

Earl's Court and West Kensington Opportunity Area Joint Supplementary Planning Document

SUSTAINABILITY APPRAISAL

**Earl's Court & West Kensington
Opportunity Area**

Supplementary Planning Document

Sustainability Appraisal

March 2012

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Version	Date	Prepared by:	Reviewed by:
01	October 2010	Stewart McKenzie, LBHF & RBKC	Steve Davies, LBHF
02	March 2011	Stewart McKenzie, LBHF & RBKC	Thomas Cardis, LBHF
03	November 2011	Stewart McKenzie, LBHF & RBKC	Brendon Roberts, RBKC
04	February 2012	Brendon Roberts RBKC	Patricia Cuervo, RBKC & Thomas Cardis, LBHF

Earl's Court & West Kensington Opportunity Area

Supplementary Planning Document Final Sustainability Appraisal

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NON-TECHNICAL SUMMARY

Background

The Earl's Court and West Kensington Opportunity Area (referred to as 'the Opportunity Area') is 37.2 hectares of developable land in the London Borough of Hammersmith and Fulham (LBHF) and the Royal Borough of Kensington and Chelsea (RBKC). A Supplementary Planning Document (SPD) has been drafted to guide development of the Opportunity Area. This has been prepared jointly by LBHF and RBKC in partnership with the Greater London Authority (GLA) and in consultation with a range of statutory and non-statutory organisations. The overarching objective of the SPD is to bring together local and strategic policy and provide guidance for master planning and development of the Opportunity Area.

The purpose of this Sustainability Appraisal (SA) is to assess, evaluate and predict the effects of the SPD and recommend ways in which to avoid these effects and where unavoidable, mitigate them. This will ensure better economic, social and environmental outcomes within the Opportunity Area, and increase the credibility of the SPD and its material weight in planning decisions.

The SA Process

The SA runs alongside the development of the SPD, and the key stages of the SA process are summarised below:

A. Setting the context and objectives, establishing the baseline and deciding on the scope
<ul style="list-style-type: none">• Identifying other relevant plans, policies and programmes and sustainable development objectives (Task A1)
<ul style="list-style-type: none">• Collecting baseline information (Task A2)
<ul style="list-style-type: none">• Identifying Sustainability issues within the Opportunity Area (Task A3)
<ul style="list-style-type: none">• Developing the SA framework (Task A4)
<ul style="list-style-type: none">• Consulting on the scope of the SA (Task A5)
B. Developing and refining options and assessing effects
<ul style="list-style-type: none">• Testing the SPD objectives against the SA framework (Task B1)
<ul style="list-style-type: none">• Developing the SPD options (Task B2)
<ul style="list-style-type: none">• Predicting and evaluating the effects of the SPD (Tasks B3 and B4)
<ul style="list-style-type: none">• Considering ways of mitigating adverse effects and maximising the effects of implementing the SPD (Task B5)

Section A

Section A (covering tasks A1-A5) includes an overview of relevant plans, programmes and policies along with establishing baseline information as a

basis for identifying social, economic and environmental issues within the Opportunity Area. Sustainability objectives have then been developed in relation to the identified issues, and have been tested against each other to determine compatibility and potential conflicts identified. In addition, indicators tracking progress towards each sustainability objective have been selected. The sustainability objectives and indicators collectively make up the SA framework, which will be used as a basis for developing options and assessing effects in Stage 'B' of the SA process.

Section B

The SPD objectives have been tested against the sustainability framework. Overall, the SPD objectives are broadly compatible with the sustainability framework and there are no objectives that are either mutually incompatible or where mitigation could not resolve conflicts. The most likely conflicts arise through the need to secure growth for housing, including affordable housing, employment and related infrastructure and the need to mitigate environmental impacts and the impacts on the built environment.

Developing the SPD options (Task B2)

The first draft of the SPD incorporated three different development capacity scenarios. These three scenarios were included to test the impact of development on transport, social and community infrastructure, character, the environment and understand the financial viability of these three scenarios. The SA of the first draft SPD considered the impact of these scenarios.

The SPD does not put forward a specific development capacity scenario, but a number of Key Objectives and Key Principles that provide a framework to guide redevelopment. In order to understand the environmental impacts of the SPD, this SA tests the impact of the highest density development capacity scenario (being a 'worst case' scenario) against the Key Objectives. If the Key Objectives sufficiently control the impacts of the worst case scenario, the Key Objectives will sufficiently control the impact of a lower scale development.

Predicting and evaluating the effects of the SPD (Tasks B3 and B4)

The effects of the SPD have been predicted and evaluated with respect to the sustainability objectives. For further robustness, a negative or positive symbol has been used to show progress or otherwise towards each indicator aligned with each sustainability objective.

Predicted negative impacts related principally to transport and accessibility and air quality. In relation to transport and accessibility, accessibility through the site would improve with any comprehensive redevelopment proposals and the public transport accessibility level would increase, but there would also be increased pressure on the highway network. With regard to air quality, the effects would be linked to the increases in traffic in the area, particularly vehicular traffic. The negative effects on air quality would increase with a higher density redevelopment.

Mitigation measures (Task B5)

Based on the prediction and evaluation of effects, there are several areas where a high density redevelopment may result in negative effects and/or where mitigation further to that proposed may enhance positive effects. Further mitigation measures are therefore recommended with respect to the following sustainability objectives:

Equality and diversity

- Provide a 'needs assessment' of community groups in and around the Opportunity Area and take the recommendations into account in the final development.

Safety and security

- Assess planning applications against Policy 7.3 of the London Plan (Designing out Crime) and RBKC's Designing out Crime SPD for development within RBKC

Transport and travel

- Ensure a reduction in personal injury accidents by preparing a road safety strategy, segregating pedestrian and cycle routes, providing signalised crossings and providing traffic calming measures;
- Require green travel plans for residential schemes, education and sites of employment;
- Require car-free and permit free residential schemes in conjunction with improvements to public transport accessibility and capacity; limit vehicle speeds to 20mph; encourage as much planting and screening as possible; minimise vehicle parking ratios well below 0.4 spaces per unit; and require Travel Demand Management incorporating green travel plans for residential schemes and employment sites.

Water resources

- Allocate more open space for Sustainable Urban Drainage Systems and more permeable surfaces;
- Water efficiency devices should be provided throughout the development.

Air quality

- Require green travel plans for both residential schemes, education and sites of employment;
- Planted open space buffer areas between arterial routes and residential blocks; and
- Ventilation for residential blocks to be drawn from buffered/internal areas away from arterial routes.

Heritage and Built Environment

- Requiring a Design and Access Statement with planning applications that thoroughly assess the impact of the proposal within the OA on heritage assets surrounding the SA.

1. Introduction

1.1 Supplementary Planning Documents (SPDs)

SPD's are statutory spatial planning documents produced by Local Authorities and other statutory bodies to support implementation of Development Plans. In this case, an SPD has been prepared to support the implementation of LBHF's and RBKC's planning policies for the Opportunity Area, as expressed in their Core Strategies. The overall objectives of the SPD are as follows:

- To establish detailed guidance on the application of policies within the London Plan and the boroughs' Development Plan Documents (DPDs) that will be used to assess any application in the Opportunity Area;
- To establish and provide guidance for masterplanning of the Opportunity Area;
- To bring forward partnership working in redeveloping the Opportunity Area and maximise public and private resources in regeneration; and
- To bring consultation forward in the planning process by engaging the public and stakeholders as early as possible in the development process.

1.2 Introduction to the Earl's Court and West Kensington Opportunity Area

The Opportunity Area comprises 37.2 hectares of land split between LBHF and RBKC, incorporating land within the Earl's Court Ward (RBKC), the North End Ward (LBHF) and the Fulham Broadway Ward (LBHF). The Opportunity Area boundary is defined by Warwick Road and the West London Line to the east, West Cromwell Road (A4) to the north, North End Road to the west and Old Brompton Road/Lillie Road to the south. The Seagrave Road car park is a parcel of land within the Opportunity Area situated south of Lillie Road bounded by Seagrave Road and the West London Line. 27.8ha of the site is contained within LBHF and the remaining 9.4ha is contained within RBKC comprising the Earl's Court 1 Exhibition Centre, some vacant land along the railway and some buildings associated with Clear Channel advertising.

The Opportunity Area is dominated by the Empress State Building and Earl's Court Exhibition Centres, which act as major landmarks on the West London skyline. It is made up of large, impermeable land holdings that lack connections into the surrounding area. The built form, whilst mixed in terms of age and type, is characteristically different to that found in the surrounding areas. For example, many of the buildings in the the Opportunity Area are stand alone structures with large footprints, which create a very different environment to that created by the terraces and mansion blocks found in the surrounding area.

Furthermore, there are a number of significant barriers to movement within the Opportunity Area. For example, the West London Line, which runs along the boundary between LBHF and RBKC, forms a physical barrier to movement from east to west and the A4 is a barrier to pedestrians who wish to pass from north to south.

The Opportunity Area features a range of land uses. The Earl's Court Exhibition Centres 1 and 2 and their ancillary servicing areas dominate the eastern side of the Opportunity Area, rising to a height equivalent to 18 stories and covering an area of 5.3 ha. The 33 storey Empress State Building is situated immediately to the west of Earl's Court 2 and is the tallest building within the Opportunity Area. The building is currently occupied by the Metropolitan Police. To the north of Earl's Court 2, the TfL Lillie Bridge Depot covers a substantial area of 7.3ha comprising marshalling yards, engineering workshops and Ashfield House, a 9 storey training facility that dominates the northern boundary of the Opportunity Area.

1.3 Sustainability Appraisal process

In accordance with the European Directive 2001/42/EC, a Strategic Environmental Assessment (SEA) is required to be undertaken on certain plans and programmes. It came into force in the UK in July 2004 and is required to be undertaken during the preparation and modification of the London Plan, Development Plan Documents (DPD) and Supplementary Planning Documents (SPD).

The purpose of Strategic Environmental Assessment is summarised in Article 1 of the SEA Directive:

“To provide a high level of protection of the environment and to contribute to the integration of environmental considerations in the preparation and adoption of plans and programmes with a view of promoting sustainable development”.

The Department for Communities and Local Government has provided guidance for merging SA and SEA as a single joint appraisal, and this approach has been applied in this report. This approach also fulfils the requirements for Health Impact Assessment and Community Safety Impact Assessment and as such avoids the need to undertake and report on separate assessments.

Table 1 – The SEA directive

Stage A	Setting the context and objectives, establishing the baseline and deciding on the scope
A1	Identifying other relevant plans, policies and programmes and sustainable development objectives
A2	Collecting baseline information
A3	Identifying Sustainability issues and problems
A4	Developing the Sustainability Appraisal framework
A5	Consulting on the scope of the Sustainability Appraisal
Stage B	Developing and refining options and assessing effects
B1	Testing the SPD objectives against the SA framework
B2	Developing the SPD options
B3	Predicting the effects of the SPD
B4	Evaluating the effects of the SPD
B5	Considering ways of mitigating adverse effects and maximising the effects of implementing the SPD
B6	Proposing measures to monitor the significant effects of implementing the SPD.
Stage C	Preparing the Sustainability Appraisal report
C1	Prepare the SA
Stage D	Consulting on the draft SPD and SA report
D1	Public participation on the SA report and the draft SPD
D2	Assessing against significant changes
D2	Making decisions and providing information
Stage E	Monitoring implementation of the draft SPD

Stage A involves establishing the framework for undertaking the SA – essentially a set of sustainable development objectives against which the SPD can be assessed, together with the evidence base that will help to inform the appraisal. The evidence base determines the environmental, social and economic issues within the area which can be used in evaluating the impacts of the SPD on the sustainable development objectives. The framework and evidence base is documented in Stage A of the SA.

Stage B involves assessing the SPD objectives and key principles against the SA framework. Measures for mitigating and monitoring the effects of capacity options are also identified and discussed at this stage. Stage C involves documenting the appraisal process and Stage D involves consultation on the preferred options themselves. Stage E involves monitoring the implementation of the SPD including its effects.

