5. OLD OAK STRATEGY

ILLUSTRATIVE MASTERPLAN

5.1 An illustrative masterplan has been produced, showing one way that the Old Oak area could be comprehensively redeveloped. This illustrative masterplan achieves the objectives of the OAPF and is based on the constraints of the site as known at the time of this OAPF's production. This guidance and depictions for streets, public amenity spaces, building heights and densities and local views have contributed to the production of the illustrative masterplan.

5.2 The illustrative masterplan is based on the design principles set out in this framework. The aim of the masterplan is to connect the main public transport nodes through legible and well-designed streets. The illustrative masterplan highlights those streets considered to be primary streets, which are likely to be areas of focus for town centre uses. These are a north-south street from Willesden Junction station, via Old Oak Common station to Wormwood Scrubs, 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.

5.3 The illustrative masterplan includes a network of public amenity spaces which would form part of the green grid, promoted in Principle D2 (see page 38). The illustrative 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.

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

5.5 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 illustrative 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 31).

5.6 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 119) which shows a potential modal network within the illustrative masterplan.

5.7 It is important to note that the masterplan layout included in this OAPF is flexible. It is expected that as more detailed design work is progressed, and more detailed proposals are prepared, the exact location of streets, spaces and buildings will move around to reflect this more detailed understanding. However, this masterplan will be used as the starting point for discussion on detailed development proposals.

3D illustrative masterplan

5.8 In addition to the 2D illustrative masterplan overleaf, a 3D illustrative masterplan will be developed during the production of the forthcoming OPDC Local Plan. This work will allow further testing on development capacity, development densities and building heights to inform policy preparation.



LAND USE

Principle 001: LAND USE

- a. In conformity with the London Plan, proposals should contribute towards the comprehensive regeneration of the Old Oak area to help deliver:
- a minimum of 24,000 new homes including affordable homes with a mix of tenures and typologies;
- 55,000 jobs with a significant provision of this provided as new commercial space focussed around a new hub at the High Speed 2 station. Opportunities should be taken to diversify into new growth sectors and provision should be made for SMEs, micro businesses and affordable workspace;
- a full mix of town centre uses which could include the following; retail, leisure, community, health, cultural, entertainment, night-time economy uses, sports facilities, educational, arts, hotels, places of worship, commercial and offices:
- a level of new retail that caters for the needs of the development and that complements and enhances nearby centres, while recognising the role retail can play in the shaping of place:
- town centre uses should be focussed around public transport hubs, along the

- new Old Oak High Street and along other major thoroughfares where there are high flows of people;
- a highly integrated transport network;
 and
- a new well connected network of streets and amenity spaces that meet the principles of Lifetime Neighbourhoods.
- b. Proposals should explore the opportunity to attract a variety of catalyst uses, from the small to the large scale, which could help play a role in attracting people to the area and creating a destination.
- c. 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, in the first instance, within the OAPF area, then the West London sub-region.

Housing

- 5.9 Table A1.1 in Annex 1 of the London Plan (2015) sets the strategic policy direction for the Old Oak Common Opportunity Area and the London Plan identifies the potential to deliver a minimum of 24,000 new homes. OPDC will, though it's Local Plan, carry out work to further consider the deliverable quantum of development.
- 5.10 Future OPDC affordable housing policy would need to accord with national

and regional policy and would need to take account of housing need and the level of physical and social infrastructure needed to support this level of development. OPDC will work closely with the boroughs to identify housing needs and policies for inclusion in the Local Plan. This will include consideration of different approaches that could be taken to affordable housing, including consideration of the potential for a fixed percentage affordable housing target. an approach promoted in the draft Mayor's Housing SPG (para 4.3.24) in opportunity areas and housing zones. OPDC's Local Plan will also consider the role that different housing types can play in addressing housing needs, including the Private Rented Sector (PRS) and other innovative housing solutions. The programme for the production of OPDC's Local Plan is set out at paragraph 1.9. The Local Plan will have to go through Examination in Public (EiP) and agreed by a planning inspector. Existing borough Local Plan housing policy at the time of the establishment of OPDC will continue to be applied to the area until OPDC produces its Local Plan. OPDC's Local Plan will contain area based housing policy including policies on housing supply, housing mix and affordable housing.

5.11 In order to deliver this level of housing, proposals that provide substantial amounts of new high quality, high density housing will be encouraged. London Plan policies on housing will apply to these proposals,



including the provision of affordable housing, a mix of housing types and sizes and high quality design, in accordance with the requirements of the GLA's Housing SPG. New residential development will need to be designed to achieve a significant proportion of ground level front doors, with defensible space, directly onto the street and be informed by best practice for improving and maintaining health. For new market housing, the GLA will encourage developers in the Old Oak and Park Royal area to sign up to the Mayoral Concordat, which requires developers to market homes first or first equal to Londoners to help tackle London's unprecedented demand for housing.

5.12 The majority of land identified for housing at Old Oak is currently designated as a Strategic Industrial Location (SIL) in existing borough Local Plans. In accordance with Policy 2.17Bb of the London Plan, it is proposed that SIL is consolidated into the Park Royal (see figure 17). The official de-designation process for SIL in Old Oak would be dealt with through OPDC's Local Plan. Any resultant loss of SIL would need to be considered at a strategic level.

5.13 Details for the potential phasing on new housing are contained within the Delivery Strategy chapter. The phased delivery of new housing will be largely dictated by market conditions. At over 150 hectares Old Oak is of a scale that should allow for different parts of the area to be developed

concurrently without market saturation, allowing for a high rate of housing delivery. OPDC's Local Plan will set an annual housing target for the OPDC area, which will be informed through further work on housing capacity and phasing across the Old Oak area.

Employment

5.14 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 location in zone 2/3 in west London 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.

5.15 The majority of new office space should be located within walking distance of 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.

5.16 It will be important to secure a range of employment opportunities within Old Oak in addition to office and commercial space. These uses will typically include Town Centre uses as set out in paragraph iii of Land use principles along with uses such as artists' studios, home based working, the service industry, and construction jobs.

5.17 Employment opportunities will not only be for those living at Old Oak. OPDC will be developing employment and skills, and business strategies to ensure that existing and future residents and businesses are given the opportunity to develop their skill sets to be able to take advantage of these opportunities.

5.18 Large employment generating proposals will need to investigate and explain how their development will complement the potential to accommodate newly emerging employment 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:
- Arts, entertainment, leisure, sports and recreation; and
- Creative industries.

5.19 The GLA understands that the OPDC is currently undertaking a Future Growth Sectors Study for Old Oak and Park Royal that is analysing potential growth sectors that could be suited to Old Oak and Park

Royal. This work will inform the preparation of the OPDC Local Plan.

5.20 The redevelopment of Old Oak will displace existing employment uses. New development proposals will need to explore the opportunity to reprovide this workspace. Developers 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, this should be considered with businesses and could be delivered through a sequential process considering locations in the following prioritised order, within:

- 1. the OAPF area (OPDC area)
- 2. West London sub-region
- 3. Greater London
- 4. South East of England

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

Town Centre uses and retail space

5.22 Town Centre uses will play an important place-making role across Old Oak and Park Royal. Town centre uses should be located close to areas with the greatest pedestrian flows and accessibility

namely around public transport hubs, along main streets and at key destinations:

- Old Oak Common station and its surroundings will form the core location for town centre uses. It is anticipated that this area 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, catering for local residents and workers as well as interchanging passengers and there will also be potential here for hotel accommodation.
- The existing stations of Willesden Junction and North Acton along with the future London Overground stations present great opportunities for clustering retail and other town centre uses. Town centre uses along Old Oak High Street must connect to Willesden Junction Station and on into Harlesden Town Centre. This is required to improve connections between Harlesden and Old Oak.
- 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 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 busy streets such as on Grand Union Street/Hythe Road. It is important that buildings along streets have high levels of either active frontage or residential front doors (with defensible space where appropriate) on to the street. It is equally important that uses providing active frontage are viable, to avoid units remaining vacant for long periods.



Figure 28. Housing, East Village, Stratford

5.23 The anticipated numbers of new homes and jobs at Old Oak are likely to give rise to a substantial retail need. The future level of retail will be assessed in greater detail through a Retail Needs Study that would be undertaken as part of the OPDC's future Local Plan.

5.24 It will be important that any retail provision should cater for the needs of the development and should complement and enhance nearby retail centres. The Retail Needs Study will assess the impact of retail provided in Old Oak and Park Royal on the surrounding hierarchy of town centres, including Harlesden, East Acton. Shepherd's Bush and Portobello Road and Ealing and Southall which will be in close proximity by virtue of Crossrail. It is anticipated that future retail would have a high proportion of convenience retail. However, there will be potential for comparison retail within the Old Oak Common Station area and along Old Oak High Street. The type, function and spatial distribution of retail will play an important role in place-making in Old Oak. The ways that retail can help deliver a vibrant and successful new place in Old Oak will be considered as part of the Retail Needs Study and this would inform OPDC's retail policies in its Local Plan.

