

# White City



## Opportunity Area Planning Framework

October 2013

London Borough of Hammersmith & Fulham / Mayor of London





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## Mayor's Foreword

by Boris Johnson, Mayor of London



On a recent walk around White City I was struck by the huge potential of the area.

Once a part of London's Olympic history, the home of greyhound racing and more recently BBC Television Centre, the area has known and seen great change over the years. Previous generations of town planners and engineers have left their mark and not always in a positive way. The great urban highways that sever the landscape are a reminder of an era when everything took second place to the needs of motorists. And through all of this time people made their homes in the area in the post-war great estates, and shown their resilience and adaptability with the Westway Trust and West London Community Riding Centre providing excellent sporting and social facilities in the shadow of the motorway. These community efforts are to be applauded and I will look to developers to contribute to their ongoing success.

London's population is growing and so is its economy. The London Plan identifies Opportunity Areas across the capital which have the potential to accommodate substantial numbers of new jobs and homes. White City is such an area, with a unique set of challenges and opportunities.

Together with Hammersmith & Fulham Council and Transport for London, we have looked at where we can make changes for the better. We have given you the opportunity for you to give us your views, and have spoken to major landowners and developers in the area to understand their plans for the future. I present the White City Opportunity Area Planning Framework that seeks to guide future development of the area.

The Framework builds on the area's rich heritage, which has influenced its character, and proposes exciting new green spaces, bridges to surrounding communities, thousands of new homes including much-needed affordable housing for families, and an inspiring new hub for creative industries, leisure, media and innovation anchored by some of the world's greatest institutions including the BBC and Imperial College London. And it is being realised with development already underway.

The Leader at Hammersmith and Fulham Council, Councillor Nicholas Botterill, is keen to realise the potential of White City as much as I am, and I look forward to continued working together on one of the most exciting areas within West London.

A handwritten signature in black ink, appearing to read 'Boris Johnson'.

**Boris Johnson,**  
**Mayor of London**



## Leader's foreword

by Nicholas Botterill, Leader, Hammersmith & Fulham Council



Hammersmith & Fulham Council is an ambitious local authority, striving to offer all our residents the best opportunities. This White City Opportunity Area Planning Framework (WCOAPF) is intended to help turn aspirations into reality.

Although this is a technical planning document, it is in fact much more. Together with existing development plan policies, the WCOAPF has the potential to improve the prospects of thousands of local people by creating significant housing and job opportunities, whilst delivering tangible benefits to the local neighbourhood. In times of austerity, it is absolutely vital that local authorities do their bit to stimulate their economies by attracting inward investment. This document sets out a framework to do just that, by providing guidance on how development should come forward on land to the east of Wood Lane and north of the existing Westfield Shopping Centre.

The regeneration of White City is already being realised, with much progress in the area since the release of the first draft WCOAPF and adoption of the Core Strategy. Westfield has received outline planning permission for a £1bn scheme to build up to 1,522 homes and expand the shopping centre, providing £20million in community benefits. Furthermore, Imperial College London has begun construction on the former BBC site, creating 3,150 jobs and delivering £8million in community benefits. Helical Bar/Aviva secured a resolution to grant planning permission for a mixed use scheme on the Dairy Crest site however this site has more recently been acquired by Imperial College London who want to expand their educational campus as part of a mixed development scheme. Stanhope/BBC have submitted their planning application to redevelop TV Centre and St James have acquired the former M&S site. We are encouraged that this demonstrates the growing interest and investment that developers and landowners are prepared to undertake to deliver the future vision for White City.

Hammersmith and Fulham is a borough of opportunity, where the council works hard to ensure that residents have access to some of the best schools and jobs and are able to buy a home. I am enjoying working with the Mayor of London on what is one of the biggest opportunities yet for this borough.

The WCOAPF dovetails with Team White City and the Neighbourhood Community Budget Pilot, through which the council, local people and organisations in the area are developing better and more effective ways of working together.

We are determined to make the most of this once-in-a-generation chance to realise the potential of White City and look forward to working with you as plans come forward.

A handwritten signature in black ink, appearing to read 'Nicholas Botterill', written in a cursive style.

**CLr Nicholas Botterill,**

**Leader, Hammersmith & Fulham Council**

## Vision for the wider White City Opportunity Area

### White City – World City

White City will be a vibrant and creative place with a stimulating and high quality environment where people will want to live, work, shop and spend their leisure time.

Anchored by world leading institutions including the BBC and Imperial College London, and with one of London's best retail offers at Westfield in a reinvigorated and metropolitan town centre, the area will become a renowned hub for creative industries and innovation. Many creative, media and entertainment companies together with bio-tech and high-tech start-ups will be attracted to the area, where cutting edge business and academic research will be linked with schools and colleges to inspire young people, providing opportunities for training and skills development in the community. The area will contribute to meeting local employment and community needs, with a high proportion of new jobs filled by local people.

The area to the north of Westfield and including the former BBC television centre will become a new urban quarter with an enlarged, mixed community, through housing-led, mixed use development and refurbishment of some existing buildings. There will be a substantial increase in the number of homes for sale and rent at a range of prices and affordability, providing a local ladder of affordable housing opportunity, supported by new leisure, green space, schools and community facilities.

The existing community will expand over a wider area on both sides of Wood Lane, with a more varied, balanced and sustainable socio-economic mix. All existing residents will be able to continue living in the area, and will be benefitting from new local job opportunities. Many of the estates' existing residents, especially those suffering from inadequate conditions like over-crowding, will have been able to move into better, more suitable homes in the local area or to remain in and benefit from an improved environment.

The economic health of the historic Shepherds Bush Town Centre will be revived. It will be a thriving destination in its own right, with an invigorated market, theatre, refurbished common and focus on entertainment, leisure and other town centre attractions.

The Opportunity Area will be fully integrated within the wider local area. The area will be a model of high quality urban design, sustainable architecture and construction situated within a first class, permeable and inclusive public realm to encourage walking and cycling. Many people will choose to both live and work in the area, reducing the need for commuting and demand on the public transport and road network. The majority of new trips in and out of the area will be made by public transport, walking and cycling, to avoid adding to road congestion.

Outstanding environmental performance will be achieved by the use of low and zero carbon technologies, including renewable energy sources, a district heat network and combined heat and power.



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01

Introduction

## Introduction

1.1 The White City Opportunity Area covers approximately 110 hectares (272 acres) on the eastern edge of the London Borough of Hammersmith & Fulham (LBHF), along the boundary with the Royal Borough of Kensington & Chelsea (RBKC). The area is roughly bounded to the east by the West Cross Route (A3220), the West London Line and the Holland Park roundabout, Sulgrave Road to the south, Shepherd's Bush Market, Wood Lane and Bloemfontein Road to the west; and the A40/Westway and Shinfield Street to the north.

1.2 The Greater London Authority (GLA) and the London Borough of Hammersmith and Fulham (LBHF) have jointly prepared this Planning Framework for the White City Opportunity Area (WCOAPF) in partnership with Transport for London (TfL). This guidance supplements and applies the Mayor's London Plan and the Borough's Core Strategy Policies and focuses on the environmental, social, economic and design objectives that apply to development within the Opportunity Area (OA). This Framework (OAPF) sets out guidance on the preferred approach and presents an indicative masterplan illustrating how the area could achieve a provision of 10,000 jobs and 5,000 homes in the area.

1.3 Delivering the 20 year vision requires a comprehensive approach to planning and regeneration that harnesses all significant development opportunities in the OA for the social, economic, environmental and physical benefit of the whole area. This is vital to assist in reducing concentrations of deprivation, reduce social and economic polarisation and encourage social mobility. It is increasingly important to look at further ways that London can achieve its homes target and encourage investment to capture the potential of the area and create a vibrant, exciting, high quality place to live and work. The OA provides valuable development capacity to support some of London's rapidly expanding population and cater for a range of commercial uses with a global reach, including creative industries; bio-technology; retail; and entertainment which help London maintain its role as a global city.

1.4 The OAPF provides guidance on the approach to future development in the eastern

part of the OA (White City East). It considers how, in line with policy, development in White City East could bring social, physical and economic benefits to the western part of the OA (White City West), which largely comprises the local council estates by increasing housing choice in the area as a whole and providing further jobs and local facilities. It also considers how development of land in White City East can transform a former industrial area which has been cut off from the rest of London by railway cuttings, viaducts and large road infrastructure.

1.5 The WCOAPF has been through two rounds of public consultation. An early draft of the WCOAPF underwent a comprehensive public consultation exercise from 8 April to 10 June 2011. A total of 291 responses were received which informed the second draft of the WCOAPF. The statutory consultation on the second draft of WCOAPF took place over 6 weeks commencing on 21 June and ending on 2 August 2013. A total of 56 written responses were received from a wide range of respondents including local amenity groups, local residents and businesses, resident groups, landowners, developers, statutory organisations and a range of special interest groups. A series of schedules (Consultation Response Schedules) setting out the consultee comments received during the 21 June – 2 August statutory consultation and officers responses to these comments is available on LBHF's website. The WCOAPF has been prepared in accordance with Part 5 Regulation 12 (a) of the Town and Country Planning (Local Planning) (England) Regulations 2012. This document is supported by a Sustainability Appraisal (included in the Integrated Impact Assessment), Statement of SPD Matters and an Equality Impact Assessment (included in the Integrated Impact Assessment), which were available for comment during the statutory consultation period and can be viewed on LBHF's website.

### Key Objectives

1.6 Key objectives for achieving the vision for the OA are as follows:

#### 1. Provide mixed use commercial development:

- Encourage offices, hotels and flexible work spaces to shape and continue the growth of the economic sector
- Capitalise on existing activities in the area and encourage spaces that can offer creative, media,

bio-medical research and development industries that build on the presence of the BBC, Imperial College London, Westfield and Hammersmith Hospital.

## 2. Reinforce and connect with the town centre:

- Provide opportunities for the extension of town centre activities northwards to better connect the Westfield Development with the area to the north.
- Improve the public realm to provide north-south connections to and from the town centre.

## 3. Creation of new housing and opportunities:

- Capacity for approximately 4,500 new homes in White City East together with additional student housing.
- Encourage a broad range of tenures, house sizes and affordability, including housing that is affordable to young families, middle income earners who cannot afford to buy on the open market and key workers and households who are neither

wealthy nor able to qualify for access to affordable rented.

- Explore opportunities for the regeneration of the estates if financial viability and funding improves and if developments can afford to provide sufficient amounts of social rented housing.

## 4. Maximise Connectivity:

- Provide pedestrian and cycling connections under and over major transport infrastructure
- Provide road access and circulation on key development sites
- Respond to the increases in population with transport infrastructure improvements

## 5. Create high quality public realm and open space:

- Ensure the provision for a large public open space, White City Green to be at the heart of the new mixed-use area.

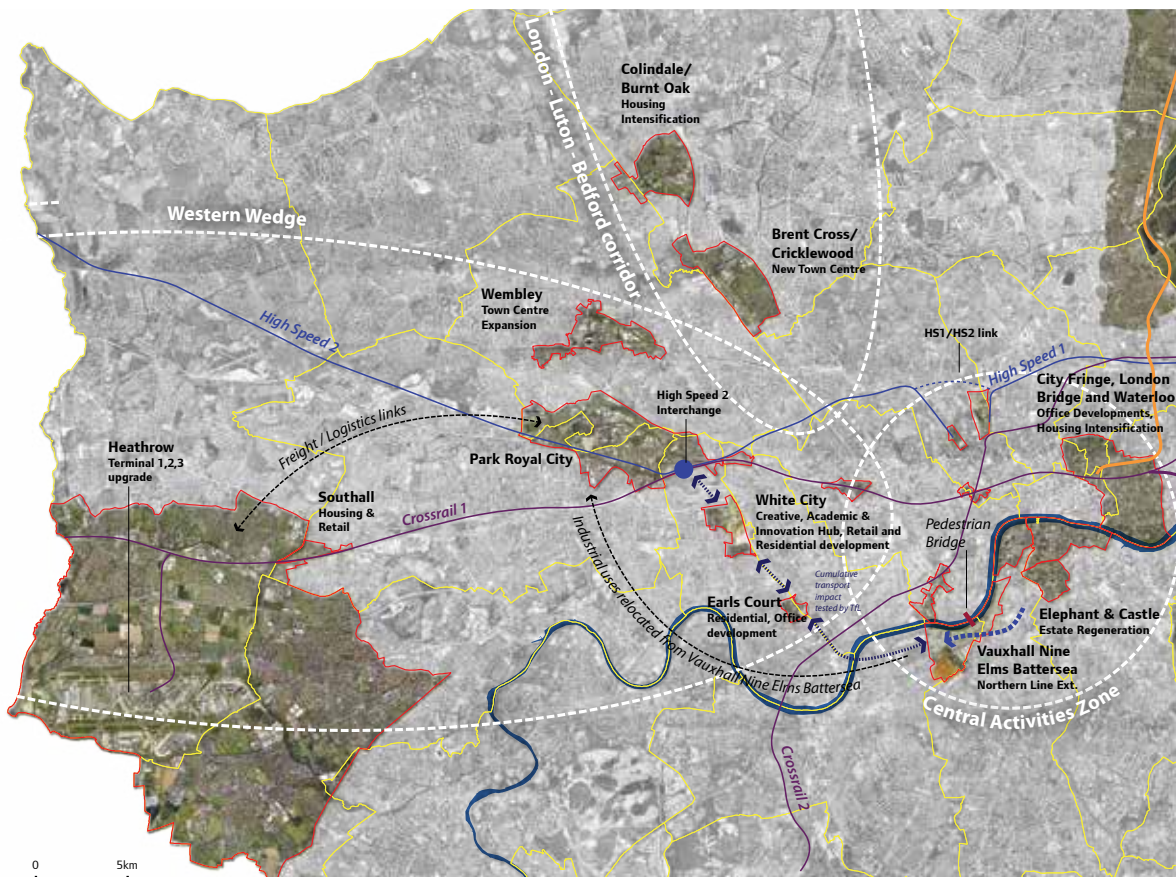


Figure 1.1: London Context

- Encourage other smaller areas of open space that reflect the existing nearby urban context that enhances local identity and contributes to secure, healthy and accessible environments.
- Provide a network of routes that improve permeability and connectivity between areas of open space, community, transport facilities, homes and jobs.

### 6. Increase employment opportunities

- Increase capacity for 10,000 new jobs to be provided across the OA and improve access to training initiatives and apprenticeships.

### 7. Provide social and community facilities

- Ensure sufficient access to a range of schools, health, leisure and community facilities to support the increased population and benefit local people where possible.

### 8. Provide innovative sustainable, energy solutions

- Explore the potential for a district energy masterplan that could be shared between major landowners and link with nearby areas.
- Explore opportunities for shared and co-ordinated approaches to waste and freight.

### Wider Context

1.7 White City is one of an arc of west London Opportunity Areas that include Vauxhall Nine Elms, Earls Court and Park Royal which together have the capacity to provide up to 50,000 homes and 150,000 jobs.

1.8 The WCOA is positioned halfway between Heathrow Airport and Central London and boasts some of the largest remaining development opportunities within 2km (1.5 miles) from London's Central Activities Zone.

1.9 The Opportunity Area will capitalise on this highly accessible location to central London, with its many transport links and proximity to the A40 that links directly to Heathrow Airport. To the north and south are two key gateways to Central London, the A40 flyover and Holland Park roundabout. The area benefits from four underground stations connecting to three lines, an

Overground station and two bus stations.

1.10 A Crossrail and High Speed 2 (HS2) interchange at Old Oak Common in Park Royal, if delivered as proposed would bring even greater benefits of connectivity to the area.

### Local Context

1.11 In 2011, an estimated 10,334 people lived in the area in 4,300 households and approximately 24,500 people worked in the OA.

1.12 The Opportunity Area comprises three sub-areas, as defined in the LBHF Core Strategy:

- White City East: including sites east of Wood Lane, BBC TV Centre and Media Village. Comprises of large underutilised industrial sites.
- Shepherd's Bush town centre: including Shepherd's Bush Common, Westfield London and Shepherds Bush Market;
- White City West: including the White City Estate, Loftus Road Stadium, Hammersmith Park, the TA Centre and Wood Lane and Batman Close Estates.

#### *White City East*

1.13 The land east of Wood Lane is currently occupied by London Underground stations and a railway cutting, surface car parks, modest office buildings, industrial estates, warehouses and sheds used for light industry, logistics and storage. Marks & Spencer operate a 'mock shop' facility in this area out of a large warehouse shed. St James has recently acquired this site from Marks and Spencer and are proposing a scheme for residential led mixed use development. Imperial College London is constructing a new campus to the north of the Westway, to incorporate student accommodation, teaching, research, and administration facilities as well as general residential, office and hotel uses. In addition, Imperial College London has acquired land on the southern side of the Westway for further academic and related activities, along with residential and other uses.

1.14 White City is a major centre for the BBC, acting as an anchor and attraction for a range of other creative, research and development and



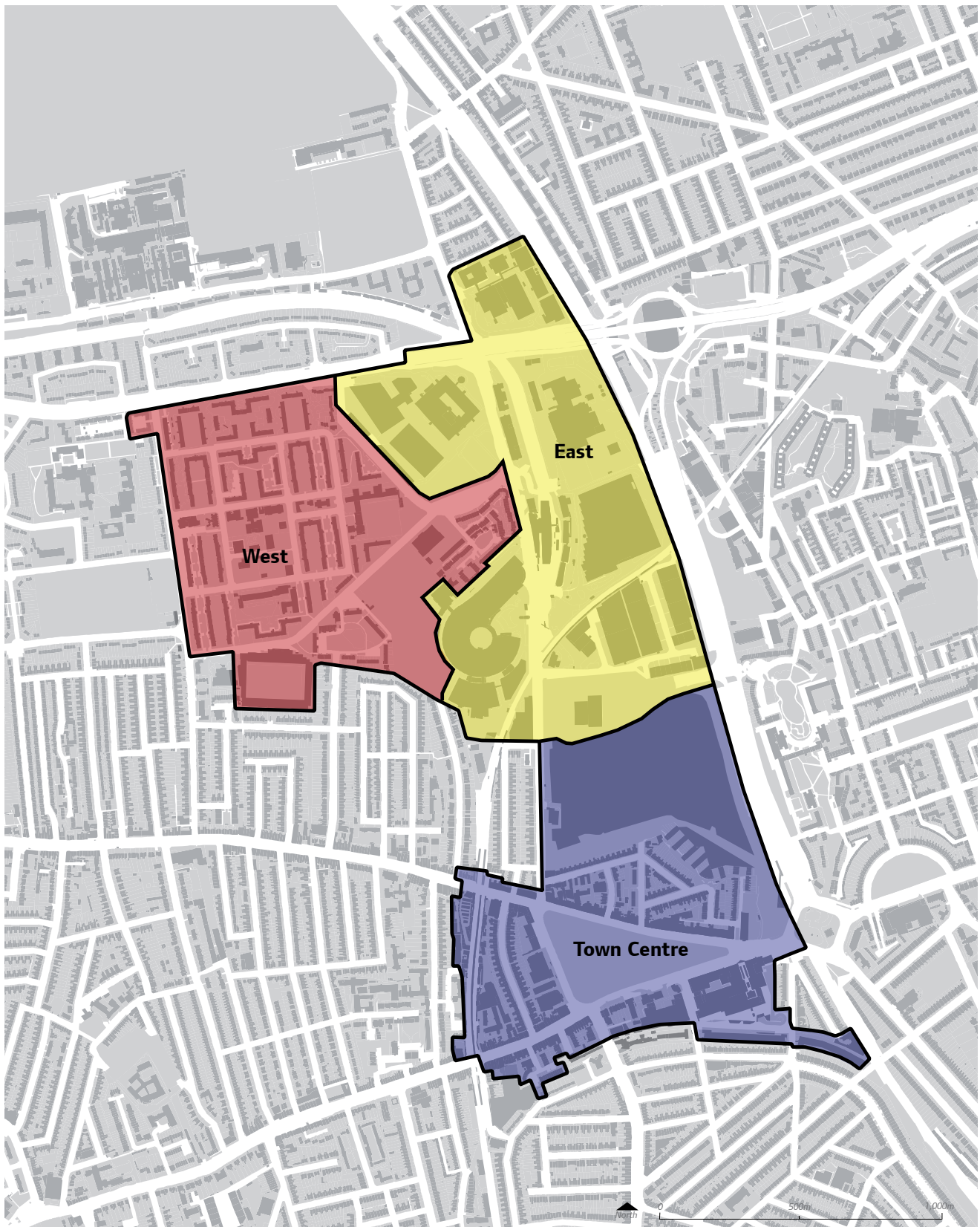


Figure 1.1: Key areas in the White City OA

media businesses in the area. Despite recent moves to consolidate and rationalise its local land holdings, including disposal of Woodlands and Television Centre, the BBC intends to maintain a key presence on their sites at the Media Village and to occupy a significant part of the refurbished/ redeveloped TV Centre.

*Shepherds Bush Town Centre*

1.15 Shepherds Bush town centre is an important entertainment/leisure and cultural centre with the Shepherds Bush Empire, Bush Theatre, numerous pubs, restaurants and bars. Retail is the dominant use in the town centre, with the West 12 Centre and Shepherds Bush Market as the original anchors, bolstered in 2008 by the arrival of Westfield shopping centre. Westfield’s development has provided approximately 8,000 jobs, improved public transport, provided a new library on Wood Lane and funding for a refurbished common, resulting in a significant increase in visitors to the area. It has changed the town centre’s role to that of metropolitan centre in the London Plan’s retail hierarchy. There is also housing in Shepherd’s Bush

town centre, ranging from private Victorian terrace houses, mansion blocks, flats above shops to local authority flats. Over a quarter of the housing in the town centre is provided in the four tower blocks of the Charecroft estate.

1.16 Shepherd’s Bush Market has suffered from a lack of investment and reduced footfall in recent years, which has led to the Council adopting a policy in the Core Strategy aimed at guiding future development of adjacent land in a way that will also regenerate the market.

*White City West*

1.17 The White City estate, LBHF’s largest local authority estate, is located in the western part of the OA, along with the Wood Lane Estate.

1.18 QPR football club is located south of the White City Estate on Loftus Road.

*Surrounding Area*

1.19 Outside the OA to the immediate west and north are the Old Oak and Wormholt estates,

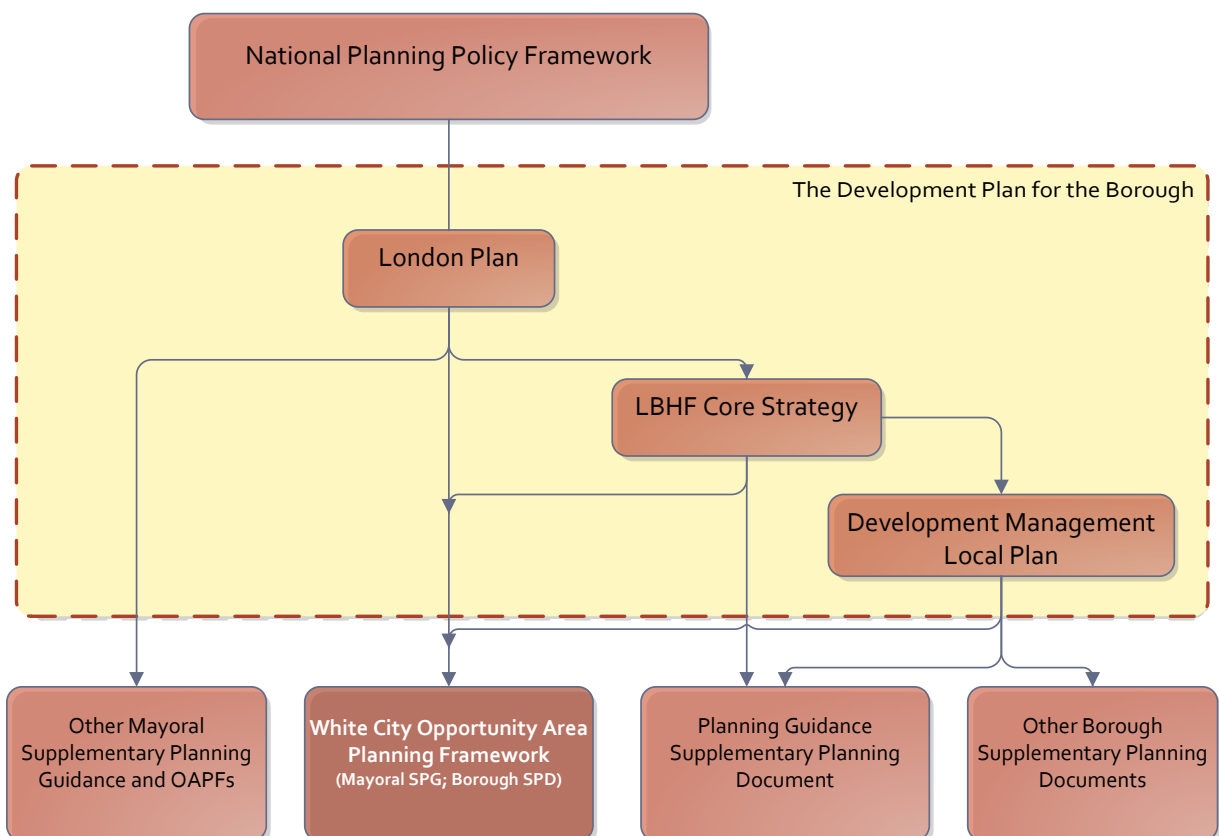


Figure 1.2: Policy Framework



and to the south are areas of Victorian terraced housing. Across the borough boundary within the Royal Borough of Kensington and Chelsea, nearby neighbourhoods are generally characterised by mansion blocks and town houses, mixed with higher rise Council housing.

1.20 The western part of the OA is well served by primary schools, although most operate at capacity. Secondary schools in the area, Phoenix High School and Burlington Danes Academy, are outside the boundaries of the OA and are at or nearing capacity. There are a number of health facilities located within the White City Estate, including the White City Health Centre and GP surgeries. A Collaborative Care Centre on Bloemfontein Road is near completion, and the Hammersmith and Queen Charlotte's & Chelsea hospitals are located north of the OA.

1.21 Sports facilities in the area include the Janet Adegoke swimming pool, the Phoenix leisure centre in the grounds of Phoenix High School, and the football pitches at Hammersmith Park. To the north of the OA are Wormwood Scrubs and Linford Christie stadium, whilst the Westway Sports Centre and Stables are located immediately east of the OA, but they are not directly accessible from the OA due to the barrier formed by the West London Line and the A3220.

### **Purpose of the OAPF and Material Weight**

1.22 This document does not create policy but provides guidance that supplements and applies the Mayor's London Plan and the borough's Core Strategy policies for White City. The purpose of the OAPF is to elaborate on the development plan policies and provide guidance on how the Mayor and borough wish to see the policy implemented and provide developers with greater certainty in the planning process.

1.23 In accordance with the Town & Country Planning (Local Planning) (England) Regulations 2012, the OAPF only contains statements regarding environmental, social, design and economic objectives which are relevant to the attainment of the development and use of land in the OA which the Council wishes to encourage, as set out in the policies of the Core Strategy.

## **London plan Annex 1- Opportunity Areas**

White City

Area (Ha): 110

Indicative employment capacity: 10,000

Minimum new homes: 5,000

An area undergoing substantial change within which completion of strategically significant new retail provision at Westfield has raised the status of Shepherd's Bush to a Metropolitan town centre. The BBC is consolidating its activities within the area and this will create opportunities for further development, building upon the area's strengths in creative, media and entertainment business. It is proposed to extend the Opportunity Area to include Shepherd's Bush town centre and the White City Estate. There is potential for mixed density housing and a focal point for office development at and around the tube stations at White City and Wood Lane with other commercial, leisure, open space, education and retail uses of appropriate scale to support the local community. This will be facilitated by de-designation of the historic strategic industrial location complemented by provision for waste and other industrial functions in the Park Royal Opportunity Area. The scope to improve connectivity with the wider area should be explored and development should be related to improvements in public transport capacity. Housing-led intensification should support local regeneration, enable estate renewal and seek a mixed and balanced community. There may be scope to enhance education and research capabilities in the area linked in particular to healthcare and bio-technology. Development should promote the vitality of the town centre, particularly in the Shepherd's Bush market area, and complement the viability of other west and central London centres. An Opportunity Area Planning Framework is being prepared by the GLA and the London Borough of Hammersmith & Fulham which will set out further strategic principles including the appropriate scale, location and mix of uses taking into account studies of the creative industries, development and transport capacity.

1.24 The OAPF sits under the broad strategic guidance of the London Plan and the more detailed guidance of the Core Strategy and the Development Management Local Plan. On publication, the OAPF will be supplementary planning guidance (SPG) to policies set out in the London Plan (LP) and it will be a supplementary planning document (SPD) to the Core Strategy. It will be considered a material planning consideration in the determination of planning applications associated with this area.

### The London Plan (July 2011)

1.25 The London Plan identifies White City as one of 33 Opportunity Areas (OAs) that can contribute to the delivery of the London Plan targets by accommodating substantial numbers of new jobs and homes. There are a large number of policies which are relevant and need to be considered. Annex 1 sets out the specific growth potential for White City.

1.26 While the LP as a whole is relevant, other specific policies and objectives that are of particular note are as follows:

- Areas for regeneration: Part of the town centre is designated as an Area for Regeneration in the London Plan and therefore should be prioritised for neighbourhood-based action and investment. Where Areas for Regeneration fall within OAs, the policy states that regeneration action should be co-ordinated with development frameworks and other policies for the area concerned.
- Town Centres: In recognition of the opening of Westfield London and related growth of the town centre, the LP has elevated Shepherd's Bush from a District Centre to a Metropolitan Centre in Annex 2, Table A2.1 of the LP.
- Creative Industries, innovation and research: Table 2.1 of the LP identifies White City as a location with the potential to generate significant growth in the Media sector beyond the sub-regional level.

### LB Hammersmith and Fulham Local Plan: Core Strategy (2011) and Development Management Local Plan (2013)

1.27 LBHF adopted its Core Strategy in October 2011 and adopted the Development Management Local Plan (DMLP) in July 2013. The Core Strategy sets out the Council's long term vision for the borough while the DMLP sets out more detailed development management policies.

1.28 Of most specific relevance to the White City OA is within chapter 7 of the CS, which sets out the strategic policy for the whole OA (Strategic Policy WCOA), along with detailed strategic policies for the three sub-areas.

- **Strategic Policy WCOA** sets out an indicative potential for 5,000 new homes and 10,000 new jobs across the OA (based largely on establishing a creative industries hub), to mainly be located in White City East. It states, inter alia, that "The Council will work with the GLA, other strategic partners, the local community and landowners to secure the comprehensive regeneration of the White City Opportunity Area (WCOA); and, to create a vibrant and creative place with a stimulating and high quality environment where people will want to live, work, shop and spend their leisure time. The existing estates community must be able to benefit from regeneration of the area through access to jobs, better local facilities, better and more suitable housing, and improved environmental conditions." Individual developments within WCOA will only be considered acceptable if they contribute to the regeneration of the whole OA.
- **WCOA1 Strategic Site (White City East):** Development is to be focused within White City East (WCOA1) which will contribute to regeneration of the whole of the OA. The policy allocates the strategic site primarily for a mix of housing (including student accommodation), employment and community uses, with a local centre that could provide for supporting services. This area is identified as the focus for establishing a creative industries hub with scope for major educational, cultural and health facilities to be incorporated in the overall mix of uses.
- **WCOA2 Strategic Site and Housing Estate Regeneration Area (White City West):** The approach for the White City Estates is



1: Imperial College London  
2: White City Estate  
3: BBC Media Village  
4: Former Dairy Crest Site /  
Imperial College London

5: QPR Loftus Road Stadium  
6: Batman Close  
7: Hammersmith Park  
8: TA Centre  
9: Wood Lane Estate

10: Former M&S site / St James  
11: Stanhope / BBC TV Centre  
12: Ariel Way Industrial Estate  
13: DIMCO Building  
14: Westfield Shopping Centre

15: Shepherd's Bush Market  
16: Shepherd's Bush Common  
17: W12 Shopping Centre



Figure 1.3: Key sites within the White City Opportunity Area



to work with estate residents to examine the opportunity for phased regeneration of the area over the plan period, to provide the existing residents with better accommodation, maximise opportunities for residents to obtain jobs and provide a more mixed and sustainable community. It is noted that if QPR FC was to approach the Council with any plans to replace the football ground, it would be assessed on the basis of how it could benefit existing residents. The two strategic sites are the Loftus Road football stadium and the Territorial Army Centre for which there are currently no specific proposals.

- **WCOA3 Strategic Site (Shepherds Bush Market and adjacent Town Centre):** The strategic approach for the Shepherds Bush Market is to provide regeneration of the Market and adjacent land to create a vibrant mixed town centre development which continues to provide an independent offer within the market stalls and new shops, whilst accommodating existing market traders.

The Core Strategy also provides for a potential increase in retail, based on the need identified in the Joint West London Retail Study 2010. It says that if major retail cannot be located within the town centre it may be appropriate north of the Westfield centre on the edge of the existing town centre boundary. Therefore, there is potential to consider a northwards extension of the town centre. This has been recognised in the planning permission that has been granted for Westfield to extend the Town Centre retail and leisure offer to the north of Westfield towards the Hammersmith and City London Underground line (H&C LUL) viaduct. This will consolidate the Town Centre's metropolitan status.

#### **Land ownership and development activity within White City East**

1.29 Regeneration of the Shepherd's Bush and White City areas has been a key objective for the Council since the late 1980s. Since 2000, it has been recognised that some form of comprehensive approach to development in White City East would achieve greater benefits than if individual developments came forward completely

separately. Consequently, the Council and GLA sought to produce guidance for land owners and developers which would encourage them to act in a coordinated way together to work up proposals. The key sites within the White City Opportunity Area are shown on Figure 1.3.

1.30 The current White City East area, with the addition of the site that now contains the existing Westfield Shopping Centre, was identified as an Opportunity Area in the 2004 London Plan which led to the development of the White City Opportunity Area- A Framework for Development, adopted in 2004 by the Council and endorsed by the Mayor of London. It sets out a framework of delivering a key employment zone in the area, which was in line with the UDP Policy at the time. Subsequently, a number of landowners collaborated and commissioned designers OMA to work on a masterplan for the area which was focussed more on presenting a mixed-use urban quarter. Many of the principles and aspirations put forward in the OMA masterplan were positive but it was not taken forward. The Council and GLA then put forward a mixed use approach in the London Plan and Core Strategy in the context of a wider opportunity area which provides the context for this OAPF.

1.31 Since consultation on the first draft White City OAPF in April 2011, a number of sites have progressed with submitted applications and planning approvals in advance of the White City OAPF progressing to its formal consultation. These schemes have generally aligned with the first draft's design guidance and the principles of its indicative masterplan so it can be seen to have been instrumental in broadly shaping the footprint, scale and height of the applications that have come forward. Consequently, the indicative masterplan in this document has had regard to these emerging proposals. At the time of writing, four major applications have been submitted and three fully approved within White City East.

#### *Woodlands Phase 1, Imperial College London (ICL)*

1.32 ICL were first to progress with their plans within White City East, having their application for 606 post-graduate student housing blocks with 9 key worker homes approved in November 2010,

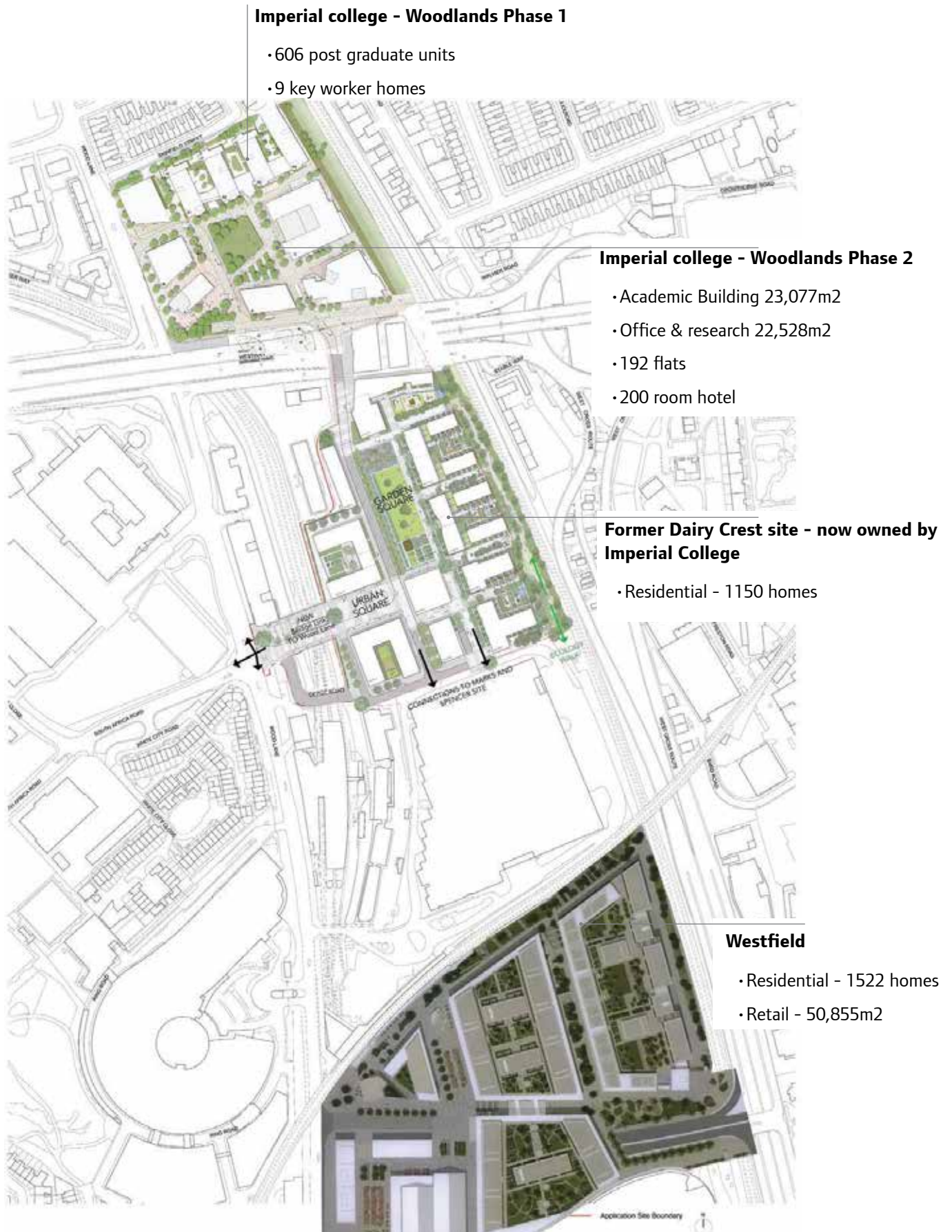


Figure 1.4: Sites with planning permissions and applications

which was in advance of the consultation on the OAPF. It was however, shaped in consultation with the Council and GLA who were at the time developing the masterplan for the site.



*CGI Imperial College*

#### *Ariel Way, Westfield*

1.33 Westfield was next to progress with plans for 1,522 residential units, with up to 16% affordable housing, after the first draft of WCOAPF went out for consultation in 2011. The development involved provision for 50,000sqm new retail, restaurant and café uses. Leisure use, community use and a small area of offices is also included in their plans. Its design reflects the principle of having an outdoor focused shopping mall, with north-south pedestrian linkages. It includes public open space south of the Hammersmith and City Line viaduct, as shown in the draft OAPF masterplan and resembles a very similar footprint and block plan as suggested in the first OAPF consultation draft. The application was approved in March 2012.



*CGI Ariel Way south of viaduct*

#### *Woodlands Phase 2, Imperial College London*

1.34 ICL then progressed the second phase of their development which was centred on a School of Public Health within a 9-storey building including a new health centre, day nursery and café. The part outline/ part detailed application includes high-tech offices which include incubator spaces and business accelerator units; University and academic offices, a hotel and gym and 34 storey building comprising 192 residential units including ground floor restaurants and cafes. The development will include a major new public central square and provide a new road link running north/south through the site. A pedestrian link connecting RBKC to LBHF under the West London Line was also proposed. The application is quite similar in design to what was shown in the draft masterplan, having designed one tall building with a series of buildings surrounding a central square. The pedestrian link was also a key east-west link suggested in the OAPF. The application was approved in December 2012.

#### *The former Dairycrest site, Imperial College*

1.35 The previous owners of the former Dairy Crest site submitted a part outline, part detailed application that proposed a residential-led mixed use development comprising 11 buildings with heights ranging from 8-32 storeys. It includes a tall building which is in line with the OAPF. The scheme included 1,150 homes with offices, small scale retail, health, and community and leisure facilities. The scheme which has a resolution to grant planning permission also sought to provide for a new bridge link over the Central Line cutting, as suggested in the WCOAPF master plan. It also followed a similar road and building layout to that suggested in the draft OAPF. The land has since been purchased by Imperial College London who wish to extend its aspirations for an educational campus as part of a mixed use development.





CGI Former Dairy Crest site

### Development Capacity

1.36 The London Plan 2011 sets out that the whole OA (including the estates and Shepherd's Bush Town Centre) could accommodate an indicative minimum of 5,000 new homes and an indicative employment capacity of 10,000 jobs. The Core Strategy has an indicative capacity figure of 5,000 homes plus student accommodation and 10,000 jobs. The mix of land uses was investigated in more detail as a part of the Transport Study where the potential increase in population was

modelled to demonstrate the amount of transport interventions required.

