The Royal Borough of Kensington and Chelsea

SEQUENTIAL TEST

August 2009

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1. Introduction

1.1. Purpose of the report

This report outlines the findings of the sequential test produced by the Royal Borough of Kensington and Chelsea to meet requirements of Planning Policy Statement 25 (PPS25).

The Sequential Test is a decision-making tool designed to ensure that sites at little or no risk of flooding are developed in preference to areas at higher risk. Within each Flood Zone, new development should be directed first to sites at the lowest probability of flooding. Local Planning Authorities should make the most appropriate use of land to minimise flood risk, substituting land uses so that the most vulnerable development is located in the lowest risk areas and trying to reduce flood risks. Evidence for the Sequential Test should be provided through the Sustainability Appraisal process and other relevant documents.

1.2. The Royal Borough of Kensington and Chelsea potential flood risk.

The Borough falls mainly on Flood Zone 1 (low probability of tidal and river flooding). However, there are areas of Flood Zones 2 and 3 (medium and high probability respectively). Flood Zone 3 covers a small proportion of the Borough and it consist mainly of the areas adjacent to the Cheyne Walk and the Chelsea Embankment with wider extents around the Royal Hospital and Gardens, Ashburnham Road, Cremorne Road, Chelsea Manor Street and Christchurch Street. Flood Zone 2 is mostly the same as Flood Zone 3 with few areas where it extends a little further including Westfield Park, Chelsea Manor Street and Christchurch Street.

An SFRA was produced in February 2008, which provided the basis for applying the sequential test. It identified surface water flooding as the main source of flooding in the Borough. The last flooding event on the 20th July 2007 left a large number of properties flooded with a mixture of surface and sewer water flooding. Map 17 of the SFRA shows the location of the reported flooded properties along with the indicative potential depths of surface water flooding obtained as result of modelling.

Counters Creek has a relevant role in terms of sewer flooding. Counters Creek is a watercourse that runs along the north and western boundary of the Borough. It was culverted over in the late 19th Century and the north of the catchment receives stormwater from as far away as Brent and Camden. Therefore, flooding on the Counters Creek area can be caused by a rainfall event in the wider catchment many miles away and could not be caused solely by local surface water inundating the local sewerage network¹. Thames Water have recently produced a report about the state of Counters Creek which explained that levels in the deeper storm relief sewers rise following

¹ Counters Creek Strategic Sewer Flooding Alleviation. Study findings and proposals for out 2009 Final Business Plan. Public Domain Version. February, 2009.

rainfall in the wider catchment, removing the capacity to relieve the trunk sewer network (the Counters Creek) and placing the high density of basements properties at risk. This report also explains that flooding in the area is not caused by overland flow through surcharged manholes as sewage levels have not previously risen this high². Thames Water have found that the impermeable land in the wider catchment supplying Counters Creek has increased by about 17% since 1971. As a result of the findings, Thames Water stated their intention to alleviate the risk of flooding in the Counters Creek as the first of several proactive solutions at the catchment level. However, these measures will not be in place immediately and therefore the results obtained from their modelling were taken into account in the sequential test as potential risk of sewer flooding.

1.3. How this fits into the Core Strategy

The Planning and Compulsory Purchase Act 2004 requires the Council to prepare a new-style development plan for the Borough in the form of a Local Development Framework (LDF), comprising a 'portfolio' of documents setting out the spatial strategy for the development and land use within the Borough. When adopted, the Royal Borough of Kensington and Chelsea's LDF will replace the Unitary Development Plan and, together with the London Plan, will form the statutory development plan for the Borough, guiding change over the next 10 to 15 years.

The Sequential Test was undertaken for those sites identified as potential development sites. Due to the importance of surface and sewer water flooding for the Borough, both sources of flooding have been thoroughly analysed taking into account all the available information.

2. Policy context

2.1. National Policy

Planning Policy Statement 25 (PPS25) sets out the Government's national policies on development and flood risk. It aims to ensure flood risk is taken into account at all stages in the Planning Process, in order to avoid inappropriate development in areas at risk of flooding from any source and to direct development away from areas of highest risk. This is referred to by PPS25 as the sequential approach. The Sequential Test refers to the application of the sequential approach by a local authority and it is used to demonstrate that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the development proposed.

Planning Policy Statement 1(PPS1) establishes the principles of Sustainable Development. It states that planning should ensure a better quality of life for present and future generations. Regional planning bodies

² Counters Creek Strategic Sewer Flooding Alleviation. Study findings and proposals for out 2009 Final Business Plan. Public Domain Version. February, 2009.

and local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change taking them into account in the location and design of development.

Planning Policy Statement 3 (PPS3) sets out the national planning policy framework for delivering the Government's housing objectives and commitment to improving the affordability and supply of housing in all communities, including rural areas. It specifies what the planning system should deliver:

- High quality housing that is well-designed and built to a high standard.
- A mix of housing, both market and affordable.
- A sufficient quantity of housing taking into account need and demand and seeking to improve choice.
- Housing developments in suitable locations, which offer a good range of community facilities and with good access to jobs, key services and infrastructure.
- A flexible, responsive supply of land managed in a way that makes efficient and effective use of land, including re-use of previously-developed land, where appropriate.

2.2. Regional Policy

The London Plan, Spatial Development Strategy for Greater London was published by The Greater London Assembly in February 2008 and is currently being reviewed.

The London Plan sets out policies pertaining to flood risk that should be considered as part of the development process:

- Policy 4A.12 Flooding: In reviewing their DPDs, boroughs should carry out strategic flood risk assessments to identify locations suitable for development and those required for flood risk management. Within areas at risk from flooding (flood zones) the assessment of flood risk for development proposals should be carried out in line with PPS25.
- Policy 4A.13 Flood risk management: Where development in areas at risk from flooding is permitted, (taking into account the provisions of PPS25), the Mayor will, and boroughs and other agencies should, manage the existing risk of flooding, and the future increased risk and consequences of flooding as a result of climate change, by:
 - protecting the integrity of existing flood defences
 - setting permanent built development back from existing flood defences to allow for the management, maintenance and upgrading of those defences to be undertaken in a sustainable and cost effective way
 - incorporating flood resilient design
 - establishing flood warning and emergency procedures.
- Policy 4A.14 Sustainable drainage: The Mayor will, and boroughs should, seek to ensure that surface water run-off is managed as close to its source as possible in line with the following drainage hierarchy:
 - store rainwater for later use

- use infiltration techniques, such as porous surfaces in non-clay areas
- attenuate rainwater in ponds or open water features for gradual release to a watercourse
- attenuate rainwater by storing in tanks or sealed water features for gradual release to a watercourse
- discharge rainwater direct to a watercourse
- discharge rainwater to a surface water drain
- discharge rainwater to the combined sewer.
- Policy 4A.15 Rising groundwater: In considering major planning applications in areas where rising groundwater is an existing or potential problem, the Mayor will, and boroughs should, expect reasonable steps to be taken to abstract and use that groundwater. The water may be used for cooling or watering purposes or may be suitable for use within the development or by a water supply company.