5.25 There will also be a need for new social infrastructure such as emergency services, education, community facilities, places

of worship, sports centres and health facilities. More information on these requirements is set out in the Delivery Chapter.

5.26 The scale of the Old Oak Common Opportunity Area, alongside its excellent public transport access, gives Old Oak significant potential to support a variety of small and large-scale sports, recreational, arts, leisure, cultural, education and health related facilities. These could become a focus or a catalyst for regeneration. 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 and understands that the OPDC will be developing a Cultural Vision to support this aspiration. Such uses could meet London's growing demand for cultural uses and also help to create an early sense of place in Old Oak in a similar way to the recently completed Central St Martins – University of Arts at Kings Cross. Proposals for large-scale catalyst uses would need to demonstrate that such facilities could be delivered without undermining the delivery of new homes and jobs in the area, having regard to the targets set out in Annex A of the London Plan (2015) and should not be at the expense of the provision of other necessary infrastructure to support development such as public open space.

5.27 During 2014 and 2015, Car Giant and London & Regional Properties have held preapplication discussions with the local planning authorities and the Greater London Authority regarding their development aspirations.

Queens Park Rangers Football Club has also 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 during this time. 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. Such a use could provide a large-scale catalyst for regeneration that could be a vibrant focal point for the development.

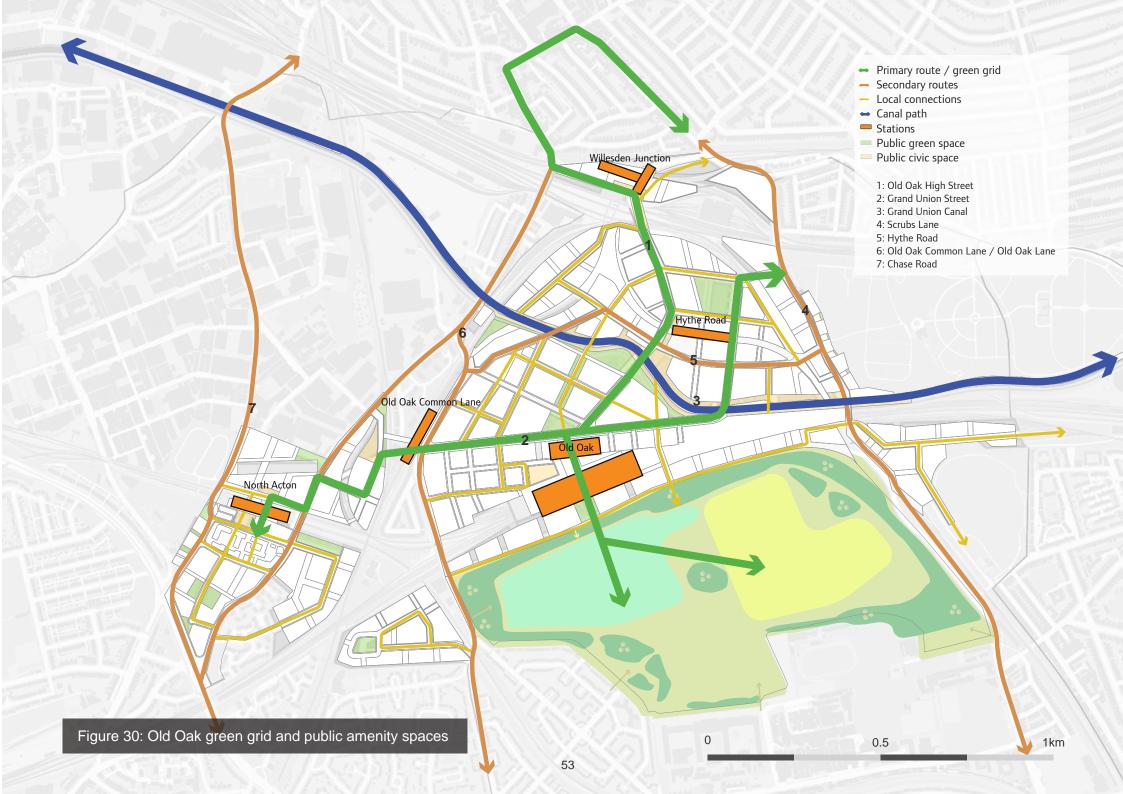


DESIGN

PRINCIPLE 002: STREETS & PUBLIC REALM

Proposals should deliver the following movement hierarchy:

| | Proposals should deliver the following movement hierarchy: | | | | | | |
|----|---|---|--|--|--|--|--|
| | Name | Location | Guidance | | | | |
| Ma | Main streets | | | | | | |
| | 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. Active frontages will be sought along its length. Continuing to run through Old Oak Common Station, the route will provide a direct route to Wormwood Scrubs. | | | | |
| a. | | | rounding characters of Old Oak North and Old Oak South. To ensure the street has a suitable sense of enclosure, the height and density of buildings should respond to the change in the width of the High Street and associated public amenity spaces. | | | | |
| | | | The street design should reflect 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 33. | | | | |
| 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 | non-residential uses along its length. | | | | |
| | | Scrubs Lane, Harrow Road in the east. | as those stated in a. above) for the street to accommodate its roles and functions. | | | | |
| Se | Secondary streets (including Grand Union Canal tow path) | | | | | | |
| d. | Please see indicative masterplan (page 45) | Located across Old Oak providing connections from main streets, destinations and surrounding areas. The Grand Union Canal provides a key eastwest 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. Specifically they will be inviting for people to walk, cycle and spend time. | | | | |



PRINCIPLE 003: PUBLIC AMENITY SPACE

Proposals should deliver the following public amenity spaces in accordance with London Plan table 7.2, the All London Green Grid SPG and the indicative green grid locations outlined in Figure 34:

| | 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 with opportunities for sitting, relaxing, recreation and play (similar to Granary Square in Kings Cross). Across the canal to the south, the existing nature reserve will continue to be green in nature. There should 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 and significant in size, with recreation and play facilities for people of all ages to provide a focal point for new communities. There may be opportunities to consider alternative locations for this public open space as more detailed development proposals progress. |
| C. | Station squares | Located north, south and west of Old Oak Common Station and adjacent to London Underground and Overground Stations. | Station spaces 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, but opportunities for appropriate greening will be explored, with the square to the south of Old Oak Common Station being green in character. The exact location of spaces around Old Oak Common station will need to be progressed with HS2, Crossrail and Network Rail |
| d. | Small open spaces | Located across Old Oak, including along the Grand Union Canal. | Smaller open should be integrated across the entire area. These spaces will provide an important local function and will be designed to cater the surrounding uses. This is likely to include a range of typologies to cater for the immediate needs of residents and employees. |



Figure 31: Russell Square



Figure 32: Granary Square, Kings Cross

5.28 Further information on how the Old Oak and Park Royal street network is to be designed and connects into the wider area has been made available as part of the overall response to public consultation queries on streets. This information is available for review on the GLA and OPDC website and has informed the development of the street hierarchy shown in figure 30. OPDC will progress further detail on this to support the Local Plan. It should be noted that the location of the spaces and the connections between them shown in Figure 34 indicate broad locations for routes and desire lines and the figure is not intended to identify specific locations.

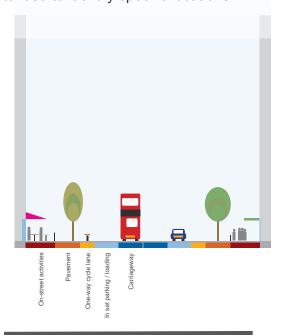


Figure 33: Illustration showing High Street cross section



Public amenity space precedents

5.29 The following precedents are intended to help inform development proposals in delivering a range of high quality public amenity spaces. The OAPF recognises that proposals will need to respond to site-specific circumstances and that these are a selection of ways that spaces can be provided. The GLA understands that the OPDC will be undertaking further related work to support the development of the Local Plan.