1.37 TfL carried out a transport study to examine the extent to which improvements or other measures would be necessary to enable development to the potential indicated by the Core Strategy and London Plan. The study tested relatively high (Scenario C), medium (Scenario B) and low (Scenario A) alternative long term growth scenarios. It concluded that a medium growth scenario was preferred. This would achieve strategic and local objectives with a reasonable package of transport interventions (improvements and restraint). However, a higher growth scenario would require mitigation measures that would be likely to be too costly and complex to be carried out within the development period. The preferred growth scenario for White City East is Scenario B in Figure 1.5.

	A	B	C
Residential (units)	3,700	4,500	5,000
Student residential (units)	1,260	1,260	1,260
<b>Total residential floorspace (sqm)</b>	<b>295,540</b>	<b>351,540</b>	<b>386,540</b>
Non-residential floorspace (sqm)			
Office	156,000	182,000	207,000
Retail	15,000	45,000	89,000
Hotel	20,000	40,000	45,000
Education	4,000	14,000	18,000
Community (D1)	10,000	11,000	12,000
Leisure	13,000	14,000	16,000
Other	14,000	14,000	14,000
B2-B8	-	-	-
<b>Total non-residential floorspace (sqm)</b>	<b>232,000</b>	<b>320,000</b>	<b>401,000</b>
<b>Total floorspace (sqm / GFA)</b>	<b>527,540</b>	<b>671,540</b>	<b>787,540</b>

Note: The figures in Figure 1.5 are gross figures of new floorspace. To calculate the net increase in office floorspace deduct 96,000 sq.m. which was the estimated amount of office floorspace that would be replaced.

Figure 1.5: White City Area development scenarios tested for the Transport Study

1.38 Scenario B for White City East represents a development quantum which is able to deliver a range of building types, within a good quality environment, meeting the urban design and place making principles set out in the urban design chapter with buildings at a scale that is appropriate to the context. This level of development would provide a good range of housing types with general or predominant densities of 700-900 (in Scenario B) with scope to increase to 1100 habitable rooms per hectare in places. These densities are also within the range set out in the London Plan density matrix.

1.39 While Scenario B was drawn up for overall transport testing purposes, it does not represent a fixed position on the mix of land uses that is appropriate. More important than simply delivering a specific number of homes or delivering a specific density of development is the need to deliver the highest quality environment to the benefit of existing and future communities. The indicative masterplan provides a clear framework showing how this can be achieved, however the quantum of development that will be delivered on each site will be dependent on the detailed design and mix of uses of individual schemes. All proposals and schemes will be considered within the policy context and will need to demonstrate how they contribute to the delivery of the objectives set out in this OAPF. Individual schemes will also require their own transport assessment.

# 02

## Land Use Strategy

### Employment

- Indicative capacity for 10,000 new jobs in the opportunity area
- Opportunities in creative, academic, technology and small business sectors
- Programmes for training, apprenticeships, outreach with local schools

### Housing

- About 5,000 new homes in the OA including about 4,500 in White City East
- Affordable Housing target 40% in line with Core Strategy policy for White City.
- Intermediate housing to include a broad range of unit sizes including 15% 3 bedrooms or larger.
- Market housing to provide a mix of unit sizes including larger family accommodation.
- Potential for additional student housing in White City East
- Opportunities to seek new affordable housing in White City East that would enable White City West estate residents to move if they are able and wish to do so
- Neighbourhoods supported by local services, open spaces and facilities

### Metropolitan Town Centre

- Investment in Shepherds Bush Market and the West 12 Centre
- Extension of town centre uses to areas north of the existing Westfield
- Historic town centre focused on retail, arts, cultural and leisure including night-time economy

## Introduction

2.1 This chapter sets out the land use mix that is considered appropriate in the OA. The land use approach focuses on delivering mixed-use development in White City East, incorporating a substantial level of housing as well as employment, retail, public realm and social infrastructure. Within the mix of uses there could be scope to accommodate major educational, cultural and health facilities provided they contribute to the regeneration objectives of the OAPF and its urban design principles.

## Employment objectives

There is an opportunity for substantial commercial activity in the OA focused on the creative, academic, technology and retail sectors. Potential growth areas include:

- innovative technology, bio-medical and scientific research and learning on a new campus for Imperial College, tying in Hammersmith Hospital;
- research and development activities led by small start-up firms;
- production, broadcasting and entertainment;
- fashion design and retail headquarters;
- provision of new visitor accommodation and facilities; and
- leisure and retail provision next to the metropolitan centre.

## Existing situation

2.2 The Opportunity Area today is home to world-class institutions, companies and facilities, many of which have created a local market for creative and industrial uses, providing opportunities for small and entrepreneurial businesses.

2.3 The BBC will continue to be a key presence for programme-making and research and development (R&D) in the BBC TV Centre and Media Village.

2.4 Imperial College is developing a campus to the north of the A40 within the OA where technology and bio-medical R&D will take place, building on the institution's relationship with the nearby Hammersmith Hospital and providing opportunities for start-up businesses linked to academic research. New postgraduate accommodation has been built and planning has been granted for a wider masterplan to include offices, teaching, research, and administration facilities. In addition to the development underway, Imperial College London (ICL) is planning to extend its educational campus to the south of the A40 as part of a mixed use development.

2.5 ICL's presence in the area along with research and development teams from the BBC creates a strong foundation for high-tech, media and technology industries, whilst ICL's growing research facilities at Hammersmith Hospital create the potential for a stronger role and additional demand for academic, medical, bio-technology, scientific and general research and development uses in the OA.

2.6 Westfield currently provides 8,000 jobs, of which 13% (1,040) are filled by H&F residents and 26% are occupied by residents from neighbouring boroughs. 61% of jobs are in retail, the remainder are in leisure, restaurants and facilities management. 20% of those H&F residents who secured employment in the Westfield Centre were previously unemployed. The Westfield extension that gained planning permission in March 2012 has secured s106 obligations to provide further employment opportunities for local residents.

2.7 There is also a strong fashion industry presence in and around the OA with Net-A-Porter, Monsoon Accessorize and the London College of Fashion in close proximity, as well as the Shepherd's Bush Market fabric shops within the town centre, which remain a rich resource for young designers. Winsor and Newton the specialist artists paint suppliers have recently relocated their research operation near to the OA, building on its reputation as a focus for creative industries.

- Housing, commercial, creative & academic uses as part of a mixed use area
- Housing as part of mixed use schemes and existing housing area
- Metropolitan centre

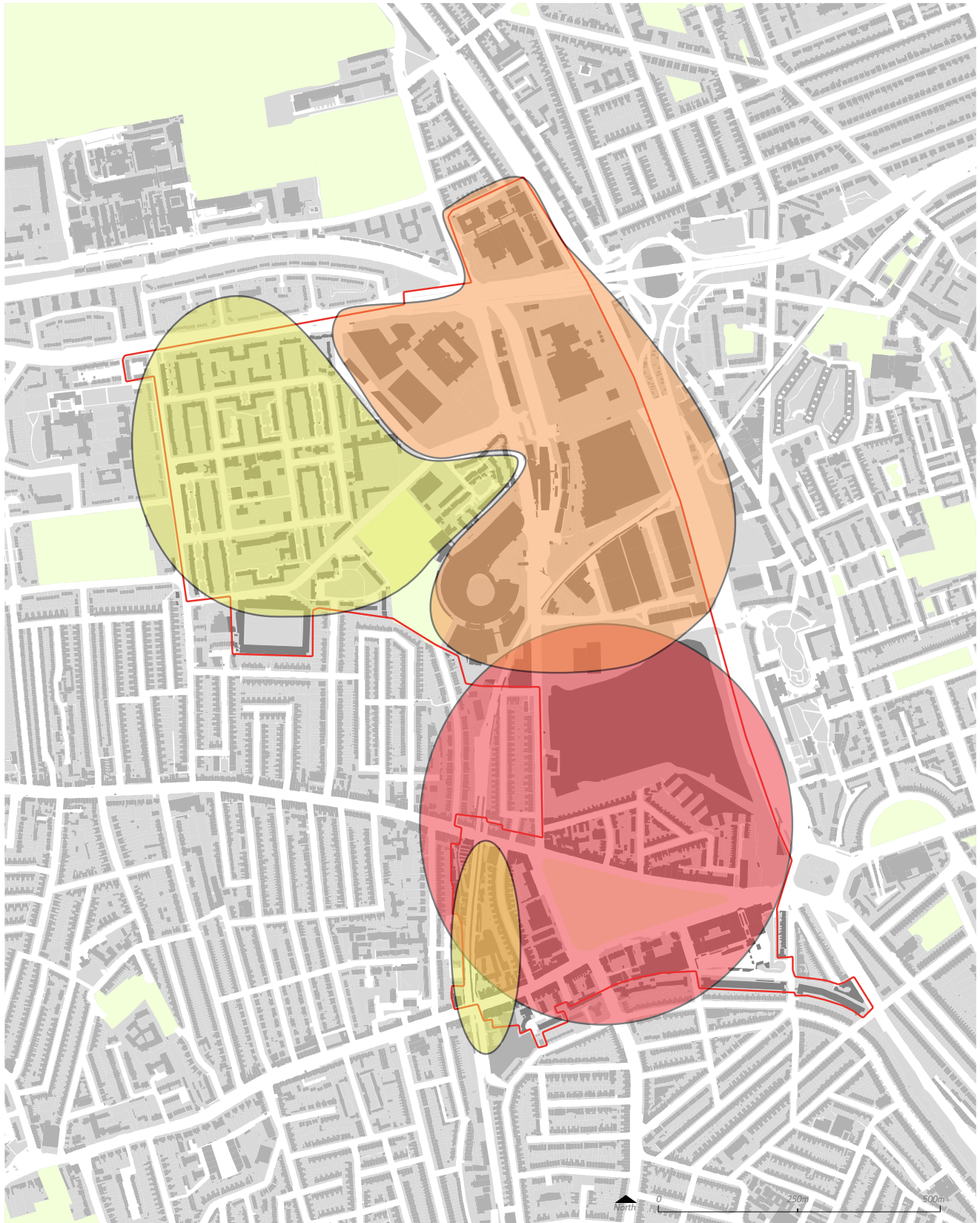


Figure 2.1: Land use strategy

### **Development opportunities**

2.8 The London Plan and Core Strategy policies indicate potential for up to approximately 10,000 new permanent jobs in the OA as a result of its regeneration.

2.9 White City has an established employment base. New employment should build on this presence, capitalising on the presence of enabling existing businesses to thrive and expand and providing opportunities for new businesses to locate to the area.

2.10 White City East should be promoted as a hub for jobs in creative industries, innovation and education with the town centre as a destination for retail, entertainment and leisure (including its potential northwards expansion). High quality mixed use development will enable business interaction and provide opportunities for people to live, learn and work in the same area. The demand from new businesses, their workforce and the new housing areas will be a major stimulus for additional shops, leisure and service providers, spreading the regenerative benefits beyond the core development area.

2.11 White City East would be ideally positioned to deliver on the key criteria needed to attract office-based creative industries and academic uses because it offers:

- A potential mixed-use setting with local amenities, including cafes, restaurants, hotels and leisure
- Homes and jobs in one area to reduce the need for commuting
- Quality public realm and physical environment
- Links with educational institutions
- Proximity to Park Royal
- Key transport links to the Central Activities Zone (CAZ) and Heathrow Airport

2.12 The retention of the 'question mark' building within the Listed BBC Television Centre building provides an opportunity to offer spaces for organisations or institutions with links to the cultural, broadcasting production and educational sectors, or other forms of entertainment that build on the history of the building and heritage of the BBC.

2.13 Employment spaces should be flexibly designed in order to be resilient to future trends in employment space demand. As well as providing larger floorplate units for established businesses, applications should include flexible business space suitable for small and medium sized enterprises.

2.14 The provision of hotel accommodation in the area is supported by both the Mayor's London Plan and LBHF's Development Plan. LBHF DMLP policy DM B2 states that permission will be granted for new visitor accommodation and other facilities in the OA subject to certain criteria being met. The London Plan seeks 40,000 additional hotel bedrooms by 2031 located primarily in town centres and opportunity areas. The provision of new hotel accommodation has been supported in the consented Imperial West scheme and is included in the planning application for the redevelopment of the BBC TV centre.



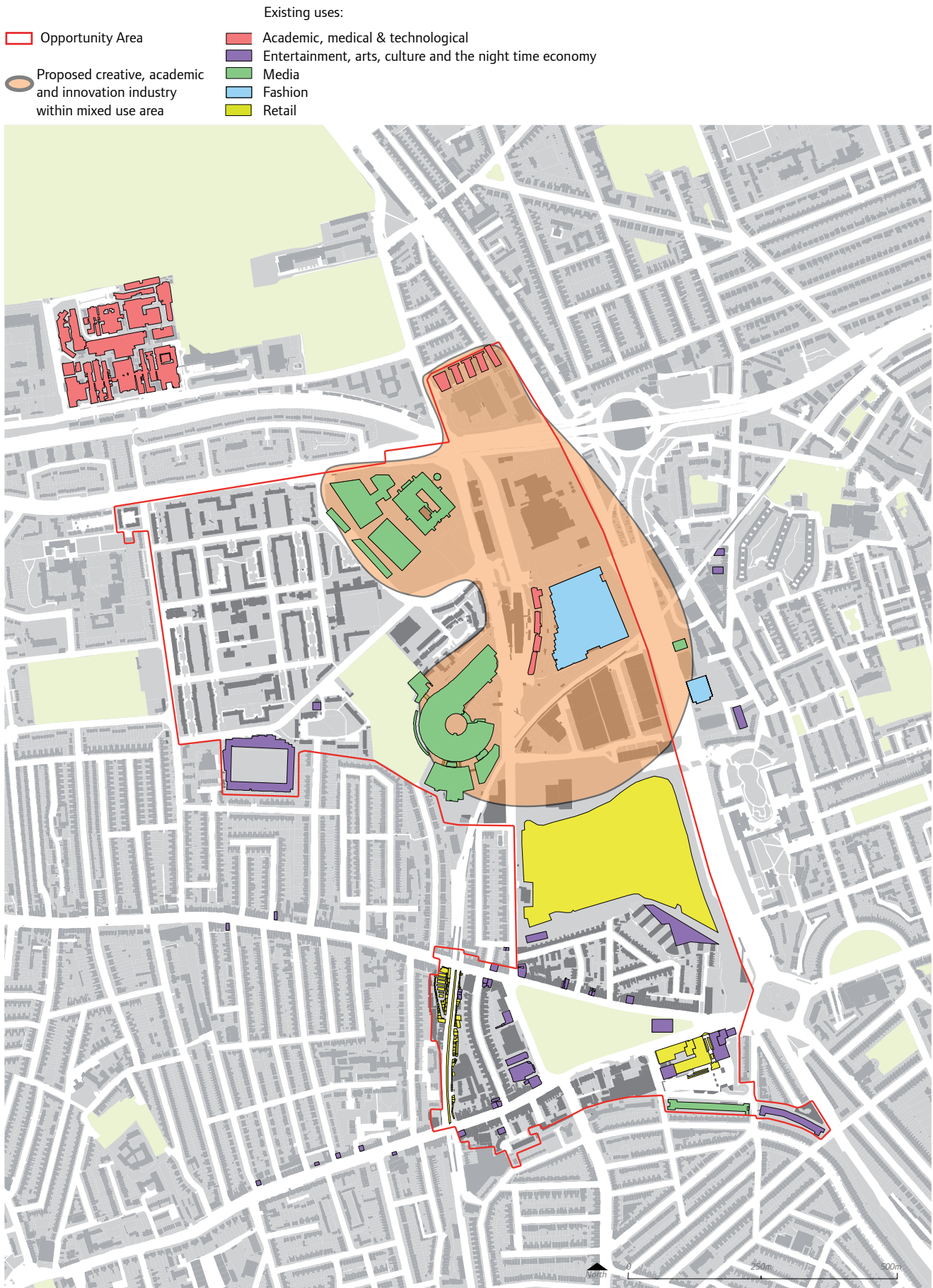


Figure 2.2: Current and future zones for employment in key sectors.

## Housing objectives

Development sites in White City East provide the opportunity to build new high quality housing as part of mixed use developments. New residential areas should be supported by local services, open spaces and facilities, to create a vibrant, liveable residential area.

New housing developments should provide affordable housing having regard to the policies of the London Plan, the H&F Core Strategy and Development Management Local Plan, subject to viability and the extent of external funding support. The target is to achieve 40% affordable housing in line with Core Strategy policy, strategic site WCOA, 1 White City East. If appropriate, the Council will require viability reviews to establish the scope for increasing the amount of affordable housing if the future economic and market conditions improve. New intermediate homes should be affordable to the full range of households who cannot afford to buy market homes having regard to the household income ranges set out in the London Plan and the LBHF Core Strategy.

All development must ensure a full range of dwelling sizes, across all tenures, although the primary requirement is to provide for family accommodation (3 bedrooms or more) to alleviate overcrowding, subject to viability.

- Market housing: a mix of unit sizes including larger family accommodation.
- Intermediate housing: at least 15% in 3 bedroom dwellings or larger.
- Social rented housing: approximately 40% in 3 or 4 bed dwellings.

Housing for students should be provided in accordance with DMLP policy DMA7.

Housing for people who need care could be provided in accordance with Policy DMA5 of the Development Management Local Plan.

## Existing situation

2.15 The OA has a considerable amount of residential accommodation in White City West (the White City, Batman Close and Wood Lane estates) and the town centre (the Charecroft estate, buildings around the Common and streets in the north, west and south of the centre). Some new residential has been built more recently as part of the Westfield shopping centre. Imperial College London has been granted planning permission for 201 dwellings (in addition to post graduate accommodation), Westfield has gained outline planning permission for a further 1,522 dwellings as part of their extension which is a mixed use scheme. Helical Bar/ Aviva have a resolution to grant planning permission for a scheme that includes 1,150 dwellings although the site has now been sold to Imperial College London. In the south of the OA, the Core Strategy promotes the regeneration of Shepherds Bush Market with a mix of uses including residential. Outline planning permission has been granted on this site to include 212 residential units.

Tenure in 2011 Census	London	H&F	White City Opportunity Area	
	%	%	Number	%
Owned	49.5%	35.6%	839	19.5%
Rented from council	13.5%	15.7%	1,870	43.3%
Other social rented (e.g. RSL)	10.6%	15.4%	399	9.2%
<b>Total Social Rented Housing</b>	<b>24.1%</b>	<b>31.2%</b>	<b>2,269</b>	<b>52.5%</b>
Private rented or living rent free	26.4%	33.3%	1,206	28.0%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>4,314</b>	<b>100.0%</b>

Figure 2.3 : Tenure mix White City compared to LBHF and London  
Source: Census 2011



- Opportunity Area
- Proposed housing areas as part of a mixed use scheme
- Existing housing areas



Figure 2.4: Current and future zones for housing.

2.16 White City is the second most deprived neighbourhood in the borough according to the National Index of Multiple Deprivation, and is ranked within the top 5% most deprived nationally with regard to income levels. There are high proportions of social rented housing. In addition, 18% of residents are living in overcrowded conditions. According to the 2011 census, 19.5% of properties within the WCOA are owner occupied, 52.5% are social rented and the remaining 28% are in the private rented of living rent-free category.

### **Development opportunities**

2.17 The LBHF Core Strategy and Annex 1 of the London Plan sets out an approach for mixed density housing development with a potential capacity of 5,000 new homes (as a minimum in the case of the London Plan). LBHF's Core Strategy sets out an indicative figure for White City East of 4,500 new homes.

2.18 The OAPF does not set out proposals for redevelopment or physical regeneration of the estates in White City West. However, to ensure that estate residents benefit from the social and economic regeneration that will take place, the OA has been defined to include a number of housing estates, and the LBHF Core Strategy seeks to ensure that development of largely privately owned land can capture the opportunity for existing communities, in terms of provision of jobs, opportunities to move to more appropriate housing, new facilities and the creation of a more sustainable, mixed and balanced community

2.19 There may be opportunities for additional student housing in the OA. The preferred location would be in White City East although provision of student housing should not compromise the potential for that area to provide family housing.

### **Affordable housing**

2.20 Development in the OA should help reduce social and economic polarisation and encourage social mobility. There should be new high quality housing for sale and rent at a range of prices and affordability, that will provide a local ladder of affordable housing opportunity, as well as helping to meet the general need for more homes.

2.21 The revised early minor alterations to the adopted London Plan emphasise the need for developments to maximise affordable housing output, and that 60% of all affordable housing provision should be for social and affordable rent, with the other 40% for intermediate rent or sale. LBHF Core Strategy policy "Strategic Site WCOA 1– White City East" sets out that 40% of housing should be affordable, and approximately 25% of all new housing (i.e. 62% of the affordable housing proposed) should be social rented, in sizes and types that enable local estate regeneration. The remaining 15% of all housing should be intermediate housing (i.e. 38% of affordable housing).

2.22 The Council will consider mechanisms to ensure that affordable housing is not compromised by excessively high service charges or maintenance rates. Housing should be designed to provide for ease of maintenance for low cost home ownership. Applicants for development will be expected to provide information on the 'weekly cost to occupier' of the proposed affordable units, including realistic and affordable service charges. For intermediate housing, annual housing costs (including service charge) should be no greater than 40% of net household income.

2.23 In accordance with development plan policy the WCOA Development Infrastructure Funding Study (DIFS) has assessed development viability broadly in White City East, to test the likely amount of affordable housing that can be achieved once contributions have been secured to mitigate other impacts of the quantum of development proposed within the framework. The study has concluded that at the time that the study was undertaken in Spring 2013, it would generally be viable to provide 15% affordable housing as well as the suggested DIFS tariff payment at current day values. This is reflected by actual development schemes coming forward in the area.

2.24 The DIFS assumes that realistic current expectations would be 15% affordable housing comprising 10% social rented and 5% intermediate housing, in the absence of grant or other external funding. The 40% affordable housing target from the Core Strategy however remains as the target



for new housing in WCOA and any reduction would need to be fully justified at planning application stage through robust financial viability. The Council and GLA will seek to maximise the provision of affordable housing from individual schemes having regard to the Core Strategy targets and London Plan policy, especially when economic conditions improve development viability and if grant or other financial support can be secured. The Council will expect any developer to produce a detailed viability assessment at the time of making a planning application to enable effective negotiation on the maximum quantity and mix of affordable housing that can be achieved. If appropriate, the Council will require viability reviews at stages in the development period to establish the scope for increasing the amount of affordable housing if the future economic and market conditions improve.

### **Dwelling Size Mix**

2.25 The GLA London Strategic Housing Market Assessment (SHMA) shows there is a considerable need to increase the stock of family sized affordable homes. The Mayor's draft revised London Housing Strategy (2011) sets out that 36% of affordable rented homes allocated funding in 2011-15 will have three or more bedrooms, and sets out a long-term aim for half of affordable homes to be family-sized. The early alterations to the London Plan also give much stronger priority to the delivery of affordable family-sized homes. The Council's Development Management Local Plan policy DMA3 seeks 15% of intermediate as 3 or more bedroom dwellings

2.26 The housing mix on the existing estates does not match the needs of residents as well as it could; overcrowding is a problem for many and there is a general need to improve the dwelling mix in favour of family dwellings. New social rented housing should be provided in a range of sizes to provide opportunities for residents to re-house (see next section), in accordance with the LBHF Development Management Local Plan policy DMA3.

### **Opportunities for estate regeneration**

2.27 The development taking place in White City East could provide an opportunity for White

City West estate residents to move to a home in any of the new developments, especially those who consider themselves to be living in less than ideal circumstances or environmental conditions. The potential for estate regeneration is explored below, but no proposals for any regeneration of the estates are set out as part of this document. Existing residents would need to be engaged in detailed discussions for any upgrade or regeneration of the estates.

2.28 Development within White City East could provide:

- New social rented housing of the right sizes and types which would provide opportunities for transfers to alleviate overcrowding or to obtain housing more suited to a tenant's needs.
- Intermediate housing (e.g. shared ownership, shared equity, discounted market sale) at the right price levels which would enable existing tenants who can afford to move into home ownership to do so while remaining in the same area. It would also provide opportunities for owner occupier leaseholders who need or wish to move.

2.29 There would be an opportunity for long term estate regeneration if estate residents wished and were able to move into new affordable housing in White City East. Any properties vacated by transferring social rent tenants could then change to other tenures in order to achieve a variety and mix of tenures within the area over time. If a significant number of White City West estate residents moved into White City East developments, there could be scope to consider a partial renewal of the estates. This could take place through refurbishment or redevelopment (for instance, by replacing blocks considered to be environmentally unsuitable), or by a combination of both approaches, having regard to the overall quality of existing accommodation. The estates could be transformed with a greater range of housing types and sizes.

2.30 To avoid large numbers of vacant properties adversely affecting living conditions for estate residents, management arrangements

would need to be put in place to prevent properties falling into disrepair, long term vacancy, anti-social behaviour, or break up of communities.

2.31 All new social rented housing built in White City East will be exclusively to accommodate those tenants of the existing estates in White City West who wish to move into better or more suitable housing (in accordance with a Local Lettings Plan). All existing social rented tenants would be able to choose to remain in the area and there will be no net loss of social rented housing in the OA as a result of the OAPF's proposals.

2.32 The benefits of regeneration will be complemented by the establishment of a neighbourhood level community budget in the area. White City is one of 10 pilot areas chosen by the Government in December 2011 to develop a small scale community budget, in 2012/13, that gives residents a local level say over the services they want and use. The aim of community budgeting is to pool central and local government spending into a single budget pot, involve residents far more in how that money is spent and ensure that spending is focused on improving the life chances of the people living in the area, helping to tackle unemployment, relatively low educational attainment and high levels of crime. The local community are playing a leading role, working with the local council and other services, to shape services so they work from the community's perspective. A package of support will be agreed with the Government.

2.33 Accommodation in White City East to enable rehousing of some of those existing White City West tenants who wish to move will become available in stages as development proceeds. If, after a reasonable period of time, the new social rented accommodation in a particular phase is not fully taken up, then an option would be that those surplus properties would change to affordable rent or an intermediate tenure (e.g. shared ownership or discounted market sale). In the above circumstances, the viability of the development would be expected to improve to enable a higher proportion of affordable housing.

## Retail objectives

The aim is to help establish the long-term viability of Shepherd's Bush town centre as a Metropolitan centre. This can be achieved by enhancing the attractiveness of the town centre based on its existing three retail anchors at Westfield, the W12 centre and Shepherds Bush Market and its leisure and cultural importance and encouraging appropriate development for town centre activities. There is scope to provide additional shopping and leisure uses on land in White City East, north of the existing Westfield Centre, if the need, capacity and sequential impact are established. This was undertaken as part of the now consented Westfield extension.

## Existing situation

2.34 Three complementary retail 'anchors' - Westfield shopping centre, West 12 shopping centre and Shepherd's Bush Market - serve as the main retail destinations in the town centre. Retail frontages along Goldhawk Road and Uxbridge Road connect the 3 anchors with smaller retail activities. Each anchor and retail frontage provides a unique offer that is attractive to many different communities and cultures and helps the town centre to remain vibrant. This diversity of the retail offer is an inherent strength of the town centre.

2.35 Westfield has brought vastly increased footfall to Shepherd's Bush and is now the dominant retail feature of the area. The 'historic' town centre has started to adapt to capitalise on the growth of the centre, but much more can be done. In the now adopted Development Management Policies, there is a more flexible approach to the prime retail quota policy to allow a greater proportion of Class A3-A5 uses to prevent vacancies in the town centre.

2.36 Shepherd's Bush Market has long been considered a valuable asset to the town centre for stocking a wide range of goods and services and providing an attraction London wide, both for its goods and for exemplifying a traditional London market with a distinct character for its cultural

- Opportunity Area
- Shepherd's Bush Metropolitan Centre
- Westfield Shopping Centre
- Shepherd's Bush market
- W12 Centre

3 Retail Anchors

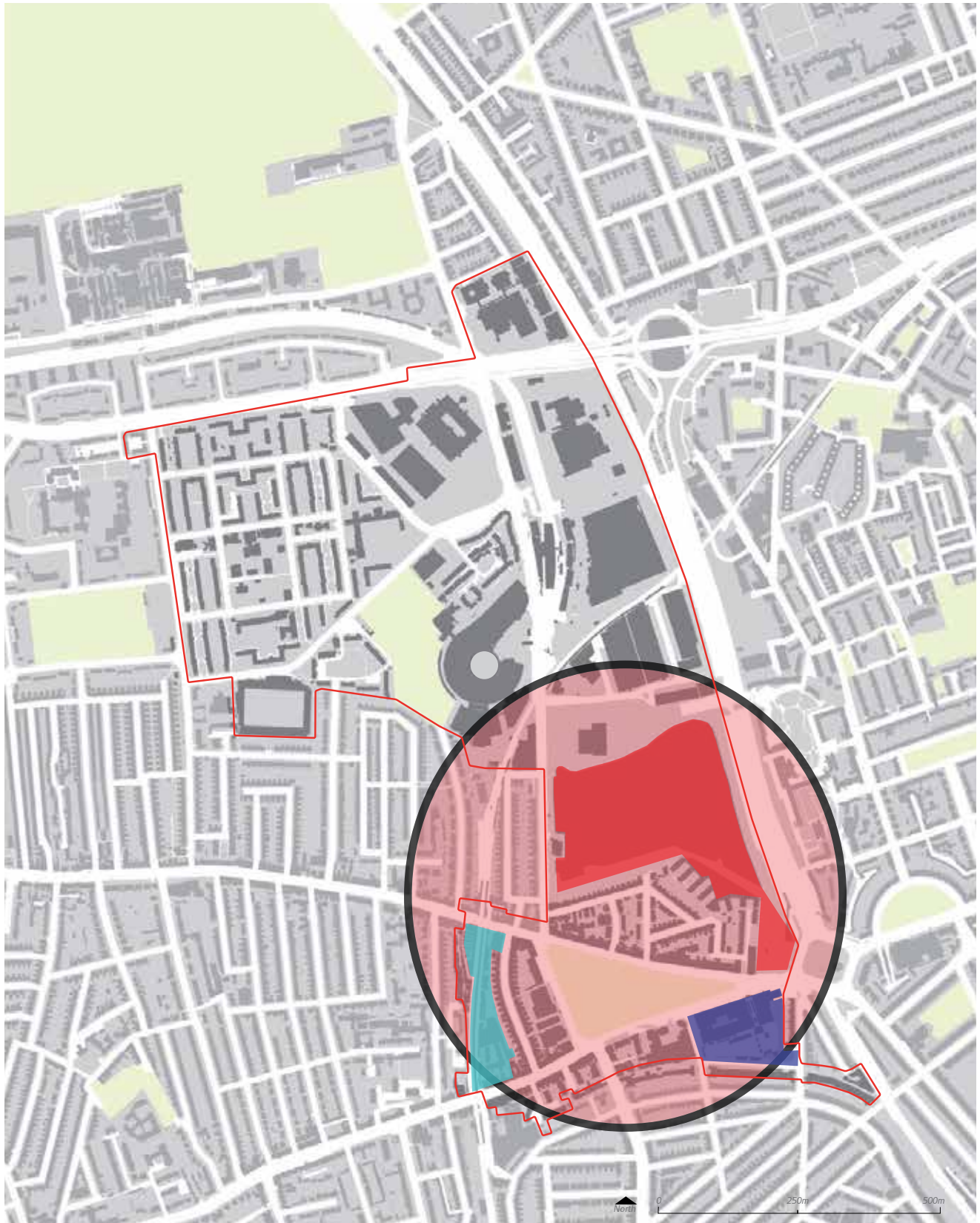


Figure 2.5: The three complementary retail anchors of Shepherd's Bush Metropolitan Centre.

diversity. However regeneration and enhancement of the Market would provide a better focus and provide a western anchor for the town centre. The Council's aspirations for the Market and adjacent land are set out in the Core Strategy policy for Strategic Site WCOA3. The Council is keen to see the refurbishment of the Market that will repair and improve its physical fabric, expand the market and the diversity of retail and food and drink options, and crucially maintains the existing traders and provides them the security to ensure the market can continue to operate without interruption and serve existing customers and communities. These objectives are reflected in the 2012 outline planning permission granted on this site.

2.37 The OAPF also acknowledges efforts already underway by the owners of the West12 centre to improve and consolidate the leisure offer, introduce new tenants and uses, invest in the centre's external appearance, and refine the retailer mix and offer.

2.38 The town centre is the key location for arts, cultural and leisure facilities in the OA, as well as for related hospitality and tourism. It has a longstanding reputation for a vibrant night time economy, with venues such as the Shepherds Bush Empire, Bush Theatre, two cinemas, the Ginglyk, and numerous other pubs, restaurants and bars. The promotion of the night-time economy must strike an appropriate balance with the residential uses in and around the town centre. LBHF DMLP policy DM B2 states that permission will be granted for new visitor accommodation and other facilities in the town centre subject to certain criteria being met; and any proposals must have regard, in particular, to Policy DM D2.

### **Development opportunities**

2.39 The LBHF Core Strategy aims to strengthen the historic town centre by encouraging commercial and leisure based development and uses that will help regenerate town centre functions. The completed Westfield Centre has upgraded the town centre's position in the London Plan hierarchy to that of a Metropolitan Centre.

2.40 The Core Strategy also provides for a potential increase in retail. The Joint West London Retail Study 2010 identified a need for an additional 40,000 plus sq.m. of retail (comparison goods) floorspace in Shepherd's Bush over the next ten years, along with a small amount of convenience goods floorspace. It states that if major retail cannot be located within the town centre it may be appropriate north of the Westfield centre on the edge of the existing town centre boundary. The OAPF's strategic transport study has tested the transport impact of additional retail to the north of the Town Centre.

2.41 The extension of retail and town centre uses (especially major leisure) north of Westfield would also support the proposed commercial uses in White City East and could help improve the planning of the entire area, allowing for a gradual transition from the town centre and retail uses to more community, leisure and residential uses. Planning permission was granted in 2012 for Westfield to extend the Town Centre retail and leisure offer to the north of Westfield towards the Hammersmith and City London Underground line viaduct. These uses are well suited to mediating between the different character areas and dealing with the spatial challenges of the site, as has been already done on the southern side of Westfield. These urban design aspects are considered in Chapter 3.



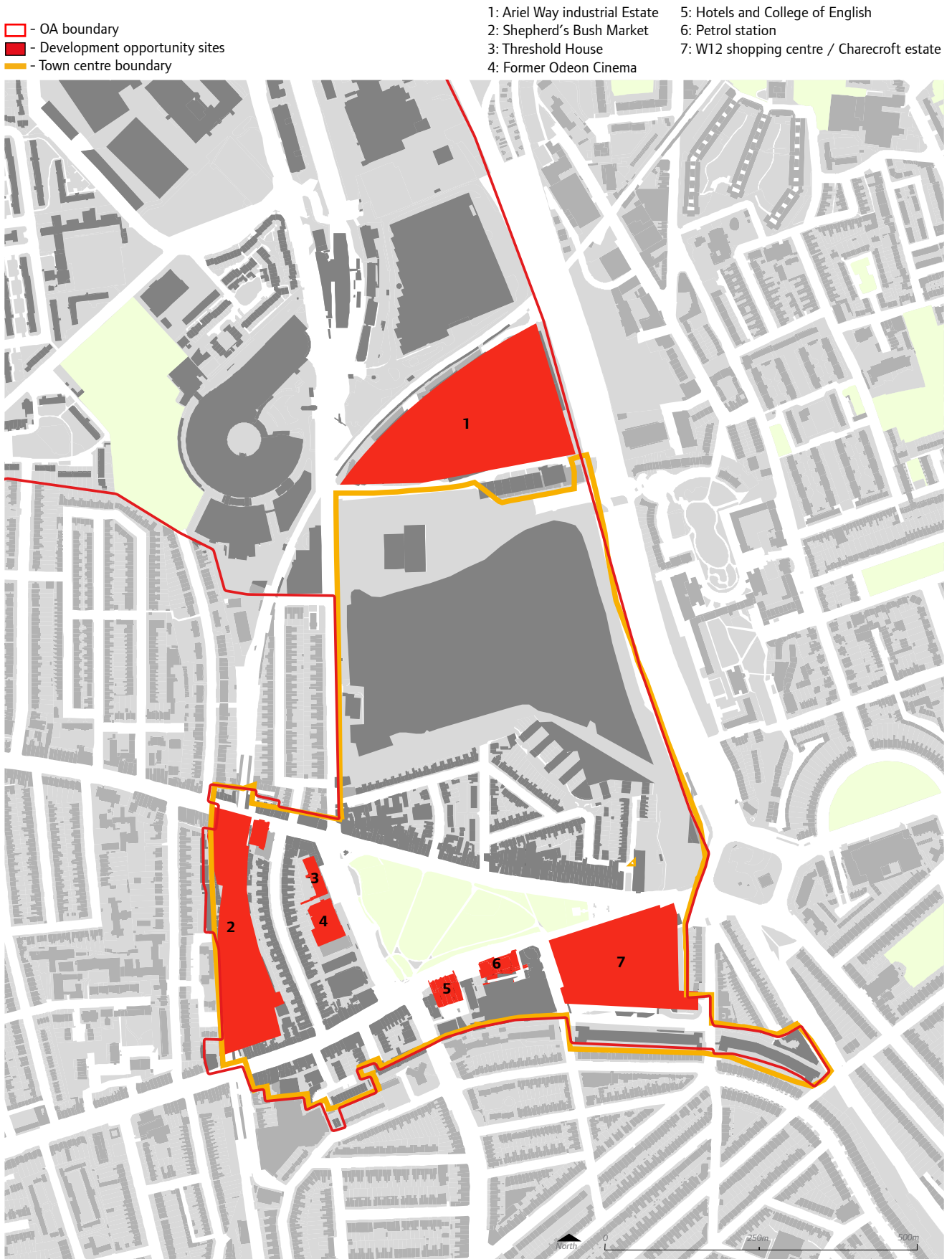


Figure 2.6: Potential development opportunities in and north of the town centre







# 03

## Urban Design Strategy

### Setting, context, and heritage

- respect the surrounding urban grain, land use, building types and scale
- celebrate the historic and distinctive architectural features of the area

### Liveable, lifetime neighbourhoods

- a flexible block plan and street grid
- a mix of dwelling types and sizes, including family housing
- high quality shared and/or private amenity space for all residents
- mansion blocks and some taller buildings (for private residential)
- mixed-use development

### Permeability and connectivity

- active street frontages
- attractive routes to encourage walking and cycling
- new east-west connections into RBKC
- improved links over the Central Line cutting
- new north-south routes connecting Westfield to Imperial College
- new connections under the Hammersmith & City Line viaduct and the A40
- new connections between Westfield and Hammersmith Park through the BBC TV Centre site
- improved connections throughout the town centre and with its hinterland
- enhance links to Wormwood Scrubs

### Public realm

- White City Green, a major new public open space
- manageable, inclusive, safe and useable public realm
- make use of the space under the Westway/A40
- enhance views of BBC TV Centre and make best use of the forecourt
- maintain open space around the Hammersmith & City Line viaduct
- reclaim the area to the north of Westfield from the tangle of roads and servicing facilities

## Strategic context

3.1 The urban design strategy for White City will help deliver wider aspirations to connect to the Opportunity Areas at Old Oak and Earls Court. This will deliver improved pedestrian and cycle links between the areas by enabling better access to existing park spaces and requiring the creation of new park spaces to support the housing development coming forward. This in turn should reduce pressure on public transport and car use and contribute to a greener more sustainable city.

3.2 The quality of environment drives investment decisions both nationally and internationally and it is important that a high benchmark is set within White City and its neighbouring OAs to ensure that both economic and environmental benefits are maximised.

3.3 In the longer term it would be possible to walk or cycle through public open spaces from Willesden Junction to Shepherds Bush and Earls Court, and for residents of Royal Borough of

Kensington and Chelsea and Hammersmith and Fulham to make use of amenities and social infrastructure in their respective boroughs easily and conveniently without having to detour around major pieces of transport infrastructure.

3.4 This overall strategy is illustrated in figure 3.2. The detailed masterplan that has been developed for White City sets out how this broader aspiration will be delivered.

3.5 White City forms one piece of a larger city planning jigsaw, with careful design it can contribute to not only enhancing its immediate environs but also make a significant contribution to the regeneration of west London, enhancing London's world city status.