In May 2006 the GLA published **Sub-Regional Development Frameworks** (SRDF) covering five geographic regions of London. Kensington and Chelsea is located in the Central London sub-region along with six neighbouring London boroughs.

The SRDF brings together a wide range of data and information about the sub-region and makes many suggestions to boroughs and others on the issues that should be addressed in implementing the London Plan.

The population is projected to grow by at least 213,000 by 2016, an annual rate of growth of over 14,000. Employment growth is projected as 238,000 in the London Plan (though more recent projections suggest this may need to be scaled down). Indeed 31% of London's housing growth, and 38% of its employment growth up to 2016 will take place within the sub-region.

Catchment Flood Management Plans are high level strategic planning documents which offer an overview of the factors that contribute to flood risk within a catchment both now and in the future; and that recommend the best ways of managing the risk of flooding within the catchment over the next 50 to 100 years.

Thames Regional Catchment Flood Management Plan³ summarises the future approach to flood risk management into four key messages:

- Flood defences cannot be built to protect everything
- Climate change will be the major cause of increased flood risk in the future
- The floodplain is our most important asset in managing flood risk
- Development and urban regeneration provide a crucial opportunity to manage the risk

The GLA, as the Regional Planning Body had prepared a **Regional Flood Risk Assessment (**RFRA) in consultation with the Environment Agency to inform their Regional Spatial Strategies (RSSs) on flood risk issues. The regional appraisal of flood risk concludes that there are five major flood

³ Summary document, January 2007

sources - tidal, fluvial, groundwater, surface water and sewers that influence the Greater London area.

The overall conclusion is that Flood Risk is a serious consideration for London. It is important that London's future is planned for and delivered in the fullest knowledge of flood risk and how it is likely to change in future.

2.3. Local Policy

The Local Development Framework (LDF) will replace the current Unitary Development Plan (UDP) adopted in 2002 and reviewed in 2007.

The vision of the UDP is to maintain and enhance the character and function of the Royal Borough as a residential area and to ensure its continuing role within the metropolitan area as an attractive place in which to live and work.

The UDP aims to strike a balance between the Borough's strategically important function of providing a high quality residential environment close to the centre of London and the needs of commercial development.

UDP addresses the question of balance through policies which:

- protect permanent residential accommodation from change to other uses and seek to increase the supply of new housing;
- give due regard to the Borough's legacy of Georgian, Victorian and Edwardian buildings and to all buildings and areas of architectural and historic interest;
- guide offices, shops, restaurants, hotels, industry and embassies to appropriate locations and
- aim to check the growth of through traffic, protecting residential areas and shopping streets from its effects and bringing net benefits to the environment through traffic management.

The LDF will set out a spatial plan of the area and identify issues, visions and objectives for future development of the Borough. The Core Strategy will be the central document for the LDF to which all planning policies must relate. It will set out the spatial vision through strategic policies that cover the whole of a Borough.

The draft vision of the emerging Core Strategy is for Kensington and Chelsea over the next 20 years is to improve an excellent Borough. We will stimulate regeneration in North Kensington through better transport, better housing and better facilities. We will build on our reputation as a national and international destination through supporting and encouraging retail and cultural activities.

And we will continue to improve our residents' high quality of life, not only through culture and retail, but also through cherishing quality in the built environment, acting on environmental issues and facilitating local living." The emerging core strategy will include policies requiring developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding The **Strategic Flood Risk Assessment** (SFRA) for the Royal Borough of Kensington and Chelsea has been prepared jointly with the London Borough of Hammersmith and Fulham.

3. Methodology

3.1. Data collection

The data gathering process has resulted in a review of different documents including:

- Strategically important documents such as the SFRA, Housing Capacity Trajectory, Retail Study and Employment Land Study amongst others.
- Existing flood risk management reports
- National, regional and local planning policy documents
- Environment Agency maps: areas of land at risk of fluvial and tidal flooding, flood defences, flood storage areas, areas benefiting from flood defences, historic flood map and main river lines.
- Other maps: Unitary Development Plan proposals map, number of sewer flooding events, areas potentially affected by surface water in the Royal Borough of Kensington and Chelsea, the Royal Borough of Kensington and Chelsea Residual risk, the Royal Borough of Kensington and Chelsea overtopping depth (sewage flooding), the Royal Borough of Kensington and Chelsea breach depth, Thames Water's map of potential risk of sewage flooding in the Counter's Creek area.

Section 6 of this document list all the documents consulted to produce the sequential test.

It is important to take into account that some maps, in particular those related to potential surface and sewer flood risk have been obtained as a result of running hydrological models and therefore they are not exact representations of the reality as their outputs are influenced by the assumptions made and the lack of accurate data.

In the case of the map showing areas of the Royal Borough of Kensington and Chelsea which could be potentially affected by surface water, JFLOW model was used to show surface water flow routes and locations where surface water may accumulate and cause flooding as a result of a 10 year intense storm lasting 1.75 hours across the natural catchments. The output map corresponds to map 17 of the SFRA and shows the maximum potential depth experienced by each area of the Borough and the indicative surface water flow paths and indicative areas of ponding which could be more susceptible to problems such as impassable roads or risk of flooding of ground floors and basements. For the purposes of undertaking the Sequential Test, the outputs of the model were divided into two categories:

- Areas potentially affected by surface water flooding with a maximum depth of up to 0.2m;
- Areas potentially affected by surface water flooding with a maximum depth higher than 0.2m.

It is important to note that none of the sites studied presented a homogeneous distribution of potential depths of surface water flooding across the site. Therefore, the higher depths were considered as the potential final depth for the whole site in terms of threshold.

Environmental Agency were consulted to provide advice on thresholds. They considered that as damp proof courses and thresholds to buildings are commonly a minimum of 150mm above the surrounding ground, flooding of 200mm depth could be seen as a reasonable threshold to require detailed modelling to be taken into account with the aim of designing a higher floor levels. They also stated that from the SFRA extracts reviewed, it appeared that a threshold of 200 - 300mm is emerging as a trigger for requiring developers to look in more detail at this form of flooding⁴.

Thames Water provided information regarding potential risk of sewage flooding in the Counter's Creek area. They used a hydraulic model to determine the sewage levels below ground during a 1 in 10 year storm event. The outputs of the model were divided into three categories (colour coded) indicating both sewage levels and probability of basement flooding. These thresholds are:

- Green: indicates that sewage levels rise up to 1.85m below ground level (18% of basement flooding);
- Yellow: indicates that sewage levels are between 1.85 and 1.25m below ground level (50% of basement flooding).

A key assumption in the model is that 70% of basements are connected to the sewerage network. The model also assumes a 5% increase in impermeability for the period 2007-2020. No assumptions for climate change were incorporated in this model.

The results from the model indicate that 7,000 properties will be at risk of internal flooding in the Royal Borough of Kensington and Chelsea and the London Borough of Hammersmith and Fulham from a 1 in 10 or more frequent event by 2020. They also indicate that average sewage levels in the Counters Creek Area have risen from around 2.13m below ground level in 1971, to 1.92m below ground level in 2008 (a rise of more than 10%).