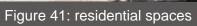




Figure 43: commercial spaces



Figure 40: canal spaces



Figure 42: residential spaces

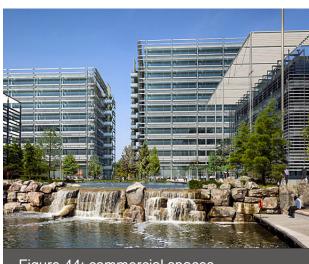
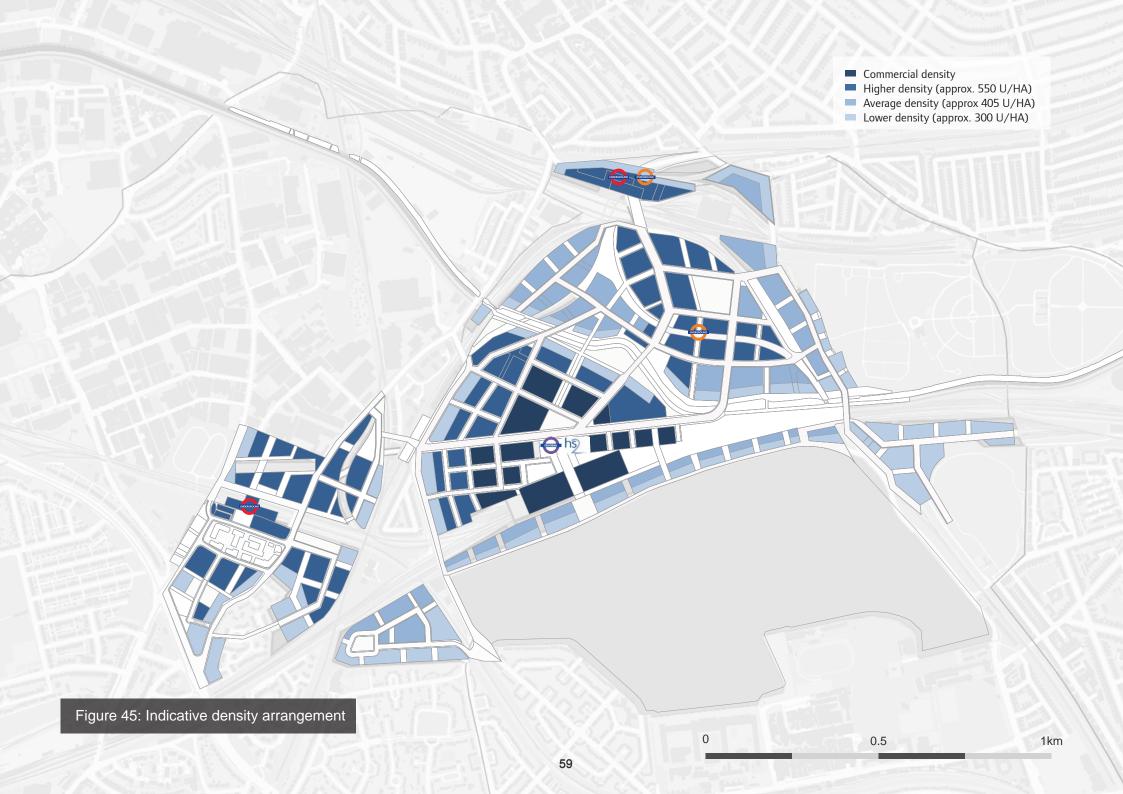


Figure 44: commercial spaces

PRINCIPLE 004: **BUILDING HEIGHT & DENSITY**

- Building heights and densities should:
 a. accord with London Plan Policy 7.7 and the guidance set out in Principle D3;
- b. accord with the guidance set out in the table below and depicted in figure 45:

| | Location | Guidance | |
|------|---|---|--|
| i. | Sensitive edges | There are sensitive locations within and adjacent to Old Oak and Park Royal, which include: designated heritage assets (including their setting) (such as the Grand Union Canal, Wormwood Scrubs and St. Mary's Cemetery), existing residential communities and public amenity spaces. New development close to sensitive locations will be expected to demonstrate how it responds to the specific characteristics of that sensitive location. Buildings in these sensitive edge areas would need to achieve the highest quality design and material use. In many instances sensitive locations tend to be positioned at the edge of Old Oak. It is important that new development adjacent to sensitive locations help mediate the transition in scale with the surrounding areas. To help manage this densities and heights in these locations may be lower. However, there may be some opportunities for a taller element where it clearly helps create a moment of interest and achieves the highest quality design. | |
| ii. | Residential-led areas | Residential-led areas will be predominantly of a higher density than development in sensitive edges. However, the predominate density in residential led areas should be lower than areas adjacent the High Street, at key destinations and transport stations. Buildings in these locations should reflect the different role of streets and should provide appropriate enclosure and amenity spaces. This will result in a variety of building heights across these areas, providing a high quality residential environment with a full range of housing typologies. | |
| iii. | Old Oak High Street and at other key destinations | Along the High Street and at key destinations across Old Oak new development should seek to deliver relatively high densities. The level of development and street width will vary to respond to the changing character. To ensure streets and spaces have a suitable sense of enclosure, the height and density of buildings should respond to the change in scale and width. At appropriate locations along the high street and at key destinations there may be some opportunities for higher densities and taller elements; however, this should not result in a wall of massing. Additionally, there may be locations where lower densities and heights are appropriate. Further detailed analysis of locations of heights and massing will be undertaken through the development of the OPDC Local Plan. | |
| iv. | Underground and Overground Stations & local vicinity | The general height of buildings around new and existing Underground and Overground stations would be high density, with opportunities for some tall buildings. In the majority of these locations, buildings 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. Buildings in these locations would still need to be mindful of surrounding sensitive locations and this is particularly relevant around Willesden Junction station, Old Oak Lane station and North Acton station. | |
| V. | Old Oak Common Station & local vicinity | Development above and immediately to the east, west and north of the High Speed 2 station would be predominantly high density commercial space, with opportunities in the future to include high density residential development. | |



- c. demonstrate how they provide a transition in scale between adjacent building height and density locations;
- d. make a positive contribution to the local townscape, the setting of heritage assets and long distance views;
- e. deliver visual permeability and legibility;
- f. explore the use of orientation and position of massing elements to deliver a positive relationship to street enclosure and ground level activities taking into account daylight, sunlight and overshadowing issues; and
- g. take account through their arrangement, of their environmental impacts, in particular on micro-climate, daylight and sunlight and overshadowing of amenity spaces. Further environmental modelling work will be done through the OPDC Local Plan process to consider this in more detail.
- 5.30 The guidance for building heights and densities presented in Principle OO4 and in figure 45 represents a density and place led methodology and should be considered along guidance set out in Principle D3. This demonstrates that Old Oak has the development capacity to deliver the quantum of homes and jobs as set out in the London Plan and that this can be achieved in a coherent and place-based manner.
- 5.31 The density ranges below have been informed by existing best practice development across London and this takes account of completed development from the London Development Database. The densities below have been applied across each of the areas. This approach to density achieves the level of residential and commercial development set out in the London Plan.

- 5.32 Further information on this work has been made available as part of the overall response to public consultation queries on heights and density. This information is available for review on the GLA and OPDC website. This information will form part of the OPDC's Strategic Housing Land Availability Assessment and Local Plan policy and the in due course. This density modelling work is based on the following density assumptions:
- Sensitive edges: new development in these areas has been modelled at approximately 300 units per hectare
- Residential led areas: new development in these areas has been modelled at approximately 405 units per hectare
- Stations and key destinations such as the high street: new development has been modelled at approximately 550 units per hectare
- Highest density areas around the HS2 stations: new development in these locations have been modelled as high density commercial and highest density residential, which could be in excess of 550 units per hectare.
- 5.33 The stations and key destination areas are identified as the highest density areas, providing 550 units per hectare, which would exceed the density matrix in Table 3.2 of the London Plan. However, paragraph 3.28 of the London Plan notes that it is not appropriate to apply Table 3.2 mechanistically and that other factors should be taken into account such as local context, design and transport capacity.
- 5.34 The Housing SPG paragraph 1.3.39 provides information for how proposals above the relevant density range will be rigorously assessed. In addition, more work on the acceptability of developments in Old Oak exceeding the density

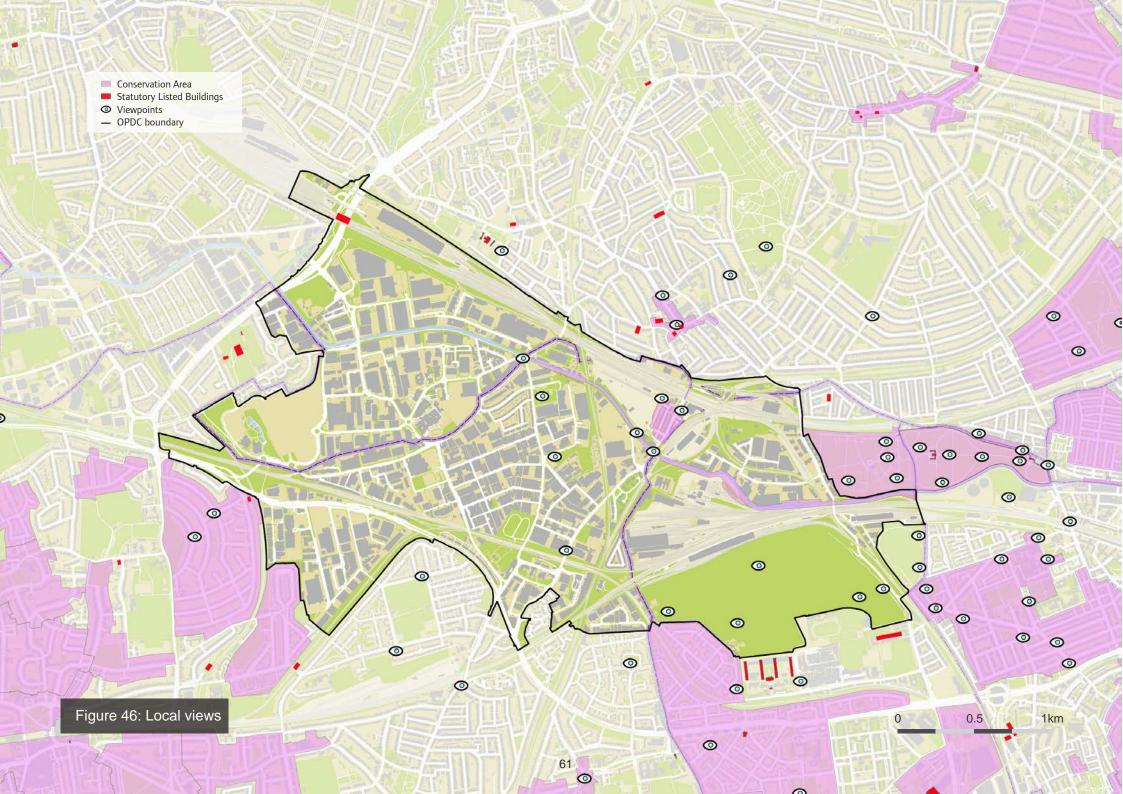
range in Table 3.2 of the London plan will be carried out as part of OPDC's Local Plan evidence base. It should be noted that the density ranges above are not predetermined densities. These ranges are provided as a guide to demonstrate how the total quantum of development as set out in the London Plan could be arranged on site. It is recognised that development on particular sites may be carried out in a number of different ways and alternative proposals could be considered appropriate so long as they accord with the guidance in this OAPF guidance and policies in the London Plan.