In the context of the Opportunity Area, the main purpose of this SA to assess, evaluate and predict the effects of the SPD and recommend measures to mitigate effects. Ultimately, this will ensure better economic, social and environmental outcomes within the Opportunity Area, and will also increase the credibility of the SPD and its material weight in planning decisions.

2. Sustainability objectives, baseline and context

2.1 Task A1: Links to policies, plans, programmes, and sustainability objectives

The SPD needs to be framed in the context of international, national, regional and local policy. A review of all relevant policies, plans and programmes has been carried out as part of the SA process carried out by RBKC and LBHF to aid formulation of their Local Development Framework (LDF) Core Strategies. The Government has introduced comprehensive changes to the development planning system via the Planning and Compulsory Purchase Act 2004 requiring Local Planning Authorities (LPAs) to replace adopted plans with Local Development Frameworks (LDFs). SA is integral to the formulation of LDF Core Strategy as per the SEA Directive and Government guidance.

The review of policy, plans and programmes carried out in association with the above SAs has been reviewed and used as a basis for the baseline in this SA, although it has been expanded and updated. The below table lists all relevant plans, policy documents and programmes at the regional and local level along with technical reports that have been used to establish the Opportunity Area baseline:

Table 2 – policies, plans and programmes

Regional / London
Sustainable Development Framework for London
The London Plan (Consolidated with alterations since 2004, published February 2008)
The London Plan (draft replacement plan, 2010)
The London Plan 2011
Sustainable Design and Construction SPG (May 2006)
Industrial Capacity SPG (March 2008)
GLA London View Management Framework Draft Regional SPG
Sustainable Communities in London, ODPM 2003
Intermodal Transport Interchange for London. BPG 2004 Regional Policy
London Climate Change Adaptation Strategy (draft August 2008)
London Water Strategy (Draft March 2007)
Health Inequalities Strategy (draft 30 th Jan 2008)
Mayor's Transport Strategy (2001), revised 2004 (CCZ) and 2006 (LEZ). Transport Strategy Implementation Targets (July 2004)
The London Rivers Action Plan (2009)
Draft River Basin Management Plan (Thames River Basin District) 2009
Thames Estuary 2100 Plan (2009)
EA Thames Catchment Flood management Plans; and EA Thames Estuary 2100 Project
Health Care for London. A Framework for action. Second Edition.
Improving Londoners Access to Nature – London Plan Implementation Report (February 2008)
London Energy Strategy (2009)
London Economic Development Strategy (2010)
Waste Management Strategy for London (2010)
Sub-Regional/West London
GLA West London Sub-Regional Development Framework (2006)
West London Alliance – strategies for housing, economic development and transport
NW London Strategic Health Authority – Strategic plan
Hammersmith & Fulham Primary Care trust - Local Delivery Plan 2005-2006

Ealing, Hammersmith/Fulham & Hounslow Primary Care Trust's NHS LIFT Strategic Service Delivery Plan 2003
Joint Municipal Waste Management Strategy (2006)
Borough – Hammersmith & Fulham
LBHF Community Strategy 2007
Unitary Development Plan (adopted August 2004) and amended in September 2007
Borough Local Implementation Plan (2005)
Air Quality Action Plan (2002)
Air Quality Progress Report 2008
Air Quality Progress Report and Action Plan Review 2007
Biodiversity action plan (2004)
Housing strategy: 2007-2014: A housing ladder of opportunity for all
Economic Development Strategy (2007)
Children and Young People Plan (2008)
Community Safety Strategy (2005)
LBHF Strategic Flood Risk Assessment (2010)
North End Ward Profile - LBHF Statistics
North End Housing Survey (2009)
LBHF Borough Profile (2006)
Metropolitan Police Crime Statistics (2008)
LBHF Core Strategy (2011)
Borough – Kensington & Chelsea
Annual Monitoring Report (2011)
Local Implementation Plan (2007)
Environment Strategy (2006)
Local Development Scheme (2008)
Community Strategy Update (2008)
Cabinet Business Plan 2009/10 to 2011/12: Proposals for discussion (2009)
Crime and Community Safety Plan 2008 -2011(2008)
The Local Biodiversity Action Plan 2007 – 2011 (2007)
Ten Year Parks Strategy (2006)

Strategic Flood Risk Assessment (2009)
Draft Strategic Housing market Assessment (2009)
Employment Land Study (2007)
RBKC Core Strategy (2010)
Air Quality SPD
Air Quality Action Plan 2009 to 2014
Noise SPD
Designing Out Crime SPD (RBKC)
Earl's Court West Kensington Opportunity Area
URS Socio Economic Baseline Study - September 2010
Earl's Court Ecological Aspirations – LBHF & RBKC, September 2010
Office of National Statistics (2009)Index of Multiple deprivation 2007
ARUP (July 2009) Appraisal of flood risk analysis
ECWKOA Energy Study (2011)
ECWKOA Transport Study (2011)
ECWKOA SPD Equality Impact Assessment (2012)
ECWKOA Character Area Study (2012)
ECWKOA Townscape and Views Study (2012)
ECWKOA Edges Study (2012)
ECWKOA Retail Study 2011
ECWKOA Office Study 2011

2.2 Task A2: Baseline considerations

2.2.1 Overview

The baseline summary below describes the underlying social, economic considerations and environmental conditions, and provides a basis for predicting and monitoring effects. The baseline conditions have been derived from a range of sources including the policy, plans and programmes referenced above. The baseline is formed of the following topic areas:

- Spatial Context;
- The Built Environment;
- Heritage;
- Housing;
- Population;
- Employment and Income;
- Deprivation;
- Flood Risk and Water Resources;
- Biodiversity;
- Air Quality;
- Health and Wellbeing;
- Open Space, Play Space and Community Facilities;
- Safety and Security;
- Education;
- Waste; and
- Transport and Travel.

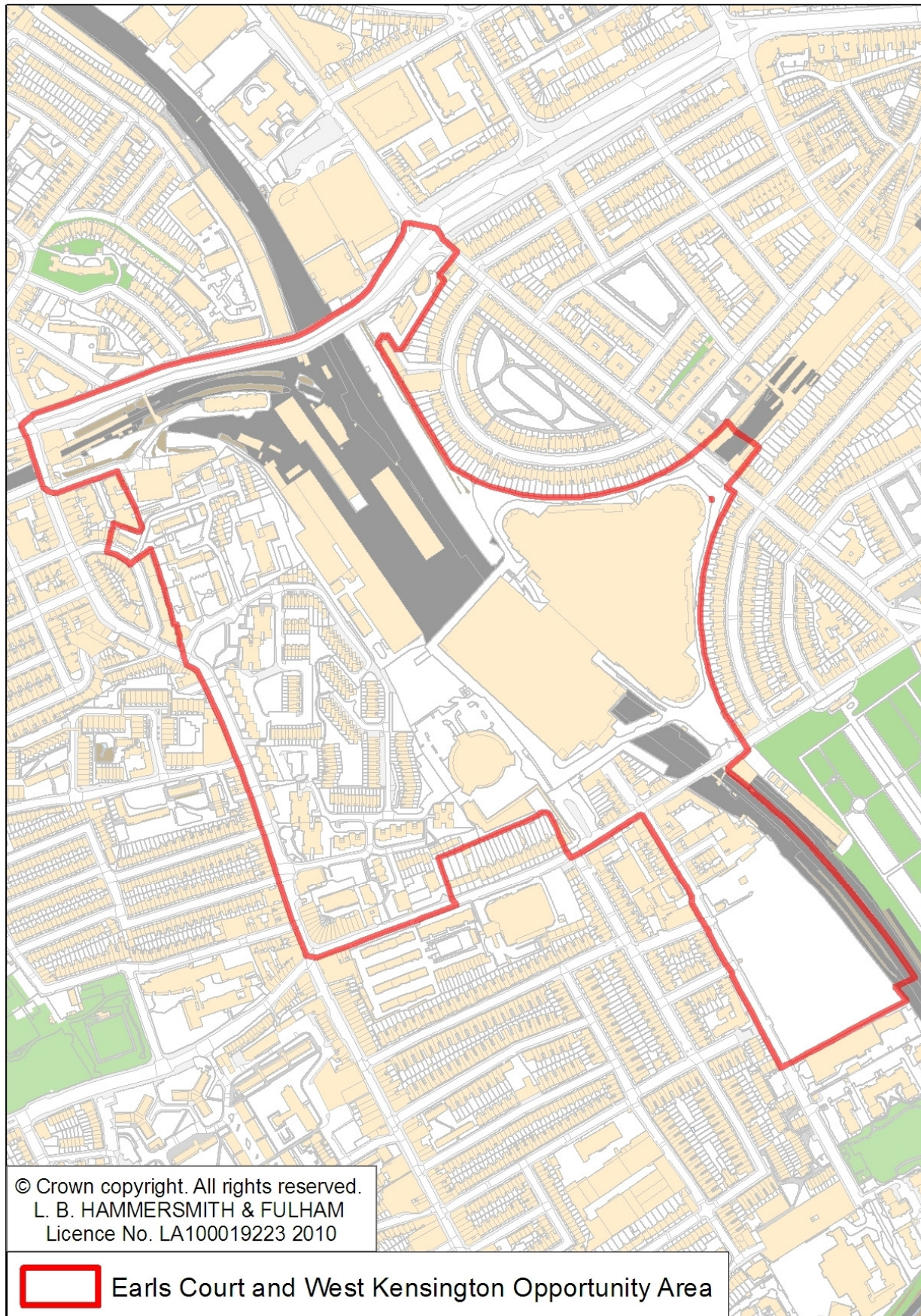
2.2.2 Spatial Context

LBHF and RBKC are two of 13 inner London boroughs, situated in the centre-west of London, north of the River Thames. LBHF is bordered by six London boroughs; Brent to the north; Kensington and Chelsea to the east; Wandsworth and Richmond-Upon-Thames to the south; and Ealing and Hounslow to the west. Excluding the City of London, it is the third smallest of the London boroughs at just over 1,600 hectares.

RBKC is the most densely populated local authority in the UK, with a population of 158,919 at 13,244 per square kilometre, and has the highest average property values in the UK. It is the second smallest London Borough at just under 1,200 hectares. RBKC is bordered by four London boroughs; Westminster to the east; LBHF to the West, Brent to the North and Wandsworth to the south.

The Opportunity Area takes in a total of 37.2 hectares of previously developed land, and is split between LBHF and RBKC. The Opportunity Area boundary is defined by Warwick Road and the West London Line to the east, West Cromwell Rd (A4) to the north, North End Road to the west and Old Brompton Road/Lillie Road to the south. The Seagrave Road car park is a discreet parcel of land within the Opportunity Area situated to the south of Old Brompton Road. The Opportunity Area incorporates land within the Earl's Court Ward (RBKC), the North End Ward (LBHF) and the Fulham Broadway Ward (LBHF). The full extent of the Opportunity Area is shown in Figure 1 below.

Figure 1 – The Earl’s Court West Kensington Opportunity Area



The Opportunity Area features a range of land uses. The Earl's Court Exhibition Centres 1 and 2 and their ancillary servicing areas dominate the eastern side of the Opportunity Area, rising to a height equivalent to 18 stories and covering an area of 5.3 ha. The 33 storey Empress State Building is situated immediately to the west of Earl's Court 2 and is the tallest building within the Opportunity Area. The building is currently occupied by the Metropolitan Police. To the north of Earl's Court 2, the TfL Lillie Bridge Depot covers a substantial area of 7.3ha comprising marshalling yards, engineering workshops and Ashfield House, a 9 storey training facility that dominates the northern boundary of the Opportunity Area.

The West Kensington and Gibbs Green housing estates lie to the west of the Earl's Court Exhibition Centres and the TfL Lillie Bridge Depot. The larger West Kensington Estate, containing 604 properties, was built between 1972-74 and includes several taller buildings of 9, 10 and 11 storeys along with low rise flats, maisonettes and terraced houses. The smaller Gibbs Green Estate features 98 properties built in 1961 comprising 7 medium-rise blocks. The estates have poorly arranged internal roads and irregular placement of buildings surrounded by poorly utilised open space, particularly on the West Kensington Estate. On-street and forecourt parking spaces dominate the streetscape of the estates. The overall proportion of social rented housing on the estates is 78 percent.

