# OLD OAK & PARK ROYAL

**OPPORTUNITY AREA PLANNING FRAMEWORK** DRAFT FOR CONSULTATION 27 FEBRUARY 2015

MAYOR OF LONDON

# INFORMATION



**Published by**
Greater London Authority
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Figure 1: Old Oak & Park Royal Opportunity Areas boundary

# MAYOR'S FOREWORD

**Boris Johnson**
Mayor of London

In February 2015, London's population reached a new high of 8.6m people, exceeding the previous record set back in 1939. Our city's population is set to continue expand, with current estimates predicting that its population will reach 11 million by 2050. Housing provision is perhaps the biggest issue that London will face over the coming decades.

London's growing population will need to be supported by an expanded employment offer. London has continued to consolidate and strengthen its position as the globe's leading business centre. In order to retain the capital's position, it is critical that we enable London to grow and expand its employment base and skills and diversify into new growing economic sectors.

Old Oak and Park Royal will play perhaps the most crucial role of any regeneration area in London over the next 20 to 30 years in delivering these much needed new homes and jobs.

Thanks to the colossal investment being made in High Speed 2 and Crossrail, the area is set to be transformed through the creation of a transport super-hub at Old Oak Common. The station, which will be the size of London Waterloo, will have unprecedented connections – just 10 minutes from Central London and Heathrow Airport and 40 minutes from Birmingham.

This Opportunity Area Planning Framework sets out a proactive strategy to capitalise on this step change in transport accessibility to redevelop Old Oak and regenerate Park Royal. Old Oak will provide 24,000 homes and 55,000 jobs while Park Royal, the UK's largest industrial estate and a vital cog in the London economy, will continue to be protected and enhanced to provide an additional 1,500 homes and 10,000 jobs. Development on the scale that we will see at Old Oak and Park Royal will of course have far reaching benefits, providing a major regeneration boost to surrounding communities. The Old Oak and Park Royal Development Corporation will work tirelessly to ensure that the benefits are secured and shared with local residents and business, existing and future. It is essential that we plan sensibly for this growth and that we do it now. There is no time to waste.

I am therefore delighted to introduce this document, which forms an important first step in laying the foundations for the Local Plan that will set out the blueprint for years to come. I am hugely excited about the future of this area, which will do so much to address London's growth needs, has enormous potential to implement new state of art and sustainable technologies and will surely be one of London's most exciting areas in which to live, work and play.

I look forward to receiving and reviewing your comments.

# CONSULTATION INFORMATION

**Overview**
This is a draft Opportunity Area Planning Framework (OAPF) for the Old Oak Common and Park Royal Opportunity Areas. This framework provides guidance for the development of the area, which once adopted would carry considerable weight when assessing planning applications. This is your opportunity to shape the draft framework prior to its adoption and point out aspects of the framework that you agree with, disagree with, or issues that you feel should be addressed. Throughout the document, we ask specific questions; however, we would appreciate your thoughts and views on all elements of the OAPF.

**When to respond**
Public consultation on this framework runs from

**27 February to 5pm 14 April 2015**

**How to respond**

Via email to: oldoakparkroyal@london.gov.uk

Via post to:

Boris Johnson,
Mayor of London
(Draft Old Oak & Park Royal Opportunity Area Planning Framework)
Greater London Authority
Post Point 18
City Hall
Queens Walk,
London SE1 2AA

In your responses please make it clear which page number, paragraph, diagram, image or question your comment relates to. Please ensure that you response is submitted by no later than 5pm.

When responding, please provide us with either your email or postal address so that we are able to contact you to update you on the progression of the framework.

Public drop-in sessions will be taking place on the below days to enable local people to discuss proposals and provide their views.

- Tuesday 10 March, 3:30pm to 8pm – All Souls Church, Harlesden, NW10 4UJ
- Wednesday 11 March, 8:30am to 10:30am – Holiday Inn Express, North Acton, W3 6UP
- Saturday 14 March – 10am to 3pm – Linford Christie Outdoor Sports Centre, Artillery Way, W12 0DF

Paper copies are available upon request by contacting either of the addresses above. Paper copies of the OAPF are also available to view during normal office hours at the following locations:
- Harlesden Library, NW10 8SE;
- Old Oak Community Centre, Braybook Street, W12 0AP;
- City Hall, Queens Walk, London, SE1 2AA

**How to find out more**

Visit: www.london.gov.uk/oldoakandparkroyal

Call: 020 7983 5552

**What happens next?**
Once the consultation has closed, the GLA will consider all comments received as part of the consultation and will make revisions where appropriate. Prior to adopting the framework, we will write to everyone that has commented on the framework and inform respondents of where on the GLA's website to view:
- all comments received as part of the consultation;
- a statement in response to the comments;
- a version of the framework highlighting the changes made as a result of the consultation; and
- a final version of the OAPF.

# SUPPORTING DOCUMENTS

The OAPF is supported by the following documents. These documents have been used to inform the content of this planning framework:

**Strategic Environmental Assessment Screening (SEA)**

The SEA fulfils the requirements for a SEA screening in a manner that incorporates the requirements of the European Union's SEA Directive (2001/42/EU) and the transposing UK Regulations.

**Integrated Impact Assessment (IIA)**

The IIA fulfils the requirements for Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) (in a manner that incorporates the requirements of the European Union's SEA Directive (2001/42/EU) and the transposing UK Regulations). The approach also fulfils the requirements for Health Impact Assessment, Equalities Impact Assessment and Community Safety Impact Assessment. This approach avoids the need to undertake and report on separate assessments, seeks to reduce any duplication of assessment work and benefits from a shared understanding of the policies.

**Habitats Regulations Assessment Screening (HRA)**

The Conservation of Habitats and Species Regulations 2010 implements the European Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (known as the 'Habitats Directive') in England and Wales. This Directive requires the assessment of plans and projects for their potential to effect sites of European nature conservation importance.

**Community Charter**

A Community Charter is currently being developed with local communities groups to demonstrate the Old Oak and Park Royal Mayoral Development Corporation's (OPDC)'s commitment to meaningful and transparent community engagement that will help to shape the regeneration of Old Oak and protection and regeneration of Park Royal.

The Charter's role is to clearly set out when, how and with whom community engagement will be carried out over the coming years. It is a critical document to help engage with existing and future communities. It aspires to foster a participatory approach to ensure local people are empowered to directly influence the development of planning policy and the future of the area.

**Transport Study**

The strategic transport study provides a high level evidence base and appraisal of proposed transport measures to support the growth aspirations at Old Oak and Park Royal. Whilst the Study identifies a strategic package of complementary measures, responding to a series of major proposed transport infrastructure schemes, including HS2 and Crossrail, it does not provide detail on specific schemes. This allows flexibility to be incorporated into plans and recognises that the proposals are still in the early stages of development and that they will be refined as the proposals for Old Oak and Park Royal take shape. Additional analysis will be undertaken and more detailed transport measures identified as the Opportunity Area is taken forward.

**Park Royal Atlas**

The Park Royal Atlas presents a detailed overview of the businesses located with Park Royal in late 2013 / early 2014. It records the employment activities and analyses business activities in terms of their sector, size, space typologies, clustering and supply chains. The Park Royal Atlas is informing the production of an Employment Land Review, which is currently being undertaken by the GLA.

# CONTENTS

Figure 2: View of Old Oak & Park Royal looking west

# 1. INTRODUCTION

# DOCUMENT STATUS

## Legal Status

1.1 This draft Opportunity Area Planning Framework (OAPF) provides supplementary detail to the planning policies contained within Mayor of London's Further Alterations to the London Plan (2014) in the form of Supplementary Planning Guidance (hereafter referred to as SPG). This OAPF should be read in conjunction with the Mayor's Further Alterations to the London Plan. Once the Further Alterations the London Plan has been adopted by the Mayor, it is proposed that this OAPF would be adopted as SPG to this new London Plan. It is anticipated that the Further Alteration to the London Plan will be adopted in March 2015.

1.2 This OAPF has been prepared in accordance with the Greater London Authority Acts 1999 and 2007, the National Planning Policy Framework and National Planning Guidance.

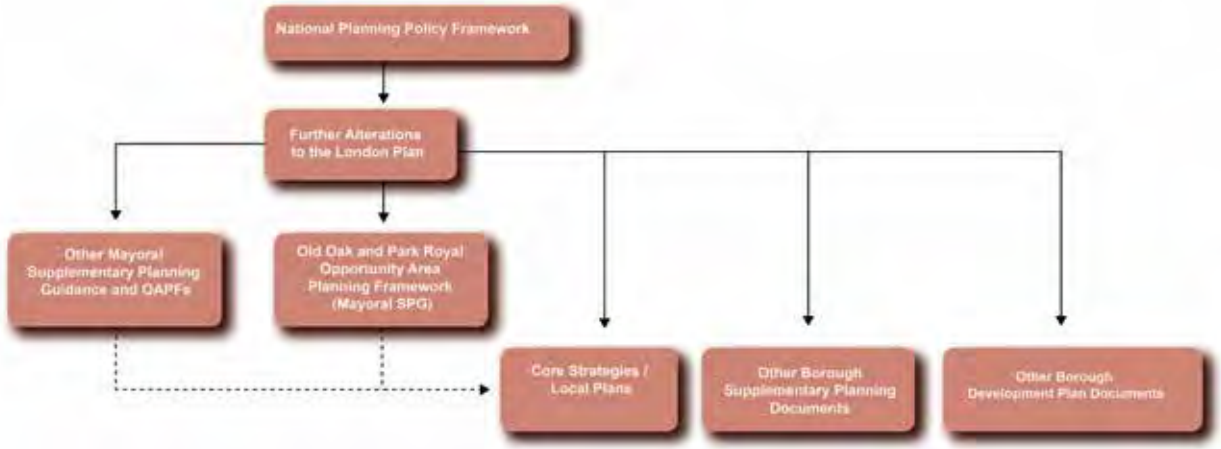



Figure 3: Legal status and relationship with planning policy documents

## Relationships with other documents

### Relationship with the Vision for Old Oak, 2013

1.3 In 2013, the GLA, in collaboration with Transport for London (TfL) and the London Boroughs of Brent, Ealing and Hammersmith and Fulham consulted on 'Old Oak – A Vision for the Future', which demonstrated how land around the planned Old Oak Common station could be redeveloped to deliver 19,000 home and 90,000 jobs.

1.4 This document was not a planning policy document but it did set out an early shared vision as to how this area could develop as a result of significant new transport infrastructure. A lot of the work carried out as part of the Vision has formed the basis for the more detailed work included in this OAPF. Comments received as part of the Old Oak Vision consultation have been considered as part of the drafting of this OAPF.

**Relationship with the Park Royal Opportunity Area Planning Framework, 2011**

1.5 In 2011, the GLA adopted the Park Royal Opportunity Area Planning Framework. The purpose of that planning framework is to highlight the important function the Park Royal industrial estate performs and to ensure its continued protection. The document can be found at:

http://www.london.gov.uk/priorities/planning/publications/park-royal-planning-framework

1.6 Upon the adoption of this new Old Oak and Park Royal OAPF, the existing Park Royal OAPF would be superseded.


**Relationship with a future Old Oak and Park Royal Mayoral Development Corporation (OPDC) Local Plan**

1.7 The Mayor is currently in the process of establishing a Mayoral Development Corporation for Old Oak and Park Royal, and plans for this new Corporation to be functioning by 1 April 2015. Once established, the new Mayoral Development Corporation would be responsible for all planning functions in this area, including the production of a Local Plan.

1.8 This OAPF would form the basis for the production of this future Local Plan. The Local Plan would be prepared in line with all relevant planning policy requirements. The Local Plan would provide greater detail, evidence and policies than are contained within this OAPF and it would have greater material weight in the determination of planning applications. The future Local Plan would also deal with the official de-designation process for the Strategic Industrial Location (SIL) within the Old Oak Common Opportunity Area. Once established and in receipt of it Planning Functions, the new Mayoral Development Corporation would start preparation and consultation on the detailed Local Plan and this is likely to take 18 to 24 months to prepare and adopt.

**Relationship with Local Authority Planning Documents**

1.9 As indicated in Figure 3, this OAPF has been produced as SPG to the Mayor's Further Alterations to the London Plan. Separately, the London Boroughs of Brent, Ealing and Hammersmith and Fulham have adopted and emerging Development Plan Documents (DPDs) that cover the Old Oak and Park Royal area. Upon the establishment of the proposed MDC on 1 April 2015, these Local Authority DPDs would have material weight contingent with the stage that the document had reached in its adoption process upon the MDC's establishment. I.e. if the document had been adopted prior to the establishment of the MDC, it would have greater weight than a document that had been consulted on but not adopted. New or emerging Local Authority DPDs progressed after the establishment of the MDC would not have any new or additional material weight in the MDC area. As the proposed MDC develops its Local Plan, the weight of Local Authority DPDs would diminish as they are superseded by the growing material weight of the MDC's Local Plan.

**Relationship with the HS2 Hybrid Bill**

1.10 Planning permission for HS2 and associated works is being sought through a hybrid Bill. Permission would be granted by Parliament under the HS2 hybrid Bill, when it is enacted. Therefore matters such as the principle for the railway works, their limits, and matters of principle relating to mitigation will be determined through the Parliamentary process rather than the normal Town and Country Planning Act process. However, the approving authority under Schedule 16 to the Bill would be responsible for subsequently giving approvals to plans and arrangements in respect of certain details of the scheme under certain conditions that the Bill will impose on the deemed planning permission.

# DOCUMENT PURPOSE

**What is an OAPF?**

1.11 Opportunity Areas are identified in the London Plan as areas with the opportunity to support regeneration and new development. Opportunity Area Planning Frameworks (OAPF) are prepared for Opportunity Areas to provide planning, regeneration and design guidance for these major growth areas. The Further Alterations to the London Plan (2014) identifies 38 Opportunity Areas in London, one of which is the Park Royal Opportunity Area and one of which is the Old Oak Common Opportunity Area.

1.12 The Old Oak Common and Park Royal Opportunity Areas are conjoined and together, they cover 650 hectares of land in West London, bordered by Harlesden and Stonebridge Park to the north, Kensal and North Kensington to the east, White City and Acton to the south and Alperton to the west. Park Royal forms one of the largest industrial estates in Europe whilst Old Oak is an area of industrial and railway land and is the planned location for a new railway station connecting High Speed 2 (HS2) to Crossrail and the Great Western Main Line.

**Why is an OAPF necessary here?**

1.13 The Further Alterations to the London Plan identifies that the Old Oak Common Opportunity Area has the capacity to deliver a minimum of an additional 24,000 homes and 55,000 jobs and that the Park Royal Opportunity Area could deliver a minimum of an additional 1,500 homes and 10,000 jobs. Combined this level of development would make a major contribution to London's growth over the next few decades. This OAPF suggests how:

- Old Oak could evolve and change over the next 30 years to create a new sustainable and successful part of London; and
- Park Royal could be regenerated to become an even more successful industrial location, while at the same time facilitating the relocation of businesses from Old Oak, so that both Opportunity Areas can realise their development potential.

**What does the OAPF do?**

1.14 The OAPF:

- provides guidance on desired land uses, infrastructure requirements and urban design measures necessary to deliver a quality new neighbourhood;
- looks at ways to maximise the considerable investment presented by the delivery of a significant new HS2/Crossrail interchange, to facilitate large scale regeneration of this area;
- explores how the Old Oak Common High Speed 2 station and surrounding development could be properly integrated with surrounding neighbourhoods, communities and town centres; and
- helps to foster new and improved partnership working between the Mayor, local Councils, transport providers, central Government, land owners, local residents and businesses and potential investors to ensure the preparation of a robust and deliverable plan.

**Context in West London**

1.15 The Old Oak and Park Royal Opportunity Areas are located close to a number of other Opportunity Areas in West London (see figure 4), such as White City, Earl's Court, Wembley, Southall, Paddington and Cricklewood/Brent Cross. The Old Oak and Park Royal Opportunity areas will be connected to the Southall and Paddington Opportunity Areas via the planned Old Oak Common Crossrail and National rail stations. Proposals for London Overground connections at Old Oak Common would provide direct connections between Old Oak and Park Royal and the White City, Earl's Court and Wembley Opportunity Areas. The potential extension of London Overground services onto the Dudding Hill Line would also provide direct connections to Cricklewood/Brent Cross.

1.16 The Golden Mile is also in the vicinity of Old Oak and Park Royal, which is a planned new Opportunity Area and which could also potentially be connected to Old Oak Common via extensions to the London Overground network.

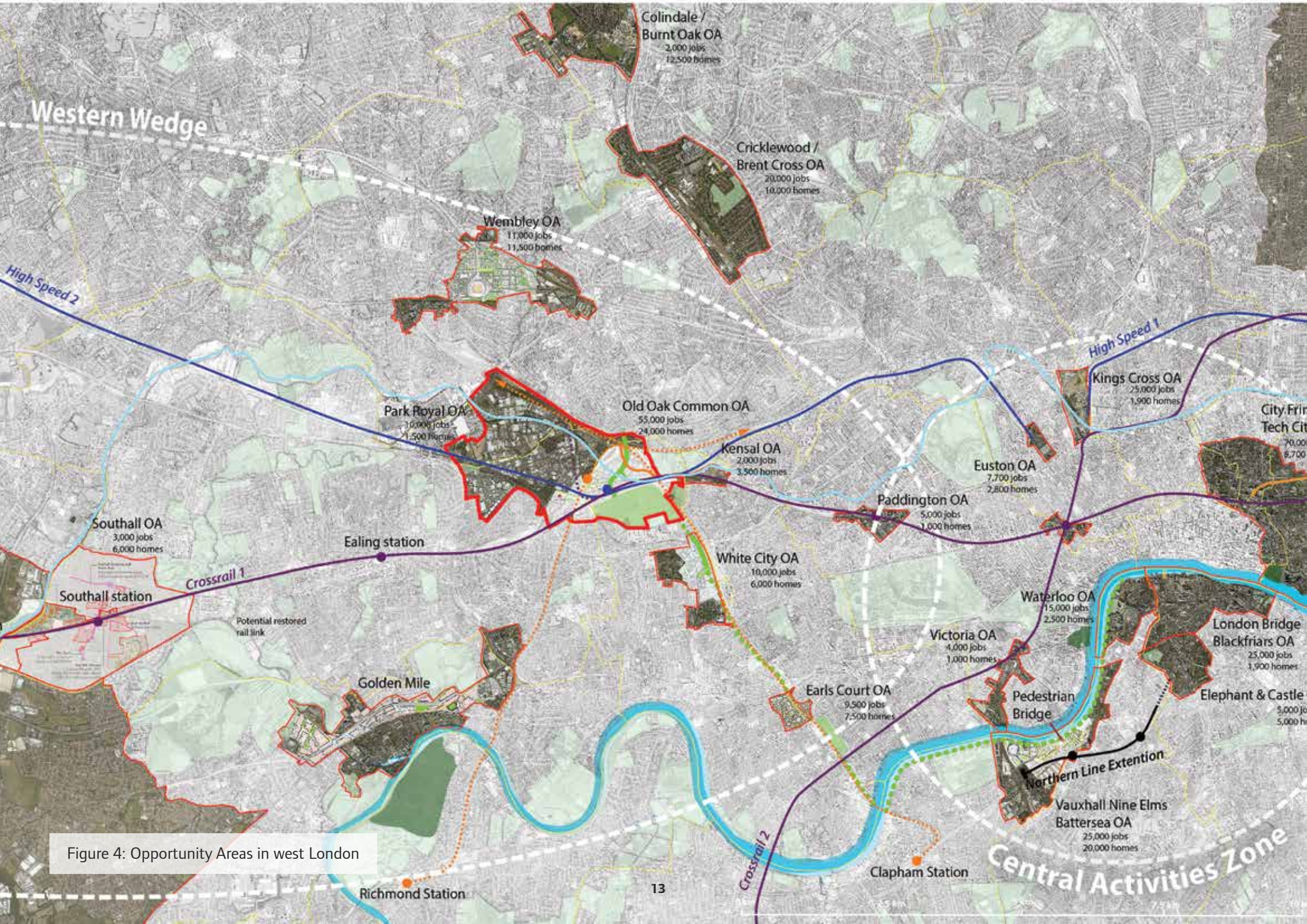



Figure 4: Opportunity Areas in west London

Figure 5: View of the Grand Union Canal

# 2. VISION & OBJECTIVES

# VISION & OBJECTIVES

## VISION

Old Oak and Park Royal will be a sustainable New Town built on brownfield land in the centre of London. It will be an exemplar in accessible, high quality and 'smart' regeneration and over the next 20 years will make a major contribution to strengthening London's role as a global city.

Old Oak and Park Royal will be a highly accessible location focussed around a world class transport 'super-hub' that will become one of the country's most connected and largest railway interchanges. The area will also benefit from significant London wide and local transport connections. This will help transform an area previously cut off from the rest of London that will also help bring economic benefits to surrounding local centres in Harlesden, Acton, Ealing and Kensal, including great local employment opportunities, both during and post construction.

Old Oak and Park Royal will offer a unique employment opportunity. There will be a new commercial and office hub providing the opportunity for 55,000 new jobs focussed around the new Old Oak Common station. Park Royal will be protected and strengthened where possible. This industrial land will continue to be London's largest industrial estate housing more than 2,000 businesses. New and diverse businesses will be attracted to Park Royal, along with relocated businesses from Old Oak, the area will accommodate an additional 10,000 jobs.

Old Oak will be a new, well connected neighbourhood of high quality design that is integrated into its surroundings. The area will house a minimum of 24,000 new homes including a mix of house types and tenures. This large new residential population will be served be my new amenity spaces and local facilities within a new Town Centre and High Street. In addition, there will be opportunities a minimum of 1,500 new homes in specific non-industrial locations in Park Royal.

## OBJECTIVES

1. **CREATE:** To create a successful and inclusive new urban neighbourhood at Old Oak, supporting delivery of a minimum of 24,000 new homes in Old Oak and 1,500 in non-industrial locations in Park Royal that includes a mix of affordable and market tenures and typologies that meet the needs of new and existing residents, and securing best practice, architecture and urban design and social, physical and green infrastructure that creates a vibrant and distinctive place, and contributes to integrated and sustainable communities;
2. **CONNECT:** To use the catalyst of the new High Speed 2 (HS2)/Crossrail and National Rail interchange and improved local transport connections to regenerate and promote the area as one of London's best connected development locations that makes a significant contribution to London's competitiveness, in a way that is sustainable, attracts long term investment, meets local needs, and supports the strategic long-term priorities in the Mayor's Further Alterations to the London Plan (FALP);
3. **COMMUNITY:** To promote economic growth that helps address deprivation and reduces inequality for local communities and Londoners, by coordinating the development and stewardship of public sector land and assets, supporting the creation of 55,000 new jobs at Old Oak and a further 10,000 new jobs at Park Royal, and working with the boroughs, key stakeholders, businesses and local communities to ensure local accountability and involvement.
4. **CONSOLIDATE:** To protect and enhance Park Royal as a Strategic Industrial Location, ensuring investment that will improve existing operations, maximise the area's industrial potential, and support the smooth transition of business and industrial relocations and ensure that new development safeguards nearby amenity assets such Wormwood Scrubs and the Grand Union Canal.

**Consultation questions:**
Q1: Do you agree with the objectives?
Q2: What other objectives would you suggest?

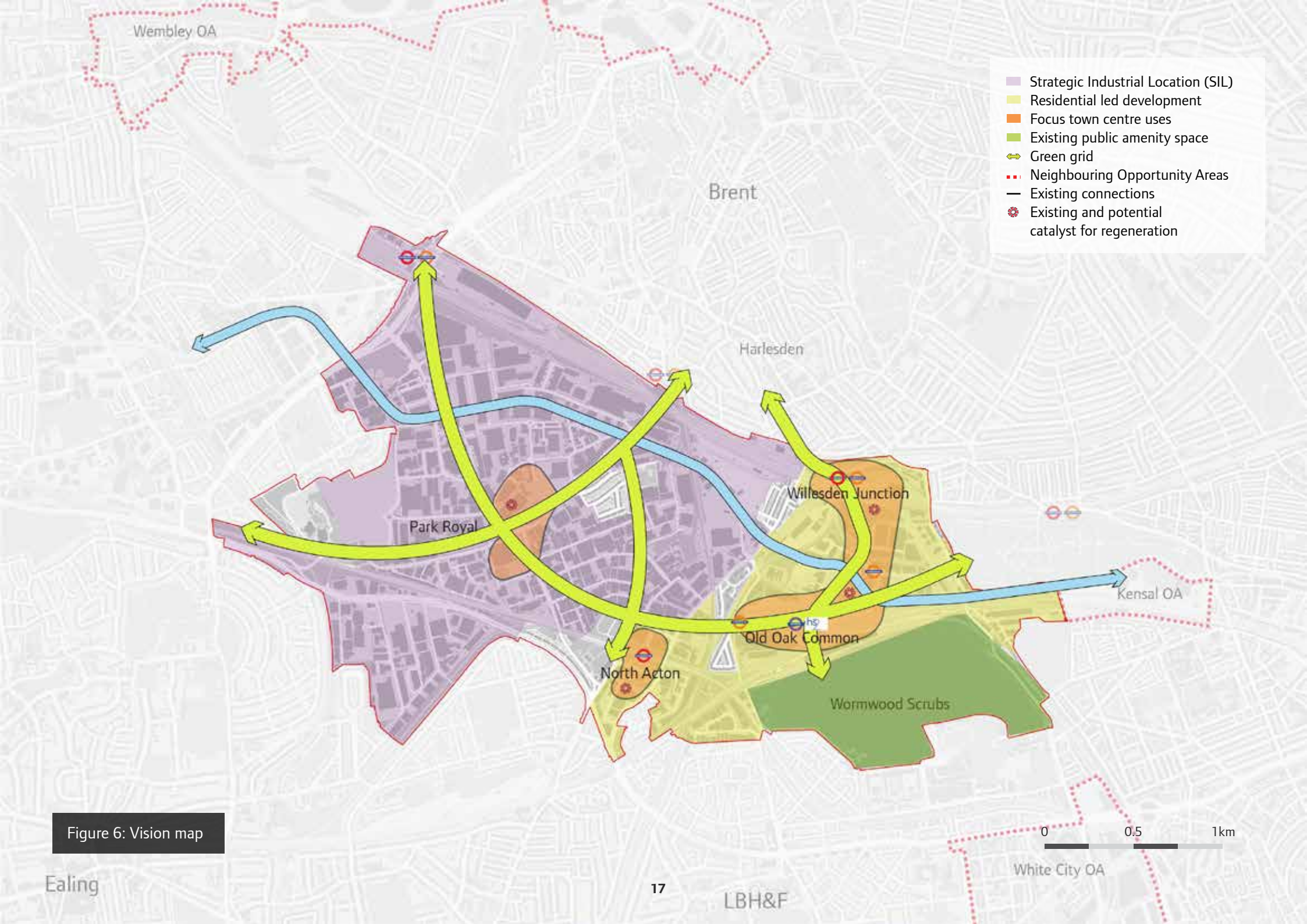



Figure 6: Vision map

Figure 7: Period properties along Scrubs Lane

# 3. LAND USE STRATEGY

# EXISTING LAND USE

3.1 In 2014, the GLA produced the Park Royal Atlas (including both Old Oak and Park Royal areas). The door-to-door survey undertaken located 2150 workplaces; 1934 of these were active, and of those the names and activities of 1717 could be identified. The distribution across the business sector colour groups is relatively even, ranging from 14% in manufacturing (sectors A-D) to 18% in services (sectors L-N).

3.2 It is estimated that the workplaces in the area contain 2,300,000 sqm of gross floor area, including all floors. In terms of floor area, the proportion of the business sectors shift significantly compared to the number. Manufacturing (sectors A-D) increases to 20%, while wholesale, transport and storage (sectors H-J) represents 27% of the total gross floor area. These business sectors clearly require larger workspaces to operate successfully.

3.3 Figure 6 shows the geographic distribution of the sectors. One of the map's most striking elements is the diverse patchwork of workplaces found across the area. While some areas have larger workplaces, others are characterised by a much finer grain, of small, individual workplaces as well as larger buildings that have been subdivided.

3.4 Mapping the business sectors highlights the many workplaces in the manufacturing, wholesale and storage and transport sectors requiring large building footprints. Many of these are involved in the manufacturing and wholesale of food. While there are some obvious clusters of larger workplaces, particularly in the food manufacturing sector, there are also many smaller scale clusters of micro food businesses. These are often located within single buildings and therefore cannot be distinguished on the map.

3.5 While vacant and unknown workplaces each make up 10% each of the total workplace number, vacant workplaces only make up 8% of the floor area.

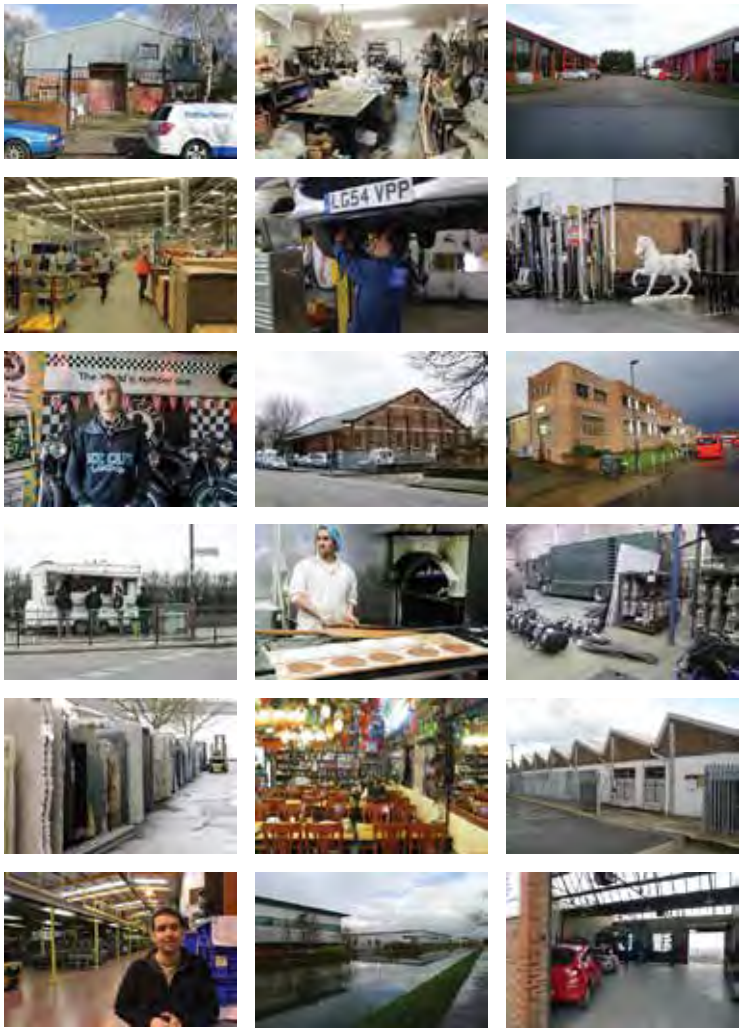
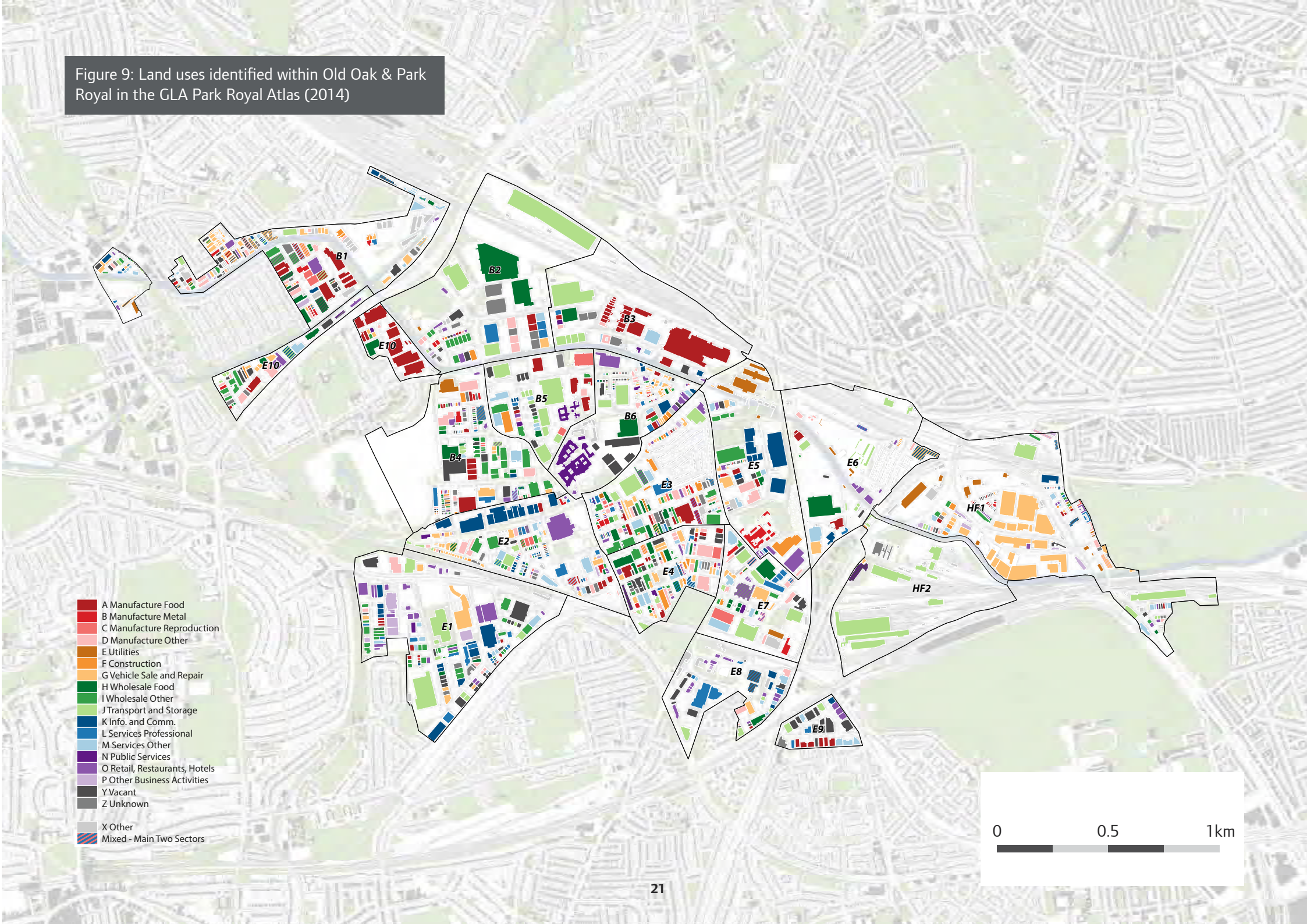



Figure 8: Images of existing land uses and businesses

Figure 9: Land uses identified within Old Oak & Park Royal in the GLA Park Royal Atlas (2014)



# LAND USE STRATEGY

3.6 The proposed land use strategy comprises three principal components:

## L1: OLD OAK

The core development area is focussed at Old Oak. This area should be redeveloped as a sustainable mixed-use part of west London. This new neighbourhood should be comprehensively redeveloped to accommodate a minimum of 24,000 new homes, 55,000 new jobs, significant new transport and social infrastructure with the opportunity for large-scale facilities that act as catalysts for regeneration. This new neighbourhood will require a mix of Town Centre uses and these should primarily be clustered around Old Oak Common station, other transport hubs and along Old Oak High Street. Central to the area's success will be the development of a network or streets and amenity spaces that celebrate the canal and that enable quality connections into the surrounding area.