5.35 This methodology does not take account of development viability which will play a key part in defining the capacity of individual sites and will need to be assessed on a site-by-site basis.

PRINCIPLE 005: LOCAL VIEWS

Proposals should be informed by local views as shown in figure 29 to assist in shaping the built form, delivering variation in the skyline, conserving heritage assets and their setting and enhancing local legibility.

5.36 Locations for local views have been provided by stakeholders including the London Boroughs of Brent, Ealing, Hammersmith & Fulham and Kensington & Chelsea and Historic England. These views are taken from surrounding Conservation Areas and other locations that may be sensitive to the impact of development in Old Oak, and require more consideration. Proposals for tall buildings should be supported by verified views and 3D modelling. Further guidance will be produced during the development of the OPDC Local Plan.



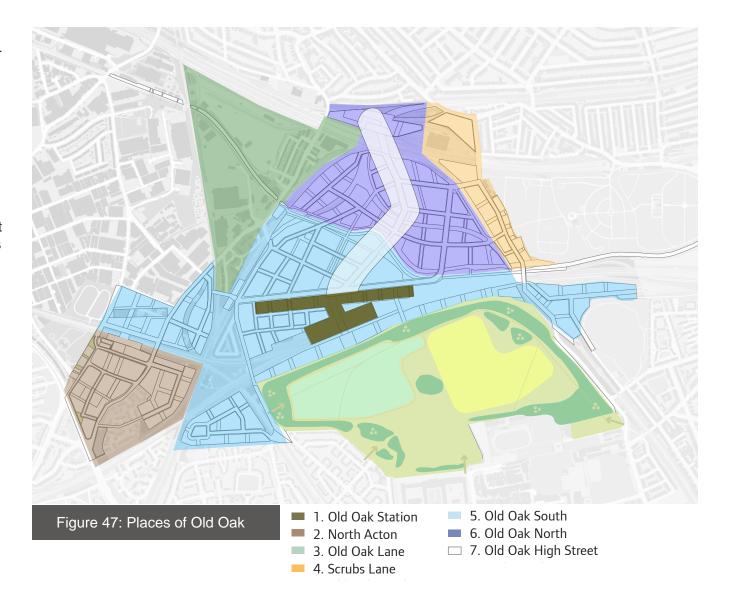
OLD OAK PLACES

OLD OAK PLACES

5.37 Creating and shaping a sense of place at Old Oak is a fundamental element of delivering long-term successful regeneration of the area. To help inform Old Oak's transformation, eight places have been identified which reflect their different, yet related, character. For each place a vision has been developed that will be delivered through a series of supporting key objectives.

5.38 This place-based guidance will be implemented alongside the broader guidance set out for Old Oak to deliver Lifetime Neighbourhoods and support healthy and sustainable communities.

5.39 The boundaries for each place are indicative and not intended to be precise.



OLD OAK NORTH

VISION

Development will be residential-led creating a new Lifetime Neighbourhood. The area will also need to include a level of commercial space focussed around activating Old Oak High Street, Willesden Junction and the Grand Union Canal as key destinations. This area will accommodate a much smaller number of jobs than Old Oak South, which will be the focus for new commercial space. The area requires significant new transport and utility infrastructure to ensure that it is both accessible and operational. Old Oak North will need to include a network of new streets and amenity spaces that meet the needs of all residents along with the provision of a sufficient level of new social infrastructure. Allongside the delivery of a new Hythe Road station, this area presents a fantastic opportunity for early delivery of homes and jobs. As part of this there could be a role for small and large scale catalyst uses to help create a destination and a place.

KEY OBJECTIVES

- 1. Early delivery of new homes and infrastructure to encourage the regeneration of the wider area;
- 2. Development will be residential-led and

Key facts

Approximate area: 43 hectares

Key Landowners: Car Giant, Network Rail, LB Hammersmith &

Fulham

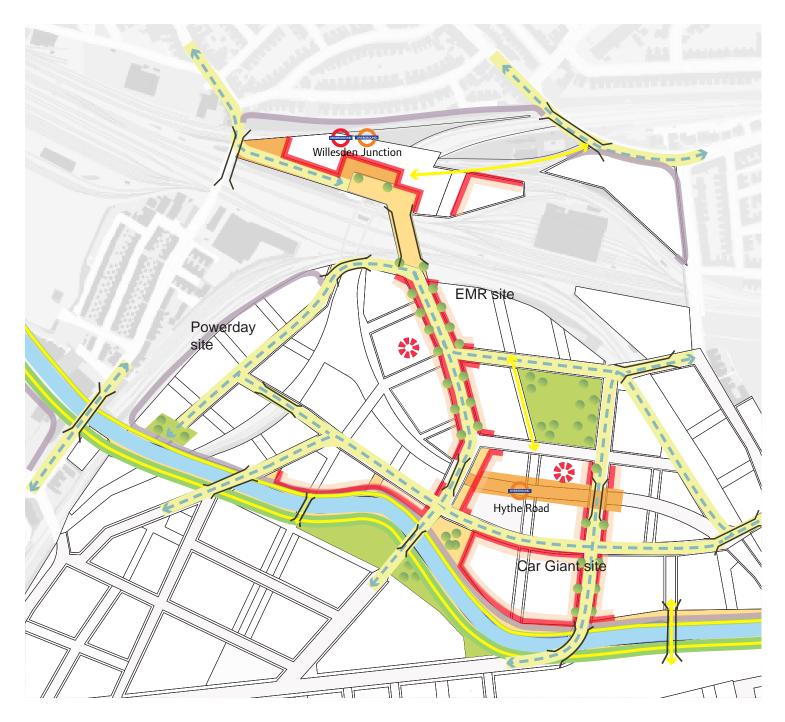
Activities: Car sales, waste processing, smaller SMEs, Willesden

Junction station and operational rail uses.

- will make a significant contribution to the overall housing target for the area;
- Potential for small and large-scale catalyst uses such as a new educational facility, sports stadium, sports complex, health, arts, leisure and 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 street network, permeable and attractive for social interaction, walking and cycling, providing better connections to the surrounding area including; an accessible bridge of at least 12 metres wide over the West Coast Mainline connecting the EMR site to Willesden Junction, new and improved connections to Scrubs Lane, and new connections over the Grand Union Canal; and
- 6. Significant provision of new amenity and leisure spaces, connected by a legible and coherent street network:
- 7. Development should be mindful of existing residential communities in Harlesden, Island Triangle and along Scrubs Lane: and
- 8. Work with the public sector on a strategy to decontaminate the land.

5.40 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.

5.41 Existing waste facilities in Old Oak North (such as European Metal Recycling (EMR) and Powerday) perform an important strategic waste function and this planning policy requirement will need to be carefully considered through OPDCs local plan. 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



- New and existing amenity space
- Public civic spaces
- New and existing rail stations
- Main streets
- Pedestrian routes
- Active frontage
- Sensitive edges
- □ Bridges and tunnels
- · Trees
- Potential catalyst for regeneration

Figure 48: Old Oak North

or alternative uses. OPDC will work with landowners to encourage the relocation of other businesses displaced from the area into Park Royal industrial estate, where feasible.

5.42 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. New development provides opportunities to overcome this severance and connect Old Oak North into its surroundings. Connections to Harlesden Town Centre will be particularly critical in order to ensure that new residents in Old Oak benefit from the services provided in this centre and vice versa. Connections to College Park and Kensal to the north-east will also be important so that the wider community is successfully integrated.

5.43 A comprehensive and joined up approach to masterplanning will be required 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.

5.44 Land currently occupied by Car Giant, EMR and around Willesden Junction station 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 the West Coast Mainline, linking Old Oak North to Willesden Junction station will be necessary, to unlock the full development potential of the area. There is an aspiration for this bridge to be vehicular, so as to improve connectivity and public transport access into the site from the surroundings. However, it is recognised that a vehicular bridge could be challenging and further feasibility work should be undertaken in due course to understand this further. At a minimum, this bridge would be a high quality pedestrian and cycle bridge There will also be a need for new and improved connections to Scrubs Lane and over the Grand Union Canal.