The findings of the Sequential Test should be analysed with caution as there is no standard methodology for assessing surface water flooding and the mapping results are not an exact representation of observed results. For the purpose of this report the thresholds used for both potential risk of surface and sewer water flooding were considered as indicative thresholds for a detailed study and were used to highlight the problems that the site could potentially face and to point out mitigation measures but not to provide a final decision in refusing the development. Further research needs to be undertaken.

⁴ Information received via email on the 28th May 2009

3.2. Site methodology

Sequential test

For the application of the sequential tests advice found in PPS25 practice guidance⁵ was followed to find sites with lower risk of flooding from any source which could potentially allocate the proposed development. Table 1 illustrates the application of the Sequential Test.



Table 1: application of the Sequential Test⁶.

Eighteen sites were sequentially tested

The sequential test involved the following phases:

- 1) Identify the potential development site and research into the site constraints and opportunities (listed in appendix 5).
- 2) Address considerations of each site in regards to flood zones (tidal and fluvial) and potential risk of surface and sewer water flooding. If the site was at a low risk of flooding from any source, no alternative sites were identified. Potential mitigation measures for any possible risk of flooding aimed were explained.
- 3) If sites at lower risk of flooding were available, planning considerations were taking into account to decide which of the alternative sites were

⁵ Table from PPS25 Practice guide, page 73

⁶ PPS25 Practice Guide

more suitable to allocate the proposed development. Size area, number of dwellings, land uses proposed and access and egress were studied along with uses impact on UDP and the emerging LDF draft policies were taken into consideration. The sustainability appraisal findings were also taken into account. In cases where the development was needed for wider sustainable development reasons in areas at potential risk of flooding the Exception Test would need to be passed. Even in cases where the development was likely to be acceptable, potential mitigation measures were described.

The sites sequentially tested were mostly likely to be acceptable and only Earl's Court was provisionally acceptable provided the Exception test was passed and mitigation measures for surface and sewer flooding were put in place.

3.3. Windfall sites

The Borough has a large number of windfall sites. Developers will need to take into account the findings and recommendations of this Sequential Test and provide evidence that they have adequately considered other reasonably available sites. PPS 25 Practice Guide explains that this will involve considering windfall sites against other sites allocated as suitable for housing in plans. If a potential site allocation or a planning application fails to score positively against the aims and objectives of the SA or LDD policy respectively, the Borough will consider whether the use of planning conditions and/or Section 106 agreements could make it do so in order for planning permission to be granted.

3.4. Climate Change

According to the water levels provided by the Environment Agency for future climate (2052 and 2102) the present day 1 in 200 year (0.5% chance of occurring each year) event levels associated with the Thames between Hammersmith and Chelsea would not increase with climate change⁷. The Thames Barrier will continue to function as intended, and its usage will increase as a result of climate change, resulting in less near closure events and therefore no increase in the peak water level expected upstream of the barrier in the study area. However, if the Barrier should fail to close in an extreme event in the future then the resultant sea level rise as a consequence of climate change would affect the amount of overtopping occurring.

Current predictions anticipate that the intensity of storms is likely to increase. This will mean that the threat from surface water flooding is likely to increase and the sporadic nature is likely to continue. However, current climate change is not expected to have a significant effect upon groundwater patterns or flow groundwater levels as they normally are the result of prolonged rainfall, which are expected to remain unchanged.

⁷ The Royal Borough of Kensington and Chelsea SFRA

Climate Change will have a major impact on the tidal flooding threat. The rising sea level will steadily reduce the level of protection that defences offer The TE2100 project has considered a range of climate change derived sea level rises from 0.9m to 4m

In theory climate change should not make a substantial difference to sewer flooding risk. However, if surface water drains are wrongly connected to the foul system, then the expected increase in intensity of storm events would be likely to increase the likelihood of sewer flooding. For the purpose of the Sequential Test it was assumed that all the sites are potentially affected by climate change effects in the same way.

4. Sequential tests

4.1. KENSAL GASWORKS



Figure 1: Kensal Gasworks Land Uses



Figure 2: Kensal Gasworks Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding. The proposed land-use for the development site is suitable for this flood zone.
- 28% of the area could potentially be affected by Surface Water, mostly under 0.05m, which is considered low risk, and a small proportion under 0.3m, which is considered high risk. The whole site is therefore considered as having a high risk of surface water flooding.
- There is no risk of flooding from defence failing or overtopping.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m, which is considered low risk.
- There is not any critical infrastructure in the area although essential infrastructure is proposed.

Is there a potential allocation site in an area at lower risk of flooding?

No other sites have been identified as being a potential alternative to the proposed development site. The site area is 15.80ha and it has between 2000 and 5000 dwellings proposed. There is not any alternative site with the same size and development capacity. At the moment the site is partially developed, with a large proportion of permeable area and therefore surface water drains naturally. Developers will need to take into account the effect that paving and the tarmac will have on the site and on the behaviour of surface and sewer water flooding.

The site's planning issues are considered to not affect its overall acceptability. Both the emerging core strategy and the sustainability appraisal state that there is a need in North Kensington for regeneration, transport enhancements, employment, recreation, community facilities and housing provision that this site will bring when the proposal is implemented.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

This site presents opportunities to be an exemplar site due to the size of the site, location at the head of the natural drainage system therefore maximising the surface water run off and possibility to provide a reduction in flooding in the Borough overall. Given this, there should be strong targets set such as achieving greenfield run off rates and adopting SUDS.

As the site is bigger than 1 ha, a FRA is required. The FRA should consider the effects of climate change and focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, and the effect of the new development on surface water run-off. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. In this case, consideration needs to be given to ground contamination. If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.



4.2. FORMER LONDON ELECTRICITY BOARD

Figure 3: Former London Electricity Board Land Uses



Figure 4: Former London Electricity Board Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 6% of the area could potentially be affected by Surface Water, all under 0.1m. This is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m. This is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The site's planning issues are considered to not affect its overall acceptability. The proposed development is likely to be acceptable. However, the following issues identified in the SFRA should be taken into account in all development proposals in Flood Zone 1:

- 1) the vulnerability to flooding from other sources as well as from river and sea flooding
- 2) The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

The FRA should consider the effects of climate change and the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

4.3. NOTTING HILL GATE



Figure 5: Notting Hill Gate Land Uses



Figure 6: Notting Hill Gate Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 48% of the area could potentially be affected by Surface Water, with a depth up to 0.5m, which is considered high risk.
- There is no risk of flooding from defence failing or overtopping
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m. This is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

The following sites have been considered as alternative sites, as they have a potential lower risk of surface water flooding: the Former Commonwealth Institute, Charles House and Homebase. From these sites, only Charles House has a potential to accommodate the same number of dwellings proposed in Notting Hill Gate. However, Charles House is not located in a Principal Shopping centre and some of the uses proposed for Notting Hill Gate (A4: drinking establishments, A5: hot food take away and B1 business, offices) will not be appropriate for Charles House as they are potentially high trip generating uses and need to be located in areas with good transport links. Moreover, these uses could enhance Notting Hill Gate Principal Shopping centre's vitality and viability.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff

As the site is bigger than 1 ha, a FRA is required. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. It will need to focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site. Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this. If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.