To the south within the Opportunity Area is the Seagrave Road car park, which is a parcel of land situated adjacent to the West London Line. It covers an area of 2.9ha featuring a small number of temporary and semi-permanent utility structures.

There are a number of other smaller and/or ancillary land uses within the Opportunity Area, namely:

- Gibbs Green school, which was previously a primary school but is currently being used to temporarily house Queensmill Special School;
- private residential houses, flats and maisonettes on Empress Place, Lillie Road and Seagrave Road;
- Registered Provider properties located around the West Kensington and Gibbs Green estates;
- a range of A1 – A5 uses along Lillie Road, North End Road, Old Brompton Road and Seagrave Road, some with converted residential flats on the upper floors;
- a hotel, community centre and telephone exchange north of Lillie Road;
- a small area of commercial and light industrial uses to the south of Lillie Road;
- a bus turning and waiting facility on Lillie Road immediately adjacent to Earl's Court 2 and the Empress State Building; and
- the Clear Channel buildings and hoardings, plus laundry and mannequin- making facilities located south of West Cromwell Road.

The Opportunity Area has some very distinctive changes in ground levels (known as topographical conditions), often as a result of the railway infrastructure. For example, there is a significant change in ground level from the east of the Opportunity Area to the west in order to provide clearance over the West London Line. The ground level is highest under Earl's Court 1 where the Wimbledon Branch of the District Line passes underground. There is also a significant drop in ground levels along the northern edge of the Opportunity Area, from the A4 flyover in the north east to the traffic junction in the north west. The Ealing Broadway and Richmond branches of the District Line are contained within a steep cutting that runs alongside the northern boundary of the Opportunity Area.

2.2.3 The Built Environment

This part of West London, particularly in the surrounding areas adjacent to the OA, is extremely fortunate to possess a remarkably well preserved historic townscape. This is acknowledged by the number of heritage assets designated in close proximity to the OA, including several listed structures, registered parks and gardens and Conservation Areas (see 2.2.4 below).

The Opportunity Area currently features a range of buildings and structures in keeping with the diverse range of land uses identified above. The built form, whilst mixed in terms of age and type, is characteristically different to that found in the surrounding areas. For example, many of the buildings in the Opportunity Area are stand alone structures with large footprints, which create a very different environment to that created by the terraces and mansion blocks found in the surrounding area.

The Earl's Court 1 and 2 exhibition buildings and accompanying servicing and access areas dominate the western side of the Opportunity Area. The Earl's Court Exhibition Centres reach 18 stories when measured from the base of the ground floor deck and have a large combined footprint. Immediately to the west of Earl's Court 2 is the 33-storey Empress State building. Collectively these are the largest structures within the Opportunity Area.

The West Kensington and Gibbs Green housing estates lie to the west of the Earl's Court Exhibition Centres and the TfL Lillie Bridge Depot. The larger West Kensington Estate, containing 604 properties, was built between 1972-74 and includes several taller buildings of 9, 10 and 11 storeys along with low rise flats, maisonettes and terraced houses. The smaller Gibbs Green Estate features 98 properties built in 1961 comprising 7 medium-rise blocks. The estates have poorly arranged internal roads and irregular placement of buildings surrounded by poorly utilised open space, particularly on the West Kensington Estate. On-street and forecourt parking spaces dominate the streetscape of the estates. The overall proportion of social rented housing on the estates is 78 percent.

The Opportunity Area contains a substantial amount of railway and London Underground Limited (LUL) infrastructure, along with local and strategic road infrastructure around the periphery. The Piccadilly Line, District Line (Wimbledon Branch, Kensington Olympia Branch and Ealing Broadway/Richmond Branches) and West London Line all cross the Opportunity Area and have a substantial 'track' footprint, principally in the north and east of the Opportunity Area. The West London Line runs north-south along the eastern boundary of the Opportunity Area adjacent to the Seagrave Road site and underneath Earl's Court 2. In addition to the railway lines there is a large amount of associated railway infrastructure including the depot, bridges, tunnels, retaining walls, utility buildings and electrical equipment within the Opportunity Area. There are three LUL stations at the edges of the Opportunity Area: Earl's Court (District and Piccadilly Lines), West Brompton (District Line and Overground) and West Kensington (District Line). Earl's Court station has full step free access to platform level.

The south and south-west of the Opportunity Area feature a range of A1 – A5 uses situated along North End Road and Lillie Road at ground floor (typical of a local centre) and includes independent and chain retail stores, convenience stores, cafés, pubs, bars, restaurants, financial services, hire stores, hairdressers and other specialist stores. Upper floors are used for a range of ancillary uses including residential accommodation.

The parcel of land between the Seagrave Road car-park and Lillie Road/Old Brompton Road is occupied by a mix of Victorian buildings, including West Brompton Railway Station. There is a mix of uses within this area including retail, residential, offices and light industrial activity on Rickett St. The

Seagrave Road car park covers approximately 2.9 hectares, featuring a small number of temporary and semi-permanent utility structures.

2.2.4 Heritage

Planning Policy Statement 5, Planning for the Historic Environment, sets out planning policies on the conservation of the historic environment. This sets out the process for dealing with designated assets, including HE10 that provides 'additional policy principles guiding the consideration of applications for development affecting the setting of a designated heritage asset'. PPS5 also states that heritage assets that are not designated, but have heritage interest, are material planning considerations. In accordance with PPS5, applicants (with assistance from the local authority) should identify any previously unidentified heritage assets at the pre-application stage.

There are no conservation areas (CAs) within the Opportunity Area, although 19 CAs border the Opportunity Area. These are listed below:

- Philbeach Conservation Area (RBKC);
- Nevern Square Conservation Area (RBKC);
- Earl's Court Square Conservation Area (RBKC);
- Earl's Court Village Conservation Area (RBKC);
- Courtfield Conservation Area (RBKC);
- Brompton Cemetery (RBKC);
- The Boltons Conservation Area (RBKC);
- The Billings Conservation Area (RBKC);
- Sedlescombe Conservation Area (LBHF);
- Walham Grove Conservation Area (LBHF);
- The Walham Green Conservation Area (LBHF);
- Barons Court Conservation Area (LBHF);
- Queens Club Gardens Conservation Area (LBHF);
- Turneville/Chesson Conservation Area (LBHF);
- Olympia and Avonmore Conservation Area (LBHF);
- Dorcas Estate Conservation Area (LBHF);
- Fitzgeorge and Fitzjames Conservation Area (LBHF);
- The Gunter Estate Conservation Area (LBHF); and
- The Edwardes Square/Scarsdale & Abingdon Conservation Area (LBHF).

West Brompton Station, including the booking hall, train shed, staircases and retaining wall, is Grade II listed. . The original Earl's Court Exhibition Centre (EC1) has 'immunity from listing' until 2016.

There are several other listed buildings, structures and registered parks adjacent to the OA boundary. These include:

- 62 to 68 Lillie Road (LBHF) – Two connected pairs of houses from the early/mid 19 Century are both Grade II listed.
- Brompton Cemetery (RBKC) – Brompton Cemetery, formed in around the 1830/40ies, is a Grade I Registered Park and Garden of Historic Interest. It contains approximately 36 separately listed structures, including several Grade II* listed arcades, entrance gates, chapels and tombs and numerous Grade II listed tombs.

- Earl's Court Station (RBKC) – Earls Court Station, which includes the train shed (opened in 1878), the facade to Earl's Court Road (opened in 1906) and the Warwick Road entrance (opened in 1937), are Grade II listed.
- St Cuthbert's Church (RBKC) – Grade II* Listed Church located on Philbeach Gardens.

There are several locally listed buildings in the OA, all of which are in LBHF. These are the Empress State building, the Famous Three Kings Pub, West Kensington Station and the Seven Stars Pub on North End Road.

There are no designated Archaeological Priority Areas within or adjacent to the OA. However, in previous written advice English Heritage state that '*There is a broad potential for Roman and earlier archaeology to have been present across this landscape once. The stream that ran through the site was of some topographic, and potentially archaeological, importance in this area*'. EH therefore state that the site has 'good archaeological potential', which should be assessed through field evaluation.

2.2.5 Housing

There are over 800 dwellings within the Opportunity Area, the vast majority of which (760 dwellings) are located in the North End Ward of LBHF on the West Kensington Estate, the Gibbs Green Estate and Registered Provider properties built on the edge of the two estates. A total of 191 of these dwellings are houses, with the remaining 569 classified as flats. The dwelling mix on the two estates is as follows:

- One-bedroom (25%);
- Two-bedrooms (41%);
- Three-bedrooms (27%); and
- Four-bedrooms (7%).

There are a small number of privately owned residential dwellings on Empress Place and between Old Brompton Road and the Seagrave Road Car Park comprising flats and maisonettes, along with converted flats above A1 – A5 uses along North End Road/Lillie Road.

The nature of the existing housing surrounding the Opportunity Area reflects a high density urban environment, characteristic of its inner-London location and reflects the housing density in RBKC which has the highest overall housing density in London. There is a greater number of flats and bedsits in converted houses in RBKC compared to the North End Ward in LBHF, where purpose built blocks of flats predominate.

With regard to tenure, the Gibbs Green and West Kensington Estates contain 532 council-owned social rented units. Another 58 dwellings are owned by a Registered Social Landlord (RSL) meaning there is a total of 590 social housing units accounting for 78 percent of the total 760 dwellings in the Gibbs Green and West Kensington estates. Initially both estates would have been 100 percent socially rented with some residents having purchased properties through right to buy schemes.

2.2.6 Population

The Opportunity Areas's residential population is approximately 1,900, with the vast majority of residents (1,500) living in the West Kensington Estate and a much smaller number (206) in the Gibbs Green Estate. The remaining residents live in converted flats on North End Road and Lillie Road, and in converted houses, flats and maisonettes on Empress Place and between Old

Brompton Road and the Seagrave Road Car Park. There are 660 and 110 households in the West Kensington and Gibbs Green Estates respectively, and an average of just over 2 people per household. The West Kensington Estate is the fifth largest estate in LBHF.

Overall, population has grown consistently over the past 20 years in both LBHF and RBKC, although the GLA estimates there will be a steady but gradually declining rate of growth in the population of both LBHF and RBKC up to 2031. However, LBHF is expected to grow at a faster average annual rate over this period and accordingly its population is forecast to surpass RBKC's population in the short to medium term. By 2031, the population is estimated to reach 209,400 in LBHF and 187,900 in RBKC, with a total of 8,804,000 residents in Greater London.

In terms of demographics, 24 percent of residents within the Gibbs Green and West Kensington Estates are under the age of 15, compared to 15 percent overall across LBHF and RBKC and 19 percent across Greater London. Across the North End and Fulham Broadway wards the most populous age group is between 18 and 34, making up 44 percent of the population. Breaking this demographic down further, the 30 to 44 age group comprise the single biggest age group (28 percent) within the surrounding wards of Earl's Court, North End and Fulham Broadway. The 20 to 29 age group is the second largest at ward level comprising 26 percent of the residential population. This figure is 5 percent above the LBHF and the RBKC average, and 9 percent above the London average.

Female residents make up 52 percent of the residential population, in line with figures for LBHF and RBKC and 1 percent above the comparative figure for Greater London. The Opportunity Area has an overall density of 51 people per hectare, well below the LBHF average of 105 persons per hectare although this is to be expected considering there are no residents within the RBKC part of the Opportunity Area and there is a substantial amount of non-residential use within the Opportunity Area.