5.45 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.

5.46 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. Eastwest connectivity should be improved through the provision of a bridge connection over the Grand Union Canal in association with the redevelopment of the Oakland's House site (see Places: Old Oak South). Figure 31 shows



- New and existing amenity space
- Public civic spaces
- New and existing rail stations
- Main streets
- Pedestrian routes
- Active frontage
- Sensitive edges
- □ Bridges and tunnels
- · Trees
- Potential catalyst for regeneration

indicative locations for these new connections into and through Old Oak North. The exact locations of these connections may vary through more detailed design work and transport modelling.

5.47 Development will be residential-led and will make a significant contribution to the London Plan housing target across the Opportunity Area. Non-residential uses should be primarily focussed around Old Oak High Street, Willesden Junction station, where non-residential uses should 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 needs of residents, where feasible. Development could include a variety of small and large-scale catalyst uses, these uses could help attract people to the area and create a vibrant place. These uses could include a new educational facility, sports stadium, sports complex, health, arts, leisure or cultural uses.

5.48 Building heights will vary across the area, with taller buildings focussed around public transport nodes, and at/around key destinations including to the south of Willesden Junction station, 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.72-75). Densities will be optimised to make the most efficient use of land, whilst delivering a high quality residential environment.

5.49 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 will need to facilitate the creation of a Lifetime Neighbourhood that provides spaces for all users. The area is currently deficient in public open space and development proposals should include a green amenity space of a significant scale for residential users to the north of Hythe Road station. This space should be at the heart of the approach to place-making in the Old Oak North area, which this OAPF refers to as 'Old Oak Square'. This space could consist of one large space or as a series of spaces across the area. If this space is provided in a more flexible way through a series of spaces, these would need to deliver a variety of functions

to meet the needs of all future residents, employees and visitors to the area. The exact location of the space(s) could shift around through detailed design (See Figure 49). There will also be a need for 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 ongoing maintenance and management of these spaces.

Figures 50: Precedents for development within Old Oak North. Granary Square and University of the Arts London (Kings Cross)



OLD OAK SOUTH

VISION

The new HS2 station presents a significant regenerative catalyst and a huge opportunity to support proposals for high density development. Old Oak South will be a focal point for a mix of uses that optimise the proximity of Old Oak Common Station. This area will become a new commercial centre and will include a significant proportion of Old Oak's new office, commercial and retail space. Old Oak South is edged by the Grand Union Canal, an existing nature reserve to the north, and by Wormwood Scrubs to the south. Both of these features will be important place-making elements and buildings alongside them should support place-making aspirations through the highest quality design. Old Oak South will become a hub of activity where people will live, work and shop, with office, retail and leisure uses focussed around the new HS2 station and Old Oak High Street. Old Oak South will be integrated into its surroundings and this will require a series of bridges over the canal, new and/or improved access to Old Oak Lane, North Acton and Wormwood Scrubs.

Key facts

Approximate area: 67 hectares

Key Landowners: Network Rail, Department for Transport,

Crossrail, Hs2

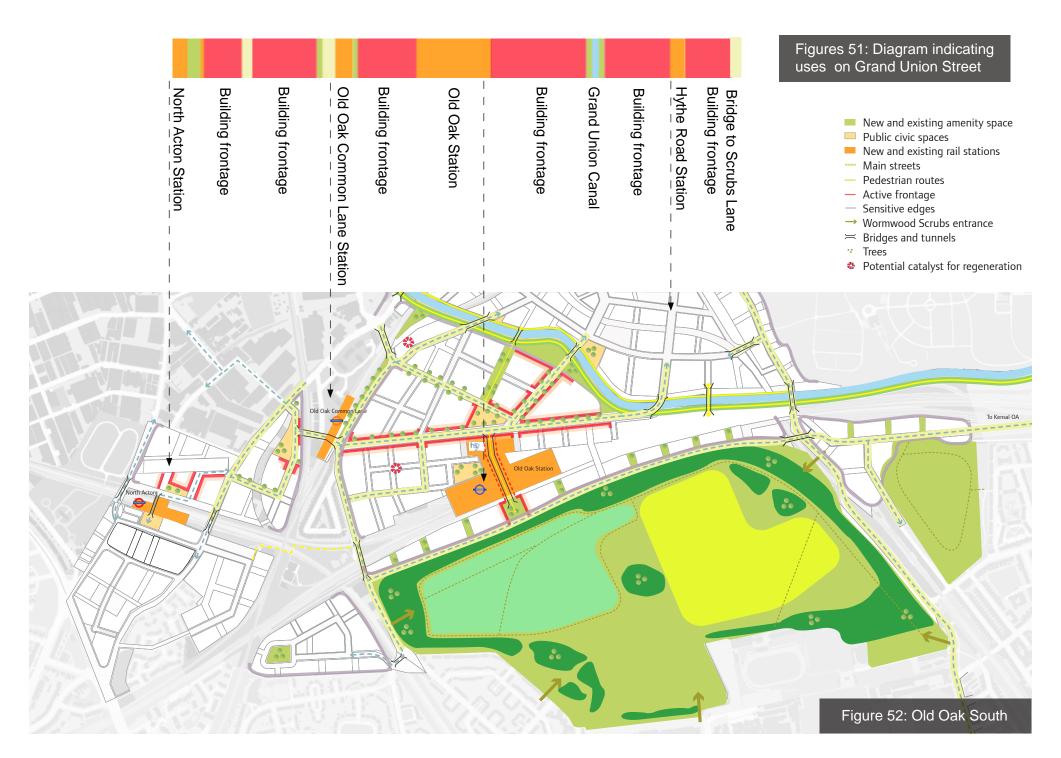
Activities: Operational rail uses, construction of Crossrail depot,

residential communities, nature reserve

KEY OBJECTIVES

- Be mixed use and make a significant contribution to the overall housing target of 24,000 homes and additional 55,000 new jobs in the Opportunity Area;
- Deliver a large quantum of new commercial space, including office, retail, hotel and leisure focussed around the new Old Oak Common station;
- Facilitate delivery of a new High Speed 2, Crossrail and Great West Main Line interchange station (Old Oak Common station), a new London Overground station at Old Oak Common Lane and provision of new bus, taxi and cycle services;
- Facilitate delivery of a new connection from the Crossrail line to the West Coast Main Line, should this prove necessary;
- Locate town centre uses around the new stations and along Old Oak High Street;
- Deliver a new and improved network of streets including;
- a new north-south Old Oak High Street;
- a new east-west Grand Union Street;
- new and improved access onto Old Oak Common Lane and an improved Old Oak Common Lane;
- a new street through the 'Shield' site connecting Old Oak Common station to North Acton;

- a new pedestrian/cycle connection (at a minimum) to the north side of Wormwood Scrubs;
- an improved accessible edge to the Grand Union Canal,
- new bridges over the Grand Union Canal connecting Old Oak South and North and
- better connections to Kensal Canalside Opportunity Area to the east.
- Relocate, or significantly reconfigure the Crossrail depot and sidings to bring forward development on this land in a timely manner
- 8. Work with central Government on opportunities to release the IEP depot site for redevelopment in the future, where this proves to be feasible;
- Encourage early delivery of areas such as the Oakland's House, North Pole East depot, North Acton and land along Scrubs Lane, where these sites support the comprehensive regeneration of the wider area;
- 10. Development should be mindful of existing residential communities at Wells House Road, Midland Terrace/ Shaftsbury Avenue, and the areas proximity to Wormwood Scrubs;
- 11. Development should provide an edge and new access points into Wormwood



- Scrubs whilst respecting its character and ecological value;
- 12. Provide a network of well-connected public spaces around Old Oak; Common station, and at Old Oak Lane station as well as a series of smaller scale amenity spaces for local needs throughout the development area;
- 13. Work with the public sector on a strategy to decontaminate the land;
- 14. Protect, enhance and connect to the Grand Union Canal and the existing nature reserve adjacent to it; and
- 15. The Brunel Road industrial estate should be retained as a Strategic Industrial Location while recognising the potential for development given its proximity to Old Oak Common Station.

5.50 Old Oak South is currently dominated by operational 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 along the canal edge. As with Old Oak North, there are likely to be issues with land contamination in Old Oak South and any proposals would need to develop a clear strategy for the identification, remediation and ongoing monitoring of land contaminants, in line with the Environment chapter.

5.51 Much of the developable area is in public sector ownership of Network Rail, Department for Transport with long leases to Transport for London (TfL), Crossrail and a series of rail operators. The public sector will therefore have a critical role in bringing forward development at Old Oak South.