4.4. THE FORMER COMMONWEALTH INSTITUTE

Figure 7: The Former Commonwealth Institute Land Uses



Figure 8: The Former Commonwealth Institute Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 12% of the area could potentially be affected by Surface Water, with a maximum depth of 0.05m, wich is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m. This is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- 2) The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

As the site is bigger than 1 ha, a FRA is required. The FRA will need to focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off and the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.



4.5. HIGH STREET KENSINGTON UNDERGROUND STATION

Figure 9: High Street Kensington Underground Station Land Uses



Figure 10: High Street Kensington Underground Station Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 100% of the area could potentially be affected by Surface Water, with a maximum depth of 0.3m, which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is higher than -1.25m, which is considered high risk.
- The existing underground station is considered as esential infrastructure.

Is there a potential allocation site in an area at lower risk of flooding?

The following sites have been considered as alternative sites, as they have a potential lower risk of surface water flooding and similar or bigger area: Hill Gate. Former London Electricity Board, the Former Nottina Commonwealth Institute, Land Bounded by Brompton Road, Sloane Street and Basil Street, Clearings I and II, Land Adjoining Trellick Tower, Charles House and Homebase. Planning considerations were taken into account and only those sites who have land uses A1 (shops) and B1 (offices) amongst their proposed land use were considered. Those sites are: Notting Hill Gate, the Former Commonwealth Institute, Land Bounded by Brompton Road, Sloane Street and Basil Street and Clearings I and II. It is important to notice that none of these sites have only A1 and B1 as their proposed land uses and therefore, even when their could be potential sites to allocate the proposed development, other uses such as C3 (dwellings) are very important for the Borough in terms of sustainability.

Site Acceptability in accordance with PPS 25

According to PPS25, all land uses are appropriate in Flood Zone 1. Moreover, the proposed uses are classified as less vulnerable under the flood risk vulnerability classification. However, the site has a potential high risk of surface and sewer water flooding which could affect the acceptability of the site and therefore other sites has been considered. The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface and sewer water flooding. The developers will need to take into account the issues identified in the SFRA for all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- 2) The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

The SFRA reveals significantly deeper surface water flooding downstream and the site may be used strategically to relieve flooding in the Borough. Even when the site area is under 1ha, an FRA is required as the proposed development may be subject to other sources of flooding. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.

4.6. TA CENTRE



Figure 11: TA Centre Land Uses



Figure 12: TA Centre Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 80% of the area could be potentially affected by Surface Water, with a maximum depth of 0.3m, which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m. This is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

The following sites have been considered as alternative sites, as they have a potential lower risk of surface water flooding and similar or bigger area: Notting Hill Gate, the Former Commonwealth Institute, Land Adjoining Trellick Tower, Charles House and Homebase. Planning considerations were taken into account and only those sites who could accommodate the same or more number of proposed dwellings for the TA centre (256) and have the proposed land uses A1 (shops), A2 (financial and professional services), A3 (food and drink) and D1 (non-residential institutions) were considered. Those sites are: Notting Hill Gate and the Former Commonwealth Institute. These two sites have another proposed land uses A4 (drinking establishments), A5 (hot food takeaway) and B1 (business, offices) which should be provided on theses sites due to their location in Principal Shopping centres.

Site Acceptability in accordance with PPS 25

According to PPS25, all land uses are appropriate in Flood Zone 1. However, the site has a potential high risk of surface water flooding which could affect the acceptability of the site and therefore other sites has been considered. Nonetheless, the proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface and sewer water flooding. The developers will need to take into account the issues identified in the SFRA for all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

Even when the site area is under 1ha, an FRA is required as the proposed development may be subject to other sources of flooding. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.



4.7. EMPRESS TELEPHONE EXCHANGE

Figure 13: Empress Telephone Exchange Land Uses



Figure 14: Empress Telephone Exchange Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 89% of the area could potentially be affected by Surface Water, with a maximum depth of 0.3m. This is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m. This is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

The following sites have been considered as alternative sites, as they have a potential lower risk of surface water flooding and similar or bigger area: Notting Hill Gate, the Former Commonwealth Institute, Land Adjoining Trellick Tower, Charles House and Homebase. Planning considerations were taken into account and only those sites who could accommodate the same or more number of proposed dwellings as the Empress Telephone Exchange (158) and have the proposed land uses A1 (shops), A2 (financial and professional services), A3 (food and drink), D1 (non-residential institutions) were considered. Those sites are: Notting Hill Gate, the Former Commonwealth Institute, Charles House and Homebase. Notting Hill Gate and the Former Commonwealth Institute, have another proposed land uses A4 (drinking establishments), A5 (hot food takeaway) and B1 (business, offices) which need to be taken into account and would need to be provided on theses sites due to their location in Principal Shopping centres and their good public transport links. Charles House and Homebase are therefore the more suitable alternative sites. However, Charles House have a primary school amongst it, proposed uses which should be provided on the site. Homebase could therefore be the most appropriate alternative site. However, Homebase is one of the five sites which are part of the strategic sites in Warwick Road. Empress Telephone Exchange is also included within the five sites. All these sites are very important to meet the housing targets of the Borough and therefore this planning consideration should be taken into account.

Site Acceptability in accordance with PPS 25

According to PPS25, all land uses are appropriate in Flood Zone 1. However, the site has a potential high risk of surface water flooding which could affect the acceptability of the site and therefore other sites has been considered. Nonetheless, the proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface and sewer water flooding. The developers will need to take into account the issues identified in the SFRA for all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

Even when the site area is under 1ha, an FRA is required as the proposed development may be subject to other sources of flooding. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.

4.8. CHARLES HOUSE



Figure 15: Charles House Land Uses



Figure 16: Charles House Potential Flood Risk

Is the potential allocation site in an area at low risk of flooding?

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 21% of the area could be potentially affected by Surface Water, with a maximum depth of 0.2m. This is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m, which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The site's planning issues are considered to not affect its overall acceptability. The proposed development is likely to be acceptable. However, the following issues identified in the SFRA should be taken into account in all development proposals in Flood Risk 1:

- the vulnerability to flooding from other sources as well as from river and sea flooding
- 2) the potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

Even when the site area is under 1ha, an FRA is required as the proposed development may be subject to other sources of flooding. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.

4.9. HOMEBASE



Figure 17: Homebase Land Uses



Figure 18: Homebase Potential Flood Risk
- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 81% of the area could potentially be affected by Surface Water, with a maximum depth of 0.2m. This is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m. This is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- 2) The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

As the site is bigger than 1 ha, a FRA is required. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. Therefore, the FRA will need to focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off. As 81% of the site land could be potentially affected by surface water flooding, the FRA should focus on mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. Moreover, the The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.



4.10. 100 WEST CROMWELL ROAD

Figure 19: 100 West Cromwell Road Land Uses



Figure 20: 100 West Cromwell Road Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 44% of the area could potentially be affected by Surface Water, with a maximum depth of 0.2m. This is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is higher than -1.25m. This is considered high risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

Charles House is the only site considered as alternative as it has a potential lower risk of sewer water flooding and similar or bigger area. Charles House could accommodate the same or more number of proposed dwellings as 100 West Cromwell Road (330). However, Charles House has a primary school and land uses A1 to A3 amongst the proposed uses which are important to support local community and should be taken into account. Due to this planning issues, Charles House cannot be an alternative site.