## L2: PARK ROYAL

Today Park Royal houses approximately 2,000 business with 30,000 employees. The continued protection of the Strategic Industrial Location (SIL) in the wider Park Royal industrial area is important for the continued success of this area, which performs a vital role in supporting the London economy. There will be opportunities to improve operations within the estate and where possible to intensify uses to cater for up to 10,000 new jobs where possible. Park Royal could also play a valuable role in accommodating displaced employment floorspace from Old Oak. Outside of SIL, development should be more mixed use, and should look to deliver a minimum of 1,500 homes. In the centre of Park Royal, the existing retail centre should be enhanced and expanded so that it can become a central hub for residents and businesses in Park Royal.

## L3: WORMWOOD SCRUBS

The continued protection of Wormwood Scrubs as a valuable amenity and ecological space for Londoners and its wildlife, coupled with improved access and sensitive enhancements where appropriate and agreed with the Wormwood Scrubs Charitable Trust.

**Consultation questions:**
Q3: Do you agree with this approach to land use?

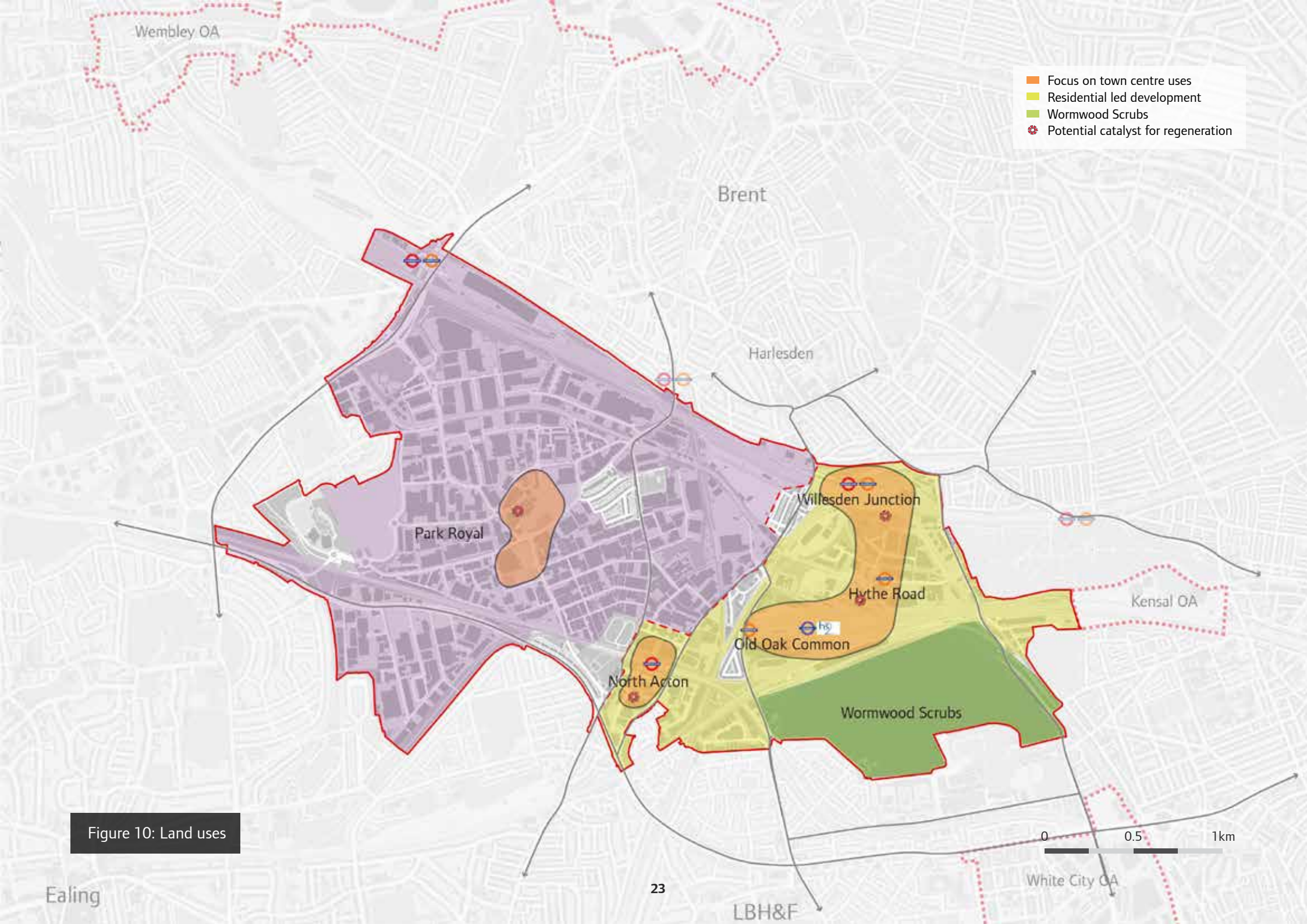



Figure 10: Land uses


Figure 11: View of Car Giant offices

# 4. DESIGN STRATEGY

# DESIGN STRATEGY

## D1: PUBLIC AMENITY SPACE

Proposals should:

a. deliver a green grid that caters for the needs of new and existing communities by:

i. creating, managing and connecting a range of well-designed new external ground-level public amenity spaces;
ii. connecting stations;
iii. protecting, improving and connecting existing public open spaces;
iv. delivering coordinated urban greening along streets and in public open spaces; and
v. connecting biodiversity assets to support habitat resilience.

b. Mitigate flood risk through the delivery of sustainable urban drainage measures.

4.1 The green grid provides an overarching structure for connecting new and existing public amenity spaces and destinations, including stations, across Old Oak and Park Royal. It provides a coordinated approach to deliverying new public spaces embedded with a network of green streets and routes.

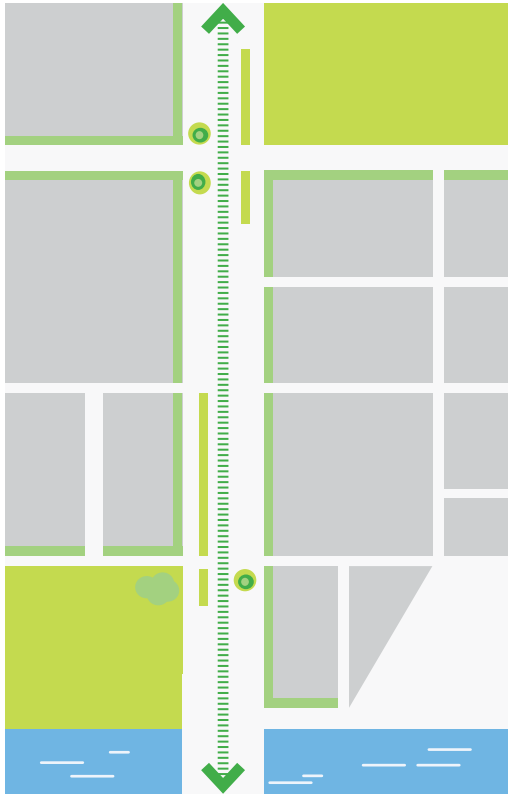


Figure 12: Illustration of elements of the proposed green grid.

## D2: STREETS & PUBLIC REALM

Proposals should create and improve streets & public realm to overcome severance and connect existing and future communities by:

a. delivering a defined and permeable urban grain and a legible urban block pattern;
b. creating new and improving existing streets and walking and cycling routes;
c. delivering active frontages of non-residential uses along main streets, stations and other appropriate locations; and
d. strengthening the identity and legibility of stations (according with guidance such as TfL Station Public Realm Design Guidance) and town centres.

Figure 13: Illustration of permeable and legible urban block pattern

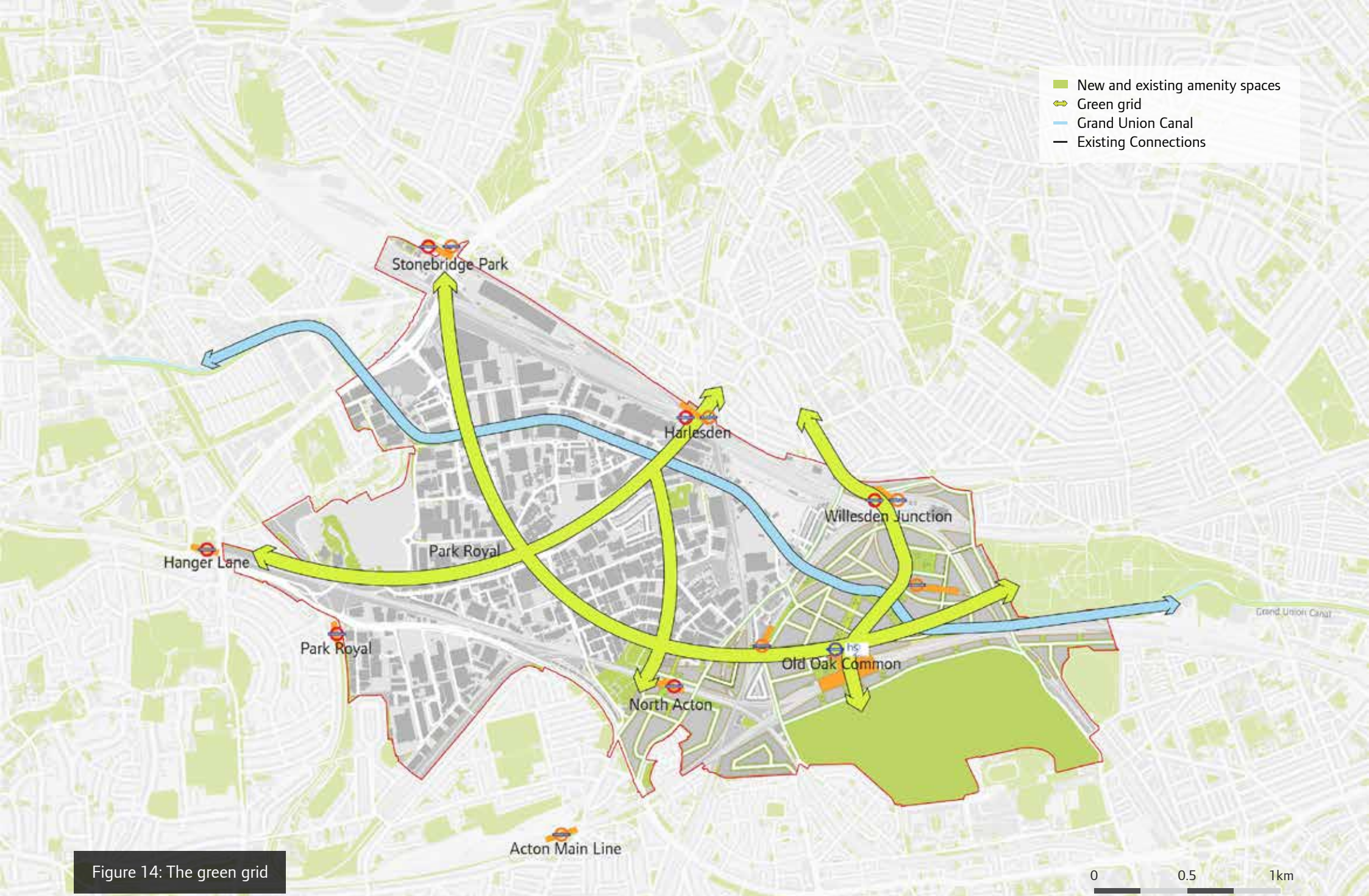



Figure 14: The green grid

## D3: BUILDING HEIGHTS & DENSITIES

Proposals should deliver:

a. greater heights and densities than the surrounding existing context to optimise the use of land;
b. taller buildings and higher densities at town centres and stations; and
c. buildings that are mindful of their context, in particular sensitive locations in the surrounding area.

4.2 This strategy reflects London Plan policy by seeking to cluster high densities around transport hubs, which have the greatest public transport accessibility and reduce densities to respond to the sensitivities of existing residential communities, heritage assets and public open spaces.

4.3 Locations within the RAF Northolt safeguarding area will need to be consulted on any planning applications exceeding 91.4m AOD.

## D4: BUILT HERITAGE

Proposals should enhance built heritage assets to contribute to successful placemaking.

4.4 The Old Oak and Park Royal areas have a disparate assortment of railway and industrial heritage that play a valuable role in informing the evolving character of the area. One element of this in Park Royal is the Brent Viaduct which is Grade II Listed. Specific collections of non-designated heritage assets are located along the east of Scrubs Lane, the Victorian Rolls Royce works and Acava Studios on Hythe Road. The proposed OPDC will be working with English Heritage on the development of the future Local Plan and in designating and managing new Conservation Areas and a Local List.

Figure 15: Illustration of building heights and massing supporting legibility and access to services.

## D5: PLACEMAKING

Proposals should contribute to the creation and improvement of locally distinct places, that meet the principles of Lifetime Neighbourhoods, within three distinct character areas:

| Area | Place |
|---|---|
| Old Oak | Old Oak North |
| | Old Oak Common Station |
| | Old Oak South |
| | Old Oak High Street |
| | North Acton |
| | Old Oak Lane |
| | Scrubs Lane |
| | Grand Union Canal |
| Park Royal | Park Royal* |
| | Heart of Park Royal |
| Wormwood Scrubs | Wormwood Scrubs |

*The place of Park Royal is managed by the guidance for Park Royal. It does not have specific place guidance.

4.5 Improving and creating new places within Old Oak and Park Royal is critical to delivering successful new and improved urban neighbourhoods. By recognising existing positive elements of the local context to inform current and new areas of character, a sense of place can be fostered and nurtured. By providing specific guidance for each of the places within the Opportunity Area, the OAPF seeks to ensure these aspirations are realised.

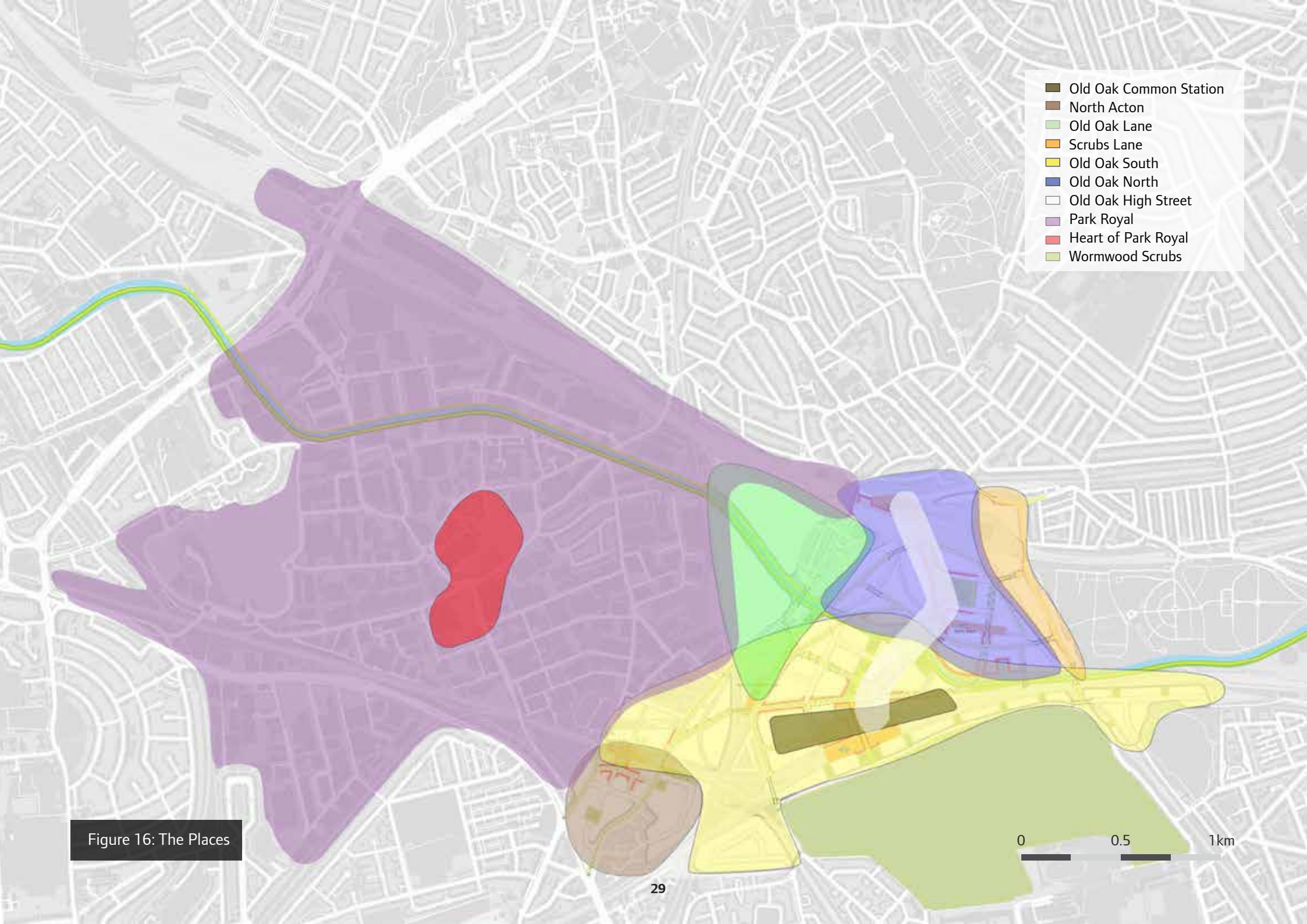



Figure 16: The Places

Figure 17: View of Old Oak North & Old Oak South

# 5. OLD OAK STRATEGY

# LAND USE

## OO1: LAND USE

a. Proposals should comprehensively regenerate the Old Oak area to deliver:

i. a minimum of 24,000 new homes including affordable homes with a mix of tenures and typologies;
ii. 55,000 jobs in a new commercial hub including a significant provision of new office space. Opportunities should be taken to diversify into new growth sectors and provision should be made for SMEs and affordable workspace;
iii. new retail provision that caters for the day to day needs of the development and does not have a detrimental impact on nearby retail centres;
iv. town centre uses in clusters around public transport hubs, along the new Old Oak High Street and along other major thoroughfares and at key entrances into the area;
v. other town centre uses including a mix of new leisure, community facilities, health, arts, cultural, hotel, and education uses to meet the needs of the local population and that could act as a focus or catalyst for regeneration in the area;
vi. a highly integrated transport network; and
vii. a new well connected public realm network that includes well designed amenity spaces.

b. Proposals seeking to displace existing employment floorspace from the Strategic Industrial Location (SIL) within Old Oak should demonstrate how they have worked to find suitable relocation sites or replacement premises, within, in the first instance, the OAPF area, then the West London sub-region.

### Housing

5.1 Table A1.1 in Annex 1 of the Further Alterations to the London Plan (2014) sets the strategic policy direction for the Old Oak Common Opportunity Area and identifies the potential to deliver a minimum of 24,000 new homes.

5.2 To meet this need, proposals that provide substantial amounts of new high quality, high density housing will be encouraged. London Plan policies on affordable housing would apply to these proposals, including the provision of a mix of housing types and high quality design, in accordance with the requirements of the London Housing SPG. In particular new development will have to be designed to achieve a high level of ground level front doors directly onto the street.

5.3 The majority of land identified for housing in the land use plan is currently designated as a Strategic Industrial Location (SIL) in existing borough Local Plans. This OAPF does not de-designate this land; rather, it indicates a direction of travel for where alternative land uses could be appropriate. The ODPC's future Local Plan could deal with the official de-designation process for the SIL within the Old Oak Common Opportunity Area, which would have to go through Examination in Public (EiP) and be agreed by a planning inspector. The Local Plan would also set a level of affordable housing for this area. This required level of affordable housing will need to take account of the level of physical and social infrastructure needed to support this level of development.

### Employment

5.4 In order to deliver an indicative target of 55,000 jobs at Old Oak, substantial proportions of employment floorspace will be necessary. Given Old Oak's inner London location and the fantastic public transport accessibility that will be delivered in the area, it is anticipated that a large portion of new employment opportunities will be provided in new office and commercial space. 'A recent GLA study (Working Paper 63) estimates that each job in London contributes £56,000 gross value added (GVA) per annum to the UK economy. 55,000 jobs at Old Oak would therefore contribute £3.1 billion GVA per annum to the UK economy. This work is based on 2012 data and it is likely that the current GVA figure per capita is higher than this. The GLA and OPDC will be undertaking further work to better understand the contribution that new jobs at Old Oak and Park Royal would make to the local, London and UK economy.'

5.5 Large employment generating proposals will need to investigate and explain how their development will complement the potential to accommodate newly emerging employment

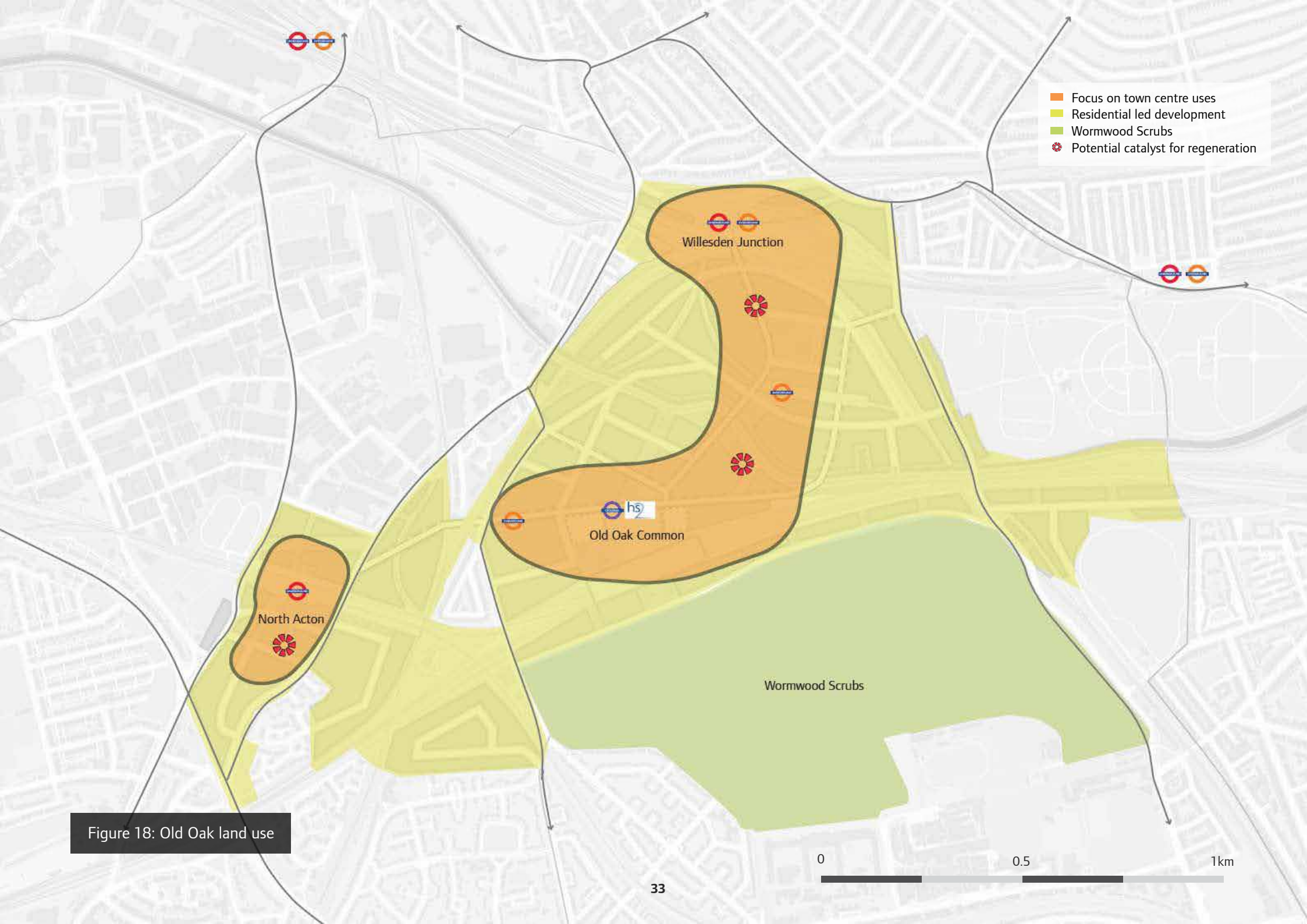



Figure 18: Old Oak land use

growth sectors. GLA projections show that across London, the following sectors are anticipated to see growth over the next 30 years:

- Accommodation and food service activities;
- Information and communication;
- Professional, Real Estate, Scientific and technical activities;
- Administrative and support service activities;
- Education;
- Health; and
- Arts, entertainment, leisure, sports and recreation.

5.6 The GLA is currently undertaking an Employment Land Review for Old Oak and Park Royal that is analysing supply and demand dynamics. This will also investigate potential growth sectors that could be suited to Old Oak and Park Royal.

5.7 The majority of new office space should be located close to the new Old Oak Common station. There will be opportunities for some smaller scale office space, particularly catering for SMEs, in other accessible parts of the Old Oak area close to areas of good public transport access.

5.8 The redevelopment of Old Oak will displace existing employment uses. New development proposals will need to explore the opportunity to reprovide this workspace. Applicants will be asked to consider the potential to relocate businesses to suitable alternative premises. On a case by case basis, this should include an assessment of affordability, size, quality and location. In terms of location, a sequential process should be implemented considering locations in the following prioritised order, within:

1. Mayoral Development Area
2. West London sub-region
3. Greater London
4. South East of England

5.9 The search area for relocations would also need to consider the specific operational needs of the business. The GLA and future OPDC will work with applicants and landowners to support the relocation of businesses to alternative sites.

### Town Centre uses and retail space

5.10 Town centre uses should be located close to areas with the greatest pedestrian flows and accessibility namely around public transport hubs and along main streets:

- Old Oak Common station will form the core location for town centre uses. It is anticipated that Old Oak Common station will be a focal point for office accommodation in order that workers are able to get to and from work as easily as possible. It will also be a focal point for a large portion of the retail space, with retail for local residents and workers as well as interchanging passengers.
- In addition the existing stations of Willesden Junction and North Acton and future London Overground stations are great opportunities for clustering retail and other town centre uses. Retail near to Willesden Junction should also connect in to retail provision in Harlesden Town Centre and complement its offer.
- The main pedestrian thoroughfare through the Opportunity Area will be Old Oak High Street. Active frontages should be provided along its length, where both retail and social infrastructure would be appropriate in order to provide for the day to day needs of residents and workers in the development. There will also be some other smaller locations within Old Oak where active frontages and town centre uses may be appropriate, such as along the Grand Union Canal, around public transport hubs, along streets such as on Grand Union Street/Hythe Road and at key entrance points to the Opportunity Area, such as the junction of Scrubs Lane with Hythe Road. It is important that where ground level active frontages are proposed, evidence is provided supporting their viability, to avoid units remaining vacant for long periods.

5.11 The anticipated numbers of new homes and jobs at Old Oak are likely to give rise to a substantial retail need. The table overleaf shows some comparable developments and the quantum of retail proposed. The future level of retail will be assessed in greater detail through a Retail Needs Study that would be undertaken as part of a future Local Plan by the proposed Old Oak and Park Royal Mayoral Development Corporation (OPDC).

| Area | Homes | Jobs | Retail floor-space |
|---|---|---|---|
| Earl's Court and West Kensington | 7,000 | 11,000 | 28,000 sqm |
| Vauxhall Nine Elms | 16,000 | 25,000 | 60,000 sqm |
| King's Cross | 2,000 | 32,000 | 45,000 sqm |

5.12 It will be important that any retail provision should cater for the day-to-day needs of the development and not negatively impact on nearby retail centres such as Harlesden and Shepherd's Bush. It is therefore anticipated that future retail would have a high proportion of convenience retail, although there will be potential for some comparison retail within Old Oak Common Station and along Old Oak High Street.

5.13 There will also be a need for new social infrastructure such as education, community facilities, places of worship, sports centres and health facilities. More information on these requirements is set out in the Delivery Chapter.

5.14 The scale of the Old Oak Common Opportunity Area, alongside its excellent public transport access, gives Old Oak significant potential to support a large-scale sports/recreational, arts, leisure, cultural, education and health related uses, which could become a focus or catalyst for regeneration in a similar way to the recently completed Central St Martins – University of Arts at Kings Cross. The GLA will work with providers of such uses to explore ways in which they could assist in accelerating development and regeneration at Old Oak Common.

5.15 During 2014 and early 2015 Queens Park Rangers Football Club has held pre-application discussions with the local planning authorities and the Greater London Authority on the potential for providing a new football stadium at Old Oak. The development of a new Football Stadium and appropriate associated development within the OPDC area could be supported, subject to it meeting appropriate planning requirements and securing land agreements, as it could provide an early catalyst for regeneration and a vibrant focal point for the development.

**Consultation questions:**
Q4: Do you have any other suggestions for the catalyst for regeneration?

Figure 19. Aylesbury Estate regeneration

# DESIGN

## Illustrative Masterplan

5.16 An illustrative masterplan has been produced, showing one way that the Old Oak area could be comprehensively redeveloped to achieve the OAPF's design objectives and work with known infrastructure constraints. This guidance and depictions for streets & public realm, public amenity spaces, building heights and densities and local views have contributed to the production of the illustrative masterplan.

5.17 The indicative masterplan is based on the principles in the following urban design section. The aim of the masterplan is to connect the main public transport nodes through legible and well-designed streets. The indicative masterplan highlights those streets that are considered to be primary streets, which are likely to be areas of focus for town centre uses. These are a north-south street from Old Oak Common Station to Willesden Junction station, called 'Old Oak High Street'. An east-west street running from North Acton station, past Old Oak Common station and over the canal, called 'Grand Union Street' and a connection from the northern part of Old Oak Common Lane to the Old Oak Common station.

5.18 The indicative masterplan includes a network of public amenity spaces which would form part of the green grid, promoted in Principle D2 (see page 26). The indicative masterplan seeks to locate these spaces so that they take full advantage of local amenity assets such as the Grand Union Canal and also provide relief at areas of high pedestrian flows such as outside of public transport hubs.

5.19 Connecting to the surrounding area is central to the indicative masterplan, to ensure that Old Oak Common is integrated and becomes knitted into the surrounding communities. This includes the opportunity for improved connections into the Scrubs.'

5.20 It is recognised more than ever in this time of economic uncertainty, that flexibility will be needed to achieve the comprehensive redevelopment of the Old Oak area. The indicative masterplan is not intended to eliminate or constrain other acceptable development and/or strategies for achieving sustainable comprehensive regeneration in accordance with relevant London Plan policies. This includes the potential for a variety of large scale uses that could act as a catalyst for regeneration, as outlined in the Old Oak Land Use Strategy (see page 32).

5.21 Streets are all shown on the illustrative masterplan as going over rail lines for the purpose of clarity. In reality, many streets might go under rail lines, such as Old Oak Common Lane, which goes under the Great Western Main Line and Salter Street, which goes under the West London Line. An indicative route network diagram is included in the Transport Chapter (page 82) which shows a potential modal network within the illustrative masterplan.

### 3D illustrative masterplan

5.22 In addition to the 2D illustrative masterplan overleaf, a 3D illustrative masterplan will be developed during the production of the forthcoming OPDC Local Plan.