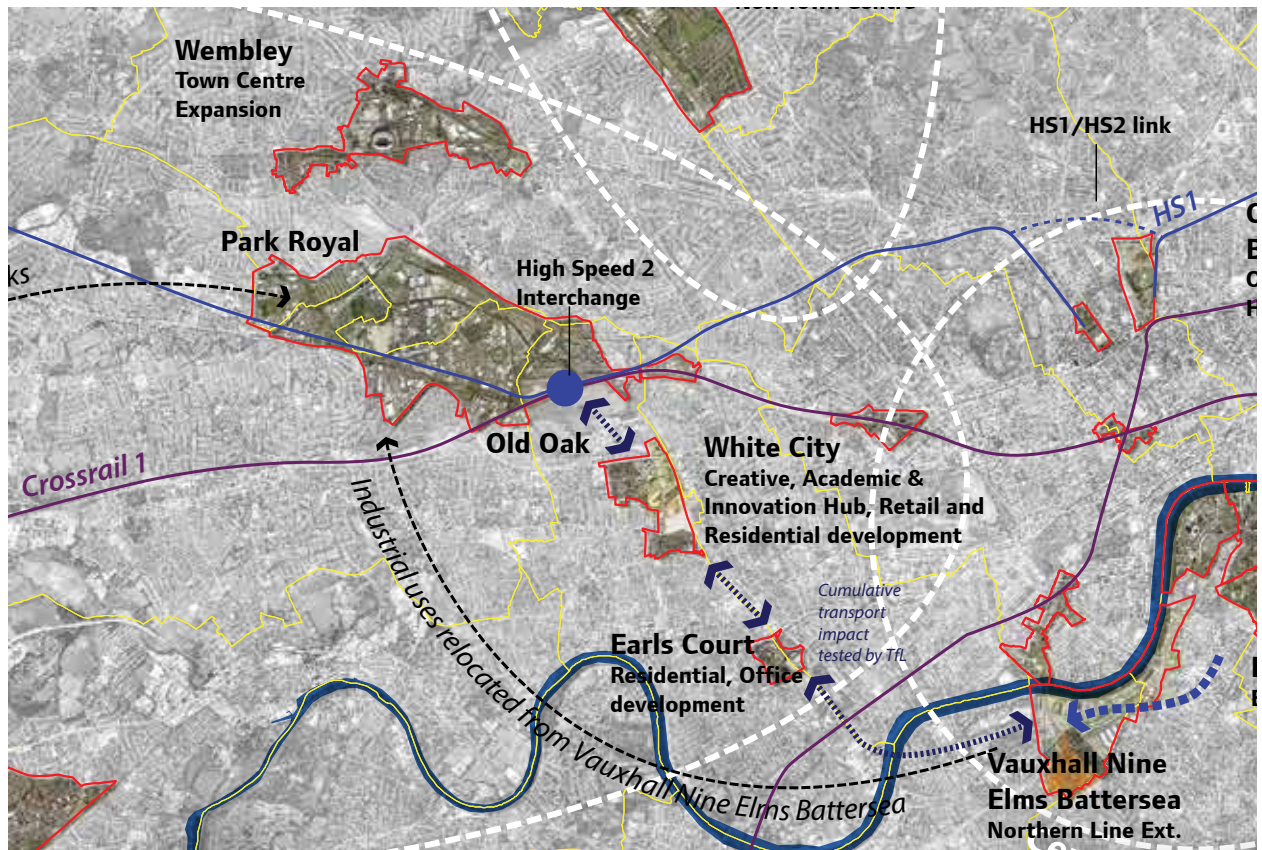


Figure 3.1: West London context



- Existing green open space
- Proposed open space
- OA boundary
- Strategic links/spaces
- Development opportunity



Figure 3.2 Urban design strategy, New green spaces and links



## Historic context

### Early development

3.6 Counters Creek originally ran through the Opportunity Area along the alignment of the West Cross Route, continuing on to Lots Road where it met the Thames. The area was largely farmland until the mid-1800s when railways were built over the land to lead into the city, with the West London Line in 1844, the Hammersmith & City Line in 1864 and the depot and generating station for the Central Line in 1900.

3.7 As a result of these new transport links, by the turn of the century the area around Shepherd's Bush Common had become a shopping and entertainment centre for West London with new shopping parades, cinemas and theatres. Semi-detached villas and terraced housing of this growing and prosperous suburb lined the streets beyond the Common, leaving a legacy of relatively dense Victorian housing which remains the dominant residential character.

### The first Olympic legacy

3.8 In 1908 the first of several international exhibitions, the Franco-British Exhibition, was held on grounds to the west of Wood Lane, in buildings rendered in white painted stucco, from which the site got its name "White City". Two new underground stations at Wood Lane (Central and Hammersmith & City Line) catered for the millions of visitors to the Exhibition.

3.9 The exhibition grounds featured a network of roads, bridges, waterways, as well as a stadium which was used for the 1908 Olympic Games. Although the exhibition buildings were designed as temporary structures, exhibitions continued to be held there until the late 1930's. The stadium was used by Queen's Park Rangers Football Club until they moved to Loftus Road, and continued to be used for rugby, athletics, boxing and greyhound racing until the mid-1980s.

3.10 Today, the diagonal road alignment between the White City estate, the BBC Media village and the grounds of Hammersmith Park are the only physical characteristics left of this early history of the site.



① 1908 - White City Olympic Stadium



② 1908 - White City Exhibition



③ White City Exhibition: The Japanese garden, now in Hammersmith park



④ Shepherd's Bush Empire



1: Olympic stadium (1908)

2: Franco-British Exhibition buildings (1908)

3: Japanese garden

4: Shepherd's Bush Entertainment Venues

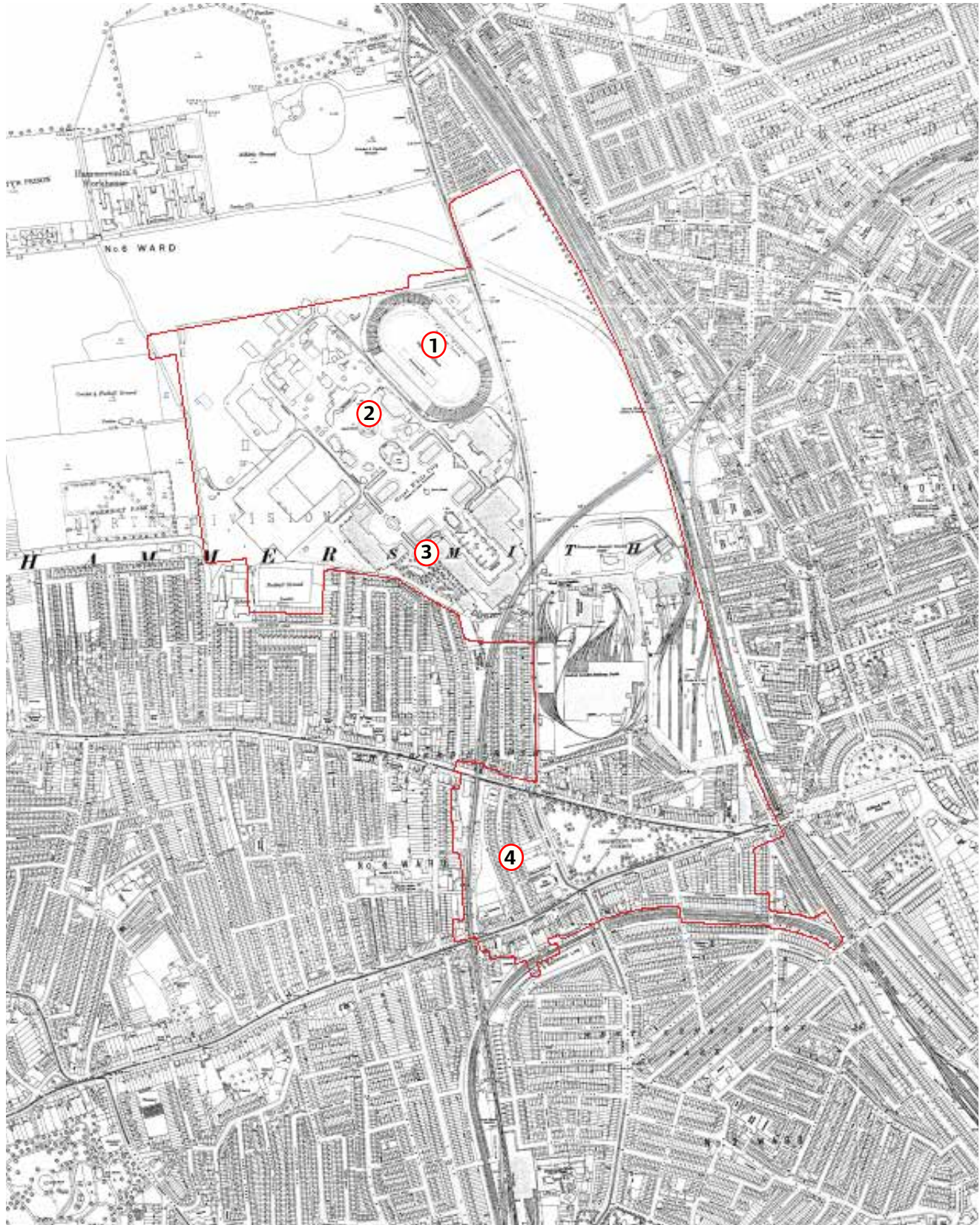


Figure 3.3 White City Opportunity Area: 1916

(Source: LB H&F)



### Inter and post war development

3.11 In the late 1930s the London County Council built the White City Estate on the Western part of the White City exhibition grounds; more than 2,000 homes in 5 and 6 storey blocks in a grid plan, with tree-lined streets named after exhibition buildings, such as Australia Way and Commonwealth Avenue. At the time the housing was of an exemplary standard although the rigid grid approach contrasted to the garden suburb approach taken to the west of the estate and the north of the Westway / A40.

3.12 After WWII, the BBC Television Centre and Hammersmith Park were built on the southern part of the exhibition grounds. Graham Dawbarn, of the firm Norman and Dawbarn, designed the TV Centre, which was Britain's first purpose built TV centre.

3.13 A new Central Line underground station was built at White City in 1947 to replace the earlier Wood Lane station. Between the Central Line cutting and the West London Line, industrial uses developed in the sites between the new road and rail infrastructure.

3.14 During the late 1960s the elevated Westway motorway was built to link the Marylebone Road with Western Avenue. Other major transport infrastructure developments included the West Cross Route (now the A3220) which linked the elevated gyratory at the Westway with a new roundabout at Holland Park. This was part of the inner London motorway box proposed in the 1969 Greater London Development Plan that was never completed following rigorous protests from community groups.

3.15 The BBC expanded Television Centre and while the White City stadium continued to be used for various sporting events, including the 1966 World Cup, it was demolished in 1985 to make way for the BBC Media Village designed by Allies & Morrison. The opening of the Westfield development in 2008 created a huge retail and leisure destination with improved transport facilities including a new Underground station at Wood Lane and a new Overground train station on the West London Line.



① Construction of the Westway (1960s)

Source: LB H&F archives



② White City Estate

Source: LB H&F archives



③ White City LUL Station, Central Line

Source: TfL



④ BBC TV Centre under construction

Source: BBC



- 1: Westway /A40 (1964)
- 2: White City Estate (1936)
- 3: White City LUL station (1947)

- 4: BBC TV Centre (1960)
- 5: Shepherd's Bush Common
- 6: West Cross Route (1960)

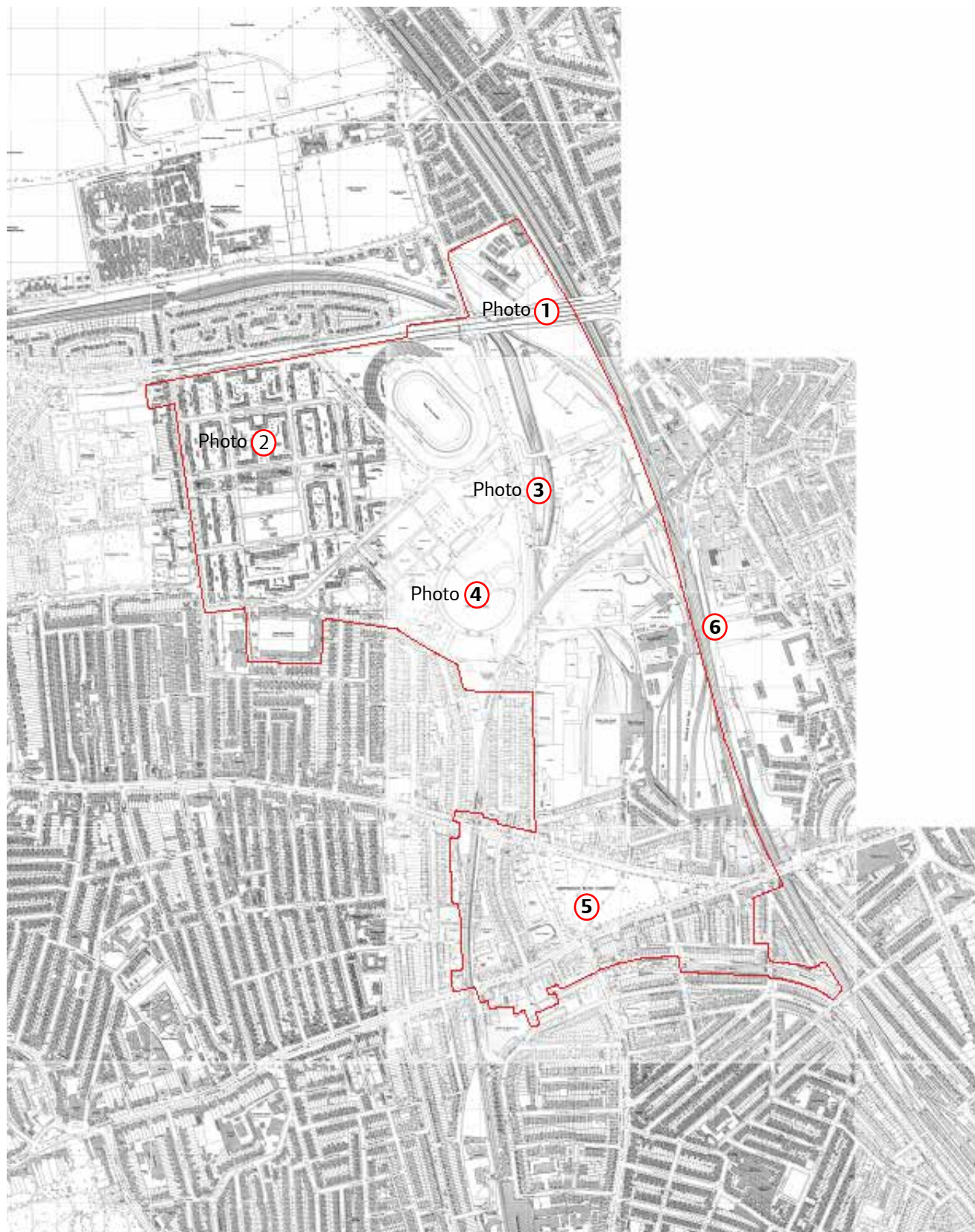


Figure 3.4 White City opportunity Area: 1978

(Source: LB H&F)

## Heritage Assets

### Conservation Areas

3.16 Most of White City East is located within the Wood Lane Conservation Area. The Shepherds Bush Conservation Area is located in the OA but is centred at the south of the area around the town centre and green and surrounding residential areas. Beyond the Opportunity Area boundary are several Conservation Areas that are predominantly residential, including the nearby Old Oak and Wormholt Conservation Area and the Oxford Gardens Conservation Area in RBKC.

### Wood Lane Conservation Area

3.17 White City East is largely covered by this conservation area which comprises distinctly different building types and areas of character. The area is centred around BBC TV Centre with other key features such as the White City London Underground Station, the Wood Lane Estate and Hammersmith Park.

3.18 The Grade II Listed BBC TV Centre is the most prominent of listed buildings in the area. The celebrated BBC Television Centre and Studio 1 has historic interest as the country's first purpose-built studio television complex. Its distinctive circular drum and contemporary detailing exemplified on the facade of Studio 1 are key elements of its special architectural and historic interest.

3.19 The DIMCO Building is Grade II Listed, which is a former electricity generating station built in 1898 as the engine and boiler house to serve the Central Line. It is now the earliest example of an electricity generating station built for the London Underground Railway system. The generator closed in 1928 and the building was later used by the Dimco power tool company.

3.20 The White City London Underground Station is designated a Building of Merit by the Council.

### Shepherd's Bush Conservation Area

3.21 This conservation area in the south of the OA includes the whole of Shepherd's Bush Common and surrounding residential streets.

Shepherd's Bush Common forms the hub of the area. It is an important open space for residents and visitors to the area and provides the focus for the area. It provides the setting for the built form, which includes some fine buildings most notably the listed grade II Empire Theatre and the listed grade II former Odeon Cinema. The neighbouring buildings at no.54 and no.58 Shepherd's Bush Green are both included on the Councils list of Buildings of Merit. The CA also includes the grade II listed terraces directly south of the Westfield mall, behind the main frontages on Uxbridge Road. The Grampians (listed grade II) is also of a high architectural quality and makes a positive contribution to the area.



A Shepherd's Bush green

Source: LB H&F



B BBC TV centre

Source: GLA



C DIMCO building

Source: GLA



- Listed Building
- Buildings of merit
- Conservation Area

Conservation Areas:

- 1: Oxford Gardens
- 2: Old Oak and Wormholt
- 3: Wood Lane
- 4: Avondale Park Gardens

- 5: Ingersoll and Arminger
- 6: Norland
- 7: Shepherd's Bush
- 8: Holland Park

- 9: Coningham and Lime Grove
- 10: Hammersmith Grove
- 11: Melrose
- 12: Lakeside / Sinclair / Blythe Road



Figure 3.5: Conservation Areas & listed buildings

### Urban form

3.22 White City today boasts iconic buildings, a strong heritage of creative industry and leisure attractions, valued open spaces and landscapes, and internationally renowned institutions. It also contains many buildings of poor quality including industrial sheds and dated commercial space.

3.23 Wood Lane today is the key transport corridor which acts as a principal gateway to the area. Many of the key commercial uses of the OA are focused along this road, with the predominant scale of development reflecting industrial and commercial uses. The grade II listed BBC TV centre and the new BBC Media Village are the dominant buildings along this part of Wood Lane. The low rise Wood Lane Estate separates the two. Low rise office developments of 6-storeys and two tube stations are located on the east side of Wood Lane. Large warehouses and industrial sheds sit on large plots of land behind many of which contain buildings of poor quality or are dilapidated. Further south on the east side of the road is the Westfield London Shopping Centre which sits opposite a long row of 3 storey Victorian terraced housing. A 6-storey car park owned by the BBC is south of the Wood Lane railway bridge. The 15-storey east tower was a later addition to the BBC TV Centre is set back from Wood Lane and is prominent in longer distance views.

#### *Town Centre*

3.24 The town centre has great variation in building form and styles. Five-storey Victorian terrace buildings predominate along the north side of the green, which is set beside the large modern Shepherds Bush Underground Station at its eastern end. Offices of 5-6 storeys predominate the western side of the green, along with larger buildings for entertainment such as the Shepherds Bush Empire and Shepherds Bush Pavilion. The southern side provides a mix of Victorian and Art Deco buildings set adjacent to the 20-storey Charecroft Estate which sits above the W12 Shopping Centre which is 2 storeys at its frontage.

#### *Existing Housing in the area*

3.25 The area surrounding White City includes different forms of housing, charting the history of housing development in London with pre- and post-war estates at high and low density, Victorian terraces and mansion blocks. Immediately north of the OA are a number of streets with consistent 2 storey terrace dwellings. To the north-east are North Kensington and the Oxford Gardens Conservation Area which feature good quality terraced housing, while to the east and south of the Westway, the Stable Way gypsy and traveller site sits in a pocket of land between the roads of the Westway junction. Beyond the OA boundary to the east are several clusters of residential towers in the Lancaster West, Silchester and Edward Woods estates which comprise 21-24 storeys. To the south and south west of the opportunity area, the area comprises a mix of housing around the town centre, predominantly consisting of Victorian terraced housing.

3.26 Council estates make up a significant part of the housing stock within the Opportunity Area. The Wood Lane estate is a tightly packed development of two to four storey townhouses with integral porches, terraces and balconies, ramps and stairs, with an emphasis on private entrances in a generally pedestrianised environment. The White City Estate is characterised by larger 5/6 storey blocks of flats set to a regular perpendicular plan with external corridor access. Mature trees line the grid of streets in the estate with generous open spaces provided between the buildings. The estate also features several community facilities and local shops, churches and schools, which all form a strong central focal point for residents. The nearby Batman Close Estate features buildings of 3-5 storeys around a large area of central open space.



- >10 m
- 10 - 20 m
- >20 m



Figure 3.6: Existing building heights

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## Opportunities

3.27 This framework seeks to integrate new development with existing facilities for community, sport and creative industries, provide better access to existing and new facilities and open spaces, and identify what new further facilities would be required to support local growth and what contributions developers would make to that provision.

### Open Space

3.28 The OA boasts a variety of open spaces, including Hammersmith Park, play areas within the estates, informal open spaces such as the lawn in front of the BBC media village and Wormwood Scrubs. These local parks and amenity spaces are popular and well-used. However, most of White City East is within an area of open space deficiency which will need to be rectified as development comes forward by providing new open space and better connections to existing open space as part of the London Green Grid.

### Sport and leisure

3.29 The legacy of the 1908 Olympic Games is continued in the area with sporting facilities including the Linford Christie stadium, the Phoenix Swimming Pool, the football pitches at Hammersmith Park, the Westway Stables and the Westway Sports and Climbing Centre.

### Retail and town centre attractions

3.30 Retail has always been a key element of the town centre, with Shepherd's Bush Market and the West 12 Centre as local shopping destinations. The arrival of the Westfield centre in 2008 has vastly expanded the retail presence in the area, as well as the leisure offer with many new restaurants and a cinema to complement the existing leisure uses in the town centre.

### Culture and entertainment

3.31 Shepherd's Bush has long been a centre for entertainment and leisure, with established venues such as the Empire and the Bush Theatre along with smaller bars and clubs centred around Shepherd's Bush Common. Access / links from the north to the town centre could be improved.



① Linford Christie stadium

Source: Google Maps



② Westfield London

Source: Westfield



③ Shepherd's Bush Empire

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④ The West London Community Riding Centre















- |  |  |   |
|--|--|---|
|  parks          |  swimming   |  running               |
|  playing fields |  cycling    |  equestrian facilities |
|  shopping       |  soccer     |  tennis                |
|  entertainment  |  basketball |  climbing              |



Figure 3.7: Existing Cultural, sport and leisure facilities in White City



## Challenges

3.32 The Opportunity Area is highly accessible by roads and rail, but is at the same time blighted by barriers to movement caused by transport infrastructure, with many of the development sites suffering from poor connections to the wider area. The West London Line, access roads and ramps for the West Cross Route and the elevated A40/Westway, the Central Line cutting and the Hammersmith & City Line viaduct all represent physical barriers to key sites in the area and linkages to communities beyond the OA.

3.33 The area is also isolated from its wider context by infrastructure and large building sites which have restricted movement throughout or around them with fencing or inactive frontages, such as the BBC TV Centre and north of the existing Westfield London shopping centre, which have previously discouraged connectivity and permeability through their sites to the wider area.

3.34 Despite the great connectivity of the area in terms of public transport and its proximity to major roads, the legacy of industrial uses to the east of Wood Lane has left a gap in access and there is currently no provision for cycling and pedestrian connectivity throughout White City east.

3.35 There are many changes in levels across the opportunity area hence there is a challenge to achieve acceptable step free routes that are accessible to disabled pedestrians to mitigate changes in level and gradients throughout the OA.

3.36 Connectivity to and from the White City Estates should be improved

3.37 This framework addresses these challenges through a series of urban design objectives that will deliver a new high quality connected urban environment.



① Under the Westway



② Central Line cutting

Source: GLA



③ West Cross Route / A3220

Source: GLA



④ Westfield London

Source: GLA



⑤ BBC Media Village

Source: GLA





Figure 3.8: Challenges in the White City Opportunity Area



## Objectives

3.38 There are three principal design objectives for the OA, as illustrated in the Indicative Masterplan:

### 1. Creating areas of new public realm and open space

- Seeking provision of a high quality area of public open space, preferably on each side of the Hammersmith and City Line viaduct, to give the area identity and provide a recreational space for shoppers, residents and workers.
- Providing smaller areas of open space which will enhance local character and distinctiveness and be clearly defined as private or shared amenity space.
- Integrating existing parks, open spaces and landscaping with new public realm.
- Providing play areas which reflect diverse needs.
- Provide ecological corridors to encourage rich biodiversity throughout the area.

### 2. Maximising connectivity

- Providing new linkages to overcome barriers created by the Westway, A3220, West London Line, the Central Line cutting and Hammersmith and City Line viaduct.
- Ensuring new developments should be permeable and existing buildings with large impermeable building footprints should provide new links through their sites to provide better connections to surrounding areas.

- Design new streets with active frontages and to be tree-lined with identified routes that will improve conditions for pedestrians and cyclists while reducing congestion.

### 3. Quality urban design that responds to context

- Provide the majority of buildings at a height of 6-10 storeys in the area to allow for a mix of uses, while also providing some lower rise terraces adjacent to existing neighbourhoods.
- Taller buildings would be more appropriate along the elevated Westway, where they would act as a point of identification for White City.
- Build upon the character of the surrounding high quality areas in West London and provide mansion-block typologies for residential areas.
- Improve settings for the distinctive architectural and townscape features of the area including DIMCO, BBC TV Centre, the Westway and the Hammersmith and City line viaduct.
- New retail should focus on shops within a shopping street typology.
- Provide a transition in scale of buildings from the town centre, moving north through White City East.
- Provide a flexible block plan that can accommodate, and be adapted to, a variety of building types, scales, sizes and a variety of amenity spaces.



Figure 3.9: Combined walking, cycling, jogging and horse riding in Hyde Park illustrating the aspiration for open space and connectivity in the OA.

Source: GLA



- ↔ New linkages
- New public realm / open space

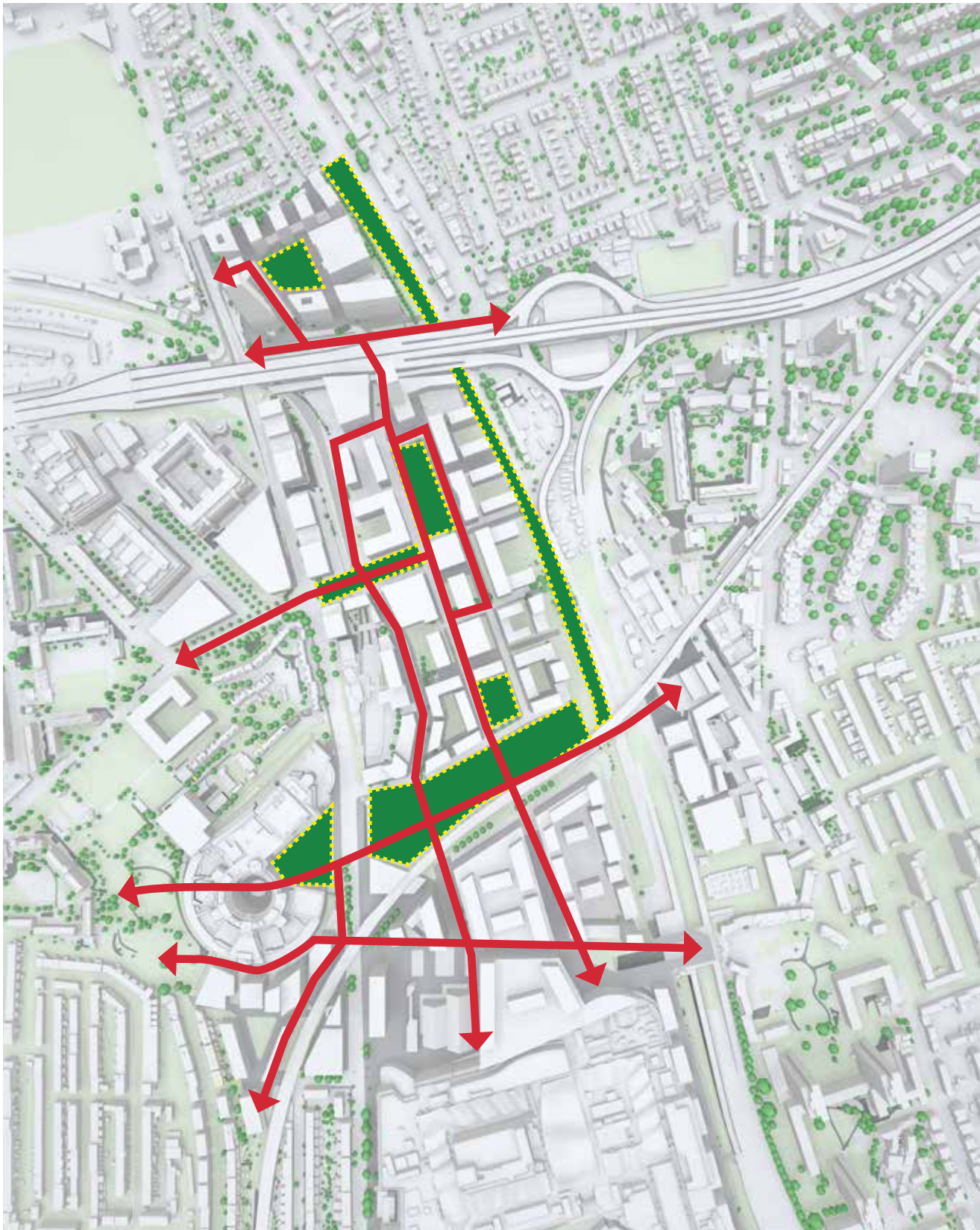


Figure 3.10 Indicative Masterplan

### The Indicative Masterplan

3.39 The indicative masterplan illustrates the urban design objectives in White City East. It is intended to provide a broad design framework that would enable individual developments to come forward in a way that encourages them to be linked into a cohesive design solution.

3.40 It should help to optimise the contribution of individual schemes to the layout and design of White City East. It is not intended to be prescriptive, but provides a tool to assist consideration of development proposals.

3.41 The Council and GLA anticipate that individual developers will use this masterplan as a starting point, but will need to undertake more detailed analysis to ensure principles of the urban design objectives are deliverable within their individual schemes, meanwhile cooperating and coordinating with other landowners including TfL and Network Rail to ensure linkages between sites will remain deliverable.

3.42 The indicative masterplan has evolved out of analysis of the three principle design objectives set out earlier in this chapter. It has also taken into account the work undertaken by individual landowners, as they have progressed their proposals for individual sites, to ensure that the masterplan can still represent a model that will assist integration between each development.

#### New masterplan open spaces

**1: White City Green**

**2: Green link / Ecology corridor**

**3: Central Line green bridge**

**4: Imperial West Square**

**5: BBC TV centre entrance**

**6: Imperial South Square**

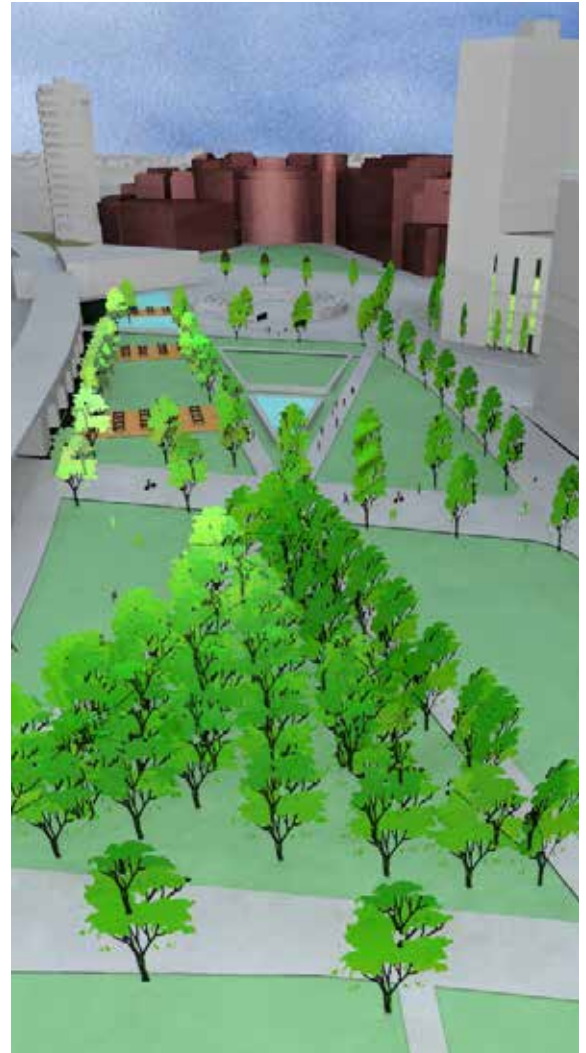


Figure 3.11: Bird's eye view: White City Green (Source 3D model: looking west towards BBC TV Centre Z Mapping)



■ New public realm / open space



Figure 3.12 New public realm / open space



## 1. Creating New Public Realm and Open Space

### White City Green

Creation of a major new public space

3.43 The Core Strategy specifies that development in White City East must be well related to a pattern of public and private open spaces. Most of this area lies within an area of open space deficiency as identified in the Core Strategy and a new public open space is needed to address this.

3.44 A substantial new public space, White City Green, should be at the heart of the OA, with the preferred location along either side and through the Hammersmith and City Line viaduct, extending east from the forecourt of the iconic BBC TV Centre building up to the West Cross Route. The precise location and shape is a matter for detailed design when development schemes come forward.

3.45 White City Green will attract future development and investment in a part of the OA that benefits from excellent public transport links and provides an ideal point of transition from the retail uses at Westfield to the south with a more commercial and residential mix to the north.

### Use of the Green

3.46 While the preferred location of the Green is largely within one major land ownership, it would represent a major asset for all landowners in the OA. Therefore, they are encouraged to take a co-ordinated and collaborative approach to delivering this public open space to a high standard. It could be maintained by the surrounding landowners/occupiers and managed through a body which enables representation from the Council, the local community and landowners including TfL who would also be involved in the process in deciding how that space is used.

3.47 The Green will be bound to the north and south by new commercial, creative, retail, residential and leisure uses and located near Wood Lane Underground Station. It will be convenient not only to new residents but also workers, shoppers and visitors to the area.

### Design of the Green

3.48 It will be a high quality area of publically accessible open space which is intended to run on both sides of the viaduct, comprising an area larger than but of a similar shape to Brook Green—a long and narrow public space located between Hammersmith Road and Shepherd's Bush Road

3.49 White City Green will capitalise on the attraction of destinations such as BBC TV Centre and Westfield, as well as being located around iconic structures such as the Hammersmith and City line viaduct and the DIMCO Building. The refurbished BBC TV Centre should open up its central, front courtyard to provide a new forecourt which should be read as a natural extension to White City Green.

3.50 A new and improved crossing over Wood Lane would reinforce this link through appropriate paving and landscaping. The green should enhance overall site legibility throughout the area by delivering a strong sight-line from the edge of the West-Cross Route in RBKC towards the BBC TV Centre and should ensure there is a wide, unobstructed passage between buildings. Views toward the DIMCO building should also be encouraged to provide greater integration with key heritage assets. This is discussed further in the section 'Quality urban design that responds to context'.

3.51 Buildings should be sited sufficiently away from the viaduct and the Green itself, so as not to crowd out this feature or create a canyon effect with excessive overshadowing on to the open space.

3.52 As well as providing soft landscaping, new trees and areas of recreation, the spaces around could incorporate areas for seating, children's play areas, toilet facilities and space for performances or temporary events such as film screenings and speciality market space. Opportunities to incorporate public art and create a setting for temporary cultural events, tying in with local creative industries, could also be pursued.

3.53 The design of the Green must adopt the principles of inclusive design effectively from



- Pedestrian & cycle bridge
- Strategic pedestrian link
- Pedestrian areas
- Public Park
- Opening up railway arches
- Strategic green link

Figure 3.13: Precedents for the proposed White City Green



Figure 3.14: White City Green: indicative masterplan including Wood Lane station and Central Line crossing

(Source 3D model: Z Mapping)

the outset, making spaces accessible, easy and convenient to use for all groups of people, with particular attention to thinking about the needs of disabled persons or older people.

3.54 Consideration must be given to the function that this space would provide late at night, with detailed lighting, other 'Secure by Design' techniques and management arrangements to ensure security and safety for all users.

3.55 The Green would also perform an important contribution to the wider sustainable drainage objectives for the OA, with opportunities to provide SUDS within areas of soft landscaping.

### **Hammersmith and City Line viaduct arches**

3.56 The railway viaduct arches that sit centrally in the Green will need to be partially opened up to provide for multiple north-south routes between the two sections of open space, some to be used as cafes and or other activities that could be integrated with the Green. Similar to the viaduct arches in Ravenscourt Park, many of the arches should remain open to pedestrians and cyclists to encourage north-south movement. Particular archways which visually link up to streets running north of the green and from Wood Lane Station should be left open for passage. Areas of hard landscaping could provide a high quality setting for uses such as local cafes, restaurants, shops and community spaces that integrate well with the open space.

### **Local Open Spaces, public realm and inclusive environments**

3.57 Local open spaces are essential to enhancing local character and distinctiveness. The richness of the area will be enhanced by a hierarchy of quality public and private spaces comprising formal parks, allotments, urban squares, communal open space, private open space and wilderness corridors. These will allow for a range of recreational and leisure opportunities which will benefit the health and wellbeing of the community.

3.58 Large scale residential, mixed use and employment uses developments will be expected to consider how their proposals can contribute to the provision of strategic open space to serve the needs of the wider area, particularly the provision of White City Green.

3.59 These will need to include formal and informal play facilities and space for informal ball games for various age groups that are easily accessible to families.

3.60 The creation of successful lifetime neighbourhoods and high quality public realm should be the objective for all developments. Open spaces should integrate features to ensure they are welcoming for people who may otherwise be excluded or feel less comfortable using the space. Spaces should be clearly defined as private or shared amenity space and smaller areas of open space will enhance local character and distinctiveness.

### **Ecology corridor**

3.61 The embankment of the West London Line should provide for an ecological corridor, to encourage further biodiversity in the area and allow movement to and from the Nature Conservation Area which is designated along the embankment to the north of the site at Imperial College. The site has been designated as a green corridor in the Core Strategy and is a SINC (Site of Importance for Nature Conservation) in the London Plan. Denser vegetation along this railway line would also provide benefits by providing a barrier from the busy train line and the noise and pollutants coming from the West Cross Route. Development in the OA should protect and enhance the existing link by creating a publically accessible green route along the length of the OA running from Shinfield Street to the town centre.





Figure 3.15: The shape of White City Green is similar to that of Brook Green



Figure 3.16: The eastern end of White City Green, looking towards RBKC

(Source 3D model:Z Mapping)

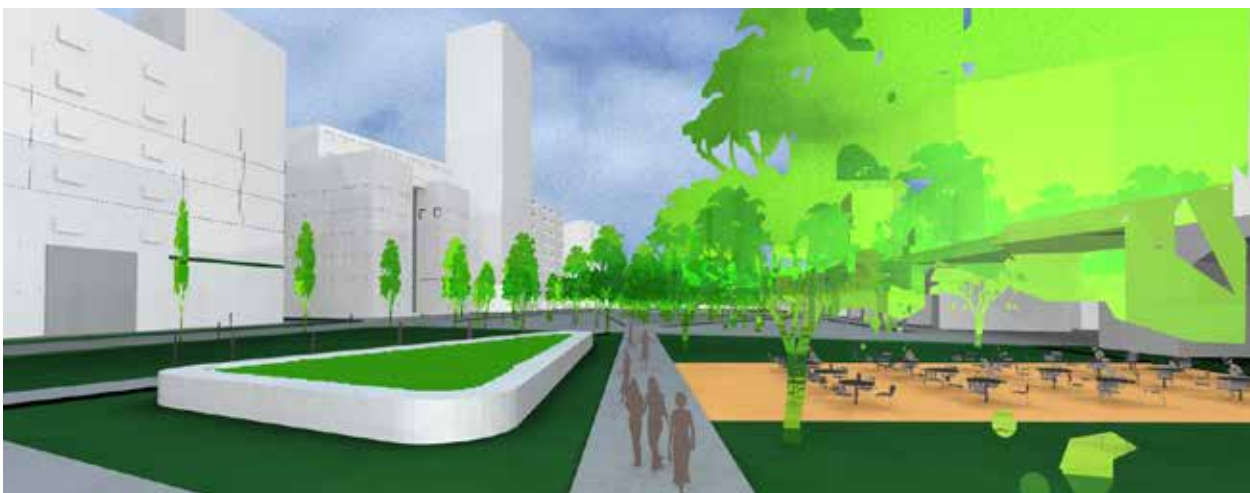


Figure 3.17: White City Green from Wood Lane looking to the east

(Source 3D model:Z Mapping)

## 2. Maximising connectivity

### Improved Routes and Connections

Improved routes and connections are needed within the OA, and between it and the surrounding area to overcome major transport infrastructure and large impermeable development sites. The OA must deliver:

- East-west connections under and over major transport infrastructure between White City East, Wood Lane and RBKC; and
- North-south connections from the town centre through as far north as the Imperial College development north of the Westway.

3.62 The Core Strategy policy for White City east states that ‘development must be permeable and well connected both within and outside the area, especially for pedestrians and to overcome the barrier effect of the West London Line/ A3220 and A40’. This OAPF chapter addresses the challenge of connecting the OA to its wider context, drawing communities together, creating links between parks and spaces, buildings, businesses, institutions and destinations and provides options on how these could be best delivered.

3.63 Key to the success of these neighbourhoods will be providing a network of tree-lined routes, streets and paths, bridges and underpasses, open areas to improve legibility; all of which will improve permeability and connections within the OA whilst improving linkages with surrounding communities. Routes that provide easy access to jobs, community and leisure facilities, the town centre and public transport are central to the framework’s design objectives.

3.64 Vehicular, pedestrian and cycle routes will all be delivered, with an emphasis on improving conditions for pedestrians and cyclists whilst reducing traffic congestion. New connections will impact positively by integrating new and existing communities to help with social integration, better access to community, leisure facilities and jobs, encouraging walking and cycling in the area

and promoting a healthy lifestyle by reducing traffic congestion which in turn helps reduce CO2 emissions, air quality, noise and dust.