Site Acceptability in accordance with PPS 25

According to PPS25, all land uses are appropriate in Flood Zone 1. However, the site has a potential high risk of sewer water flooding which could affect the acceptability of the site and therefore other sites have been considered. Nonetheless, the proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for sewer water flooding. The developers will need to take into account the issues identified in the SFRA for all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

As the site is bigger than 1 ha, a FRA is required. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. It will need to focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.





Figure 21: Land bounded by Brompton Road, Sloane Street and Basil Street Land Uses



Figure 22: Land bounded by Brompton Road, Sloane Street and Basil Street Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 20% of the area could potentially be affected by Surface Water, with a maximum depth of 0.1m, which is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m, which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The development is likely to be acceotable. Developers will need to take into account the issues identified in the SFRA for all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

As the site area is under 1ha, an FRA is not required. However, developers will need to take into consideration the effects of climate change and have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding. Appropriate SUDs techniques will need to be put in place. If basements are proposed in the site, the developers would need to take into account the Subterranean Development Supplementary Planning Document





Figure 23: Clearings I & II Land Uses



Figure 24: Clearings I & II Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 86% of the area could potentially be affected by Surface Water, with a maximum depth of 0.2m. This is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable. Developers will need to take into account the issues identified in the SFRA for all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

The SFRA reveals significantly deeper surface water flooding downstream and the site may be used strategically to relieve flooding in the Borough. Even when the site area is under 1ha, an FRA is required as the proposed development may be subject to other sources of flooding. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this. If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.

4.13. WORNINGTON GREEN



Figure 25: Wornington Green Land Uses



Figure 26: Wornington Green Potential Flood Risk

- The site falls into Flood Zone1 for tidal and fluvial flooding.
- 6% of the area could potnetially be affected by Surface Water, with a maximum depth of 0.5m which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water or Sewer flooding events in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No other sites have been identified as being a potential alternative to the proposed development site as there are not alternative sites with lower risk of surface water flooding and similar or bigger site area. It is important to take into account the potential benefits that this site will bring to the regeneration of North Kensington.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

As the site is bigger than 1 ha, a FRA is required. The FRA should focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off and the effects of climate change. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.



4.14. NORTH KENSINGTON SPORTS CENTRE

Figure 27: North Kensington Sports Centre Land Uses



Figure 28: North Kensington Sports Centre Potential Flood Risk

- The site falls into Flood Zone1 for tidal and fluvial flooding.
- 78% of the area could potentially be affected by Surface Water, with a maximum depth of 0.3m, which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is higher than -1.25m which is considered high risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The proposed development will have an important contribution towards the regeneration of North Kensington.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface and sewer water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

The SFRA reveals significantly deeper surface water flooding downstream and the site may be used strategically to relieve flooding in the Borough. As the site is bigger than 1 ha, a FRA is required. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this. If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.

4.15. EARL'S COURT



Figure 29: Earl's Court Land Uses



Figure 30: Earl's Court Potential Flood Risk

- The site falls into Flood Zone 2 & 3a (20%) for tidal and fluvial flooding and the rest of the site falls into Flood Zone 1.
- 4% of the area could potentially be affected by Surface Water, with a maximum depth of 0.5m which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water flooding event in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is higher than -1.25m which is considered high risk.
- There is not any critical infrastructure in the area.

Alternative sites considered

No other sites have been identified as having a lower potential risk of flooding from all sources. The only potential alternative to the proposed development site is Kensal Gasworks which is located in Flood Risk 1, has a lower potential risk of sewer flooding and could potentially allocate the amount of development proposed for Earl's Court Road. However, Kensal Gasworks has a higher percentage of its area potentially affected by surface water flooding. Furthermore there are further planning considerations as the development proposed in Kensal Gasworks would contribute to the wider regeneration of North Kensington.

Site Acceptability in accordance with PPS 25

The proposed development is provisionally acceptable. As the site falls partially in Flood Risk Zone 3a and contains land uses classified as "more vulnerable" an exception test is required and should be passed before allowing these uses. Furthermore, approved mitigation techniques should be put in place to mitigate surface and sewer water flooding. The site is bigger than 1 ha and therefore, an FRA is also required. The FRA should to focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere following development through the addition of hard surfaces, the effect of the new development on surface water run-off and the effects of climate change. The FRA should consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

The FRA should also consider mitigation of surface and sewer water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

Development plans for the site will need to demonstrate that flood risk can be effectively and safely managed without increasing flood risk elsewhere and should seek opportunities to relocate existing development to land in zones with a lower probability of flooding. If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy which prevent the development of self-contained basements in Flood Risk Zone 3.



4.16. LAND ADJOINING TRELLICK TOWER

Figure 31: Land Adjoining Trellick Tower Land Uses



Figure 32: Land Adjoining Trellick Tower Potential Flood Risk

- The site falls into Flood Zone 1 for tidal and fluvial flooding.
- 1% of the area could potentially be affected by Surface Water, with a maximum depth of 0.02m which is considered low risk.
- There is no risk of flooding from defence failing or overtopping.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No. The site is considered to be at low risk of flooding from any source.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

As the site area is under 1ha, an FRA is not required. However, developers should consider the effects of climate change and have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding. Appropriate SUDs techniques should be put in place.



4.17. BARBLY PRIMARY SCHOOL

Figure 33: Barlby Primary School Land Uses



Figure 34: Barlby Primary School Potential Flood Risk

- The site falls into Flood Zone1 for tidal and fluvial flooding.
- 47% of the area could potnetially be affected by Surface Water, with a maximum depth of 0.5m which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

No other sites with lower risk of flooding have been identified as being a potential alternative to the proposed development site as the site area. However, Kensal Green Gassworks presents a smaller area affected by surface water flooding (28%) making this site a potential alternative for the development.

Kensal Green Gassworks has a potential to deliver between 2000 and 5000 dwellings proposed whereas Barbly Primary School's proposed land use is C2 (school). Both the emerging core strategy and the sustainability appraisal state that there is a need in North Kensington for regeneration, including a school. Therefore, both developments will contribute towards regeneration. Kensal Gasworks could be used to accommodate the proposed development maybe through intensification although it is important that the proposed development in Kensal Gasworks is implemented to achieve regeneration in North Kensington.

Site Acceptability in accordance with PPS 25

The proposed development is likely to be acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- 2) The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

The SFRA reveals significantly deeper surface water flooding downstream and the site may be used strategically to relieve flooding in the Borough. As the site is bigger than 1 ha, a FRA is required. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this. If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.