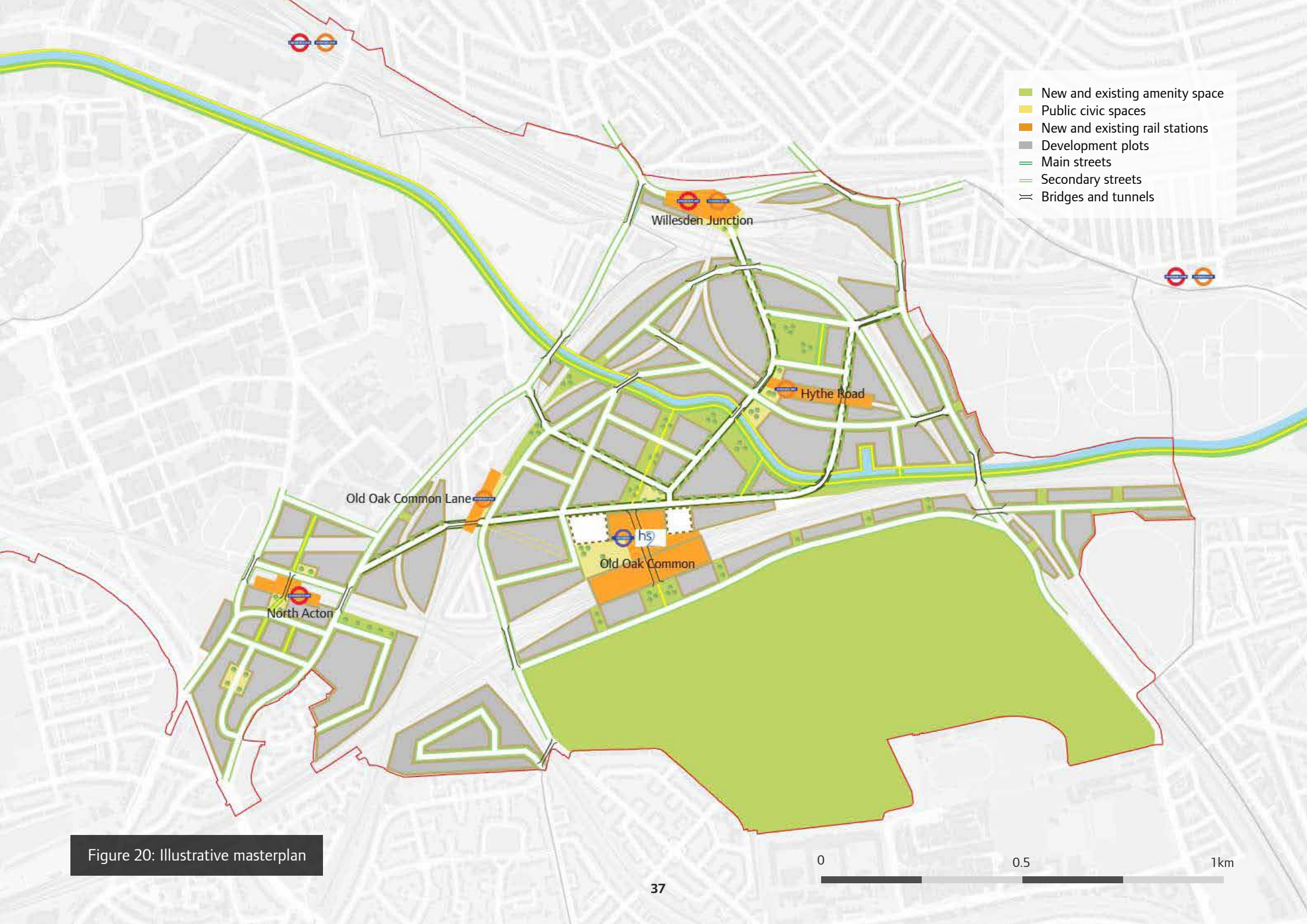



Figure 20: Illustrative masterplan

## OO2: PUBLIC AMENITY SPACE

Proposals should deliver:

| | Name | Location | Guidance |
|---|---|---|---|
| a. | **Grand Union Square** | Located at the junction of Old Oak High Street and the Grand Union Canal. | Comprising of two distinct elements either side of the Grand Union Canal, Grand Union Square to the north of the canal will be civic in nature and comprise largely of hard landscaping with opportunities for recreation and play (similar to Granary Square in Kings Cross).<br><br>Across the canal to the south, the existing nature reserve will continue to be green in nature. There will be significant improvements, particularly to its biodiversity and ensuring the space is publicly accessible. |
| b. | **Old Oak Square** | Located beside or close to Old Oak High Street within Old Oak North. | Old Oak Square will be green in character with recreation and play facilities for people of all ages to provide a focal point for new communities. |
| c. | **Station squares** | Located north, south and west of Old Oak Common Station and adjacent to London Underground and Overground Stations. | Station squares should be an integral part of the station in terms of function and design. These spaces will be civic in nature, providing spaces for movement and activities supporting the roles of the stations. They will generally comprise high quality hard landscaping aside from the square to the south of Old Oak Common Station which will be green in character. |
| d. | **Small open spaces** | Located across Old Oak, including along the Grand Union Canal. | Small open spaces will deliver a range of typologies to cater for the immediate needs of residents and employees. |

Figure 21: Russell Square

Figure 22: Granary Square, Kings Cross

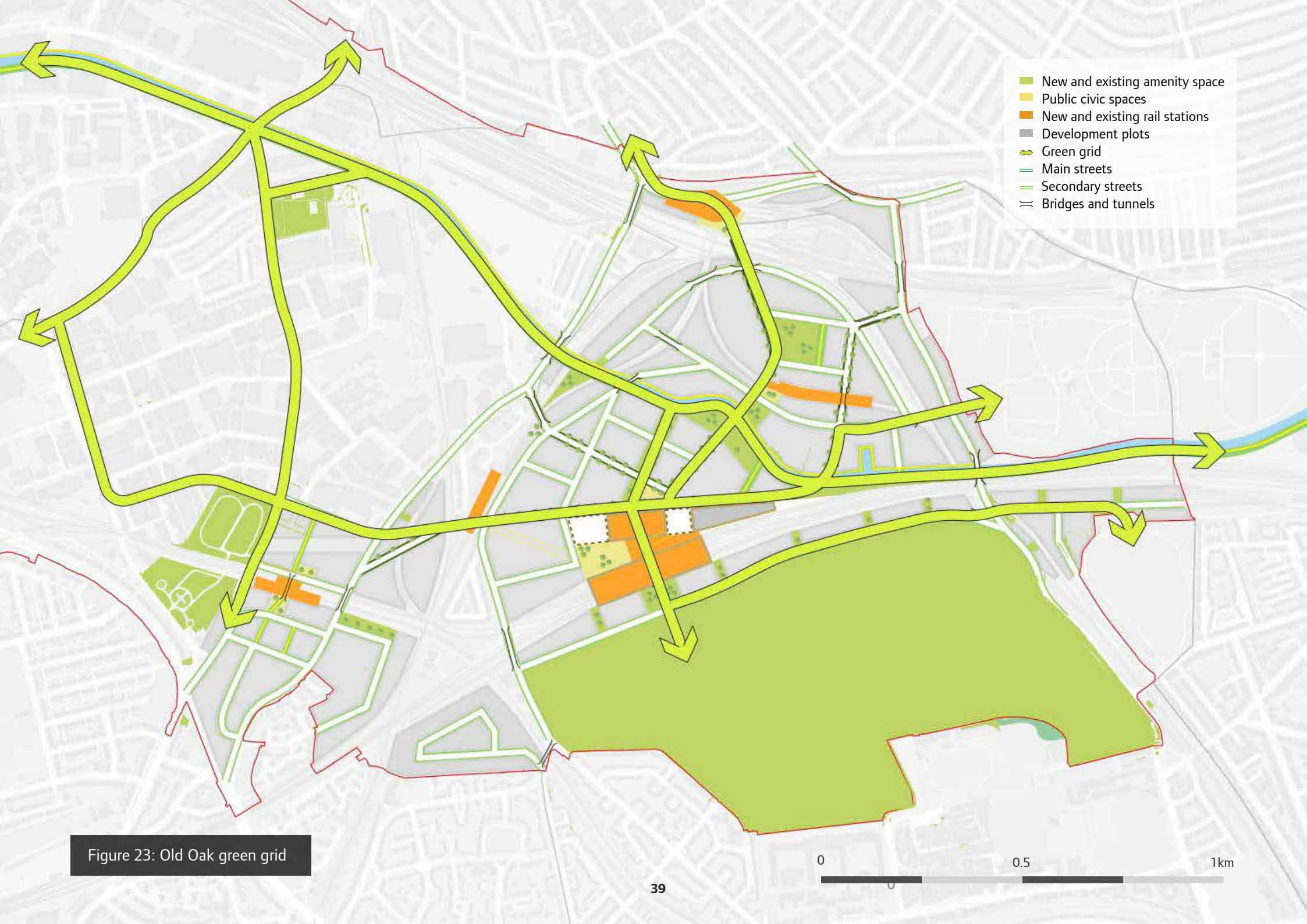



Figure 23: Old Oak green grid

## OO3: STREETS & PUBLIC REALM

Proposals should deliver:

| | Name | Location | Guidance |
|---|---|---|---|
| **Main streets** | | | |
| a. | **Old Oak High Street and Old Oak Common Station** | Located within Old Oak North and Old Oak South, Old Oak High Street will provide the main north-south route within the Old Oak area, linking Wormwood Scrubs through Old Oak Common Station in the south, to Willesden Junction Station and Harlesden town centre in the north. | Old Oak High Street will be the focus of the street network, structuring Grand Union Street and secondary streets. Non-residential use active frontages will be located along its length. Continuing to run through Old Oak Common Station, the route will provide a direct route to Wormwood Scrubs.<br><br>The envisaged street width of the High Street should be approximately 25 metres with opportunities for variation responding to functions and built form. This reflects existing and emerging guidance (including TfL London Cycle Design Guidance (2014), TFL Better Streets Delivered Case Studies (2013) and Roads Task Force Report (2013) including the London Streets Family document (2013)) for streets and spaces design to accommodate active frontages, street greening, walking and cycling, inset on-street parking / loading and vehicle movement. This is depicted in figure 24. |
| b. | **Grand Union Street** | Located within Old Oak North and Old Oak South, Grand Union Street will provide the main east-west route within Old Oak linking North Acton, Old Oak Common Station and Scrubs Lane, Harrow Road in the east. | Grand Union Street will support east-west movement with non-residential use active fronts along its path near to stations.<br><br>The envisaged street width should accord with existing and emerging guidance (such as those stated in a. above) for the street to accommodate its roles and functions. |
| **Secondary streets (including Grand Union Canal tow path)** | | | |
| d. | **Please see indicative masterplan** | Located across Old Oak providing connections from main streets, destinations and surrounding areas.<br><br>The Grand Union Canal provides a key east-west walking and cycling route through Old Oak. | Secondary streets and the Grand Union Canal will provide a quieter street environment to deliver a range of local roles and functions to support the activities of Old Oak High Street and Grand Union Street. |


Figure 24: Illustration showing High Street cross section

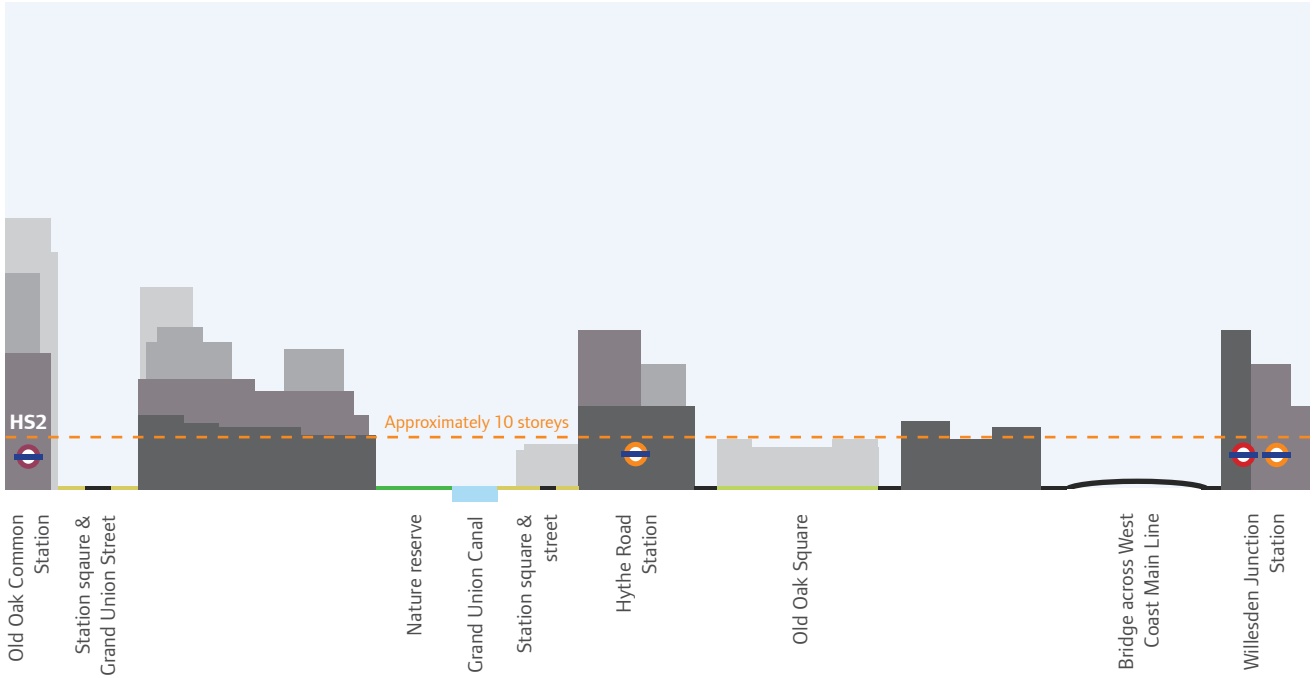



Figure 25: Illustration showing indicative eastern elevation of Old Oak High Street (does not account for topography)

5.23 Consultation comments submitted for the Old Oak Vision Document in 2013 suggested that further work was required to inform guidance for building heights. This guidance presents the current position which will continue to evolve as additional technical analysis is undertaken for the OPDC Local Plan. Consultation comments relating to building heights for this draft OAPF will be used to inform this analysis including the development of a 3D masterplan.

## OO4: BUILDING HEIGHT & DENSITY

New building heights and densities should:

a. accord with the guidance set out in the table below and depicted in figure 26:

| | Location | Guidance | |
|---|---|---|---|
| i. | **Sensitive areas (including areas adjacent to heritage assets, Wormwood Scrubs and existing residential communities)** | **Lower** | Buildings adjacent to sensitive areas should deliver lower heights to respond to local sensitive areas. These locations tend to be positioned at the edge of Old Oak and will contribute to the delivery of an appropriate transition in scale with the surrounding areas. |
| ii. | **Old Oak High Street** | **Approximately 10 storeys** | Along the High Street, a width of at least 25m is envisaged (see previous section OO3 a.). To ensure the street has a suitable sense of enclosure and supports local legibility, a prevailing shoulder height of approximately 10 storeys should be delivered. Massing and heights should respond to local sensitivities and the different characters of Old Oak North and Old Oak South (as depicted in figure 25).<br><br>At appropriate locations along the street there may be opportunities for higher densities and taller elements that should not result in a wall of massing. Further detailed analysis of locations of heights and massing will be undertaken through the development of the OPDC Local Plan. |
| iii. | **Underground and Overground Stations & local vicinity** | **Higher** | Buildings in these locations will be tall. In these locations should be carefully articulated and heights must be varied in order to avoid being read as a singular mass. Careful consideration will need to be given to how massing and heights transition between different locations. |
| iv. | **Old Oak Common Station & local vicinity** | **Highest** | |

b. demonstrate how they provide a transition in scale between adjacent building height and density locations;
c. make a positive contribution to the local townscape and longer term views; and
d. explore the use of orientation and position of massing elements to deliver a positive relationship to street enclosure and ground level activities.

### Entrance points

5.24 Around Old Oak, there are opportunities to define entrance points into the new neighbourhood, such as at the junction of Old Oak Lane and Station Approach. The design of buildings at entrance points will set the tone for the wider area. As such they will need to achieve an exemplary architectural standard and there may be opportunities for taller elements. The design and form of new buildings in these locations should be informed by their surroundings; in particular their proximity to nearby sensitive locations (including existing residential communities, heritage assets, open spaces including Wormwood Scrubs). Specifically entrance points should support the wider legibility of Old Oak and help to achieve a gradual transition between Old Oak and its surroundings.

### Height comparisons

5.25 In other Opportunity Areas, building heights are proposed to reach between 150m and 200m.

**Consultation questions:**
Q5: Where do you think entrance points into Old Oak should be?


Figure 26: Building heights & densities

## 005: LOCAL VIEWS

Proposals should be informed by local views as shown in figure 27 to assist in shaping the built form, delivering variation in the skyline, conserving heritage assets and enhancing local legibility.

5.26 Locations for local views for the have been provided stakeholders including the London Boroughs of Brent, Ealing, Hammersmith & Fulham and Kensington & Chelsea and English Heritage. These views are taken from surrounding Conservation Areas and other locations that may be sensitive to the impact of development in Old Oak Common, and require more consideration. Further guidance will be produced during the development of the OPDC Local Plan.

**Consultation questions:**
Q6: Are there any additional views you would suggest?

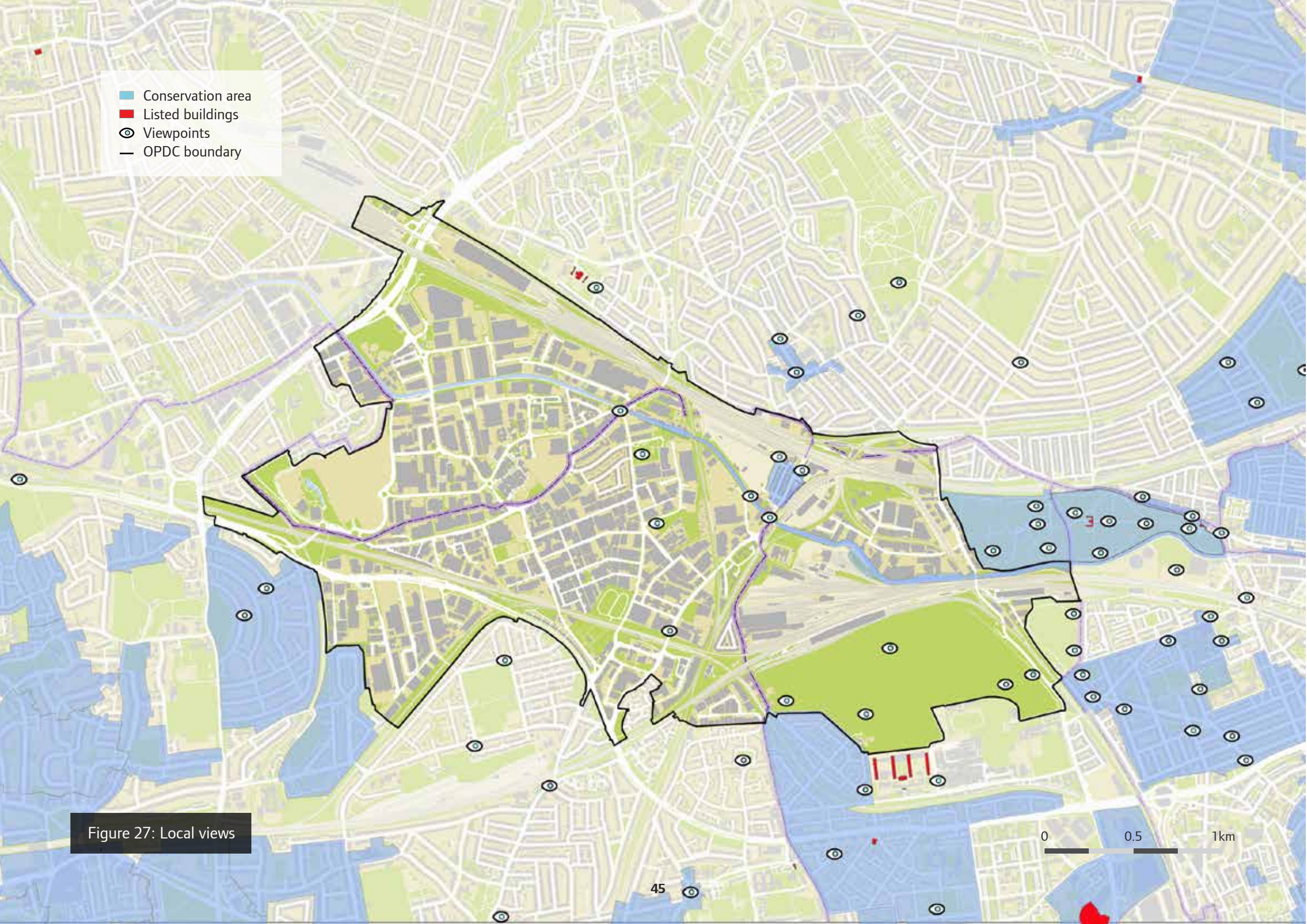



Figure 27: Local views

# OLD OAK PLACES

# PLACE VISIONS

## OLD OAK LANE

Old Oak Lane will be a line of transition between Park Royal and Old Oak. The street will continue to be a busy connecting street between the A40 and Harlesden Town Centre as well as providing enhanced access to Old Oak and physical improvements will be secured to mitigate these impacts.

## OLD OAK HIGH STREET

Old Oak High Street will be one of the key attractions in the core development area, providing a major hub for activity with a mixture of town centre uses and civic and open spaces.

## OLD OAK NORTH

Development will be residential-led, with associated commercial, local retail and social infrastructure and potential for large-scale catalyst uses, along with substantially improved transport infrastructure including a remodelled Willesden Junction Station and new bridge over the West Coast Main Line.

## SCRUBS LANE

Scrubs Lane will be a key site for early development within the area and its environment will be significantly enhanced, through new high quality development and public realm improvements.

## OLD OAK COMMON STATION

Old Oak Common station will be a new state of the art public transport interchange that will serve both a new community at Old Oak, London and the wider UK. It will incorporate the highest standards of architecture and will be designed to connect seamlessly into its surroundings.

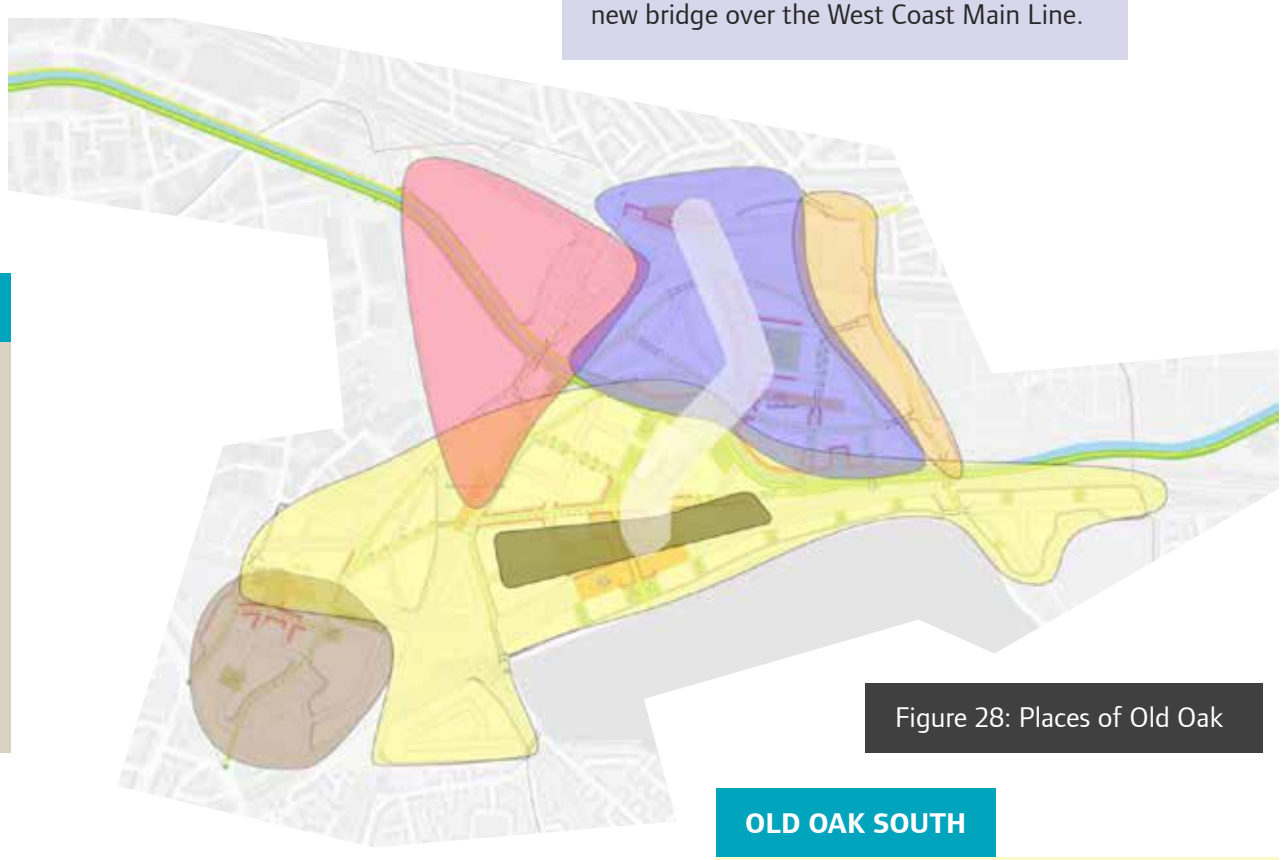


Figure 28: Places of Old Oak

## GRAND UNION CANAL

The Grand Union Canal will be a diverse, well-used and high-quality space fronted by active uses and open spaces to provide a key east-west walking, cycling and freight route.

## OLD OAK SOUTH

Old Oak South will be a focal point for high density, mixed use development, which optimises the benefit of its proximity to the new Old Oak Common station. It will be a hub of activity where people will live, work and shop, with office, retail and leisure uses focussed around the new stations and Old Oak High Street.

## NORTH ACTON

Future development at North Acton will continue to progress along the same lines as the recent successful regeneration of this area and future development will maximise the area's proximity to Old Oak Common and improved connections between both centres will be vital in achieving this.

# OLD OAK NORTH

**Key facts**
Approximate area: 43 hectares
Key Landowners: Car Giant, Network Rail, LB Hammersmith & Fulham
Activities: Car sales, waste processing, smaller SMEs, Willesden Junction station and operational rail uses.

## VISION

Development will be residential-led, with associated commercial, local retail and social infrastructure and potential for large-scale catalyst uses, along with substantially improved transport infrastructure including a remodelled Willesden Junction Station and new bridge over the West Coast Main Line.

## KEY OBJECTIVES

1. Early delivery of new homes and infrastructure to kick start the regeneration of the wider area;
2. Development will be residential-led and will make a significant contribution to the overall target of a minimum of 24,000 new homes in the Opportunity Area;
3. Potential for large-scale catalyst uses such as a new educational facility, football stadium, sports complex, health, arts, leisure or cultural centre;
4. New and improved public transport connections, including a new Overground station at Hythe Road and improvements to Willesden Junction station;
5. A new and improved road, walking and cycling network, providing better connections to the surrounding area and including an accessible bridge of at least 12 metres wide over the West Coast Mainline connecting the EMR site to Willesden Junction; and
6. Significant provision of new amenity and leisure spaces connected by a legible and coherent street network.

5.27 Old Oak North forms a significant part of the core development area. It is currently occupied by a number of large-scale operations, including two waste sites, a large car dealership and major railway infrastructure, including the West London and North London Overground lines, the West Coast Mainline and a series of smaller scale independent businesses. By virtue of the existing types of uses, land is expected to be contaminated and remediation works will be required.

5.28 Existing waste facilities in Old Oak North (especially European Metal Recycling (EMR) and Powerday) perform an important strategic waste function and their future will need to be carefully considered. To facilitate residential led mixed use development in this area, EMR will need to be relocated. For Powerday, subject to detailed design and mitigation work, there is an opportunity to consider the role it could play in addressing future waste management and energy provision for the area, as well as the management of construction waste. The relocation of Powerday may be appropriate in the longer term to release the site for housing or alternative uses. Other businesses displaced from the area will be encouraged to relocate to Park Royal industrial estate.

5.29 Existing connections are poor, with no through east-west vehicular links. The pedestrian environment is particularly hostile, with existing routes isolated from surrounding uses and suffering from a lack of natural surveillance.

5.30 A comprehensive and joined up approach to masterplanning will be expected and it is important that the public sector and private land owners work together to achieve co-ordinated delivery of new infrastructure and development, in a sustainable mix of uses that will provide the best long term future for the area.

5.31 Land currently occupied by Car Giant and EMR could be brought forward for redevelopment in advance of HS2 by improving connections to Willesden Junction station to the north. To support this, the delivery of a new bridge over


- New and existing rail stations
- Civic amenity spaces
- Old Oak High Street
- Green amenity spaces
- Retained and improved nature reserve
- Grand Union Canal
- Streets
- Active frontage
- Sensitive edge
- Pedestrian routes
- Bridges and tunnels
- Trees
- Potential catalyst for regeneration

Figure 29: Old Oak North

the West Coast Mainline, linking Old Oak North to Willesden Junction station will be necessary, to unlock the full development potential of the area. At a minimum this bridge would be pedestrian and cycle. Subject to further feasibility work, there is also an aspiration for this bridge to be vehicular, which would help improve bus access into this area.

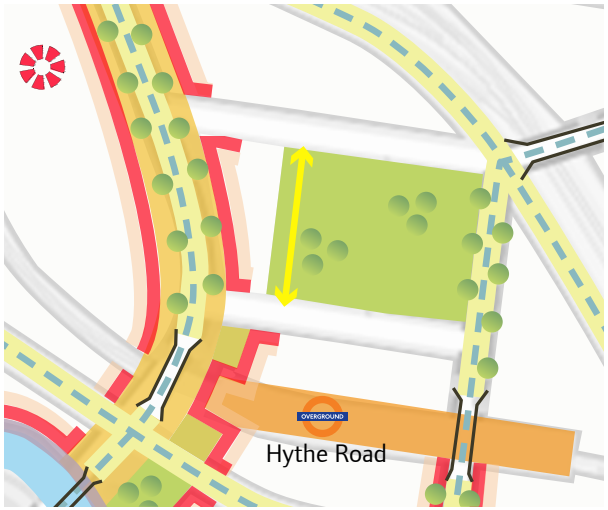
5.32 There will be a new London Overground station at Hythe Road and a need for significant improvements to Willesden Junction station (increased capacity, improved interchange ability, access improvements, an overall better user experience and better connections to Harrow Road and Old Oak Lane) that will provide improved rail connections into the surrounding local area.

5.33 A new road and rail network will serve to integrate the area into the wider urban fabric, overcoming significant barriers to movement presented by existing rail infrastructure and providing coherent links to the existing street network. This will include a new link from Scrubs Lane to connect up with the HS2 station. East-west connectivity should be improved through the provision of a bridge connection over the Grand Union Canal in association with the redevelopment of the Genesis site (see Places: Old Oak South).

5.34 Development will be residential-led and will make a significant contribution to the minimum target of 24,000 new homes across the Opportunity Area. Non-residential uses should be primarily focussed around Old Oak High Street, Willesden Junction station, where non-residential uses could connect into Harlesden Town Centre and the new Overground station at Hythe Road. However, there is potential for local retail and social infrastructure elsewhere in the area, to provide for the day-to-day needs of residents, where feasible. Development could include large-scale catalyst uses which could include a new educational facility, football stadium, sports complex, health, arts, leisure or cultural centre.

5.35 Building heights will vary across the area, with taller buildings focussed around Willesden Junction and the new Overground station at Hythe Road and opportunities for increased massing along Old Oak High Street (see Places: Old Oak High Street on p.56-57). Densities will be optimised to make the most efficient use of land, whilst delivering a high quality residential environment.

5.36 Development must deliver a high quality public realm, including a legible and coherent street network, providing improved east-west and north-south connectivity. New public amenity spaces are likely to include a quieter, green amenity space for residential users to the north of Hythe Road station ('Old Oak Square' – whose location could shift to facilitate large-scale catalyst uses in this area (See Figure **29a**)); new civic spaces at the entrances to Willesden Junction station and the new Hythe Road London Overground station; and a canalside space ('Grand Union Square') opposite the retained or remodelled nature reserve, akin to Granary Square at King's Cross. Detailed discussions will be needed on the exact location, design and on-going maintenance and management of these spaces.




Figures 29a: Alternative location for Old Oak Square to facilitate a large scale catalyst.

Figures 30 to 33: Precedents for development within Old Oak North. From top left: St. Andrews (Bow), Granary School & University of the Arts London (Kings Cross), Adelaide Wharf (Hackney), Aylesbury Estate Regeneration (Southwark).

# OLD OAK SOUTH

**Key facts**
Approximate area: 67 hectares
Key Landowners: Network Rail and Department for Transport
Activities: Operational rail uses, construction of Crossrail depot, residential communities, nature reserve

## VISION

Old Oak South will be a focal point for high density, mixed use development, which optimises the benefit of its proximity to the new Old Oak Common station. It will be a hub of activity where people will live, work and shop, with office, retail and leisure uses focussed around the new stations and Old Oak High Street.

## KEY OBJECTIVES

1. Development will be mixed use and will make a significant contribution to the overall target of a minimum of 24,000 new homes and an indicative additional 55,000 new jobs in the Opportunity Area;
2. Deliver a large quantum of new commercial space, including office, retail, hotel and leisure focussed around the new Old Oak Common station;
3. Facilitate delivery of a new High Speed 2 and Crossrail interchange (Old Oak Common station), a new London Overground station at Old Oak Lane and provision of new bus and taxi services;
4. Facilitate delivery of a new connection from the Crossrail line to the West Coast Main Line;
5. Town centre uses should be focussed around the new stations and along Old Oak High Street;
6. Development will deliver a new and improved network of streets including; a new north-south Old Oak High Street; a new east-west Grand Union Street; a new street through the 'Shield' connecting Old Oak Common station to North Acton; a new pedestrian/cycle access to the north side of Wormwood Scrubs; an improved accessible edge to the Grand Union Canal, and new bridges over the Grand Union Canal connecting Old Oak South and North;
7. Relocate the Crossrail and IEP depots to bring forward development in a timely manner;
8. Development should be mindful of existing residential communities at Wells House Road and Midland Terrace/Shaftesbury Avenue and the areas proximity to Wormwood Scrubs;
9. Development should provide an edge and new access points into Wormwood Scrubs whilst respecting its character and ecological value;
10. Provide a network of well-connected public civic spaces to the west and north of Old Oak Common station, as well as a series of smaller scale amenity spaces for local needs through the development area; and
11. Protect and enhance the existing nature reserve adjacent to the Grand Union Canal.

5.37 Old Oak South is currently dominated by operational railway infrastructure as well as the construction of new railway infrastructure. The area is also home to two small residential communities, at Wells House Road and Midland Terrace/Shaftesbury Gardens, and a nature reserve.

5.38 Much of the developable area is in public sector ownership and long lease: either Network Rail, Department for Transport or Transport for London (TfL). The public sector will therefore have a critical role in bringing forward development at Old Oak South.

5.39 There will be a new and improved road, walking and cycling network, including:

- a new east-west street named Grand Union Street, connecting Old Oak Common Lane through to Hythe Road;
- a new bridge across the Grand Union Canal connecting Old Oak Common Lane to Old Oak North via the Genesis site;
- a new street through the 'Shield' site, connecting Old Oak and North Acton. TfL are currently leading on a study looking at this connection and its relation to the potential spur to the West Coast Main Line; and

- New and existing rail stations
- Civic amenity spaces
- Old Oak High Street
- Green amenity spaces
- Retained and improved nature reserve
- Grand Union Canal
- Streets
- Active frontage
- Sensitive edge
- Pedestrian routes
- Bridges and tunnels
- Trees
- Potential catalyst for regeneration

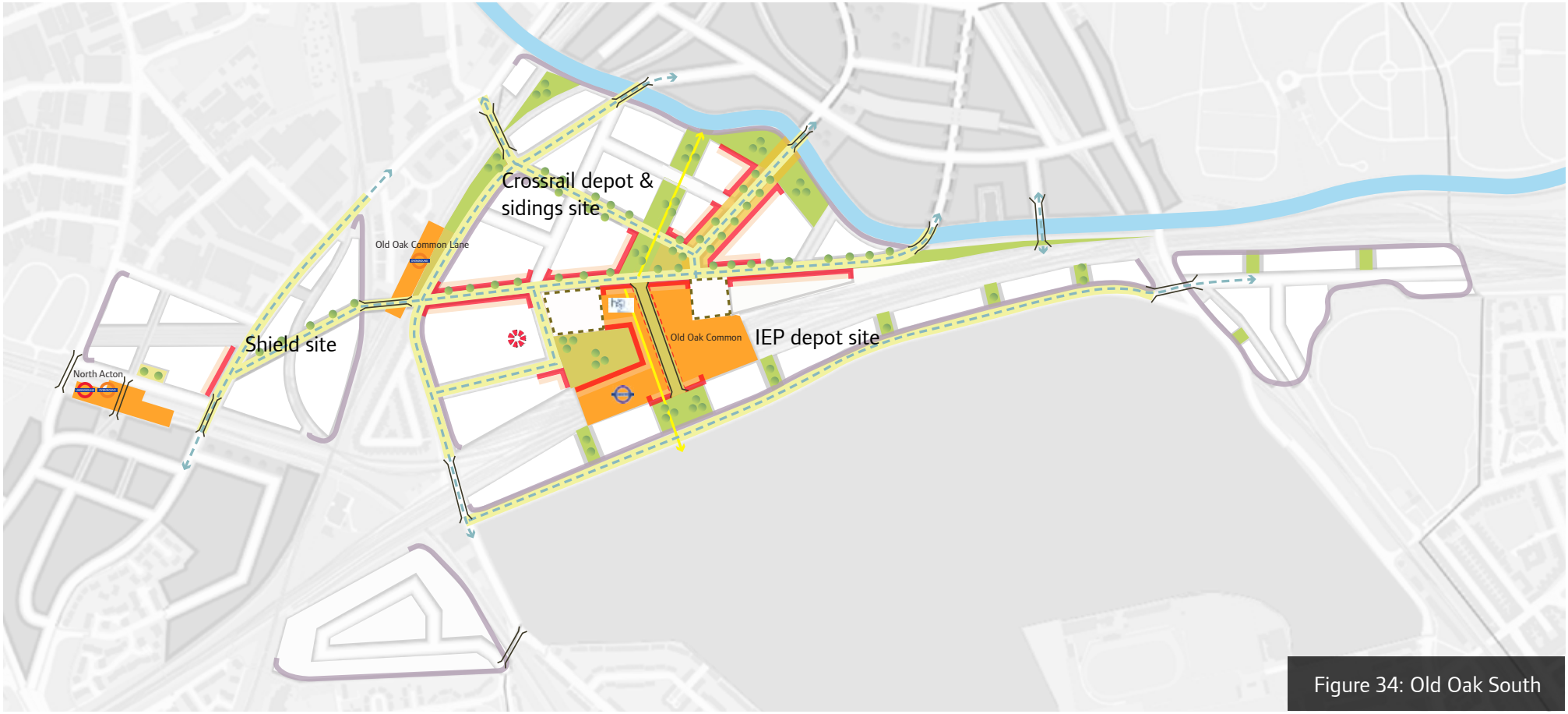



Figure 34: Old Oak South

- a new north-south Old Oak High Street and a new pedestrian access route across the IEP depot site to the north side of Wormwood Scrubs.

5.40 By virtue of its proximity to the new Old Oak Common station, together with a new London Overground station at Old Oak Common Lane, the area will be highly accessible, with direct connections to Birmingham and London Euston via HS2, as well as Heathrow, the West End and Canary Wharf via Crossrail. Such a high degree of accessibility justifies high density mixed use development, including office, retail and leisure uses focussed around the new stations and Old Oak High Street. Development on the fringes of Old Oak South, such as the Genesis site, the Shield site and the North Pole depot, is expected to be residential-led, with supporting local retail and social infrastructure to meet the day-to-day needs of residents.