5.52 There will be a new and improved road, walking and cycling network. This will include a series of bridge connections over the Grand Union Canal and the GLA/OPDC will work with Canal and River Trust and landowners to develop a bridge strategy for the area including:

- A new north-south high street bridge over the canal;
- a new east-west street named Grand Union Street, connecting Old Oak Common Lane through to Hythe Road and on to Scrubs Lane; and
- new bridges across the Grand Union Canal connecting Old Oak Common Lane to Old Oak North via the Oakland's House site.

5.53 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. In accordance with London Plan policy, this 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 Oakland's House 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.

5.54 Development on the Crossrail depot and sidings sites is contingent on their relocation or reconfiguration. The Mayor considers it critical to either fully or partially relocate or reconfigure the depot and sidings in the 2020's so that development can proceed upon the opening of the proposed Old Oak Common station. 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).

5.55 The IEP depot site, immediately to the north of Wormwood Scrubs, is freehold owned by the Department for Transport (DfT). The land is leased as operational rail land and currently performs important functions for operational rail uses. Given the scale of regeneration proposed immediately to the north of this site, the Mayor is keen to promote the longer term redevelopment of this land to accommodate new homes and jobs to accord with the wider vision of the area. The Mayor, through GLA, OPDC and TfL is keen to work with DfT to explore opportunities to relocate existing uses to alternative sites to realise this vision for the area. However, it is recognised that given current contractual obligations and operational requirements this would require close working across all parties to address these challenges. In the shorter term, the Mayor is keen to secure improved access to Wormwood Scrubs to ensure that people living and working to the north of the depot site can still access to the Scrubs as an important amenity and ecological space. This could include connections delivered while the IEP depot is still operational. OPDC will work closely with both the London Borough of Hammersmith and Fulham and Wormwood Scrubs Charitable Trust to explore how these connections could be delivered.

5.56 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 Oakland's House 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.

5.57 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, which will provide opportunities for better connections between Old Oak and the Kensal Canalside Opportunity Area in the Royal Borough of Kensington and Chelsea.

5.58 Development should be mindful of existing residential communities at Wells House Road and Midland Terrace/Shaftesbury

Gardens 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.

Figure 53a: Precedents for development within Old Oak South, City of London, St Mary's Axe.





Figure 53b: Precedents for development within Old Oak South, Bishop's Square (Spitalfields).

OLD OAK HIGH STREET

VISION

Old Oak High Street will be one of the main attractions in the core development area. It will provide a key north-south route connecting Harlesden to Wormwood Scrubs and further south. It will provide direct access to Willesden Junction station, Hythe Road station and Old Oak Common station. There will be a hub of Town Centre activities along its length with a mix of amenity spaces. The canal and its surrounding amenity spaces will become a focal point for this new street. There will be a need for new infrastructure to ensure the street is fully connected into its surroundings that must achieve the highest standards for public transport, social interaction and walking and cycling.

KEY OBJECTIVES

Development should:

- Provide a legible connection between Wormwood Scrubs and Old Oak Common station with Willesden Junction station and Harlesden Town Centre
- 2. Provide a street environment that is attractive for pedestrians and cyclists along its entire length. There may 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;
- Provide clear and direct access into Old Oak Common station, Hythe Road Overground station and Willesden Junction station;
- 4. Deliver a mix of town centre uses typical of a busy London high street;
- Seek to incorporate active uses (including residential entrances) along its full length of the street (where feasible);
- 6. Include public green spaces and public squares along its length. It should celebrate the canal as a focal point and include built in Sustainable Urban Drainage and greening measures to address drainage issues in the area; and
- 7. Explore opportunities for increases in building heights along the street, in recognition of its role and function as a mixed use high street.

Key facts

Approximate length: 1km

Land Ownership: DfT, Network Rail, LBHF, Car

Giant

5.59 New development should achieve the highest quality design that will contribute to delivering an excellent and accessible public realm. The High Street should be, at a minimum, a through connection for pedestrian and cyclists with exemplar public realm to promote its use by these two modes. It may also be necessary for all, or parts, of the street to be vehicular, including public transport, servicing and private vehicle. However, 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.

5.60 The High Street forms part of the 'green grid' (see page 37). It is therefore expected that street 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 spaces to be provided contiguously or continuously along its entire length to support the incorporation of Sustainable Urban Drainage techniques. 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.

- New and existing amenity spacePublic civic spaces
- New and existing rail stations
- Main streets
- Pedestrian routes
- Active frontage
- Sensitive edges
- → Wormwood Scrubs entrance
- ─ Bridges and tunnels
- · Trees
- Potential catalyst for regeneration

Figure 54: Old Oak High Street



5.61 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. To the north of the canal the predominant land use should be residential, and to the south of the canal it should be commercial. There will be opportunities along the High Street to provide uses such as retail, commercial, community uses and leisure.

5.62 Given the opportunities for generous street widths (see Old Oak design guidance) and active uses, there will be opportunities for higher density development along the High Street. Building heights and massing should vary, respond to local character and context and should not create a wall of massing. Density along the High Street is likely to have three overarching characters:

- The part of the High Street to the south of the canal around Old Oak Common station is likely to be high density commercial uses, with potential for tall buildings. Spaces interfacing with the High Street are likely to be more civic in nature with hard landscaping;
- 2. The part of the High Street around the canal is likely to be low or medium densities with spaces potentially including more soft landscaping that responds to canal's biodiversity; and

3. The part of the High Street to the north of the canal is likely be more varied with some high density residential led uses close to the main transport hubs of Hythe Road and Willesden Junction and medium densities elsewhere. Spaces are likely to be a mix of hard and soft landscaping – with the potential for hard landscaped civic spaces next to the station and soft landscaped spaces relating to areas of residential behind the High Street.

5.63 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 areas. New buildings should also have regard to the proposed local views (see pages 60 and 61).



Figure 55: Southwark Street as a comparison for street enclosure



OLD OAK COMMON STATION

Key facts:

Planned opening date: 2026

Land Ownership: Network Rail, HS2 **Station capacity:** 250,000 passengers

interchanging per day

VISION

Old Oak Common Station will be a new state of the art public transport interchange that will serve communities at Old Oak, Park Royal, London and the wider UK. It will incorporate the highest standards of architecture and will be designed to connect seamlessly into its surroundings with the station and track potentially accommodating over station development. It will become a beating heart with the opportunity to perform a comparable regenerative impetus to that of the recently improved Kings Cross station.

KEY OBJECTIVES

- Create a destination of exceptional quality and form an integral part of the public realm, connecting into its surroundings in all directions;
- Be of outstanding architectural quality, rivalling the finest stations in the world such as the redeveloped Kings Cross and St. Pancras stations;
- Secure connections to Wormwood Scrubs including a legible and direct ungated access through the station in

- order that people can move seamlessly through the station, as well as exploring other opportunities for connections to the Scrubs from Old Oak South;
- Provide a variety of active town centre uses that caters for residents, employees, and passengers;
- 5. Provide new public arrival spaces that will act as a focal point for the entire area;
- Be supported by a mixed development including commercial, retail and residential uses;
- 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
- 8. 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.

5.64 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 that help create a destination and which are accessible to the local community. This new station should be a core part of a new centre.

5.65 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.

5.66 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, Park Royal, 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. It can act as a catalyst and precedent for future development. As noted in para 1.13 of the Introduction chapter, the HS2 Hybrid Bill, once enacted, will determine issues such as the station's limits and matters of principle relating to mitigation. Other matters will be dealt with through Schedule 16 approvals, which will be determined by OPDC. As part of the petitioning process, the GLA has negotiated an undertaking whereby a station design panel will be established for the Old Oak Common station, that will consider issues such as the external and internal design of the station and how the station integrates with the surroundings. The GLA is confident that this panel will add rigour to the approach to designing the station and help to ensure that it achieved the highest design quality.

5.67 It may be possible for the Old Oak HS2 station to support over station development and OPDC and the GLA are currently exploring how this could be facilitated without affecting the programme of HS2. 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. A similar example in development can be seen at Hudson Yards in New York City. The illustrative masterplan in this OAPF includes the emerging thoughts on the block layout that might be achievable to deliver over station development at Old Oak Common. Were significant over-station development to prove feasible, there may also be opportunities to reconsider the street layout in the Old Oak South area to better optimise the arrangement of new development and connectivity with the wider area. The height, scale and massing of any over station development would need to be mindful of its impact on the surrounding context, including Wormwood Scrubs.