4.18. PRINCESS LOUISE HOSPITAL

Figure 35: Princess Louise Hospital Land Uses



Figure 36: Princess Louise Hospital Potential Flood Risk

- The site falls into Flood Zone1 for tidal and fluvial flooding.
- 100% of the area could potentially be affected by Surface Water, with a maximum depth of 0.5m which is considered high risk.
- There is no risk of flooding from defence failing or overtopping.
- There is no record of Surface Water or Sewer flooding events in the past.
- The site falls in an area where the likely top water level in the sewerage system for a 1 in 10 year rainfall event is lower than -1.85m which is considered low risk.
- There is not any critical infrastructure in the area.

Is there a potential allocation site in an area at lower risk of flooding?

The following sites have been considered as alternative sites, as they have a potential lower risk of surface water flooding and similar or bigger area: the Former Commonwealth Institute, Clearings I and II, Land Adjoining Trellick Tower, Charles House and Homebase. From these sites planning considerations were taken into account and only the site Land Adjoining Trellick Tower which has land uses C2 (residential institutions) and C3 (dwellings) amongst its proposed uses was considered as a potential alternative site. Consideration should be given to the other uses proposed in Land Adjoining Trellick Tower (B1 and D1) which could contribute towards the regeneration of North Kensington.

Site Acceptability in accordance with PPS 25

The proposed development is provisionally acceptable, provided approved mitigation techniques are proposed for surface water flooding. The SFRA has identified the following issues to be considered in all development proposals in Flood Risk 1:

- 1) their vulnerability to flooding from other sources as well as from river and sea flooding
- The potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water runoff.

The SFRA reveals significantly deeper surface water flooding downstream and the site may be used strategically to relieve flooding in the Borough. Even when the site area is under 1ha, an FRA is required as the proposed development may be subject to other sources of flooding. The FRA should consider both the effects of modelled surface water flooding on the development and the potential to increase flooding elsewhere along with the effects of climate change. The FRA should focus on the vulnerability to flooding from surface and sewer water flooding as well as from river and sea flooding, the potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off. The FRA should consider mitigation of surface water flooding and prevention of existing flooding problems through the use of appropriate SUDs techniques depending on the ground conditions and constraints of the site. The FRA should also consider the prevention of on site surface water flooding by considering the application of a site wide sequential approach to development. For example locating development out of the high risk areas susceptible to flooding on the site.

Moreover, the FRA should consider the mitigation of off site surface water flooding by achieving greenfield run off rates or better as required by the London Plan. Proposals should adopt appropriate Sustainable Urban Drainage Systems (SUDS) techniques in a hierarchical manner to help achieve this.

If basements are proposed in the site, developers would need to take into account the Subterranean Development Supplementary Planning Document and the policies of the emerging core strategy.

Developers will also need to have regard to the emerging policies in the LDF which will require developments to adapt to fluvial flooding and to mitigate the effects of and adapt to surface water and sewer flooding.

5. Conclusions

Surface and sewer water flooding are very complicated to model and predict. Further work needs to be undertaken to assess properly the potential risk of surface and sewer water flooding in the Borough.

6. Consulted documentation

The data gathering process has resulted in a review of the following documents:

National, regional and local planning policy Documents:

- PPS25
- PPS1
- PPS3
- The London Plan
- Adopted UDP
- The emerging Core Strategy
- Specific sites Supplementary Planning Documents: Warwick Road Planning Brief, Kensal Canalside Pre-Feasibility Study, The Commonwealth Institute Planning Brief, Princess Louise Planning Brief and Wornington Green SPD.
- Subterranean developments SPD

Strategically important documents:

- Housing Capacity Trajectory
- Annual Monitoring Report
- Housing Needs Study (same as Housing Capacity Study)
- Local Development Scheme
- Site Specific Allocations (Issues and Options 2006)

- Draft Strategic Housing Market Assessment (2009)
- Retail Needs Assessment (2004)
- Open space audit (2004)
- Residential density study
- Employment Land Study
- Planning Designations

Existing flood risk management reports:

- Sub Regional Strategy
- Catchment Flood Management Plans
- GLA's RFRA
- Thames Water Counters Creek report (Strategic Sewer Flooding Alleviation Study finding 2009)
- The Royal Borough of Kensington and Chelsea SFRA

Environment Agency Maps:

- · Areas of land at risk of fluvial and tidal flooding
- Flood defences
- Flood storage areas
- Areas that benefit from flood defences
- Historic Flood Map
- Main river lines

Other maps:

- Unitary Development Plan Proposals Map
- Number of sewer flooding events (provided by JBA consultants)
- RBKC surface water (provided by JBA consultants)
- RBKC Residual Risk (provided by JBA consultants)
- RBKC Overtopping Depth (Sewage Flooding) (provided by JBA consultants)
- RBKC Breach Depth (provided by JBA consultants)
- Thames Water map of potential sewer flooding

Acronyms

CS: Core Strategy
DPD: Developing Planning Documents
EA: Environment Agency
FRA: Flood Risk Assessment
GLA: Greater London Authority
LDD: Local Development Documents
LDF: Local Development Framework
LP: London Plan
LPA: Local Planning Authority
PPS1: Planning Policy Statement 1
PPS25: Planning Policy Statement 25
PPS3: Planning Policy Statement 3
RFRA: Regional Flooding Risk Assessment
RPB: Regional Planning Body

RSS: Regional Spatial Strategies. SDS: Spatial Development Strategy SFRA: Strategic Flood Risk Assessment SRDF: Sub-Regional Development Frameworks SSA: Site Specific Allocations SUDs: Sustainable Urban Drainage Systems TE: Thames Estuary UDP: Unitary Development Plan

Appendix 1: Potential surface and sewer flood risk

SITE	Proportion (%) of site at risk of Surface Water Flooding	Risk of Surface Water Flooding	Risk of Sewage Flooding
Kensal Gasworks	28	High	Low
Former London Electricity Board Depot	6	Low	Low
Notting Hill Gate	48	High	Low
The Former Commonwealth Institute	12	Low	Low
High Street Kensington Underground	100	High	High
Station			
TA Centre	80	High	Low
Empress Telephone Exchange	89	High	Low
Charles House	21	Low	Low
Homebase	81	Low	Low
100 West Cromwell Road	44	Low	High
Land Bounded by Brompton Road, Basil	20	Low	High
Street and Sloane Street			
Clearings I and II	86	Low	Low
Wornington Green	6	High	Low
North Kensington Sports Centre	78	High	Medium
Earl's Court	4	High	High
Land adjoining Trellick Tower	1	Low	Low
Barlby Primary School	47	High	Low
Princess Louise Hospital	100	High	Low



Appendix 2: Sites area

Appendix 3: Proposed dwellings



Appendix 4: Vulnerability classification

Sit e No.	Site	Flood Risk Zone	Proposed Uses	Flood Vulnerability Classification	Zone 2 compatibility	Zone 3a compatibility
1	Kensal Gasworks 1		Offices General Industry Restaurants Residential	Less vulnerable Less vulnerable Less vulnerable More vulnerable	N/A	N/A
2	Former London Electricity Board Depot	1	Offices Substation Education Residential	Less vulnerable More vulnerable More vulnerable More vulnerable	N/A	N/A
3	Notting Hill Gate	1	Shops Financial Services Restaurants Bars Take-aways Offices Residential Nursery	Less vulnerable Less vulnerable Less vulnerable Less vulnerable More vulnerable Less vulnerable Less vulnerable More vulnerable More vulnerable	N/A	N/A
4	The Former Former Commonwealth Institute	1	*Museum Leisure place *Residential Hotel Offices (*more likely)	Less vulnerable Less vulnerable More vulnerable More vulnerable Less vulnerable	N/A	N/A
5	High Street Kensington	1	Shops	Less vulnerable	N/A	N/A