The ethnic composition of Opportunity Area residents is varied with a high proportion of foreign born residents. There are a high proportion of people of black and black British ethnicity with 27 percent of residents in the West Kensington Estate and 17 percent of residents within the Gibbs Green estate identifying themselves within this group. At the ward level, the ethnic composition is broadly in line with that of RBKC and LBHF, although the proportion of residents from a non-white background was slightly lower than that for Greater London. Overall, 'British and Irish white' and 'other white' is the biggest ethnic group in the Earl's Court, North End and Fulham Broadway wards, although there is also considerable diversity within the white ethnic group. 23 percent of residents in Earl's Court and adjacent wards are of non-British and non-Irish backgrounds, compared with 15 percent in LBHF, 25 percent in RBKC and 8 percent in Greater London.

2.2.7 Employment and Income

The Opportunity Area currently suffers from higher unemployment than surrounding areas, with 22 percent of residents on the Gibbs Green Estate and 28 percent of residents on the West Kensington Estate claiming benefits, compared to a borough average of 14 percent. There are also more long-term unemployed residents, with approximately 40 percent of unemployed residents claiming benefits for a period longer than 6 months compared to the borough average of 30 percent. At a ward level, unemployment is lower than the Opportunity Area average at 4.5 percent, in line with borough wide averages. Once pensioners, children and those on incapacity benefits are taken into account, 43 percent of West Kensington Estate residents and 38 percent of Gibbs Green Estate residents are economically inactive (2008 figures). Of the working population within the Opportunity

Area, the majority are employed in associate professional and technical occupations which is in line with the London wide average, although 6 percent less than the ward level average.

The average gross household income within the Opportunity Area (including investment income and welfare payments) was £28,300 in 2009 which is 75 percent of the LBHF average. Furthermore, within the two estates more than half of households have a yearly income of less than £20,000 and approximately 20 percent of households rely on an income of less than £10,000. Less than 5 percent of households have incomes of £80,000 or more.

2.2.8 Deprivation

Based on 2007 figures, the entire Opportunity Area was classified as being within the 20 percent most deprived areas in England. The North End and Fulham Broadway wards are both ranked within the 10 percent most deprived communities in England with respect to income levels and barriers to housing and services. In particular, the Gibbs Green and West Kensington Estates are both in the lowest 10 percent most deprived neighbourhoods in LBHF, experiencing the highest levels of income and employment deprivation, and very significant housing and services deprivation. Neighbourhoods within the Earl's Court Ward by comparison are significantly less deprived on average. Wards on the RBKC side of the Opportunity Area are consistently populated by residents with better qualifications and higher incomes in comparison to those wards in LBHF.

The Opportunity Area also falls within the boundaries of the North Fulham New Deal for Communities area, a government funded programme set up in 2001 to tackle the problems afflicting highly deprived communities.

2.2.9 Flood Risk and Water resources

A Strategic Flood Risk Assessment (SFRA) was published by RBKC in August 2009 and LBHF in June 2010 in accordance with PPS 25 *Development and Flood Risk*. SFRA is a planning tool that enables boroughs to select and develop sustainable site allocations away from vulnerable flood risk areas by classifying zones dependent on flood risk.

Based on flood modelling and subsequent planning policy, the site is located in an area of "high flood risk" (Flood Zone 3) and would not be suitable for self-contained basement flats. However, the Environment Agency (EA) is able to accept residential units when located 600mm above the statutory flood level in conjunction with providing a safe means of escape. The site has not flooded as a result of tidal river flooding since the site's flood history was first recorded. In RBKC, self contained basements dwellings, will not be allowed in Flood Risk Zone 3, as stated in policy CE2.

The most significant risk associated with the local sewer network (owned and operated by Thames Water) relates to the Counters Creek Sewer which runs along the eastern boundary of the Opportunity Area. It is a large diameter Victorian era combined stormwater sewer which occasionally backs up as a result of limited capacity in deeper storm relief sewers, causing local basement flooding. There have been no reported instances of flooding from surcharging manholes and the flooding risk relates principally to basement connections to the existing sewer network. Thames Water are planning to undertake a £32m strategic storm relief tunnel to alleviate this problem, which is scheduled for 2015. This will depend on the success of the bid they are putting forward to OFWAT in 2012. There are currently no instances of significant surface water flooding on the Opportunity Area, and any stormwater flooding is highly localised and quickly dissipated. Map 17 of the SFRA shows that properties flooded in the Opportunity Area in 2007.

2.2.10 Biodiversity

The physical environment of the Opportunity Area is severely degraded and contains only one area of 0.88ha that is notable in terms of biodiversity; a semi-natural green corridor running alongside the West London Railway Line more or less on the boundary of LBHF and RBKC. It has been classified as being of Grade 1 Nature Conservation Importance in LBHF.

The West London Line corridor is important in ecological terms as it joins up with the Grand Union Canal to the north. The majority of the rail corridor is a complex of abandoned sidings and overgrown 'roughland' along with patches of semi-improved natural grassland with a ruderal/ephemeral community nearer the track bed. Some areas of roughland have progressed to semi-mature sycamore woodland. An extensive area of roughland, tall herb and sycamore woodland to the west of West Brompton Station is enhanced by adjoining habitat in the Brompton Cemetery located just outside the Opportunity Area. There is also a large area of semi improved natural grassland to the south of West Cromwell Road.

The LBHF Fox Survey indicates that the West London Line corridor is suitable for foxes as it provides undisturbed breeding habitat and a corridor to feeding areas including the adjacent Brompton Cemetery. Although there are no other specific surveys covering the fauna of the site, the mixture of habitats including bramble and other berry species provide a food source along with habitat for birds and small mammals. A recent survey in June 2010 by LBHF biodiversity officers found a dominance of the native *Leucanthemum vulgare* that supports nectar feeding insects.

The LBHF Biodiversity Action Plan (BAP) identifies seven habitat types that are especially important in the borough, including railway corridors and residential gardens and allotments, both habitat types that are represented in the Opportunity Area. Two bird species have been identified in the BAP that are of particular value to both boroughs; *Black Redstart* and *House Sparrow*. These are also considered 'flagship' species, the protection of which benefits other wildlife.

2.2.11 Air quality

The Opportunity Area is within an Air Quality management Area and currently features degraded air quality. There are areas of high NO₂ concentrations in the Opportunity Area particularly along the strategic highway network.

2.2.12 Health and wellbeing

Some parts of the Opportunity Area suffer from health deprivation with residents of both the Gibbs Green Estate and West Kensington Estate suffering from below average health outcomes.

The Opportunity Area is served by the Hammersmith and Fulham Primary Care Trust (PCT) and the Kensington and Chelsea PCT. The two PCT's provide primary health care services to the local resident population.

Residents of the Opportunity Area can easily access private health care treatment given the proximity of Harley Street, Cromwell Hospital (BUPA) and other private hospitals.

In 2007 there was an average of 63.6 GPs per 100,000 people in LBHF, which is greater than the average for England of 61.8 per 100,000 people. This equates to 1,704 patients per GP, which is

meeting the standard target patient list of 1,800 patients per GP recommended by the Department of Health. In RBKC there were 56.7 GPs per 100,000 people, which is below the average for England, but at 1,785 patients per GP is above the Department of Health standard. There are eleven GP practices within typical walking distance (1km) of the Opportunity Area.

At a London-wide level, it is acknowledged that there is sufficient, if not excess capacity of hospitals, particularly in inner London as a result of historical provision. Within LBHF and RBKC, there are a number of NHS Hospital Trusts and Foundation Trusts, namely Imperial College Trust, Chelsea and Westminster Hospital Foundation Trust, Royal Brompton and Harefield Trust, The Royal Marsden Foundation Trust and the Central and North West London Foundation Trust.

2.2.13 Open Space, Play Space and Community Facilities

Within the Opportunity Area itself, there is limited public open space, comprising primarily of irregular shaped areas of open space within the Gibbs Green and West Kensington Housing estates. Within the hinterland, there is Normand Park, a public open space to the south west of the Opportunity Area. Brompton Cemetery is publicly accessible, but as a cemetery has limited recreational value.

The open space within the Opportunity Area, referred to as the 'West Kensington Estate Open Space', is in reality a series of poorly laid out open spaces separating the various residential blocks and terraces and is of limited active or passive recreational value although they are of some amenity value to the estates. There is also a triangular shaped Multi Use Games Area (MUGA) within the cartilage of the estates. There are 13 private parks and open spaces within walking distance (1km) of the Opportunity Area, access to which is unlikely be available to future residents of the Opportunity Area.

There are eight publicly accessible outdoor sports pitches and 12 indoor leisure facilities within reasonable walking distance (1km) of the Opportunity Area, although there are none within the Opportunity Area. Outdoor sports facilities at Lillie Road Recreation Ground are currently being upgraded, and are situated approximately 1km from the Opportunity Area. The Lillie Road Fitness Centre is also programmed to be upgraded which is free to residents within the Opportunity Area.

There are 20 children's play spaces within 800m of the Opportunity Area, the accessibility benchmark set out in the GLA Supplementary Planning Guidance (SPG) 'Providing for Children and Young People's Play and Recreation'. Applying this guidance further, it has been identified that there are five doorstep playable spaces, 12 local playable spaces, one neighbourhood playable space and one limited access play area accessible from the Opportunity Area. Three of these areas are within the Opportunity Area; Gibbs Green Playground, Ivatt Place Playground and the Fulham Centre Games Area.

In terms of community facilities, there are eight crèches, four youth centres, and four community centres and meeting spaces within typical walking distance of the Opportunity Area. There are also three libraries situated within 1km walking distance of the Opportunity Area at West Kensington, Brompton and Fulham. The newly built state-of-the-art Shepherd's Bush Library at Westfield is also available to Opportunity Area residents.

2.2.14 Safety and security

The Opportunity Area experienced a 3 percent decrease in the total number of crimes committed since 2005/06 in 2008. The largest decreases were both burglary and robbery (30 percent), theft and handling (8%), along with a small decrease in the rate of sexual offences. There was a small increase in the number of drug arrests along with a 6 percent increase in both criminal damage and in 'Violence against the person' crimes.

2.2.15 Education

In 2001, 52 percent of working age residents in the Earl's Court, Fulham Broadway and North End Wards had a level 4 or 5 qualification. This is almost 20 percent above the London average, and 7 percent above the LBHF average but in line with RBKC. Only 13 percent of the population had no qualification, almost 10 percent fewer than the equivalent figure across London as a whole, and 7 percent fewer than across England.

There is a marked difference in educational attainment between wards in LBHF and RBKC. In LBHF 49 percent of residents hold a level four and five qualification in North End, but in Fulham Broadway only 42 percent of residents hold these qualifications. These two wards also have the highest percentage of residents with no qualification (18 percent and 21 percent respectively), which is close to the Greater London figure of 24 percent. 54 percent of residents within the Earl's Court Ward have qualifications at levels four and five and only 11 percent of the population have no qualifications at all.

Educational attainment on the West Kensington and Gibbs Green Estates is significantly lower than the underlying ward averages, with almost one third of adult residents having no qualification at all. LBHF audits of the Gibbs Green and West Kensington Estates show that in 2008, 30 percent of adults of working age had no educational qualifications, and only 31 percent and 20 percent respectively had level 4 or 5 qualifications.

2.2.16 Waste

There is no specific information relating to waste generation and recycling rates at ward level so borough figures are used. The overall LBHF and RBKC recycling rates are 20 percent for municipal waste and 27 percent for household waste. These rates of recycling are higher than many other London Boroughs and greater levels of recycling are anticipated in the medium to long term in line with London Plan targets (>45 percent diversion rate for municipal waste by 2015). Waste generated within the Opportunity Area is currently transported via the Thames by barge from two Western Riverside Waste Authority (WRWA) transfer stations in Wandsworth to a river fed landfill site in Thurrock, Essex. Co-mingled dry recyclables collected via both boroughs' kerbside and commercial recycling collection are currently sent by road to the Viridor Waste Management material reclamation facility (MRF) in Crayford, Kent, to be sorted.

Existing arrangements for waste transfer, disposal, recycling and processing will continue in the short term due to LBHF and RBKC contractual obligations with WRWA. Residual municipal solid waste from all WRWA borough's is soon to be diverted from landfill to a new river fed energy-to-waste incinerator currently under construction at Belvedere, Bexley, programmed to be operational by 2012. Co-mingled dry recycled material will also be sent to a new facility programmed for completion at Smugglers Way in Wandsworth in 2010 and will therefore be processed within the WRWA area.