3.65 New development is expected to achieve the highest standards of accessible and inclusive design. Development must adhere to the principles of lifetime neighbourhoods: places where people throughout their lifetime have access to a range of services, infrastructure and facilities- all easily reachable by foot, wheelchair, mobility scooter, bike and public transport. It will be important to mitigate changes in level and gradients throughout the OA to ensure the provision of step free routes that are accessible to disabled pedestrians.

3.66 TfL and Network Rail own or control areas which are essential to achieving many of these improved connections, including the Hammersmith and City Line viaduct, the Central Line cutting, the Westway and the embankment to the West London Line. They must be engaged as key partners in masterplanning and throughout the application process to ensure the principles in this framework can be delivered.

### New and improved connections

- 1: Wood Lane
- 2: New street grid
- 3: Connections through Westfield
- 4: Hammersmith and City Line viaduct arches
- 5: North-South connections under the A40
- 6: Pedestrian bridge over A3220
- 7: Pedestrian underpass of West London Line
- 8: East-west connections over Central Line
- 9: East-west Connections through BBC
- 10: East-West linkages to White City West

*Note: Numbers relate to the numbers on Figure 3.18*



↔ New linkages

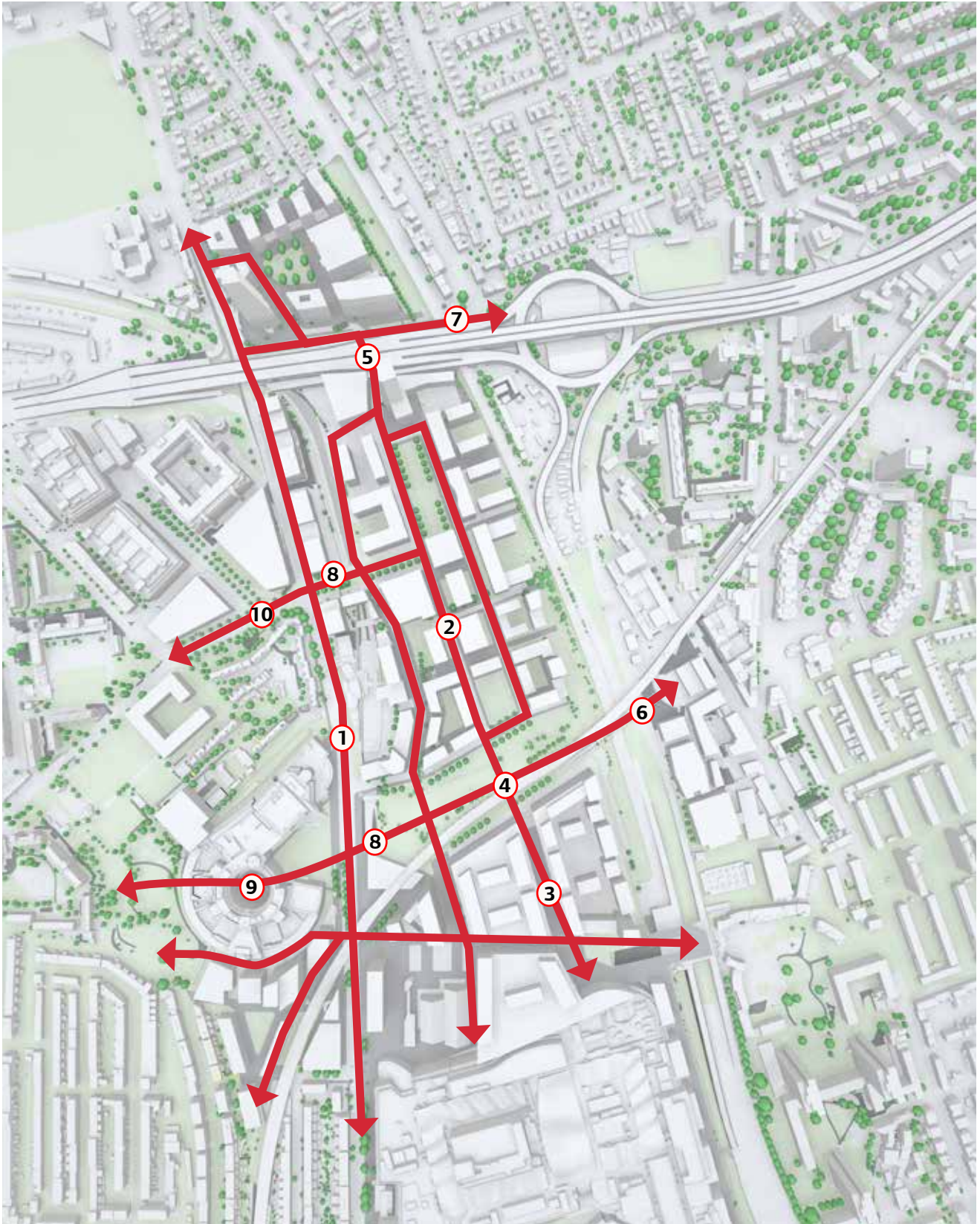


Figure 3.18 New linkages and better connections throughout White City East



### North South connections

3.67 Improving north-south connections includes providing a northern entrance to Westfield so that it connects with the area north of the existing shopping centre and encourages movement through White City Green. Provision for the railway viaduct arches to be opened for passage will provide the opportunity to join up to one of two new key routes through the area to the site north of the Westway. New development will be required to create a high quality transition between the town centre and new development areas.

### Wood Lane

3.68 Wood Lane is currently the only north/south route that exists in the OA and one which could benefit from improvements to its public realm. The redeveloped BBC TV Centre will enhance the experience for pedestrians along Wood Lane, particularly at the section which will face White City Green.

3.69 A co-ordinated approach should be taken to improve Wood Lane and give the street a clear identity. Wood Lane should become a high profile thoroughfare with active uses to either side. The pavements should be safe and accessible, generous and free of clutter and building frontages should face Wood Lane directly. Where possible, new tree planting should be provided to complement the existing mature plane trees which line part of Wood Lane.

### New Street Grid

3.70 Development of the major sites east of Wood Lane will include a new street grid which links into the existing road network to unlock access throughout White City East. The new streets will provide alternative north-south routes to Wood Lane, improve connections with the town centre and capitalise on connecting existing and proposed linkages that run east-west across the area, such as the West Cross Route and the Central Line cutting. New streets will also enhance visual links to help with orientation and site legibility and should align with major roads.

3.71 Figure 3.19 illustrates one road running parallel to Wood Lane from White city Green, underneath the Westway/A40 and into the Imperial College site. It will act as the key connection through the new developments and is referred to as White City Lane in the indicative drawings. The road will reconnect with Wood Lane to the north of the Westway and is intended to be winding at its northern section to discourage motorists from using it as an alternative to Wood Lane, but should include a cycle priority route.

3.72 New streets which have been called Wormwood Way and Reith Row in Figure 3.19 will act as secondary north-south connections, which should not attract through-traffic and therefore will not provide a direct link through the area.

3.73 All the roads should be designed to adoptable standards, be generous to both cyclists and pedestrians and be shaded by trees. Preferably, two north-south and three east-west streets should be provided with two-way traffic, with generous on street parking and street planting with the potential for SUDS incorporated.

3.74 There may be scope for shared surface/ pedestrianised streets within developments; however these must be designed to ensure they are accessible and safe for all users.

3.75 All development proposals must illustrate in their planning applications a clear street hierarchy and demonstrate how the proposed streets connect to the wider network and improve connectivity.

- Wood Lane upgrade
- White City Lane: new road for all users
- Local connection
- Green and ecological route



Figure 3.19: New and improved north-south links

(Source 3D model: Z Mapping)

### **New North-South connections through Westfield**

3.76 The site to the north of the existing Westfield shopping centre is dominated by access roads for commercial servicing, car parking, bus and taxi circulation all of which render the area inhospitable for pedestrians. The northern elevation of the existing building creates a challenge to improving connectivity from the shopping centre to the north, as the public routes through Westfield are two levels above ground (at the same level as the crossing over the West Cross Route). At ground level, the northern elevation is a largely inactive frontage punctuated by servicing entrances. The dominance of roads makes it difficult for pedestrians to make direct east-west connections.

3.77 As a result of this large building footprint and inward looking shopping mall at Westfield, there are limited points of connection from White City East to the Town Centre. Development of the Westfield extension must include ways to address this deficiency, by introducing new passages through the existing development that can provide a connection south from the town centre. This creates a transition from the built up town centre uses, to a more localised shopping centre typology as one moves further north through White City Green towards more mixed use and residential areas.

3.78 Figure 3.21 shows a platform or deck over the existing road network to the north of Westfield which elevates the main pedestrian access to the same level that exists within the shopping centre, as well as the existing link over the West Cross Route into RBKC. This deck provides a development platform for new offices, homes and shops to the north of the existing Westfield and provide for areas of open space. Any decked solution must manage the level changes to integrate any development at deck level with the rest of the OA by adhering to the principles of inclusive design.

3.79 The existing linkage which runs along the West Cross Route adjacent to the existing Westfield development should be improved to encourage pedestrian and cyclist connections with the town centre and how it can connect with the new extension.

### **Hammersmith and City Line viaduct arches**

3.80 The railway viaduct arches in the Green will need to be opened up to provide for multiple north-south openings between the two sections of open space.

3.81 Buildings should be set back from the viaduct and White City Green to respect the important contribution the viaduct makes to the townscape of the White City Green.

3.82 The general scale of development should reflect the building heights set out in Figure 3.57; a taller building close to the West Cross Route, on the axis with the existing East Tower of BBC TV Centre would improve orientation and highlight the crossing point into RBKC.

### **DIMCO building**

3.83 Development of this site should provide high quality public realm and an improved setting for the Grade II listed DIMCO building. The indicative masterplan assumes the retention of the bus stand and bus station but the pedestrian experience and opportunities to appreciate the building could be enhanced through landscaping and public realm design in consultation with TfL Buses and TfL Asset Management.

3.84 The relocation of the bus stand located in the DIMCO building and the adjacent bus station could be explored but only if they could be accommodated on a site south of the H&C line viaduct and with the agreement of TfL Asset Management.





Figure 3.20: Illustration of public realm and shops within the approved Westfield extension

(Source: Westfield)

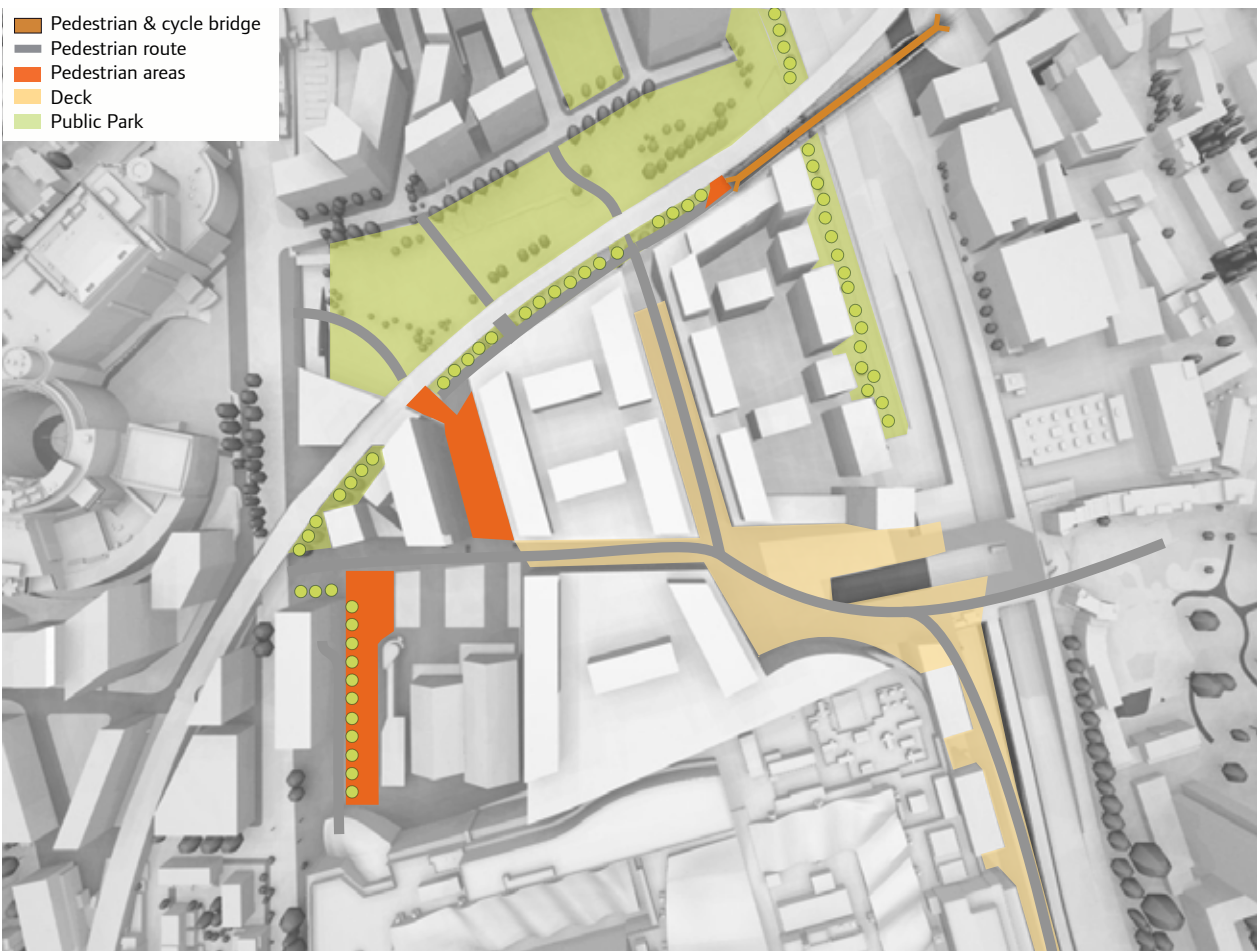


Figure 3.21: Westfield High Street: Indicative masterplan

(Source 3D model:Z Mapping)

### North-South connections under the A40/ Westway

3.85 The Westway changes from an at-grade road to become elevated at the north eastern corner of the OA. The A40 slopes up to a point that it is high enough to provide parking and storage areas for logistics companies underneath the elevated road infrastructure. Much better use of these spaces in the OA will ensure scarce land resources are used to their optimum potential and help improve north-south links between uses such as Wormwood Scrubs.

3.86 Given the provision of social, leisure and community facilities such as schools, Hammersmith Hospital and Wormwood Scrubs to the north of the OA and the need to give access to these from the existing and proposed communities to the south, improved connections along the length of the A40 are a key element of this framework and urban design strategy.

3.87 The underside of the Westway will be primarily used to deliver a major north-south route for vehicles, pedestrians and cyclists (see mark 3 on Figure 3.22). The remaining space that is not used for the main route could be landscaped and managed in a way that provides leisure opportunities, community use or possibly commercial use. Precedents along the Westway of well-maintained, overlooked and attractive recreational spaces could be emulated here to complement new development on sites north and south.

3.88 The entrance to an east-west pedestrian subway (see figure 3.22-Point 3) should connect to the new north-south routes under the Westway to ensure that people coming from the south of the OA can easily find and make the connection to the east, and vice versa. These two connections must work together to improve overall accessibility in the OA.

### West of Wood Lane

3.89 To the west of Wood Lane, there is an existing tunnel that provides an east-west connection along the A40. The access route to the tunnel along the southern edge of the A40 is poorly lit and suffers from a lack of visibility through the tunnel. Any development under the Westway in this location should seek to improve the sense of safety, security, overlooking and quality of the environment along this route. (see figure 3.22 Point 1).

3.90 At Bloemfontein Road, the surface crossing leads to a poor quality footbridge over the Central Line to Du Cane Road. This footbridge should be improved to facilitate a safe, attractive route from Bloemfontein Road to Hammersmith Hospital, the Scrubs and Linford Christie Stadium.

3.91 Development should enhance overall site legibility, delivering strong sight-lines to help orient pedestrians, by providing separate blocks with open streets and passageways that will include views north to south along new roads and cycle/ pedestrian connections from the Imperial College development, south towards the White City Green, through viaduct arches and through the Westfield extension site.



Figure 3.22: Westway / A40: Key north-south connections

(Source 3D model:Z Mapping)



- Pedestrian & cycle tunnel
- Strategic pedestrian link
- Potential for pedestrian areas
- Strategic green link



Figure 3.23 Indicative masterplan: under the Westway / A40



Figure 3.24: Playspace and horse riding already under the Westway roundabout in RBKC



**East-West connections**

3.92 Connections that will run over or under the West Cross Route and West London Line are essential to link communities from the east in RBKC with the White City development area and transport connections, and also provide vital pedestrian and cycle linkages from this area to access areas towards central London. Improved links from White City east to White City west are also required to link the residential estates to the new development.

3.93 A redeveloped BBC TV Centre and the development of the White City Green could improve the experience for pedestrians along Wood Lane by removing the existing impermeable gated frontage to the BBC TV Centre and could encourage further linkages through the site towards Hammersmith Park.

3.94 Solutions for providing improved connections over the Central Line cutting are of upmost importance for the success of the new development in White City east. New and wider bridges to the north and south of White City east

will be required in order to be able to access and service the amount of development required in the area.

**Pedestrian Bridge to the east**

3.95 The existing crossing over the West Cross Route was recently built as part of the Westfield centre development, which connects the Edward Woods Estate with the north-east corner of Westfield. It lands on the eastern side of Ariel Way where roads dominate and therefore does not provide a useful pedestrian link other than to those who are able to walk along the west cross route, towards the town centre.

3.96 An elevated pedestrian footbridge over the West London Line and the West Cross Route could be provided immediately to the south of the Hammersmith and Fulham viaduct. It would land in the part of the Green which would provide a direct pedestrian and cycling route into RBKC from the open space. The possible eastern landing point would be to the north of 'Notting Dale' development in the OA, see mark 2 on Figure 3.35, 3.27 and 3.29.

← New crossings over and under the West London Line

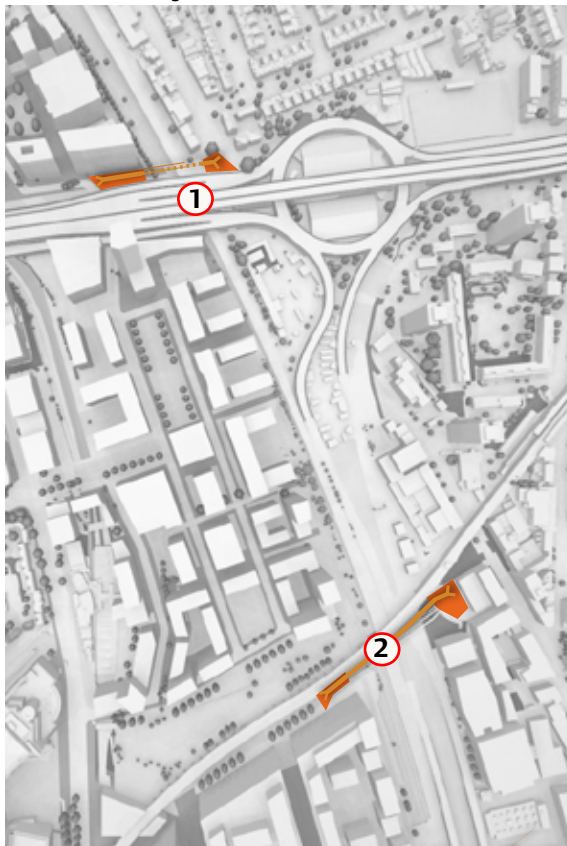


Figure 3.25: West Cross Route and West London Line: key connections (Source 3D model:Z Mapping)

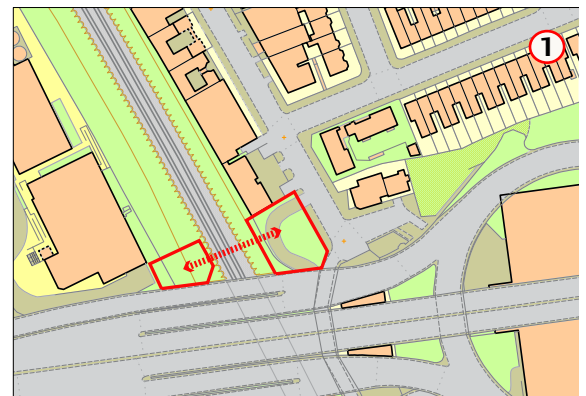


Figure 3.26: Landing site for Northern crossing

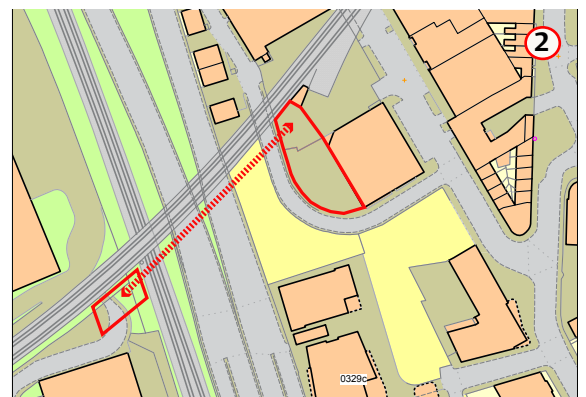


Figure 3.27: Landing site for Southern crossing

3.97 RBKC also has a long-term strategy for the Latimer area that places importance on introducing connections to White City. It has undertaken feasibility studies for achieving better east-west connections and has identified this bridge as one of two preferred options which should be delivered as part of development in the OA.

3.98 The design of any bridge crossing should be simple, elegant and striking in appearance, with careful attention given to its landing on the eastern side and how it connects with key north-south connections through the viaduct archways.

### Pedestrian and Cycling Underpass- Imperial West to the Westway Sports Centre

3.99 The Westway Development Trust has developed a cycle and pedestrian link along the section of the Westway in RBKC which terminates at the boundary with LBHF. Both RBKC and the Westway Trust have aspirations to extend the connection westwards.

3.100 A shallow underpass to the north of the A40 would provide a route for pedestrians and cyclists beneath the existing West London Railway

line, linking the Imperial College London site with RBKC near the Westway Sports Centre, see mark 1 on Figure 3.25, 3.26 and 3.28.

3.101 The Imperial College London development should integrate into their design an entrance for the underpass, one which provides a gentle gradient into the underpass to ensure visibility to ensure safety and security, along with CCTV and lighting where necessary.

3.102 Development should enhance site legibility, delivering strong sight-lines to help orientate pedestrians. Figure 3.21 shows a layout for the Westfield extension that will enhance the visual link from the current crossing point which runs from Hunt Close to Ariel Way over the West Cross Route, across the site towards the east tower at the BBC TV Centre. The site layout should ensure there is a wide, unobstructed passage between buildings at this location.

3.103 Views should run east-west along the Hammersmith and City line viaduct from the West Cross Route toward the BBC TV Centre as discussed in the open space section.



Figure 3.28: Northern crossing (1): Shallow pedestrian underpass

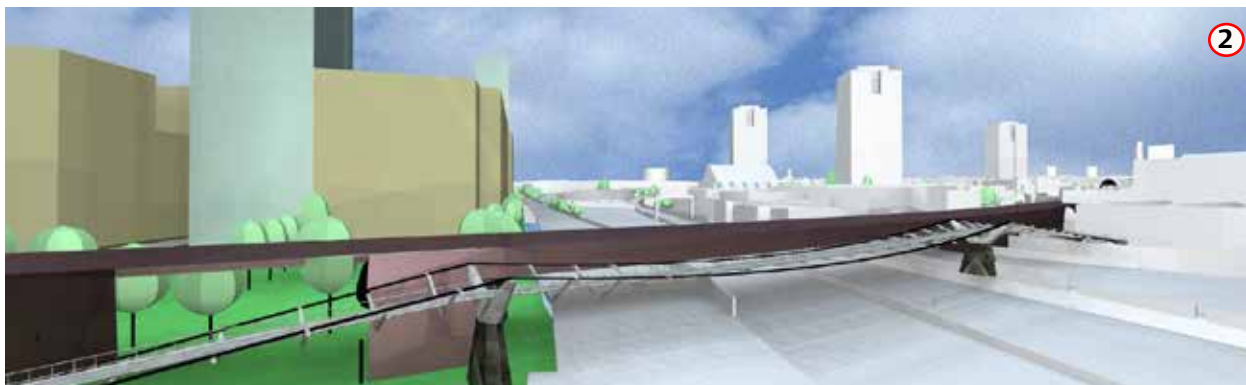


Figure 3.29: Southern crossing (2): impression of pedestrian and cycle link

(Source 3D model: Z Mapping)

## East-West connections across the Central Line

3.104 The Central Line cutting, as shown in Figures 3.30 - 3.33, restricts access from Wood Lane to the part of White City East between the A40 and the Hammersmith and City Line Viaduct to two narrow bridges. The transport chapter identifies the need to improve bridge access to provide the necessary access and circulation into this area. This could involve straightening, widening and provision of generous sized pedestrian routes over the cutting. Any bridge works or new bridges would have to be delivered with the least possible disruption to railway services. Precedents for a similar approach can be found at Bishop's Place over the Network Rail cutting into Liverpool Street (Bishopsgate, LB Hackney).

## Southern bridges- Former Marks and Spencer site

3.105 The existing road bridge to the former Marks and Spencer site at the south is narrow and provides limited scope for further pedestrian and vehicular access, while the walls along the pavement limit visual links. A new wider, lightweight bridge structure over the Central Line cutting would improve the visual and physical links from Wood Lane and the TV Centre forecourt, see Figure 3.32 and mark 3 on Figure 3.33.

3.106 A new additional bridge over the cutting to the south of the existing road bridge should also be considered as it would provide a direct connection to the forecourt of the BBC TV Centre. It should be treated as an extension of White City Green and will provide important public realm and physical and visual links from within the Green to Wood Lane and the BBC TV Centre. Given operational requirements of the Central Line, it may be impractical to fully cover the cutting as opposed to bridging over parts of it. The suggested bridges are envisioned as wide, light-weight structures for pedestrian and amenity use. The delivery of this link will need to be provided and considered in light of future development proposals for this site, see Figure 3.32 and mark 3 on Figure 3.33.

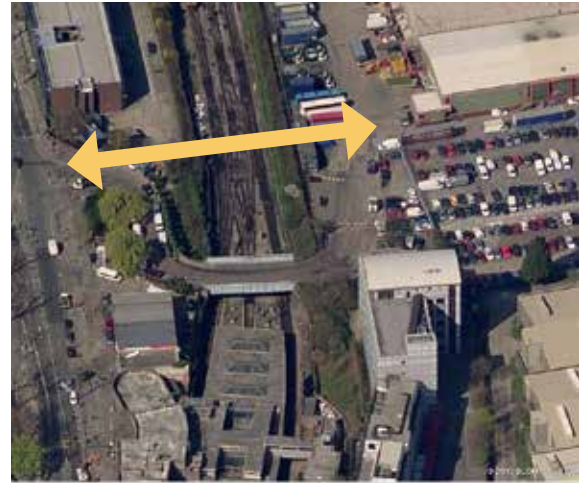


Figure 3.30: Crossing 1 direct link to White City East from South Africa Road



Figure 3.31: Crossing 2 direct link to east side White City station



Figure 3.32: Crossing 3 direct link between White City green and BBC TV centre and Wood Lane station



- Pedestrian & cycle bridge
- Vehicular bridge
- Strategic pedestrian link
- Route through Tube station

- ① Northern bridge - Depot Road
- ② White City Station: Ticket hall entrance
- ③ Southern bridge - Marks and Spencer site



Figure 3.33: Former Marks & Spencer Site / St James Central Line cutting: Key connections

(Source 3D model: Z Mapping)

### Northern Bridge- Depot Road

3.107 At the junction of South Africa Road and Wood Lane is an existing access road bridge, along Depot Road. This access road does not provide a direct visual link over the Central Line cutting into White City east as it bends to the right after the crossing with Wood Lane.

3.108 Figure 3.33 shows a new bridge that extends straight across the cutting after crossing the junction with Wood Lane to provide a strong visual and physical connection from South Africa Road into White City east and provide further vehicular and pedestrian capacity. The masterplan shows a landscaped area over a lightweight structure, which could join the new bridge up with the existing to provide a wide opening towards White City East. See mark 1 in Figure 3.33

### White City Station- Ticket Hall Entrance

3.109 A new eastern ticket hall for the White City LUL station could provide an additional connection to Wood Lane over the Central Line Cutting. Whilst this is not an open and public route at this point in time, it could provide direct access into the tube station if development of the Centre House site was to be delivered.

3.110 To gain access to the station platforms and to cross the railway, the existing walkway would need to be re-built or reinforced to be appropriate for public use. See mark 2 in Figure 3.33.

### Wood Lane Station Entrances

3.111 The introduction of improved public realm and open space to the east and south of Wood Lane Station as part of ‘White City Green’ creates an opportunity to improve access from the station to White City Green.

3.112 The development of the Green should consider how it could help deliver a southern entrance to the station and enhance access into the northern entrance directly from the Green. High quality public realm around these new entrances will be an essential ingredient to any improvement works.



Figure 3.34: Potential provision for an additional entrance at Wood Lane Station Source: TFL



Figure 3.35: Potential provision for an additional entrance at Wood Lane Station Source: TFL

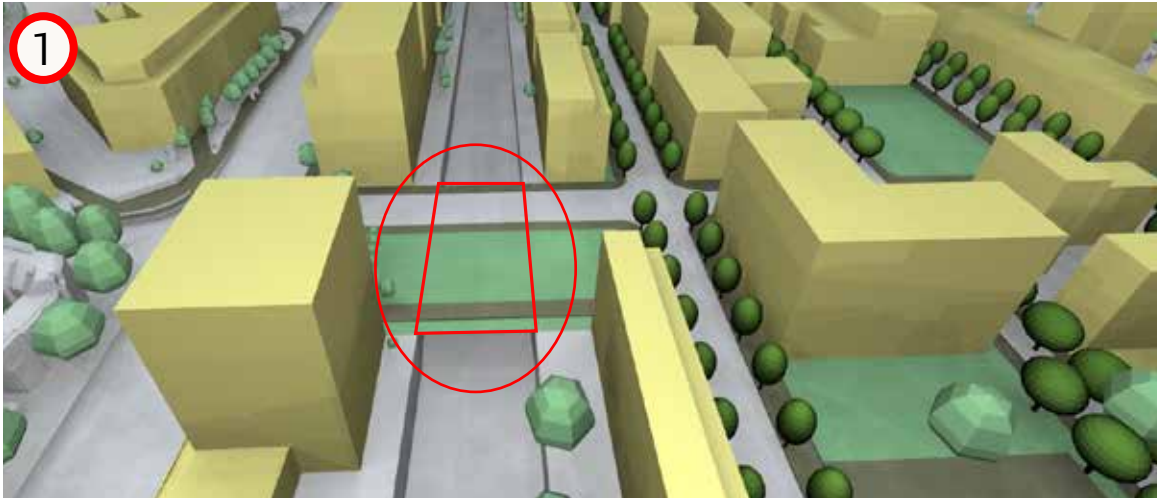


Figure 3.36: Wider bridge over the Central Line cutting: South Africa Road to White City East (Source 3D model:Z Mapping)

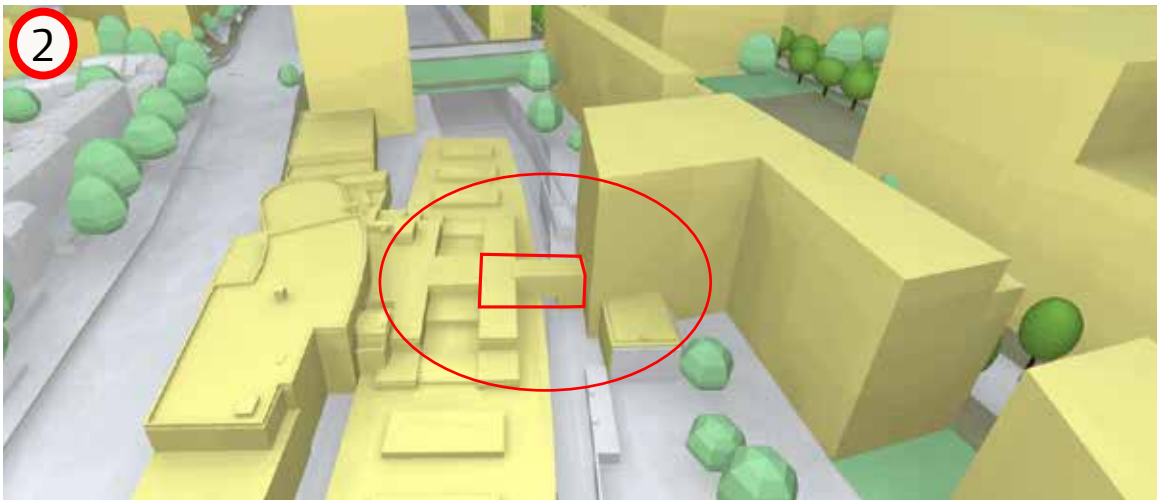


Figure 3.37: Eastern ticket hall and pedestrian walkway at White City LUL station (Source 3D model:Z Mapping)

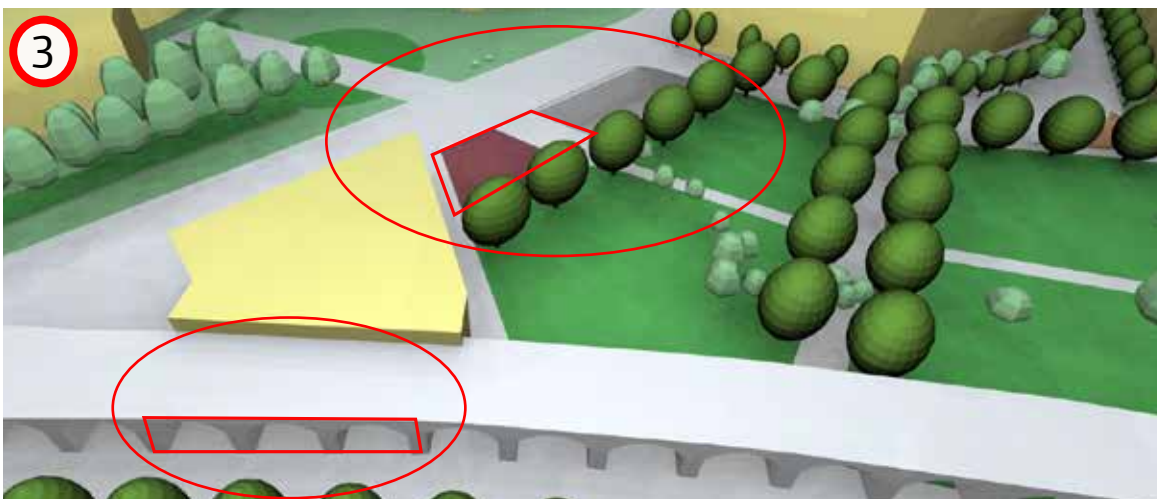


Figure 3.38: Lightweight bridge north of Wood Lane LUL station and new southern entrance to Wood Lane LUL station (Source 3D model:Z Mapping)



### East-West linkages through the BBC TV site

3.113 The priorities for the BBC TV site include:

- Opening up the forecourt of the building to create a welcoming public space that serves as an extension of the White City Green;
- Creating a pedestrian route with active frontages around the perimeter of the studio ring into Hammersmith Park, to reflect the unique geometry of the site;
- Introducing public routes through the building to Hammersmith Park without damaging historic fabric and plan form of the listed building; and
- Providing two new routes through the viaduct arches to improve connections to Hammersmith Park and provide the opportunity for the north-

south link along the Hammersmith and City Line viaduct to Shepherds Bush Market.

### Pedestrian route from BBC TV Centre to Shepherds Bush Market

3.114 Two new routes through the viaduct arches should be introduced to improve connections to the BBC TV Centre site from Wood Lane and White City Green. The opening of these arches could present the opportunity to link with a pedestrian and cycle route alongside the Hammersmith and City Line viaduct from Shepherds Bush Market London Underground Station towards the BBC TV Centre site. This route could provide the opportunity to open further arches along the viaduct for offices and active use where it is not seen to negatively impact on amenity of nearby residents.



Figure 3.39: BBC TV Centre:



Figure 3.40: BBC TV Centre, Studio 1 and main entrance



Figure 3.41: BBC TV Centre, Inner courtyard

- Pedestrian areas
- Public Park
- Opening up BBC TV Centre
- Existing mature trees
- Pedestrian & cycle bridge
- Strategic pedestrian link
- Pedestrian route
- Route through BBC TV Centre

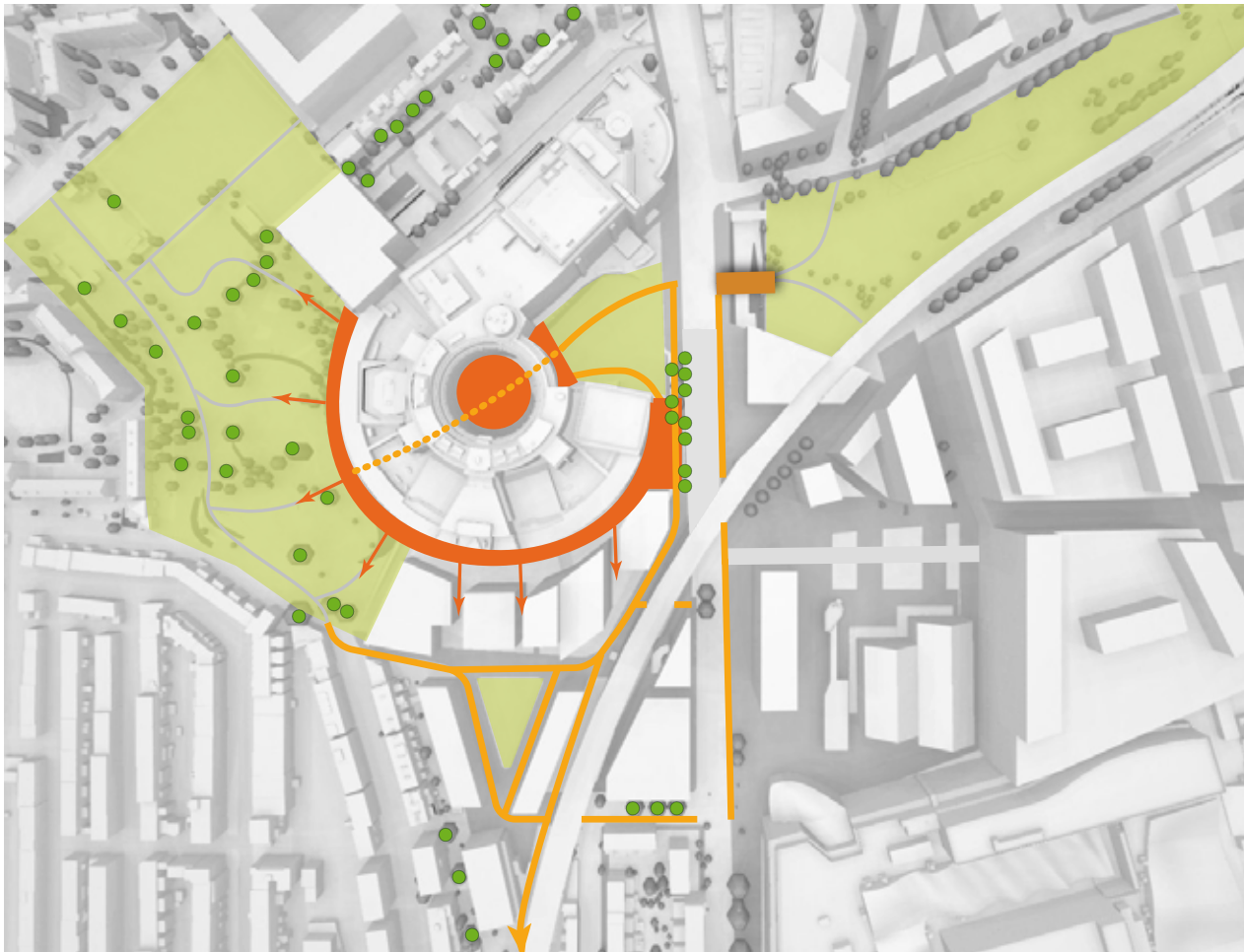


Figure 3.42: BBC TV Centre, Indicative masterplan

(Source 3D model:Z Mapping)



Figure 3.43: Future BBC TV Centre development

(Source: BBC)



## East-West linkages in White City West

### South Africa Road

3.115 Any future development of the BBC Media Village site and the TA Centre should ensure permeable sites to allow pedestrians to connect easily with the wider area and create a transition from the residential areas of the estates to the commercial development along Wood Lane. Development of these sites should be accompanied by a unified public realm with a consistent approach to pavements, tree planting and street furniture. The existing area of open space and its group of mature trees to the north of the Wood Lane estate along South Africa Road could provide the focus for the public realm strategy.

### Commonwealth Avenue

3.116 Minor alterations to the servicing arrangements of the Canberra School would enable Commonwealth Avenue to achieve a pedestrian and cycle connection eastwards to Dorando Close, giving estate residents more direct access to the resources, transport connections, and amenities in the east of the OA.



