OPDC
OLD OAK AND
PARK ROYAL
DEVELOPMENT
CORPORATION

Industrial Land Review

LOCAL PLAN SUPPORTING STUDY

Draft for Regulation 18 Consultation
4 February 2016

Role of this study

This study has been produced to inform the draft Local Plan and should be read alongside other relevant studies, the draft Local Plan and the London Plan.

Study overview

Document title	**Industrial Land Review**
Lead author	OPDC, Peter Brett Associates, Jones Lang LaSalle
Purpose of the study	Assesses the current and future supply and demand for industrial land within Old Oak and Park Royal.
Stage of production	Draft completed to inform Regulation 18 version of the Local Plan
Key outputs	■ Site analysis of over 300 employment sites ■ Quantitative supply and demand of industrial land ■ Market profile and demand for industrial growth sectors ■ Options for intensifying use of industrial land ■ Policy recommendations
Key recommendations	Protect ■ Protect industrial uses in Park Royal SIL ■ Reduce non-conforming uses in Park Royal SIL ■ Return Park Royal HS2 construction sites to SIL ■ Development adjacent to Park Royal SIL Intensify ■ Efficient use of industrial land ■ Reduce road congestion ■ Intensification pilot projects Expand ■ Adjust Park Royal SIL boundary ■ Light industrial floor space in Old Oak ■ Manage industrial floorspace within the region ■ Industrial space design and planning guidance Support ■ Business relocation ■ Low carbon transition ■ Local procurement ■ Business listing and online forum

Relations to other studies	Interfaces with Park Royal Transport Strategy, Public Realm, Walking and Cycling Strategy, Retail & Leisure Needs Study and other OPDC strategies in development including the Socio-Economic Regeneration Strategy.
Next steps	The Review is in draft and is available for comment. Necessary revisions will be made following public consultation before the document is finalised to sit alongside the Regulation 19 consultation on the Local Plan.

Consultation questions

1. Do you agree with the recommendations of this supporting study? If not, please explain why.
2. Do you agree with the methods used in delivering the recommendations? If not, please set out alternative approaches and why these should be used.
3. Are there any other elements which the supporting study should address? If yes, please define these.

You can provide comments directly through:

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OLD OAK & PARK ROYAL

INDUSTRIAL LAND REVIEW

FINAL DRAFT

Published by

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Data

Unless otherwise indicated, the data for this study is based on field and desk survey work undertaken by the Greater London Authority in early 2014 and early 2015.

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MAYOR OF LONDON

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EXECUTIVE SUMMARY

INTRODUCTION

This Industrial Land Review (ILR) assesses the current and future supply and demand for industrial land within the boundaries of the Old Oak and Park Royal Mayoral Development Corporation (OPDC) which was set up in April 2015 to guide the regeneration of Old Oak and support industry in Park Royal. It serves primarily as evidence base to inform the development of the OPDC Opportunity Area Planning Framework (OAPF) and Local Plan (LP). The supply and demand of industrial land is assessed taking into account proposals for the redevelopment of Old Oak around a major new interchange train station between Crossrail, High Speed Rail 2 (HS2) and Great Western mainline train lines.

The OPDC area contains 355ha of employment sites which accommodate around 1500 business units in diverse sectors, many of which provide goods and services to London's businesses and residents. 60% of the estimated 36,000 jobs are in industrial sectors and many workers live locally in the three surrounding boroughs. The industrial area grew in the post-war period producing everything from ketchup to busses. After a decline in large manufacturing firms after 1970, today it is one of the most sought after locations for industry in London. It is made up of a patchwork of business sizes and sectors with several clusters including film and TV, food production, vehicle repair and logistics. The OPDC was set up to guide the regeneration of Old Oak and support industry in Park Royal. This Industrial Land Review (ILR) provides evidence and recommendations for the OPDC and its local plan.

POLICY AND EVIDENCE BASE

The ILR and Local Plan sit within a hierarchy of documents functioning at different spatial scales. At a national level, guidance is provided for how to produce an employment and industrial land review, while at a London level the guidance and evidence base suggests that across London industrial activities decreasing. Standalone office uses within the Park Royal SIL are not supported by the London Plan and as such this study focuses on industrial uses.

Specific to Park Royal, growth is projected to take place in the logistics and waste management industrial sectors alongside green industries and clean technology with a focus on micro, small and medium sized workspaces. This trajectory is also echoed in local planning documents and research.