5.41 Development on the Crossrail depot and sidings sites is contingent on their full or partial relocation. The Mayor considers it critical to either fully or partially relocate the depot and sidings in the 2020's so that development can proceed upon the opening of the proposed Old Oak Common HS2, National Rail and Crossrail stations. This will unlock the comprehensive regeneration of the Old Oak area. Work is currently underway by TfL to look at the feasibility of reconfiguring the depot and sidings or fully or partially relocating them to an alternative location (see Delivery Chapter).

5.42 The IEP depot site could be brought forward for development by relocating this depot to an alternative location. As with the Crossrail depot and sidings, the Mayor considers it critical that the depot is relocated and development is brought forward in a timely manner, as the development of this site will provide much needed new homes and will facilitate delivery of a new access into Wormwood Scrubs for residents, workers and visitors. Development of this site should be lower in scale and provide an active edge to the Scrubs whilst respecting its character and ecological value (see the Wormwood Scrubs Chapter). Further discussions with the Department for Transport (DfT) are needed to progress options for relocation of the IEP depot.

5.43 The majority of Old Oak South is expected to come forward for development post-2026, when Old Oak Common station is scheduled to open. The notable exception to this is the Genesis site, which is capable of being developed as an earlier phase and should be designed to facilitate delivery of a new bridge across the canal connecting Old Oak Lane to Old Oak North.

5.44 Subject to the east part of North Pole depot being decommissioned, it may also be possible for land to the east of Scrubs Lane to be delivered pre-2026.

5.45 Development should be mindful of existing residential communities at Wells House Road and Midland Terrace/Shaftesbury Avenue and development on adjacent sites should be designed so as not to create a cliff edge between existing communities and Old Oak. Development should also have regard to existing amenity spaces and heritage assets such as Wormwood Scrubs, which is protected as Metropolitan Open Land and by the Wormwood Scrubs Act (1879) and the existing nature reserve adjacent to the Grand Union Canal, which is a valuable natural asset that should be protected and enhanced for the enjoyment of the new residential community.

Figures 35 to 38: Precedents for development within Old Oak South. From top left: Canary Wharf (x2), City of London, Bishops Square (Spitalfields).

# OLD OAK HIGH STREET

**Key facts**
Approximate length: 1km
Land Ownership: DfT, Network Rail, LBHF, Car Giant
Comparables: Baker Street, Tottenham Court Road

## VISION

Old Oak High Street will be one of the key attractions in the core development area, providing a major hub for activity with a mixture of town centre uses and civic and open spaces.

## KEY OBJECTIVES

1. Provide a legible connection between Wormwood Scrubs and Old Oak Common station to the south with Willesden Junction station and Harlesden Town Centre to the north;
2. Have well designed pedestrian and cycle connections along its entire length. There will also be a need for vehicle movement, along either part of the street, or its full length, and these activities will need to be carefully integrated;
3. Provide clear and direct access into Old Oak Common station, Hythe Road Overground station and Willesden Junction station;
4. Incorporate generous street widths in the region of 25 metres and high quality public realm;
5. The high street should include public green spaces and public squares along its length. It should celebrate the canal as a focal point and potentially have built in Sustainable Urban Drainage meaures to address drainage issues in the area;
6. The high street should include a mix of town centre uses typical of a busy London high street with active uses along its full length; and
7. Opportunities for increases in building heights along the street could be explored, in recognition of its role and function as a mixed use high street.

5.46 New development will achieve the highest quality design and will contribute to delivering an excellent and accessible public realm. It is envisaged that this connection is at a minimum, a through connection for pedestrian and cyclists. It may also be necessary for all, or parts, of the street to be vehicular, including public transport, servicing and private vehicle, but further transport and design work is needed to assess this in more detail. This would be encouraged where it would add to the street's sense of activity and does not detract from the environment for pedestrians and cyclists.

5.47 The High Street forms part of the 'green grid' (see page 38). It is therefore expected that streets widths are generous and incorporate the highest standards of design for the public realm. Along its length, open spaces and public squares should be provided to contribute to the open space network. It may also be feasible for open and civic space to be provided contiguously or continuously along its entire length (see East Village). New development should celebrate the canal as a focal point along the new High Street. The nature reserve on the southern edge of the canal should be retained, improved and potentially expanded, and a complementary new space should be provided on the northern edge of canal comparable to Granary Square at Kings Cross. The High Street has been indicatively designed as going under the West London Line at Salter Street, with improvements to the tunnel to make the connection wider and deeper. However, a more direct alignment of the High Street from Old Oak Common station to Willesden Junction station, which creates a new connection under or over the West London Line could also be supported.

5.48 Along with the Old Oak Common Station, Old Oak High Street should be the key location for active uses within the core development area. The character and uses along the full length of the High Street will vary. However, it will include a mix of typical London high street uses. There will be opportunities here to provide uses such as

retail, commercial, community uses and leisure.

5.49 Given the opportunities for generous street widths in the region of 25 metres (see Old Oak Design section, page 40) and active uses, to ensure the street has a suitable sense of enclosure and supports local legibility, a prevailing shoulder height of approximately 10 storeys should be delivered. Massing and heights should respond to local sensitivities and should also not create a wall of massing and at appropriate locations there may be opportunities for higher densities and taller elements.

5.50 Any development proposals will need to be sensitive to its surroundings such as Wormwood Scrubs, the Grand Union Canal, Kensal Cemetery and nearby existing residential buildings. New buildings should also have regard to the proposed local views (see pages 44 and 45).

Figure 39: Tottenham Court Road as a comparison for street enclosure


Figure 40: Old Oak High Street

# OLD OAK COMMON STATION

**Key facts:**
Planned opening date: 2026
Land Ownership: Network Rail
Station capacity: 250,000 passengers

## VISION

Old Oak Common station will be a new state of the art public transport interchange that will serve both a new community at Old Oak, London and the wider UK. It will incorporate the highest standards of architecture and will be designed to connect seamlessly into its surroundings.

## KEY OBJECTIVES

1. Be a destination of exceptional quality and form an integral part of the public realm, connecting into its surroundings in all directions with ungated access in order that people can move seamlessly through the station, including south towards Wormwood Scrubs.
2. Support a variety of active Town Centre uses that caters for the local population and interchange passengers;
3. Be of outstanding architectural quality, rivalling the finest stations in the world such as the redeveloped Kings Cross and St. Pancras stations;
4. Provide a new public arrival spaces that will act as a focal point for the entire area;
5. Support mixed development including commercial, retail and residential uses;
6. Support over station, and over track, development, where feasible, to optimise development capacity preferably in the form of new development or new decked amenity space; and
7. Provide a state of the art public transport interchange, which would easily facilitate the movement of pedestrian, cyclists and passengers from buses, taxis and (a small number of) cars into and from the station and be well integrated into the public realm.

5.51 The station and its immediate surroundings should not just be a place to go to access the transport network, but should have wider facilities and services accessible to the local community. This new station should be a core part of a new local centre.

5.52 To enable this to happen, the station should become part of the wider public realm and be seamlessly integrated into its surroundings. Facilities such as retail, leisure, cafes and restaurants are important parts of any large station. By integrating these uses with the wider area they could cater for the needs of passengers using the station as well as the day to day needs of surrounding residents and workers, in a similar way to St. Pancras and King's Cross.

5.53 London has a tradition of grandly designed stations from the Victorian era and despite adaptation to take increased capacity and facilitate new technology, each retains its own unique character. The new Old Oak Common station would need to be designed to accommodate approximately 250,000 passengers per day, making it one of the UK's biggest in terms of passenger flows. The station could be a gateway to Old Oak, London and the UK and could shape many visitors' first impressions. The station should therefore be of the highest architectural quality, drawing on the standards set by London's other major rail hubs and rivalling the finest stations in the world. The style and character that is created would be imprinted not just on the transport network but in the identity of the wider area and could reflect the area's ambition and act as a catalyst and precedent for future development.

5.54 There is an opportunity to provide over station and over track development. This approach would enable an increased quantum of development, provision of amenity space and would also allow for the design of a more integrated and high quality place. The most

sustainable form of development focuses high levels of mixed use activity and density at the areas of highest accessibility. Development over the station would allow for the optimisation of public assets and development capacity and would allow for greater permeability and connectivity across the site and create the potential for releasing development value.

5.55 The station should be designed to be accessible from the north, south, east and west so that it can be connected into the 'green grid'. The concourse should provide for ungated access in order that people could move seamlessly through the station, whether they are using the rail services on offer or not. This station concourse should also have as few vertical movements as possible so that coherent links can be made to the station entrances to the north, west and south. This should include:

- an access point and civic space on the western side of the station building;
- a northern access point to the station. In the longer term the full or partial relocation of the Crossrail depot and sidings will provide the opportunity to create a new exemplar civic space adjoining the northern entrance to the station;
- passive provision for a new publicly accessible southern entrance. The provision of this new connection is extremely important to complete the network of north-south routes and provide improved access to Wormwood Scrubs, which is currently difficult to access. In the long term this southern access would connect through the High Speed 2 station, the existing IEP depots and provide access to Wormwood Scrubs. This route should include provision of a public space at the southern access to the station on the IEP depot land. This southern access would also help to support the long term redevelopment of the IEP depot site; and
- an eastern entrance to the station should include an access to the station for passengers coming from the development sites to the north of the Grand Union Canal.

5.56 There is likely to be a large demand for onward travel from the station and the local area by bus and taxi. The station, under the HS2 proposals, will be accompanied by an intermodal interchange, which would easily facilitate the movement of people from buses, taxis and cars into and from the station. At the same time, the intermodal interchange should not act as a barrier to pedestrian flows into the station but be well integrated into the public realm. Within the station itself, connections between High Speed 2, Crossrail, Great Western Main Line and any potential London Overground platforms would need to be as legible and as seamless as possible.

5.57 The Introduction chapter (page 11) explains that approval for a number of the overarching principles and design components for the Old Oak Common station are being sought through the HS2 hybrid Bill process. The GLA, TfL and the London Boroughs of Brent, Ealing and Hammersmith and Fulham have petitioned on this Bill and some of these petitioning points relate to the design of the Old Oak Common station. More information on these petition items can be found in Appendix B.


- New and existing rail stations
- Civic amenity spaces
- Old Oak High Street
- Green amenity spaces
- Retained and improved nature reserve
- Grand Union Canal
- Streets
- Active frontage
- Sensitive edge
- Pedestrian routes
- Bridges and tunnels
- Trees
- Potential catalyst for regeneration

Figure 41: Old Oak Common Station

# NORTH ACTON

**Key facts**
Approximate area: 32.9 hectares
Key Landowners: Carphone Warehouse, Fairview Homes, Berkeley Homes, John Lewis, Quattro, Boden, Georgina and Texaco
Recent regeneration has delivered 2,040 homes and 1,225 student homes.

## VISION

Future development at North Acton will continue to progress along the same lines as the recent successful regeneration of this area and future development will maximise the area's proximity to Old Oak Common and improved connections between both centres will be vital in achieving this.

## KEY OBJECTIVES

1. Support mixed use intensification, including residential, offices, light industrial and potential for retail, leisure and hotel uses closer to North Acton Underground station;
2. In particular new employment space should seek to provide flexible space for SME businesses;
3. Development in the vicinity of North Acton station should be medium to high density;
4. Proposals should be sensitive to existing residential premises and North Acton Cemetery;
5. Development on the edge of the A40 should provide a defined frontage and act as a gateway to the Old Oak and Park Royal area;
6. Improve pedestrian and cycle connections between North Acton, Old Oak Common and Wormwood Scrubs;
7. Improve the road network within North Acton to provide better facilities for pedestrians, cyclists and bus users. Ealing Council are currently assessing the potential to improve the Gyratory system;
8. Secure wholesale improvements to the public realm across North Acton and in particular on the one-way system along Victoria Road and Wales Farm Road;
9. Continue support for the new access and a new amenity space at the entrance to North Acton Underground station; and
10. Explore the opportunity to upgrade North Acton station to provide additional capacity and improved access to accommodate increased passenger numbers.

5.58 North Acton station is situated on the Central Line, which provides frequent access to the West End and the City. Coupled with bus connections, this affords North Acton a high public transport accessibility level, which provides opportunities for medium and high density development and it is an appropriate location for town centre uses and active frontages at ground floor level.

5.59 The Park Royal Opportunity Area Planning Framework (2011) identified North Acton as the Southern Gateway. The area has experienced major redevelopment in recent years and current indications show that this pace of regeneration and renewal is likely to continue with opportunities for growth in the immediate vicinity of North Acton station, as well as to the south on the Perfume Factory and Portal Way sites.

5.60 In recent years there has been a high provision of student accommodation within North Acton and whilst these uses are supported and have helped to regenerate and bring a new population into the area, it is now important that future residential schemes seek to provide a greater mix of tenure types and typologies to accommodate a more mixed and balanced community.

5.61 Within North Acton there is a lack amenity space. New development will need to make an adequate provision of new public and private amenity space. In particular new residential development will be expected to include good quality private/communal amenity spaces and will also need to demonstrate how it is contributing to a joined up network of public amenity spaces. This may require new development to design and delivery public amenity space that connects with amenity spaces on adjacent sites.

5.62 Development will need to be sensitive to the amenity of existing residential premises, such as to the west of Wales Farm Road and to North Acton Cemetery. Along the A40 any future development should provide a strongly defined frontage, such as that created by the recently expanded and refurbished Holiday Inn, to act as a gateway to North Acton and the rest of the Opportunity Area.

5.63 The Shield site is located immediately to the north of North Acton and more detail on this site can be found in the section on Old Oak South. However, development on the Shield site will provide opportunities for the provision of a direct connection from North Acton station to the new London Overground station at Old Oak Common Lane.

5.64 To the south of North Acton station, Ealing Council is currently in the process of delivering a much needed new public square, which would provide a central focal point to North Acton.

5.65 Capacity enhancements and access improvements will be required to North Acton station to accommodate increased passenger usage. London Underground has developed options for improvement but these are not committed projects and external funding would need to be secured. A significant part of the land immediately to the north of the station and rail line is required for the construction of High Speed 2. Once this is completed, development proposals could be brought forward for this land, known as the 'sword' site and there will be opportunities for public realm enhancements and improved connections. However, this will be dependent on the outcome of the Employment Land Review and a detailed review of Strategic Industrial Land use designations.

5.66 Victoria Road and Wales Farm Road are both heavily used routes with considerable noise, light and air quality pollution. As part of the proposed HS2 works, road and bridge widening would create additional space to provide improved facilities for cyclists and buses. New development should provide enhancements that look to complement these works, such as widened footpaths and planting, as well as ensuring that buildings are designed to mitigate against the routes' harsh environmental conditions.

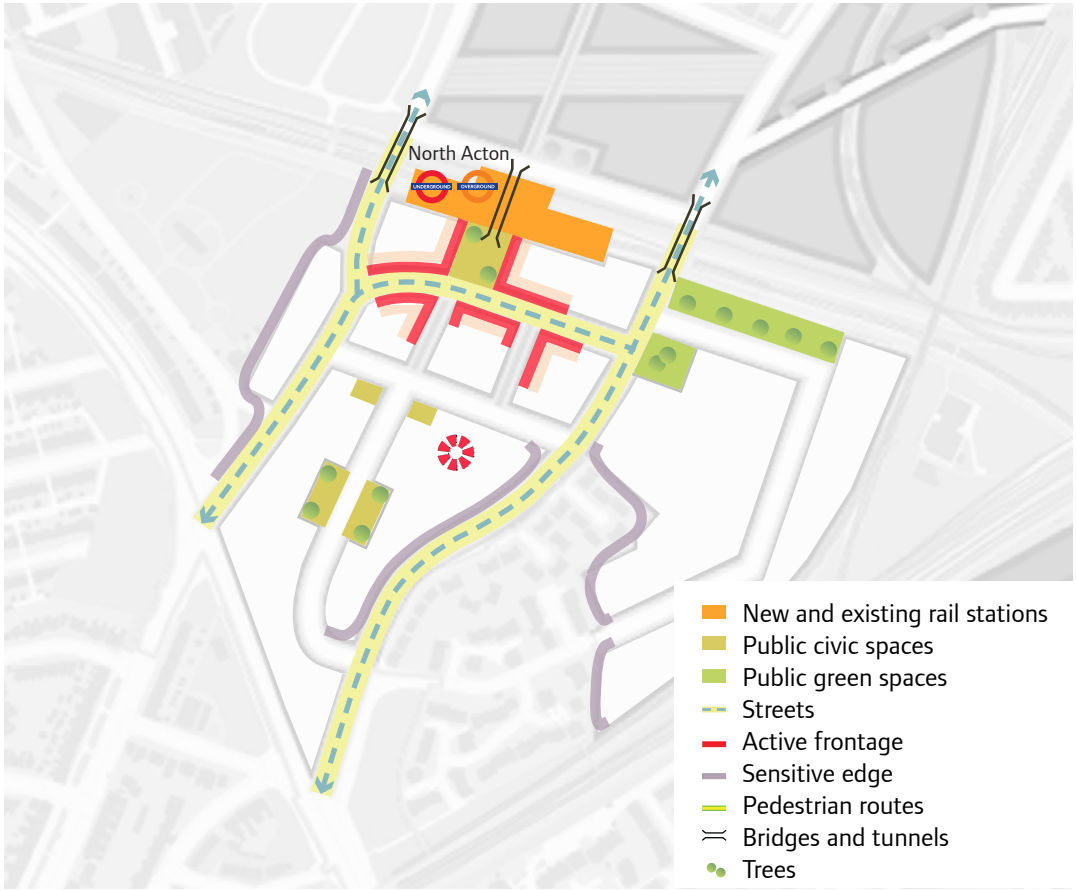



Figure 42: North Acton

# GRAND UNION CANAL

**Key facts**
Approximate length within Old Oak & Park Royal: 4.3 km
Major landowners: Canals & Rivers Trust
Main land uses: Cycling route, industrial uses
Conservation Area

## VISION

The Grand Union Canal will be a diverse, well-used and high-quality space fronted by active uses and open spaces to provide a key east-west walking, cycling and freight route.

## KEY OBJECTIVES

### Within Old Oak

1. New development along the canal should be mixed use, with retail and leisure uses located near to main streets and other key routes;
2. New development should recognise the canals conservation area designation and its sensitive and historic character with new buildings more restrained in height and providing an appropriate level of enclosure to the canal and towpath(s);
3. New waterspaces, such as basins, should be explored where feasible;
4. Support delivery of new bridges over the canal to improve connectivity

### Along the full length

5. Active frontages should be provided along the canal where appropriate;
6. New connections to the canal should be provided to improve access;
7. New and improved towpaths providing walking and cycling routes should be provided along both sides of the canal reflecting the specific character of the canal to access neighbouring areas and support the potential for the designation of a cycle Quietway;
8. New and improved lighting and signage should be delivered and balanced with biodiversity aspirations;
9. Biodiversity and flood mitigation improvements will be supported
10. New and improved accessible local public amenity spaces should be provided;
11. Opportunities for new residential and visitor moorings would be supported in appropriate locations that do not adversely impact on the delivery of the core regeneration area around Old Oak or the potential for transport use;
12. Development of new passenger and freight transport facilities will be supported in appropriate locations.

5.67 The Grand Union Canal currently provides the only consistent east to west walking and cycling route through the OAPF area although improvements are required. The canal provides a direct connection into central London and improvements to the environment of the canal tow paths, along with delivery of new active frontages will help transform this part of the canal into a high quality part of people's journey along the canal.

5.68 How these improvements are secured is likely to differ between Old Oak and Park Royal. However, similar successful examples of how to activate a canal edge can be seen along the Lea Navigational Canal within and adjacent to the Queen Elizabeth Olympic Park. Improvements to the canal will be undertaken in close working with the Canals and Rivers Trust.

5.69 To help increase the use of the canal for walking and cycling, dining, leisure, recreation and employment uses should be focused along the canal. These uses should provide active frontages onto the canal to increase passive surveillance and create a more inviting linear route.

5.70 Due to the nature of the sites adjacent to the canal and lack of access to the tow path, the canal is underutilised as a transport route and presents an uninviting environment. There will likely be a greater use of the canal for walking, cycling and leisure opportunities. As such the

Figure 43: Kingsland Basin, Hackney



potential to deliver new and improved tow paths and new open spaces needs to be maximised.

5.71 The scale of development will vary along the canal, with Old Oak Common seeing a greater level of growth than Park Royal. Within Old Oak Common, new buildings will need to recognise the more sensitive character of the canal and building heights will be more restrained then elsewhere in the core development area. However, there will be opportunities for taller elements that deliver exemplary architectural quality to reflect the location of main streets and new public open spaces to support legibility.

5.72 The potential to deliver biodiversity improvements along with innovative solutions to towpath lighting should be considered. Alongside side these, the role of the canal to support and deliver sustainable urban drainage should be investigated.

5.73 The canal is also a vital asset in securing sustainable transport patterns for construction and waste transport. The expansion and intensification of Park Royal will contribute to increasing the potential for water transport that will require new and improved wharf facilities and working with water freight companies to maximise potential opportunities.

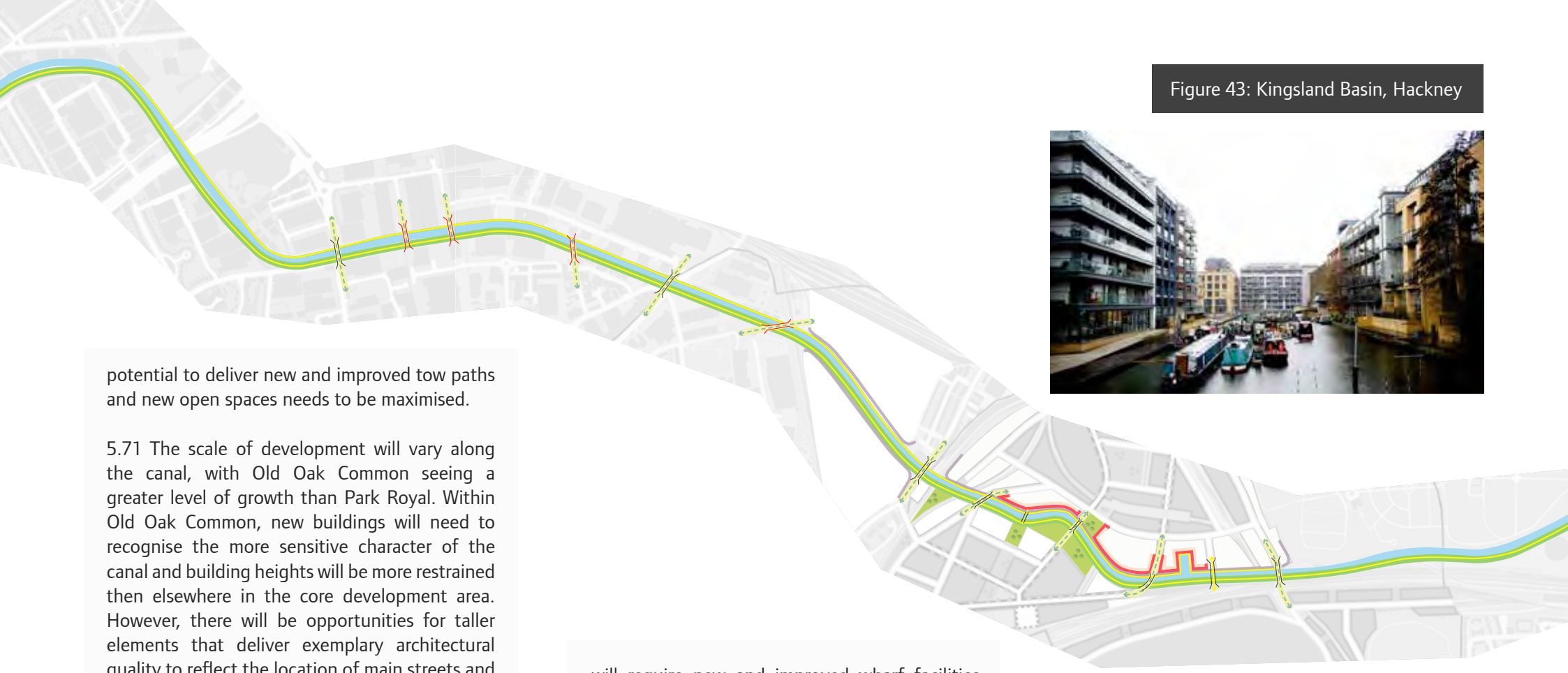



Figure 44: Grand Union Canal

# SCRUBS LANE

**Key facts**
Approximate length: 750m
Major landowners: Car Giant, Perrygrove, Aurora Developments, UK Tyre Exporters Ltd and there are also a number of smaller freeholders and leaseholders operating in the area
Existing homes: 5; Existing businesses: 57

## VISION

Scrubs Lane will be a key site for early development within the area and its environment will be significantly enhanced, through new high quality development and public realm improvements.

## KEY OBJECTIVES

1. Early regeneration along Scrubs Lane will be encouraged;
2. New and improved access points should be provided into Old Oak North;
3. Transport improvements are likely to be required along Scrubs Lane;
4. Public realm improvements including wider footways and cycle infrastructure will be needed;
5. Environmental and street greening will be required;
6. New development should create a coherent built form onto the street. Along the eastern side of the street development should sensitively respond to adjacent buildings and to St. Mary's Cemetery; while along the western side (behind the street front) there will be opportunities for increased massing and taller elements that responds to new development within the core development area to the west. Scrubs Lane should be a transition area between the surrounding area and the core development area
7. New development to the south of Scrubs Lane will need to respect the existing Grand Union Canal conservation area;
8. There is also an opportunity to investigate the potential for a safe and secure access to the Cemetery; and
9. Development should be predominately residential led with opportunities for other uses on the lower levels, such as entrances into Old Oak North, new development should include a mix of active commercial uses and residential front doors on street.

5.74 Scrubs Lane is an important road, which connects Harlesden Town Centre and Willesden Junction Station in the north, with White City, Shepherd's Bush and North Kensington in the south. Scrubs Lane is currently served by the 220 bus route (Willesden Junction to Wandsworth) and has access to Willesden Junction station via Harrow Road. It will be possible for new mixed use development proposals on Scrubs Lane to be brought forward in the short term.

5.75 Hythe Road provides the only entrance point into Old Oak North. This road dips in a tunnel under the West London Line. Development proposals will need to look at improving the Hythe Road entrance, improving its design and making it a more welcoming environment for pedestrians and cyclists.

5.76 In addition to the Hythe Road entrance, it is also expected that an additional connection into Old Oak North will be required to ensure the full development potential of Old Oak North can be realised. This additional connection is considered necessary to provide improved transport capacity, improved connectivity with the wider area and better resilience to the transport network. There is an opportunity for this connection to be provided either over or under the existing train line. It is recognised that this will be technically challenging and further work with Network Rail is required.

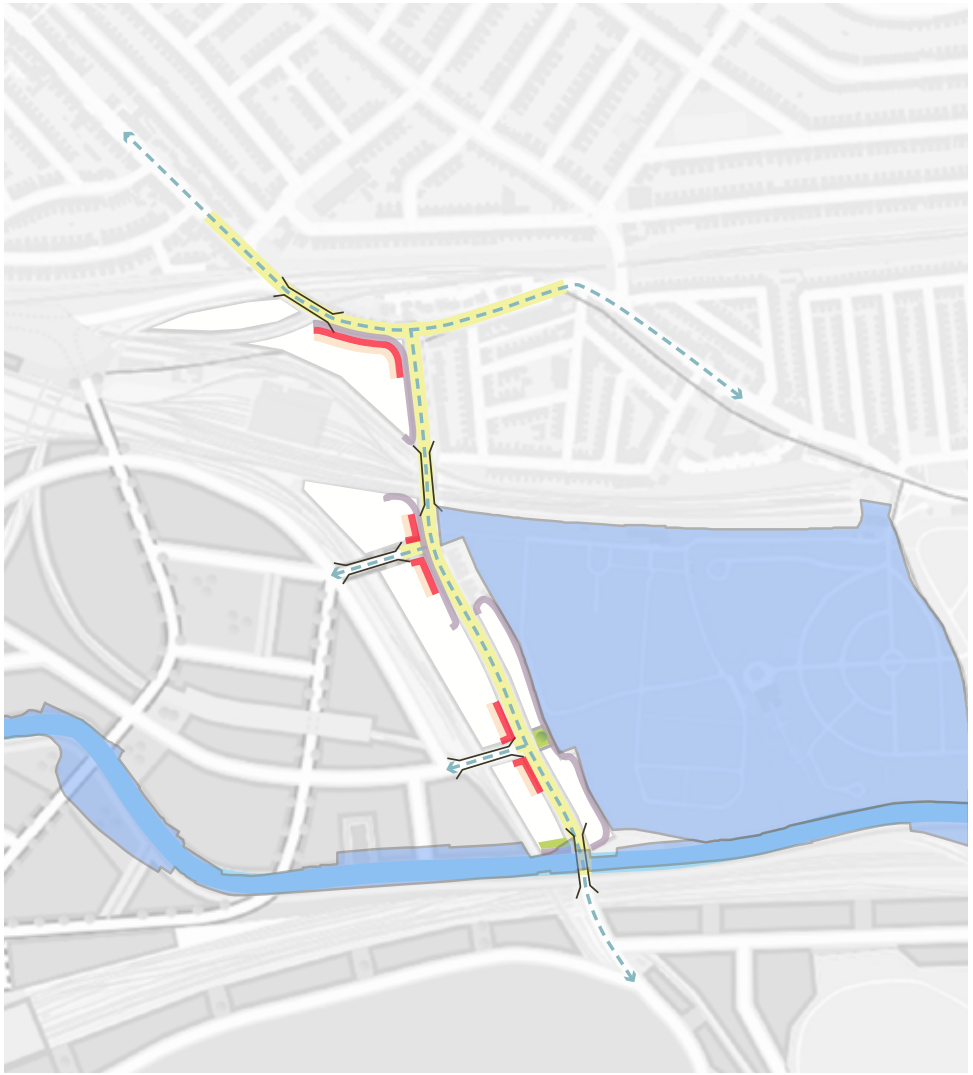
5.77 Scrubs Lane is currently a harsh environment. The road is busy, particularly with the number of lorries entering waste sites on Scrubs Lane and within Old Oak North. The public realm is of a relatively poor quality, despite the road's generous street widths, ranging from approximately 17m to 19m. Monies will be secured from new development to make improvements to the road, by improving its management and operation,

public realm and by street greening.

5.78 To the east of Scrubs Lane, development will need to be sensitive to nearby St. Mary's Cemetery, existing residential and business premises and the Grand Union Canal, in accordance with the guidance provided in the Grand Union Canal place text. St. Mary's Cemetery has been designated as a Conservation Area by the London Borough of Hammersmith and Fulham (LBHF). LBHF plan to consult on revising the boundary of the conservation area so that it also includes some additional properties on the eastern side of Scrubs Lane. Any development to the east of Scrubs Lane will need to be sensitive to the cemetery and the existing residential and business premises that will form part of LBHF's proposed extension to the conservation area boundary.

5.79 To the west of Scrubs Lane, development fronting onto the street should respond to the scale and rhythm of premises to the east, so that development along the street reads as one. Development not fronting onto Scrubs Lane to the rear of land to the west has the potential to increase in scale to blend with the density of development being proposed in Old Oak North.

5.80 Development along the length of Scrubs Lane should be residential led with opportunities for a mix of uses including active and employment uses provided around the new and improved access points into Old Oak North. As part of this, the GLA will expect opportunities to be explored for the provision of SME space. Small amounts of retail may be appropriate at the two entrances into Old Oak North. Active frontages including well designed residential front doors onto the street will be encouraged.



- Green amenity spaces
- Conservation area
- Grand Union Canal
- Streets
- Active frontage
- Sensitive edge
- Pedestrian routes
- Bridges and tunnels
- Trees

Figure 45: Scrubs Lane

# OLD OAK LANE

**Key facts**
Approximate length: 650 metres
Existing homes: 414
Existing businesses: 30

## VISION

Old Oak Lane will be a line of transition between Park Royal and Old Oak. The street will continue to be a busy connecting street between the A40 and Harlesden Town Centre as well as providing enhanced access to Old Oak and physical improvements will be secured to mitigate these impacts.

## KEY OBJECTIVES

1. Industrial land to the west of Old Oak Lane will continue to be safeguarded as a Strategic Industrial Location (SIL);
2. Redevelopment should investigate the potential for an alternative vehicular connection to the west of Old Oak Lane, to minimise traffic impact on the Island Triangle;
3. Enhanced accesses should be provided from Old Oak Lane to the Old Oak development area;
4. Improvements to the street may be required to mitigate increased transport use;
5. Proposals should be sensitive in scale to existing residential premises and Conservation Areas;
6. Enhancements should be made to the public realm on Old Oak Lane; and
7. There is an opportunity to secure active frontage as part of new development fronting onto Old Oak Lane;

5.81 Old Oak Lane and Old Oak Common Lane sit at the centre of a dividing line between Old Oak and Park Royal. To its west, the strategy remains to continue to protect and regenerate the Park Royal industrial estate, whilst to its east, the strategy seeks redevelopment of Old Oak. Old Oak Lane is home to a small enclave of residential properties, known as the Island Triangle, and further south of Victoria Road are Shaftesbury Gardens and Midland Terrace. The Island Triangle is a set of Victorian railway cottages and is a Conservation Area. Any proposals adjacent to this Conservation Area will need to be sensitive in scale and respond in their character to their architectural heritage.

5.82 To the west, HS2 Ltd has identified land as a temporary work sites. This is planned to be in operation until 2026 and once its use ceases and it is deemed surplus to requirements, the GLA will seek its retention as a Strategic Industrial Location (SIL). The redevelopment of this may provide opportunities to investigate the potential to provide improved road access, which would go some way towards accommodating increased traffic along the street. The Transport Study that supports this OAPF has identified the need for improvements to the Old Oak Lane route.

5.83 Development next to Old Oak Lane will provide opportunities to enhance the road's public realm and highway capacity, including potential enhancements to existing bridge connections; however, these opportunities are likely to be limited as a result of narrow street widths. Development to the east of Old Oak Lane will also provide opportunities to improve connectivity into the Old Oak area. At Willesden Junction, there will be substantial improvements to connectivity allowing for better access from Old Oak Lane. To the south of the West Coast Main Line, development of the Savoir Beds site may provide opportunities to provide pedestrian/cycle and vehicular access into the Powerday site, although there are substantial levels to overcome in order to achieve this. Next to the Grand Union Canal, it may be also possible to secure a pedestrian/cycle connection, which would connect through to the core Old Oak area (see Places: Grand Union Canal).

5.84 The Mayor will continue to work with HS2 to ensure that the works they have planned along Old Oak Lane and Old Oak Common Lane

will be of the highest possible design and will be mindful of the operation of existing businesses and residents.