Figure 3.44: Wood Lane



Figure 3.45: South Africa Road



Figure 3.46: Commonwealth Avenue



Figure 3.47: Dorando Close



- Strategic pedestrian link
- ▬ Improved existing roads
- ▭ Pedestrian areas
- Strategic green link

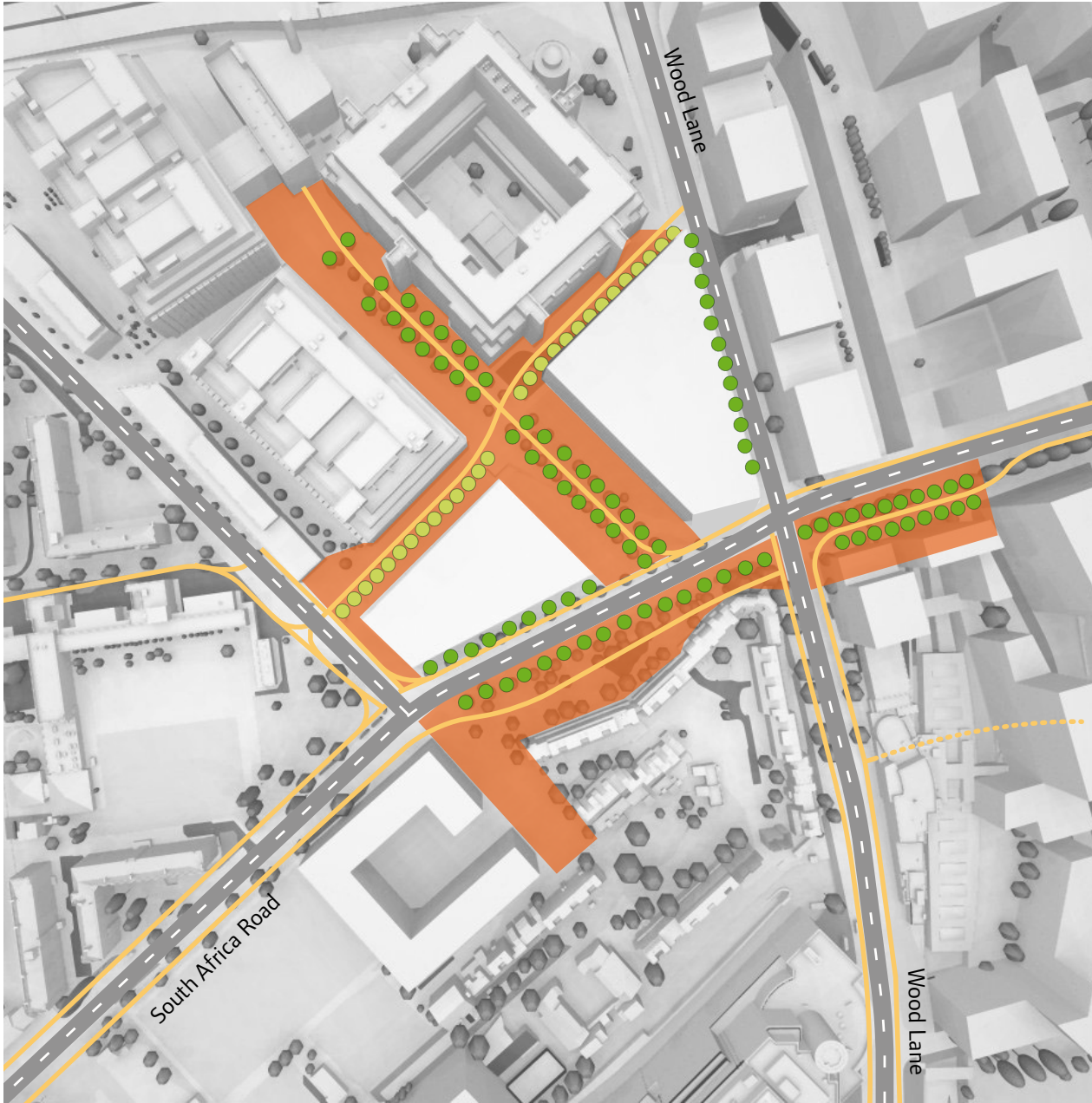


Figure 3.48: Indicative Masterplan: Improved gateway to the White City Estate

(Source 3D model: Z Mapping)

### 3: Quality urban design that responds to context

#### Streets and Buildings that create a sense of place

White City East will be expected to deliver flexible, mixed use neighbourhoods to accommodate high quality housing, community facilities, local shops and employment space.

The majority of residential development should be in the form of modern mansion blocks (normally between 6-10 storeys) with shared amenity space at the centre of the block along with private amenity space on balconies and roof terraces.

Commercial buildings should be located close to transport connections and should be provided in mixed developments with active uses at ground floor, and high-quality buildings that provide a layout that is flexible for a variety of commercial and related uses.

New retail development should be provided in an open environment at ground floor level on streets.

Developments should provide a legible environment that relates to, and connects with, the setting and context of the surrounding urban grain and character.

#### Creating Great Neighbourhoods

3.117 White City East should feature good quality residential developments with a mix of housing types for people on all incomes. This principal is about creating human scale, sustainable residential areas where a wide range of people will want and be able to live and take pride in the area. It requires consideration of a range of factors, including the mix of housing types and sizes, and building heights. This is fundamentally about what makes a place work as a living environment, such as the relationship between dwellings, streets, open spaces, local facilities and public transport, and ensuring that people feel safe and are safe in the area.

3.118 All new housing areas must be designed to provide safe, well connected, inclusive, permeable and liveable neighbourhoods capable of accommodating a range of households and assimilating different tenures, with access to supporting facilities and adequate public and private open space.

3.119 The design of affordable housing should be tenure blind in terms of the external appearance of the buildings and amenity. Buildings that include affordable housing should be integrated in the overall residential scheme. The London Plan (para 3.76), the Housing SPG (para 4.4.34) and the LBHF Core Strategy requires affordable housing and market housing to be integrated in any development and to have the same external appearance.

3.120 The majority of new housing should be provided in mid-rise, modern mansion blocks or stacked maisonettes reminiscent of terraced housing. There may be the opportunity for new housing in the limited number of tall buildings which are identified in the next section. There is scope for relatively high density (700-900 HRH) housing but densities in individual schemes will be assessed having regard to the London Plan, the LBHF Core Strategy (H3) and the LBHF Development Management Local Plan (DMLP) housing and design policies and standards.

3.121 Mansion blocks should have frequent shared entrance cores, or in the case of maisonettes, their own front doors. Developments will be expected to incorporate shared amenity space, along with private amenity space on balconies and roof terraces.

3.122 Homes should open onto tree-lined streets with on-street parking and generous pavements. In some cases, local shops and community facilities at ground floor level will provide active frontages and safer street environments.

#### *Retail, Commercial and large spaces*

3.123 Commercial office buildings could be of a similar form to the Monsoon Accessorize headquarters, being medium-rise buildings with a

striking design and flexible floorspaces that allow for a range of commercial tenants.

3.124 Commercial office buildings could also be delivered in mixed-use buildings with active uses at ground floor and a mix of non-residential community uses throughout. New commercial buildings for creative, media and technology should be located near public transport and closer to Wood Lane.

3.125 Town Centre uses will be extended north of the existing Westfield with major leisure, residential and retail in an active environment with a series of retail uses at ground level on streets with offices and residential above. New development should avoid the monolithic approach of the existing Westfield Mall and instead deliver variation in scale, grain and built form to make a successful transition from the shopping mall typology to a high street typology and encourage a suitable mix of commercial and residential uses. This will require a finer grain of development requiring separate blocks, open public streets and passageways without canopies or bridges above and generous open spaces.

3.126 The BBC TV Centre could be refurbished for new leisure, commercial, academic or other institutional uses.

3.127 The indicative masterplan is intended to provide a reasonably flexible framework within which a variety of uses could be located. The design and location of large buildings will need to be undertaken with care to respect the urban grain.



Figure 3.50: Artist impression of residential use on the Westfield site



Figure 3.51: Artist impression of Imperial College student accommodation  
(Source: AukettFitzroyRobinson)



Figure 3.52: Artist impression of Imperial College site from Westway



Figure 3.49: Artist impression of retail in the Westfield site  
Source: Westfield



Figure 3.53: Commercial blocks / Monsoon Accessorize headquarters  
Source: RB K&C



### **Improving the setting of Listed Buildings**

The departure of the BBC from the Grade II listed Television Centre creates opportunities to open up the large, inward looking site, improve the public realm surrounding the site and provide new high quality buildings that will enhance the setting and views towards the BBC TV Centre.

Development of the Westfield Extension should look to improve the setting of the Grade II Listed DIMCO building and provide high quality public realm around its base and improved views towards the building.

3.128 The central ring building and Studio 1 of the BBC with its iconic wall to Wood Lane are of special architectural and historic interest at a national level; and parts of the drama block and older ring of studios are of interest at a local level. The elements of special architectural and historic interest should be retained and any proposals for re-use should improve their setting and provide opportunities for the public to appreciate them through the introduction of new uses compatible with the character of the building.

3.129 Subject to satisfactory justification being provided, a refurbishment and redevelopment scheme involving removal of the ancillary buildings which are not of special architectural or historic interest could help make better use of the site, improve the access to the site and improve the setting of the buildings of highest significance. Any proposals for new development should be part of a wider masterplan for the whole TV Centre site, which takes into consideration the setting of the most significant elements of the building and ensures they are incorporated appropriately.

3.130 There may be an opportunity to redevelop some of the ancillary buildings to the main structure which are not of special interest. These include the majority of the drama block, the yard used for satellite dishes, the east tower, the multi-storey car park, the restaurant block and the 1990s addition to the TV Centre on Wood Lane.

3.131 Development on the service yard to the south of the round building must be sensitive to the scale and privacy of the adjoining terraces and should be of modest scale and in keeping with terraced housing to the south.

3.132 Development on the site of the drama block should be of a scale that mediates between the terraced housing to the south and the TV Centre building. This building should include an opening to allow an access route into Hammersmith Park.

3.133 The existing east-tower has a poor presence at ground level and provides little contribution to the local townscape; its demolition would improve the setting of the listed building. Its replacement with a building of a similar scale with an improved design, location and orientation could make a positive contribution to the legibility of the public realm, as set out in the next section. New development must have an active, well considered presence at ground level to Wood Lane and should incorporate an improved public realm with connections to the wider site, as discussed in 'Wood Lane, North South connections'.

3.134 The restaurant block provides another opportunity to introduce a new building with an active frontage to Hammersmith Park. The site relates primarily to the park and low-rise character of the Wood Lane estate. Development should therefore be sensitive to this context and its impact on the park and should maintain a domestic scale.

3.135 There may also be scope to improve the 1990s extension to the TV Centre to provide a more active frontage to Wood Lane at ground floor level. New buildings and extensions should not compete with the elements of TV Centre that have special significance but should enhance the setting.

3.136 The multi-storey car park makes a negative contribution onto Wood Lane. Redevelopment of this site should introduce a building with active frontages on Wood Lane, and mediate between the scale of residential streets to the south and west and the large, institutional building of TV Centre.

3.137 The BBC TV Centre could be refurbished to include a mix of new leisure, commercial, academic or other institutional uses along with some residential space.

### DIMCO Building

3.138 New development should provide a high quality public realm and setting around the Grade II Listed DIMCO building.



Figure 3.54: BBC TV centre

Source: GLA



Figure 3.55: Restored DIMCO building

Source: GLA

### Building heights in the opportunity area

**The majority of new buildings should be medium-rise of 6-10 storeys with some lower-rise 3-6 storey terraces, particularly in areas close to existing neighbourhoods.**

**Some buildings of 11-15 storeys may be appropriate along the A3320 and around Westfield's new shopping street. The existing 15-storey tower at the BBC TV Centre could be replaced with a better-designed tower that subject to detailed design considerations, could be taller than the existing one.**

**16-20 storey buildings may be appropriate at a point of townscape significance such as the north-east corner of White City Green.**

**Slender towers of approximately 21-30 storeys (up to 100 metres) could be appropriate along the Westway.**

**The acceptability of particular proposals for tall buildings will be considered in detail at planning application stage in accordance with the development plan and having regard to the urban design objectives of the OAPF.**

3.139 The LBHF Core Strategy policy for WCOA states that 'The council will expect most new development to be low to medium rise, however a limited number of tall buildings of exceptionally good design may be acceptable, in particular, close to the A40 and A3220 and in any other areas identified in the White City OA planning framework tall buildings strategy.' Policy BE1 also says that tall buildings may be appropriate 'in masterplanning which is consistent with the SPD'.

3.140 Tall buildings are generally defined in the London Plan as 'those that are substantially taller than their surroundings, cause a significant change to the skyline or are larger than the threshold sizes set for the referral of planning applications to the Mayor' (the threshold for referral is 30 metres). The LBHF Core Strategy glossary defines tall buildings as 'those that are substantially taller than their

neighbours and/or which significantly change the skyline.'

3.141 The OAPF gives guidance on building height and the possible general locations for tall buildings. The purpose of the indicative masterplan is to illustrate how that guidance could be applied but not definitively propose or prescribe the height of buildings in particular locations. The masterplan shows approximate locations where tall buildings may be acceptable subject to a full appraisal at the time when a planning application is made, particularly with regard to precise location, height, design and impact.

### General Guidance

3.142 Well-designed tall buildings can make positive contributions to townscape and can play a valuable role in place shaping. They can provide variety and interest, articulate a point of significance for the wider area, such as deliberately framed views and vistas, highlighting regeneration areas and help with wayfinding through identifying landmarks.

3.143 The approach to building height is derived from and complements the public realm and open space objectives, analysis of the built and heritage context and the desktop views assessment using a 3D model. The preferred height and scale of development within the OA varies depending on the immediate context and new development must ensure a variety of scale, massing and architecture is delivered across the OA. All development must relate appropriately to neighbouring buildings, public open space and vehicular, pedestrian and cycling routes.

3.144 The indicative masterplan identifies the limited locations where taller buildings would be suitable and could contribute to the legibility of the wider area without unreasonable overshadowing of strategic open spaces or nearby residential areas. An analysis of local and wider views, including views from within conservation areas within LBHF and RBKC has also informed this approach and requires that the introduction of tall buildings in preferred locations should have little detrimental impact on views. A detailed views analysis which considers the cumulative impact of building height in the area will be required to be submitted with each planning application which comes forward.



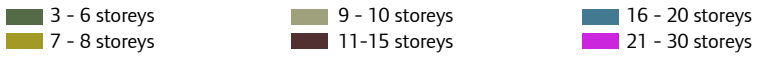


Figure 3.56: Building heights in the indicative masterplan

(Source 3D model: Z Mapping)

### Preferred Locations for tall buildings

#### Along the A40/ Westway: Gateway to London

3.145 The OA acts as a transition zone between western and central, inner and outer London. Tall buildings near the Westway and northern section of the West Cross Route will provide a strong identity for the OA and provide beacons for regeneration. They will identify and landmark White City as the 'gateway' into central London, echoing similar clusters along the rest of the route. Taller buildings will provide a buffer to the flyover for development within the OA, and the scale would balance and respond to the existing height of the elevated road infrastructure.

3.146 The indicative masterplan indicates scope for up to two towers (approximately 30 storeys or 100 metres) in the general area around the Westway: one to the north and one to the south of the Westway. Tall buildings in these locations will provide points of visual emphasis on the north-south roads through the site and will be landmarks in views northwards from White City Green and Westfield.

3.147 Any tall buildings must be located sensitively to limit the impact of overshadowing on existing and future communities or public open space, to avoid the canyon effect and take into consideration any impact on views of the nearby conservation areas.



Figure 3.57 Aerial view of the Westway - existing

(Source: Westfield)

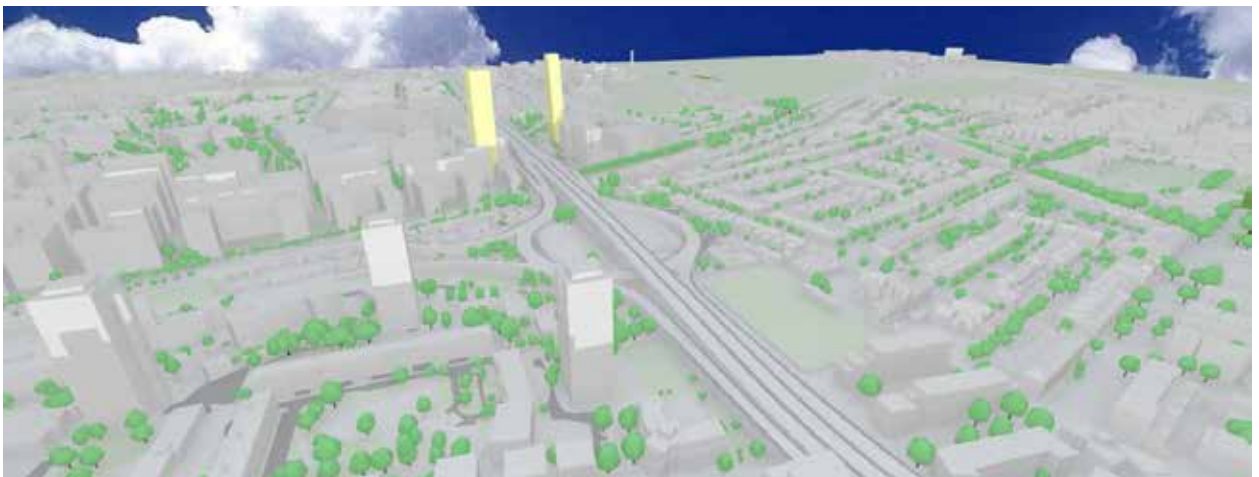


Figure 3.58 Tall buildings along the Westway - proposed

(Source 3D model:Z Mapping)





Figure 3.59 Key plan: Along the A40 / Westway

(Source 3D model:Z Mapping)

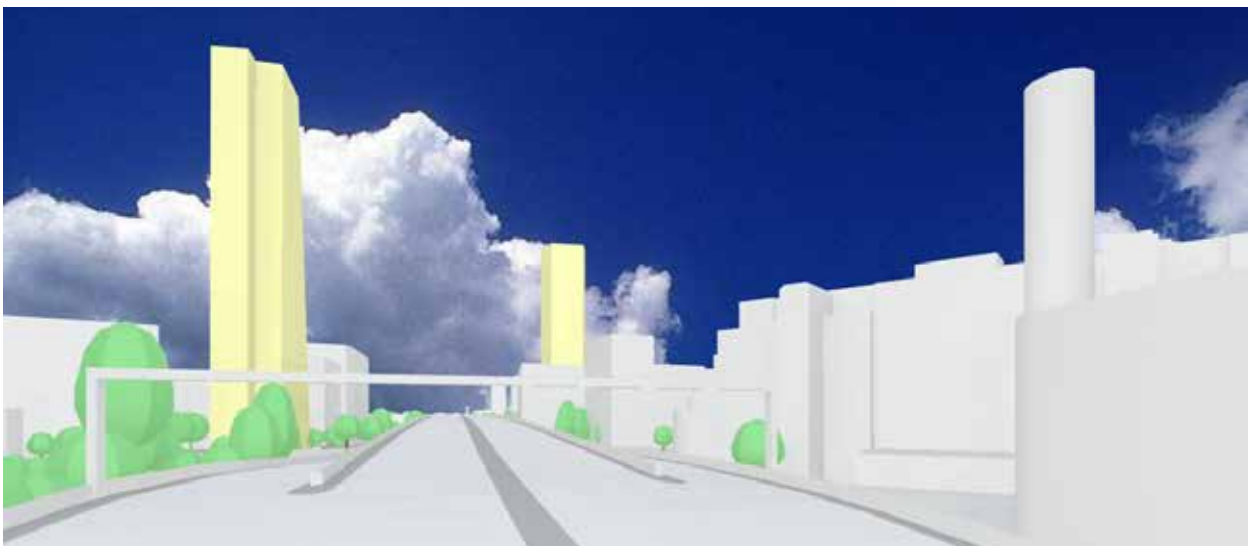


Figure 3.60: View 1, Looking east along the A40 / Westway

(Source 3D model:Z Mapping)

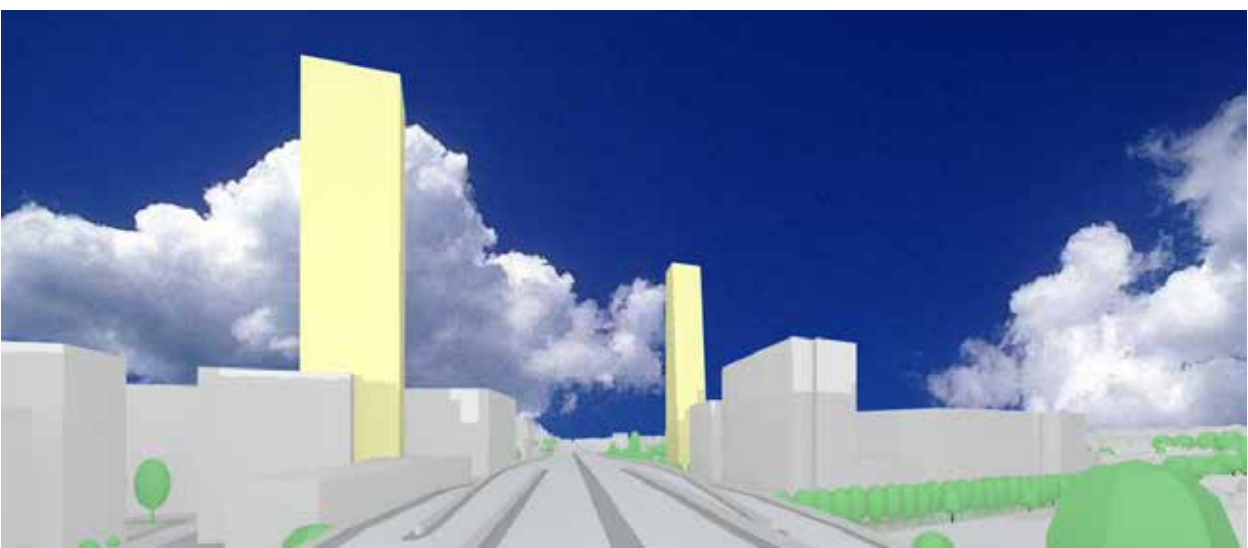


Figure 3.61: View 2, Looking west along the A40 / Westway

(Source 3D model:Z Mapping)



### At White City Green

3.148 Two taller buildings of 11-20 storeys may be justified as part of an integrated design approach to highlight the area as a centre of activity. The taller buildings around the Green could provide a recognisable and identifiable address for new commercial and residential developments, frame views to the BBC from the east, complement the delivery of White City Green and nearby community and leisure facilities; and capitalise on the prime location fronting open space. When viewed from the Westway and the long cityscape views, the buildings would be read as part of the cluster of tall buildings (21-24 storeys) to the east of the West Cross Route.

3.149 The indicative masterplan illustrates one 11-15 storey building adjacent to the north-west



Figure 3.62 Taller building on the Westfield site

corner of White City Green to signal the location of the commercial hub and White City Station.

### North of Westfield

3.150 There may be scope for a taller building (up to 20 storeys) to the north of the existing Westfield Centre at the existing crossing over the West Cross Route. This would place the building on an axis with the east tower of the BBC Television Centre to assist with orientation, highlighting the crossing point into RBKC.

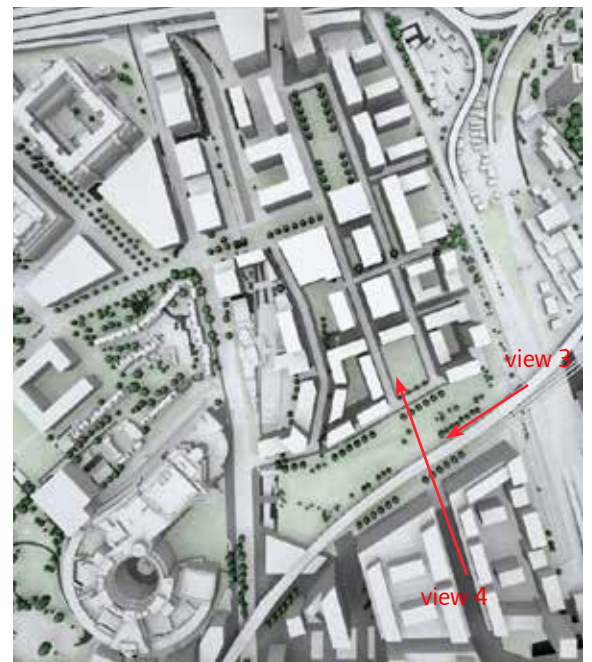


Figure 3.63: Key plan, White City East

(Source 3D model: Z Mapping)

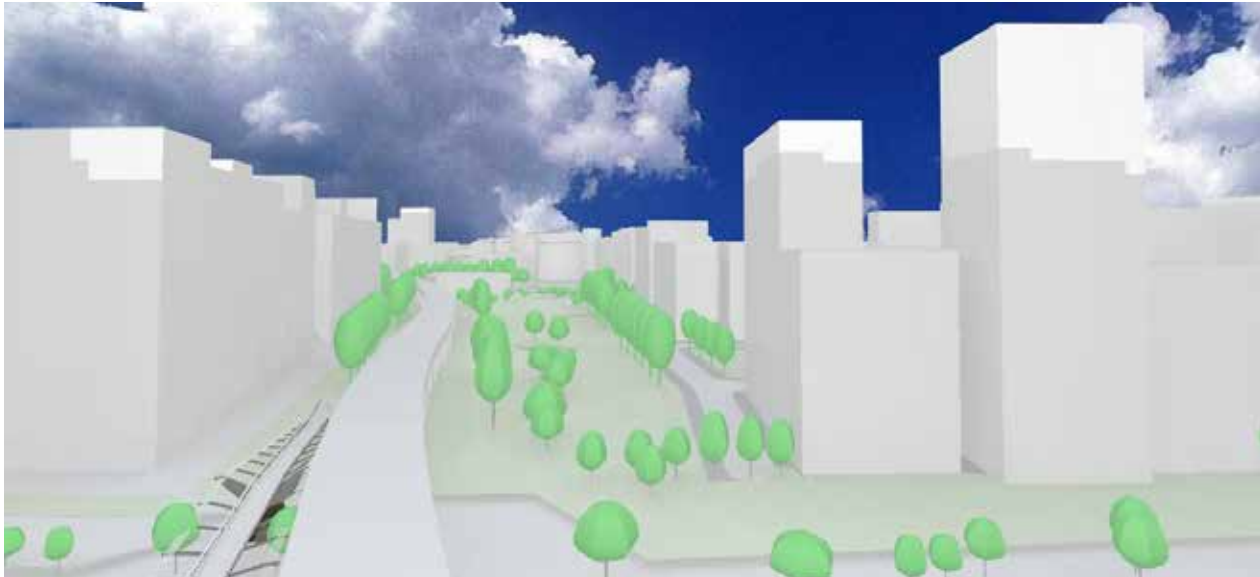


Figure 3.64: View 3, Looking west from the Hammersmith & City Line Viaduct

(Source 3D model:Z Mapping)



Figure 3.65: View 4, Looking north from White City green, towards the Westway

(Source 3D model:Z Mapping)

### **BBC TV Centre**

3.151 The setting of the listed BBC Television Centre would be enhanced, particularly in views from the east, by the demolition of the existing east tower. A new building that could be taller than the existing building, but crucially of a much higher quality and with a better relationship to Wood Lane, and the Westfield development would sit on the axis of views from the West Cross Route, providing an east-west visual connection across the entire site.



Figure 3.66: Aerial view of BBC TV Centre and the existing tower

(Source: Westfield)



Figure 3.67: Indicative masterplan - aerial view of BBC TV Centre

(Source 3D model: Z Mapping)



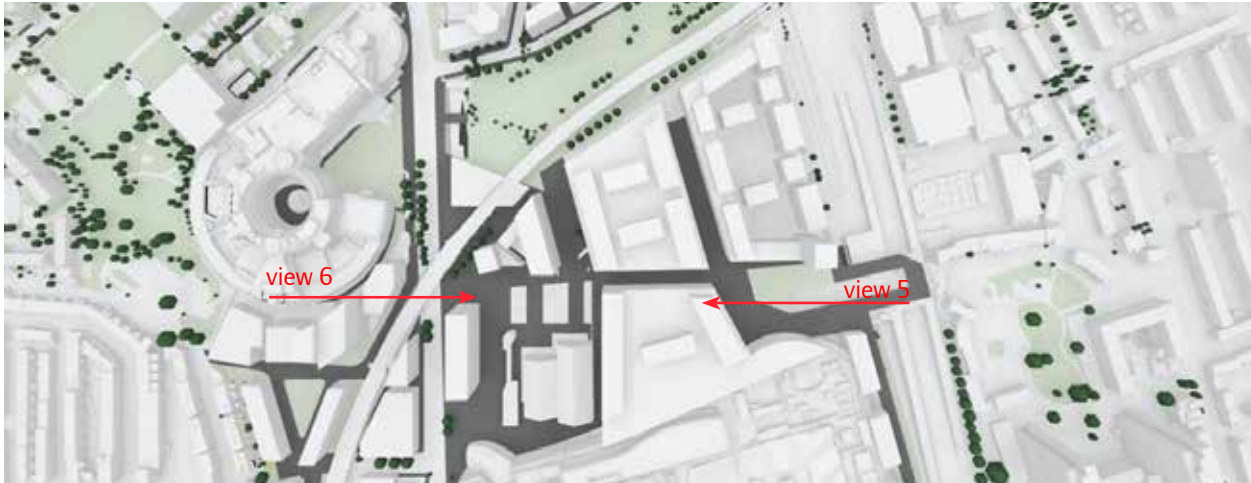


Figure 3.68: Key plan: Westfield High Street

(Source 3D model:Z Mapping)

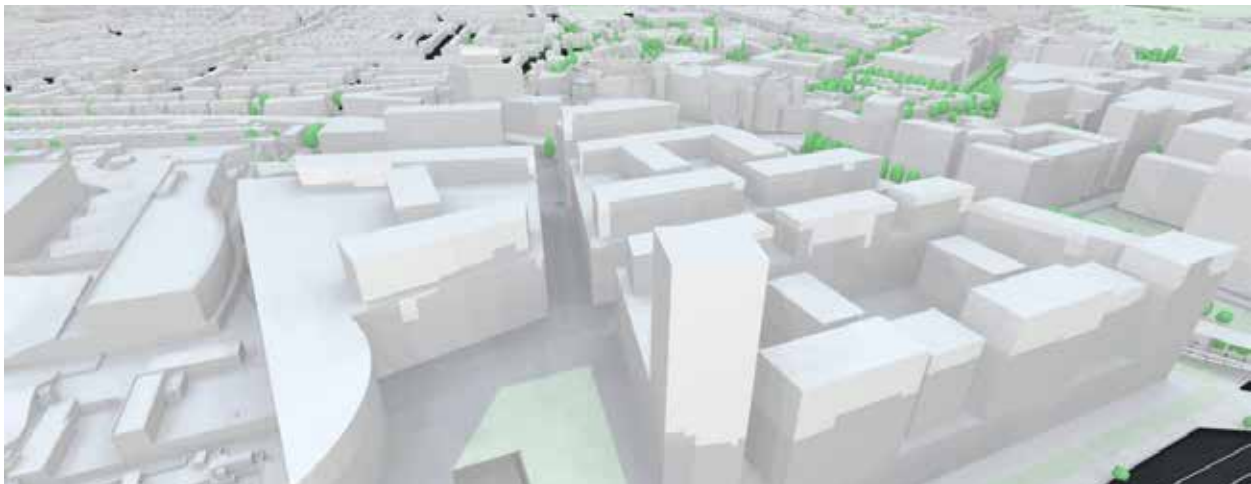


Figure 3.69: View 5, Looking west along Westfield High Street towards the east tower, from the West Cross Route junction

(Source 3D model:Z Mapping)

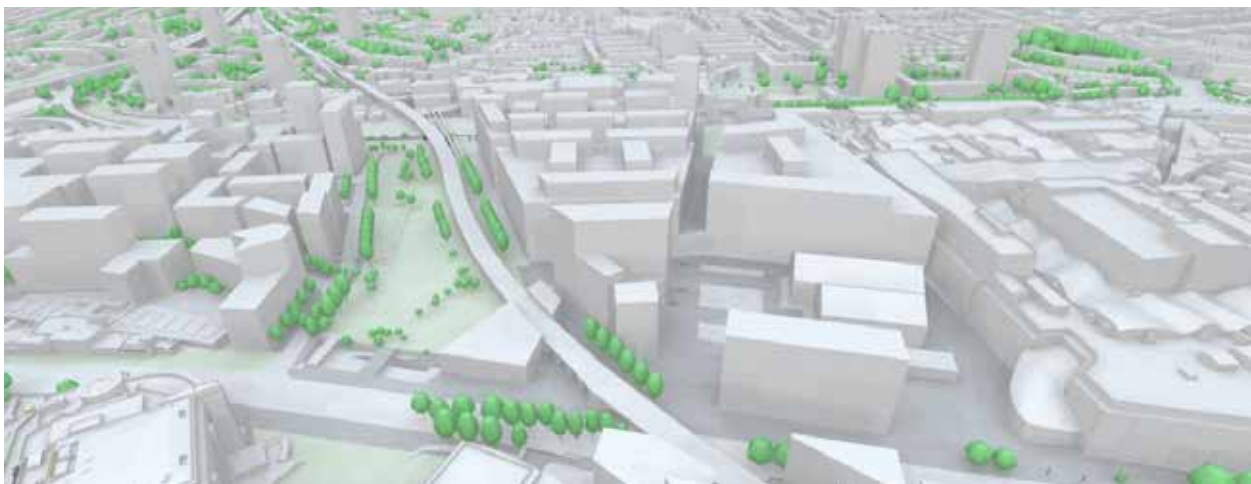


Figure 3.70: View 6, Looking east along Westfield High Street towards RBKC from Wood Lane and the BBC TV Centre

(Source 3D model:Z Mapping)

### Views assessment of tall buildings

3.152 An assessment of the visual impact of taller buildings on views into and out of the OA has been undertaken. This includes views to and from RBKC and other local conservation areas. The context is a tightly-knit, densely developed inner London townscape

3.153 The Townscape Views Analysis (Appendix 1) was commissioned to supplement the work already undertaken regarding the visual impact of taller buildings within the OA on surrounding areas. It provides a baseline study of 21 views (see Figure 3.71) from outside the OA and considered the impact to the townscape as a result of the development of 5 key sites within WCOA (Imperial West, Dairy Crest, Westfield, BBC TV Centre and Marks and Spencer).

3.154 Buildings will be most visible from open spaces which afford panoramic views eg Wormwood Scrubs, Kensal Green Cemetery and Kensington Memorial Gardens. With only low level tree screening around their edges they afford views not only of the consented 35 storey tower on the Woodlands site and the approved 32 Storey tower on the Dairy Crest site but many of the anticipated mid-rise buildings too. However many will be viewed in the context of other existing tall buildings such as the Charecroft Estate Towers, Westfield Shopping Centre and BBC TV Centre.

3.155 In views from the northern part of the site from the east and west, e.g. from within the Oxford Gardens and the Wormholt and White City Conservation areas, two towers will be visible in views along the street grid whilst the mid-rise buildings will be largely obstructed or screened from view by existing buildings and tree cover.

3.156 From the south, the two tall towers are only prominent from the corner of Wood Lane and Uxbridge Road and they create new distant landmarks as a focus for the regeneration of the area, and provide a visual link to the town centre. In other views from the south such as Shepherds Bush Common, new buildings will be completely or partially screened from view by existing development and mature trees. In Royal Crescent and Holland Park, buildings are largely obscured from view by existing buildings and mature trees.

3.157 In views of the central and southern part of the site from the west e.g. Avondale Park and Ladbroke Grove Conservation Areas, the towers are partially visible, being largely obscured by existing buildings and screened by mature trees.

3.158 A more detailed analysis with other views will be likely to be required with any particular proposal which comes forward as part of a planning application.



Map 3.71: Views from Townscape Views Analysis



**Progress to masterplan delivery 2011-2013**

3.159 This previous indicative masterplan was presented to stakeholders and the public for the

first round of consultation in 2011. This plan has since been refined as a result of consultation comments and negotiations with developers and key stakeholders over emerging proposals.



Figure 3.72: Masterplan consulted on in 2011

(Source 3D model:Z Mapping)

3.160 The 2013 masterplan reflects progress towards the implementation of the original masterplan.

Implemented  
Planning permission consented

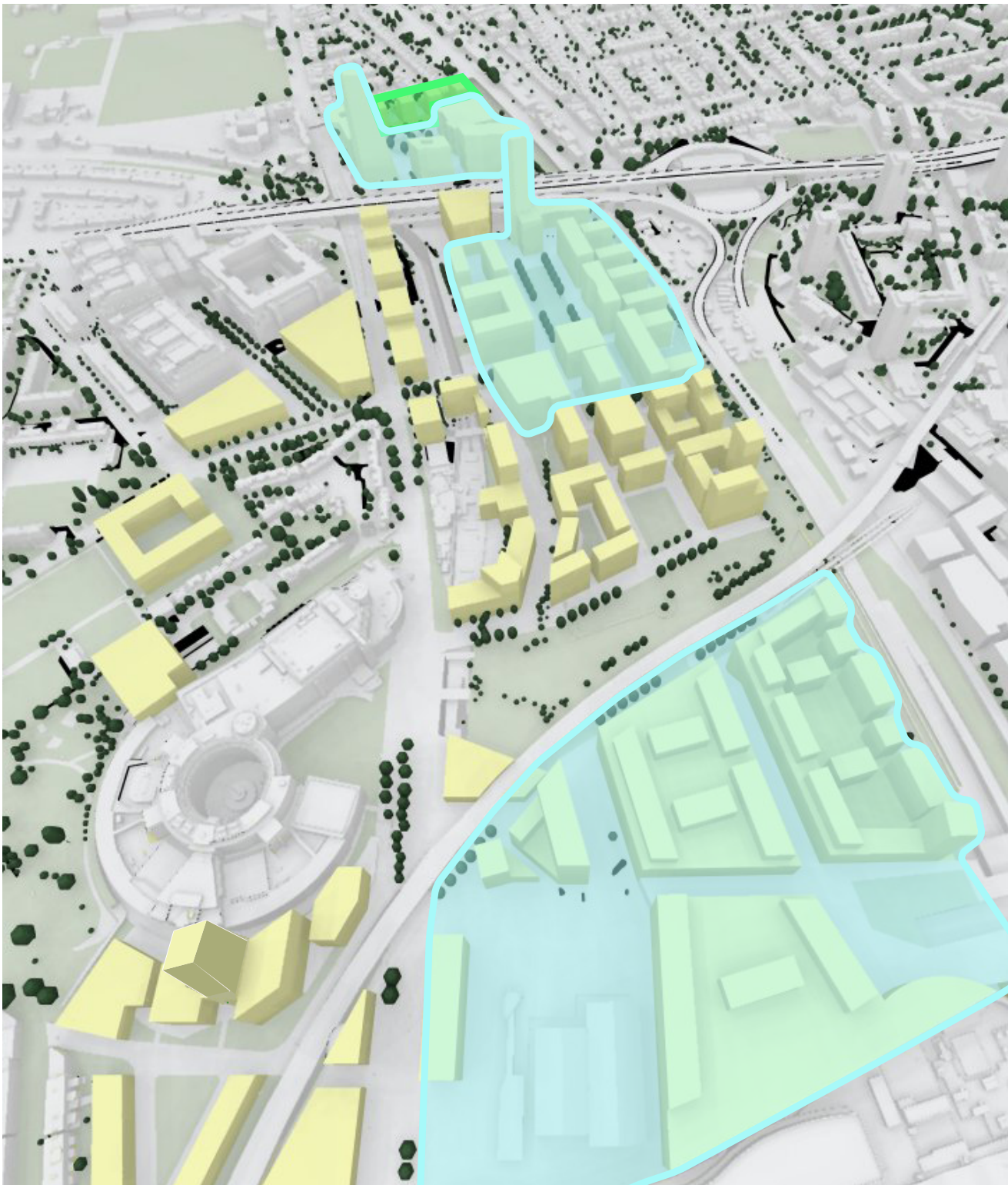


Figure 3.73: Current masterplan proposals 2013

(Source 3D model: Z Mapping)







# 04

## Transport and Accessibility Strategy

### Key principles:

- Build on the area's good network of strategic and local connections, including committed transport infrastructure improvements, so as to fully integrate new developments with surrounding communities.
- Maximise the number of trips by walking and cycling.
- Ensure excellent access to, and increased capacity on, public transport.
- Manage demand for freight and deliveries; and
- Minimise vehicular travel to mitigate traffic impacts and congestion on the road network.
- Ensure timely and phased interventions are put in place to accommodate increased travel demand from development and that these interventions do not adversely impact on the transport network.
- Reduce the impact of existing barriers to movement such as the Westway (A40), the West Cross Route (A3220), the West London Line, the Central line and the Hammersmith & City/Circle Lines.
- Encourage a shift towards walking, cycling and public transport and deliver a high quality public realm.
- Improve access and circulation on key development sites within White City East.
- Identify required transport infrastructure improvements at key interchanges such as Shepherds Bush Station and junction improvements.
- Improve the accessibility of the public transport network and public realm within White City East.