The Greater London Authority has published an Opportunity Area Planning Framework for Old Oak & Park Royal which supplements the London Plan. These documents provide strategic guidance to accompany the OPDC Local Plan to guide development in the OPDC area. Alongside these documents, the ILR and a number of other pieces of technical research will inform the OPDC Local Plan. Once adopted, the London Plan and OPDC Local Plan will form the 'development plan' for the OPDC area.

SITE ANALYSIS

The OPDC area has been subdivided into 300 employment sites of varying sizes. Most are categorised as industrial land uses, however the categories mask the diversity of business sectors and mix of industrial and non-industrial activities within each site. There are four main industrial site typologies: standalone warehouses, industrial estates, dense light industrial and business centres.

Business centre sites have the highest plot ratios and employment densities while standalone warehouses and industrial estates require lower plot ratios to function efficiently. Current site densities suggest that there could be scope to intensify some sites through redevelopment and infill development, especially those close to public transport hubs on the edge of Park Royal and along the main access routes to them. This can help to free up ground floor and yard space on other sites for the businesses that need them.

The limited supply of vacant industrial employment land at 2% suggest that additional employment generating floor space would need to come from making more intensive use of the sites. However, for many of the firms operating in Park Royal further increasing development densities is not ideal without a number of challenges being addressed. On-highway parking and congestion is an issue as firms displace activity onto the highway because their properties have insufficient open yardage, servicing space or parking. The workforce is also affected by congestion, because many drive to work, as well as the limited services, such as cafés in the area. However, there is scope to reduce the number of people driving to work as a large part of the workforce lives locally and the main pedestrian access routes from Park Royal to public transport hubs could be improved by combining services and more intensive sites along them.

Around 300 businesses and 6000 jobs will be affected by redevelopment in Old Oak and HS2 construction sites. There is an opportunity to retain a diverse local economy and local employment by encouraging land owners to support the relocation of displaced businesses from Old Oak and HS2 construction sites to appropriate sites within Park Royal and the surrounding boroughs. However this is a challenge that will require a more intensive use of industrial land due to the low land and floor space vacancy rates

QUANTITATIVE SUPPLY AND DEMAND

There is evidence of a growing shortage of land across London and Park Royal is the largest reservoir of Strategic industrial locations in West London. It accommodates a wide range of industrial users but is one of the few locations large enough to accommodate strategic property requirements as well as land for waste, utilities and transport. These uses are often cited as 'bad neighbours' and are very difficult to accommodate on smaller local scale sites.

London seeks to balance its stock of industrial land through the use of the industrial land release benchmarks to manage the release of surplus industrial sites, mainly former manufacturing sites, into other uses. But data shows that that industrial land has been being released twice as fast as the benchmarks suggested.

Also the replacement of former manufacturing space with new logistics property is not as fluid as the benchmarks suggested would be needed to support the London economy. When former industrial sites are redeveloped they are replaced either with new homes or residential led mixed use redevelopment. This puts growing quantitative pressure on the remaining stock of SIL land in London to efficiently service the growing London economy.

MARKET PROFILE

As the stock of Industrial land diminishes the remaining market demand is concentrated on areas such as Park Royal and Old Oak. New occupiers looking for industrial property in London have less choice of location and some well-established London firms have already been displaced to the area by regeneration elsewhere. Reflecting this, occupier demand for the space at Park Royal and Old Oak is strong, vacancy rates very low, rents have been rising (and are the highest in London) and investment yields are also low.

Developers are responding to the shortage of industrial land in London by redeveloping and renewing stock so it can be used much more efficiently. Logistics is driving occupier demand today and developers expect this demand to increase as London's population grows. So former manufacturing sites built at high plot ratios, are redeveloped for more efficient but lower density industrial units.

There is also strong demand from waste, utilities, transport and some Sui Generis uses such as garages, motor trade and building supply firms. This is a smaller source of demand but because these types of activity have little alternative land available they compete with the logistics market for the declining stock of SIL land and property.

INTENSIFICATION

Despite increasing market demand and decreasing supply of industrial land in Park Royal there is currently little indication that the industrial development market is looking to intensify industrial sites in London. There are many barriers to intensifying industrial sites in Park Royal, such as the need for yard space, investor and occupier preferences, patterns of land ownership, road congestion, increased construction costs, increased management and decreased occupier flexibility. However, as the land supply for traditional single storey warehouses with yards dries up there is an opportunity in Park Royal to explore strategies to use industrial sites more efficiently and free up ground floor space for the businesses that need it.