	Underground Station		Offices	Less vulnerable		
6	Charles House	1	Shops Professional Services	Less vulnerable Less vulnerable	N/A	N/A
			Restaurant Residential	Less vulnerable More vulnerable		
7	TA Centre	1	School Shops Professional Services Restaurants Non-residential institutions	More vulnerable Less vulnerable Less vulnerable Less vulnerable Less vulnerable	N/A	N/A
8	Empress Telephone Exchange	1	Shops Professional Services Restaurants Social and Community Uses Car park	Less vulnerable Less vulnerable Less vulnerable Less vulnerable Less vulnerable	N/A	N/A
9	Homebase	1	Residential Commercial	More vulnerable Less vulnerable	N/A	N/A
10	100 West Cromwell Road	1	Residential Creche, health and fitness centre	More vulnerable Less vulnerable	N/A	N/A
11	Lad Bounded by Brompton Road, Sloane Street and Basil Street	1	Shops Offices Hotels Storage	Less vulnerable Less vulnerable More vulnerable Less vulnerable	N/A	N/A

12	Clearings I and II	1	Shops	Less vulnerable	N/A	N/A
			Restaurants	Less vulnerable		
			Bars	Less vulnerable		
			Offices	Less vulnerable		
			Residential	More vulnerable		
14	Wornington Green	1	Residential	More vulnerable	N/A	N/A
	_		Institution			
			Residential	More vulnerable		
			Leisure	Less vulnerable		
15	North Kensington	1	Residential	More vulnerable	N/A	N/A
	Sports Centre		Institution			
			Residential	More vulnerable		
			Leisure	Less vulnerable		
16	Earl's Court	3	Residential	More vulnerable	Acceptable	Exception test
			Institution			required
			Residential	More vulnerable		
			Leisure	Less vulnerable		
17	Land adjoining Trellick	1	Residential	More vulnerable	N/A	N/A
	Tower		Institutions			
			Residential	More vulnerable		
			Non-residential	Less vulnerable		
			institution			
18	Barlby Primary School	1	Residential	More vulnerable	N/A	N/A
			institution			
19	Princess Louise	1	Residential	More vulnerable	N/A	N/A
	Hospital		Institution			

Flood	Area Location	Site ID	Site Name	Site Size (ha)	No. of Dwellings	Proposed Land Use	Vulnerability Classification	Except'ns Test required	Planning Issues		Projecte Developi	d ment Times	Residential cales	Development	Proportion (%) of site at risk of tidal and fluvial
Zone									Opportunities	Constraints	Short (0-5yrs)	Med (6- 10yrs)	Long (10yrs+)		flooding
1	Golborne	1	Kensal Gasworks	15.80	2000-5000	B1, B2, A3, C3, waste facilities	Essential infrastructure	NO	Kensington regeneration // Responding positively to Climate Change // Intensifying development in an accesible area and providing connections into existing estates // Improved North-South connections over both, the railway lines and the canal, and possible adding a new bus route // Useable public realm around the canal-side will be developed to aid permeability and create a more legible street network //School redevelopment to provide additional community facilities at Middle Row/St Mary's// Waste Management facilites and local shoopping provision to meet the retail needs	willing to participate in such a large project // Crossrail to use part of the site as a temporary bus garage during construction works (2007) // Single vehicular connection to the site makes it isolated // Access to the site is constrained by the single road leading from Ladbroke Grove and this will limit development // Currently designated as Employment Zone, which restricts the type os uses permitted. However, there is a proposal in the emerging LDF to change designation to primarily residential (mix-use).		1/2	1/2	Acceptable	0%
1	Queen's Gate	2	Former London Electricity Board Depot	0.32	55	C3, B1, C2, SG	More vulnerable	NO	Easily accessible by tube & bus // Wealth of visitors attractions & cultural amenities in the adjacent areas //	townscape // Retail	15		40	Acceptable	0%

Appendix 5: Site information

1	Campden	3	Notting Hill Gate	1.15	320	A1, A2, A3, A4, A5, B1, C3, D1	More vulnerable	NO	cogestion area// Improve legibility of route to	Retail skewed that fail to - benefit from it// Poor pedestrian environment // Lack of high quality gathering and resting spaces for locals and visitors // Large traffic volumes	200	120	Acceptable	0%
1	Holland	4	The Former Commonwealth Institute	1.38	90	D1, D2, C3, C1, B1 (C3 & D1 more likely)		NO	Easily accessible by public transport // Opportunity to improve the form and appearance of the building // Near a principal shopping centre area // Opportunity to draw people to the site and give it a new focus	upon the site // Within and sorrounded by conservation area // The new building should respect the parkland character of Holland Park	1/2		Acceptable	0%
1	Queen's Gate	5	High Street Kensington Underground Station	0.42	0	A1, B1	Less vulnerable	NO	Theoretical site. Opportuni and good transport links	ties: good central locations 0	0	0	Acceptable	0%
1	Abingdon	6	TA Centre	0.81	256	A1, A2, A3, C3, D1	More vulnerable	NO	good quality area of townscape // Opportunity to create a new public open space // Opportunity to increase the level of connectivity & choices of routes for pedestrians // Opportunity to create a new bycicle route to be connected to the London Cycle Network @ Kensington High Street & Russell Road // Medium to high public transport accessibility // Opportunity to provide social and community facilites for public use //	Intense traffic // Both junctions (A3220 Warwick Road with the A4 West Cronwell Road, and Warwick Road with High Street Kensington) identified priority sites by London Road Safety Unit due to a high collision rate // Constraints for pedestrian with regard to access/connectivity to/from the site (due to its location in the intersection of two major transport routes) // The site is relatively isolated by the presence of the busy roads and rail corridors // The numerous artificial ground planes present	256		Acceptable	0%

									that the podium represents to the creation of active frontages and connections to and across the site // Constraint in achieving consensus from the numerous stake/lease holders	
Abingdon	7	Empress Telephone Exchange	0.60	158	A1, A2, A3, C3, D1, SG	More vulnerable	NO	Opportunity to create a good quality area of townscape // Opportunity to create a new public open space // Opportunity to increase the level of connectivity & choices of routes for pedestrians // Opportunity to create a new bycicle route to be connected to the London Cycle Network @ Kensington High Street & Russell Road // Medium to high public transport accessibility // Opportunity to provide social and community facilites for public use // Opportunity to provide affordable housing // Opportunity to improve the pedestrian experience of using this street	by Warwick Road // Intense traffic // Both junctions (A3220) Warwick Road with the A4 West Cronwell Road, and Warwick Road with High Street Kensington) identified priority sites by London Road Safety Unit due to a high collision rate // Constraints for pedestrian with regard to access/connectivity to/from the site (due to its location in the intersection of two major transport routes) // The site is relatively isolated by the presence of the	