## Introduction

4.1 This transport strategy is in line with the London Plan, the LBHF Core Strategy Strategic sites, LBHF Development Management Local Plan and draws on the Strategic Transport Study (STS) to set out existing and future transport conditions and the impact of development in White City East. The STS has informed recommendations for investment and interventions necessary to accommodate future growth and support development in the Opportunity Area (OA) whilst minimising any negative impact on the transport network. The range of transport ‘interventions’ recommended in the STS and this strategy is further considered in the Development Infrastructure Funding Study (DIFS), which sets out a recommended list of investment priorities as set out in the Delivery and Implementation Strategy (Chapter 7).

## Existing context

4.2 White City is an important transport hub in terms of public transport, highways, logistics and servicing activity. Whilst the intensely developed south of the OA is very well served by public transport, access to public transport in the north and north-west of the OA is less accessible.

4.3 There has been extensive transport investment as part of the first Westfield Shopping Centre development with new rail stations on the Hammersmith & City/Circle Underground line (Wood Lane) and the West London Line (Shepherd’s Bush) on the Transport for London (TfL) Overground network. Shepherd’s Bush Underground station on the Central line has also been enlarged and modernised. Two new bus interchanges have also been built, and the road network at Ariel Way and Uxbridge Road has been reworked to include pedestrian and cyclist improvements and increased capacity.

4.4 The south-east corner of the OA forms a transport interchange hub between the tube, rail, bus and taxi services. There are four Underground stations within the OA (Shepherd’s Bush, White City, Wood Lane and Shepherd’s Bush Market) providing direct radial access via the Central and Hammersmith & City/ Circle lines into central London and

to major national and international rail stations. The new station on the West London Line at Shepherd’s Bush provides access to the Overground and Southern Train rail networks which provide good orbital rail links. However, these services currently operate close to capacity.



4.5 There are 14 bus routes serving the wider OA including a bus station at Wood Lane with capacity generally well-matched to current demand. The north and north-west of the OA has fewer routes and lower frequencies, although the opening of White City bus station has improved bus links.

4.6 Access for pedestrians and cyclists is constrained by barriers created by the Underground cutting and viaduct, the West Cross Route to the east and the Westway to the north.

4.7 The Westway (A40) traverses the north of the site. It is a key east-west route and serves an important strategic traffic function for freight as well as being a key London radial route connecting Central London, Heathrow airport, the M4, M25 and the South West. In the southern part of the OA, there are two further important east-west routes: Uxbridge Road (A4020) and Goldhawk Road (A402) which merge at the Shepherd’s Bush Green gyratory and lead east to Holland Park Avenue via Holland Park roundabout. The Westway and the north/south West Cross Route (A3220), form part of the TfL Road Network (TLRN). Uxbridge Road and Goldhawk Road form part of the TfL Strategic Road Network (SRN). Wood Lane (A219) forms a north-south spine route through the OA.

4.8 A variety of freight activities occur in the area throughout the day. The media venues, offices, warehouses and shopping complexes generate a large number of delivery and servicing trips, while other logistics activities serving the London area take place to the north of the site.

4.9 The primary trunk roads as well as the secondary local roads all suffer from peak time congestion. The Loftus Road football stadium creates surges of activity throughout the OA on match days, leading to heavy pedestrian flows around the site and road closures affecting vehicular traffic and bus routes.

- Piccadilly Line
- District Line
- London Overground
- Central line
- Hammersmith & City line
- Road network
-  Train station
-  Tube station
- - - Proposed HS2

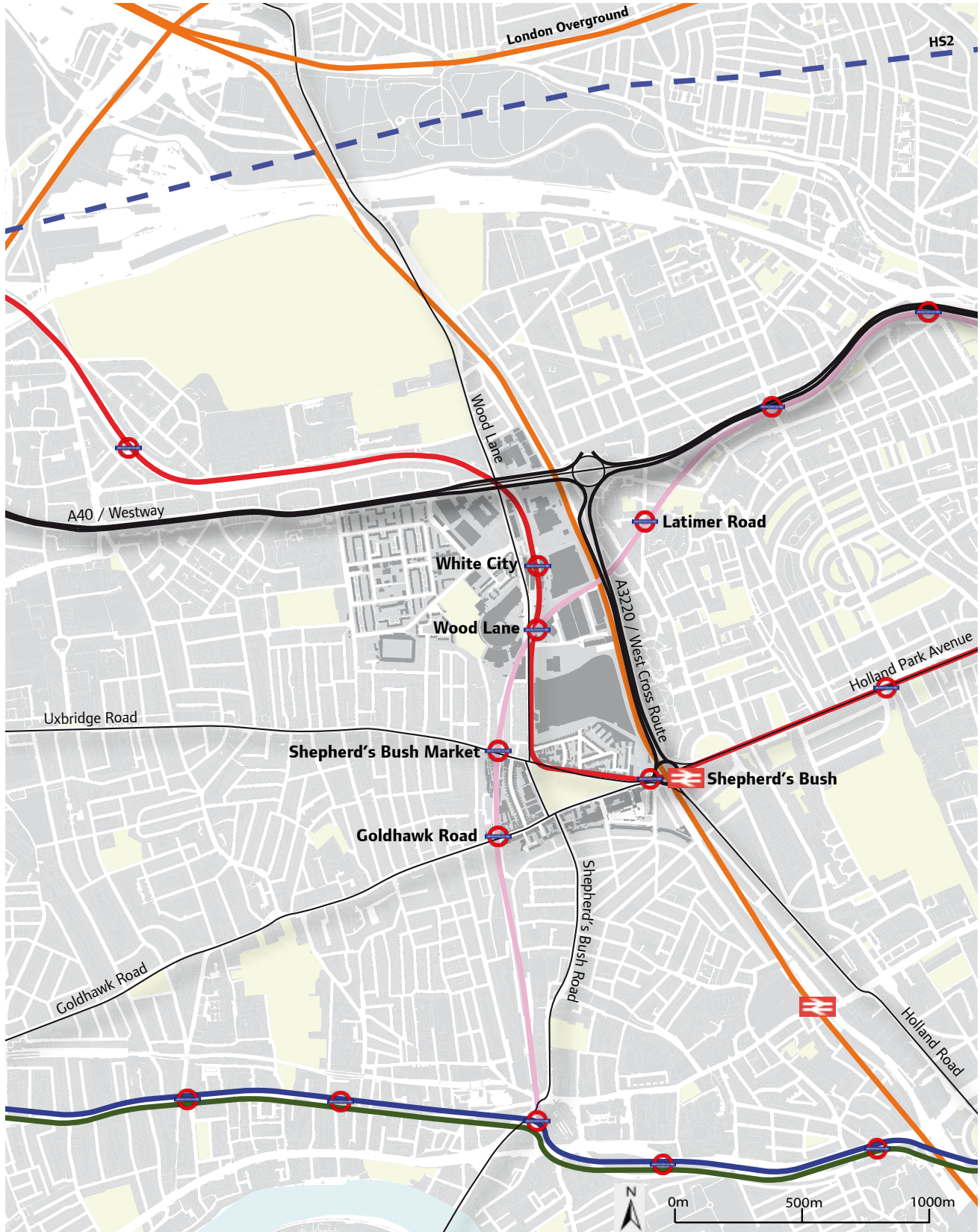


Figure 4.1 Current and future Road, Rail and Underground network



### Transport Challenges

4.10 A series of transport challenges have been identified for the OA.

#### Congestion

- There are increasing numbers of journeys by private car leading to delays and high levels of road congestion.
- There is congestion at key highway junctions such as Holland Park roundabout, the junction of Wood Lane and the A40 as well as junctions on Uxbridge Road.
- There is congestion on A219 Wood Lane/ Scrubs Lane, which is the only north-south route that runs the whole length of the Borough.
- Highway congestion levels are currently at their highest during the weekday evening peak and on Saturdays.

#### Physical connectivity

- Existing strategic transport infrastructure presents several barriers to local movement throughout the OA, and isolates key development sites in White City East.
- The lack of physical links makes walking and cycling unattractive.
- Crowding & capacity on the public transport network.
- There is crowding on the West London Rail services as well as capacity constraints in the ticket hall at Shepherd’s Bush Overground station during peak times.
- Pedestrian access from White City and Shepherds Bus interchanges to the wider area needs improving.
- Currently buses are very well used in the OA and are expected to continue to play an important role in supporting growth, though development will create capacity constraints on some routes.

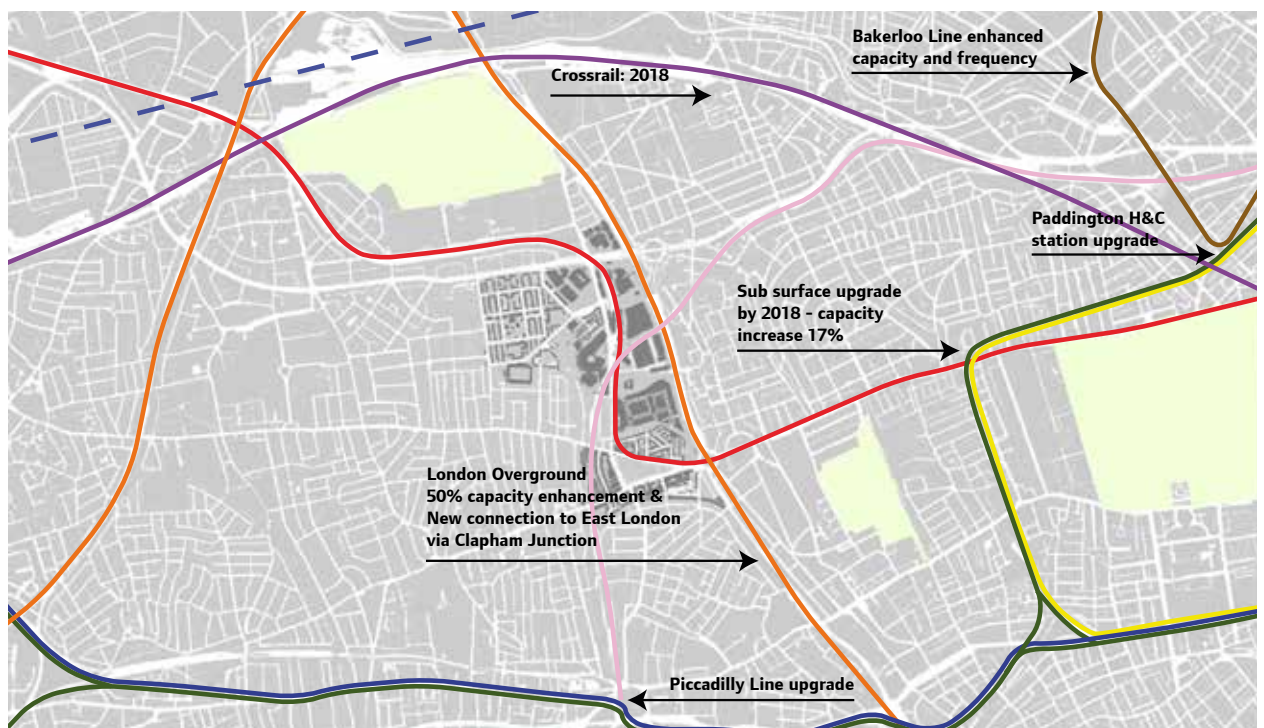
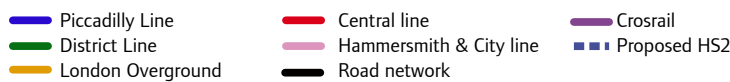


Figure 4.2: Future Rail and Underground network improvements (2020)

Source: TFL

**Behavioural change**

- Encouraging behavioural change so that a higher percentage of trips are made using public transport, walking and cycling to minimise demands on the highway network.

*Future transport conditions – without development in the OA*

4.11 The current average mode share for all trips to and from the OA is typical of Inner West London Boroughs, with 31% of people travelling by car, 41% by public transport, and 28% by walking and cycling.

4.12 The STS established a baseline of future conditions in the area which would be expected without any development in the OA. On the basis of this modelling, the future public transport mode share would be expected to increase to 43% (from 41%) with highway mode share falling to 29% (from 31%) and walking/cycling remaining at 28%.

4.13 By 2018 conditions on the public transport network will generally improve as substantial committed investment will provide extra capacity across

the network (including schemes such as Crossrail and the planned upgrade to the Hammersmith & City/Circle lines). However, despite significant capacity and frequency enhancements, all services on the West London Line will continue to experience crowding.

4.14 Conditions on the highway network are expected to worsen into the future with an estimated growth in traffic between 2007 and 2031 of around 14% in the PM peak. This includes the effect of the removal of the Western Extension of the Congestion Charge and the first phase of the Westfield development. This will result in increased delays at a number of junctions including:

- Holland Park Roundabout;
- Shepherd’s Bush Green;
- A40 / Old Oak Road (Savoy Circus);
- A40 / Wood Lane;
- Du Cane Road / Wood Lane; and
- West Cross Route.



Figure 4.3: Junctions likely to see increased delays without development in the White City Opportunity Area (2031)

### Transport impacts of the preferred development scenario

The STS tested the impact of three capacity scenarios discussed in Chapter 1. For transport modelling purposes, the potential capacity over the longer term of those areas west of Wood Lane to accommodate an increase in homes or commercial space was evaluated. This ensures that in the event that future engagement with estate residents identified opportunities for estate regeneration, this might lead to an increase in the quantity of housing or employment in that area, and there would be sufficient transport capacity. However, these considerations in the transport study are not intended to suggest change is likely in those areas in the plan period, and neither this OAPF nor the LDF Core Strategy make any proposals for these areas.

4.15 The greatest level of development tested was 8,300 homes and 13,400 jobs. This quantum was discounted due to its unmanageable impact on the transport network, amongst other planning

considerations. Although the middle scenario of approximately 6,300 additional homes and 8,400 jobs also resulted in a number of impacts arising from the development, these impacts were seen as potentially manageable given a sufficient level of investment in physical interventions and conditions on development to minimise additional impact.

#### Impact on the Road Network

4.16 Irrespective of development at White City, the effect of background growth in highway demand across London over the next twenty years will exacerbate existing conditions on the highway network. This is despite a decrease in the vehicular trips mode share in favour of public transport expected in the future.

4.17 The proposed development will further worsen traffic conditions from more car trips as well as from increased freight, public transport (buses), waste collection and service and delivery activity. Even a modest increase in vehicular trips (relative to the total number of trips in the area) will lead

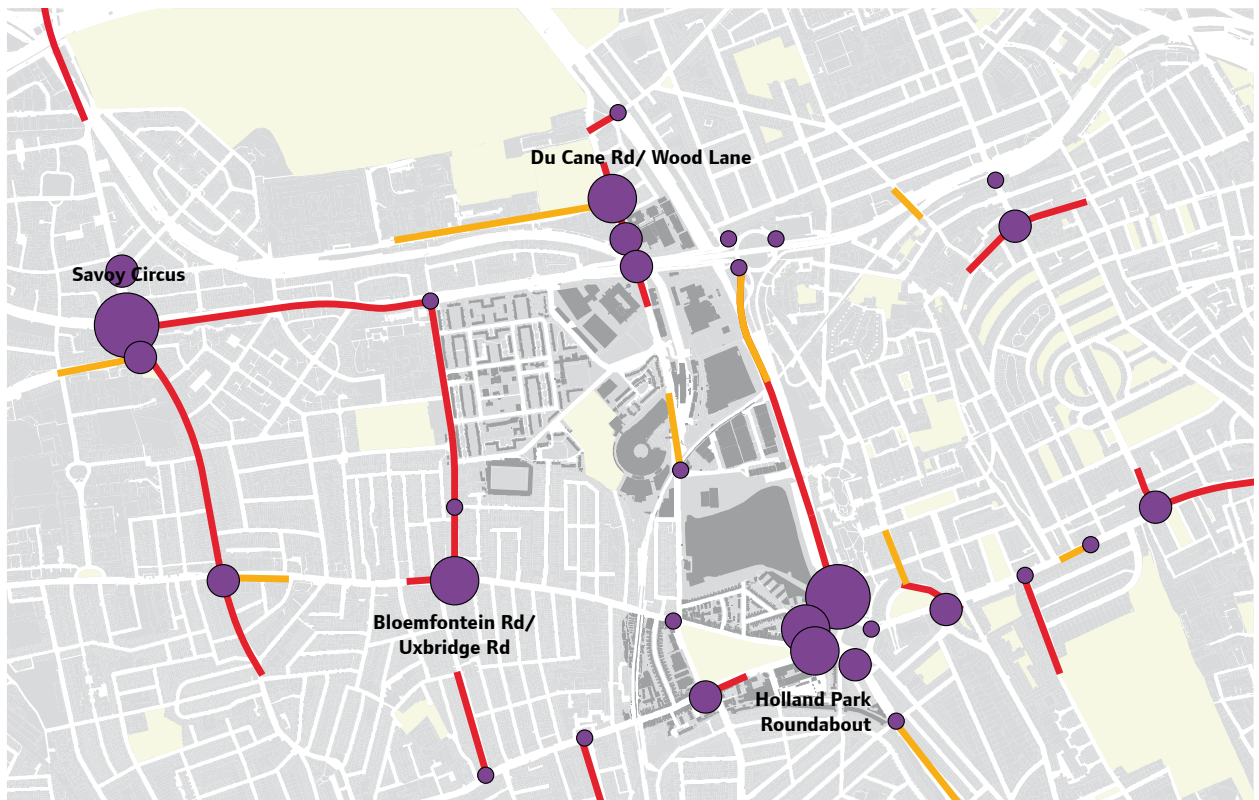


Figure 4.4: Junctions likely to see increased delays with development in the White City Opportunity Area (2031)



to increased congestion and reduction in average speeds on the local and strategic highway network, as well as a wider displacement of traffic outside of the area.

4.18 The growth proposed in the preferred OA development scenario will generate around an additional 1,000 vehicle trips in the evening (PM) peak, representing around a 3% increase in vehicular traffic. The STS highlights that there would be greater impacts in the evening (PM) peak than the morning (AM) peak when the roads are generally most congested, and also at weekends and particularly Saturdays, when traffic flows are high and there is significant congestion. Although new roads will be introduced within the White City East area to create a new street grid, the main highway impact of development will be to existing highway links and junctions.

4.19 Without further investment in highway infrastructure, apart from local traffic management, the increase in traffic due to the developments will put a further strain on the existing roads in the area. The figure below highlights the junctions where increased delays are predicted as a result of the developments, and that traffic impacts are not evenly distributed across the study area. The junctions principally affected in this scenario are:

- Old Oak Road / A40 (Savoy Circus)
- Shepherd's Bush Gyratory
- Holland Park Roundabout
- Bloemfontein Road/ Uxbridge Road.

#### *Impact on Public Transport*

4.20 The committed transport investments for the public transport network for White City were generally in balance with the growth projected in the Mayor's Transport Strategy 2010. However, with the higher level of growth proposed in the Core Strategy, the STS indicates that the transport system will begin to show signs of crowding and decreasing service levels by 2021.

4.21 With the levels of development proposed, there will be increased passenger demand on Overground, Rail, Underground and buses. The proposed development scenario will generate additional demand for public transport services during the morn-

ing, evening and inter-peak period if no further measures are taken beyond committed investment.

4.22 The Central line will experience the highest demand increases of all the public transport services, although this should be set in the context of the delivery of Crossrail, which will reduce some background demand on the Central Line to allow it to cope with the additional demand from development in the OA.

4.23 There will also be a rise in demand for bus services across the OA, particularly close to Underground stations and Shepherd's Bush town centre.

4.24 The Overground and Southern rail services will remain very crowded during peak periods.

4.25 Overall, without further capacity enhancements and interventions public transport service levels will worsen due to a rise in travel demand. In particular, buses will experience higher levels of crowding and delays, and Central Line stations serving the OA sites will be heavily used. In addition, Shepherds Bush Rail station will experience severe crowding.

4.26 The STS has identified and tested a range of measures to address this objective, including:

- measures to encourage people to use public transport, to walk or bicycle instead of using their car; or, to walk/cycle instead of taking short public transport trips
- capacity, frequency and access improvements on public transport to accommodate more users
- improved access for coaches and taxis
- junction improvements at key highway congestion hotspots
- reviewing controlled parking zone (CPZ) operation and car parking levels

4.27 The various measures have been assessed in terms of how necessary they would be to enable the future development of White City East as a whole. This has been used as the basis of prioritisation in the Development Infrastructure Study (DIFS). The 'Required Interventions' identified within this chapter are those transport interventions

which are currently considered necessary to provide sufficient transport capacity either by providing local access to sites or by providing strategic capacity improvements to the transport network ('Exceptional site specific development costs' and 'Essential Mitigation' in DIFS). Interventions identified as 'desirable' in the DIFS refer to those schemes which are assessed as benefitting the area. However, their absence would not prevent the development of White City East as a whole from taking place. These may be interventions that are needed to mitigate the impact of individual schemes but that will be considered on a site by site basis.

4.28 All developments will be expected to contribute to the required interventions, and possibly the desirable interventions depending on particular circumstances. The contribution may be by on-site measures or financial contributions which may be pooled with contributions from other developments. (See the end of this chapter on delivery).

**Transport Strategy: Mitigation and intervention measures**

Transport impacts generated by development in the OA will be mitigated so that traffic conditions are no worse than if there were no development, in order to meet Council and Mayoral objectives. This chapter sets out a number of required and desirable interventions based on the STS's assessment of the need to mitigate the impact of the quantity of development envisaged. The Council and TfL will keep the list of interventions and priorities under review in light of the impact of emerging developments, future conditions affecting the transport network and other factors.

Individual developments will be expected to contribute appropriately to implementation of the transport interventions.

**Highways**

Developments should minimise future congestion by:

- demand management measures
- contributing to provision of a new local network of routes
- financial contributions to key local junction improvements

4.29 As set out above and in the STS, there is already substantial traffic congestion in the White City area, with this set to worsen as London grows. Traffic generated by development in the OA will contribute to this. To address the challenges posed by future congestion levels, the transport strategy aims to reduce to a minimum the amount of highway traffic generated by the development through measures to manage demand and encourage alternative modes of travel.

4.30 In order to overcome the barriers presented by strategic transport infrastructure and the isolation of key development sites in White City East, a local network of permeable routes will need to be created. They will provide links into the existing road network, improve connections to the town centre and unlock access throughout this area.

4.31 Measures to reduce demand for car use, through rigorous car parking standards, the inclusion of car clubs, and travel demand management measures will be required. Consideration will also be given to controlling the levels and operation of on-street parking and public car park provision, particularly in relation to any extension to the Westfield shopping centre given the high traffic flows on Saturdays.

4.32 The London Plan (Table 6.2) sets out maximum parking standards and the Mayor's Housing SPG (November 2012) expands on how these should be applied. It says Policy 6.13C states that the "maximum standards set out in Table 6.2 ... should be applied to planning applications" and should be implemented in the context of the much more broadly based and over-arching Policy 6.13A in which "the Mayor wishes to see an appropriate balance being struck between promoting new development and preventing car parking provision that can undermine cycling, walking and public transport use". This flexibility is amplified in supporting text where the Mayor "recognises that London is a diverse city that requires a flexible approach to identifying appropriate levels of car parking provision across boundaries. This means ensuring a level of accessibility by private car is consistent with the overall balance of the transport system at local level". The SPG indicates that in the circumstances expected to apply in White

City East (i.e. density and expected public transport accessibility level) up to one parking space per residential unit would be appropriate. The STS has concluded that in order to meet the Mayor's objectives the approach to parking should be constrained as indicated in the required interventions box.

4.33 The implementation of such 'demand management measures' will still leave a level of traffic generated by the development which will result in impacts that will need to be mitigated. Physical interventions to 'smooth' traffic flow and manage congestion/ minimise delay within the local area will be required to deliver on the key principle that traffic conditions do not worsen as a result of development of the OA.

4.34 Indicative junction improvement proposals have been identified, supported by micro simulation modelling, to minimise additional delays at Holland Park Roundabout, Shepherd's Bush Green and on Uxbridge Road where the development impacts are predicted to be substantial. However each development will also need to develop and implement solutions to the traffic issues it specifically causes. These

will need to be identified and addressed through the more detailed transport assessment (TA) that will be required to support each planning application.

4.35 A longer term piece of work needs to be undertaken in collaboration with the Boroughs and TfL, through the existing Sub Regional Transport Panels, to identify wider measures to address the strategic highway impacts arising from projected growth in West London, which could also support the full development of Scenario B.

4.36 Where car parking is provided, in line with the Mayoral priority to promote the use of electric vehicles, the provision of charging points for electric vehicles, both within new buildings and on-street will be expected to be provided.

- New streets and access to development areas
- Required Highways Interventions



Figure 4.5: Required Highways interventions



<b>Required interventions: highways</b>
Parking provision for residential development between a maximum of 0.2 and 0.4 spaces per dwelling
Limited parking provision for commercial development
Review and amendments to surrounding controlled parking zones N, O, G, CC
Local area junction improvements to reduce delay at the following junctions for all users:
. Bloemfontein Road / Uxbridge Road
. Shepherd’s Bush Green/Uxbridge Road
. Shepherd’s Bush Green/Goldhawk Road,
Additional highway mitigation schemes associated with each development’s impacts identified at the planning application stage.
Provide electric vehicle charging parking spaces and car club bays
Improve bridge access over Central line cutting to provide improved highway access and circulation in development sites
Introduce new streets for local circulation and access in development areas.

<b>Walking</b>
Developments should contribute to an improvement in the quality of the pedestrian environment throughout the OA to provide an attractive alternative to car and public transport use, and to meet the Mayor’s and the Borough’s targets in relation to walking.

4.37 Higher levels of walking and cycling can only be achieved if the OA is connected to the surrounding areas, including new convenient east-west links such as a pedestrian/cycle tunnel in the north of the OA and a pedestrian/cycle bridge in the centre of the OA.

4.38 The following recommendations should be read in conjunction with the public realm strategy for the OA. Three main strategic elements are needed: improved quality of the pedestrian environment, the

introduction of new or improved connections and crossings for pedestrians, and improved wayfinding/signage. See box on walking and cycling interventions.

4.39 To ensure that walking is a travel mode of choice, especially for trips less than 1.2km or a 12 minute walk, the pedestrian environment must be well designed, safe and secure. Routes should be logical, legible, well-lit, and convenient. In addition, high quality public realm will be expected, that connects walking routes through public squares, open space and recreational and play space. It is also important that the OA is properly integrated into the adjacent neighbourhoods to enable the wider community to enjoy the new facilities and be able to access the surrounding areas. In addition to good physical links and infrastructure, wayfinding is an important tool to promote walking. TFL’s Legible London scheme is currently available in Shepherds Bush town centre and should be implemented throughout the OA.

<b>Cycling</b>
Developments should contribute to improved conditions and facilities for cycling throughout the OA so that it can become an increasingly viable alternative to the private car, and meet the Mayor’s and the Borough’s targets in relation to cycling.

Four strategic areas should be addressed by any development: provision or connection to cycle-friendly routes; provision of connections across key infrastructure; provision of facilities to encourage and facilitate cycling in developments and public realm; and consideration of cyclist requirements in new building design. See box on walking and cycling interventions.

4.40 To facilitate commuter journeys by cycle and to make the new White City area easily accessible by bike, integration with the wider London Cycle Network, including Cycle Superhighway (CS10) and the “Cycling Crossrail” along the A40 is expected. The London Cycle Hire scheme is being extended into the OA. Developments will be expected to contribute to the provision of docking stations.

4.41 New developments and areas of public realm must be designed to be accessible by bicycle, to incorporate excellent cycle infrastructure, including cycle ways, dedicated cycle crossings over heavily trafficked roads, high quality cycle parking at all employment and non-residential locations (including showers and lockers) and residential cycle parking (as per standards set out in the London Plan policy 6.9 and table 6.3).

Required interventions: walking and cycling
Pedestrian and cycle connection below West London Line north of Westway
Pedestrian and cycle connection over A3220 and West London Line south of Westway
Pedestrian and cycle connections over the Central Line cutting
Extension of TfL’s wayfinding strategy (Legible London) that is co-ordinated with other/existing signage
New and enhanced walking routes/ connections throughout the OA

Pedestrian Crossings enhanced on identified desire lines
Provision of docking points for the Mayor’s cycle hire scheme within the OA
Integration of Cycle Superhighway 10 and “Cycling Crossrail” within the OA and improved links to and from them
Introduction of safe cycle priority at junctions and cycle crossing facilities on highly trafficked roads to ensure integration with the wider London Cycle Network
Provision of safe, secure and accessible cycle parking at all new developments, both for occupants and for visitors, including end of journey facilities.

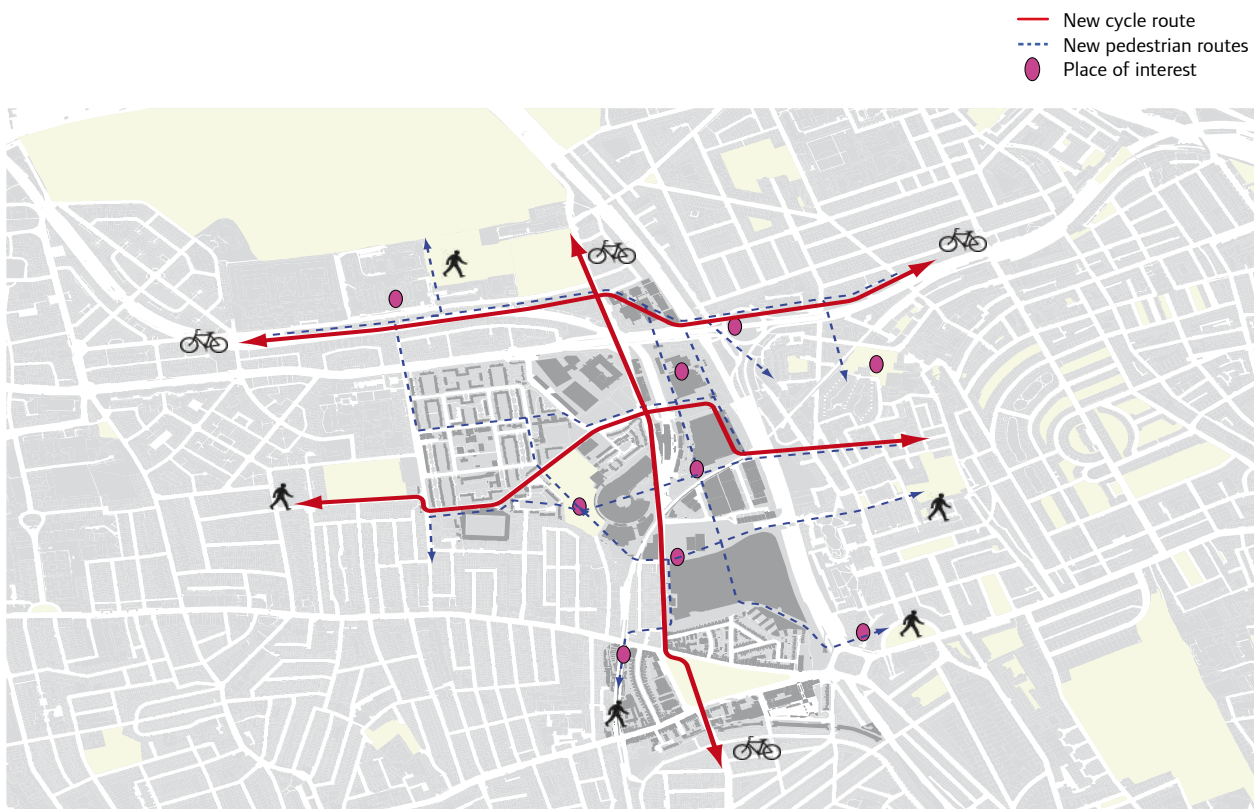


Figure 4.6 Required pedestrian and cycling interventions.

**Underground and Rail**

Developments should contribute to capacity improvements at Shepherds Bush Rail Station, and, where possible to improved access to particular Underground stations in the OA.

4.42 The STS predicts a 39% increase in trips in the OA as a result of the proposed growth scenario. This is against a background of reduced passenger flows on the Central Line through this part of West London as a result of the opening of Crossrail. Future development of the sites to the east of Wood Lane and north of Westfield will create demand for new access points to these London Underground (LUL) stations, which will make it easier for people to access LUL services and improve the general circulation and connectivity of the area. Although the transport modelling does not show a requirement for these additional access points, these do provide opportunities to build in capacity for future growth.

4.43 Wood Lane station has built in the potential for a second entrance to the south, through the existing railway arches. White City station already has a pedestrian bridge to the east over the existing tracks for staff. Future development should seek to capitalise on the existing infrastructure and improve them where necessary to provide additional access into the stations.

4.44 The Mayor’s Transport Strategy sets out an objective of improving access to public transport for all. Step-free access is provided on the Hammer-smith & City/Circle Line at Wood Lane and Over-ground at Shepherds Bush but there is no step-free access to the Central Line in the OA. Integrating step-free access at White City station is considered to be a more cost effective solution than providing step free access at Shepherd’s Bush station (which also serves the Central Line but is a deep station). In anticipation of the increased patronage of White City station, and in line with meeting the Mayor’s Transport Strategy, step-free access improvements to White City Station should be implemented to ensure that all Underground lines in the OA area are accessible.

4.45 Enhancements to the Shepherd’s Bush Rail station will be required to support West London line growth and to meet the increased demand that will arise from development of the OA.

**Required interventions: underground and rail**

Capacity improvements to Shepherds Bush Rail Station including additional capacity in the ticket hall, a second entrance at the northern end of the site and platform extensions to accommodate 8-car trains

**Desirable interventions**

Step-free access to White City station

Eastern entrance to White City Station

Southern entrance to Wood Lane Station



Figure 4.7: Potential Step-free access at Wood Lane

Source: TFL



Figure 4.8: Provision at Wood Lane for southern entrance inside

Source: TFL



**Buses**

Developments should contribute to enhancing bus services and the operation of the local network.

4.46 Bus services will need to be enhanced to cope with the increased demand from proposed development. The operation of the local bus network will need to be reviewed and additional bus infrastructure and service-related interventions will be required. This will be likely to involve both adding more buses to the network and extending some routes to serve the north of the OA.

4.47 The design of the public realm and access routes around the DIMCO building and bus stand would benefit from review in order to establish whether the pedestrian experience can be improved and the bus facilities can be better integrated with the wider development and public realm without compromising bus operations.

4.48 This might include the potential for relocation of the bus standing from the DIMCO building to release this building for another use, which could be considered by TfL. Any such relocation would require a new location, ideally within/below new development south of the Hammersmith & City Line viaduct. However, any such move, including phasing, will have to be negotiated and agreed with TfL and be fully funded by the developer. Any change to the DIMCO building must ensure that the bus standing facilities continue to be available to serve the local area including any growth in the bus network.

**Required interventions: buses**

Capacity increases on bus routes serving the OA to meet demand increases. Infrastructure and services to be reviewed and improvements identified as more detailed work is undertaken for each development

**Desirable interventions**

Potential relocation of the bus standing area from the DIMCO building to a location within the OA



Figure 4.9: Existing public realm around DIMCO

Source: GLA



Figure 4.10: Existing public realm around DIMCO

Source: GLA



Figure 4.11: Existing public realm around DIMCO

Source: GLA



Figure 4.12: Existing public realm around DIMCO

Source: GLA

**Taxis, Private Hire and Coaches**

Developments should allow for additional taxi ranks, coach stops and parking, and dial-a-ride facilities in locations where they will be convenient for the customer.

4.49 Taxis and Private Hire Vehicles provide an important travel choice option and should be fully integrated into the OA. Private hire covers a wide range of services, including minicabs. Unlike licensed taxis, journeys must be booked through a licensed private hire operator and vehicles cannot be hailed or approached on the street.

4.50 Developments and masterplans in the OA should allow for additional taxi ranks in locations where they will be convenient for the customer such as outside hotels, busy venues, stations, shopping centres, etc. Taxis and private hire vehicles can drop off and set down in a number of locations but consideration must also be given in providing suitable facilities to make this as efficient as possible.

4.51 Scheduled and unscheduled coach services provide an important travel choice and are vital in terms of supporting tourism and London’s economy. Scheduled coach services are regular services which stop at fixed bus stops, whereas unscheduled services tend to be ad hoc charter and tourist operations. Demand for unscheduled services is expected to increase with the range of proposed uses that include hotels, major retail, meeting and conference facilities as well as entertainment uses at BBC TV Centre.

4.52 Stops and parking for coaches should be integrated within the masterplan and public realm proposals. For scheduled services, there have been discussions with TfL for the provision of formal stops for the ‘Oxford Tube’ coach service north of Holland Park roundabout, to be funded using existing developer contributions. A working design was developed for both north and south-bound coach stops on the A3220 and following a safety audit, a double bay on the northbound A3220 only will be implemented. This stop could, in future, also be used by other scheduled coach operators.

4.53 Parking for unscheduled coaches should be provided at locations such as Westfield, BBC television centre or the Loftus Road stadium as they are likely to attract this type of service.

4.54 Development should provide off street facilities for dial-a-ride and community transport and other forms of “paratransit” used by disabled people.

Required interventions
Taxi drop off and pick up facilities
Scheduled coach service stop
Parking for unscheduled coach services
Dial-a-ride and community transport facilities



Figure 4.13: Taxi rank

Source: GLA



Image 4.14: New coach stop North of Holland Park Roundabout

### Freight and Waste

Developments will need to manage freight transportation effectively, in order to avoid unnecessary growth in highway congestion.

4.55 Development in the OA will generate high levels of demand for goods and services delivery and waste collection. Additional demand is also being driven by changes in business behaviour, such as 'just-in-time' logistics and a growth in home deliveries. On-line shopping is rising and first-time delivery failure rates are high, leading to second and even third attempted trips. This contributes unnecessarily to highway congestion, which the transport study has identified must be managed for the OA going forward.

#### Short-term / immediate actions

4.56 For these reasons the OA will need a coordinated and comprehensive strategy for freight and waste collection. All delivery and servicing activity for new developments should be 'off street' and away from bus routes/cycle paths, and all proposals should be accompanied by a delivery and servicing plan to minimise this impact.

4.57 Development of an OA-wide framework Delivery and Servicing Plan, with reference to the published guidance from TfL: <https://www.tfl.gov.uk/microsites/freight/publications.aspx>.

#### Longer-term actions

4.58 Developers should look at the feasibility of providing a well-sited, consolidated local delivery and servicing centre as part of the new development. Such facilities have been proven to reduce deliveries by up to 70%, with resulting savings in emissions and congestion. It would have 24-hour operation, thereby removing freight vehicles from the highways in peak periods. It would also act as a central collection point for deliveries into the OA that could then be distributed to the local final delivery point by electric vehicle, bicycle or walking. It should also act as a holding point for deliveries for local businesses and residents who are not at home to receive

the delivery, and would ideally include chilled and secure facilities provided to enable all commodities to be delivered outside of normal peak hours. The feasibility of providing such a facility, its nature and the preferred location should be explored by all the landowners; however the DIFS has not identified this as an essential infrastructure need that should be prioritised at this stage.

4.59 A collaborative approach to waste management will also be encouraged. This should consider consolidation and efficient mechanisms for collection of waste to reduce vehicle journeys and length. Landowners must collaborate and identify sustainable and energy effective ways to collect waste, including the potential for a waste collection system such as Envac (underground vacuum collection of waste) which can reduce local refuse vehicle miles by up to 90%. Combined collection of business waste can also reduce highway impact. As with the consolidated delivery centre, the feasibility of taking such an approach should be explored by all the landowners, however the DIFS has not identified this as an essential infrastructure need that should be prioritised at this stage. This is set out in more detail in Chapter 7

#### Required interventions

All delivery and servicing activity for new developments should be 'off street' and away from bus routes/cycle paths.

Future delivery and servicing needs of existing and new uses, must be addressed to cover out-of-hours deliveries, home deliveries etc.

#### Desirable Interventions

A feasibility study should be undertaken examining the provision of a consolidated service and delivery facility

Development of an OA-wide framework Delivery and Servicing Plan, with reference to the published guidance from TfL

Feasibility study to consider how to rationalise and minimise the impact of waste collection e.g. Envac system



### **Delivery of transport interventions**

4.60 A key objective of the London Plan policy is to ensure integration between transport and development and to ensure that there are adequate levels of transport capacity and services to support high-density development throughout Opportunity Areas such as White City.

4.61 This chapter has set out the findings of the STS, which sets out the minimum strategic transport measures, local transport improvements and demand management initiatives that need to be implemented to support a cumulative level of development approaching 6,300 additional homes and 8,400 jobs without adversely affecting the strategic transport network. All of these improvements should be delivered by the land-owners and developers in the OA.

4.62 Each development proposal will also be required to identify and deliver effective measures to mitigate the local highway impact associated with specific development proposals. A longer term piece of work will also need to be undertaken to identify wider measures to address the highway impacts arising from projected growth, including OA development, across West London.

4.63 This chapter, informed by the DIFS, has set out an initial prioritisation of infrastructure delivery based on current understanding of likely developments, trajectories, and their impact on the transport network at key points in time. Not all of the measures listed are currently in the 'required interventions' list, however the list of priorities will be reviewed on a regular basis to take into account new information and understanding.

4.64 Transport infrastructure to support development will need to be funded through development contributions in combination with TfL resources where appropriate and available. Development contributions will be secured through either S106 obligations or the Borough Community Infrastructure Levy which is expected to be introduced in late 2013 (or possibly a combination of both sources where there are already obligations

in place). This will be in addition to payment of the Mayoral CIL.