Ground floor space can be freed up for larger warehouses by developing sites to include additional light industrial workplaces on upper floors for businesses that do not require regular use of yard space and parking. Developing new industrial estates with a second storey of yard and warehouse space accessed via ramps and providing shared facilities for larger deliveries could provide viable solutions. Raising roofs, adding floors and freeing up yard space in dense light industrial sites can also provide additional space for businesses to start-up, grow and function more efficiently.

SPATIAL SCENARIOS

While HS2 and Crossrail provide a new strategic development opportunity in Old Oak, the release of industrial land in Old Oak and the construction sites for HS2 will exacerbate the shortage of industrial land in the area as confirmed by the quantitative and market analyses. As demand for goods and services in London grows, Park Royal is one of the few locations able to accommodate larger industrial uses.

Based on how they will be affected by HS2 construction and Old Oak redevelopment boundaries the OPDC employment sites have been split into four groups:

- Old Oak - all sites be redeveloped as non-industrial;
- Park Royal SIL - all sites to continue to be protected as a Strategic Industrial Location;
- Park Royal HS2 construction sites – these sites should be redeveloped as Preferred Industrial Land (PIL) after their use for the construction of HS2 given the shortage of industrial land in the area. Whether redevelopment as a higher density Industrial Business Park (IBP) should be considered would need to be assessed closer to the time; and
- Park Royal non-SIL employment sites – these sites will continue to complement the SIL uses however their redevelopment should be controlled and a small number of specific sites designated as SIL to protect current and adjacent SIL uses.

RECOMMENDATIONS

These recommendations for policy and delivery focus on protecting and maximising the contribution of industrial uses in the OPDC area to support a robust local and regional economy. They are divided into four overarching groups to address the conclusions of the report:

Protect – acknowledges the high demand for industrial land in the OPDC by focusing on how local planning policies should protect industrial land and industrial businesses within Park Royal.

- Protect industrial uses in Park Royal SIL
- Reduce non-conforming uses in Park Royal SIL
- Return Park Royal HS2 construction sites to SIL
- Development adjacent to Park Royal SIL

Intensify - focuses on planning policies to use the remaining industrial land efficiently and provide industrial space to more businesses.

- Efficient use of industrial land
- Reduce road congestion
- Intensification pilot projects

Expand – recommends options for the Local Plan and broader strategies to expand the supply of industrial space in the area in response to increasing demand.

- Adjust Park Royal SIL boundary
- Light industrial floor space in Old Oak
- Manage industrial floorspace within the region
- Industrial space design and planning guidance

Support - focuses on how the OPDC can support the local industrial economy and businesses by facilitating the relocation of displaced businesses within the area and supporting businesses to capture procurement opportunities from development at Old Oak.

- Business relocation
- Low carbon transition
- Local procurement
- Business listing and online forum

1 INTRODUCTION

ROLE

1.1 This Industrial Land Review (ILR) study assesses the current and future supply and demand for industrial land within the boundaries of the Old Oak and Park Royal Mayoral Development Corporation (OPDC) which was set up in April 2015 to guide the regeneration of Old Oak and support industry in Park Royal. It serves primarily as evidence to inform the development of the OPDC Opportunity Area Planning Framework (OAPF) and Local Plan (LP). The supply and demand of industrial land is assessed taking into account proposals for the redevelopment of Old Oak around a major new interchange train station between Crossrail, High Speed Rail 2 (HS2) and Great Western mainline train lines.

1.2 The redevelopment proposals replace industrial uses with high-density housing, commercial, retail, leisure and community uses in the Old Oak area as well as residential led mixed use development in pockets of land in Park Royal that are not designated as industrial. There are also industrial sites that have been reserved for use as HS2 temporary construction sites. This study assesses the impacts these proposals will have on industrial land, businesses and employment and how these impacts can be mitigated.

OVERVIEW

Introduction

1.3 Tells the story of the OPDC area's industrial history and its current diverse economy. Outlines the proposed OPDC redevelopment and infrastructure. Lays out the context of both the planning policy and evidence base at the National, London and local levels.

Policy and Evidence Base

1.4 Outlines the existing policy and evidence documents at national, London and Borough levels related to industrial land in the OPDC area. Presents forthcoming policy and evidence documents for the area.

Employment Sites

1.5 Maps out the existing employment sites and provides both qualitative and quantitative analysis of the sites. Identifies the main land uses and typologies of the employment sites and provides an overview of the employment sites that will be affected by the redevelopment of Old Oak.