- HS2 work sites
- Conservation area
- Grand Union Canal
- Streets
- Sensitive edge
- Pedestrian routes
- Bridges and tunnels

Figure 46: Old Oak Lane


Figure 47: Park Royal Oriental Carpet Centre

# 6. PARK ROYAL STRATEGY

# LAND USE

## PR1: LAND USE

a. The GLA will continue to safeguard existing Strategic Industrial Locations (SIL) and promote development and intensification on SIL land.

b. New employment proposals in Strategic Industrial Locations should:

i. deliver new workspace that maximises and intensifies the use of the site to support delivery of 10,000 new jobs in Park Royal and where possible accommodate business relocations from elsewhere in the OAPF area.

ii. deliver new employment workspace that meets identified needs for micro, small and medium enterprises in locations within easy walking distance to public transport services and/or town centres and for larger enterprises elsewhere.

c. support the delivery of nationally significant railway infrastructure.

d. Within First Central, proposals for office floorspace, elements of housing and ancillary retail, health and leisure facilities will be supported and should:

i. improve walking and cycling access to Park Royal London Underground Station
ii. improve walking and cycling to the existing residential areas to the north; and
iii. enhance the adjacent wildlife corridor to the south-west.

e. Within the area of existing housing and Wesley Playing Fields, proposals which support the existing residential character, improve the quality of the public realm and Wesley Playing Fields and improve walking and cycling routes to and from Wesley Playing Fields and the Grand Union Canal will be supported.

6.1 Park Royal is one of Europe's largest and most thriving industrial estates providing vital services for the capital and further afield. The Park Royal Atlas (2014) provides a snapshot of the diverse range of employment activities across the Park Royal Strategic Industrial Location.

6.2 This role is reflected in its London Plan Strategic Industrial Location (SIL) designation. Given its strategic importance, proposals not in accordance with the area's SIL designation will be resisted.

6.3 New employment proposals within Strategic Industrial Locations will be required to maximise and intensify the use of the site to increase employment densities, efficiencies and flexibility to help to accommodate displaced employment floorspace. This could include increasing the amount of employment floorspace, delivering shared services and floorspace (such as deliveries infrastructure and site access) and implementing new employee working patterns. This activity has the potential to continue to grow which is reflected in the London Plan target for 10,000 additional new jobs.

6.4 In addition to employment uses, Park Royal also has a role in delivering waste, logistics and land for transport functions in accordance with its SIL designation.

6.5 The Park Royal Atlas demonstrates that micro and small businesses comprise approximately 95% of the existing businesses. Micro and small businesses refer to a range of employment sectors, including creative and cultural industries. Different sectors have different spatial needs which require a range of sizes and types of workspace. Businesses with smaller floorspace requirements tend to deliver higher employment densities and as such should be located nearer to existing and new public transport services. Conversely, businesses requiring larger floorspaces such as warehousing generally have a lower density of employees and as such are more appropriate to be located further away from public transport interchanges.

6.6 To achieve help regenerate Park Royal, improvements to the road network, public transport and broadband connectivity will also need to be delivered.

6.7 First Central sits on the western edge of Park Royal with housing areas to the north and west and Strategic Industrial Location (SIL) land to

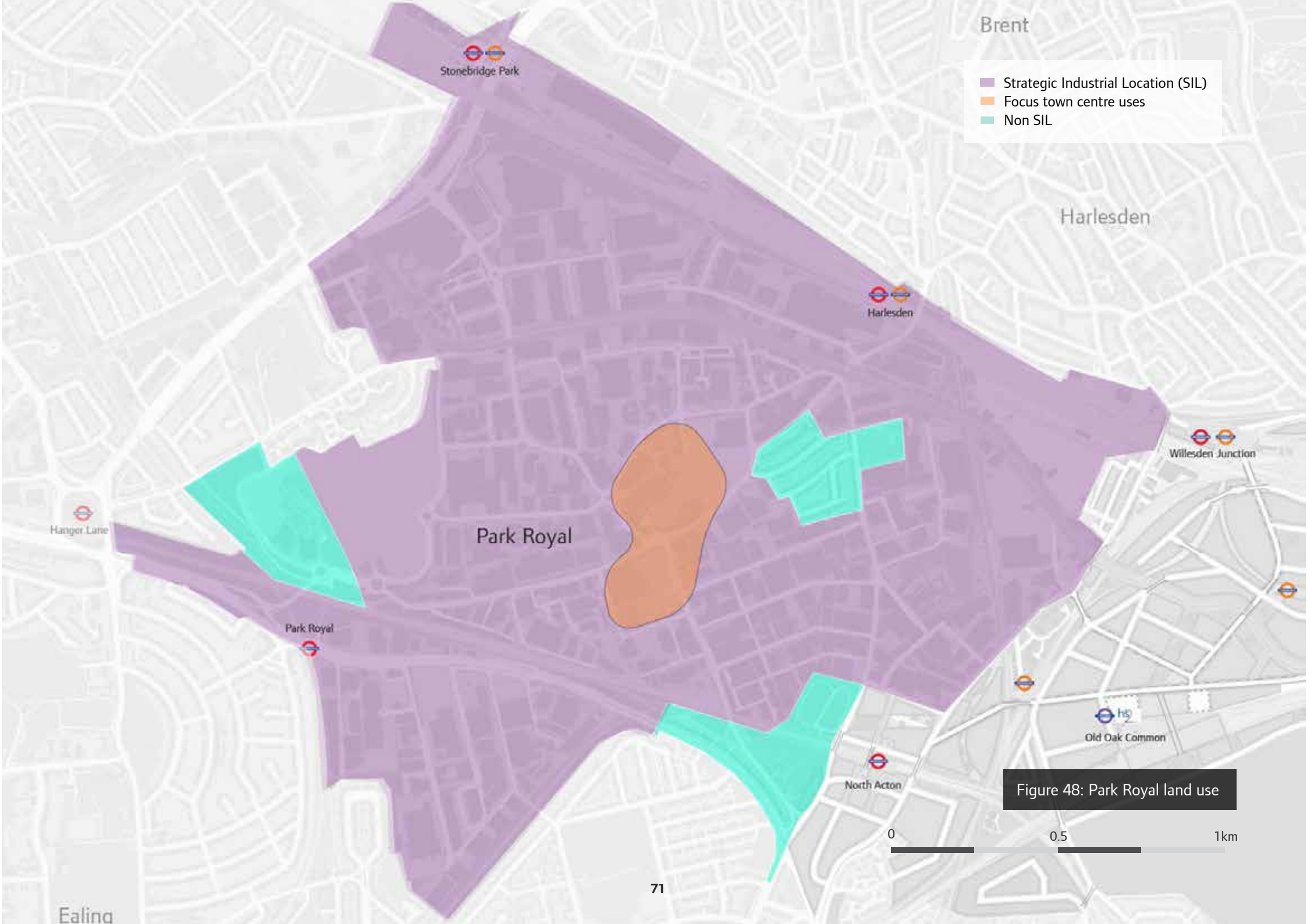



Figure 48: Park Royal land use

the east. Its location near to Park Royal London Underground Station and position outside of SIL enables it to accommodate an element of housing subject to the mitigation of any impact on the functioning of the SIL. The element of housing will be supported where it enables the delivery of significant public transport improvements, connecting the site to the Heart of Park Royal and other public transport services. Supporting uses should be local in scale and nature.

6.8 There is an existing area of housing that sits west of North Acton Road, south east of Acton Lane with Wesley Playing Fields adjacent in the east. The residential character of this area is markedly different to the surrounding industrial uses and should be improved where possible. The Wesley Playing Fields offer a valuable green space within the north of Park Royal and should be improved where appropriate. Specifically, the creation of an improved walking and cycling route to the Grand Union Canal should be explored to improve local accessibility.

# IMPROVING INFRASTRUCTURE

## PR2: INFRASTRUCTURE

a. Proposals should seek to improve transport and utilities infrastructure.

b. Improvements to:

i. the road network should be focussed along the four main roads of Abbey Road, Acton Lane, Park Royal Road and Coronation Road and at junctions with the North Circular Road (A406), Western Avenue (A40) and Old Oak Lane (A4000); and
ii. the walking and cycling network should be focussed along the four main roads, along the Grand Union Canal and along north-south routes across the canal.

c. Proposals for employment floorspace should demonstrate how they will maximise the use of sustainable transport modes and facilities for freight movement.

6.9 To support the protection, intensification and the long-term successful functioning of Park Royal, it is critical that existing issues relating to traffic congestion and broadband connectivity are addressed to support business growth and development.

6.10 As such, the Mayor will work with TfL to deliver a transport strategy for Park Royal and is working with broadband providers to ensure that deliverable processes are in place to meet current and future needs and accords with the principles of 'Smart London' (see pages 128 and 129). With this in mind, any development which seeks to deliver these principles will be supported.

6.11 The local and strategic road network within and adjacent to Park Royal is frequently congested which restricts public transport access and freight movement. To help to address this, proposals for facilities which help alleviate congestion will be supported. These could include consolidation centres, rail depots and canal wharves for freight transport alongside shared freight and passenger vehicle parking. Additionally, new employment uses should demonstrate how they maximise the use of the Grand Union Canal and rail network for freight transport purposes.

6.12 Congestion on the road network and the quality of the public realm restricts the use of walking and cycling as sustainable transport modes. As such proposals will be required to contribute to the delivery of new and improved walking and cycling routes, specifically in the delivery of north-south routes. The Mayor will explore options with partners and stakeholders to improve the transport network.

# DESIGN

## PR3: PUBLIC AMENITY SPACE

Proposals should deliver:

| | Name | Location | Guidance |
|---|---|---|---|
| a. | **Heart of Park Royal small amenity spaces** | Located within the Heart of Park Royal. | These new public amenity spaces should be delivered on, or coordinated between individual sites with typologies which reflect the nearby employment and housing uses. The Mayor will work with stakeholders to explore how these spaces will be delivered. |

## PR4: STREETS & PUBLIC REALM

Proposals should:

a. deliver active frontages on the ground floor and above within the Heart of Park Royal and along the Grand Union Canal.

b. utilise a coordinated palette of high quality durable materials and street furniture to support Park Royal's role and reflect and improve its local character.

6.13 Improvements to the street environment and public realm are required to support the industrial character and functions of Park Royal. Park Royal has a rich industrial heritage which should also be reflected in development. The OPDC will work with English Heritage and other stakeholders ensure local heritage is embedded within the character of the area.


Figure 49: Park Royal design

# HEART OF PARK ROYAL

**Key facts**
Approximate area: 20 hectares
Key Landowners: Central Middlesex Hospital, Asda, various residential and commercial

## VISION

The Heart of Park Royal will be enhanced as a thriving town centre, providing a range of services and amenities to support the local business, residential and medical communities.

## KEY OBJECTIVES

1. Create a sense of place with well-defined streets and spaces;
2. Support the intensification of sites;
3. Support a range of retail, leisure uses and business services on the main roads of Abbey Road, Acton Lane, Park Royal Road and Coronation Road and within the Asda site to create active frontages;
4. Explore the potential for delivering a mix of uses, including residential, on the Asda site and other suitable locations;
5. Support appropriate taller buildings;
6. Improve legibility to the surrounding businesses and destinations including local stations, the Grand Union Canal and public open spaces;
7. Deliver new public green spaces near to the junction of the four main streets.
8. Ensure that new development continues to support and respond to the important role of the surrounding Strategic Industrial Location (SIL) designation;
9. Secure improvements to transport infrastructure including improvements to the road capacity and layout (as shown in fugure; as well as increases in frequency, capacity and connectivity in the local bus network.

6.14 There is an opportunity for the Heart to become a destination for both new businesses and employees from the businesses in the wider Park Royal area through the creation of a new mixed use environment. However, development within the Heart should ensure that it does not inhibit the function of the surrounding SIL, which is necessary to ensure its long term protection and enhancement of Park Royal.

6.15 The Heart of Park Royal currently lacks a defined character. Its environment is dominated by the road network and framed by a range of inactive building frontages and parking that creates a poor quality public realm. The existing services are dispersed within the area which weakens its role as a centre for business services.

6.16 In seeking to improve and create a sense of place there is an opportunity to consider the arrangement of the Asda site and the potential to intensify its use, deliver a new amenity space and to help to deliver greater definition to the public realm, open spaces and road network. Intensification may include increasing building height and massing that will help to improve legibility within Park Royal.

6.17 The four mains streets that meet in the centre of the Heart suffer from traffic congestion and a poor public realm. Through new development these streets have the potential to better frame this local centre through active frontages and provide consistent building lines. Public open spaces are not currently present within the Heart and would support the local communities and visitors.

**Consultation questions:**
Q7: Where do you think new housing, and/or amenity space, could be located within the Heart which wouldn't impact on the protected industrial land?

- Public green spaces
- Strategic Industrial Land
- Streets
- Active frontage
- Sensitive edge
- Pedestrian routes
- Bridges and tunnels
- Trees

Figure 50: Potential junction improvement

Figure 51: Heart of Park Royal

Figure 52: Wormwood Scrubs looking north east

# 7. WORMWOOD SCRUBS STRATEGY

# WORMWOOD SCRUBS STRATEGY

## WS1: PROTECT & ENHANCE

The Mayor will:

a. Ensure the valuable ecology of Wormwood Scrubs is maintained and where appropriate enhanced;
b. Maintain and where appropriate enhance Wormwood Scrubs as an area for exercise and recreation for the inhabitants of the metropolis;
c. Improve access to Wormwood Scrubs from the surrounding area;
d. Secure resources for the long-term management and maintenance of the Scrubs;
e. Carry out detailed discussions with local residents and interest groups, including the Friends of Wormwood Scrubs; and
f. Agree any works with the Wormwood Scrubs Charitable Trust on the opportunity for any sensitive improvements that could be made to the Scrubs.

7.1 Covering almost 68 hectares, Wormwood Scrubs is the largest open space in the London Borough of Hammersmith & Fulham, and is green lung that provides people and wildlife with the opportunity to enjoy green amenity space. The Wormwood Scrubs open space is managed by the Wormwood Scrubs Charitable Trust and is protected by the Wormwood Scrubs Act 1879, the Commons Act 2006 and as Metropolitan Open Land in the London Plan. This protection will continue and the Mayor of London will not seek to change the Acts or its designation as Metropolitan Open Land. The Ministry of Defence also have rights to access and use the Scrubs.

7.2 Over half of the Scrubs comprises a mix of young and established woodland, scrub, grassland and tall herbaceous vegetation which gives the Scrubs a sense of wildness that is a unique characteristic, in particular given is proximity to central London. There is a combination of diverse habitats across Wormwood Scrubs that support a diverse range of native plants, breeding birds and insects, including species not usually found in more formal parks and open spaces. The site also supports a large population of common lizards and attracts a wide variety of migrant birds in spring and autumn. There are a number of legally protected animals, plants and fungi resident on the Scrubs.

7.3 Retaining the Scrubs as an amenity space that is more wild than tamed, will inform future thinking about how the regeneration of land at Old Oak relates to the Scrubs. Given the scale of development planned to the north of Wormwood Scrubs it is recognised that there will be an increase in users, and so in the interest of coherent planning and to ensure that all local people have access to the Scrubs, there is a need to consider the potential impacts of these additional users.

7.4 Over the coming year there is a need to have discussions with local residents, businesses, local Councils, the Wormwood Scrubs Charitable Trust and local groups (including Friends of Wormwood Scrubs) to consider these issues in more detail. Any works to the Scrubs would need to be consented by the Wormwood Scrubs Charitable Trust and the current role of the Charitable Trust will not be changed.

7.5 As part of these discussions there will be some important issues to consider including:

- The conflict between protecting the integrity of the Scrubs and providing access to it;
- Outcomes of increased users;
- Drainage across the Scrubs;
- Maintenance and management;
- Relationship to surrounding areas including the Linford Christie Stadium; and
- Opportunities for sensitive enhancements.

7.6 All development shown to the north of the Scrubs in Figure 53 is on rail or industrial land.


Figure 53: Wormwood Scrubs


Figure 54: Kings Cross Station

# 8. TRANSPORT STRATEGY

# TRANSPORT STRATEGY

### Strategic Transport Study

8.1 This transport chapter is supported by a Strategic Transport Study, which is a supporting document to this OAPF. The Study was undertaken by Transport for London in conjunction with the GLA and Hammersmith & Fulham, Ealing and Brent Councils. The Strategic Transport Study provides an evidence base for the transport measures proposed in this document and responds to major transport infrastructure proposals including High Speed 2 (HS2) and Crossrail 1.

## T1: RAIL & UNDERGROUND

Proposals should:

a. Deliver a state of the art rail station at Old Oak Common, providing interchange between HS2, Crossrail 1 and the Great Western Main Line;
b. Provide new London Overground station(s) and supporting infrastructure;
c. Provide substantial capacity improvements to existing London Underground and Overground stations, particularly Willesden Junction and North Acton;
d. Ensure that the impact on existing rail infrastructure is minimised during construction.

8.2 The new Old Oak Common station and surrounding interchange will be the key driver for development in the area and will be the focus of future transport connections. The station itself is being designed to accommodate 250,000 passengers a day, making it comparable in passenger numbers to Waterloo. HS2 will provide up to 18 trains per hour between Old Oak and the North, with Birmingham Airport just 31 minutes from Old Oak. The new Crossrail station at Old Oak will provide up to 24 trains per hour into central London, as well as services towards Heathrow and Reading. There will also be up to 24 trains per hour into central London on rail services using the Great Western Main Line (GWML).

8.3 The presence of a Crossrail station will be one of the most important transport connections to the site. Crossrail will provide a substantial increase in rail capacity to the West End, City and Canary Wharf and the station will bring excellent regional and sub-regional connectivity to Old Oak.

8.4 Subject to a positive business case a potential link from Crossrail to the West Coast Main Line (WCML) could provide additional connections from northwest London and Hertfordshire including, potentially, Wembley Central. The most recent proposals for a Crossrail to WCML extension would also be compatible with aspirations for operating passenger services on the Dudding Hill Line although a business case for this has not yet been established.

### London Overground station(s)

8.5 Building on the international, national and regional links provided by HS2 and Crossrail, TfL has developed proposals for new London Overground stations at Old Oak Common which would provide access to services operating on the North and West London Lines.

The London Overground stations would:

- Reduce the crowding effects of HS2 in central London;
- Facilitate regeneration across the Old Oak Common site;
- Provide a new strategic transport interchange for west London and improve connections to other Opportunity Areas;
- Provide improved access to Crossrail and HS2.

8.6 Current HS2 plans do not provide for new stations on the London Overground or connections to them but they are seen as essential to maximise the potential connectivity of the new interchange. Public consultation on three alternative options for the new London Overground station(s) took place in autumn 2014. Following this TfL has made a recommendation to develop option C which would comprise two

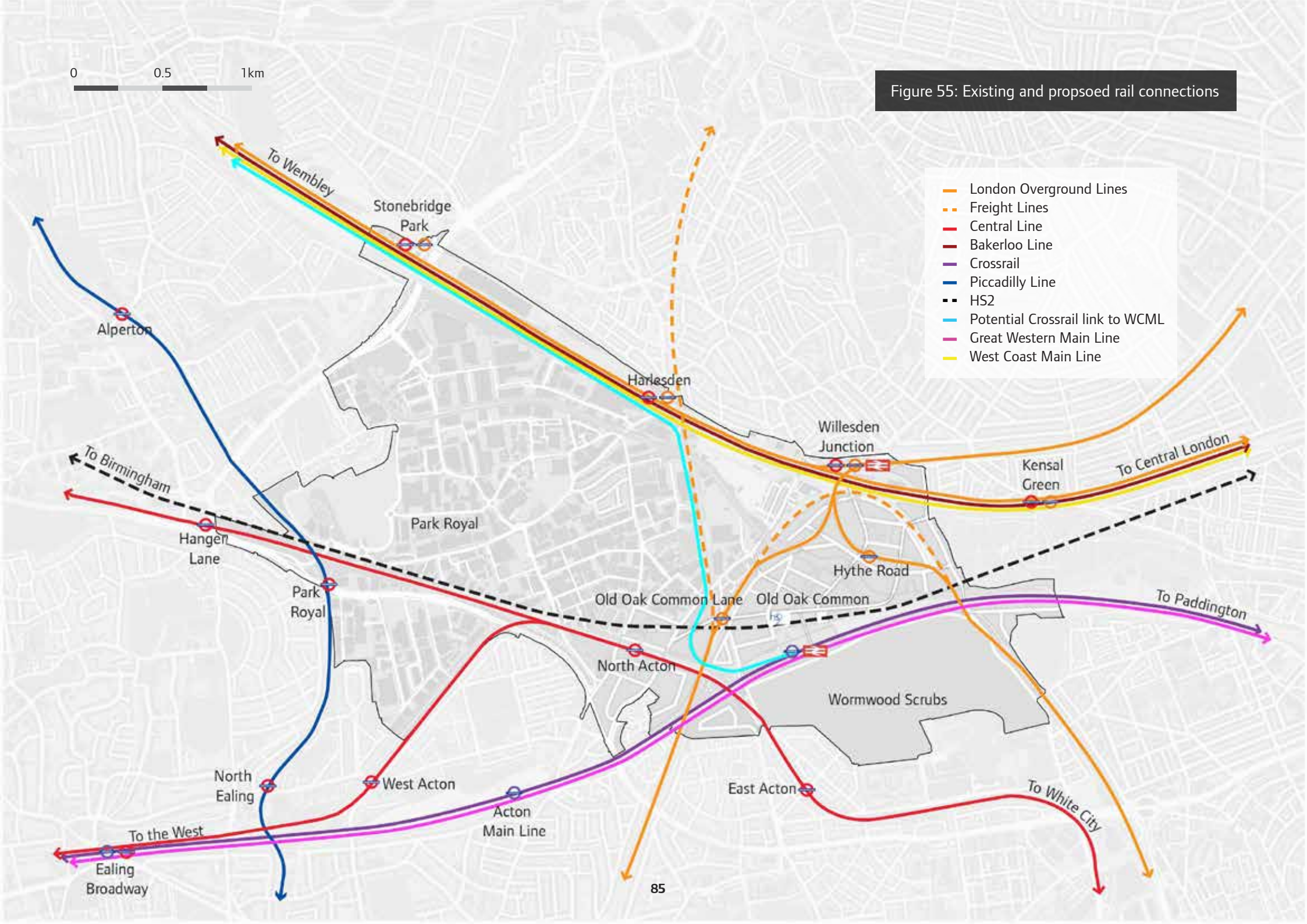



Figure 55: Existing and propsoed rail connections

separate stations as illustrated in figure 55. This decision was also supported by a detailed technical study. The proposed stations are not a committed project and so powers of delivery and sources of funding would need to be secured.

8.7 As well as providing congestion relief at London Euston, the new London Overground stations will provide excellent local and sub-regional connections to Old Oak and will support development by extending the catchment area for new commercial activities bringing 250,000 additional people and 150,000 additional jobs within an hour's journey of Old Oak. The new stations will be essential to deliver the scale of development envisaged without compromising the operation of other parts of the transport network. They will provide a level of public transport access and capacity which can support high density residential and commercial development.

8.8 The stations will also widen access to employment, retail and leisure opportunities for new residents by offering connections to major centres such as Clapham Junction, Shepherd's Bush, Richmond and potentially Hounslow. Improving local connectivity to Old Oak from all directions is critical to help maximise the opportunities for regeneration of the area. Indeed, a 2014 study by Jones Lang LaSalle has suggested that with the local connectivity provided by the proposed Overground stations, as many as 20,000 additional jobs would be created at Old Oak. As part of the station proposals, new high quality pedestrian and cycle links will be provided across the Old Oak development area connecting to Victoria Road and the main HS2/ National Rail transport hub.

8.9 In addition to the new London Overground station(s), the case for improved service frequencies and longer trains is being investigated for the North and West London Lines.

### Station improvements

8.10 To accommodate the scale of development at Old Oak and Park Royal, major improvements will be required at an early stage to existing rail stations including Willesden Junction and North Acton. These capacity improvements will need to accommodate the increases in rail station usage forecast but they are not currently funded or committed and so there would need to be a sound financial case and sources of funding would need to be secured.

8.11 The impact of development and growth across the area will also put added pressure on nearby stations such as Kensal Green, Harlesden, Park Royal, Stonebridge Park and Hanger Lane. Access to existing and new rail and Underground stations from Park Royal industrial estate will need to be enhanced through a combination of improved bus links and more direct high quality routes for pedestrians and cyclists.

### Willesden Junction

8.12 Willesden Junction is a major interchange for north and west London. As well as the proposed rail connections highlighted above, passengers will also have the choice of taking existing Bakerloo line and London Overground services from Willesden Junction. A major rebuilding of the station will be required at an early stage to cater for development related trips and to act as a focus for development to the north of Old Oak. The rebuilt station will need to offer improved interchange between the high and low level stations, accessibility improvements, better connections with buses and high quality pedestrian and cycle links to the surrounding streets. However, there are no existing plans, funding or commitment to improvement by Network Rail, DfT, TfL, or rail operators and so this would need to be secured. Walk and cycle routes in and around the station will also need to be improved to cater for increased passenger numbers, particularly between Willesden Junction and the new development to the south. Any proposed work in and around the station including links over rail lines will require liaison with the Network Rail Delivery and Operations team.

### North Acton

8.13 As well as improved access arrangements, works at North Acton to accommodate the predicted increase in passenger numbers will require new passenger facilities which may include new access from the north, improved entrances and ticket hall, a new footbridge, new stairs and lift access. London Underground has completed a study looking into potential options for improvement. However, there is no existing funding or commitment to this project. The preferred option and design will be dependent on securing funding and more detailed station

modelling. There is also the possibility of a more substantial redevelopment which could allow for new structures to be built above the station. It will be important to secure good interchange with buses as part of any changes in and around the station.

## Existing rail infrastructure

8.14 It is essential that existing rail infrastructure remains open during the likely long construction period and that any temporary disruption to both passenger and freight services is managed effectively and kept to a minimum. This will be a challenge when installing new stations, subways, bridges and potential new decked structures over operational rail lines.

8.15 Existing and planned transport facilities and infrastructure including depots, maintenance facilities and stabling will need to be accommodated even if this involves relocation of some facilities in the long-term. Although HS2 will necessitate the relocation of the existing First Great Western and Heathrow Express depots, the new Crossrail depot is due to come into operation in 2017. TfL is currently assessing alternative locations for the reconfiguration or relocation of the Crossrail depot in the 2020's. Depending on the outcome of this work, the scale and phasing of development and related infrastructure works at Old Oak may be impacted.

8.16 South of the GWML tracks is a depot for the Intercity Express Programme (IEP) trains which is nearing completion on part of the former North Pole Eurostar depot. The first trains will arrive at the depot during 2015.

8.17 As well as the depots and stabling at Old Oak, there are existing rail freight facilities at and in the vicinity of Willesden Junction. If the existing rail freight facilities were identified for redevelopment, replacement facilities with the same capacity and accessibility would need to be provided nearby. The North and West London Lines and Dudding Hill Line also provide important routes for rail freight transport which will need to be accommodated.

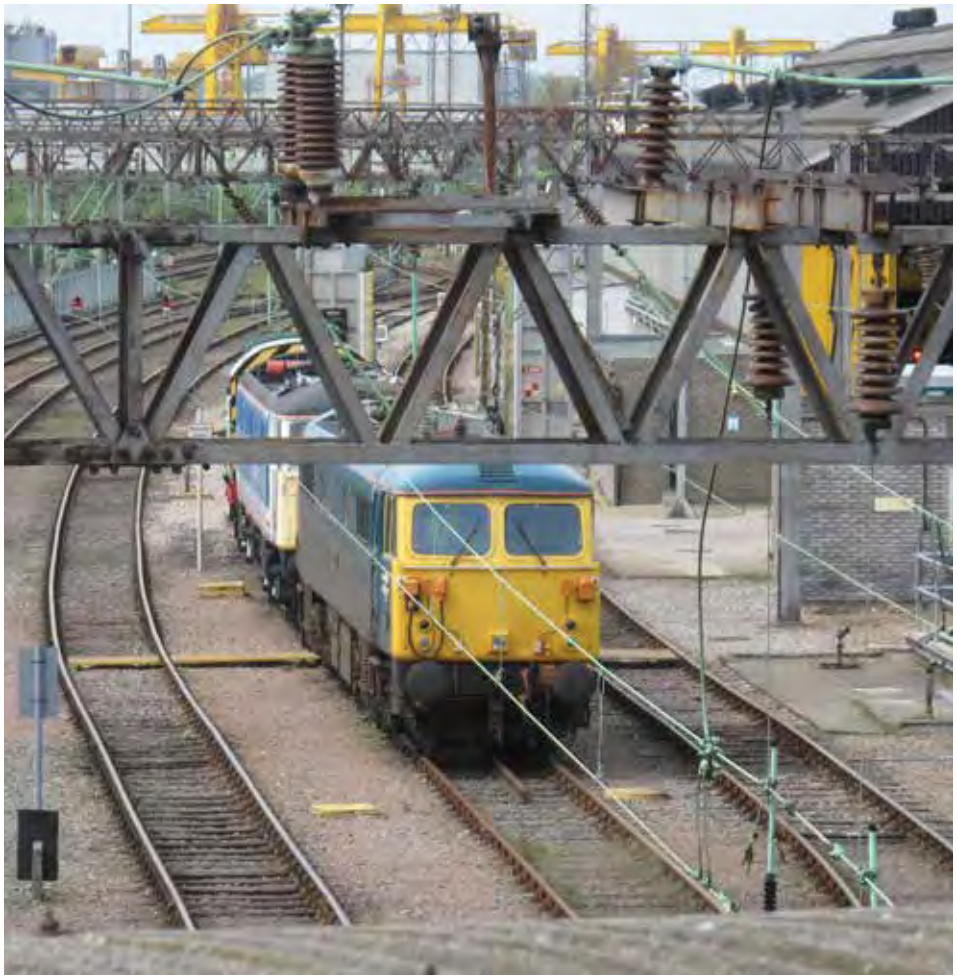


Figure 56: freight trains looking towards Park Royal.

## T2: ROADS

Proposals should:

a. Develop a network of new roads and streets to cater for the needs of all users, including measures to give priority to pedestrians, cyclists and buses, and to provide improved east-west and north-south connectivity;
b. Ensure that roads in and around Old Oak and Park Royal can support development while maintaining capacity and reliability for strategic transport movements on an already heavily used network;
c. Manage the cumulative impact of developments in west London on the A40 and A406 corridors, particularly on key junctions along these corridors including Hanger Lane, Gypsy Corner, Savoy Circus and Wood Lane;
d. Provide appropriate links to, and improve junctions with the strategic road network;
e. Provide sufficient capacity to enable the bus network to function effectively and for freight and site traffic to access and egress the site;
f. Improve management of traffic on the existing network;
g. Enhance existing highway infrastructure;
h. Create new local links to the road network; and
i. Create a legible, permeable and accessible network of streets for all users.

8.18 The road network will need to change if it is going to support new development in the area, improve conditions for existing users and facilitate improved pedestrian, cycle and bus connections. It will also be important that the amount of traffic generated by the development is limited to what the strategic road network including the A40 and A406 can handle without having a negative impact on its strategic function, given the limited amount of feasible and productive improvements that can be made.

8.19 New junctions and road links will be needed to open up potential development sites. An indicative route network is shown at figure 57.

8.20 A 2014 study by Jones Lang LaSalle has suggested that the provision of Grand Union Street - an eastern highway link, bridging the gap between the HS2 interchange and Hythe Road, is the single most important highway link to provide, as it connects the largely residential development to the north, to the transport hub and commercial development to the south. Other important links that are essential to delivery are identified in figure 57.

8.21 The Roads Task Force (RTF) Street Types classification adopted by TfL will be used to identify the movement and place functions of these new routes. Measures to prioritise bus movements, provide segregated facilities for cyclists and create pedestrian priority areas will be needed. Any through routes used by general traffic should be designed to avoid rat running including traffic calming and controlled crossing facilities. 20 mile per hour speed limits will be the norm across the area, and this should be achieved through good design, rather than merely signage. All new and improved roads must be built to adoptable standards.

8.22 In the wider area, highways modelling carried out for the Strategic Transport Study showed that a number of road junctions would be affected by increased traffic as a result of development at Old Oak. Changes in delays at key junctions without any substantial changes to the highways network are shown in figure 58.

8.23 It may not be possible for physical improvement works to be carried out at many of these junctions and in any case this may just shift the problem to another location. A package of transport interventions that has been designed to provide access to development sites and to minimise impacts on the surrounding road network was tested as part of the Strategic Transport Study and is fully described in the report. However, there is a need for further analysis to examine the need for improvements in the wider area. A study of the A40 corridor, which could include tunnelling options, is being carried out to understand the cumulative impact of growth at Old Oak and elsewhere in west London and to identify potential long-term solutions. The study is due to report later in 2015.

8.24 Development proposals will need to demonstrate that the impact on the road network can be managed in a way that mitigates the negative impacts on traffic flow and junction capacity. Collision analysis will be used to help inform the need for improvements at specific locations.

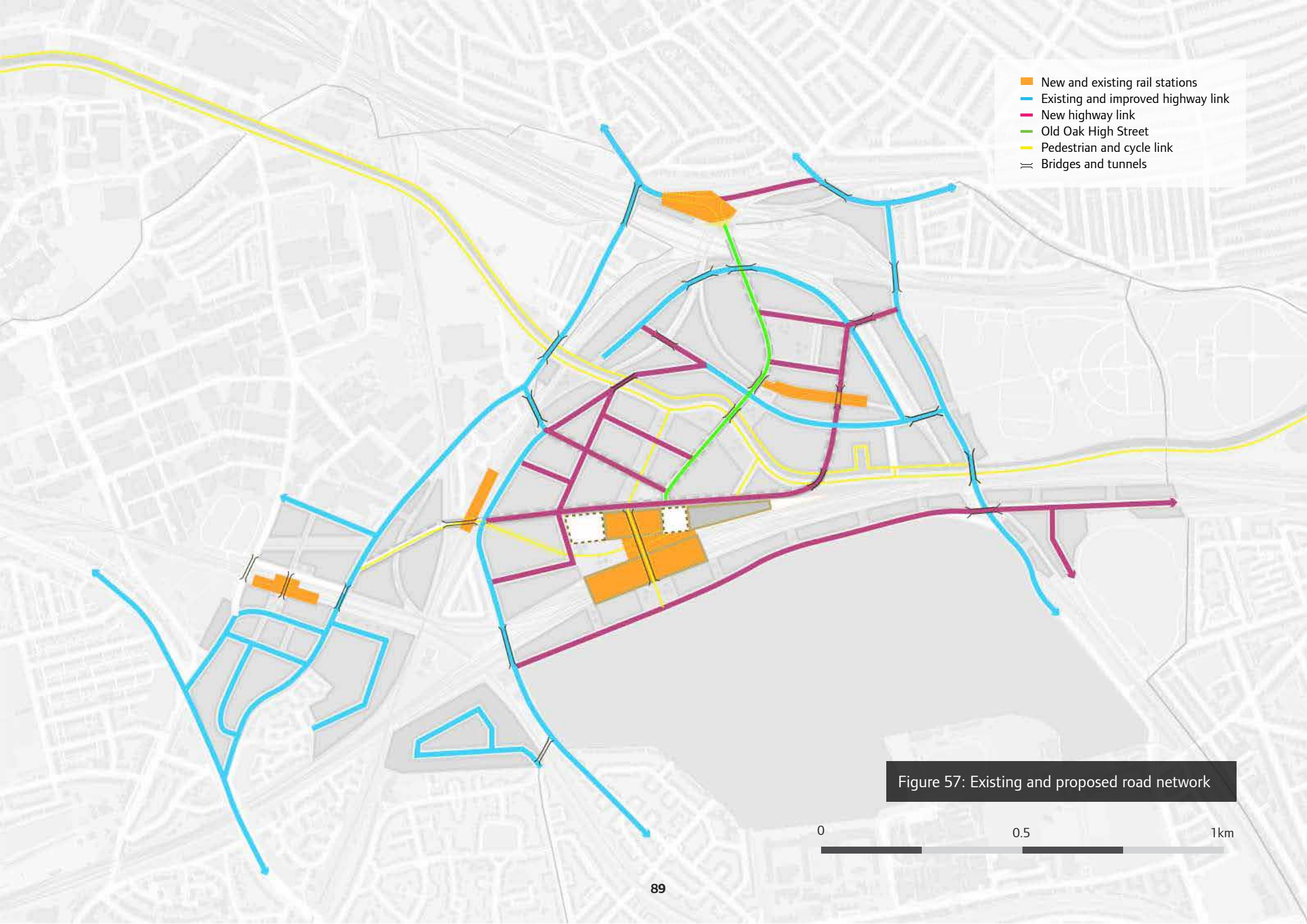



Figure 57: Existing and proposed road network

## T3: CAR PARKING

Proposals should:

a. Provide no car parking for new commercial development apart from parking for disabled people; and
b. Provide no more than 1 car parking space per 5 residential units with priority given to disabled residents.