### **Mayoral CIL**

4.65 The opening of Crossrail from 2018 will provide the release of capacity on the Central line to support a large proportion of the public transport demand created by development in the OA. In accordance with London Plan policy 8.3, from the 1 April 2012, the Mayor introduced a Community Infrastructure Levy (CIL) – the Mayoral CIL, to help fund the Crossrail project. Developments within LBHF, including this OA, are required to pay a charge of £50 per square metre (applied to the net increase in floor area). The Mayoral CIL will be applied in addition to any charging structure for the OA or Borough CIL.

### **Planning applications and detailed transport analysis**

4.66 The STS has identified some of the strategic transport interventions needed to support development in the OA. However, each major development proposal will be required to provide a detailed TA, in line with TfL's current guidance for TAs. The TA will have to identify the impact of the individual proposal in detail, within the context of the transport challenges in the OA. In particular it will have to assess the specific impacts to the highway network (including to locations beyond the immediate development site boundary) and local bus capacity, to ensure effective mitigation of any impacts are achieved. The TA will need to provide details of the proposed mitigation measures, including the travel demand management required to achieve a shift to sustainable modes and all the other requirements set out in the TfL guidance.

4.67 A micro-simulation model has been developed as part of the STS. All further detailed TAs should use this model as a basis for their work to identify detailed junction improvements required

Required for planning applications
Full discussion with LBHF, TfL and the GLA at the pre-application stage
TAs in line with the NPPF, TfL's TA and Travel Plan Guidance
Demonstrate how strategic and localised/site-specific interventions will fully mitigate any transport impacts generated by the development proposals
In line with Best Practice, an assessment of the cumulative impact of development to ensure that the wider OA proposals are taken into account, to ensure that any space capacity on the transport network is not credited to earlier developers and to allow the infrastructure to be secured in a fair and equitable way.
Where necessary to assist the delivery of key transport infrastructure, TfL should be consulted on the drafting of any section 106 agreement and where necessary, be a signatory to those agreements







# 05

## Social, Community and Leisure Infrastructure

All development must contribute to the provision of social infrastructure to support the expanded residential and worker population across the OA and this is currently expected to include:

- One form entry at primary school level.
- Support for early years nursery provision for low income families.
- One form entry at secondary school level.
- Facilities for up to 5 GPs and possibly dentists.
- Improved physical connections to RBKC to enable access to the local infrastructure in both boroughs which is generally available to each borough's residents and workers.
- Recreational sports and fitness facilities: either by providing new facilities within the area or by improving access to existing facilities, with financial support to enable access for low-income families.
- Local shops and services in White City East.
- Measures to ensure and enhance community safety.
- Target a minimum of 15% of construction jobs to be on a traineeship basis and 10% on an apprenticeship basis.
- Target 15% of all labour used on the development should live within LBHF.
- Raise aspirations and awareness of job possibilities and career paths amongst school age and young people and develop links with educational and learning institutions.
- Improve access to and numbers of work experience trainee and apprenticeship opportunities.
- Initiatives to provide business engagement activities and possible provision of business space to suit different needs, budgets and sectors.
- Maximise procurement opportunities for local businesses both during construction and end user stages.

**Introduction**

5.1 The aim of this OAPF is to give more detailed guidance on infrastructure need as a result of growth in homes and jobs in accordance with the London Plan and Core Strategy. This also accords with the NPPF which says “153. ....Supplementary planning documents should be used where they can help applicants make successful applications or aid infrastructure delivery, and should not be used to add unnecessarily to the financial burdens on development.”

5.2 New social infrastructure and community facilities will have to be provided at accessible and convenient locations, although some needs may be best met by expanding existing facilities in the surrounding area rather than making provision on wholly new sites. The Development Infrastructure Funding Study (DIFS) has assessed social infrastructure needs and costs across the White City East area in detail. The DIFS infrastructure assessment (taking account of emerging schemes) was based on the mix and quantum of development capacity proposed in Scenario B (Figure 1.5) and the expected trajectory of development over a 20-year period. This chapter summarises the social and community infrastructure that is expected to be needed. Chapter 7, Delivery and Implementation Strategy, considers the potential costs of delivering infrastructure, and mechanisms to ensure that developers make a reasonable contribution. Infrastructure needs and priorities will be kept under review in light of the mix of development which emerges as schemes come forward.

**Education**

**All developments must contribute to provision of educational facilities.**

**The following infrastructure is expected to be required:**

- **1 form entry at primary school level**
- **1 form entry at secondary school level**
- **early years capacity equivalent to 2 nurseries (either through new facilities or subsidy of placements for low income families)**

**Existing conditions**

5.3 Map 5.1 shows the locations of existing local primary, secondary and nursery schools within and surrounding the OA.

5.4 There is currently unmet childcare need in the north of the borough, which will become more severe with development in the OA. There is currently no child care or schools provision in White City East. The only nursery school in the OA is located in White City Estate and is at capacity. All the primary schools in and close to the OA are full within their early years and reception phases (Bentworth, Pope John, St. Stephen’s and Canberra). The recently opened Ark Conway free school is also at capacity for the year groups (4-11 years old) it operates.

5.5 There are no secondary schools within the OA boundary, although Phoenix High and Burlington Danes schools are just outside the OA, and are at capacity. Planning permission has been granted by RBKC for construction of a new academy and leisure centre on the existing Kensington Leisure Centre site at Silchester Road in North Kensington, which is within 500 metres of the opportunity area but currently with very limited access from the area.

**Future need**

5.6 The potential number of children at nursery, primary and secondary level has been estimated on the basis of the current child yield formulas used by LBHF. Whilst the mix of dwelling sizes in different tenures will undoubtedly vary during the development period, current estimates suggest that there would be an increase of 432 school-age children in the OA, of whom 307 would be primary age and 125 would be of secondary age.

Bedrooms	Market	Intermediate	Social Rented
1	0.01	0.01	0.07
2	0.11	0.255	0.40
3	0.42	1.135	1.85
4+	0.98	1.44	1.90

*LBHF Child Yield Formulas based on the 2004 LB Wandsworth Housing Survey*

- ▭ Opportunity Area
  - ▭ Nursery schools
  - ▭ Primary schools
  - ▭ Secondary schools
- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>N1: Harmony Nursery</li> <li>N2: St Anne's Nursery and Children Centre</li> <li>N3: Randolph Beresford Early Years Centre</li> <li>N4: Vanessa Nursery School</li> </ul> | <ul style="list-style-type: none"> <li>S1: Phoenix High School</li> <li>S2: Burlington Danes C of E Academy</li> <li>S3: St Charles RC Six Form College</li> <li>S5: New Kensington Academy</li> </ul> | <ul style="list-style-type: none"> <li>P1: Bentworth Primary School</li> <li>P2: Oxford Gardens Primary School</li> <li>P3: Pope John Primary School</li> <li>P4: Canberra Primary School</li> <li>P5: St Francis of Assisi Primary School</li> <li>P6: Avondale Park Primary School</li> <li>P7: Greenside Primary School</li> <li>P8: St Stephen's C of E Primary School</li> <li>P9: Miles Coverdale Primary School</li> </ul> |
|---|--|---|



Figure 5.1: Nurseries, primary & secondary schools



5.7 The Council has plans for the expansion of provision in the north of the borough supported by Government grant and expects that some of the children from the White City East development will be able to access that expanded local provision. However, an additional form of primary entry will be required to fully meet longer term need resulting from proposed development. The additional primary school provision must be local to the development area, and is likely to be met by expansion on one of the existing school sites.

5.8 Further capacity will be required at secondary level and this will require an additional one form of entry. The additional secondary school provision will be planned at an appropriate location. LBH&F and RBKC will plan for the location of future primary and secondary provision as part of their bi-borough approach to education services.

5.9 The increase in nursery age children will require provision of nursery and affordable childcare facilities equivalent to two nurseries. Developments should support affordable nursery provision so that low income families can access local early years facilities. Imperial College has provided for a crèche in their phase 2 proposals.

5.10 Financial contributions will be sought from developments towards funding any expansion of and improved access to early years, primary and secondary education in order that sufficient capacity is secured at the right time, in accordance with the phasing of development and the increase in the child population. The presence of Imperial College in the OA is a major opportunity to achieve links to local schools that will enhance the curriculum and help raise and expand aspirations. The Council and Imperial College are discussing how such links could benefit local sixth form education both across the Borough but also focused within a local secondary school to enhance its offer to families.

## Health and social care

**All developments must contribute to the provision of health facilities.**

**A health and wellbeing centre incorporating enhanced primary health care provision and located within White City East is expected to be required. This should include accommodation for five GPs (and possibly dentists). Additional capacity and phasing for the delivery of additional doctors will be subject to review by Inner West London NHS in the light of its emerging service strategy.**

### Existing conditions

5.11 The Health and Social Care Act 2012 established Clinical Commissioning Groups (CCGs) as the main local commissioners of NHS services to continuously improve the effectiveness, safety and quality of services. A joint Health and Wellbeing Strategy is being developed to meet these needs. The Health and Social Care Act has given the local authorities statutory duties to improve the health of the population from April 2013, which require action along the entire pathway from prevention to tertiary care. A GP Practice Estate Review is in progress to assess all of the primary care locations in Inner North west London in terms of overall quality, capacity and future potential of each site. A key priority for the local CCGs is the impact on primary care of the strategy for "Out of Hospital" care/services. Significant initiatives to redesign patient care to ensure that wherever practical and appropriate, patients can access care and advice/support in primary care locations.

5.12 The previous NHS Hammersmith and Fulham Strategic Plan 2009-2014 assumed that the north of the borough would be primarily served by the White City Health and Social Care Centre, where up to four existing GP practices will be relocated. This Centre is expected to open in Spring 2014 and will be located on the western edge of the OA on Bloemfontein Road. The range of services in the Centre also includes Central London Community Healthcare services and the Child Development Service which is due to move from

St. Dunstan's to the White City Collaborative Care Centre (WCCCC).

5.13 In the town centre there is a business case being developed to enable the Bush Doctors to relocate to fit for purpose health facilities within the re-developed W12 Shopping Centre.

Future need

5.14 Inner West London NHS (INWL) is currently developing a service strategy (as part of a North West London initiative) for how services could be organised in the future. In advance of completion of the strategy, INWL considers that the development of White City East is likely to require additional capacity in the form of a health and wellbeing centre with primary healthcare facilities (to accommodate a practice of approximately 5 GPs) close to a transport hub. Provision for other primary care services in the area such as dental, pharmacy and opticians will need to be reviewed. The centre would be expected to be linked to the proposed WCCCC in Bloemfontein Road in respect of clinical pathways and integration of health and wellbeing services.

5.15 Any new facilities should include health promotion and prevention services to address risk factors that may affect the new population such as smoking, obesity and stress and the needs of the very young or the elderly who tend to consume health services at a higher rate.

5.16 Co-location of health and social infrastructure should be considered at an early stage as health/community facilities have the potential to act as a community hub providing a range of services and opportunities for social interaction and cohesion.

## Leisure, recreation, sports and fitness

**Development should contribute towards provision for leisure, recreation, sport and fitness needs for the future population, including improved access for low income families, having regard to the LBHF Development Management Local Plan (DMLP) (policy DM D2).**

**Provision could be made directly within White City East, or by financial contributions to enhancing existing local facilities (e.g. at Linford Christie Outdoor Sports Centre).**

**New east-west links into RBKC should be provided to improve access to the Westway Sports Centre and other facilities.**

Existing conditions

5.17 Although the OA itself has limited facilities for leisure, recreation and sport, there are many nearby facilities including Linford Christie Outdoor Sports Centre, the Phoenix Fitness Centre and Janet Adegoke swimming pool (which is located at Phoenix school on Bloemfontein Road), which includes a learners pool, gymnasium as well as a 25-metre pool. Nearby open space is at Wormwood Scrubs, Hammersmith Park and Shepherds Bush Common.

5.18 Shepherds Bush town centre is recognised as being of metropolitan importance and is highly accessible to central London. It is already well known for a number of large and small venues and modern cinemas, together with the BBC TV Centre for audience programmes. Westfield features a multi-screen cinema and other facilities, and the next phase includes leisure space which could be suitable for a bowling alley.

5.19 In RBKC, the Westway Sports Centre features football pitches, indoor tennis courts, a climbing centre and outdoor five aside courts. The Westway Development Trust plans to expand the Westway Centre's facilities and there appears to be scope (with some existing spare capacity and

through expansion) for the centre to contribute to meeting sports and leisure needs of the OA and the wider area. This is supported by RBKC's recent draft SPD.

5.20 The Kensington Leisure Centre at Silchester Road in North Kensington has a swimming pool. RBKC has approved a scheme to replace the Centre with an academy and new leisure centre that will have three pools (up to 25 metres), a 120 station gym and an eight-court sports hall. This is primarily aimed at meeting needs local to the centre within RBKC.

5.21 LBHF has appointed PlayFootball.net to undertake the works and services contract for the redevelopment of Hammersmith Park sports facilities providing a football facility to include free community access. The works will include upgrading the synthetic turf pitches in South Africa Road adjacent to Hammersmith Park.

5.22 The former Dairycrest site which has a resolution to grant planning permission has provision for leisure space within their development; however, there has been no indication of what they will provide.

#### Future need

5.23 The LBHF DMLP policy DM D2 states that the Council will support the enhancement of arts, culture, entertainment, leisure, recreation and sport uses by (inter alia)... requiring provision of new facilities as part of major development proposals, where appropriate and viable. Development in White City East will generate additional demand from the new schools, residents and workers for a broad range of leisure facilities which could be expected to be partly or wholly provided on a commercial basis.

5.24 Improving provision does not just mean constructing new facilities. It also means improving physical access to existing facilities (including in Kensington & Chelsea), planned maintenance and investment in existing facilities to ensure they remain functional, and ensuring that new facilities are provided in accessible locations.

5.25 The Hammersmith & Fulham Leisure Needs Study (PMP 2010) considered likely future

needs in White City resulting from development. It concluded that there would be need for an indoor sports hall, health and fitness facilities, a full size gym (in excess of 100 stations), with appropriate 'pay and play' provisions and provision of a synthetic turf pitch. The study also suggested that there may be further need for indoor tennis or a seasonal airhall, and that revenue-generating activities such as indoor climbing provision would be beneficial. It noted that there was no need for additional swimming capacity, but retaining access to the Phoenix School pool was important.

5.26 Under the current joint borough working arrangements for leisure that are in operation between Hammersmith and Fulham and RBKC, there will be a strategic approach to planning for future leisure requirements across the two boroughs in the area around the OA, along the lines of the Sport England facilities planning model. In the meantime, the OAPF seeks the provision of east-west links into RBKC which would help to improve access to the Westway Sports Centre and other facilities.

5.27 The DIFS also identifies the provision of the following as desirable, subject to development viability:

- New or enhanced facilities equivalent to a sports hall of 6-8 courts and a full size publicly accessible gym (at least 100 stations)
- Improved access to Wormwood Scrubs and the facilities at Linford Christie Outdoor Sports Centre.

5.28 However, the exact way in which public sports and fitness provision is provided as a result of development in White City East will be the subject of further strategic planning in a way that ensures this complements existing provision. In particular, future planning should take account of the existing opportunities offered at the Westway Sports Centre, Phoenix Fitness Centre & Janet Adegoke swimming pool, Linford Christie Outdoor Sports Centre and the scope for expansion and development of those facilities. There are also discussions on using the public parks to provide free leisure activities such as outdoor gyms and jogging trails.



5.29 The availability of development land north of Westfield and the BBC's departure from Television Centre provides opportunities to introduce additional leisure and entertainment facilities that would attract customers from a wide area and reinforce the strength of the leisure and entertainment offer in the area. The OAPF does not prescribe what sort of leisure facilities would be appropriate but they should be of wide public interest, such as ten-pin bowling or ice skating.

### Local shopping and services

**Developments should make adequate provision for the day to day shopping and service needs of future residents and workers in convenient locations.**

#### Existing situation

5.30 At present, there are Neighbourhood Parades on Bloemfontein Road and Satellite Parades on Uxbridge Road, Goldhawk Road and Shepherds Bush Road close to the town centre. There is limited provision of local convenience goods and services within White City East.

#### Future need

5.31 The future residential and working population in White City East will need to have access to local shops and services to provide for day to day needs that would not be provided by the town centre. Ideally this should be co-located with other local facilities at the most accessible locations. The indicative master plan suggests that the vicinity of White City Central Line station would be a suitable location. The LBHF Core Strategy (WCOA1) says that there should be "a local centre with supporting uses (e.g. local shopping, restaurants and community facilities).

### Community facilities

**Development should contribute to the provision of necessary community meeting space for the future population.**

#### Existing situation

5.32 There is significant existing provision of community facilities within the western part of the OA on the White City Estate, and immediately to the west of the OA on the Wormholt estate, including churches and faith facilities and community halls. At the Edward Woods estate, the Council is providing a third sector hub.

5.33 The first phase of the development at Imperial West includes a community space of 200sq.m. The outline permission for the site north of Westfield also provides for some community space, and the recently permitted development at the former Dairycrest site has made allowance for community space within their development also.

#### Future need

5.34 LBHF Development Management Local Plan policy DM D1 says (inter alia) "The provision of new or expanded community uses should be provided as part of the necessary supporting social infrastructure for significant new housing and other development proposals. Where it is not appropriate to provide community uses on site or in total as part of a development scheme, a contribution to new and/or enhanced uses in the locality will be sought."

5.35 As the population of the area increases due to development in White City East, there is likely to be increased demand for local facilities for the general population as well as for particular sectors such as young people, elderly people, or specific ethnic communities. Community facilities and services will need to be located so that they have maximum accessibility for their potential users. The DIFS identifies a new Community Centre as desirable.

## Emergency services

**Development should contribute to measures to ensure community safety in White City East and in the surrounding area. These include:**

- **Providing CCTV within development schemes together with financial contributions to link with the borough CCTV system and provide any enhanced capacity at the borough's CCTV control centres.**
- **Where necessary and appropriate, financial contributions to Council CCTV provision in the surrounding public realm.**
- **Where appropriate, facilities and support for enhanced policing of the area.**

### Existing situation

5.36 In recent years, an enhanced town centre policing scheme has operated in Shepherds Bush Green ward. Instead of the Metropolitan Police model of one sergeant, two constables and three community support officers the council has funded an extra four identical teams plus an inspector to police the ward 24/7.

### Future need

5.37 It is expected that public realm CCTV will be provided by developers as part of normal development costs, and linked into the borough's CCTV network. This includes contributing to any increase in staffing capacity of the borough's CCTV control centre to cater for increased demand from the expanded CCTV network. Financial contributions may also be necessary to enhance CCTV in the public realm in the area surrounding White City East to enhance the safety of developments' residents, workers and visitors, as well as the public as a whole.

5.38 The enhanced town centre policing scheme should be continued and developers will be requested to contribute to its ongoing costs where

appropriate. The Metropolitan Police Authority has indicated a potential need to accommodate two Safer Neighbourhood Teams in the area. Following recent consultation on the now adopted Police and Crime Plan, which included details of the Local Police Estate and Public Access requirements, a potential need for a future contact point at either Westfield and / or the Bush Theatre was highlighted. Suitable premises will need to be identified in due course.

## Employment training and recruitment

**In accordance with LBHF Development Management Local Plan policy DM B3, all development should support, and contribute towards, provision of appropriate employment and training initiatives and programmes for local people of all abilities in the construction of major developments and in larger employment generating developments. This will include:**

**All development should support, and contribute towards, measures to maximise the opportunities for recruitment of local people, including during construction; providing a Recruitment and Job Shop and recruiting from the local area.**

**To help implement these measures, development should support the introduction of Workplace Coordinators to support trainees and apprenticeships and work with the developer's project team and future occupants.**

### Existing situation

5.39 Two of the WCOA's Super Output Areas are within the top 10% most deprived nationally, and a further four Lower Level Output Areas are in the 10%-20% most deprived (see appendix TA01). The OA ranks within the top 20% most deprived nationally on both the income and employment domains. In addition to the WCOA itself having high levels of deprivation, other parts of the

surrounding area in the wards of Wormholt and White City, College Park and Old Oak, and Addison in Hammersmith & Fulham and the western wards of Kensington & Chelsea have severe levels of income and employment deprivation in comparison to other wards within those boroughs.

5.40 The OA has among the lowest employment rates in the borough, with the unemployment rate being nearly twice the borough and London averages. This is reflected in the rate of 'Out of work benefit claimants' (22.1% vs 13.0% in the borough or 12.6% across London). Long-term unemployment is at the highest level for over a decade with 50% claiming JSA for over 6 months (borough 49%). Youth unemployment has risen sharply since 2009 and now represents 21% of all JSA claimants (Borough 20%).

#### Future need for training

5.41 All developers will be expected to adhere to the H&F Employment and Training Code, which sets out actions to secure local employment and training benefits and to maximise opportunities available to H&F residents. There should be workplace coordinators within the development team to support trainees and apprenticeships with occupants and contractors. They should work closely with developers to meet identified employment needs and coordinate links with external agencies to provide suitable candidates, which is critical in steering job opportunities towards local people.

5.42 Improving access to vocational training and education is essential to ensure local people are equipped with the right skills to compete for jobs, whether at the construction stage or in businesses and services that are located in the area. This should include an apprenticeship/trainee programme which will place local people in local industry sectors including retail, hospitality, creative, business & finance administration and construction.

5.43 Developers and main contractors in the OA will be expected to work with the Council to ensure that local residents benefit from employment and training opportunities arising as a result of development, including paid work placements,

unpaid work experience and apprenticeships. In addition, they will be expected to encourage and support access to:

- construction training by providing information on jobs,
- encouraging local resident training and employment as part of the tendering process,
- ensuring appropriate contractual provisions between contractors and sub-contractors,
- co-operating with the Council's Education Business Partnership in their liaison with schools,
- colleges and training providers to assist with curriculum development,
- arrange professional input to career days, teacher training and work experience.

Developers will need to provide an agreed number of work placements for students per year in partnership with the Education Business Partnership. This program should result in local people making up 15% of the construction workforce.

#### Future need for recruitment

5.44 Construction contractors and business occupants (especially in retail, hospitality, leisure, tourism, cultural/creative industries, health and social care, professional services) should target recruitment from the local area. A target of 15% of jobs, both at construction stage and at occupation/completion of development should be filled by local residents. Developers, contractors and businesses will be required to give early notification to the Council of employment opportunities and required skill levels, advertise any job vacancy locally and provide for and fund Workplace Coordinators within the developer's project team.

5.45 Employers must ensure they engage with specific under-represented groups such as the long-term unemployed, people with disabilities, people with mental health issues, people with ESOL needs and ex-offenders.

5.46 Developments should support provision of a recruitment and job shop, which will serve as a highly visible portal for residents seeking vocational



skills and training relevant to local job vacancies, trainee work experience and apprenticeship opportunities. It will also assist employers to recruit to vacancies and co-ordinate outreach programmes to local housing estates, schools and partner agencies to raise aspirations and awareness of job possibilities, well in advance of vacancies being advertised so people can gain appropriate skills.

### **Business engagement and investment**

**Development proposals for business floorspace should incorporate variety in the type, size, cost and terms (lease arrangements) of accommodation, and be readily adaptable for use by a range of tenants.**

**There should be provision of hub drop-in meeting space and workspace hire scheme suitable for very small businesses and start ups.**

**Developers should put in place procedures to ensure small and medium sized local enterprises (local SMEs) have access to tender opportunities for the procurement of goods and services generated by the development both during and after construction.**

5.47 The Council has set out, in its Business Engagement & Investment Code of Practice, initiatives designed to support the retention of jobs, employment and services. The Local Procurement Code sets out initiatives designed to maximise local economic growth and gains by specifically encouraging local procurement opportunities.

5.48 Development in the OA should provide for a range of business, office and retail premises to suit different budgets and sectors and to maximise opportunities for local entrepreneurship and enterprise. Business incubator facilities can greatly increase survival rates of new businesses. Affordable workspace through a time-based membership approach provides a highly supportive environment for enterprise and innovation,

assisting residents who want to become self-employed or have recently started a business.

5.49 Developers and local businesses should also contribute to programmes to enhance business and area competitiveness, such as town centre management, business engagement and visitor development programmes; ensure that leases for commercial occupiers secure cooperation with the Council; and, engage with the Borough Business Forum to work on business support initiatives. Developers will be required to sign up to a Working with Local Businesses Charter, which will set out the terms under which developers will be expected to promote and advertise tender opportunities (through contractors and sub-contractors), to allow local businesses to benefit from the construction and operation of developments through procurement.

# 06

## Energy and environmental strategies

This strategy seeks to establish a coordinated and consistent approach to addressing policy objectives and requirements relating to the quality of the environment, in the following areas:

### Energy

- Planning for electrical capacity
- Reducing carbon dioxide emissions
- Development of Decentralised Energy and a District Heating Network
- Employing other Renewable Energy sources

### Waste

- Waste & management
- Sustainable construction and demolition waste
- New waste infrastructure development opportunities in White City
- Waste storage, collection and transport
- Installation of an Automated waste collection system

### Air Quality

- Inclusion of low emission strategies

### Noise and Vibration

- Inclusion of noise impact assessments

### Sustainable Water Management and Flood Risk

- Maximising sustainable urban drainage systems to reduce surface water flooding.
- Reducing water consumption through water saving techniques

### Ecology and Biodiversity

- Protecting and enhancing existing Nature Conservation Areas, SINC and Green Corridors
- Replace any loss of Nature Conservation Area, SINC or Green Corridor with an area of equal or greater conservation area value on site
- Create further habitats through the provision of open space, SUDS and green and brown roofs

## Introduction

This chapter does not intend to reiterate policies set out within the London Plan and Local Plan, but provides more detailed guidance on environmental design and strategies that could be delivered.

## Energy

Regeneration of the OA must take advantage of the opportunity to take a co-ordinated approach for the provision of energy to the area and address climate change. All development must incorporate high levels of environmental performance and be exemplar in its sustainable design and construction. Key objectives that developers will be expected to address are:

- Addressing the shortfall of electrical capacity at White City
- Addressing energy demand through the Energy Hierarchy (Be Lean, Be Clean, Be Green) and move towards zero carbon development over the life of the plan
- Establishing a decentralised energy network that serves new development within the OA and potentially beyond with low carbon heat
- Designing buildings to minimise energy use with energy efficient design
- Incorporating appropriate and complimentary renewable energy sources

### Electrical Capacity in White City East

6.1 There is an electrical capacity shortfall to White City and it has been identified that a new substation will be required to power the new development. The overall energy requirement in White City East was investigated as part of the DIFS and the total electrical demand is defined as requiring an estimated 25MW of electricity across all developments. This was based on watts per sqm and assumed site wide diversities, which will change dependent on the floorspace and uses coming forward on the sites.

6.2 Discussions with UK Power Networks (UKPN) confirmed that only 5MW existing and 11kV capacity exists to White City East. While the system has some capacity for initial phases of development across the OAPF East area, it does not have capacity to accommodate the full estimated demand.

6.3 UKPN have confirmed that a new primary substation is required to support development on site. Key landowners in White City East need to work with UKPN, with the assistance of the council and the GLA, to establish how this vital piece of infrastructure can be delivered.

6.4 To begin such discussions, the Mayor has set up a high-level working group which includes Network Distribution Operators, National Grid, Ofgem, key players from the business and development sector and local authorities across London. The purpose of this initiative is to establish a collaborative approach towards the delivery of an accessible and competitive electricity network and strategically planned investment in electricity infrastructure where and when it is required. White City is one of the key areas for discussion.

6.5 The high level working group has so far identified that the new substation will likely comprise of 2 x 33MVA transformers as this satisfies the first customer that is currently negotiating with UKPN but also provides capacity for future developments in White City East to connect in. It is expected that the substation will be shared between landowners within White City with any spare capacity being utilised by London Power Network to support the existing network which could bring costs saving accruing to all parties.

6.6 Discussions are taking place as to the location of the substation; however it is expected that the substation will need to be provided on site. The footprint required for the new primary substation is difficult to confirm until the capacity and number of 11kv switch panels are known, but would generally be in the region of 28m x 18m, over 2 levels.

6.7 Whilst the initial investment will be split between the first applicant and UKPN, the Connection Charging methodology which governs how UKPN charges for new connections allows UKPN to proportionally charge for substation works on a proportionate capacity basis for five years from the commissioning date of the substation.

6.8 Once more detailed capacity work that is being carried out by UKPN and the first customer



is complete; other landowners from White City will have to work together with UKPN to negotiate their connection to the substation. As part of the regulations that UKPN is governed under, landowners will need to negotiate and pay UKPN directly for their cost of connection. UKPN estimates the total cost of delivering the substation and connection has been estimated at £18m.

6.9 Whether all of this cost will be met by developments in White City East is dependent on the stage of which they would want to connect to the network and how much of the capacity is needed across these sites. As part of the DIFS, the substation has been included in the list of essential infrastructure required for development in the OA. The funding strategy (DIFS) assumes that this cost would be met on a site by site basis and landowners would only be required to contribute a portion of the estimated cost of the substation (£6mil). Developers will contribute towards this infrastructure through DIFS payment, or if it is replaced by CIL, via CIL payment.

#### Decentralised Energy Network

6.10 Development proposals should provide a detailed energy assessment demonstrating how the London Plan energy hierarchy has been implemented to meet the required levels of carbon reduction, having regard in particular to the London Plan energy hierarchy, the LBHF DM policies and the Planning Guidance SPD. Buildings proposed in the OA must be designed to minimise energy use, meeting Building Regulations 2010 Part L through energy efficiency measures alone and to achieve further carbon reductions through implementation of additional low/zero carbon technologies. This should be demonstrated within a Sustainability statement which is required as part of any major development. Buildings should be designed to minimise the potential for overheating and cooling. Where cooling will be required it should be specified to minimise energy demand in line with the GLA cooling hierarchy (London Plan policy 5.9).

Major new developments in White City should prioritise identification and connection to existing Combined Cooling, Heat and Power (CCHP)/ Combined Heating and Power (CHP) distribution networks, or provide new site-wide CCHP/CHP

schemes with communal heating that also enables future connection into larger, low carbon district heating networks.

6.11 Combined Heat and Power (CHP) units generate electricity close to the point of use and enable the heat released during the power generation process to be captured, distributed and used locally, often via a district heating network. This approach enables higher fuel conversion efficiencies and lower electricity distribution losses. District heating networks are fundamental to ensuring these efficiencies are achieved, and will enable low-carbon heat captured from dedicated CHP plants (or possibly waste to energy facilities) to be distributed and used for space heating and hot water production in both domestic and commercial buildings.

6.12 The GLA and independent consultants are undertaking an Energy Study for the OA. The Energy Study and the Council's Heat Mapping study have found that the WCOA is, in principle, a suitable location for decentralised energy generation and distribution. Development of such a network would also be one of the most cost effective ways of delivering carbon emissions savings for the area.

6.13 The Energy Study will propose a strategic framework and masterplan for the development of a site-wide, low carbon decentralised energy (DE) network within the OA to deliver environmental benefits above what might otherwise be achieved by individual developments on a plot-by-plot basis. The framework has focused on the main develop-

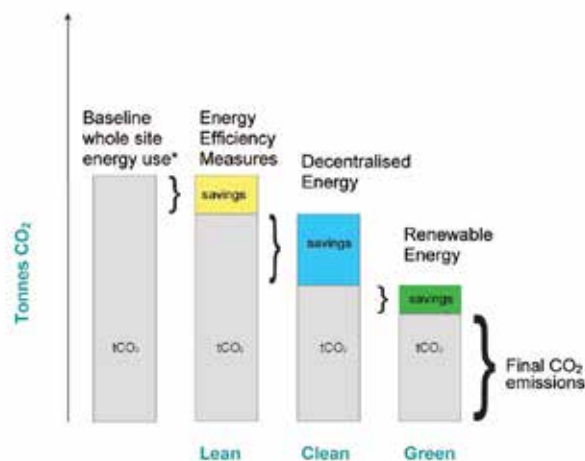


Figure 6.1 Calculation of energy / CO<sub>2</sub> savings

ment sites in White City East, which would feature high energy densities, short distances between heat customers and similar regeneration timescales.

6.14 The DE network would be based around gas-fired CHP units which would serve all major new development with low carbon heat distributed to customers via a decentralised energy network. Early assessment of the potential heat demand in the WCOA and surrounding areas estimates annual demand to be around 60MW. This could be provided by a 10MW(e) CHP system in a single energy centre distributing heat via a heat network made up of 12km of pipeline. The annual CO2 savings potential of such a network has been calculated to be around 15 -35,000 tonnes. Electricity generated by the CHP plant will be exported to the grid.

6.15 The study has also considered the potential for linkage with the existing White City Estate or linkage if there were to be any further regeneration. This could potentially provide a cost-effective energy and heating network for the estates.

6.16 The study also considers the potential for future redevelopment proposals in Kensington and Chelsea to connect to a wider scheme. The DE network could be extended or connected to other networks in the future which could further benefit the area and surrounding areas. An example of one potential heat network configuration is shown below, which would be developed in phases over the next 20 years.

#### Decentralised Energy Steering Group

6.17 The GLA, landowners, developers, LBHF and RBKC councils have formed a Decentralised Energy Steering Group to progress the energy masterplan from the initial energy study to full feasibility. The Decentralised Energy Project Delivery Unit (DEPDU) at the GLA is currently leading the consultants on the feasibility study to determine

the technical, financial and commercial potential of a DE network in the area.

6.18 Once the feasibility study has been completed and the business case for a network has been established, the steering group will work together to provide a strategy for delivering and funding the shared facility.

6.19 As some sites in the OA have already been granted planning permission, the preferred approach is that in the short term developments ensure they are 'future proofed' so that they can be connected to a future network. Where a development is completed before the network is available, the development should be designed using technical standards established by the Steering Group to ensure it can connect to the network with the minimum delay and modifications.

6.20 Planning obligations will need to be used to ensure connections occur and that technical standards and guidelines are acted upon. The pipework necessary on each site to allow for future-proofing has been assumed to be a normal site-specific cost in the Development Infrastructure Funding Study (DIFS) and will therefore not be funded through the s106 tariff. As the extent of physical infrastructure to deliver a shared facility has not yet been determined, shared costs have not been included as an item in the list of essential infrastructure to be funded by any s106 pooling in the delivery strategy (Ch.7), but future reviews of the infrastructure needs may include this.

#### Renewable Energy

6.21 On-site renewable energy will be required to meet any shortfall in achieving carbon reduction targets. The suitability of renewable energy measures will be assessed having regard to their viability, location and impacts such as noise, air quality, visual appearance and biodiversity.

	Annual Heat Consumption (GWh/year)	Peak Heat Demand (MW)	Annual Cooling Consumption (GWh/year)	Peak Cooling Demand (MW)	Annual Electricity Consumption (GWh/year)
Developer lead Developments	52.3	18.4	5.8	9.9	122.2
Public lead Developments	17.2	6.2	0.2	0.2	8.9
Royal Borough of K & C	7.2	2.2	0.1	0.1	7.1
Total	76.7	26.8	6.1	10.2	138.2

Figure 6.2 Annual heat and cooling consumption and demand per area.

- Council estates
- Developer led developments
- South of Westfield (connecting to heating network not viable)
- RBKC (future developments)

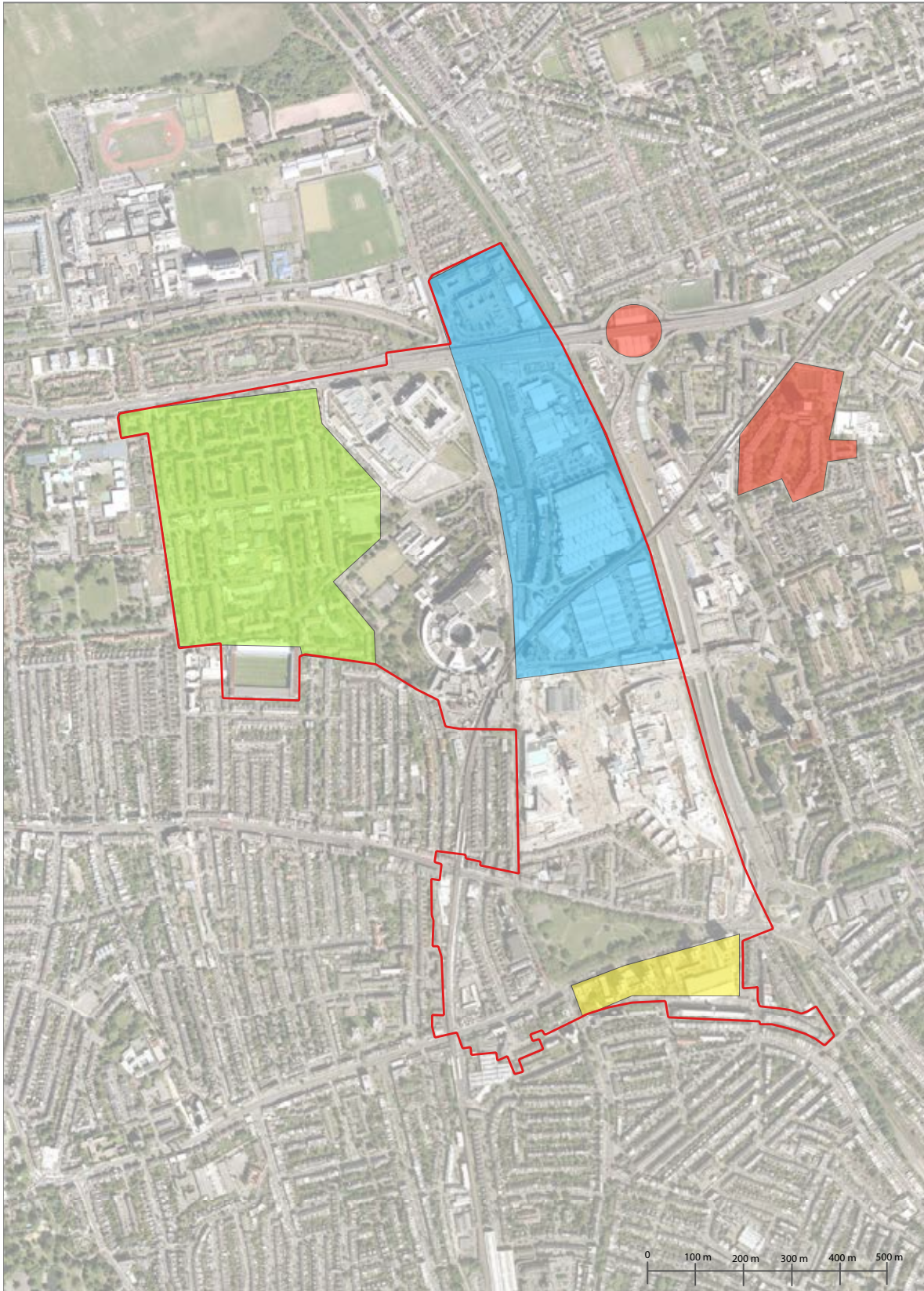


Figure 6.3 Energy demand overview

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6.22 All potential renewable technologies, such as photovoltaic panels, solar thermal, wind, ground and air source heat pumps and biomass fuelled boilers should be assessed for their feasibility in terms of energy generation capacity, 'payback', suitability (building location and compatibility with DE) and likely impacts such as noise, air quality and visual appearance. The Government's Feed-in Tariff and Renewable Heat Incentive provide incentives improve viability by reducing the payback period.

### Waste and waste management

6.23 The following priorities have been identified for resource and waste management that developments in the OA would be expected to undertake on top of the policy requirements:

- Demolition and excavation waste, including contaminated waste, should be treated, recycled and reused on-site
- In addition to regulatory approaches, redevelopment in the OA should contribute towards reducing, reusing and recycling waste through non-regulatory and education based approaches.
- Redevelopment of the OA must deliver sustainable and integrated waste collection and management systems
- Redevelopment of the OA should provide green waste and kitchen waste collection to support a community led composting scheme.
- Consideration of an automated waste collection system to relieve traffic congestion, air quality and local environmental quality.

6.24 Key landowners in White City East should jointly commit to sustainable waste management and minimise the amount of waste produced, in the context of the existing agreements and commitments in place for waste management in the borough.

6.25 Opportunities for management of municipal solid waste (MSW) within the OA would require dialogue with WRWA to ensure issues arising from Authority's Powers of Direction over the Borough's MSW are fully considered and accounted for. The Council will encourage further materials reclamation at the Hythe Road Strategic Industrial Location, as

long as it remains in contractual agreements with the WRWA.

6.26 London Plan policy 5.16 'Waste Self-Sufficiency' establishes a target of 100% waste self-sufficiency for London by 2031. To manage the apportioned tonnages of municipal and commercial/ industrial waste, boroughs are required to identify opportunities to provide new and enhanced treatment and recycling facilities. Policy CC3 of the Core Strategy states that waste management should be primarily dealt with through fuller utilization and safeguarding of existing sites in the Old Oak Common area, however, it also mentions in supporting text that major new developments including White City will need to ensure that development makes provision for managing waste on site and also at the existing Hythe Road Strategic Industrial Location.

6.27 The mix of uses proposed for the OA (retail, market, office, academic, residential, hotel and leisure) will generate a range of mainly non-hazardous, potentially recyclable wastes that could be captured at the source for re-use and recycling, enabling diversion of these waste streams from landfill.

6.28 LBHF has identified in its LDF Background Paper on Waste that additional waste management facilities are required to deal with locally produced waste streams through to 2031 and beyond, and to provide for greater range of waste processing facilities within the borough, including recycling, composting and dealing with food waste.