Quantitative Supply and Demand

1.6 Identifies and discusses the benchmarks set by the GLA for the release of industrial land by the three boroughs. Provides an updated industrial land baseline for the three surrounding boroughs.

Market Profile

1.7 Takes a close look at the market indicators which show an increasing demand for industrial space in the OPDC area. Investigates the type of industrial developments being built and analyses the feasibility of using industrial land more intensively.

Intensification

1.8 Explores the opportunities and constraints of options for intensifying the use of typical industrial site typologies in Park Royal.

Spatial Scenarios

1.9 Overview of expected future land area and employment figures for Park Royal, Old Oak and HS2 construction.

Conclusions

1.10 Summary of the conclusions from all the report sections.

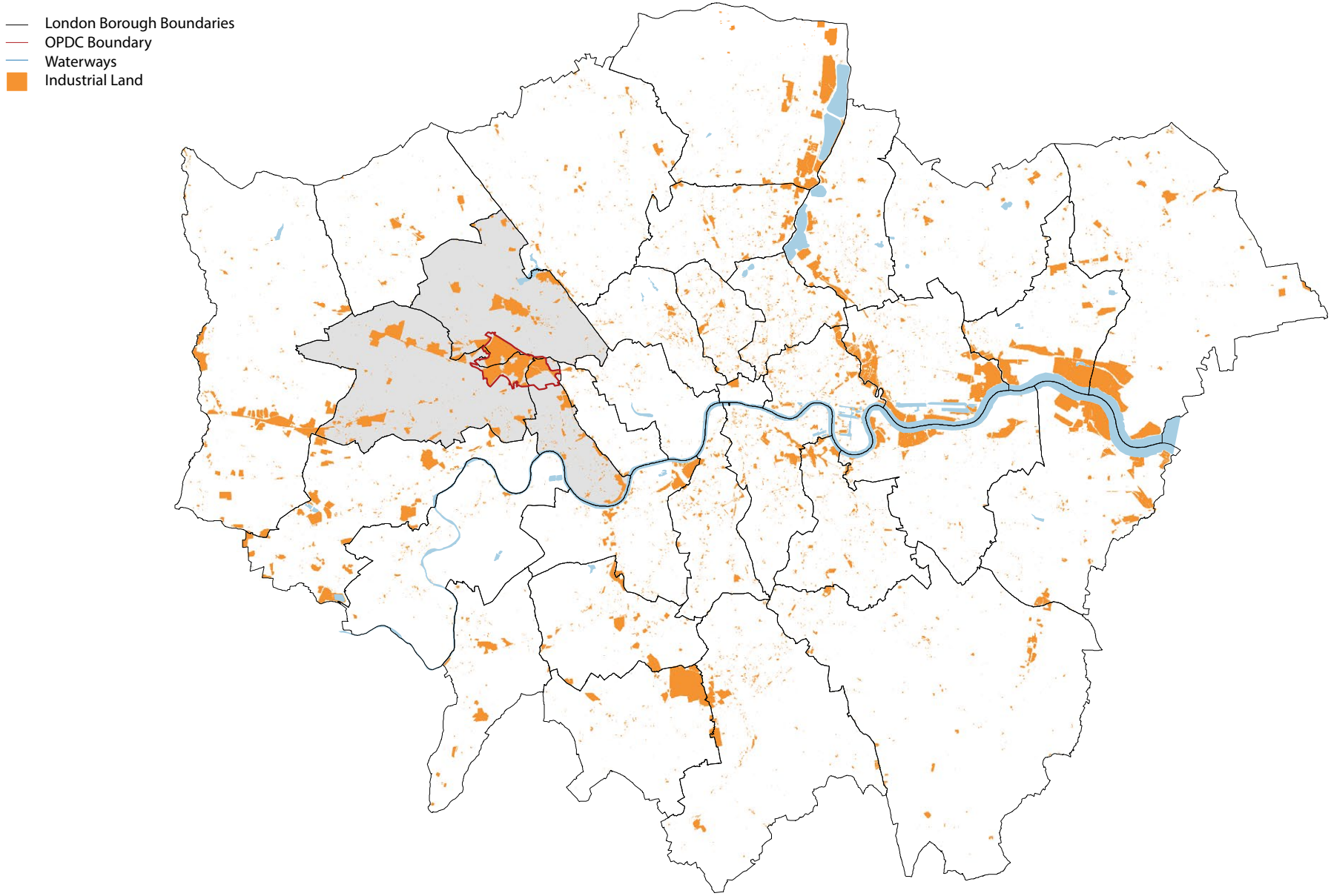
Recommendations

1.11 Recommendations for policy, strategies and actions by the OPDC, surrounding boroughs, GLA, HS2 and business associations.