There are no dedicated waste or recycling handling facilities within the Opportunity Area. All commercial waste generated by The Earl's Court Exhibition Centres is currently collected by a private contractor and disposed of separately.

2.2.17 Transport and travel

The Opportunity Area and immediately surrounding area is an important transport hub in terms of public transport and the TfL Road Network (TLRN).

The Opportunity Area is bounded by the A4 Talgarth Road/West Cromwell Road (to the north), Warwick Road (to the east), North End Road (to the west) and Lillie Road/Old Brompton Road (to the south). The dominant traffic movement in the area is east-west along the A4 (West Cromwell Rd) and Old Brompton Road/Lillie Road, with a less significant north-south through movement. There is also a substantial west-south through movement from the A4, turning right onto Earl's Court Road and then continuing south on Redcliffe Gardens. The reverse movement from Finborough Road north to Warwick Road and then turning left onto the A4 westbound is also a dominant movement (half of all Warwick Road traffic approaching the A4 subsequently turns left onto the A4).

The Public Transport Accessibility Level (PTAL) varies throughout the Opportunity Area. Areas near the boundary of the Opportunity Area adjacent to LUL stations have the highest PTAL score of 6 with the PTAL dropping to 3 in the middle of the Opportunity Area. The lower PTAL in the middle of the Opportunity Area is a function of the impermeable nature of the area, distance to stations, the size of land holdings and lack of a highway network.

There are three LUL stations within or immediately adjacent to the Opportunity Area; Earl's Court Station, West Kensington Station, and West Brompton Station. Earl's Court Station serves the Piccadilly Line and all three western branches of the District Line (Wimbledon Branch, Ealing Broadway Branch and Richmond Branch), West Kensington serves the District line (Richmond and Ealing Broadway Branches) and West Brompton Station serves the District Line (Wimbledon Branch) and West London Line.

The bus priority network around the Opportunity Area is under-developed, with only limited sections of bus lane on North End Road. The lack of bus priority means that services are commonly subject to delays caused by traffic congestion. The standard of bus / rail / underground integration is also generally poor, with no dedicated interchange facilities within or surrounding the Opportunity Area.

In terms of walking and cycling, the middle of the Opportunity Area is almost totally impermeable and there are no routes through the middle of the site. The A4 is a significant barrier to pedestrian and cycle movement to the north, although a complicated multistage level crossing is provided at the junction of West Cromwell Road/Warwick Road. There is a contiguous footway network around the boundary of the Opportunity Area encompassing West Cromwell Rd, Warwick Rd, Lillie Rd and North End Rd, and at grade access to all LUL stations and bus stops.

Rail connections around the Opportunity Area are extensive and provide links to local, metropolitan, regional and national services. Stations within 1km (walking distance) are West Brompton, Earl's Court, West Kensington and Kensington Olympia.

2.3 Task A3: Identifying sustainability issues and problems

Task A3 of the SA process requires the identification of sustainability issues. This is integral to the SA process, and informs Stage B where the SPD is tested against the SA framework.

The identification of sustainability issues meets the requirements of the SEA Directive to identify *“any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of particular environmental performance.”*

The following list of issues was developed from the review of plans, programmes and policies and the baseline data summarised in 2.2 above. The sustainability issues are summarised in a London and Opportunity Area context:

Table 3 - Opportunity Area issues

Opportunity Area Sustainability Issue
Environment
Open space: The quantity of open space should be increased and the quality of public realm in the Opportunity Area should be improved.
Climate change: Current patterns of land use and related energy consumption within the Opportunity Area are unsustainable and result in higher than average overall CO2 emissions. Vehicle movements are currently un-mitigated within and surrounding the Opportunity Area.
Biodiversity: The physical environment of the Opportunity Area is degraded with only one rail corridor supporting any noteworthy biodiversity.
Natural resources: there will be increased demand for water, energy use, pressure on biodiversity and open space arising from population growth and increased economic activity.
Water quality and resources: Most of the Opportunity Area is within flood zone 3. Significant new development will increase surface water run off and increase the potential for surface flooding, sewer flooding (as the Counter's Creek sewer is up to capacity) and pollutant run off.
Waste: Waste minimisation and recycling initiatives are limited within the Opportunity Area.
Air quality: The Opportunity Area is within an Air Quality management Area and currently features degraded air quality.
Social
Housing: There is currently an insufficient mix and quantity of housing within the Opportunity Area and a limited range of dwelling sizes. The quality of the existing housing stock is poor. Much of the housing in the wider area is also not affordable.
Equality and diversity: the Opportunity Area features comparatively high levels of social deprivation.
Education: There is a shortage in the number of schools and nurseries within and surrounding the Opportunity Area and all primary schools and nurseries are predominantly full. Links to existing educational facilities could be improved.
Safety and security: Reported crime in parts of the Opportunity Area is above the LBHF and RBKC average, although this is decreasing.

Opportunity Area Sustainability Issue
Transport and travel: Despite substantial surrounding public transport infrastructure, some parts of the Opportunity Area still have a comparatively low level of public transport accessibility. Strong physical segregation based on railway and road infrastructure severely affects pedestrian and cycling permeability across the Opportunity Area.
Health and wellbeing: The Opportunity Area population suffers from poor overall health outcomes as a result of social deprivation. Key health indicators in the Opportunity Area are all worse than both borough and London averages.
Economic
Stable economy: Some industry sectors are under represented in the Opportunity Area's economy.
Employment: There is a high rate of worklessness and benefit dependence in the West Kensington and Gibbs Green Estates, and unemployment is higher than the Borough and London average. A disproportionate amount of the population is on benefits.
Regeneration and land use: The majority of the Opportunity Area is currently under-utilised in terms of development potential, especially for mixed-use type development.
Heritage and the built environment: The potential conflict between new development creating a distinctive identity while respecting and enhancing the character and setting of heritage assets, including existing heritage assets in the surrounding conservation areas and listed structures (including architectural distinctiveness, townscape, landscape and archaeological heritage) poses a challenge to the location and scale of future development.

2.4 Task A4: Developing the SA Framework

Task A4 of the SEA Directive requires the establishment of sustainability objectives, along with identifying relevant indicators that track progress towards achieving objectives. The objectives relate directly to the sustainability issues identified in section 2.3 above. The sustainability objectives below are distinct from those of the SPD but in some cases will overlap.

For efficiency, the suite of indicators chosen to track progress towards sustainability objectives have mainly been selected from those used in the SA report on the LBHF core strategy options (May 2009). All indicators (unless stated) are National Indicators (NI) and sourced from the Department for Communities and Local Government. The geographic level at which data is monitored needs to be reduced from borough to local (Opportunity Area) level where appropriate.

Table 4 - Sustainability objectives and indicators

Sustainability objectives	Indicator and source
1. Housing: Optimise housing within the Opportunity Area and meet revised London Plan housing targets.	<ul style="list-style-type: none"> • NI 154 Net additional homes provided (LBHF Community Services / RBKC Performance Report) • NI 155 Number of affordable homes delivered (LBHF Community Services / RBKC Performance Report) • NI 158 decent council homes (LBHF Community Services / RBKC Performance Report) • Percentage of homes meeting the highest achievable Code for Sustainable Homes (LBHF Community Services / RBKC planning decision records) • Percentage of homes meeting lifetime homes standard (LBHF Community Services / RBKC Annual Monitoring Report)
2. Equality and diversity: Create a more cohesive community reducing social deprivation and child poverty. Promote social inclusion, interaction, and skills development and increase the number and accessibility of community facilities.	<ul style="list-style-type: none"> • NI 116 Proportion of children in poverty (LBHF Childrens Services / RBKC Performance Report) • NI 140 Fair treatment by local services (LBHF Childrens Services / RBKC not monitored) • Percentage of homes built to wheelchair housing standards (LBHF Community Services / RBKC planning decision records)
3. Education: Ensure new schools are appropriately sited and expanded and cater for the predicted child yield. Ensure all children have access to a quality education and ensure opportunities exist for on-going training. Improve accessibility to existing educational facilities.	<ul style="list-style-type: none"> • NI 75 Number of pupils attaining five or more A – C grades at GCSE level (Department for Education and Skills, annual performance tables & LBHF Children's Services) / RBKC Performance Report) • New schools and training institutions established (LBHF, annual monitoring report / RBKC Annual Monitoring Report)
4. Safety and security: Reduce the amount of crime by reducing opportunities for crime, and reduce the fear of crime through building and public realm design principles.	<ul style="list-style-type: none"> • NI 2 % of people who feel they belong to their neighbourhood (LBHF Finance and Corporate services / RBKC not monitored) • NI 5 Overall/general satisfaction with local area (LBHF, annual monitoring report / RBKC not monitored) • NI 16 Serious acquisitive crime rate (LBHF Community Services, via Police / RBKC Performance Report) • NI 17 Perceptions of anti-social behaviour (Police)
5. Health and wellbeing: Improve overall levels of health across the Opportunity Area, reduce disparities between different groups and improve access to primary health care.	<ul style="list-style-type: none"> • NI 116 All age, all cause mortality rate (HF and K&C PCT) • NI 56 Obesity among primary school age children in year 6 (LBHF Community Services, via HF PCT / RBKC Performance Report) • NI 57 Children and young peoples participation in high quality PE and sport (LBHF Childrens Services / RBKC Performance Report) • NI 8 Adult participation in Sport (LBHF Resident services /

Sustainability objectives	Indicator and source
	RBKC Performance Report)
6. Transport and travel: Improve Public Transport Accessibility throughout the Opportunity Area. Achieve modal shift from private vehicle trips to sustainable forms of transport. Establish new pedestrian and cycle facilities. Limit the number of private vehicle parking spaces.	<ul style="list-style-type: none"> Public Transport Accessibility Score (PTAL) (Transport for London, PTAL map) Number of Personal Injury Accidents (PIA's) (LBHF, annual highway safety report) Modes of transport using annual travel count data (LBHF and TfL data) Percentage amount of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre (LBHF Environment Services) New pedestrian and cycle facilities (LBHF, annual highway safety report) NI 198 methods of children travelling to school (5-16 year olds) (LBHF Environment Services Dept / RBKC Performance Report)
7. Stable economy: To encourage a strong, diverse and stable economy in the Opportunity Area, to establish new businesses, and improve the resilience of existing businesses.	<ul style="list-style-type: none"> NI 172 VAT Registration Rate (LBHF Community Services / RBKC Performance Report) NI 174 Skills gap in the current workforce reported by employers (LBHF Community Services / ONS)
8. Employment: To offer residents the opportunity for rewarding, well-located and satisfying employment and creating jobs for people living within the Opportunity Area. Training opportunities to enable local people to access new jobs.	<ul style="list-style-type: none"> NI 151 Overall employment rate (LBHF Community Services / ONS) NI 152 working age people on out of work benefits (LBHF Community Services / RBKC Performance Report) NI 153 Working age people claiming out of work benefits in the worst performing neighbourhoods (LBHF Community Services / RBKC Performance Report)
9. Regeneration and land use: Use land efficiently, optimising development on appropriate sites and optimising housing densities whilst creating quality public spaces and community facilities.	<ul style="list-style-type: none"> New residential units (LBHF, annual monitoring report / RBKC Annual Monitoring Report) Commercial floorspace established (LBHF, annual monitoring report / RBKC Annual Monitoring Report) Number of planning applications per annum (LBHF, annual monitoring report / RBKC Annual Monitoring Report)
10. Heritage and the built environment: To integrate the new development into the existing urban fabric, overcoming the divide created by the west London line, enhancing the quality and character of the townscape and protecting nearby heritage assets.	<ul style="list-style-type: none"> Number of new east west connections created (LBHF / RBKC planning decisions records) Percentage of heritage assets preserved or enhanced (LBHF, annual monitoring report / RBKC Annual Monitoring Report)
11. Open space: Improve the quality of the public realm and	<ul style="list-style-type: none"> Total area of open space (LBHF, annual monitoring report; London Plan annual monitoring report / RBKC Annual