158	Acceptable	0%

										vehicular access to Earl's Court Olympia via the basement // The barrier that the podium represents to the creation of active frontages and connections to and across the site // Constraint in achieving consensus from the numerous stake/lease holders	
1	Abingdon	8	Charles House	1.54	500	A1, A2, A3, C3, D1	More vulnerable	NO	Opportunity to create a good quality area of townscape // Opportunity to create a new public open space // Opportunity to increase the level of connectivity & choices of routes for pedestrians // Opportunity to create a new bycicle route to be connected to the London Cycle Network @ Kensington High Street & Russell Road // Medium to high public transport accessibility // Opportunity to provide social and community facilites for public use // Opportunity to provide affordable housing // Opportunity to improve the pedestrian experience of using this street	by Warwick Road // Intense traffic // Both junctions (A3220) Warwick Road with the A4 West Cronwell Road, and Warwick Road with High Street Kensington) identified priority sites by London Road Safety Unit due to a high collision rate // Constraints for pedestrian with regard to access/connectivity to/from the site (due to its location in the intersection of two major transport routes) // The site is relatively isolated by the presence of the busy roads and rail corridors // The	

500	Acceptable	0%

										vehicular access to Earl's Court Olympia via the basement // The barrier that the podium represents to the creation of active frontages and connections to and across the site // Constraint in achieving consensus from the numerous stake/lease holders	
1	Abingdon	9	Homebase	1.12	400	C3, A1-A5	More vulnerable	NO	Opportunity to create a good quality area of townscape // Opportunity to create a new public open space // Opportunity to increase the level of connectivity & choices of routes for pedestrians // Opportunity to create a new bycicle route to be connected to the London Cycle Network @ Kensington High Street & Russell Road // Medium to high public transport accessibility // Opportunity to provide social and community facilites for public use // Opportunity to provide affordable housing // Opportunity to improve the pedestrian experience of using this street	by Warwick Road // Intense traffic // Both junctions (A3220) Warwick Road with the A4 West Cronwell Road, and Warwick Road with High Street Kensington) identified priority sites by London Road Safety Unit due to a high collision rate // Constraints for pedestrian with regard to access/connectivity to/from the site (due to	

400	Acceptable	0%

										vehicular access to Earl's Court Olympia via the basement // The barrier that the podium represents to the creation of active frontages and connections to and across the site // Constraint in achieving consensus from the numerous stake/lease holders	
1	Abingdon	10	100 West Cromwell Road	1.07	330	C3, D1, D2	More vulnerable	NO	Opportunity to create a good quality area of townscape // Opportunity to create a new public open space // Opportunity to increase the level of connectivity & choices of routes for pedestrians // Opportunity to create a new bycicle route to be connected to the London Cycle Network @ Kensington High Street & Russell Road // Medium to high public transport accessibility // Opportunity to provide social and community facilites for public use // Opportunity to provide affordable housing // Opportunity to improve the pedestrian experience of using this street	Physical barrier created by Warwick Road // Intense traffic // Both junctions (A3220) Warwick Road with the A4 West Cronwell Road, and Warwick Road with High Street Kensington) identified priority sites by London Road Safety Unit due to a high collision rate // Constraints for pedestrian with regard to access/connectivity to/from the site (due to its location in the intersection of two major transport routes) // The site is relatively isolated by the presence of the busy roads and rail corridors // The numerous artificial ground planes present challenges for connectivity across the site // Need to consider Tesco's operational requirements and minimise disruption to customers // Requirement to keep Shaftesbury Place habitable and minimise disruption to its residents and their visitors //	

330	Acceptable	0%

										vehicular access to Earl's Court Olympia via the basement // The barrier that the podium represents to the creation of active frontages and connections to and across the site // Constraint in achieving consensus from the numerous stake/lease holders		
1	Brompton	11	Land bounded by Brompton Road, Sloane Street and Basil Street	0.35	0	A1, B1, C1, B8	More vulnerable	NO	Good residential environment // Public realm imoprovements planned // Opportunity to make more of the connection to the park and to get a new crossing// Opportunity for a retail expansion to the rear	Traffic congestion// Land in multiple ownership	0	0
1	Hans Town	12	Clearings I and II	0.47	80	A1, A3, A4, B1, C3	More vulnerable	NO	Contributions towards the provision of education facilities commensurate.// An enhanced package of public realm improvements to the wider area // A new public pedestrian route on give access to the new open space	Shortfall of public space	0	80
1	Golborne	13	Wornington Green	5.3	1,108	C3, D2	More vulnerable	NO	Bring up to the decent homes standards // Availability of Open Space during development (Athlone gardens) // Security and crime prevention.	Traffic impact, traffic congestion, transportation or parking.		808
1	Notting Barns	14	North Kensington Sports Centre	1.9	60	C2, C3, D1, D2	More vulnerable	NO	Development could provide employment opportunities for residents, a new local centre, housing and social and community facilities // Opportunity to provide a new secondary school needed in the north of the Borough	This area is poorly provided for in term of amenities //There are a few shops //Access is critical	0	0

	0	Acceptable	0%
		Λυτεριανίε	
)	0	Acceptable	0%
)8	0	Acceptable	0%
	60	Acceptable	0%

1, 2 and 3a	Earl's Court	15	Earl's Court	7.43	300 dwellings or 1000 offices	B1, C3, D1	Less vulnerable	YES	provision of additional social infrastructure such as new health and education facilities. Redevelopment can be the catalyst for a significant improvement in the economic and social health of Earl's Court // Economy: provide employment and brings money into the Borough // Opportunities to create a new and improved environment, including modern iconic architecture // Improvements to local services and transport links .// Improved/increased open space // Improved facilities to local residents (sports, health, restaurants, etc)	heritage value // New tall buildings could reduce sunlight for existing residents, increase population density, increase traffic and increase pollution // Hard to provide adequate open space // Pressure on current public transport- particularly Earl's Court tube which is up to capacity // Need for supporting services- doctors, schools, open spaces, parking // Traffic volumes will increase. One-Way creates a barrier for pedestrian: heavy traffic		0	300	Acceptable only if Exception Test is passed	20%
1	Golborne	16	Land Adjoining Trellick Tower	0.82	100	C2, C3, D1, B1	More vulnerable	NO	site of metropolitan importance // Grand Union Canal provides the setting for promoting ecological enhancements // Capacity for further dwellings subject to detail design considerations	Lack of good access to the Grand Union Canal to open and integrated it into the extisting pattern// Grade II* listed building// Rail safeguarding line for the crossrail project.	100	0	0	Acceptable	0%
1	St Charles	17	Barlby Primary School	1.67	0	C2	More vulnerable	NO	Enable provision of a new high school	Existing capacity of primary school will needed for kensal expansion	0	0	0	Acceptable	0%
1	St Charles	18	Princess Louise Hospital	0.41	80	C2, C3	More vulnerable	NO	Opportunities for wider regeneration of North Kensington	It has poor public transport accessibility	80	0	0	Acceptable	0%