5.68 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 are able to move seamlessly through the station, whether they are using the rail



- New and existing amenity space
- Public civic spaces
- New and existing rail stations
- Main streets
- Pedestrian routes
- Active frontage
- Sensitive edges
- → Wormwood Scrubs entrance
- ─ Bridges and tunnels
- Trees

Figure 57: Old Oak Common Station

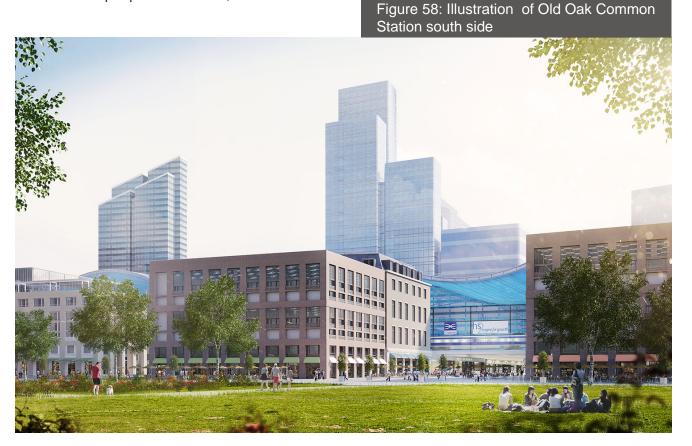
services on offer or not. This station concourse should ensure coherent links can be made to the station entrances to the north, west and south. This should include:

- 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. The GLA and OPDC are investigating ways in which additional connections can be delivered in the short-medium term while the IEP depot remains operational. However, in the long term the best place making and regeneration solution is to have a clear and legible connection through the Old Oak High Speed 2 station connecting Old Oak to Wormwood Scrubs and further south. The GLA currently considers that this connection could be best achieved through an at-grade connection but recognise that this connection is the subject of more detailed design work with HS2 Ltd and will ensure the Wormwood Scrubs Charitable Trust are involved in discussions. 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. The southern access should be designed to ensure that it sensitively integrates with Wormwood Scrubs; 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.

5.69 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.





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 successfully completed regeneration in this area. New and improved connections to Old Oak Common Station and the core development area will be important to ensure North Acton is integrated into the wider regeneration. New development in the area will need to deliver a mixture of new public and private amenity spaces. North Acton station will likely require improvements to increase its capacity and access arrangements.

KEY OBJECTIVES

- Support mixed use intensification, including residential, student housing, offices, light industrial, educational uses and potential for retail, leisure and hotel uses closer to North Acton Underground station;
- 2. should seek to provide flexible space for SME businesses;
- 3. Be high density in the vicinity of North Acton station:
- Achieve the highest standards of design when in close to surrounding sensitive locations including existing residential premises and North Acton Cemetery;

- Improve pedestrian and cycle connections between North Acton, Old Oak and Wormwood Scrubs and provide improved connections to communities south of the A40;
- 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;
- 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;
- 8. Provide a mix of public and private amenity spaces
- Support new access and 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.

5.70 North Acton station is situated on the Central Line, which provides tube access to the West End and the City. Coupled with bus connections, this affords North Acton a high level of public transport access, 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.

- 5.71 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. Development is expected to be residential led but provision of employment space would be encouraged, particularly within the high tech innovative economy and clean tech sectors.
- 5.72 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 important that future schemes seek to provide a greater mix of tenure types and typologies to accommodate a more mixed, balanced and sustainable community.
- 5.73 Within North Acton there is a lack amenity space. New development will need to make an adequate provision of new public, communal and private amenity space. In particular new residential development will be expected to include good quality private/



Figure 60: North Acton

- New and existing amenity space
- Public civic spaces
- New and existing rail stations
- HS2 work sites
- Main streets
- Pedestrian routes
- Active frontage
- Sensitive edges
- ─ Bridges and tunnels
- · Trees
- Potential catalyst for regeneration

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.

5.74 Development close to sensitive areas such as existing residential premises, and North Acton Cemetery, will need to be of the highest standards of design. Along the A40 any future development should provide a strongly defined frontage, such as that created by the recently expanded and refurbished Holiday Inn.

5.75 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. Aspirations for a Crossrail spur connecting the West Coast Main Line with the Great West Main Line could potentially cut this site in two and solutions would need to be found to overcome this severance, by providing links either over or under the spur.

5.76 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.

5.77 Capacity enhancements and access improvements will be required to North Acton station to accommodate increased passenger use. TfL, Ealing Council and OPDC have

commissioned a feasibility study to investigate potential improvements to North Acton station to increase its capacity and accessibility. To the north of the station, the land 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 Location (SIL) use designations.

5.78 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 61: Illustration of Old Oak Common Lane Station underpass (by Farrells on behalf of TfL)





GRAND UNION CANAL

VISION

Within Old Oak the Grand Union Canal will be central to creating a new place. It will be a diverse and well used space. The built environment created along the canal should look to other regeneration schemes examples such as Battlebridge Basin near King's Cross for guidance. Development should enable easy east-west movement on both sides of the canal and should also allow views, and access, to the canal from land to the north and south. To achieve this there will need to be close working with the Canal and River Trust. This should include preparation of a deliverable bridge crossing strategy in discussion with landowners. The canal should become a place of interest for residents and visitors. It should be fronted by high quality buildings, with some opportunities at key destinations for higher densities and active uses. The canal edge should include a series of connected open spaces that allow people the opportunity to enjoy this place. Within Old Oak it is also important that development enables the easy use of the canal for movement of people and freight.

Within Park Royal the canal should play an important commercial role for business. There are opportunities to use the canal for transport and freight. The Mayor and OPDC will work to encourage this. There may also be a need for additional crossings along with ecological enhancements. The southern canal side tow path should be maintained and continued for use as an important east-west route for pedestrians and cyclists. Access to both sides of the canal edge should be promoted. However, it is unlikely that a new fully accessible tow path would be deliverable on the northern side of the canal.

KEY OBJECTIVES

Within Old Oak

- New development along the canal should be mixed use including residential, with some opportunities for retail and leisure uses located near to main streets and other key destinations;
- 2. New development should recognise the canal's conservation area designation and its sensitive and historic character;
- In general new buildings should be more restrained in height then at transport nodes, but there will be opportunities for some high quality, high density development at key destinations along the canal;

Key facts

Approximate length within Old Oak & Park Royal: 4.3 km

Major landowners: Canals & Rivers Trust Main land uses: Sustainable transport corridor, navigable waterway, leisure uses, boater moorings and adjacent industrial uses. Designated as a Conservation Area, Cycle Quietway and Nature Conservation Area of Metropolitan Importance.

- 4. There is an opportunity to bring additional water into the core development area, and new water spaces, such as basins, should be explored where feasible;
- 5. 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 navigational function of the canal;
- New development should support the delivery of new bridges over the canal to improve connectivity and to achieve this a bridge a strategy will need to be prepared and agreed with the Canals and River Trust and landowners; and
- 7. The tow path on the southern side of the canal should be retained and improved, whilst on the northern side new access, and views, to the canal should be secured to allow east-west movement within the core development area.

Figure 63: Kingsland Basin, Hackney



Within Park Royal

- 8. New development should seek to activate the canal edge where appropriate and viable;
- 9. New connections to the canal should be provided to improve access;
- 10. The southern canal side tow path should be retained and improved and should help deliver the requirements of a cycle Quiet Way.
- New and improved lighting and signage should be delivered and balanced with biodiversity aspirations;
- 12. New development should provide an appropriate sense of enclosure to the canal and explore the potential for buildings to be set back from the canal edge;
- 13. Biodiversity and flood mitigation improvements will be supported where these do not have an adverse effect on navigation. Opportunities to use canal water for the heating and cool of buildings will be explored within major developments situated adjacent to the canal.
- 14. New and improved accessible local public amenity spaces should be provided;
- 15. Development of new passenger and freight transport facilities will be supported in appropriate locations, where it can be demonstrated that such facilities are viable. Opportunities for temporary wharves during the demolition and construction should be explored.

Figure 64: Grand Union Canal

- New and existing amenity space
- Public civic spaces
- New and existing rail stations
- HS2 work sites
- Main streets
- Pedestrian routesActive frontage
- Sensitive edges
- → Wormwood Scrubs entrance
- ─ Bridges and tunnels
- Trees

5.79 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 towpath, 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. The Paddington Arm of the Grand Union Canal has been designated as a cycle Quiet Way and improvements to the existing towpath should enhance the user experience for cyclists and pedestrians as well as increasing connectivity to neighbouring areas. Pathways on the offside of the canal (non-towpath side) will be supported in appropriate locations, such as where they are adjacent to active uses within the core development area

5.80 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 River Lee Navigation within and adjacent to the Queen Elizabeth Olympic Park. Improvements to the canal will be undertaken in close working with the Canal & River Trust.

5.81 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.

5.82 Due to the nature of the sites adjacent to the canal and a lack of access to the towpath, 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 potential to deliver a new and improved towpath, other pathways and new open spaces needs to be maximised.

5.83 The delivery of bridges across the canal will be critical in supporting north – south accessibility. These should be designed to be sensitive to their context and developed with engagement from the Canals and Rivers Trust specifically with regard to location, delivery and maintenance.

5.84 The scale of development will vary along the canal, with Old Oak Common seeing a greater level of change than Park Royal. Within Old Oak, new buildings will need to recognise the more sensitive character of the canal as a Conservation Area and there may be opportunities to set some buildings back from the canal edge. Building heights will be more restrained than 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. To support this

approach, development should consider recognised best practice canalside development from around UK locations such as Battlebridge Basin (LB Islington), Brindleyplace (Birmingham) and Kings Cross (LB Camden). Further information gathering will be undertaken to inform the OPDC Character Study and Public Realm and Amenity Space to support the Local Plan and this work will help inform the location, scale and type of development that sits alongside the canal.

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

5.86 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.