Sustainability objectives	Indicator and source
increase the number of public open spaces.	Monitoring Report for net open space)
12. Climate change: Requiring energy generation from renewable and low carbon sources, and promote energy efficiency.	<ul style="list-style-type: none"> • NI 186 per capita CO2 emissions (LBHF Community Services / RBKC Performance Report) • Renewable Energy Capacity Installed by type (Environment Services Department / RBKC planning decisions records) • Percentage of homes meeting the highest achievable Code for Sustainable Homes (LBHF Community Services / RBKC planning decisions records)
13. Biodiversity: Restore and enhance bio-diversity across the Opportunity Area.	<ul style="list-style-type: none"> • Planting schedule for new open space • NI 197 Improved local biodiversity – active management of local sites (LBHF Environment Services Dept / RBKC Performance Report)
14. Natural resources: recycle demolition materials in construction and minimise the consumption of water and energy in developments.	<ul style="list-style-type: none"> • Percentage of homes meeting the Code for Sustainable Homes (LBHF Community Services / RBKC planning decisions records) • NI 192 Household waste recycled and composted (LBHF Environment services Dept / RBKC Performance Report) • Estimated water consumption (OFWAT – this is also a UK Government sustainability indicator)
15. Water resources: Minimise the risk of surface flooding and promote sustainable urban drainage.	<ul style="list-style-type: none"> • Number of schemes incorporating SUDS principles and natural filtration (LBHF, Environment Services Dept / RBKC planning decisions records)
16. Soil conditions and contamination: Ensure all contaminated sites are re-mediated prior to development, with the option of in situ treatment investigated.	<ul style="list-style-type: none"> • Soil samples and ground water monitoring before and following site remediation (LBHF conditions of planning permissions, sampling results from individual sites / RBKC Environmental Health)
17. Waste: To minimise production of waste across all sectors in the Opportunity Area and increase rates of re-use, recycling and recovery of materials. Composting or anaerobic digestion of all green waste.	<ul style="list-style-type: none"> • NI 192 Household waste recycled and composted (LBHF Environment services Dept / RBKC Performance Report) • Cubic metres of waste arising by sector GFA (DEFRA, EA, GLA, Waste arising by sector)

Sustainability objectives	Indicator and source
18. Air quality: Reduce all forms of air pollution and improve the atmosphere in the Air Quality Management Area.	<ul style="list-style-type: none"> • Air Pollution Index (DEFRA, estimated emissions of NO₂, PM₁₀ and SO₂ – this is also a UK sustainable development indicator/ RBKC Performance Report) • Number of times the level of pollution exceeds the guide limits for PM₁₀ and NO₂ (LBHF, Environment Services Dept / RBKC Performance Report)

Compatibility of sustainability objectives

The above sustainability objectives promote an integrated approach to economic, environment and social factors. Many of them overlap and cannot be categorised as a stand-alone topic. The table below illustrates how the sustainability objectives cover the requirements of the SEA Directive.

Table 5 - Relationship of sustainability objectives to SEA directive issues

SEA directive Issue	SA Objectives
Biodiversity	6, 9,11,12,13,14,15,18
Population	1,2,3,4,5,6,7,8
Human health	1,2,3,4,5,9
Fauna	11,12,13,18
Flora	11,12,13 15,16,18
Soil	15,16
Water	13,14,15,16
Air	6,12,14,18,
Climate factors	6,12,13,14,18
Material assets	1,2,5,7,8,9
Cultural heritage	9,10
Landscape	9,10,11

The Sustainability Objectives were then tested for compatibility as a requirement of the SEA directive, which aims to highlight potential conflicts between the objectives. The majority of the sustainability objectives are compatible however the following table highlights potentially conflicting objectives:

Table 6 - Compatibility of Sustainability Objectives

Sustainability Objective		Sustainability Indicators																		
		1. Housing	2. Equality & Diversity	3. Education	4. Safety & Security	5. Health & Wellbeing	6. Transport & Travel	7. Stable Economy	8. Employment	9. Regeneration & land use	10. Heritage & Built Environ.	11. Open Space	12. Climate Change	13. Bio-Diversity	14. Natural Resources	15. Water Resources	16. Soil Conditions & contamination	17. Waste	18. Air Quality	
1. Housing																				
2. Equality & Diversity		+																		
3. Education		+	+																	
4. Safety & Security		+	+	+																
5. Health & Wellbeing		+	+	+	+															
6. Transport & Travel		+	+	+	+	+														
7. Stable Economy		+	+	+	+	+	-													
8. Employment		+	+	+	+	+	+	+												
9. Regeneration & land use		+	+	+	+	+	+	+	+											
10. Heritage & Built Environ.		+	+	+	+	+	-	-	+	-										
11. Open Space		+	+	+	+	+	-	+	+	-	+									
12. Climate Change		+	+	+	+	+	-	-	+	-	+	+								
13. Bio-Diversity		+	+	+	+	+	+	-	+	-	+	+	+							
14. Natural Resources		+	+	+	+	+	-	-	+	-	+	+	+	+						
15. Water Resources		+	+	+	+	+	+	+	+	-	+	+	+	+	+					
16. Soil Conditions & contamination		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
17. Waste		+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+		
18. Air Quality		+	+	+	+	+	-	-	+	-	+	+	+	+	+	+	+	+	+	
			1. Housing	2. Equality and Diversity	3. Education	4. Safety and Security	5. Health and Wellbeing	6. Transport and Travel	7. Stable Economy	8. Employment	9. Regeneration and Land use	10. Heritage & Built Environ.	11. Open Space	12. Climate Change	13. Bio-Diversity	14. Natural resources	15. Water Resources	16. Soil Conditions & contamination	17. Waste	18. Air Quality

+ Compatibility
- Potential incompatibility

The outcome of this exercise highlights that there are areas of potential incompatibility and conflict between:

- Objectives for a stable economy have the potential to conflict with transport and travel;
- Objectives for heritage and built environment have the potential to conflict with transport and travel, stable economy and regeneration and land use;
- Objectives for open space have the potential to conflict with transport and travel;
- Objectives for Climate Change have the potential to conflict with transport and travel, stable economy and regeneration and land use;
- Objectives for biodiversity have the potential to conflict with a stable economy and regeneration and land use;
- Objectives for natural resources have the potential to conflict with transport and travel, stable economy, employment and regeneration and land use;
- Objectives for water resources have the potential to conflict with regeneration and land use;

- Objectives for soil conditions and contamination have the potential to conflict with stable economy;
- Objectives for waste have the potential to conflict with stable economy, employment and regeneration and land use;
- Objectives for air quality have the potential to conflict with transport and travel, stable economy, regeneration and land use and climate change;

Identifying these potential incompatibilities is useful in that it highlights the need to mitigate and minimise the impact of more jobs, housing and regeneration and the associated consumption of resources and resultant emissions. The most important action is to resolve these conflicts through mitigation of environmental impacts to ensure sustainable outcomes can be delivered by the SPD. It is important that the SPD includes Key Objectives and/or Key Principles to resolve these potential conflicts. The extent to which the SPD meets the sustainability objectives is assessed in table 8 below. Any measures required to mitigate the impacts of the SPD are set out in table 9.

2.5 Task A5: Consulting on the scope of the SA

Task A5 of the SEA requires LBHF and RBKC to consult the environmental consultation bodies on the scope and level of detail of the SA. Four statutory bodies are designated in the SEA regulations.

For the purposes of this SA the Environment Agency was consulted and their response incorporated in making changes to the SA Framework and relevant objectives (a response from the EA was received February 14th 2011). The Environment Agency, English Heritage and Natural England have been consulted as part of the statutory public consultation process in producing the draft SPD. Comments raised during the consultation on the draft SPD and draft SA, together with an officer response and indication of how the either document has been revised, is published alongside this SA and the SPD.

3.2 Task B2: SPD Development Scenarios

3.2.1 Summary

Task B2 of the SEA directive requires the development of capacity options or 'development scenarios'. The previous draft SPD set out three development scenarios with the key difference between each scenario the proposed number of residential units; 4000, 6000 and 8000 for scenarios one to three respectively. The scenarios were further developed to include an indicative quantum for jobs, housing, open space, commercial space, retail space, open space and infrastructure, and the impacts of each scenario were tested by the earlier draft sustainability appraisal.

The revised draft SPD no longer considers development capacity scenarios and instead sets out Key Objectives and Key Principles which any comprehensive redevelopment would need to incorporate. The Key Objectives and Key Principles also provide a basis for assessment of any proposed redevelopment. For the purpose of predicting and evaluating effects, a hypothetical high density scenario has been tested as it represents a 'worst case' scenario in terms of the potential magnitude and duration of effects. As such, it is similar to the previously tested Development Capacity Scenario 3. If the Key Objectives and Key Principles provide a suitable mechanism to control the impacts of this 'worst case' scenario, it is extremely likely that they will control lower density development. The high density scenario tested below assumes that the entire Opportunity Area is built out, including the Gibbs Green and West Kensington Housing estates, and the revised development capacity scenario figures are set out in Table 7 below:

Table 7 - High Density Development Scenario

Scenario	Housing capacity *	Resi floorspace **	Resident population ***	New Jobs ****	Total commercial / non-residential floorspace *****	Office floorspace	Retail floorspace	Hotel	Leisure (includes cultural) floorspace	Other non-residential floor	Total floorspace
High Density Development Scenario	8000	728,000 sq.m.	19,200	15,000	277,500 sq.m. (2,985,900 sq.ft.)	194,250 sq.m.	27,750 sq.m.	27,750 sq.m.	22,200 sq.m.	5,550 sq.m.	1,005,500 sq.m. (10,819,180 sq.ft.)

Notes:

* Housing capacity may include redevelopment and replacement of existing dwellings in the area, such as the 746 dwellings on the West Kensington & Gibbs Green Estates that LBHF has indicated may be included.** GEA based on 70 sq.m. per dwelling plus 30% allowance for net to gross. The allowance for net to gross is intentionally generous and is expected to be revised down through master planning.

*** Based on the London-wide average figure of 2.4 persons per dwelling. This represents an upper 'worst case' estimate given the LBHF figure of 2.22 and the RBKC figure of 2.0.

**** All jobs figures are new (net additional) jobs.

***** GEA based on a figure of 18.5 sq.m. per work space which includes an allowance for net to gross. The subsequent break down of this figure into broad land use categories is based on the following proportions of this total: office (70%); retail (10%); hotel (10%); leisure (including cultural) (8%); and other non-residential uses (2%). The commercial / non-residential figures broadly reflect those currently put forward by Capital & Counties Plc as does the relative proportions for each commercial / non-residential land use identified above. All are indicative working figures and will need to be refined through master planning, transport capacity modelling and topic based studies on floorspace requirements and impact. This will include refinement of the area figure per workspace for each use category beyond the broad figure used at present.

3.3 Task B3 & B4: Predicting and evaluating the effects

Tasks B3 and B4 of the SEA directive requires the prediction and evaluation of effects of the capacity options, and this is set out in Table 10 below with reference to the sustainability objectives and related indicators. Where appropriate, the Key Principles below have been revised to reflect changes following consultation on the revised draft SPD (Nov / Dec 2011).