8.25 The modelling for the Transport Study indicated that the road network would not be able to accommodate additional development related traffic unless parking was restricted to very low levels across the Old Oak development area. Low levels of car parking will be essential to ensure that traffic congestion does not reach unacceptable levels. Nearly all spaces will be allocated for disabled staff and visitors, car club vehicles and operational use including deliveries. This approach is justified by the very high level of public transport accessibility resulting from the planned and proposed investment. The availability of rail services will be equivalent to central London and this will be supplemented by a radically improved bus network and a comprehensive network of high quality walking and cycling routes so that the need for access to a car can be met by dedicated car club spaces together with parking for disabled people.

8.26 For new commercial development including offices, retail and leisure uses, no car parking should be provided apart from parking for disabled people. This approach will need to be applied to all new development in the core Old Oak area where Public Transport Accessibility Levels (PTALs) will be the highest. It is expected that the majority of commercial space will be located close to Old Oak Common station and other public transport interchanges.

8.27 To ensure that impacts on the road network are minimised and to reduce the need for costly infrastructure, car parking for residential development will need to be restricted to very low levels, equivalent to a ratio of 0.2 spaces per unit. The approach taken in each place will need to be informed by PTALs and expected household types. Parking for disabled residents and visitors will be a priority and all parking spaces will be purchased on short leases rather than being sold with a specific property.

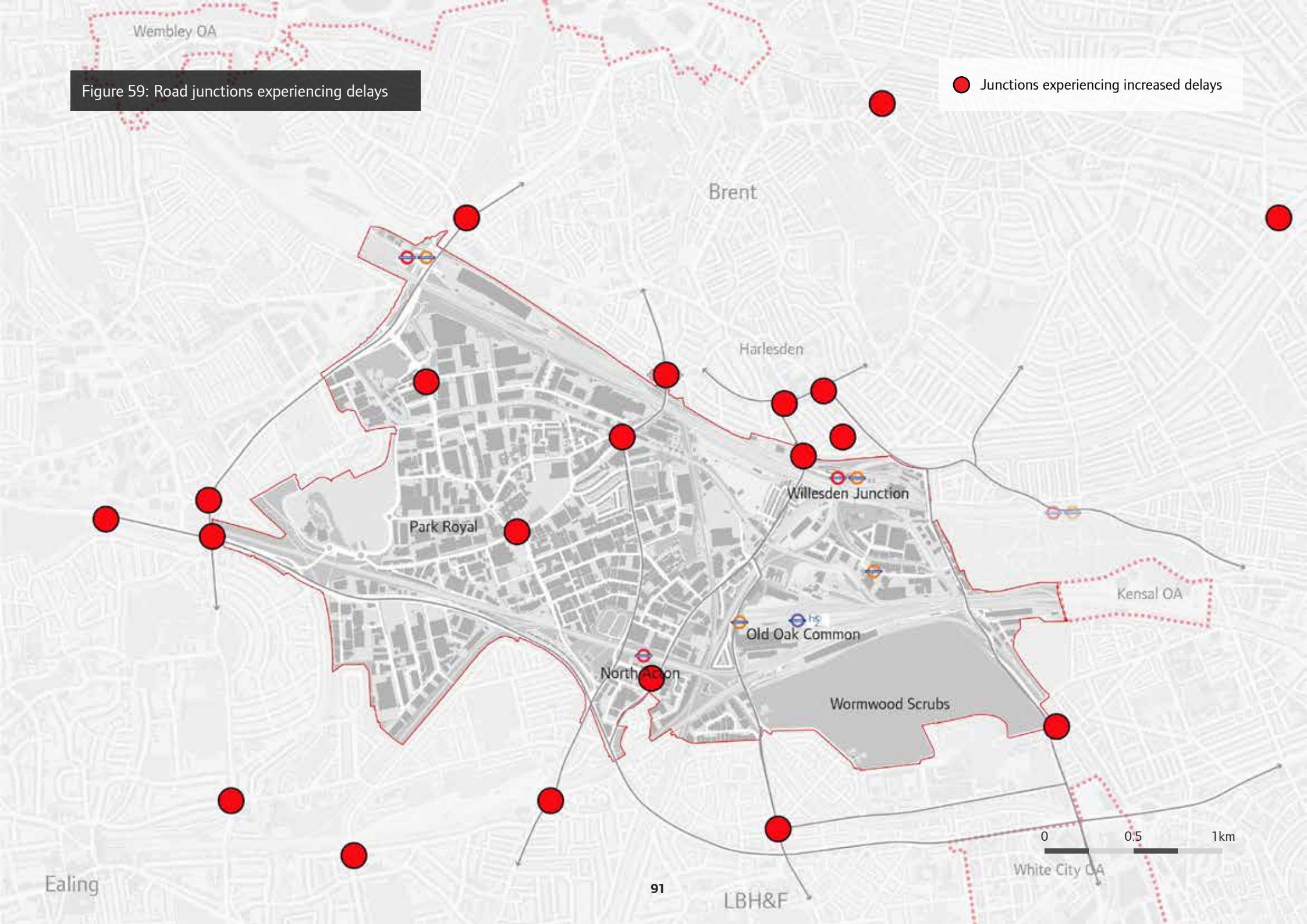
8.28 It is expected that Controlled Parking Zones (CPZs) will be co-ordinated across the area and that an approach to residents' permits will need to reflect the availability of alternatives to car ownership. Car club vehicles spread across the site should provide access to a car when needed for specific journeys and car club bays will need to be designed into the new development areas at the outset.

## T4: TAXIS, PRIVATE HIRE & COACHES

Proposals should provide suitable facilities to cater for anticipated demand from taxis and coaches.

8.29 There is likely to be a strong demand for taxis and private hire vehicles (PHV) generated by the HS2/National Rail interchange. The HS2 Transport Assessment suggests that there will be around 140 taxi trips (per direction) generated in the peak hour upon opening of HS2 Phase 2. The interchange will be designed with fully accessible taxi ranks and facilities for PHVs. Taxis and PHVs may be allowed to use access routes that are not available to general traffic. Further taxi and PHV demands will be associated with the Overground stations in the area. A key challenge will be the ability of the local road network to accommodate this number of taxis, along with residual demand from the development. Depending on the nature of development, particularly those which attract many visitors, there may also be a need to provide temporary facilities for coach parking as well as pick up and drop off.

Figure 59: Road junctions experiencing delays



## T5: BUSES

Proposals should:

a. Provide increases in bus frequencies on existing routes and introduce new and extended bus routes through the new development area; and
b. Provide improvements to bus infrastructure.

8.30 To accommodate the increase in travel demand and to better serve existing communities, it will be necessary to recast the bus network in this part of London, and to introduce new and extended bus routes across the new development area. In line with the Transport Strategy's aims there will be a strong emphasis on good provision of bus services as a way of ensuring a high public transport modal share and reducing the impact of the development on the surrounding road network. Infrastructure such as bus priority to secure reliable and quick passage through the site, and suitably located stops and stands will be essential to delivering this. Bus priority could encompass measures such as bus lanes, bus only areas and/or gates depending on the individual circumstances at each location.

8.31 Bus services will provide improved connections linking Old Oak and Park Royal to surrounding neighbourhoods including the potential to provide a direct link to the Opportunity Area at Kensal Canalside. A combination of bus route extensions, new routes, additional capacity on existing services and enhanced frequencies should accommodate the substantial increase in bus trips expected as a result of growth and development at Old Oak.

8.32 Figure 60 shows existing bus services as well as the indicative roads a future bus network could operate on. Creating a bus only link between the heart of Old Oak and Willesden Junction would give substantial benefits in terms of bus accessibility, journey times and operational efficiency. This could be achieved by building the proposed bridge across the West Coast Main Line rail tracks to a standard that could accommodate buses. A feasibility study will look at the cost, design and engineering implications. Routes running into the site via this bridge would attract additional bus passenger trips and create a vital link between the Old Oak development area and areas to the north that include some of the highest levels of deprivation in London. There would also be benefits in allowing buses to use the proposed route from Old Oak Lane/ Station Road to High Street/Harrow Road past Willesden Junction station.

8.33 All roads that will be used by buses must allow appropriate clearance for the largest double deck vehicles and be built to an adoptable standard with sufficient width. Where appropriate, priority should be provided over other vehicular traffic which may include the creation of bus only facilities not open to general vehicular traffic. Improvements such as the works to lower Old Oak Common Lane where it passes under the Great Western Main Line are absolutely vital in allowing access for double decker buses. These works will be carried out as part of HS2.

8.34 The bus routes which use these roads would need to be determined at a later date following a review of the bus network operating in the wider area and the form new development takes, particularly north of the canal. Proposals for individual sites, sources of funding and development phasing will all influence the development of the bus network. At present it is anticipated that there would be at least six bus routes running to/through the site.

8.35 This increase in bus services will also require provision of new supporting infrastructure such as bus stops, stands, turning and drivers' facilities. TfL's Bus Stop Accessibility Guidance will be applied to all new facilities and existing facilities brought up to standard. Bus stops should be placed close to centres of activity. Whilst these issues will need to be considered in more depth at the detailed design stage it is important that they are built into the planning process now, as they will require sufficient space to be made available. In particular, sufficient space for bus interchange and standing space for terminating facilities will need to be provided, particularly around the HS2 station.

8.36 Where possible, bus services and the availability of through routes for buses will be provided from the beginning of the occupation of development to ensure that car-dependency does not become established. The bus services are

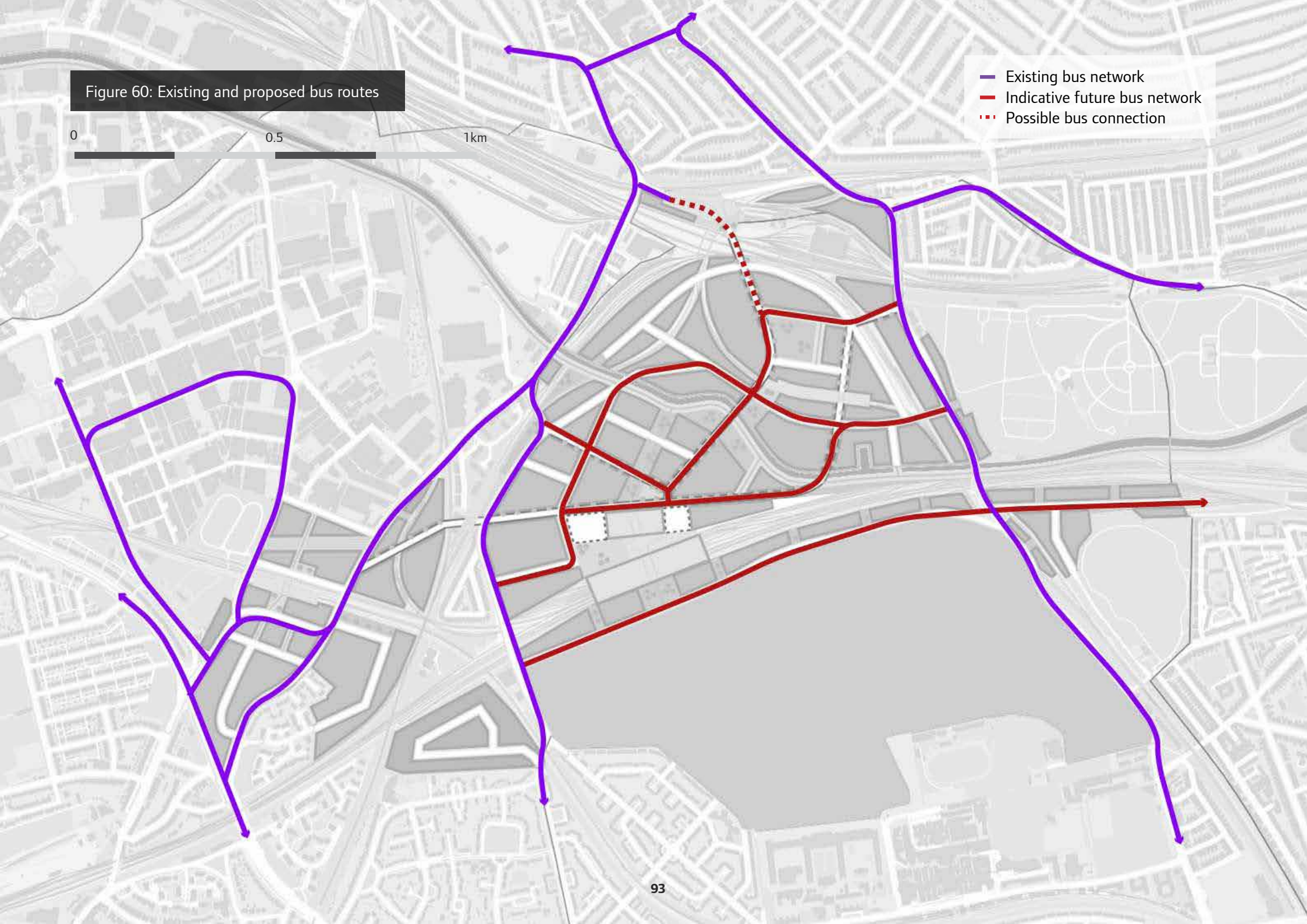



Figure 60: Existing and proposed bus routes

likely to require initial subsidies to pump-prime routes before they become viable. In the short-term there will need to be bus service diversions and route changes to accommodate construction works. It will be essential that disruption to bus services during the long construction period is minimised and any extra costs incurred by TfL be paid for by the developers.

## T6: WALKING & CYCLING

Proposals should:

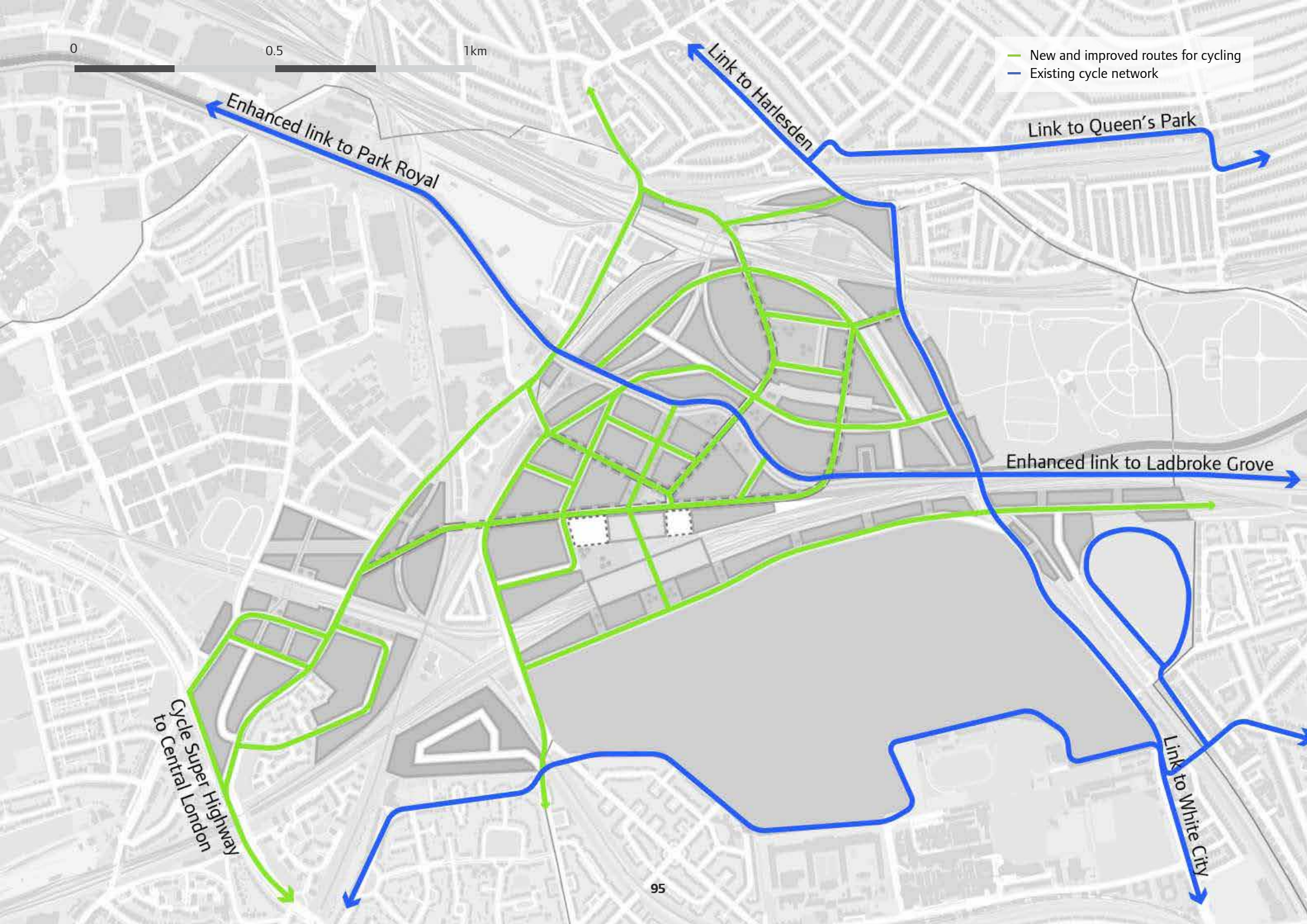
a. Create a high quality pedestrian and cycle network of streets across the development area with a high level of segregated cycle infrastructure;
b. Provide high quality cycling provision in line with the Mayor's Vision for Cycling and the adoption of best practice from the 'Mini Holland' projects;
c. Connect to existing and planned pedestrian and cycle links in the wider area;
d. Ensure that all key destinations including public transport interchanges, local centres, schools and community facilities are fully accessible on foot and by cycle; and
e. Provide cycle parking in accordance with of in excess of emerging London Plan standards.

8.37 Aside from limited access along the Grand Union Canal, the heart of Old Oak is currently impenetrable for pedestrians and cyclists and the whole area is difficult to navigate with numerous barriers to movement and a hostile environment. Large highway and rail corridors in the wider area also create barriers to movement in and out of the site. The HS2/National Rail interchange will remain difficult to access unless improvements are made to the existing road network and new high quality links are provided for pedestrians and cyclists. There will be a need to provide new connections to both existing and proposed strategic cycling and walking routes and to key destinations such as Harlesden, White City, Park Royal, North Acton, Queens Park and Ladbroke Grove. Existing and indicative future cycle routes are show in figure 61.

8.38 Modelling carried out for the Strategic Transport Study has shown that a high proportion of journeys in and around Old Oak will need to be undertaken on foot or cycle if the road network is not to suffer from increasing congestion. The area has great potential for cycling and walking given its topography and the close proximity of major trip attractors. In line with the Mayor's Vision for Cycling there should be a transformative change in conditions underpinned by high quality design solutions. The design of the area should therefore encourage and accommodate a high mode share for both cycling and walking. All streets should be designed to be comfortable and attractive for all pedestrians and cyclists.

8.39 Redevelopment presents an opportunity to open up the area and reconnect it to surrounding residential and business areas as well as establishing connections along the canal corridor and linking to green spaces such as Wormwood Scrubs. The canal towpath provides a leisure route for cyclists and pedestrians and is likely to be designated as a future 'Quietway' but currently it is narrow and its capacity is limited. A continuous pedestrian and cycle route should also be created along the north side of the Grand Union Canal. There are proposals for the east west Cycle Super Highway to be extended along the A40 corridor and links to this from Old Oak will need to be provided. The Park Royal industrial estate should

Figure 61: Existing and indicative future cycle routes


0
0.5
1km
New and improved routes for cycling
Existing cycle network
Enhanced link to Park Royal
Link to Harlesden
Link to Queen's Park
Enhanced link to Ladbroke Grove
Cycle Super Highway to Central London
Link to White City

also benefit from improved facilities to enable more journeys to be undertaken by foot or cycle.

### New route networks

8.40 The opportunity exists to create an entirely new high quality network of routes for pedestrians and cyclists in Old Oak that overcome the barriers and severance which make moving around the area so difficult. The details of this network will be determined as the masterplan and phasing of development across the site emerge.

8.41 Segregated facilities or priority measures to assist cyclists will be required, particularly on busier streets. All cycle routes and supporting infrastructure will need to conform with or exceed London-wide and borough standards including the London Cycling Design Standards (2014). Adoption of best practice from the mini-Holland projects should be the norm.

8.42 New development will need to be permeable for pedestrians and cyclists at all times. The design of infrastructure should be accessible to all pedestrians and cyclists in line with the supplementary planning guidance Accessible London: achieving an inclusive environment. TfL's Pedestrian Comfort Level Guidance will be used to inform detailed planning of pedestrian routes such as pavement widths and crossing facilities and will be applied to both new and upgraded routes. Pinch points and hidden areas should be avoided. The most challenging aspect will be providing infrastructure to overcome level differences and to cross rail lines and canals. Gradients should be minimised and shallow enough to provide access for all but in some locations it may be necessary to provide lifts to overcome changes in levels.

### Supporting infrastructure

8.43 Cycle parking will be provided to cater for future demand in line with the quantitative and qualitative requirements set out in the London Cycling Design Standards (2014), providing numbers in excess of emerging London Plan standards. This will include private cycle parking for residents and employees as well as generous provision for visitors and high quality facilities at public transport interchanges. The spatial and design requirements will need to be factored in from the outset. Visitor cycle parking will be integrated into the overall urban design and sited in locations that do not impede pedestrian movement. Cycle wayfinding signage will be installed to improve the legibility and navigation to, from and through the area.

8.44 A future extension of Cycle Hire into Old Oak would represent a logical expansion westwards. Subject to further analysis, a network of docking stations could be designed in to the new development areas from the outset and built at the appropriate timings. Funding for the docking stations would need to be provided through contributions from developers as there are currently no plans by TfL to extend the network in this area. The case for extending further into the Park Royal industrial estate would need more detailed investigation.

8.45 To provide navigation, particularly for the large number of visitors expected to use the transport interchange, Legible London signage will be installed at key locations. To aid pedestrians' understanding of the area there should be consistent use of paving materials. High quality walk connections linking the main transport interchange to the London Overground station(s) and other key destinations such as Willesden Junction, North Acton and surrounding areas will be designed to form part of the urban fabric. Where possible, these will be open 24 hours a day to non-rail travellers even where they are managed as part of the overall transport interchange.

## T7: CONSTRUCTION FREIGHT, DELIVERIES & SERVICINGS

Proposals should:

a. Make maximum use of rail and water transport during the construction period, including removal of excavated material, and for servicing and deliveries;
b. Co-ordinate and phase construction projects to enable the transport impacts to be effectively managed;
c. Manage servicing and deliveries in line with best practice to minimise the impact on the surrounding road network;
d. Support the provision and operation of measures to reduce freight trips and promote cleaner vehicles (e.g. consolidation centres).

8.46 The concentration of multiple infrastructure and development projects within one area and the sheer scale of construction activity will generate pressures on the transport network. This has not been explicitly modelled in the Strategic Transport Study although some information on construction movements has been collated by Network Rail based on information supplied by Crossrail and HS2. Further analysis of construction transport impacts will be required as information on development phasing becomes available. A construction logistics strategy that achieves a high level of co-ordination between all developers and infrastructure providers drawing on best practice from elsewhere will be prepared. Challenging targets for use of sustainable transport will be set and enforced through the strategy.

8.47 Adopting sustainable transport solutions across all major construction projects will help to minimise impacts on local residents and businesses, create new commercial opportunities for local companies and allow the sharing of overheads. Construction phasing, detailed timing of deliveries and vehicle routing will need to be managed and co-ordinated across a range of projects. A central booking system for deliveries will need to be put in place and all major construction projects will be required to sign up and participate including a contribution to the costs of shared facilities such as consolidation centres, wharves and rail facilities.

8.48 There will be a need to co-ordinate and phase construction projects to enable the transport impacts to be effectively managed. As construction activity intensifies the number of vehicle movements on the local road network will increase along with potentially increased exposure to road safety risk and deterioration in air quality.

8.49 A combination of voluntary measures, incentives and targeted investment will be used to reduce these increases as much as possible, e.g. through use of alternative modes. Residual movements will need to be made using vehicles that are designed to be as safe as possible, together with high standards of driver training.

8.50 Membership of a scheme such as the Fleet Operator Recognition Scheme and adherence to the industry Standard for reducing Work-Related Road Risk will form part of a package of measures to reduce risk to other road users from freight movements.

### Using rail and canal in construction logistics

8.51 For a number of years there have been aspirations to make greater use of the canal and rail routes for freight transport in Old Oak and Park Royal and some sites already have direct rail or canal access. However, the potential of these modes, particularly for bulk transport has not been exploited.

8.52 Redevelopment in Old Oak alongside major infrastructure projects will generate a large amount of construction vehicle movements for a number of decades exporting waste and importing materials. The amount of construction activity planned for the area provides an opportunity for sustainable transport solutions to be adopted. Maximum re-use and recycling of waste and construction materials within the area will reduce transport demands. For residual movements, there is potential for bulk construction materials and/or waste to be transported by rail and canal although issues of local environmental impact and commercial viability will need to be addressed.

8.53 The project director for HS2 phase 1 has

stated that maximum use should be made of rail and water transport for movement of waste and construction materials. Alongside use of existing facilities, this is likely to require additional rail freight facilities which could be shared with other large construction projects and provide a legacy use for future distribution and logistics services. A commitment to maximising use of rail and water transport should be extended to all other major construction projects in Old Oak, drawing on best practice from Crossrail and the Olympics. As part of the scrutiny process for HS2, TfL has petitioned for maximum use to be made of the canal and rail network for construction transport in line with policy in the London Plan and Mayor's Transport Strategy and will continue to pursue discussions with HS2 Limited as the project is developed.

8.54 Off-peak rail paths for freight movements, to 2017 are reserved as part of the construction strategy for Crossrail, enabling 85% of excavated Crossrail material (by tonnage) to be removed by rail. Investigation should take place as to whether paths can be identified beyond 2017 for the use of transporting construction materials and waste from major infrastructure and development projects at Old Oak.

8.55 Water transport could take advantage of existing wharf facilities on the canal and may be best suited to transport of bulk loads to be used in construction including movement of material for tunnel segments.

### Freight transport geography

8.56 Old Oak and Park Royal currently generate a substantial number of road freight movements as they are key industrial sites where many raw materials and manufactured goods are handled en route to their final users, generally elsewhere in London. Although business relocations may have an impact on vehicle routing, there will still be a substantial number of freight movements to accommodate on the road network. Improving the reliability of deliveries and servicing is a key factor in business success.

8.57 Park Royal is London's largest industrial area and one of Europe's biggest urban industrial estates home to more than 2,000 workplaces and over 30,000 employees. Wholesale, transport and warehousing / storage use functions account for 27 per cent of commercial floor space in Park Royal. Manufacturing accounts for 20 per cent and construction related activities account for a further eight per cent. Arguably, in some sectors such as food preparation, Park Royal already acts as a large-scale consolidation centre for central London. These generate a substantial number of strategic and local trips by heavy and light goods vehicles. Similarly, Old Oak currently accommodates a number of key industrial and waste processing activities.

8.58 Congestion at key junctions and on links providing access to strategic routes is a major barrier to business growth and may have been a factor in business relocations away from the area in recent years. The volume of freight and servicing movements also raises challenges in terms of maintenance and management of the road network and the safety and environment for other road users.

### Reducing additional delivery and servicing trips

8.59 A potential solution to the problem of large freight vehicles using unsuitable roads and the resulting congestion is the establishment of consolidation centre(s) that could service Old Oak and Park Royal and potentially a wider area of west London. Consolidation centre(s) could reduce the volume of Heavy Goods Vehicles (HGVs) passing through the area although it would generate traffic impacts in the immediate vicinity. New commercial and residential development within the Old Oak area will generate large numbers of delivery and servicing movements once occupied. TfL wishes to discourage use of unsuitable roads by vans and HGVs to avoid the resulting congestion that could arise. Consolidation centre(s) may also enable deliveries and servicing to take place during the night-time or other off peak periods, thereby avoiding the worst traffic congestion.

8.60 The establishment of consolidation centre(s) used by multiple businesses in the area could reduce demand and help manage flows at peak times by enabling 'call-off' deliveries of stock during quieter times on the local road network and reducing freight's contribution to congestion.

8.61 Consolidation centre(s) should be located on sites that are easily accessible to the strategic

road network, rail connected and central for local deliveries and servicing. Potential sites for consolidation centre(s) in the Old Oak and Park Royal area will be identified through the Local Plan process.

### Designing facilities for deliveries and servicing

8.62 Servicing and deliveries in Old Oak and Park Royal will need to be managed in line with best practice to minimise the impact on the surrounding road network. In new development areas off street solutions for servicing should be adopted, where possible, utilising different ground levels including basement and void areas within multi storey structures. Street frontage servicing should be minimised and restricted to small individual units located on lightly trafficked streets which can be serviced by small delivery vehicles. From the outset residential and commercial developments will be designed with central drop off facilities for home deliveries including refrigerated storage. Given that the largest growth in traffic in recent years has been light goods vehicles (vans) it is particularly important to find more efficient means of delivering goods to enable the road network to function more effectively.

Figure 62: Grand Union Canal looking east

# 9. ENVIRONMENT STRATEGY

# ENVIRONMENT STRATEGY

## E1: WATER

Proposals should:

a. Minimise water consumption through the use of efficient devices, smart landscaping and the use of grey water and rainwater recycling;
b. Use an extensive range of sustainable drainage techniques (including green infrastructure) to ensure that new development achieves a greenfield run-off rate; and
c. Explore opportunities to retrofit sustainable urban drainage measures to existing buildings and public realm.

9.1 The Old Oak and Park Royal area provides an opportunity for the design and implementation of innovative water management techniques that can help minimise flood risk, reduce water wastage, and ensure that any increasing demand on water supply does not impact on the already at critical supply levels across London and the south east of England.

9.2 Flood risk within Old Oak and Park Royal is generally low, albeit with some localised higher risk areas. However the downstream combined sewer catchment is recognised as having significant capacity issues leading to frequent surface water and combined sewer flooding. Therefore all proposals must ensure that any new development does not increase flood risk either on site or elsewhere. This should be achieved through the provision of comprehensive new drainage infrastructure, coupled with the provision of grey water recycling and rainwater harvesting systems.

9.3 In line with the emerging London Sustainable Drainage Action Plan (LSDAP) consideration should be given to delivering and encouraging sustainable drainage retrofits. There are a wide range of relatively easy and low cost options associated with existing industrial buildings and large format public buildings e.g. hospitals and open spaces to enable surface water storage and infiltration measures to be implemented.

9.4 The GLA will commission an Integrated Water Management Plan to highlight the long term infrastructure requirements for water demand and drainage in Old Oak and Park Royal. The Water Management Plan would look to:

- Assess the existing water supply infrastructure in the Old Oak and Park Royal area;
- Assess the existing sewerage and drainage infrastructure in the Old Oak and Park Royal area;
- Consider the likely range of demands for water supply, sewerage and drainage through the redevelopment of the Old Oak and Park Royal area;
- Propose a range of options to minimise drinking water demand, maximise grey/rainwater re-use, maximise the use of sustainable drainage systems and minimise discharge to the Combined Sewer system;
- Consider a range of sensitivity tests for the above options;
- Assess the spatial implications of any required infrastructure; and
- Assess the outline costs of any required infrastructure.

Figure 63: Swales in Upton, Northamptonshire

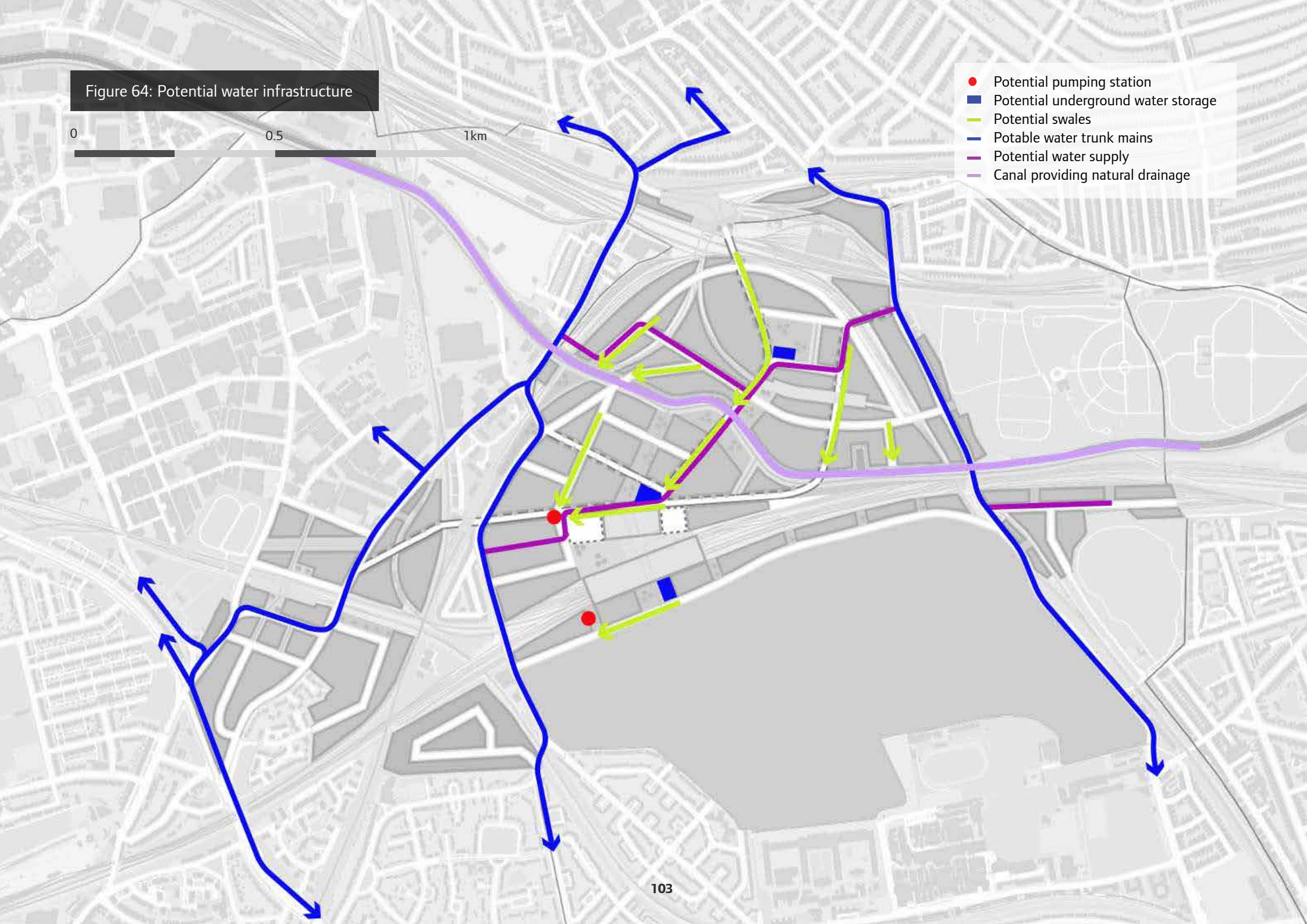



Figure 64: Potential water infrastructure

## E2: WASTE

Proposals should:

a. Continue to safeguard waste sites in Park Royal;
b. Investigate the potential for the relocation of waste sites in Old Oak;
c. Support London's transition to the circular economy to turn London's waste into an economic opportunity and become 100% net waste self-sufficient
d. Investigate the potential for integrating waste sites in Old Oak delivering benefits in the form of jobs, new materials and low carbon heat and power; and
e. Demonstrate innovative waste and recycling management and collection processes to help boost London's recycling rate.