LOCATION

1.12 The OPDC area, made up of Old Oak and Park Royal, is one of London's largest industrial areas. Located to the West of Central London, it is situated within the three London Boroughs of Brent, Ealing and Hammersmith & Fulham. The area is bounded by National Rail, Overground and Tube lines to the north, south and east, while the North Circular (A406) and Western Avenue (A40) form additional boundaries to the west and south. It covers 650 ha, over twice the area of the City of London Corporation. Although most of the land is industrial, there are a handful of residential pockets, a hospital and supermarket in addition to land for the railway lines and their embankments crisscrossing the area.

fig. 1 Location of OPDC



HISTORY

From Fields to Factories

1.13 The Park Royal Atlas (GLA, 2014) contains a timeline of the main events in the history of the OPDC area starting with the construction of the Paddington arm of the Grand Union Canal in 1801. Until the 1870s the area was still fields and green spaces, including Old Oak Common and Wormwood Scrubs, although at that point it was already cut up by a spaghetti of railroads. By the 1890s clusters of homes had been built around it and by the 1920s some homes, infrastructure, businesses and a hospital were built in the area itself. The showground for the Royal Agricultural Show was located there from 1903 to 1905 and King George V allowed the area to take the name Park Royal. It is here that Old Oak and Park Royal's familiar industrial character started to emerge, with the location of munitions factories during World War I. Other factories emerged producing everything from Route Master buses to Guinness beer and Heinz Ketchup.

Industrial Fall and Rise

1.14 In 1932 there were 73 factories employing 13,500 workers. The area did not suffer the severe bomb damage of many of London's industrial areas. Industry boomed in the post-war period and by the 1960s the area employed more than 45,000 people, slightly more than today's estimates. However by the 1970's Park Royal faced industrial decline and around 70 larger firms left the OPDC and Wembley areas. Employers such has Heinz survived by cutting their work force from 3500 to 500 before eventually relocating in 2000 and the Guinness factory suffered a similar fate, closing in 2005. In recent years the OPDC area is back in demand and large, modern logistics warehouses and offices have been built. While some large factories, such as McVities and a fine metal refinery still remain, many others that had produced everything from beans and beer to bombers and buses have been replaced by small and medium sized industrial units or have been subdivided into smaller industrial units.

LOCAL ECONOMY

1.15 The Park Royal Atlas (GLA, 2014) brought to light the patchwork of diverse business units across the area based on a door-to-door survey of all the workplace units within a defined study boundary that included Alperton to the north west. In early 2015 the data was updated to cover the OPDC boundary. This study analyses the area based on employment sites which have been identified within the OPDC boundary.

1.16 Because some businesses are part of larger companies with multiple locations this study refers each location as a business unit as is in the London Business Survey (2014). The Park Royal Atlas calls these business units workplaces. This study goes on to group all the business units on a site together to determine the major use of each site according to industrial land use categories discussed in the Site Analysis Chapter.

Important Economy

1.17 The OPDC area is one of London's largest and most successful industrial areas. It is home to around 1,500 business units employing an estimated 36,000 people within its boundary, 55% in industrial sectors. The area provides 2,100,000 m^2 of employment floor space on employment sites totalling 355ha, 85% of which are industrial. It provides much needed employment to the surrounding boroughs and west London while supplying diverse goods and services to businesses and inhabitants across the local area, west London and Greater London.