Table 8 – predicting and evaluating the effects of the development scenarios

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
1. Housing	Net additional homes provided	Yes	++	<i>The number of homes provided will depend on the phasing, which will be dependant on planning applications coming forward and subsequent approvals and phasing. The high density scenario tested assumes the redevelopment of the housing estates within the Opportunity Area.</i>
	Number of affordable homes delivered	Yes	++ (?)	<i>The draft replacement London Plan density target for the Opportunity Area sets an indicative threshold of new homes although the high density scenario assumes a greater number. Key Principle H06 (in accordance with the LBHF Core Strategy (2010)) requires 40% of housing to be affordable in LBHF comprising a mix of tenures. Key Principle H07 states 50% of the gross external residential floorspace above 800sqm should be affordable with a minimum of 15% intermediate housing, subject to viability on the RBKC part of the site (consistent with RBKC Core Strategy policy). Key Principles HO12 and HO13 states affordable housing must be based on local need and the strategic housing needs assessment.</i> <i>Overall there is uncertainty on the likely tenure split of new residential dwellings as this is dependent on need and viability of specific proposals.</i>
	Decent council homes	Yes	++	<i>Key Principle H016 states all new housing must accord with standards in the London Plan. Key Principle HO10 requires an Affordable Housing Plan be secured by reserved matters that must set out affordability, location, tenure mix and unit size.</i>
	Percentage of homes meeting the Code for	Yes	++	<i>Key Principle ENE1 requires each phase of development to meet the carbon reduction targets set out in the London Plan (2011), with all residential development from 2016 being zero carbon and non-residential development from 2019 being zero carbon.</i>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	Sustainable Homes			
	Percentage of homes built to wheelchair housing standards	Yes	++	<i>Key Principle HO18 requires a minimum of 10% of residential units in each borough must be wheelchair accessible. Key Principle HO19 requires all residential units to be built to lifetime homes standards.</i>
2. Equality and Diversity	Number of community organisations	Yes	++	<i>Key principle SC6 requires redevelopment to provide a community hub of 4,500sqm floorspace including a library, multi faith space, youth space, children's centre, affordable and flexible office, training and meeting space, adult learning and training space and halls for hire for use by the voluntary sector and residents.</i>
	Percentage of homes meeting lifetime homes standard	Yes	++	<i>Key Principle HO19 requires all residential units to be built to Lifetime Homes Standards.</i>
3. Education	Number of pupils attaining five or more A- C grade GCSE's	Yes	++	<i>Key Principle SC1 requires any planning application within the OA to be assessed against both RBKC and LBHF child yield formulas in order to provide the relevant educational (nursery, primary and secondary) floorspace and associated fit out costs to cater for the population uplift in the area.</i>
	Access to educational facilities	Yes	++	<i>In addition to the increased education provision required under Key Principle SC1, Key Principle UF1 requires improved north south and east west connectivity across the OA to overcome existing severance. Key Principles TRN3 to TRN7 require improvements to the pedestrian environment to encourage walking.</i>
	New schools and training institutions established	Yes	++	<i>Key Principle SC1 requires any planning application within the OA to be assessed against both RBKC and LBHF child yield formulas in order to provide the relevant educational (nursery, primary and secondary) floorspace and associated fit out costs to cater for the population uplift in the area.</i>
4. Safety and security	Crime rate within the Opportunity Area	Yes	++	<i>It is difficult to predict whether the total amount of crime will be reduced given the large increase in projected population. However, the decrease in social deprivation associated with the high density scenario is expected to lead to an overall decrease in crime throughout Opportunity Area, and almost certainly on a per capita basis. Safer, healthier and more integrated</i>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
				<i>communities result in a reduction in crime. Key Principle UF39 ensures that all streets and public open spaces are overlooked by the 'active frontages' to improve natural surveillance. Development in RBKC will also need to accord with RBKC's Designing out Crime SPD.</i>
	Overall/general satisfaction with local area	Yes	++	<i>Apart from the vision that seeks to create a place 'that people want to live in, work in and visit' this is impossible to predict in terms of the SPD. This will be assessed once the development is complete through public perception, number of vacant units and potential for new heritage assets. A scenario implemented in accordance with the proposed Housing Strategy and Urban Form Strategy will result in a well designed place with tenure blind residential dwellings, job opportunities, the creation of attractive and usable open space, improved accessibility and connectivity, and drastic improvements in social infrastructure. The decrease in social deprivation associated with the current housing estates is expected to improve overall resident satisfaction within the Opportunity Area once complete.</i>
	Percentage of buildings that achieve secure by design classification	Yes	+(?)	<i>Although many Key Principles in the Urban Form Strategy relate to aspects of 'secure by design', there is no key principle that specifically requires it be incorporated into building design. Key Principle UF39 ensures that all streets and public open spaces are overlooked by the 'active frontages' to improve natural surveillance.</i> <i>Policy 7.3 of the London Plan 'Designing out Crime' requires Boroughs to seek to create safe, secure and appropriately accessible environments where crime and disorder and fear of crime so not undermine quality of life or community cohesion. Development in RBKC will also need to accord with RBKC's Designing out Crime SPD.</i>
5. Health and Wellbeing	All age, all cause mortality rate	Yes	++	<i>Development of the area will improve health outcomes and life expectancy through improved living environments and a range of social infrastructure and physical measures. Key Principle SC2 requires any application for comprehensive redevelopment of the OA to provide a NHS health facility. The size of this facility should be calculated based on the methodology set out in the SPD. The facility should be located in an easily accessible location for all residents living within the O A and should be provided within one of the earlier phases of development. The Environmental Strategy also requires development to 'protect the new and existing population from the impacts of demolition, excavation and construction, which includes consideration of noise vibration, dust, air quality and road safety during the construction and demolition. Key</i>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
				<i>Principle SC3 states that major planning applications in the OA must be accompanied by a Health Impact Assessment.</i>
	Obesity among primary school age children in year 6	Yes	+	<i>Development of the OA will improve health outcomes including reducing obesity through a range of new social infrastructure and other physical measures including improved open space and play space. Key Principles UF12 to UF17 requires publicly open space, which includes a minimum of 10sqm of publicly accessible green open space per child (UF14) and a minimum of 10sqm of dedicated play space per child (UF15). . Key Principle SC3 states that major planning applications in the OA must be accompanied by a Health Impact Assessment.</i>
	Children and young people's participation in high quality PE and sport	Yes	+	<i>Key Principles UF12 to UF17 requires publicly open space, which includes a minimum of 10sqm of publicly accessible green open space per child (UF14) and a minimum of 10sqm of dedicated play space per child (UF15). . All scenarios are likely to increase participation in physical education and sport as a result of new social infrastructure and other physical measures including improved open space and play space. Key Principle SC4 requires any proposals for redevelopment of the OA to provide a range of indoor and outdoor sports and leisure facilities to cater for the needs of the future population.</i>
	Adult participation in sport	Yes	+	<i>Redevelopment of the OA is likely to increase participation in physical education and sport as a result of new social infrastructure and other physical measures including improved open space and indoor facilities. Key Principle SC4 requires any proposals for redevelopment of the OA to provide a range of indoor and outdoor sports and leisure facilities to cater for the needs of the future population.</i>
6. Transport and Travel	Public transport Accessibility level (PTAL)	Yes, TfL PTAL maps	+(?)	<p><i>Redevelopment of the will require major transport interventions to improve PTAL, particularly in the middle of the Opportunity Area.</i></p> <p><i>Key Principle TRN10 requires improvements to all three nearby LUL Stations (Earl's Court, West Brompton and West Kensington) to accommodate increases in passenger numbers. Station improvements by themselves however will not improve PTAL. In addition to station improvements, Key Principle UF1 requires improved north south and east west connectivity across the OA to overcome existing severance. Key Principles TRN3 to TRN7 require improvements to the pedestrian environment to encourage walking.</i></p>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	Number of personal injury accidents (PIA's)	Yes	?	<i>Key Principles TRN3 to TRN9 require improved pedestrian and cycle environment to encourage walking and cycling. Key Principles UF1 to UF3 requires improved connectivity through the OA</i>
	Modes of transport using annual travel count data.	Yes, Borough highways and TLRN vehicle counts.	-?	<p><i>All three scenarios will result in an inevitable increase in vehicle movements. However, measures to limit vehicle ownership and encourage travel by sustainable modes could substantially decrease the number of vehicle trips.</i></p> <p><i>Key principles TRN 3-18 encourage additional trips to be made by foot, bicycle or public transport.</i></p> <p><i>Key principle TRN21 states that development should not worsen traffic conditions. However, there are no specific requirements for travel demand measures set out in the Transport Strategy.</i></p>
	New pedestrian and cycle facilities	Yes	++	<p><i>All scenarios will include improvements to pedestrian and cycle infrastructure, with new footways, footpaths, cycle routes and cycle storage facilities.</i></p> <p><i>Key Principles TRN3 to TRN9 require improved pedestrian and cycle environment to encourage walking and cycling. Key Principles UF1 to UF3 requires improved connectivity through the OA</i></p>
	Methods of children travelling to school	Yes	++	<i>General accessibility improvements to pedestrian, cycling and public transport infrastructure (in accordance with Key Principles TRN3 to 18) will encourage modal shift away from private vehicle trips to more sustainable modes of transport, including for school trips.</i>
7. Stable Economy	VAT registration rate	Yes	++	<i>Redevelopment of the OA will create a high level of employment space (as set out in Table 7) which will help encourage the establishment of new businesses. The Employment Strategy seeks to create an additional 7,000 new jobs and improve access to training initiatives and apprenticeships. Key Principle ES1 requires that existing business floorspace in the OA should be renewed and modernised or replaced through development proposals to maintain and intensify existing employment provision. New businesses will also be created as a result of the retail strategy and cultural strategy.</i>
	Skills gap in the	Yes	++	<i>The Employment Strategy seeks to create an additional 7,000 new jobs and improve access to</i>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	current workforce			<i>training initiatives and apprenticeships. Key Principle ES8 states that any application for the comprehensive redevelopment of the area will be expected to support and fund Workplace Coordinators and the provision of a recruitment & employability training centre and a recruitment and job shop.</i>
8. Employment	Overall employment rate in the Opportunity Area	Yes	++	<i>The Employment Strategy seeks to create an additional 7,000 new jobs and improve access to training initiatives and apprenticeships. Key Principle ES9 requires any application to be supported by a Local Labour, Skills and Employment Strategy, which sets out steps that will be taken during and after construction to improve locals access to training and employment and demonstrating that work has been undertaken and is ongoing with strategic and local partners to ensure that local residents are provided with opportunities for employment in the Opportunity Area.</i>
	Working age people on out of work benefits	Yes	++	<i>The Employment Strategy seeks to create an additional 7,000 new jobs and improve access to training initiatives and apprenticeships. Improving opportunities to employment will reduce the number of working age people on out of work benefits.</i>
9. Regeneration and Land Use	New residential units	Yes	++ 4,000 units	<i>The London Plan requires a minimum of 4,000 new homes.</i>
	Commercial floorspace established	Yes	+++ 90,000 m2	<i>The London Plan requires indicative employment capacity of 7,000sqm new jobs. Key Principle ES2 requires proposals in the OA should incorporate additional business floorspace totalling approximately 90,000sqm (GEA) across the OA, primarily to meet local demand in both boroughs.</i>
	Number of major planning applications per annum	Yes	++	<i>Major applications are expected on a phased basis over a 20-year period, and the SPD includes a phasing strategy.</i>
10. Heritage and the Built Environment	Percentage of heritage assets and	Yes	+	<i>The extent to which new development is designated as listed buildings or conservation areas in the future is premature for the purposes of the SPD.</i>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	conservation areas			<i>It is recognised that tall buildings have the potential to impact on conservation areas and on the setting of listed buildings, and building heights may compromise views and the setting of Brompton Cemetery. The SPD includes various Key Principles in the Urban Form Strategy to control the impact of tall buildings, most importantly is UF21 which requires proposals to demonstrate that they do not have a negative impact on views identified and analysed in the Townscape Views Analysis. Key Principle UF19 requires that development preserves or enhances the character, appearance and setting of surrounding conservation areas and listed buildings. Key Principle UF20 requires development to preserve or enhance the character and appearance and setting of Brompton Cemetery and its listed buildings. Key Principle UF27 requires that development will be expected to preserve or enhance the character, appearance and setting of any listed buildings or conservation areas around the edges of the OA. In addition to this, para 4.11 refers to the English Heritage / CABE Guidance on Tall Buildings (2007) and para 41.2 refers to the EH document titled 'The Setting of Heritage Assets' (2011).</i>
	Number of new east west connections created	Yes	++	<i>A Key Objective in the SPD requires development to: 'maximise connectivity'. UF1 requires the introduction of a number of new east-west and north-south connections across the OA that overcome the existing severance. Key Principles TRN3 to TRN7 require improvements to the pedestrian environment to encourage walking.</i>
11. Open Space	Total area of open space	Yes	++ A min of 2 ha local park	<i>The Opportunity Area is within an area of recognised open space deficiency in accordance with Policy 7.18 of the London Plan.</i> <i>The 'Public Open Space' objective within the UFS, and specifically Key Principle UF12 requires any proposal for comprehensive regeneration will be expected to include a publicly accessible local park of at least 2 hectares.</i> <i>Key Principle UF14 requires any regeneration proposal to provide a minimum of 10m2 of dedicated play space per child. Key Principle UF13 requires (as far as possible) all residential properties to be within 100m walking distance of a publically accessible green space.</i>
12. Climate Change	Per capita CO2 emissions	Yes	++	<i>Key Principle ENE1 requires each phase of development to meet the carbon reduction targets set out in the London Plan (2011) (Policy .24), with all residential development from 2016 being zero carbon and non-residential development from 2019 being zero carbon.</i>
	Renewable	Yes	++	<i>Key Principle ENE2 requires a decentralised energy (including associated district heat network)</i>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	energy capacity installed by type			<p>with associated energy centre(s) and infrastructure. Key Principle ENE3 requires on-site renewable energy to meet any shortfall in achieving the carbon reduction targets.</p> <p>Key Principle ENE4 requires an energy assessment to be submitted with major planning applications and demonstrate how the targets in the London Plan are met. Energy assessments must also demonstrate the reasons for selecting and discounting certain fuel options and renewable energy technologies.</p>
	Percentage of homes meeting the Code for Sustainable Homes	Yes	++	Key Principle ENE1 requires each phase of development to meet the carbon reduction targets set out in the London Plan (2011) (Policy .24), with all residential development from 2016 being zero carbon and non-residential development from 2019 being zero carbon.
13. Biodiversity	Planting schedule for new open space	Yes	++	<p>Key Principle ENV18 requires development to protect and enhance ecology and biodiversity within and adjacent to the Opportunity Area with no net loss of species or habitat by:</p> <ul style="list-style-type: none"> - Protecting and enhancing the Sites of Nature Conservation Importance (SNCI) adjacent to the northbound West London Line platform at West Brompton Station; - Replacing other Sites of Nature Conservation Importance to a significantly higher standard within the OA; - Ensuring that there is no net loss (in area) of Sites of Nature Conservation Importance; - Creating further habitats through the provision of open space, landscaping and tree planting focussing on priority native habitats suitable to the area (acid grassland, woodland and freshwater habitats); - Ensuring that all green open space is connected to form a network of green spaces, with a focus on north-south connectivity; - Delivering Sustainable Urban Drainage systems in the form of swales, rain gardens, ponds and surface drainage systems to provide habitat diversity; - Requiring, where feasible, for all buildings to include green and brown roofs, together with some green walls, to encourage biodiversity habitats, facilitate migration, improve insulation, reduce the impact of the urban heat island effect, help regulate building temperatures and attenuate stormwater flows; - Minimising light pollution to areas sensitive to bats and other wildlife.
	Total area of	Yes	++	The Opportunity Area is within an area of recognised open space deficiency in accordance with