SCRUBS LANE

Key facts:

Approximate length: 1560m

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

Partially within the Grand Union Canal Conservation Area

VISION

Scrubs Lane is an important road connecting Harlesden, Old Oak, and White City which is well used and will continue to be well used. It also provides access to the A40. There is an opportunity to improve the physical environment of this street through robust building, traffic management, new access routes to Old Oak and existing amenity spaces, and the provision of quality public realm for pedestrians and cyclists.

Along Scrubs Lane there may be opportunities for early development so long as these developments complement the aspirations of the wider masterplan and support the comprehensive regeneration of the area whilst also achieving suitably high design standards.

To the north of the Grand Union Canal this should include new and improved connections from Scrubs Lane into Old Oak North, a significantly improved public realm, access to the canal, and there may also be opportunities to provide new access into the Cemetery.

To the south of the Grand Union Canal this should include new and improved access to North Pole Depot East that would enable improved connections on to Kensal Canal side Opportunity Area. There should also be opportunities to improve pedestrian and cycle access to both Wormwood Scrubs and Little Wormwood Scrubs which would provide better opportunities for local people to access these important amenity and ecological spaces.

Kensal Cemetery and the Grand Union Canal Conservation Areas sit to the east and south of Scrubs Lane. New development will need to be sensitive to these existing heritage assets. To create an attractive place the environment of Scrubs Lane will need to be significantly enhanced, through new high quality development and public realm improvements. These should also create a generous walking and cycle environment along its entire length. Uses in this area will be residential-led with opportunities for a mix of uses at lower levels. At ground level buildings will need to be predominantly either active, or have

a mixture of residential entrances with front doors on street.

The scale and massing of development along Scrubs Lane will need to be coordinated with that of nearby Opportunity Areas, specifically along the Grand Union Canal to the Kensal Opportunity Area.

KEY OBJECTIVES

- 1. Early regeneration along Scrubs Lane will be encouraged where it complements the aspirations of this planning framework and OPDC's energy policy plans. It will be important that early development achieves the highest quality design and architectural standards to set the right tone for the wider area
- 2. To the north of the Grand Union Canal new and improved access points should be provided into Old Oak North from Scrubs Lane:
- 3. To the south of the Grand Union Canal new and improved access to North Pole Depot East should be provided, along

- with opportunities for pedestrian and cycle access to Wormwood Scrubs and Little Wormwood Scrubs
- 4. Transport improvements are likely to be required along Scrubs Lane;
- Public realm improvements including wider footways and high quality cycle infrastructure will be needed linking Scrubs Lane to Wood Lane and further south to White City;
- Environmental and street greening will be required, including the potential for Sustainable Urban Drainage Systems (SUDS);
- 7. New development should create a coherent built form onto the street:
 - Scrubs Lane should be a transition area between the surrounding area and the core development area;
 - •Along the eastern side of the street, development should sensitively respond to adjacent buildings (including the Former Cumberland Park Factory) and to St. Mary's Cemetery;
 - Along the western side (behind the street front) there will be opportunities for increased massing and taller elements that respond to the scale of new development within the core development area.
- 8. New development to the south of Scrubs Lane will need to respect the existing Grand Union Canal conservation area;
- 9. There is also an opportunity to investigate the potential for a safe and secure access to the Cemetery; and
- 10. Development should be

predominantly residential led with opportunities for other uses on the lower levels. New development should include a mix of active commercial uses and

residential front doors on street. Where early development is proposed, lower level uses will need to be flexible to respond to a changing environment.



5.87 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 pedestrian 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.

5.88 Today 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.

5.89 In addition to a Hythe Road vehicle, pedestrian and cycle entrance, it is also expected that an additional vehicular, pedestrian and cycle connection into Old Oak North will be required to ensure the full development potential of Old Oak North to 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 and the exact location of this connection may vary following more detailed design work and modelling.

5.90 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 relocation and redevelopment of the waste sites in Old Oak North would be likely to reduce the number of these lorry movements, helping to make Scrubs Lane a less harsh environment. 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. Opportunities should also be taken to provide a cycle route, connecting the proposed Cycle Superhighway along the A40 corridor and Cycle Quietway along the Grand Union Canal to the existing cycle network around Harlesden.

5.91 To the east of Scrubs Lane, development will need to be sensitive to nearby St. Mary's and Kensal Cemetery, existing residential and business premises and the Grand Union Canal, in accordance with the guidance provided in the Grand Union Canal place guidance. St. Mary's Cemetery has been designated as a Conservation Area by the London Borough

of Hammersmith and Fulham (LBHF) and has also been identified as a nature conservation area and Metropolitan Open Space. Any development to the east of Scrubs Lane will need to be sensitive to the cemetery and its heritage assets. The OPDC will work with the London Borough of Hammersmith & Fulham, Royal Borough of Kensington and Chelsea and Historic England to designate a Conservation Area for 69 to 91 Scrubs Lane to manage these heritage assets. Development along Scrubs Lane should also consider ways that the College Park residential area to the north-east of Scrubs Lane can be better integrated into the Old Oak area.

5.92 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.

5.93 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 which could include incubator space and start-up space

in association with educational institutions such as Imperial College. Small amounts of retail, SMEand micro bussines space may be appropriate at the two entrances into Old Oak North or close to the canal access. Active frontages including well designed residential front doors onto the street will be encouraged. In the early years lower level units may need to be flexibly designed to mitigate the existing environment and this would need to be discussed in detailed through pre-application discussions with the planning authorities.

5.94 To the south of Grand Union Canal new development should provide a new or improved access to North Pole East that should also enable a connection to Kensal Canal side Opportunity Area. There is an opportunity to provide improved access for pedestrians and cyclists into both Wormwood Scrubs and Little Wormwood Scrubs.



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 the protected Strategic Industrial Location (SIL) of Park Royal and the mixed use regeneration area of Old Oak. The street will continue to be a busy connecting street between the A40 and Harlesden Town Centre. Immediately west of Old Oak Lane there are two large sites set to be used as HS2 work sites. Once HS2 has finished work, there is an opportunity to encourage the design and development of SIL appropriate uses here that help to buffer the existing Park Royal industrial area from existing and future mixed-use development to the east. Whilst Preferred Industrial Locations would still be supported, the delivery of Industrial Business Park uses along Old Oak Lane would help improve the character and types of use along this street. These two sites should be joined by a new bridge over the canal to allow better movement between both sites. Where the fronts of these sites meet Victoria Road there is an opportunity for uses that help to activate and define the street and improve the street environment.

There should be new and enhanced access to the core Old Oak regeneration area from Old Oak Lane. This should be coupled

with physical improvements to the street to better manage vehicle, pedestrian and cycle movements. There is a need to work with HS2 to mitigate construction logistics, where possible, impacts along this route.

KEY OBJECTIVES

- 1. Continue to function as an important north-south connection road
- 2. Industrial land to the west of Old Oak Lane will continue to be protected as a Strategic Industrial Location (SIL);
- 3. Development brought forward on the HS2 works sites after their requirement for HS2 construction ceases should comply with the SIL land use policy requirements. There may be an opportunity to encourage the use of these sites as Industrial Business Park uses in the east of the sites, which could help act as a buffer between Old Oak and the wider Park Royal area such. The sites could form a location for research and development, high tech and/or clean tech uses. The redevelopment of these sites should investigate the potential for an alternative vehicular connection to the west of Old Oak Lane, to minimise

- traffic impact on the Old Oak Lane Conservation Area;
- Enhanced access routes should be provided from Old Oak Lane to the Old Oak development area;
- 5. Improvements to the street may be required to mitigate increased transport use:
- Proposals should be sensitive in scale to existing residential premises and Conservation Areas;
- 7. Enhancements should be made to the public realm on Old Oak Lane; and
- 8. Development should intensify employment uses along Old Oak Lane. There is an opportunity to secure active frontages as part of new development fronting onto Old Oak Lane.

5.95 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 within the Old Oak Lane Conservation Area and further south of Victoria Road are Shaftesbury Gardens

and Midland Terrace. The Old Oak Lane Conservation Area is a set of Victorian railway cottages. Any proposals adjacent to this Conservation Area will need to be sensitive in scale and respond in their character to their architectural heritage.

5.96 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 and OPDC will seek its retention as a Strategic Industrial Location (SIL). Development brought forward on the HS2 works sites after the requirement for HS2 construction ceases should comply with the SIL land use policy requirements. There may be an opportunity to encourage the use of these sites as Industrial Business Park uses, which could help act as a buffer between Old Oak and the wider Park Royal area. The sites could form a location for research and development, high tech, innovation technology and/or clean tech uses. Redevelopment of these sites may also provide opportunities to investigate the potential to provide improved road access across the canal, which would go some way towards accommodating increased traffic along the street. The Strategic Transport Study that supports this OAPF has identified the need for improvements to the Old Oak Lane route.

5.97 Development next to Old Oak Lane will provide opportunities to create better enclosure and 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).

5.98 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 sitesConservation areaGrand Union CanalStreetsSensitive edge
- Pedestrian routes
- ─ Bridges and tunnels