9.5 The London Boroughs of Brent, Ealing, Hillingdon, Hounslow and Richmond have produced a joint West London Waste Plan, which identifies within Park Royal, specific sites that should be safeguarded for waste. The Mayor will support the local authorities in protecting and safeguarding these waste sites.

9.6 Within the Old Oak Common Opportunity Area there are several waste sites:

- European Metal Recycling;
- Powerday;
- Capital Waste Ltd;
- UK Tyre Exporters; and
- O'Donovan's Waste Disposal Ltd.

9.7 New development in Old Oak and Park Royal affords the opportunity to explore how existing waste sites can be incorporated into solutions for the treatment and transfer of waste in the area and potentially provide for energy need. For example, the Powerday waste site provides construction waste services and has planning approval for small-scale on-site energy generation. This facility could act as the on-site construction waste management centre for the redevelopment of the Old Oak Common Opportunity Area and could be refurbished over the lifetime of the development so that its focus could switch to municipal waste management and district-scale energy generation. Alternatively, the Powerday could be relocated in the longer term to release the site for housing or alternative uses.

9.8 It will be necessary to relocate one or more waste sites in the Old Oak area to accommodate new development. In particular the early relocation of EMR is considered necessary to facilitate the early regeneration of Old Oak North. The Mayor is keen to ensure that existing waste management activities in Old Oak continue to operate in the area and will work with waste providers to explore ways in which sites could be relocated. Any relocation deemed necessary will be done in line with London Plan waste policy and the GLA will work constructively with the relevant borough/s within its jurisdiction to ensure its waste apportionment is met.

9.9 Given the scale of new development to take place, development should seek to deliver over and beyond Mayor's waste policy and targets, through the use of innovative solutions to reduce waste production in construction phase, use recyclable materials as much as possible, and to achieve a 95%+ reuse and recycling rate as achieved on the Olympic Park site in 2012. Development should provide local facilities to support waste minimisation and achieving high reuse and recycling rates and identify final destinations for residual waste, with preference for local energy generation facilities where appropriate.

9.10 Development should provide highly visible and accessible recycling facilities for both residential and non-residential and see a commitment for adequate storage space maximising recycling opportunities and meeting the standards in the GLA's SPG on Sustainable Design and Construction. This should be considered at the earliest stages of the design process and included in plans submitted when applying for planning permission.

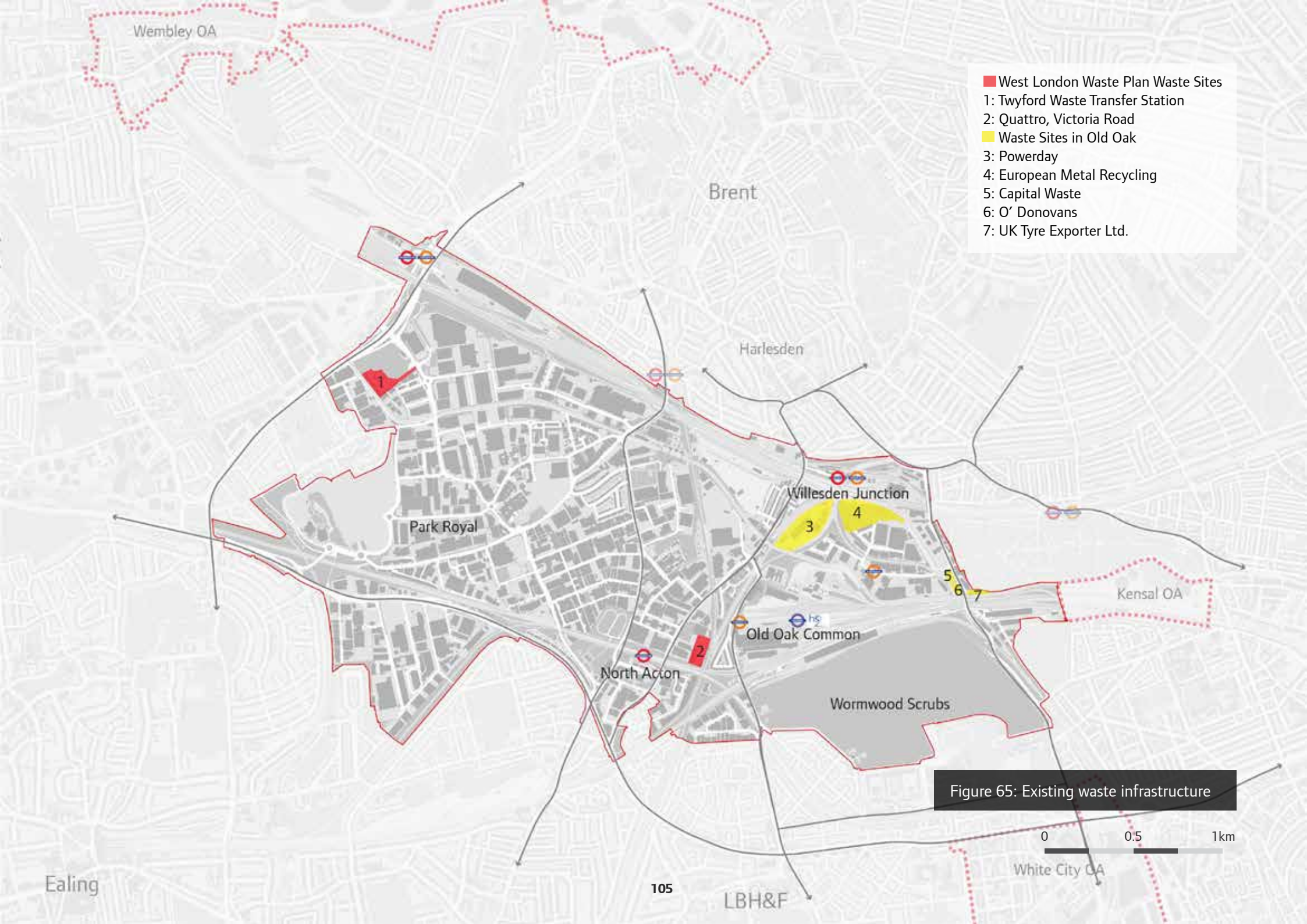



Figure 65: Existing waste infrastructure

## E3: AIR QUALITY

Proposals should:

a. Minimise the generation of air pollution, both during and post construction, making new developments 'air quality neutral' or better; and
b. Achieve EU established health-based standards and objectives for a number of air pollutants (NOx, PM10 and PM2.5).

9.11 Development proposals should include mechanisms to ensure that they are air quality neutral and achieve EU health based standards. Longer-term improvements to air quality (and other benefits such as urban cooling) can also be delivered through a strategic approach to the provision of trees in the public realm which considers the form and structure of the canopy and how groups or avenues of trees interact with the open space network to create 'breeze pathways' that optimise air flow.

### Road Traffic

9.12 The main source of existing air pollution in the area is directly attributable to emissions from road traffic, as is the case for most parts of London. The site is close to roads with high traffic flow resulting in significant concentrations of road traffic-related pollutants. Airborne concentrations of the main pollutants increase substantially when compared to sites not close to main roads, as exemplified by locations near the A40 Western Avenue. During construction, the main air quality effects are anticipated to result from emissions of oxides of nitrogen (NOx) and fine particulate matter and dust (PM10 and PM2.5) emanating from an increase in road traffic and traffic-management schemes.

9.13 Mechanisms for minimising air pollution are therefore closely tied to the principles of the transport strategy: encourage use of public transport, walking and cycling and minimise the number of trips by private vehicle. Developers will be required to undertake strategies that assess baseline air quality levels, set targets for new air quality levels, monitor this during and post construction and take action if these targets are exceeded.

9.14 Once the proposed scheme is in operation, changes in traffic are anticipated to be the cause of significant residual effects for air quality at a small number of residences close to a short section of the A4000 Old Oak Lane. There will be adverse impacts on NO2 concentrations on Victoria Road, Victoria Terrace and Shaftesbury Gardens. There will be moderate adverse impacts on NO2 concentrations on the A4000 Old Oak Lane, Shaftesbury Gardens and Wales Farm Road close to the Old Oak Common station area. There will also be slight adverse impacts for NO2 concentrations on A4000 Victoria Road (near the A40 Western Avenue) and along the A219 Wood Lane in the vicinity of Burlington Danes Academy (DfT, 2013). There will be temporary moderate adverse impacts on roadside NO2 on the A5 Edgware Road between Blomfield Road and the A40 Marylebone Flyover. These are considered significant effects. Traffic data obtained from the Old Oak Common area indicates that some roads are predicted to have significant changes in traffic flows. In this regard, there will be moderate adverse impacts for fewer than 20 properties assessed for NO2 along the A4000 Old Oak Lane between the junctions with Atlas Road and Channel Gate Road.

9.15 The guidance in the Transport Strategy chapter, which aims to maximise use of walking, cycling and public transport while minimising the number of additional vehicle trips, should help to mitigate some of the negative impacts on air pollution. A site-wide construction logistics plan which promotes use of rail and water transport and greater efficiency in use of road transport should also be beneficial.

### Dust Emissions

9.16 Existing uses at Old Oak include a number of industrial and waste recycling plants that cause a substantial amount of dust and emissions. The reconfiguration of the area is likely to see an improvement in current air quality issues.

9.17 Future dust emissions will be associated with activities including vehicular movements, site preparation, demolition, works and the use of haul routes within areas of construction. For example, dust concentrations are particularly acute near high density housing 20 meters to the east of the land required for construction on

Stephenson Street. Two localities, Midland Terrace and Wells House Road are partially encircled by construction compounds at Old Oak Common Station, Old Oak Common Lane underbridge satellite compound and Victoria Road tunnel drive main compound. It is anticipated that the main dust-generating activities will occur at the construction compounds at Old Oak Common, Atlas Road, Victoria Road and Willesden Euroterminal.

9.18 Development proposals for buildings that give rise to air pollution will be encouraged to find mechanisms (interventions e.g. technology) are put in place to ensure that they are air quality neutral and achieve EU health based standards. Longer-term improvements to air quality (and other benefits such as urban cooling) can also be delivered through a strategic approach to the provision of trees in the public realm which considers the form and structure of the canopy and how groups or avenues of trees interact with the open space network to create 'breeze pathways' that optimise air flow. Mitigation measures will need to be in accordance with the Control of Dust and Emissions from Construction and Demolition SPG.

## E4: ENERGY

Proposals should:

a. ensure that Old Oak and Park Royal area is an exemplar of low carbon development; and
b. commit to achieving the highest standards of energy efficiency and low/zero carbon technology.

9.19 The GLA will be particularly supportive of exemplar residential and non-domestic proposals that look to achieve cost-effective near or zero-carbon standards on-site.

9.20 The proximity between the proposed Old Oak mixed-use area and the Park Royal industrial area provides the opportunity to interconnect these two places to achieve a diversified energy demand that will enable a more cost-effective energy supply and infrastructure provision.

9.21 An Energy Strategy shall be prepared by the GLA which, as more detailed development proposals emerge, will be superseded by an Energy Masterplan for the Old Oak and Park Royal area. It is expected that this Masterplan would provide confirmation and additional guidance on:

- Heating and cooling requirements, including the potential for heat and cooling networks, energy centre requirements and the potential for use of waste heat and other energy sources to supply district heating networks;
- Electricity infrastructure requirements, including electricity substation requirements, location, land take and the opportunity to retail electricity;
- Heat networks and their associated thermal storage and energy production plant in balancing energy demands and supply at a local distribution level: the feasibility of energy from waste will be established;
- Consideration of the ability to connect into nearby decentralised energy developments, proposed at White City and Wembley;
- Smart grids and demand side response at building (new and retrofitting existing) or aggregate level to optimise capacity investment, reduce energy demands, balance local energy supply and demand, including peak energy across the site, and reduce the need for network reinforcement;
- Existing buildings and the need to mitigate peak loads;
- The use of innovative technologies for distributed generation;
- Energy demands for electric and fuel cell vehicles and the opportunities for distributed refuelling infrastructure, i.e. chargepoints and electrolyser hydrogen refuelling stations, and their use in last mile electricity grid balancing; and
- Ensuring energy infrastructure is located to be resilient to current risks and the impacts of future climate change.

9.22 The Energy Strategy and subsequent Masterplan should be used to inform future planning policy in the Local Plan. This is particularly relevant around safeguarding sites for electricity substations, energy centres and network routes (and their installation design coordination with other linear infrastructure) and planning for heat network installation according to heat load development.

Olympics energy centre, Stratford

Figure 66: Olympic Energy Centre, Stratford

## E5: GREEN INFRASTRUCTURE

Proposals should:

a. Create a network of amenity spaces connected by soft landscaping and tree planting to encourage healthy, walkable neighbourhoods;
b. Use green infrastructure to sustainably manage rainwater (see water section);
c. Retain and enhance the value of existing ecological or nature conservation assets;
d. Improve ecological connectivity by enhancing existing green corridors such as the canal and railway lines; and
e. Help reduce temperatures in hot weather and intensification of the urban heat island effect through providing shading and evaporative cooling and green and brown roofs and walls.

9.23 At Old Oak there is an opportunity to ensure that the concept of green infrastructure is fully adopted and realised such that the provision of open space throughout the site is not informed solely by space standards but by the functions that a well-planned green infrastructure network can provide; in particular, the role of green infrastructure in surface water management and the opportunity to encourage 'healthy living' neighbourhoods by creating greener routes through the development.

9.24 Furthermore, the development site has existing green corridors in the form of the canal and railway embankments which have some existing ecological value but which could be bolstered by carefully considered landscaping or habitat creation, particularly along the canal corridor where there is scope for planting of marginal vegetation and reedbeds to increase its biodiversity value.

9.25 Wormwood Scrubs is a major open space to the south of the development site. Whilst increased recreational use of this site is a likely consequence of the new development, Wormwood Scrubs has considerable existing ecological value which will need to be maintained, and enhanced where possible. Consequently the green infrastructure within the core development site itself should be designed to accommodate as much of the day to day recreational demand as possible.

9.26 Within Park Royal there will also be opportunities as part of development proposals to secure ecological enhancements. Development should look to connect up existing ecological areas and corridors through the provision of street greening and new open space and biodiversity corridors. These improvements would also help to enhance the environmental quality of Park Royal.

## E6: LAND CONTAMINATION & REMEDIATION

Proposals should identify land that is contaminated and sources of contamination and remediate the land, in accordance with the stages outlined below.

9.27 The Old Oak and Park Royal area has been heavily used by industry and there are likely to be a number of sites with substantial land contamination. The OPDC may need to undertake further work looking into the potential land contamination context in the OPDC area to inform the Local Plan. The Local Plan and future planning applications in the ODPC would need to comply with all statutory processes for managing the decontamination of land. Statutory duties to address land contamination would remain with the individual local authorities within the Old Oak and Park Royal area.

Any proposals will need to follow the below even stage process:

### 1. Preliminary Risk Assessment

9.28 This assessment should comprise of a desk top study which includes details of past and present uses at the site and the surrounding area to identify any potential sources of contamination. Any pollutants associated with these sources should be identified along with their potential related risks. It should then be determined what sensitive receptors are likely to be present at the development site such as humans, ecological receptors or building materials. Any pathway from potential on-site sources to off-site sensitive receptors should also be identified. A conceptual site model should be produced to demonstrate where any pathway connects any of these sources to the sensitive receptors.

### 2. Site Investigation Scheme

9.29 This scheme is based upon the preliminary risk assessment and should set out how the site investigation will be carried out, how the sources of pollution identified in the conceptual site model will be targeted and determine the existence of the pathway to the identified receptors.

### 3. Site Investigation

9.30 This investigation should be undertaken using current guidance and methods. The results of the investigation must be clearly presented, compared against recognised and approved standards and interpreted so that it is clear to see where remediation action is required.

### 4. Risk Assessment

9.31 The results of the site investigation should be assessed to determine the degree and nature of any contamination on the site and the risks posed by any contamination to human health, controlled waters and the wider environment. The conceptual site model should be revised with the information gathered through the site investigation to confirm the existence of any remaining pollutant linkages.

### 5. Remediation Strategy

9.32 A detailed method statement for any required remediation works identified through the risk assessment should be produced with the aim of breaking any pollutant linkages. The Strategy should support waste minimisation and maximising resource use by promoting the sustainable remediation and reuse contaminated soils.

### 6. Verification

9.33 A report should be produced which validates and verifies that all of the works outlined in the remediation strategy have been undertaken as agreed. This would include details such as analytical results confirming successful in-situ remediation or importation or clean topsoil cover, the proper placement of gas membranes and waste transfer tickets demonstrating a duty of care in handling any off site transfer of excavated soil.

### 7. On-going monitoring

9.34 If during development, contamination not previously identified is found to be present at the site, the respective Council should be immediately informed and no further development (unless agreed in writing by the Council) should be carried out until a report indicating the nature of the contamination and how it is to be dealt with is agreed in writing.

Figure 67: West Coast Main Line looking west

# 10. DELIVERY STRATEGY

## Development Infrastructure Funding Study

10.1 The GLA is currently in the process of developing a Development Infrastructure Funding Study (DIFS), which is informing some of the outputs in this chapter. The DIFS is focussing on the core development area at Old Oak; however, delivery and securing infrastructure will be equally important in the Park Royal industrial estate and the GLA will be undertaking further work on delivery in Park Royal, which will look in particular at utilities infrastructure, as there are known to be problems with the current broadband, drainage and energy networks. The DIFS will be concluded in Spring 2015 and will inform the following future workstreams:

- the Local Plan produced by the proposed Old Oak and Park Royal Mayoral Development Corporation (OPDC);
- A Community Infrastructure Levy (CIL), which is a levy charged on developments to pay for infrastructure. This would be produced by the OPDC and would undergo its own statutory consultation and examination;
- A Section 106 Supplementary Planning Document (SPD), which would identify those pieces of infrastructure not been picked up through CIL and would provide further detail on types of infrastructure and funding sources;
- Infrastructure prioritisation and delivery strategy. This would form part of the DIFS and CIL work and would identify the potential delivery mechanisms for infrastructure and rank infrastructure under the following categories of importance:
  1. critical enabling infrastructure,
  2. essential mitigation,
  3. high priority; and
  4. desirable.
- A Growth Strategy, which would identify potential funding and financing sources other than through CIL, Section 106 and Section 278.

## DL1: WORKING WITH STAKEHOLDERS

Proposals should:

a. Ensure a comprehensive approach is taken to the regeneration of the area;
b. Ensure joined up working between key stakeholders such as the public and private sector landowners, local authorities, statutory undertakers and infrastructure providers;
c. Optimise development and accelerate delivery on public sector assets by ensuring that public sector landowners are joined up and have an aligned strategy; and
d. Kick start regeneration in advance of the planned Old Oak Common station;

10.2 As can be seen from Figure 68, there are six freehold landowners who own (or will own) the majority of land in the core development area, which makes the assembly of deliverable development plots less problematic than on sites in more fragmented ownership. These are:

- Network Rail;
- Department for Transport;
- Car Giant;
- The London Borough of Hammersmith and Fulham;
- Perrygrove; and
- HS2 Ltd (who will be acquiring land for the construction of the Old Oak Common station.)

10.3 The GLA has started the process of engaging with landowners, developers, utility providers and other public sector bodies in order to understand their needs and aspirations and in turn how these can best fit with the Mayors regeneration objectives for the area. The GLA will encourage collaborative working in order to minimise compulsory purchase requirements and to ensure that a comprehensive approach is taken to masterplanning and infrastructure delivery, in accordance with this OAPF. In taking this comprehensive approach, developers and landowners will need to demonstrate how:

- their proposals fit within a wider masterplan and do not prejudice future development on adjacent sites;
- proposals are being phased to fit with other stakeholders' aspirations; and
- consideration has been given to the provision of on-site infrastructure in relation to the overarching masterplan.

10.4 The GLA will work closely with developers, other public sector bodies such as the local authorities, infrastructure providers and statutory undertakers to ensure that infrastructure is delivered in accordance with the needs of service providers and that appropriate sources of revenue funding for the ongoing maintenance of infrastructure have been identified.

10.5 Over 50% of freehold land ownership within the core development area is within public sector ownership. Combined, this public sector land could accommodate 10,500 homes and 46,000

jobs (from a total of 24,000 homes and 55,000 jobs across the Old Oak Common Opportunity Area), which would generate substantial capital receipts to the public sector as well as long term revenue receipts in the form of council tax, business rates, income tax, corporation tax and stamp duty.

10.6 The GLA is working with public sector landowners such as Network Rail, the Department for Transport, TfL and the London Borough of Hammersmith and Fulham to realise optimal value for their assets and secure substantial benefits for the Opportunity Area and its surroundings by bringing forward new homes and jobs and supporting infrastructure. Joined up public sector working will be particularly instrumental in securing development on the Crossrail depot and IEP depot sites.

10.7 Old Oak Common station is currently programmed to open in 2026. This will undoubtedly transform the area, giving Old Oak unparalleled local, regional and national transport connections. However, the GLA is keen to ensure that, where feasible, development in the surrounding area is brought forward in advance of the opening of Old Oak Common station. Early development proposals would need to demonstrate how they fit with and support the long term delivery of the wider masterplan.

10.8 The GLA and the future OPDC will work with landowners and developers to ensure that infrastructure requirements for early development help secure the objectives of the wider masterplan whilst not placing an infrastructure burden that stops development from coming forward.

| | |
|---|---|
| Network Rail | 59.1 ha |
| Department for Transport | 11.3 ha |
| Car Giant | 15.7 ha |
| LBHF | 1.0 ha |
| Perry Grove | 0.7 ha |
| Private multiple landowners | 20.7 ha |
| Proposed HS2 Work sites | 25.7 ha |

(ownership as set out in the hybrid bill)

| | |
|---|---|
| Public Landowners | 71.2 ha = 53% |
| Private landowners | 37.1 ha = 28% |
| HS2 work sites | 25.7 ha = 19% |
| total: | 134 ha |

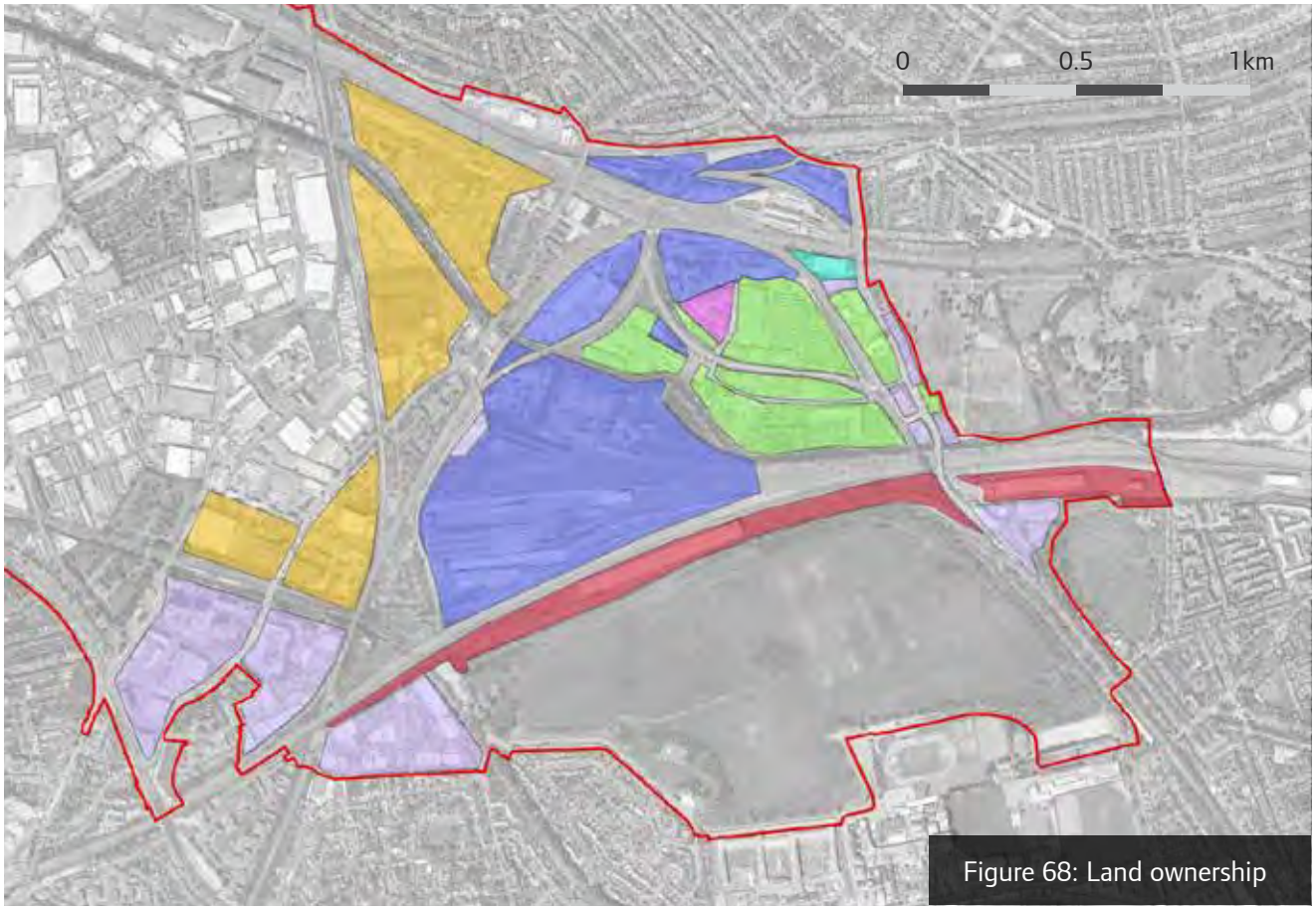



Figure 68: Land ownership

## Indicative phasing

10.9 Figure 69 provides an indicative phasing plan for development in the Old Oak Common Opportunity Area. Phasing is split between pre and post 2026, when the planned Old Oak Common station is due to open. Given the length of time over which this project could be delivered it is anticipated that the exact phasing would vary and what is set out represents a pragmatic and potentially deliverable programme. Given the size of the Opportunity Area and the predicted numbers of homes and jobs, it is unlikely that all sites identified as being pre-2026 would be fully built out within that period. However, the opportunity for those sites identified as pre-2026 is that they can be developed without being overly reliant on the opening of Old Oak Common station and so should not be sterilised for development during the station's construction.

## Pre 2026

10.10 Development pre-2026 would start to the north of the Grand Union Canal, around North Acton and on the Genesis site.

10.11 At North Acton development has already started, with the Berkeley Homes and Costume Store student housing schemes already occupied and development on the former NEC House site currently under construction. This high pace of regeneration and renewal at North Acton is anticipated to continue with opportunities for growth in the immediate vicinity of North Acton station, as well as to the south on the Holbrook House, Perfume Factory and Portal Way sites.

10.12 North of the Grand Union Canal, there is potential for the early delivery of new homes and jobs, taking advantage of improved and new accesses off Scrubs Lane, improved connections to Willesden Junction station and the area's canalside setting.

10.13 In total all of these sites have the overall capacity to accommodate at least 8,600 homes and 7,400 jobs pre-2026. The GLA will also encourage catalysts for early regeneration, such as major education establishments, a football stadium, a sports and leisure complex, health, arts and cultural centres, aligned with improvements in the key infrastructure and better connections.

10.14 Early development on these sites would not be contingent on the High Speed 2 and Crossrail station. Nonetheless to realise their full development potential significant infrastructure improvements will be required as set out in the following section on infrastructure delivery.

## Post 2026

10.15 The opening of Old Oak Common station in 2026 will act as a huge catalyst to kick start the regeneration of the land to the south of the Grand Union Canal. This land to the south of the canal could accommodate at least 9,300 homes and 48,900 jobs. This represents a shift in land use strategy from a focus on housing delivery pre-2026 to a focus on commercial space delivery post-2026. This strategy reflects the fantastic public transport accessibility that would bring Old Oak within just 10 minutes of Central London and Heathrow and 40 minutes of Birmingham.

10.16 Overall development post-2026 will include both the land to the south of the canal and also the remaining homes and jobs on other sites that have not yet been completed. The overall quantum of post-2026 development is approximately 15,500 homes and 47,000 jobs.

10.17 The Crossrail depot and sidings are located immediately north of the Old Oak Common station and their full or partial relocation to an alternative site is needed to enable the redevelopment of this land. The Mayor considers it critical to relocate all or parts of the depot and sidings in the 2020's so that development can proceed upon the opening of the proposed Old Oak Common HS2, National Rail and Crossrail stations and to unlock the comprehensive regeneration of the Old Oak area. Work is currently underway by TfL to look at the feasibility of reconfiguring the depot and sidings or fully or partially relocating them to alternative locations. Although there are significant costs associated with relocation of the depot, it is an important site in helping to increase development value across the wider Old Oak Common Opportunity area as well as improving connectivity and permeability.

10.18 To the south of the Old Oak Common station, the IEP depot should be brought forward for development by relocating this depot to elsewhere on the Great Western Main Line. As with the Crossrail depot and sidings,


Figure 69: Development phasing

The Mayor considers it critical that the depot is relocated and development is brought forward in a timely fashion as the development of this site will provide much needed new homes and will ensure delivery of a new access from Wormwood Scrubs to the future HS2, Crossrail and National Rail stations for residents, workers and visitors. As with the Crossrail depot and sidings, there are likely to be significant costs associated with relocating the depots. Further discussions with the Department for Transport (DfT) are needed to progress options for relocation of the IEP depot and explore viability in greater detail.

10.19 Land acquired by HS2 for construction purposes, such as the land around the station and the 'Shield' site would also be likely to be redeveloped, once construction of Old Oak Common station is complete.

| Phase | Approximate years | Housing | Jobs |
|---|---|---|---|
| Pre-2026 | 2016-26 | 8640 | 7367 |
| Post-2026 | 2026-50 | 15505 | 47137 |
| Total | 35 years | 24145 | 54504 |

## DL2: INFRASTRUCTURE

Proposals should provide the necessary infrastructure to support the needs of development.

10.20 Developers will be expected to make a reasonable return from development. However, developers would need to do so within the parameters established by the Mayor's London Plan and Local Plans. This would include making appropriate contributions to the delivery of supporting infrastructure and affordable housing.

10.21 The GLA has commissioned a Development Infrastructure Funding Study (DIFS) for the Old Oak and Park Royal area, which is currently being drafted and is looking at the viability of development and the amount and type of infrastructure necessary to support the delivery of 24,000 homes and 55,000 jobs in Old Oak and 1,500 homes and 10,000 jobs in Park Royal. A summary of the types of infrastructure and the timing of its delivery are provided in the proceeding sections. The DIFS is mostly focussed on the delivery of new homes and jobs in Old Oak. There are known to challenges with existing infrastructure in Park Royal, particularly transport, drainage, energy and telecommunications (Broadband). These issues are covered in the Park Royal Strategy chapter but the GLA also plan to undertake further evidence work to understand what improvements the Park Royal industrial estate needs to compete globally with more modern purpose built estates.

10.22 Figure 70 shows some of the key infrastructure fixes and principles within the Old Oak and Park Royal area. The fixes are those pieces of infrastructure whose location is reasonably settled and that is unlikely to dramatically change through further iterations, whereas the principles are pieces of infrastructure, whose location is broadly known, but for which there is likely to be a little more flex in terms of location and design.

### Transport Infrastructure

10.23 Figure 70 shows indicative locations for the key transport infrastructure enhancements identified within the Old Oak and the wider area. As identified in the transport chapter, the provision of appropriate transport infrastructure will be critical to realising the development potential at Old Oak. Without the majority of transport infrastructure identified in Figure 70, no development at Old Oak would be able to occur. The delivery of infrastructure has been split between pre and post 2026.

10.24 Some of these infrastructure items may be funded by Government, some items form part of the GLA and/or other public bodies' petitions on the HS2 Bill and may or may not be funded by Government, and some will form part of existing Network Rail / TfL capital programmes. However, a substantial proportion of transport infrastructure is assumed to be funded through forms of development value capture – either through a Community Infrastructure Levy (CIL), Section 106 or Section 278 planning contributions.

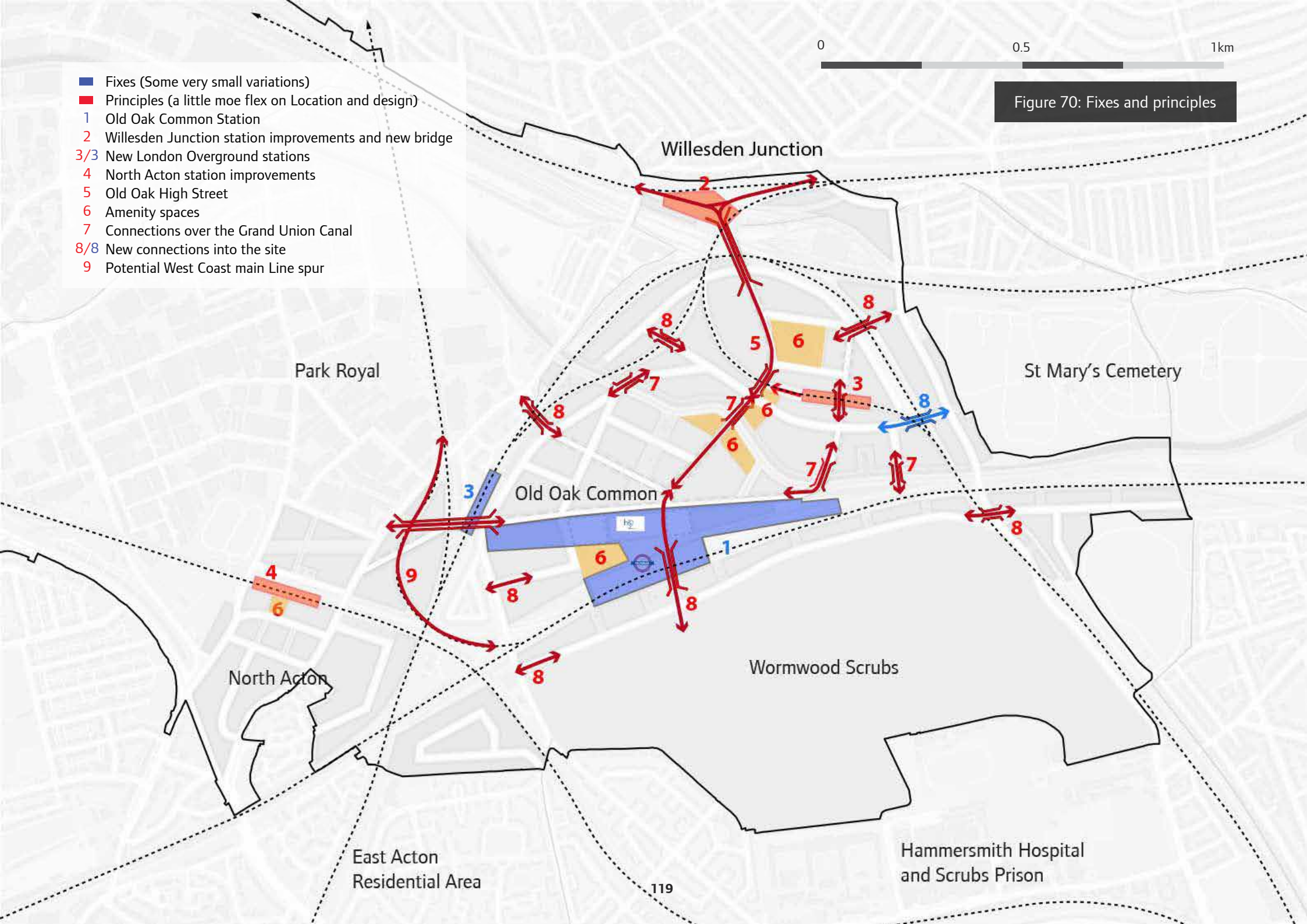



Figure 70: Fixes and principles

## Pre 2026

10.25 Land to the north of the Grand Union Canal has a particularly important role to play in kick starting the regeneration of the wider area. It has the potential for early delivery of new homes, infrastructure and large-scale uses such as a new educational facility, football stadium, sports complex, health, arts, leisure or cultural centre, which could act as a catalyst for the regeneration of the area and focus for the early phases of development. Land currently occupied by Car Giant and European Metal Recycling (EMR) could be brought forward for redevelopment in advance of delivery of High Speed 2 (in 2026). The full delivery of these sites would require:

10.26 Improved connections to Willesden Junction station to the north. This would include:

- delivery of a new bridge over the West Coast Mainline (accessible and inclusive pedestrian and cycle as a minimum) linking Old Oak North to Willesden Junction station (1); and
- Improvements to Willesden Junction station to improve its capacity and accessibility and improved connections from the station area on into Harlesden Town Centre via both Harrow Road and Old Oak Lane (2).