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	open space		2 ha local park	<p><i>Policy 7.18 of the London Plan.</i></p> <p><i>The 'Public Open Space' objective within the UFS, and specifically Key Principle UF12 requires any proposal for comprehensive regeneration will be expected to include a publicly accessible local park of at least 2 hectares.</i></p> <p><i>Key Principle UF14 requires any regeneration proposal to provide a minimum of 10m2 of dedicated play space per child. Key Principle UF13 requires (as far as possible) all residential properties to be within 100m walking distance of a publically accessible green space.</i></p>
14. Natural resources	Percentage of homes meeting the Code for Sustainable Homes	Yes	++	<i>Key Principle ENE1 requires each phase of development to meet the carbon reduction targets set out in the London Plan (2011) (Policy .24), with all residential development from 2016 being zero carbon and non-residential development from 2019 being zero carbon.</i>
	Estimated water consumption	Yes	++	<i>Key principle ENV8 requires residential development to be designed to limit mains water consumption to 105 litres per person per day or less.</i>
	Household waste recycled and composted	Yes	++	<p><i>Key Principle ENV12 requires development within the OA to contribute towards reducing, reusing and recycling waste through non-regulatory and education based approaches.</i></p> <p><i>Key Principle ENV10 states that redevelopment of the OA must deliver sustainable waste collection and management systems.</i></p> <p><i>Key Principle ENV13 requires redevelopment to provide green waste and kitchen waste collection to support a community led composting scheme.</i></p>
15. Water resources	Number of schemes incorporating sustainable urban drainage systems (SUDS) and natural filtration	Yes	+	<p><i>Key Principle ENV9 requires development to reduce the volume of the undeveloped site's surface water at peak times to greenfield run-off rates or better</i></p> <p><i>Key principle ENV9 also requires SUDS to be incorporated into the design of buildings and public realm.</i></p>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
16. Soil conditions and contamination	Soil samples and ground water monitoring before and following site remediation	Yes	++	<p><i>A comprehensive seven stage remediation strategy is proposed for the Opportunity Area.</i></p> <p><i>Key Principle ENV14 states that construction will only begin once any potential land contamination has been identified, assessed and remediated. Key Principle ENV15 requires the remediation strategy to demonstrate that measures with the least environmental impact have been selected, especially considering transport and on-site treatment.</i></p>
17. Waste	Volume of waste recycled or composted	Yes	++	<p><i>Key Principle ENV12 requires redevelopment in the OA to contribute towards reducing, reusing and recycling waste through non-regulatory and education based approaches.</i></p> <p><i>Key Principle ENV10 states that redevelopment of the OA must deliver sustainable waste collection and management systems.</i></p> <p><i>Key Principle ENV13 requires redevelopment to provide green waste and kitchen waste collection to support a community led composting scheme.</i></p>
	Cubic metres of waste arising by sector	Yes	++	<p><i>Key Principle ENV10 requires that redevelopment of the OA delivers sustainable waste collection and management systems, taking into account industry best practice.</i></p> <p><i>Key Principle ENV11 requires at least one centralised waste management facility must be provided in the OA.</i></p> <p><i>Key Principle ENV12 requires redevelopment in the OA to contribute towards reducing, reusing and recycling waste through non-regulatory and education based approaches.</i></p>
18. Air quality	Air Pollution Index	Yes	-	<p><i>The anticipated increase in vehicle movements along with energy related emissions has the potential to negatively impact on air quality within the Opportunity Area. However, mitigation measures will help limit any long term deterioration of air quality.</i></p> <p><i>Key principle ENV16 states that redevelopment must be air quality neutral against existing levels (therefore being no worse) and should include mitigation measures to improve air quality.. Key Principle ENV3 also requires Construction Environmental Management Plans (CEMPs) outlining measures to control and monitor dust and other construction related emissions to be submitted. Para 12.80 requires a Low Emission Strategy.</i></p>

SA Objectives	Target/ Indicator	Can the effects be quantified	High Density Scenario	Comments
	Meeting the objectives of the AQMA	Yes	-	<p><i>The anticipated increase in vehicle movements and related emissions will negatively impact on air quality within the Opportunity Area. However, mitigation measures will limit long term deterioration in air quality in line with Key Principles ENV16.</i></p> <p><i>Key principle ENV16 states that redevelopment must be air quality neutral against existing levels (therefore being no worse) and should include mitigation measures to improve air quality. Key Principle ENV3 also requires Construction Environmental Management Plans (CEMPs) outlining measures to control and monitor dust and other construction related emissions to be submitted.</i></p>

3.4 Task B5: Mitigation Measures

Task B5 of the SEA directive requires the consideration of mitigation measures where negative effects have been identified, along with maximising the positive effects of the SPD where possible. The overall impact of implementing the SPD is predicted to be very positive in terms of sustainability. However further mitigation of negative impacts is required in order to meet specific sustainability objectives. Table 9 below outlines mitigation measures in relation to sustainability objectives and identified negative impacts:

Table 9 – proposed mitigation measures

Sustainability Objective	Impact and proposed mitigation
Equality and diversity	<p>Establishment and strengthening of community organisations</p> <p>Aside from identifying the need to provide social infrastructure (e.g. schools, community facilities, primary care facilities and open space), it is unclear what measures are proposed to encourage the establishment of community organisations and strengthen existing organisations.</p> <ul style="list-style-type: none"> • A needs assessment of community groups within the Opportunity Area and surrounding areas is recommended. This should identify requirements in terms of necessary support structures and facilities to enable them to establish and flourish within the Opportunity Area.
Safety and Security	<p>Although many Key Principles of the Urban Form Strategy within the SPD relate to aspects of secure by design, such as delivering active frontages, there is no key principle that underpins secured by design and requires it to be incorporated into the design of buildings and public space.</p> <ul style="list-style-type: none"> • Planning applications within the OA will therefore need to be assessed against London Plan Policy 7.3 (Designing out Crime) and RBKC's Designing out Crime SPD for development within RBKC •
Transport and travel	<p>Personal injury accidents</p> <p>Measures to improve road safety for all users and reduce traffic speeds will need to be implemented in order to avoid an increase in personal injury accidents. In addition to the general measures set out in the Transport</p>

Sustainability Objective	Impact and proposed mitigation
	<p>Chapter of the SPD, specific measures to avoid an increase in PIA's could include:</p> <ul style="list-style-type: none"> • preparation of a road safety strategy that takes a holistic approach towards movement within the Opportunity Area; • segregated pedestrian and cycle routes; • signalised pedestrian and cycle crossings on busy routes; • traffic calming measures; • green travel plans for both residential schemes, education and sites of employment. <p>Vehicle trip generation and travel demand management</p> <p>A high density scenario will result in a marked increase in vehicle trip generation, impacting on residential amenity, road safety and air quality (NO2 and PM10).</p> <ul style="list-style-type: none"> • car-free and permit free residential schemes in conjunction with improvements to public transport accessibility and capacity; • limit vehicle speeds to 20mph; • encourage as much planting and screening as possible; • minimise vehicle parking ratios well below 0.4 spaces per unit; and • Travel Demand Management incorporating green travel plans for residential schemes and employments sites.
Water resources	<p>Sustainable Urban Drainage Systems</p> <p>There is a potential limitation on the extent to which SUDS can be implemented given the amount of open space, large amount of hard standing and decking.</p> <ul style="list-style-type: none"> • The Urban Form Strategy and overall land use proposal should revisit the open space/green space typologies and look to increase the amount of land for SUDS. • Water efficiency devices should be provided throughout the development.

Sustainability Objective	Impact and proposed mitigation
Air quality	<p>Air pollution index and Air Quality Management</p> <p>The anticipated increase in vehicle movements along with energy related emissions have the potential to negatively impact on air quality within the Opportunity Area, particularly along arterial routes bordering the Opportunity Area, namely Warwick Road, Lillie Road, North End Road and Cromwell Road/Talgarth Road (The A4). In addition to the mitigation measures set out in the Transport Chapter and Environment Strategy, further mitigation measures will help limit any long term deterioration of air quality or the impact of deteriorating air quality, such as;</p> <ul style="list-style-type: none"> • green travel plans for both residential schemes, education and sites of employment; • Planted open space buffer areas between arterial routes and residential blocks; and • Ventilation for residential blocks to be drawn from buffered/internal areas away from arterial routes.
Heritage and the Built Environment	<p>Impact of buildings on heritage assets</p> <p>The impact of new development in the OA on the setting of heritage assets surrounding the OA has the potential to cause conflict, especially given the proximity of surrounding conservation areas, listed buildings and structures and registered parks. In addition to the mitigation measures set out in the Urban Form Strategy, including recent changes to include reference to the setting of heritage assets, development proposals within the OA will be expected to:</p> <ul style="list-style-type: none"> • Requiring a Design and Access Statement with planning applications that thoroughly assess the impact of the proposal within the OA on heritage assets (listed buildings and structures, conservation areas and registered parks and gardens) surrounding the SA.