standards and public health issues	Consumer Protection Tel 020 8891 7117 commercialeh@richmond.gov.uk

OTHER USEFUL CONTACTS

Organisation	Issues Considered	Contact
Structural/ Civil Engineers: Professional Bodies	Advice on finding a engineer and party wall surveyor	Institution of Structural Engineers (IstrucE) www.findanengineer.com/index.asp Institution of Civil Engineers (ICE) www.ice.org.uk/
Conservation Accreditation Register for Engineers	A list of engineers accredited in building conservation	Conservation Accreditation Register of Engineers - CARE www.careregister.org.uk/
Association of Structural Underpinning Contractors (ASUC)	For lists of contractors with specialist expertise in underpinning and subsidence repair techniques, engineered foundation solutions and retrofit basement construction.	www.asuc.org.uk/
Association of Geotechnical Specialists (AGS)	For specialist advice on geotechnical and geoenvironmental engineering and geology.	www.ags.org.uk
Considerate Constructors Scheme	Information on the nationally recognised Considerate Constructors Scheme	Tel 0800 783 1423 Email siteenquiries@ccscheme.org.uk www.ccscheme.org.uk
Health and Safety Executive	Information and advice on managing sites safely including developer's responsibilities and duties in relation to health and safety.	Guidance on Construction www.hse.gov.uk/construction/
Transport for London	Advice on works affecting roads managed by TfL.	Highways license for Red Routes. www.tfl.gov.uk/info-for/urban-planning-and-construction/highway-licences
Historic England	Advice on archaeological potential of sites.	London@HistoricEngland.org.uk
Thames Water	Advice on sewers and drainage.	020 7973 3731 or 020 7973 3779 www.thameswater.co.uk/developers/592.htm
Network Rail	Advice on development above or near to Railway infrastructure.	Network Rail National Helpline 08457 114141

If you need this document in
Braille, large print, audio tape,
or another language,
please contact us on
020 88917117 or
minicom 020 8831 6001

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