10.27 Improved East-west connectivity by:

- Providing a new bridge connection over the Grand Union Canal, following a route through the Genesis site (3);
- Providing a new vehicular connection over/under the rail line to the north of the existing Hythe Road entrance to provide a second connection from these sites to Scrubs Lane (4); and
- Improving the Hythe Road entrance/exit (5).

10.28 Facilitating the comprehensive regeneration of the wider area in particular through:

- Delivery of a new north-south bridge over the canal from Hythe Road into the Old Oak Common station site (6);
- Public realm and capacity enhancements on existing highways such as Scrubs Lane and Old Oak Lane (7); and
- Delivery of the Hythe Road London Overground station on the West London Line (8).

10.29 To the south of the canal, substantial transport improvements will be made to Old Oak Common Lane and Victoria Road undertaken by HS2 Ltd (9) in association with providing access to the west of Old Oak Common station. A new London Overground station to the west of Old Oak Common Lane (10) would be required to provide interchange between the North London Line and HS2/Crossrail. Improvements to North Acton station (11) to provide increased capacity and improved access will be necessary to cater for the increased demand resulting from development. Development on the Genesis site would require a new access road off of Old Oak Common Lane (12). A potential Crossrail spur to the West Coast Main Line may also be provided pre 2026 (13), providing Crossrail services to locations such as Harrow and Wealdstone, Watford and Tring.

## Post 2026

10.30 Once Old Oak Common station has been completed and is operational, the focus for development is anticipated to shift to the south of the Grand Union Canal. The relocation of the Crossrail depots would make it possible to create additional connections over the Grand Union Canal (14). On the IEP depot, development will provide opportunities to create a new access to Wormwood Scrubs (15), through the Old Oak Common station. Redevelopment would provide the possibility for improved east-west connectivity through the creation of a new street linking Old Oak Common Lane to Scrubs Lane (16). Development to the east of Scrubs Lane may also provide opportunities for connections further to the east (17) to the Kensal Canalise Opportunity Area and beyond to Ladbroke Grove.

10.31 To the west, development on the Shield site would provide opportunities to deliver a connection from the new station on the North London Line to Victoria Road (18) and on to North Acton station. This could include the potential for a new entrance to North Acton station to its north (19).

10.32 To the north of the Grand Union Canal, infrastructure provision post 2026 is likely to be related to providing additional connections either over or under the West London Line and North London Line tracks, particularly to development on the Powerday waste site, which would require improved highway access (20). Connections would also help improve access between Willesden Junction, the canal and Old Oak Common station.

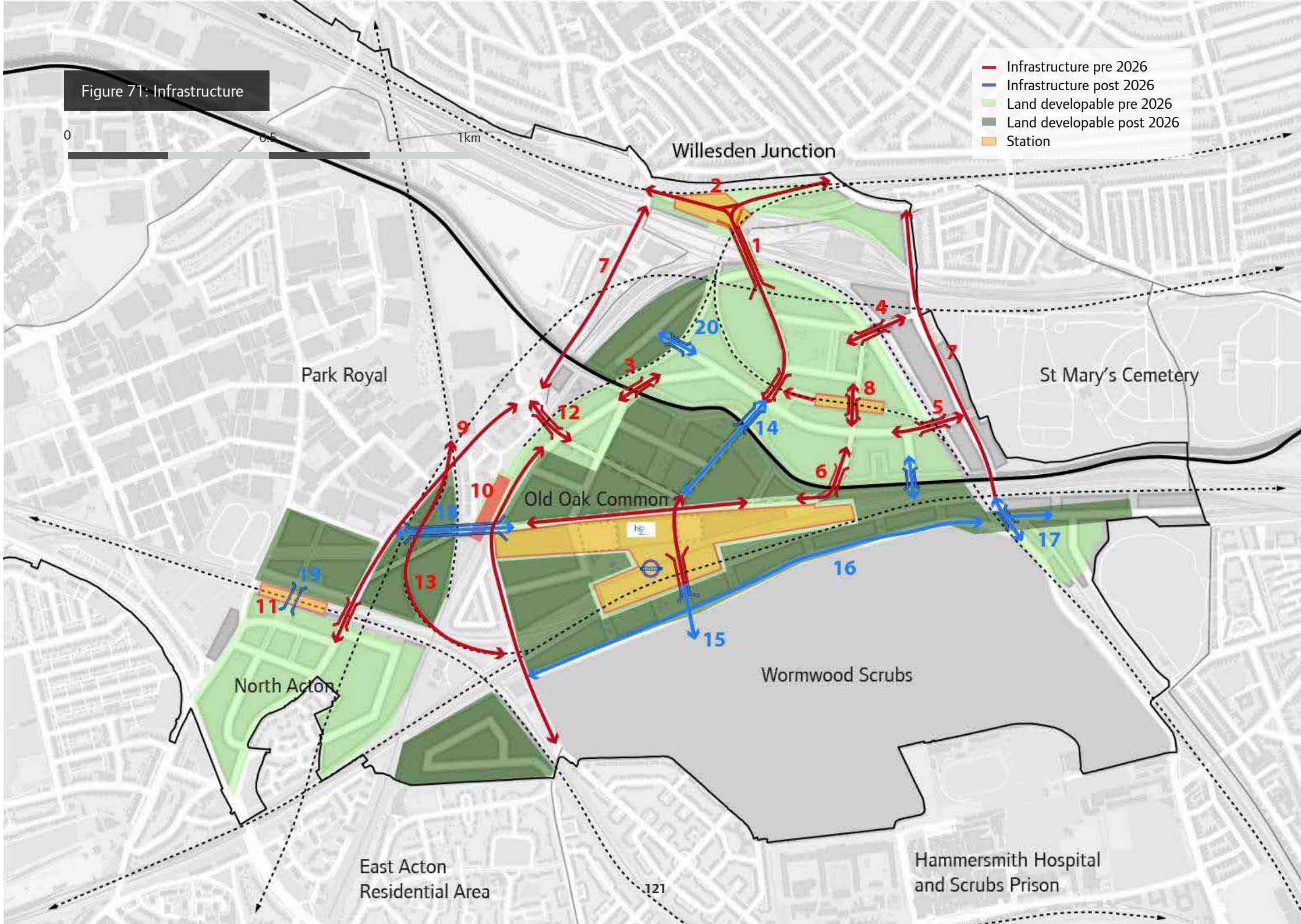



Figure 71: Infrastructure

## Social Infrastructure

10.33 Figure 72 shows indicative locations for social infrastructure provision within the Old Oak area. Locations of social infrastructure are only indicative at this stage as the exact locations will be dependent on further masterplanning work by developers, further consideration of development phasing and further discussions with social infrastructure providers.

10.34 The amount of social infrastructure required will be contingent on the new resident and worker population in the Old Oak area. Below are early outputs from the Development Infrastructure Funding Study (DIFS) indicating of the amount of social infrastructure that would be necessary to support the London Plan target of a minimum of 24,000 homes and an indicative additional 55,000 jobs. These figures are likely to change as further modelling work as part of the DIFS is undertaken.

### Education

10.35 Off-site provision:

- A one form entry expansion of an existing primary school; and
- A two form expansion of an existing secondary school

On-site provision:

- 3x2 form primary schools; and
- An all through (3-19 years) 4 form school

10.36 In the early phases, the focus would be on expanding existing school capacity rather than building on-site provision. Any existing school expansion would be dependent on further work to identify the ability of any premises to expand coupled with the ability of children living in the development to easily access the school – especially in the case of the primary school expansion, where school runs require greater parental supervision. Further work will be necessary to understand the timing of and potential locations for the all-through school as this will be a substantial facility, which is likely to require the acquisition of land. Potential funding mechanisms for its delivery will be considered.

### Health – Primary and Community Care

10.37 Development at Old Oak is anticipated to give rise to the need for 30 GPs, which could be accommodated in five health centres, each of approximately 1,200sqm. There will also be provision for dentists, pharmacists and opticians. Work will be undertaken with GLA Health Team, NHS England, the local Clinical Commissioning Groups and all the Health and Wellbeing Boards to ensure that:

- the new health provision contributes to local Health and Wellbeing Strategies; and
- that health infrastructure provision has been informed by local people, key stakeholders and commissioners of the services.

### Emergency Services

10.38 Development at Old Oak has been identified as being likely to give rise to the following emergency service infrastructure:

- Two extensions to existing police facilities (each of 425sqm);
- An on-site contact point/police shop;
- A 25sqm CCTV monitoring suite;
- Intensification (1,500sqm) of Park Royal Fire Station; and
- Provision of additional capacity at existing ambulance stations;

### Community and Sports Facilities

10.39 Development is anticipated to give rise to the need for two community hubs of 2,600sqm, which could be co-located with other services such as GPs, police and primary schools. One or both of these facilities could be anchored by a library and could provide a variety of other services, including affordable office, training and meeting space, adult learning and training space, halls for hire and a crèche. Provision of places of worship within the Opportunity Area would also be encouraged as part of development proposals, which could be collocated with community facilities. Affordable sports provision will be secured through CIL or S106 agreements.

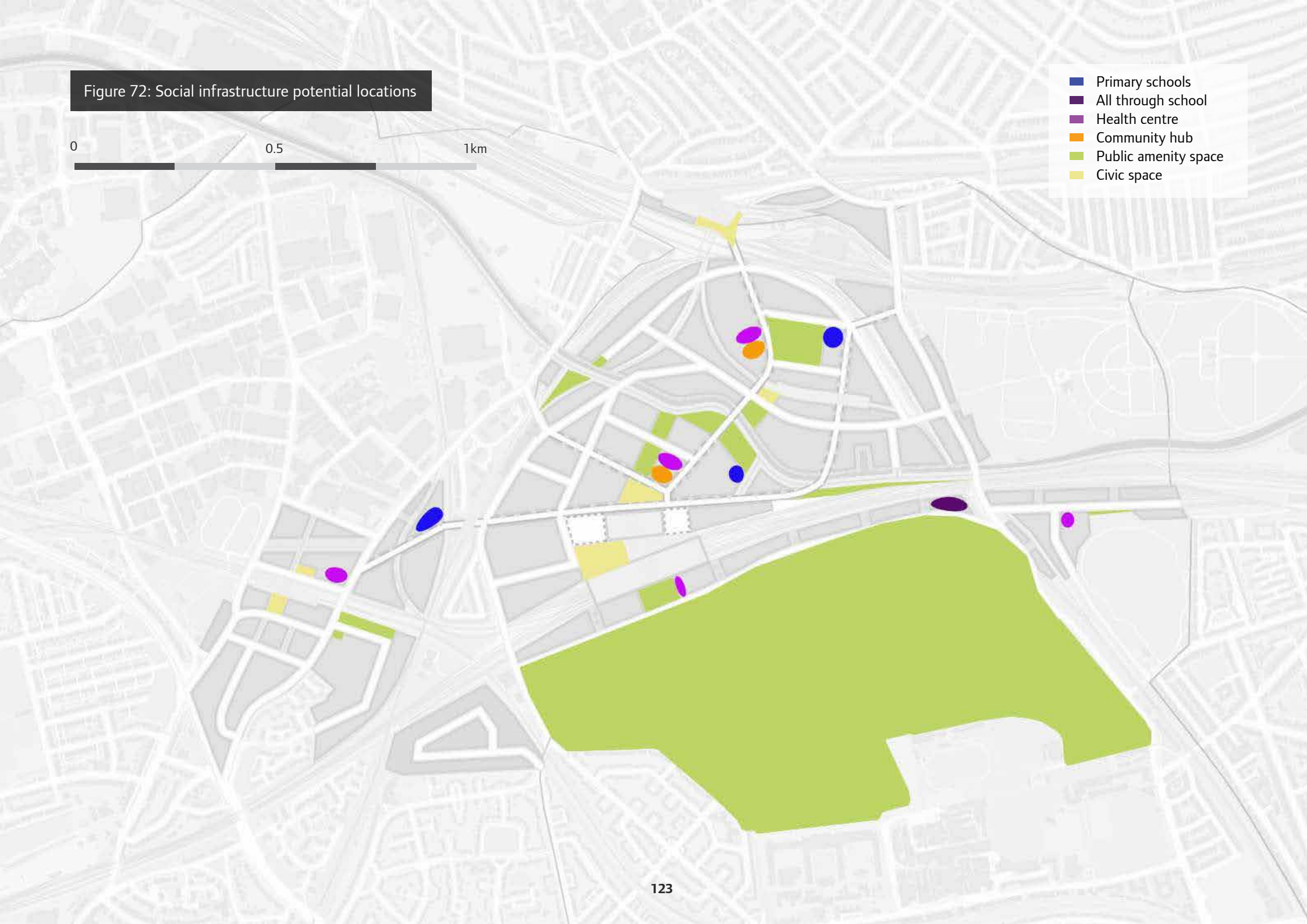
### Open Space and Play Space

10.40 Figure 72 also illustrates the indicative open space network identified in the OAPF indicative masterplan (see page 37). These are:

- Sensitive enhancements to Wormwood Scrubs;
- Enhancements to Grand Union Park;
- Improvements to existing towpath so the South of the Grand Union Canal;
- New towpath to the north of the Grand Union Canal;
- New open space to north of Grand Union Canal;
- Civic square near to rail stations; and
- 'Green grid' network of open spaces.

10.41 Play space will also be required. For under 5s, this is likely to be provided within development plots, whereas for older children, formal and informal play will be secured within public open spaces.

Figure 72: Social infrastructure potential locations



## Economic Infrastructure

10.42 Figure 74 shows the Index of Multiple Deprivation for the area surrounding the Old Oak area. Within the immediate vicinity of Old Oak there are a substantial number of Super Output Areas (SOAs) classed as being within the top 10% deprived nationally and a significant number of SOAs within the top 20%. The levels of deprivation becomes even more pronounced when looking specifically at income deprivation, with a greater proportion of SOAs in the 10% and 20% most deprived. Over 9% of residents in Harlesden, over 7% of residents in Stonebridge and over 5% of people in the College Park and Old Oak were claiming Job Seekers Allowance in May 2014, compared to a national average of 2.4%.

10.43 The regeneration of Old Oak will provide opportunities for employment for local people, both in the end state when development is complete but also during the construction phase.

10.44 It is important that strategies are put in place to ensure that local residents and businesses benefit from this construction boom, in addition to putting in place measures that provide opportunities for nearby residents to secure post-construction employment.

10.45 In order to achieve this, the Mayor will:

- Require developers to 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;
- Negotiate as part of planning obligations from major developments:
  - support and funding of Workplace Coordinators working within the developers' project team to ensure that local people benefit from employment opportunities throughout the development;
  - the provision of a recruitment & employability Construction Training Centre before and during construction; and
  - the provision of a post construction standalone Recruitment and Job Shop in a focal point of the development.
- Set planning policy requirements for local apprenticeships and training as part of construction and post construction works.

Figure 73: Construction Skills Centre, King's Cross

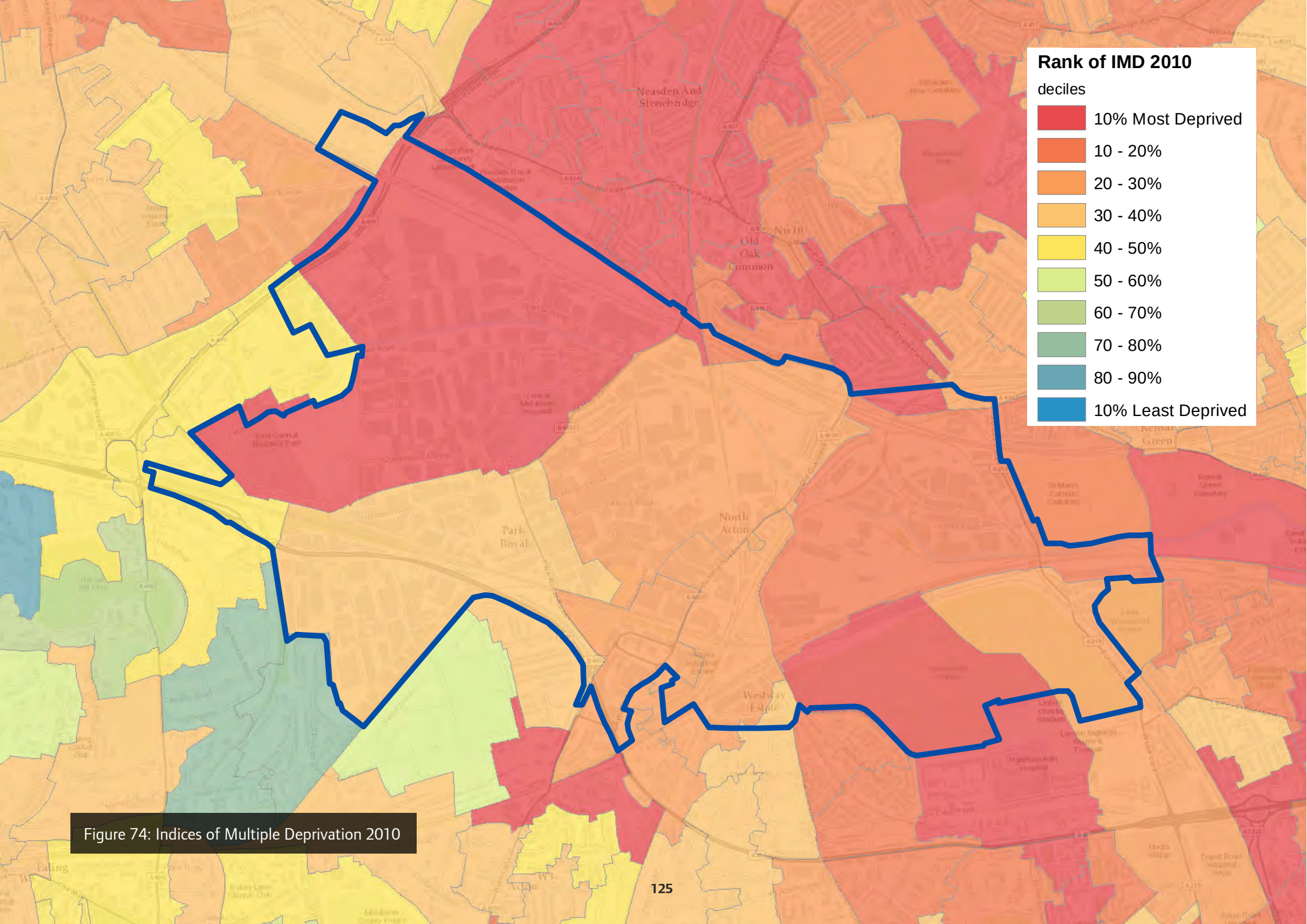



Figure 74: Indices of Multiple Deprivation 2010

## Utilities Infrastructure

10.46 Figure 75 provides indicative utilities infrastructure network gas and electricity in Old Oak Common and Figure 64 on page 103 provides an indicative utilities network for foul and surface water sewerage. The GLA with OPDC will be seeking to deliver a Construction Programme in 2016 with providers. Existing networks in Park Royal may also require enhancement, which would be investigated further as part of a future Local Plan developed by the proposed OPDC.

10.47 The GLA plans to undertake more detailed modelling of potable water and foul and surface water sewerage supply and demand with Thames Water, who is responsible for water infrastructure and distribution networks. Given the number of homes and jobs predicted at Old Oak, the provision of substantial new potable water infrastructure is anticipated. Demand on the foul and surface water sewerage network can be dramatically reduced by sustainably managing surface water drainage flows. The GLA will require developers to utilise Sustainable Urban Drainage Systems (SUDS) to minimise run off (see guidance for water in the Environment Chapter). Only once all other sustainable drainage options have been considered will connection to the surface water network and finally combined network be considered.

10.48 National Grid own and operate gas distribution. The Old Oak area is currently served by a low pressure gas network. There are also a number of medium pressure gas mains in the vicinity of the Old Oak area. Development at Old Oak will require an expansion of the medium pressure gas mains infrastructure and reinforcement of the existing mains where any connection is made. Low pressure mains will also be required to serve individual buildings, which would usually be provided under new roads and footpaths.

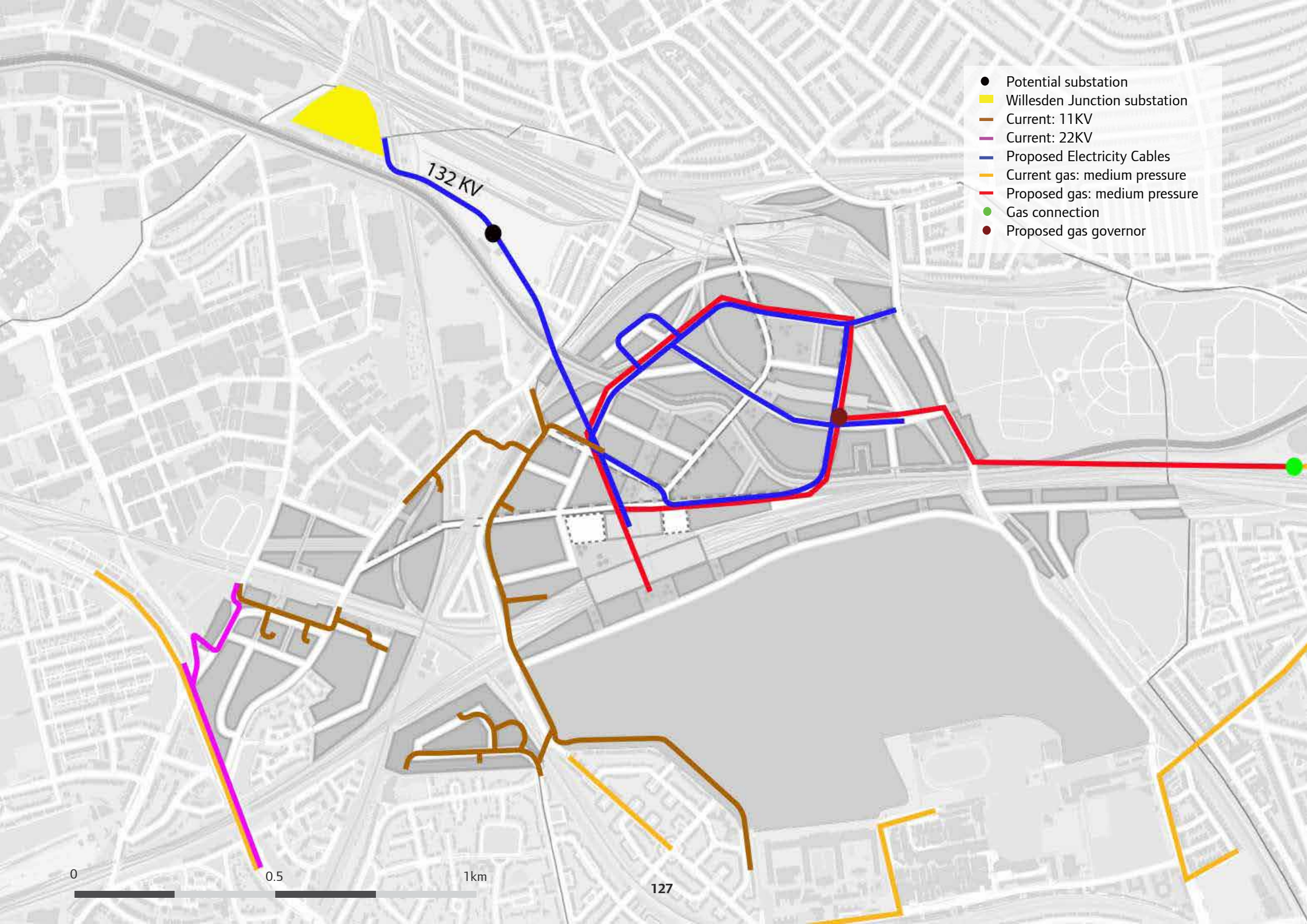
10.49 The local electricity distribution network in the Old Oak area is owned and operated by UK Power Networks (UKPN). The network is composed entirely of underground cables, the majority of which were installed between the late 1930s and 1960. Development in the Old Oak area will require an upgrade in the network, including a new main substation to serve the development. Substations are not ideal neighbours from an aesthetic or public perception perspective and so that the location of the substation would need to be carefully planned.

10.50 An energy strategy will be developed over the coming months, which will inform the development of an energy masterplan as detailed on in the Environment Chapter. This will set out the extent of the energy infrastructure to be implemented in the area and look at potential overlap with electricity network development (e.g. co-location of energy centre and substations and sharing of pipe and cable routes). The Plan forms the basis of the system to be developed in detail at the delivery stage.

10.51 District heating/cooling networks should also be installed at Old Oak, in accordance with the London Plan. Estimated costs of installation of heat networks and the associated infrastructure can range from £5,000 to £10,000 per dwelling depending on development density. Based on the figure of £7,500 per unit the network would cost around £180 million. However, heat networks create an income as a result of energy demand. It is estimated that 24,000 homes would generate an income of approximately £12,000,000 per annum, making it an attractive proposition to energy suppliers and investors.

10.52 Telecommunications networks are provided by a range of operators including BskyB, BT, Colt, Instalcom, Verizon, Virgin Media, Cable & Wireless and Vodafone. Networks usually fall within the existing public highway network and there is a major telecommunications mast operated by Cable & Wireless adjacent to the Powerday waste recycling site to the north of the Opportunity Area. The area is served by three exchanges: Acton to the south-west, Harlesden to the north-west and Kensal Green to the east. New superfast broadband will need to be provided to the Old Oak area from these three exchanges. Further to the west in the Park Royal Industrial Estate, there are shortcomings with broadband that will also need to be addressed (see the Park Royal Chapter).

Figure 75: Proposed utilities infrastructure


Potential substation
Willesden Junction substation
Current: 11KV
Current: 22KV
Proposed Electricity Cables
Current gas: medium pressure
Proposed gas: medium pressure
Gas connection
Proposed gas governor
132 KV
0
0.5
1km

## DL3: Smart London

Proposals should contribute to the advancement of a Smart London by integrating innovative technologies, services and open data sharing arrangements into new development by:

a. Undertaking a baseline study mapping out existing Information and Communications Technology (ICT) system resources across the development and neighbouring areas. This would identify those resources with the greatest potential for reuse, identify gaps and provide the foundation for a strategy to fill them; and
b. Providing a SMART Strategy, setting out how best practice Smart technologies, services and open data will be designed in to schemes and/or safeguarded for future implementation as new technologies, services and use cases develop.

### Smart London

10.53 Smart London is a Londonwide priority which promotes London being at the vanguard of innovative technology, services and uses of city data to drive efficiency, interoperability, collaboration, sustainability, economic growth and quality of life. A smarter Old Oak Common and Park Royal will function more efficiently and will provide a better quality of life for Londoners.

10.54 The scale of development at Old Oak Common and Park Royal offers an exemplary opportunity to create a 'smarter' London experience for all. The GLA will engage with developers, infrastructure providers and London's technology sector in bringing forward ambitious and innovative proposals.

10.55 Smart solutions, in their broadest sense, should be identified at an early stage and then designed and built in a way that facilitates the area's progress towards becoming smarter.

10.56 Masterplans and site briefs should provide in-depth measures and solutions for increasing smart innovations and capabilities within developments and infrastructure projects. The developer should use procurement processes to support innovative business that could enhance smart functionality. When the developer contracts out services related to the management of a development or infrastructure, the contracts should be set up to enable additional functionality to be added later at a fair and transparent cost.

### Smarter Examples

10.57 There are numerous examples illustrating how data, technologies and services are being used to enhance the lives of Londoners, create new businesses and answer city problems:

- London Datastore (http://data.london.gov.uk/) is a data sharing website, allowing for the free flow of data between stakeholders;
- GLA population projections visualisation tool (http://data.london.gov.uk/case-studies/population-projections/) is the creation of an interactive tool to view population projections allowing users to more readily understand current and future population trends across London. It allows users to look at how large-scale developments are projected to drive population growth in the local areas.
- Whereabouts London (http://whereaboutslondon.org/) is an ongoing experiment in how open data can be used to help cities and citizens see their environment in a new light. By blending 235 types of data we're beginning to investigate what London could look like if we drew London's boundaries afresh, grouping neighbourhoods based on how we live, not where we live. Reimagining neighbourhoods in this way could help local authorities to commission shared services, or design and procure shared infrastructure more effectively across existing administrative boundaries.
- Access to high-speed broadband (http://data.london.gov.uk/case-studies/broadband/) and the internet is now considered the fourth utility and if we are to remain competitive in the global economy and bolster our reputation as the greatest city on earth we need to ensure every Londoner is able to access the very best digital connectivity. Whilst London leads Europe in much of its broadband connectivity there are still concerns – slow and unreliable broadband is a common complaint from some high-tech businesses in the capital – and the Mayor's Office believe a shift from basic broadband to superfast could boost London's economy by around £4bn by 2024.
- London Output Area Classification (LOAC) (http://data.london.gov.uk/case-studies/London-output-area-classification/) uses a combination of over 60 Census variables to

classify every single small area in London within demographical groups.

- The CELSIUS (http://celsiuscity.eu/) scheme will demonstrate how London's smart heat and power networks can operate in the future.
- Building Information Modelling (BIM) – a computer model that maps out buildings and infrastructure so that others can understand how it functions and how their projects can connect into infrastructure. This helps to stop the often uncoordinated approach to laying utilities where by each statutory undertaker lays pipes and cables, which ultimately ends up with roads being dug up and re-laid multiple times during occupation.

10.58 Figure 76 shows utilities modelling undertaken in association with Crossrail's construction plans at Liverpool Street. There is an aspiration to undertake a similar exercise of utilities modelling at Old Oak and Park Royal in order to better understand existing utilities infrastructure and explore opportunities for more efficient infrastructure provision

## Clean Tech

10.59 London's green economy generates approximately £28 billion a year to the capital's economy, with 9,000 businesses employing over 160,000 people. The sector is predicated to continue growing at a rapid rate in excess of 6% per annum. There are significant opportunities for the green economy to play an important role in the Old Oak and Park Royal area, with opportunities for clean tech now in the Park Royal Industrial Estate, soon in Imperial at White City and in the future in the Old Oak area.

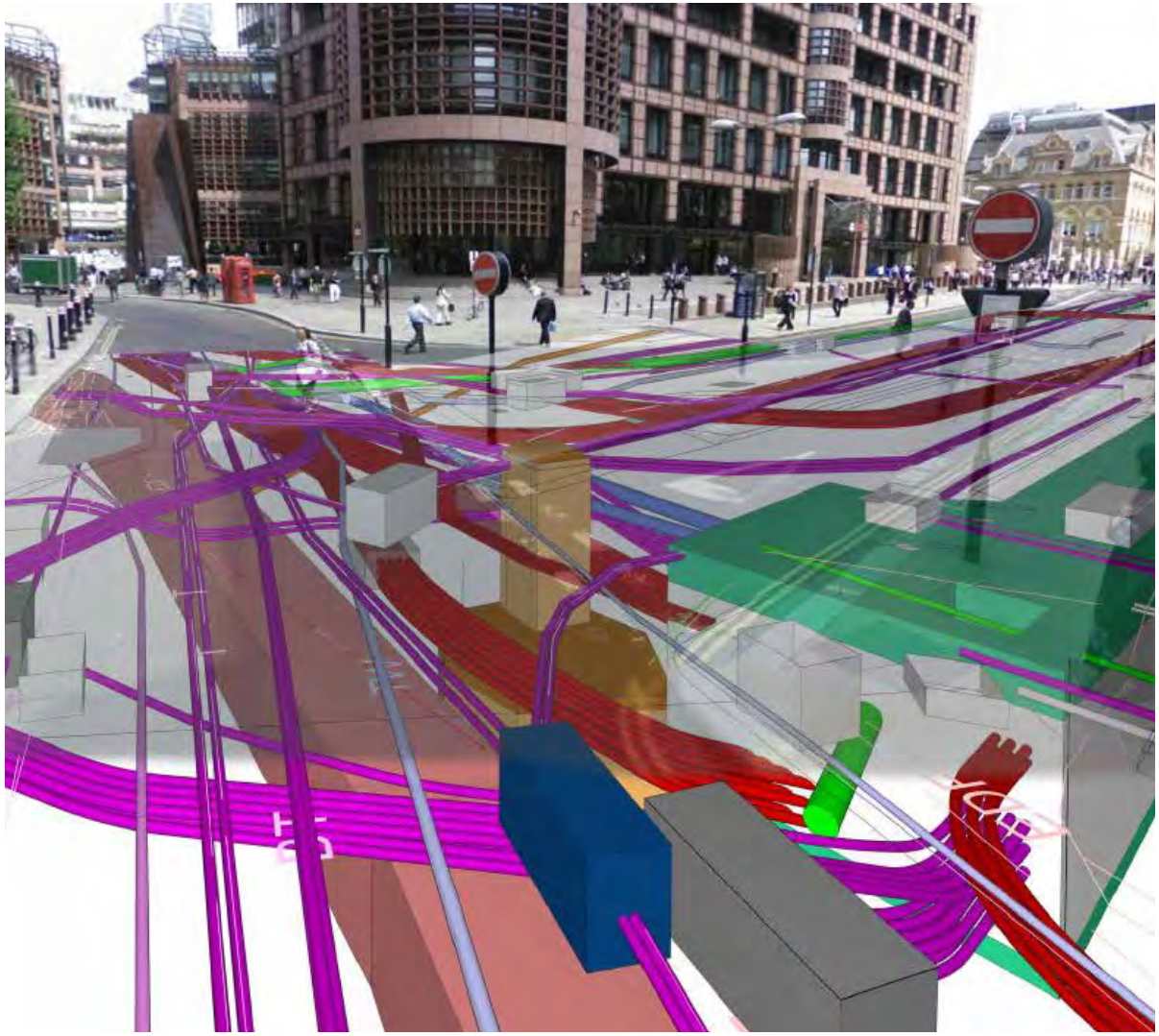


Figure 76: Underground utilities modelling at Liverpool Street