### Waste Infrastructure Development Opportunities in the OA

#### Demolition, Excavation and Construction Waste

6.29 At the design and planning stage, development in the OA must consider how to meet the principles of sustainable design and construction with respect of the use of materials and management of Construction and demolition waste (CDE): These principles include:

- engaging developers, architects and designers to design out waste at source

- treating waste and reusing it on-site, or together with construction materials, maximise the use of reclaimed materials or construction components with recycled content
- managing CDE waste in line with the waste hierarchy and any removal of waste to be transported as close as possible to the point of production or otherwise transported in its most sustainable manner, as approved by the Council.

#### Using and adapting current waste management arrangements

6.30 Although the WCOA is not a preferred location for waste infrastructure development, there are opportunities to integrate small-scale, localised waste facilities as part of the masterplan development proposals.

6.31 Key opportunities for waste infrastructure development would contribute to creation of local employment opportunities, including the development of a re-use and repair network to extend the life-cycle of unwanted products and the provision of a mini-materials recycling facility (MRF) to sort and bulk up dry-recyclables for reprocessing. Opportunities for anaerobic digestion are not seen as appropriate in the White City OA, but should be explored in relation to the Park Royal opportunity area. Small-scale, individual site opportunities should also be optimised.

6.32 The spaces under the Westway and space created under decking introduced by Westfield as part of future development, should all be considered as preferred locations for these uses. Any uses located under the Westway will have to be balanced and give consideration to the aspirations for improved connectivity and high quality public realm.

#### Non-regulatory and education based approaches.

##### a) Re-Use and Repair Network

The OA is of sufficient size to allow implementation of an on-site re-use strategy, subject to suitability of the material for re-use. The London Re-Use Network, operated by the London Re-use Network (LRN) provides an integrated and strategic ap-

proach to the collection; processing and distribution of unwanted good for re-use and repair throughout London.

6.33 The WRWA and the four constituent Waste Collection Authorities have partnered with LRN and received funding to consolidate the re-use network across the area including LBHF. Additional re-use outlets should be integrated into the main retail and commercial areas to be sited on the development sites east of Wood Lane; spaces below the Hammersmith & City Line viaduct and the Westway might be ideal for a range of repair and refurbishment operations, particularly for office/domestic furniture and waste electrical and electronic equipment. Such spaces may be suitable as depots, hubs and outlets that provide the physical infrastructure necessary (including storage, sorting, training, repair and retailing activities). These operations should also provide employment opportunities for local residents.

##### b) Integrated waste collection and management systems

6.34 To deliver sustainable waste collection and management systems, development in the OA must accord with LBHF's 'Planning Guidance Supplementary Planning Document July 2013'.

6.35 A large opportunity for integrated waste management will be generated by the commercial, retail and industrial waste streams in the OA, i.e. for collection by a private waste contractor or by the local authority if requested by the occupier.

The commercial, retail and industrial waste in the OA is likely to be significant based on the future proposed commercial and retail uses in the OA. Food and packaging waste are likely to be the main waste streams generated by the waste producers within the WCOA. Westfield and Shepherd's Bush Market, both will be giving rise to larger amounts of recyclable packaging waste and food waste. Large amounts of food and domestic waste are likely to be generated by residential and student uses and this could be integrated with other nearby large waste produc-

ers. This could provide for a more cost effective and sustainable way of disposing of certain types of waste for the OA.

Commercial and retail uses in the main development area will give rise to waste, comprising primarily of clean packaging materials, such as cardboard and plastic. These waste streams should be segregated and bulked up locally within the WCOA prior to reprocessing elsewhere.

6.36 Large quantities of food waste are likely to be generated by the Imperial College site, which could be integrated with the nearby HMP Wormwood Scrubs Prison and Hammersmith Hospital, for example.

6.37 HMP Wormwood Scrubs undertakes its own sorting and baling operation, sorting plastics and cardboard for recycling. It also has a medium-term plan to separate food waste for on-site composting and is looking to collaborate with Hammersmith Hospital on waste management. These proposals could be developed further with sites in the WCOA to achieve efficiencies of scale in waste management through collective contracting initiatives or working with other organisations such as local Business Improvement Districts.

6.38 Waste could be collected by a private waste contractor or by the local authority if requested by the occupier. Developers will need to work together with the Council if they wish to consider the potential for an integrated waste management facility to establish a public/private partnership which could deliver an efficient waste management service to collect, receive and sort waste in an environmentally and economically sustainable manner.

Opportunities for management of municipal solid waste (MSW) within the OA would require dialogue with WRWA to ensure issues arising from Authority's Powers of Direction over the Borough's MSW are fully considered and accounted for.

#### c) Green waste and Composting Collection

6.39 Redevelopment of the OA should provide green waste and kitchen waste collection to support a community led composting scheme.

6.40 Community-led composting on a small scale or domestic basis could also be delivered from the collection of kitchen waste. This could be dealt with as part of a small-scale sorting facility set up as a community project if it cannot be integrated or come forward with larger scale commercial opportunities for dealing with food waste.

6.41 Any such scheme that developers would be interested in pursuing would require dialogue with the WRWA to ensure issues arising from Authority's Powers of Direction over the Borough's MSW are fully considered and accounted for and projects could be implemented as feasible.

#### d) Automated Waste Collection Systems

Regeneration of the OA provides an ideal opportunity to incorporate a sustainable and energy-efficient system for the collection of waste and recyclables. This should consider consolidation of efficient mechanisms for collection of waste to reduce vehicle journeys and length, and potentially an automated waste collection system such as Envac (underground vacuum collection of waste) and combine it with collection of business waste. Multiple land ownership would require a co-ordinated approach to look into the feasibility of capital investment and installation of AWCS infrastructure, including a pipeline network and collection station(s). Developers are encouraged to consider the feasibility of such a scheme on their site and work with other landowners to provide a joint approach.

6.42 Such a system could improve the efficiency of on-site collection, transportation of waste, increase recycling rates and improve local environmental quality and street scene by reducing traffic congestion from waste vehicles blocking local roads, the number of vehicle movements required in removing local waste, and in turn, reducing the impact of waste collection vehicles on noise and air quality in the borough. Use of inlet points into a vacuum system also prevents build-up of waste on the streets, which can lead to the creation of fly-tipping hotspots.



6.43 Advantages to developers include a more efficient use of internal space by reducing the amount of space required for wheeled bins and the number of bin changes required, particularly for large commercial premises. Where chutes are provided for the collection of waste, either by vacuum or manually, separate chutes are required for waste and recycling to encourage recycling at source.

#### e) Other Opportunities

Developers should seek out opportunities to capitalise on arrangements already in place, build on existing best practices, and require current occupiers to take a more co-ordinated approach to waste management going forward.

6.44 Spaces on development sites used for servicing areas provide opportunities for local businesses to house equipment such as compactors, balers and shredders. Collection of waste and

recyclables and the use of facilities could be co-ordinated by a local Business Improvement District or Local Enterprise Partnerships as part of collective contracting arrangements for smaller businesses.

#### Land Contamination and Contaminated Waste

Developers must ensure that the subject land is suitable for use and that any risks of contaminated land are identified, assessed and that necessary remediation is carried out to address these risks. This remediation should be sustainable and should not otherwise adversely impact the environment by its implementation. Developers must have regard in particular to LBHF Development Management Local Plan policy DM H7 and amenity policy 4-17 of the Planning Guidance SPD.

6.45 A rich history of industrial development and associated practices within White City has led to the risk of contamination of land, which needs



Figure 6.4: An example of on-site sorting and reuse of construction materials. (Source: Environment Agency 2012)

to be assessed, and if necessary, remediated, prior to redevelopment to ensure it is suitable for use. Land on which industrial practices took place may have become contaminated by activities such as improper chemical storage, handling or disposal as well as accidental chemical leaks or spills. These industries may have also contaminated surrounding properties either by allowing pollutants to enter groundwater and travel to these properties or via down-wind deposition of particulate pollutants from industrial air emissions. Natural sources of contamination also exist such as gas producing organic matter or naturally occurring heavy metals in the soil.

6.46 The entire area occupied by the White City Opportunity Area within LBHF has been designated as a potentially contaminated land site under Part IIA of the Environmental Protection Act (EPA) 1990 due to the probable risks associated with past and present uses of the site. A historical environmental search of the site was undertaken by the Council which details the potential past and present sources of contamination across the OA.

6.47 A myriad of potentially contaminative uses have existed across the whole of the OA including a former brickfield, engineering works, scrap yard, railway lines/sidings, fire fighting apparatus works, foundry, perfumery, metal casting works, dairy, dyeing & cleaning works, as well as works and factories which included chemical and fuel storage.

6.48 Adjacent potentially contaminative uses include a former brickfield (infilled with unknown material) a coal and goods depot. Current on-site potentially contaminative uses include a number of light industrial works.

6.49 Prior to any development commencing, the site will need to be fully assessed and if necessary remediated. Contaminated Land Report 11: Model Procedures for the Management of Land Contamination (Defra 2004) sets out seven phases of remediation that should be followed and should be submitted to and approved in writing before the next phase is undertaken.

## Air Quality

6.50 All applications for development should include a Low Emission Strategy (LES) incorporating an air quality assessment which compares current and future emissions in the area as a result of development.

6.51 The whole of LBHF is designated as an Air Quality Management Area (AQMA) because levels of pollutants exceed the national air quality standards. The Council has produced an Air Quality Action Plan which outlines measures to help reduce emissions, particularly Oxides of Nitrogen (NOx) and small particles (PM10), and to improve local air quality.

6.52 Vehicles using the Westway and West Cross Route are major local sources of these pollutants, but buildings are also responsible for significant amounts of local emissions, mainly from gas boilers. Mitigation measures must be employed in the OA to provide development that is considered at least air quality neutral in accordance with the Mayor's Air Quality Strategy and local Air Quality Action Plan.

6.53 In order to achieve air quality neutral development, it is likely that design solutions and mitigation will be necessary. The GLA provides guidance on how developments can achieve air quality neutral levels of performance in their SPG on Sustainable Design and Construction, including setting acceptable emissions standards for new major developments.

6.54 A submitted LES should consider the feasibility of the following measures, and set out and illustrate those selected for the specific development:

- Locate residential buildings away from busy roads;
- Incorporate significant tree planting and other green landscaping along major roads to act as barriers;
- Use passive heating and cooling building design and use low/ zero carbon technologies;
- Reduce the rate of off-street parking to new dwellings to encourage a low level of car ownership;

- Require 20% of car parking spaces to provide electric vehicle charging facilities to encourage the use of these vehicles;
- Implement 20mph zones and shared surface treatments on certain roads to reduce through traffic; and
- Encourage walking and cycling by improving connectivity through the OA and improving access to public transport.

6.55 As well as minimising the air quality impacts of developments once built and operational, it will also be necessary for the LES to show how the potential emissions of dust and pollution during the demolition and construction process will be minimised. This should be achieved with reference to the GLA's Best Practice Guidance on Controlling Dust and Emissions from Construction and Demolition.

6.56 Exposure to potentially elevated pollution levels will also need to be taken into account in locations where new buildings are planned next to pollution sources such as main roads.

### Noise and Vibration and Environmental Pollution

6.57 Development must be designed and constructed in line with Council policy to adequately control and mitigate against noise and vibration. New noise and vibration sensitive development should be located away from sources of significant noise and vibration, and noisy development should not be introduced into noise sensitive areas unless it can be appropriately mitigated.

6.58 Planning applications should be accompanied by a noise impact assessment prepared in consultation with LBHF and the GLA if referred. This will identify existing and potential sources of noise and vibration, potential impacts and what mitigation measures will be put in place to alleviate the impact.

6.59 A major source of noise and vibration in White City East is from road traffic, particularly from the Westway and the West Cross Route. Also

contributing to noise in the area are the London Underground trains, West London Line trains and aircraft on flight paths. Existing industrial sites currently create noise in the area but these are likely to be discontinued with future regeneration of the area.

6.60 The Shepherd's Bush area is densely populated with mixed residential and commercial uses where noise arises from associated activities and plant equipment, bars, restaurants and places of entertainment. Other typical sources can include sports venues, religious, cultural, educational and other leisure facilities that can be experienced around the opportunity area.

6.61 The proposed land uses in the OA have the potential to generate further noise and vibration from road traffic including delivery vehicles, and the night time economy (bars, restaurants and other cultural facilities). Construction and demolition phases are also able to create a lot of additional noise which needs to be appropriately mitigated.

6.62 In accordance with National and European legislation, DEFRA is currently implementing a requirement to prepare Noise Action Plans (NAPs) that address and improve noise within the noisiest areas. Given the scale of the proposed development, its location being bound by major roads and the likely impact on road traffic noise associated with the development, the OA is likely to be included within the NAP. Applicants will need to work with the Highway Authority and Environmental Health Departments to ensure that development proposals comply with the requirements of the NAP.



### Sustainable Water Management and Flood Risk

6.63 New development in the OA must incorporate measures to reduce water consumption, re-utilise rainfall runoff and enable appropriate infrastructure to be constructed to address the growing challenges of water and sewerage management in the area. Developers should incorporate measures to:

- maximise sustainable urban drainage systems to reduce surface water flooding
- Any peak combined foul and surface water flows entering into a combined sewer must be matched or reduced to current flows.
- Install dual water systems and use grey water systems where possible
- Install green and brown roofs wherever possible to reduce rainwater runoff and minimise heat gain in buildings
- reduce consumption of water and energy resources
- employ water conservation techniques
- Protect vulnerable development (i.e. basement rooms) from flooding by incorporating appropriate measures such as waterproof construction techniques, pumps and non-return valves and provision of safe access and egress.
- Ensure that adaptation measures are in place in development susceptible to flooding.

6.64 The increasing population across London is putting more demands on water supplies and sewerage infrastructure whilst climate change through this century is predicted to add to these pressures in several ways. Hotter summers lead to increased demand for water. More intense storms make capturing rain for water supplies more difficult and increase the risk of flooding. Increased temperatures can also affect water quality in rivers and waterways.

6.65 London Plan policies 5.12 'Flood Risk Management', 5.13 'Sustainable drainage', 5.14 'Water Quality and Wastewater Infrastructure' and 5.15 'Water Use and Supplies' seek to protect current water levels, promote sustainable urban drain-

age systems, the abstraction and use of groundwater and to protect and conserve water supplies and resources. In addition, Core Strategy policy CC2 'Water and Flooding' expects all development to minimise current and future flood risk, including from surface water run-off.

6.66 Where large areas of decking, hard-standing or impermeable surfaces are required, surface water should be managed as close to its source as possible, having regard in particular to LBHF Development Management Local Plan policy DM H3 and sustainability policy 2 of the Planning Guidance SPD. Numerous SUDs measures must be implemented across the OA, including:

- Storing rainwater for later use;
- Integrating greens space, soft landscaping and planting which are able to cope with extreme weather conditions to reduce the impact of overheating, provide shade and attenuate stormwater flows;
- Using permeable and semi-permeable surface materials for pedestrian areas, pavements, driveways and highways;
- Integrating vegetated swales, basins, drainage channels, infiltration trenches and filter drains, retention ponds, soakaways, wetlands and rain gardens;
- Incorporate public and private gardens as well as green corridors (with native and indigenous planting);
- Including green and brown roofs and walls in building designs; and
- Installing attenuation tanks.

6.67 The WCOA currently consists of large areas of impermeable surfaces and hard standing due to the nature of its current uses. Redevelopment of the area provides the opportunity to significantly reduce the amount of water run-off through maximising the use of SUDs.

6.68 Development should aim to reduce the volume of the undeveloped site surface water runoff at peak times to greenfield run-off rates or better. Where possible, development should aim to achieve 100% attenuation or at the least 50% attenuation on site, ensuring that the surface

water run-off is managed as close to its source as possible, in accordance with the drainage hierarchy in London Plan policy 5.13. SUDs must be incorporated into the design of buildings and the public realm wherever practical.

6.69 The planned White City Green provides a particularly good location for implementation of SUDs on a strategic scale, while smaller private open spaces should be encouraged to incorporate soft landscaping and drainage and incorporating smaller scale water drainage channels and soakaways.

6.70 New developments should incorporate appropriate measures having regard in particular to LBHF Core Strategy Policy CC2, Development Management Local Plan policy DM H3 and sustainability policies in the Planning Guidance SPD), including:

- Any peak combined foul and surface water flows entering into a combined sewer must be matched or reduced in comparison with existing flows entering the Counters Creek sewer system.
- Employ suitable SUDs techniques to manage surface water run off as close to its source as possible in line with drainage hierarchy set out in Policy 5.13 'Sustainable drainage' in the London Plan.
- Water supplies are protected and conserved by minimising use of mains water and encouraging where appropriate the installation of rainwater harvesting and dual potable and grey water systems (London Plan policy 5.15 Water Use and Supplies).
- Green roofs are installed wherever possible to help attenuate rainwater runoff (London Plan policy 5.11 Green Roofs)

6.71 The WCOA is outside the 1 in 1000 year flood risk area for tidal flooding and therefore flood risk from the River Thames is particularly low. The south-western corner of the OA is on the fringes of the tidal flood risk zone 3, as identified on the Environment Agency map but is well protected from tidal flood risk by the Thames Barrier and river wall defences.

6.72 The WCOA sits within a densely built up part of London which has progressively developed over the past 200 years. This has resulted in virtually all the natural water and drainage systems being removed from the area, which is now served by a system of combined sewers that take a mix of foul water.

6.73 Flooding from surface water and the combined sewer network (owned and operated by Thames Water) in particular, the Counters Creek sewer, pose the greatest risks of flooding in the OA and in West London. Counters Creek sewer serves a vast catchment area and, during extreme rainfall events it can reach capacity and cause water to back up and flood properties, particularly at basement level.

6.74 Thames Water owns and maintains the combined sewer network. Surface water drains from roads and other impermeable surfaces, with large developments often directing large amounts of rainwater runoff into the sewers. Thames Water's sewer flooding records indicate that there are high numbers of properties in the White City area, both within LBHF and RBKC which have experienced flooding during intense storms such as those experienced in 2007.

6.75 Some parts of the WCOA may be more susceptible to ponding of surface water and flooding following intense rainfall and also sewer flooding. Given the surface water runoff risk associated with the area and the limited capacity of the Counters Creek sewer, a Flood Risk Assessment (FRA) should still be submitted with any planning application in the OA, and any FRA should focus on assessing and managing flooding from intense rainfall and sewer flooding.

6.76 Thames Water is currently bidding to Ofwat seeking funding for improvements to the capacity of the Counters Creek combined sewer infrastructure. This project is called the Counters Creek Sewer Alleviation Scheme and if successful the agreement would allow construction to commence in 2014 with completion likely in 2018. Thames Water are also investigating the potential benefits that sustainable drainage solutions could also provide in reducing the existing problems.

6.77 Thames Water will require proposed flows of foul and surface water into the combined sewer system to be either matched or reduced in comparison with existing flows. As the council requires significant improvement in surface water run off rates (at least a 50% reduction compared to pre-development conditions), if foul flows are proposed to be increased, then additional storm water attenuation would be required to lower the risk of the Counters Creek sewer flooding (see below).

### Water Conservation

6.78 Climate change is expected to lead to changes in rainfall patterns as well as potential increases in demand for water. Developments must therefore incorporate water saving design measures and equipment to reduce the levels of water consumption. Ways of achieving this can include rainwater harvesting, water butts, aerated and spray taps, low-flow and dual flush toilets, vacuum drainage systems and waterless urinals.

6.79 London experiences low levels of rainfall compared to the rest of the country. As it has a high population, this means that there is less water available per person than in many other places, including cities in hotter and drier climates. As the number of households continues to grow in London, so too will demand for water supplies.

6.80 To avoid running out of water, damaging the environment by abstracting too much water from rivers or imposing drought restrictions it is necessary to balance London's water supply and demand. Although most of the time there is sufficient water in local rivers such as the Thames and groundwater resources, supplies can become limited during prolonged periods of low rainfall.

### Ecology and Biodiversity

6.81 All major development applications in the OA must have regard to LBHF DM Local Plan policy DM E3 and policies 14- 22 of the Planning Guidance SPD.

All major development applications must be accompanied by an Ecological Impact Assessment, including an ecological survey and ecological enhancement strategy. An ecological management

plan will also be required through any Section 106 agreement. Development will be expected to protect and enhance ecology and biodiversity within and adjacent to the OA with no net loss of species or habitat by:

- Maintaining and enhance the sites adjacent to Central Line Cutting and rear of White City Station;
- Maintaining and enhancing Shepherds Bush Green and Hammersmith Park;
- Preserving and enhancing the Green Corridor along the Western boundary of the OA to encourage further habitat migration, particularly with other habitats north of the OA in Wormwood Scrubs and Little Wormwood Scrubs.
- Creating further habitat through the provision of the White City Green and other smaller areas of landscaping, tree planting and open space that is connected to form a network.
- Creating green and brown roofs, walls and roof gardens to encourage further biodiversity and habitats, facilitate migration, improve insulation, reduce the impact of the urban heat island effect, regulate building temperatures, attenuate stormwater flows and minimise light pollution to areas sensitive to bats and other wildlife.
- Ensuring no net loss of SINC, Nature Conservation Areas and Green Corridors.
- Minimising light pollution to areas sensitive to bats and other wildlife.

6.82 There are four non-statutory Sites of Importance for Nature Conservation (SINCs) within the OA as identified in the London Plan; two of which are larger areas of open space, including Hammersmith Park which has Grade II Borough-wide importance and Shepherd's Bush Green which is an Area of Local Importance in the Borough Core Strategy. A section along the Central Line Cutting and area behind White City Station are the two smaller pockets of semi-natural space that is designated as SINC and known as Railside Habitat in the Core Strategy which has Grade I Borough Importance. A Green Corridor runs along the West London Line on the eastern edge of the OA and



links to the Statutory SINC site and site of Grade I Borough Importance at Wormwood Scrubs and the non-statutory Little Wormwood Scrubs.

6.83 There are a number of species that have been seen in areas near to the OA. These include various plant species, bat species, species of bird, the common toad *bufo bufo*, the common lizard *Lacerta vipera* and the stag beetle *Lucanus cervus* as well as various other butterfly and moth species.

6.84 Development will need to protect existing substantive areas of ecological habitat as specified within the Core Strategy unless it is found to be impossible to protect a small nature conservation area at a certain location. This would only be possible if the provision can be made for replacement conservation interest of equal or greater value elsewhere on site.

6.85 Due to its location, part of the nature conservation area along the Central Line cutting may be overshadowed if any new or widened bridges are required to access the new development east of Wood Lane and east of the Central Line cutting. It is imperative that in addition to the space to be provided as open space for recreational purposes, that additional space is provided to accommodate the re-provision of SINC area affected by any decking.







# 7

## Delivery and Implementation Strategy

- Individual developments must make appropriate contributions to infrastructure provision whether through direct provision or by means of financial contributions.
- Housing developments must also make appropriate provision for affordable housing, subject to viability.
- The financial contributions will be collected initially by S106 obligations. When the borough Community Infrastructure Levy (CIL) is introduced developments will contribute through a combination of the CIL or S106 obligations for different infrastructure types or projects.



## Introduction

7.1 The LBHF Core Strategy policy for White City East, says that “all separate sites must individually contribute proportionally to achievement of the objectives and policies for the area; and, to the overall provision of social and physical infrastructure, affordable housing, and any necessary improvements to the transport infrastructure that are necessary to enable the area to be developed to its potential.”

7.2 The Council and GLA wish to provide as much certainty as possible concerning the infrastructure needed to support development in WCOA and the extent to which developers should be expected to contribute. Therefore, a Development Infrastructure Funding Study (DIFS) and Strategic Transport Study were commissioned to identify the estimated costs of infrastructure and to advise on the viability of possible developer funding. The preceding chapters of the OAPF have highlighted the most significant physical, social and economic infrastructure that will be needed or is desirable over 20 years to support development in the OA and help secure regeneration benefits in the local and wider community.

7.3 The Council has been working to introduce a Community Infrastructure Levy (CIL) from spring 2014 which is aimed at setting charges on development to help fund much of the infrastructure needed to support development in the whole borough (including WCOA). The intention has been that the DIFS and CIL will help provide a clear and consistent approach to development contributions in WCOA. The Mayor of London has already introduced a CIL for all new development in London (except development for health or education facilities) as a contribution towards the funding of Crossrail and the rate is £50 per sq.m Hammersmith & Fulham.

7.4 The Council and GLA’s approach is in accordance with the National Planning Policy Framework (NPPF) which states (Paragraph: 153) that “Supplementary planning documents [SPDs] should be used where they can help applicants make successful applications or aid infrastructure delivery..”, However, the NPPF adds that SPDs “... should not be used to add unnecessarily to the

financial burdens on development”. In addition, it states (Paragraph: 173) “To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.”

7.5 The DIFS has examined the extent to which development may be expected to both provide affordable housing and contribute to infrastructure costs without adversely affecting development viability. It has concluded that, given the current economic circumstances and without any grant, residential development could not meet the 40% affordable housing target set out in LBHF Core Strategy policy and make sufficient contribution to infrastructure costs needed to support the development. However, at 15% affordable housing development the DIFS would expect to fund most essential infrastructure costs, and it suggests that development could contribute at the rates shown in Figure 7.2 (in addition to the Mayor’s CIL).

7.6 The borough CIL must be set through a process which is separate from this OAPF. However, emerging viability evidence is so far reaching similar findings concerning the level of affordable housing that can be viably provided by development while making a satisfactory contribution to infrastructure costs.

7.7 The Council and GLA will continue to seek to secure the maximum reasonable amount of affordable housing having regard to any improvement in economic conditions and the possibility of any external funding becoming available. The target is still to achieve 40% affordable housing in line with Core Strategy policy, strategic site WCOA, 1 White City East.

### Development Infrastructure Funding study (DIFS)

7.8 The consultants AECOM, Drivers Jonas Deloitte and Davis Langdon carried out the DIFS on behalf of the GLA in partnership with

TfL, Hammersmith & Fulham Council, and in consultation with the major landowners in White City East. The full DIFS report is provided as a Technical Appendix to this planning framework at appendix TA3. The Strategic Transport Study that has informed the DIFS is also available at appendix 2.

### Infrastructure

7.9 The DIFS provides an analysis of what infrastructure will be required over a period of up to 20 years to support the level of development envisaged in White City East. Infrastructure requirements were identified and prioritised based on an assessment of the need for transport, health, education, open space and other areas arising from future growth in housing and jobs. The DIFS did not assess the need for relatively minor financial contributions that individual developments might need to make.

7.10 The study examined the extent to which certain local infrastructure items could be apportioned to individual sites or funded jointly by all developments, as shown in Figure 7.1. A summary of the individual items within each category is provided in table 4.3 of the DIFS and a

more comprehensive list is provided in its Appendix B.

7.11 The DIFS includes an indication of phasing based on current understanding of the likely 20 year development trajectory in the area. It must be emphasised that the infrastructure needs and costs are based on current day assessments of the expected mix and pace of development. As development proceeds some infrastructure needs could be redefined or provided in different ways than is currently assumed.

#### *Viability testing and contribution to infrastructure costs and affordable housing*

7.12 The DIFS carried out financial viability appraisals to determine what level of contribution to infrastructure costs could be fairly expected from development without making most development unviable. In summary, it concluded:

- Assuming that development funds the full cost of standard site specific and exceptional site specific costs shown in table 7.1, mixed use development as a whole would not be viable enough to make a reasonable contribution to essential infrastructure costs and provide 40% affordable housing without grant.

Type of infrastructure and priority category	Capital and ongoing costs	Method of funding
Standard site specific development cost e.g.: sustainable urban drainage, broadband/wifi, electricity sub-stations, combined heat and power and decentralised energy network, on site highways, electric car charging points, CCTV.	£83.9m	To be funded as part of individual development costs.
Exceptional site specific development costs e.g.: Projects needed to make sites available for development: service diversions, demolition, decontamination, decked area, access improvements (especially from Wood Lane)	£77.1m	To be funded as part of individual development costs. Some access costs apportioned between two or three sites.
Essential mitigation: See Figure 7.2 for a list.	£56.9m	Jointly funded by S106 obligations and/or CIL charge (when introduced), supplemented by other sources.
Desirable and policy high priority: Projects that are not assessed as essential to mitigate development in White City East as a whole. They may be considered necessary for individual site proposals. See DIFS Appendix B for current list.	£55.8m	If required, would be funded by S106 obligations and/or CIL charge (when introduced), supplemented by other sources.
Total	£273.7	

Figure 7.1: Priorities and general types of infrastructure

- At 15% affordable housing, development as a whole that had not already been approved at the time of the study should be sufficiently viable to contribute towards the cost of most essential infrastructure. The total contribution, taking account of those approved schemes is estimated by the DIFS at £50.8M against total essential infrastructure costs of £56.9M.
- The study recognised that most development in the OA will take place in phases over a very long period. Therefore, the possibility of improved economic conditions affecting property values over the development period could improve viability in the longer term and increase the potential contribution that developments could make to affordable housing and other infrastructure costs.

7.13 The DIFS viability assessment was carried out on the basis of general assumptions and not actual detailed schemes. At this stage, the funding gap of £6M is indicative and many assumptions are likely to change as actual schemes come forward and as infrastructure projects are defined and costed in more detail, and economic conditions change. To the extent that a gap remains, or there is a gap in particular development periods, it could be addressed by securing other sources of funding from Government Departments (e.g. for education) or other bodies (e.g. TfL) or by considering other approaches to funding infrastructure. In addition, infrastructure may need to be prioritised further where possible.

7.14 The DIFS did not assess a rate for Tier 1 retail (type of retail provided for in the Westfield centre) as the proposed Westfield extension had been approved with a S106 Agreement for funding infrastructure. The Council and GLA would expect any alterations or additional Tier 1 retail floorspace to make a contribution to infrastructure at a level that is consistent with the existing S106 contribution.

**Way forward for funding infrastructure**

In addition to meeting its own enabling and site specific infrastructure costs, each development must contribute towards the cost of essential

infrastructure as defined in the OAPF and DIFS, and should contribute to the cost of desirable or any other infrastructure where appropriate. The Council will assess the extent of the development contribution that should be made by means of S106 obligations having regard, inter alia, to the DIFS recommended rates set out in Figure 7.2, the Mayors CIL, any borough CIL that will be levied, and development viability. In other words,

DIFS proposed charges	Tariff (per sq.m of GIA)
Private residential	£100
Student accomodation	£100
Retail (A1-5) tier 2: i.e. local, stand-alone, street frontage units at the base of mixed-use residential or commercial buildings.	£75
Office (B1)	£40

Figure 7.2: WCOA DIFS proposed tariffs

the overall ‘planning contributions’ through CIL and S106 will be considered before and after the borough CIL is introduced to ensure sufficient funding is available to deliver the DIFS recommended infrastructure. In the event of any change to an approved scheme which does not materially reduce the infrastructure requirement, the Council will also have regard to the infrastructure funding that was previously agreed with a view to at least maintaining that level of funding.

The Council will expect any developer to produce a detailed viability assessment at the time of making a planning application to enable an effective negotiation on the maximum quantity and mix of affordable housing that can be achieved and the contribution towards infrastructure costs. If appropriate, the Council will require viability reviews at stages in the development period to establish the scope for increasing the amount of affordable housing and infrastructure contribution if future economic and market conditions improve.

7.15 The normal way by which developments in the UK have contributed to the cost of infrastructure is by S106 obligations, which have



Report Reference	Category	Scheme	Capital Costs (£m)	Ongoing Costs (per annum)	Ongoing costs time period	Total ongoing Cost	Grand Total Cost	Trigger Year
1	Water, Waste & Energy	New 132 / 11kV Primary Substation	£6,000,000	N/A			£6,000,000	2015
2	Transport	Subway from the IC site to the Westway Leisure Centre (Linked to project 30)	£2,000,000	N/A			£2,000,000	2014
3	Transport	Shepherd's Bush Overground Station	£3,900,000	N/A			£3,900,000	2015
4	Transport	White City public Transport Improvements	£5,350,000	N/A			£5,350,000	2021
5	Transport	White City off-site highway and junction improvements	£6,220,000	N/A			£6,220,000	2015
6	Transport	Bridge south of the Hammersmith & City line viaduct (linked to project 31)	£3,500,000	N/A			£3,500,000	2015
7	Transport	Area Wide Travel Plan		£40,000	15	£600,000	£600,000	2026
8	Education	Nursery Provision		£60,000	15	£900,000	£900,000	2032
9	Education	White City Primary School provision	£5,000,000	N/A			£5,000,000	2021
10	Education	Secondary School	£5,000,000	N/A			£5,000,000	2021
11	Health	White City East Healthcare	£1,640,000	N/A			£1,640,000	2021
12	Leisure & Green Infrastructure	White City Green	£3,540,000	£15,000	10	£150,000	£3,690,000	2022
13	Transport	Mayor's Cycle Hire Scheme	£800,000	N/A			£800,000	2014-2022
14	Employment, Training & Economy	Construction and end user training / employment		£314,117	20	£6,282,334	£6,282,334	2013
15	Employment, Training & economy	White City Recruitment and Job Shop	£1,500,000	£150,000	19	£2,850,000	£4,350,000	2013
<b>Acquisition Costs</b>								
30	Transport	Acquisition costs for underpass beneath West London Line (Linked to Project 2)	£500,000				£500,000	2014
31	Transport	Acquisition Costs for bridge south of the Hammersmith & City Line viaduct (Linked to project 6)	£1,200,000				£1,200,000	2015
	<b>Total</b>		<b>£46,150,000</b>				<b>£56,932,334</b>	

Figure 7.3: Essential mitigation infrastructure

sometimes involved pooling of contributions from more than one development. However, the Government intends to scale down the scope of S106 obligations and has given local planning authorities the power to introduce a Community Infrastructure Levy (CIL) as well. The Council is currently preparing to introduce a borough-wide Community Infrastructure Levy (CIL) from spring 2014. The income received would be expected to be a major source of funding for OA infrastructure in the future. However, additional future S106 contributions may be needed for any infrastructure that the Council does not intend to fund from CIL. The council, as part of its CIL charge-setting process, will seek to provide as much certainty and clarity as it can on the potential funding.

7.16 In considering future development proposals the Council and Mayor must have regard to achieving the policies of the Development Plan. The financial contributions sought from developments towards infrastructure costs (via CIL and S106) should enable development of strategic housing and employment sites like White City East by contributing to the provision of necessary infrastructure without undermining viability. A satisfactory balance must be struck between the extent of contributions to infrastructure and viability.

7.17 Similarly, the provision of affordable housing is a key part of the Development Plan. The DIFS and individual schemes approved recently have shown that present day economic conditions are not favourable for achieving the policy target for affordable housing (40%) in the absence of grant. Moreover, requiring the full policy levels of affordable housing would be likely to lead to schemes being unviable and/or unable to make any infrastructure contribution. In that case, schemes could not be approved or would not proceed. Therefore, in the interests of the Development Plan, the Council and GLA will seek to maximise affordable housing provision over time but must also have regard to the need to seek to achieve the development of strategic sites which are vital to achieving the London Plan and LBHF Core Strategy objectives. The extent to which developments may be approved with particular levels of affordable housing or infrastructure contribution will depend on a proper planning assessment at the time based

on consideration of all relevant matters.

7.18 Establishing the financial contribution that development should make without undermining viability is not straightforward in White City East, where individual developments are expected to take place over very long periods. The DIFS has shown how the viability of development in White City East could change over time but there can be no certainty over future economic conditions. In negotiating recent S106 Agreements in the area, the Council has sought to include review clauses, particularly with a view to increasing affordable housing in the future, if possible.

7.19 Until the borough Community Infrastructure Levy is introduced (anticipated in spring 2014), development in White City East will be expected to make contributions to infrastructure costs through S106 obligations (together with the Mayor's CIL). Developments approved after CIL is in force, will contribute to infrastructure costs in two ways:

- They will pay the appropriate CIL rates for the area (see the emerging proposed charges at [www.lbhf.gov.uk/cil](http://www.lbhf.gov.uk/cil)). The Council will make clear which items of infrastructure will be funded using such CIL receipts in its Regulation 123 list.
- For other infrastructure, not to be funded by CIL (i.e. not in the Regulation 123 list), S106 contributions will be sought. In determining the extent of these contributions the Council will have regard (inter alia) to the DIFS study, development viability appraisals submitted at the time, the prevailing CIL charges, the achievement of affordable housing, and other relevant factors (as discussed above).

### **Managing and implementing delivery of the framework**

7.20 In order to ensure the success of the OA, a Strategy Board for the development of the area will be established by Hammersmith & Fulham Council, the GLA and the major developers. Such a Board (with input from the main infrastructure providers and local community) could review and advise the Council on the prioritisation of infrastructure projects, the allocation of funds available from S106 obligations and a future borough CIL.

# A1

## General appendices

A1 – Acronyms & glossary

A2 – Bibliography



## A1. Acronyms and Glossary

°C	Degrees Celsius
3D	Three-dimensional
A	Appendix
AD	Anaerobic Digestion
AECB	Sustainable Building Association
AOD	Above Ordnance Datum
BBC	British Broadcasting Corporation
BERR	Department for Business, Enterprise and Regulatory Reform
BME	Black and minority ethnic
BMW	Biodegradable Municipal Solid Waste
BREEAM	BRE Environmental Assessment Method
CABE	Commission for Architecture and Built Environment
CAD	Conservation Area Directory
CAMS	Catchment Abstraction Management Strategies
CAZ	Central Activities Zone
CCHP	Combined Cooling and Heat Power (distribution networks)
CDE	Construction, Demolition and Excavation
CHP	Combined Heating and Power (distribution networks)
CCZ	Congestion Charging Zone
CHP	Combined Heat and Power
C/I	Commercial and Industrial waste
CIRIA	Construction Industry Research and Information Association
CLG	Department of Communities and Local Government
CO <sup>2</sup>	Carbon Dioxide
CSH	Code for Sustainable Homes
DCLG	Department of Communities & Local Government
DE	Decentralised Energy
DECC	Department of Energy and Climate Change
DCFS	Department for Children, Families and Schools

DEFRA	Department of Environment Food and Rural Affairs
DfL	Design for London
DHN	District Heating Network
DHW	Domestic Hot Water
DIFs	Development Infrastructure Funding Study
DIY	Do-it-yourself
DNO	Distribution Network Operator
DPD	Development Plan Document
DRLP	Draft Replacement London Plan
EfW	Energy from Waste
EH	English Heritage
EiP	Examination in Public
ESCO	Energy Service Company
ETF	Environmental Transformation Fund
EU	European Union
FRA	Flood Risk Assessment
GB	Great Britain
GLA	Greater London Authority
GP	General Practitioner
HA	Hectares
HRH	Habitable Rooms per Hectare
HWS	Hot Water Service
ICE	Institution of Civil Engineers
ICL	Imperial College London
IDNO	Independent Distribution Network Operator
IMD	Index of Multiple of Deprivation
KV	Kilovolts
LB	London Borough
LBHF	London Borough of Hammersmith & Fulham
LCN	London Cycle Network
LDA	London Development Agency
LDF	Local Development Framework
LTS	London Transportation Studies
LU	London Underground
LUL	London Underground Limited
LV	Low Voltage

LVMF	London View Management Framework
LWaRB	London Waste & Recycling Board
M	Metre
M <sup>2</sup>	Metres squared
M <sup>3</sup>	Metres cubed
MJ	Mega joule
MRF	Materials Recycling Facility
mm	Millimetres
M&S	Marks and Spencer
MW	Megawatt
MWe	Megawatt Electric
MWH	Megawatt Hour
MSW	Municipal Solid Waste
NHS	National Health Service
NVQ	National Vocational Qualification
OA	Opportunity Area
OAPF	Opportunity Area Planning Framework
OAWAT	Office of Water Services
p.a.	Per Annum
PROA	Park Royal Opportunity Area
PPS	Planning Policy Statement
PRS	Pressure Reducing Station
PTAL	Public Transport Accessibility Level
QPR	Queens Park Rangers Football Club
QVA	Qualitative Visual Assessment
RBKC	Royal Borough of Kensington and Chelsea
RCV	Refuse Collection Vehicles
RIBA	Royal Institute of British Architects
ROC	Renewable Obligation Certificate
RPB	Regional Planning Body
RSS	Regional Spatial Strategy
S106	Section 106
SDS	Sustainable Drainage System
SEL	Strategic Employment Land
SFRA	Strategic Flood Risk Assessment
SHMA	Strategic Housing Market Assessment
SIL	Strategic Industrial Location

SMP	Shoreline Management Plan
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
SPV	Special Purpose Vehicle
SME	Small and Medium Enterprises
SRDF	Sub Regional Development Framework
SRN	Strategic Road Network
SUDS	Sustainable Urban Drainage System
TA	Territorial Army
TA	Transport Assessment
TER	Target Emissions Rate
TfL	Transport for London
TH	Treasury Holdings
TLRN	Transport for London Road Network
tpa	Tonnes per annum
tph	Trains per hour
TRCCG	Three Regions Climate Change Group
UDP	Unitary Development Plan
UHI	Urban Heat Island
UK	United Kingdom
UDP	Unitary Development Plan
USG	United States Government
WCOA	White City Opportunity Area
WCOAPF	White City Opportunity Area Planning Framework
WEZ	Western Extension Zone
WLL	West London Line
WHS	World Heritage Site
WRAP	Waste and Resource Action Programme
WRWA	Western Riverside Waste Authority

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