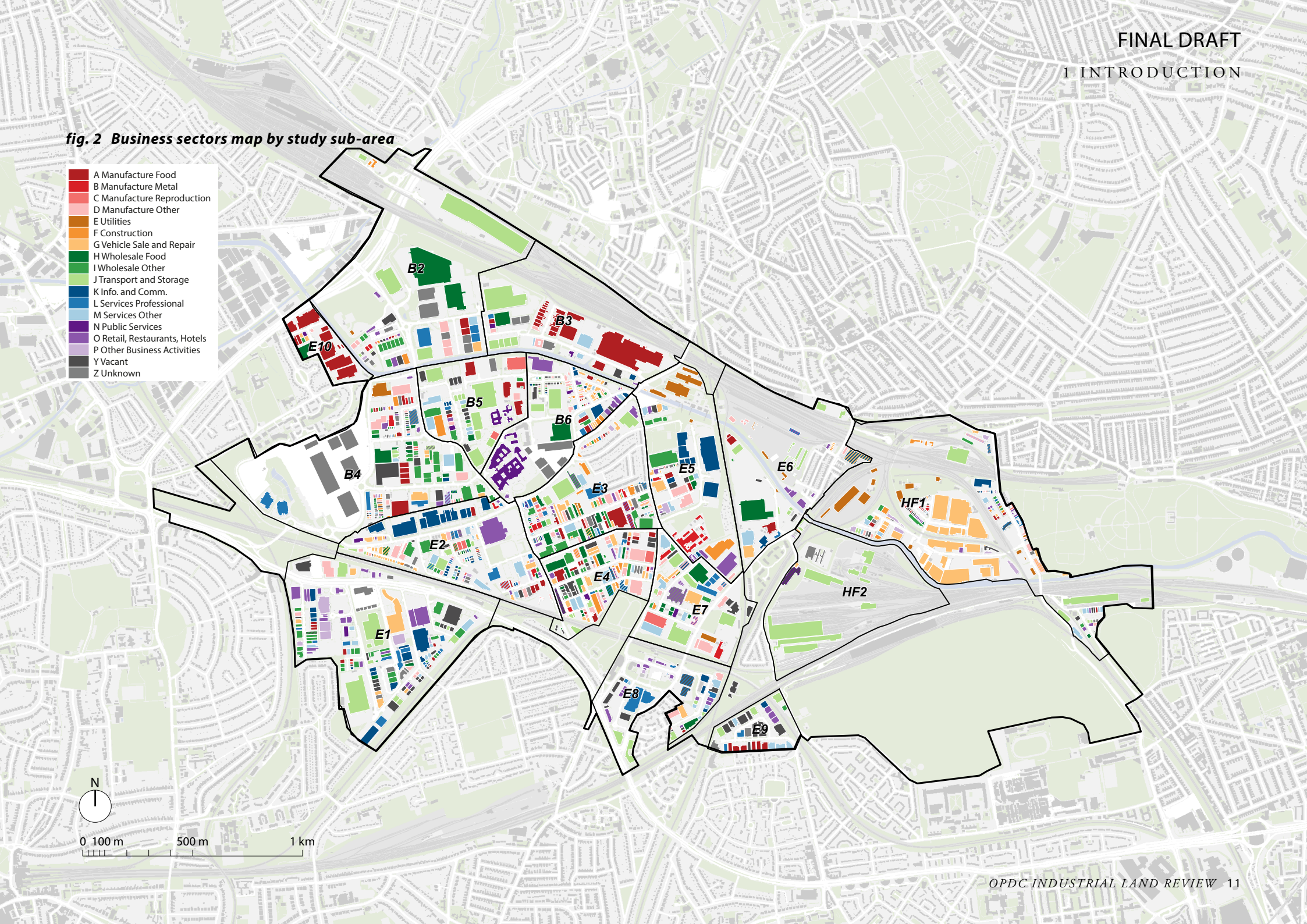
Diverse Sectors

1.18 The activities of the business units are spread across a diverse range of sectors that forms a patchwork across Park Royal with some important business clusters across the area. There are four business clusters that stand out in particular: prop houses and film studios; food manufacturing and wholesale; vehicle sale and repair; and logistics. Some of these clusters are spread across divers business sectors. Over 55% of the businesses are in industrial sectors, manufacturing (19%) and wholesale (16%) account for the biggest share, followed by vehicle sale and repair (9%). Although only 7% of the businesses are in the transport and storage sector, they take up 15% of floor space in the OPDC area. For the non-industrial sectors, 6% of businesses are in the information and communication sector while 18% provide professional and other services and 14% serve the area with retail, restaurants and hotels.

Diverse Sizes

1.19 99% of the business units in OPDC area are micro, small and medium sized, employing 76% of the workforce. 56% of these are micro with less than 10 people, however they make up only 10% of the workforce. Businesses occupy a range of different space typologies and sizes, from small workshops to large warehouses.

fig. 2 Business sectors map by study sub-area



OLD OAK & PARK ROYAL DEVELOPMENT CORPORATION

1.20 On 1 April 2015, the Old Oak & Park Royal Development Corporation (OPDC) was established to maximise the regeneration benefits generated by the arrival of the High Speed 2 and Crossrail Station the size of Waterloo in 2026 and potentially two new London Overground Stations. The OPDC will act as a single, transparent and robust body to spearhead the regeneration of this area.

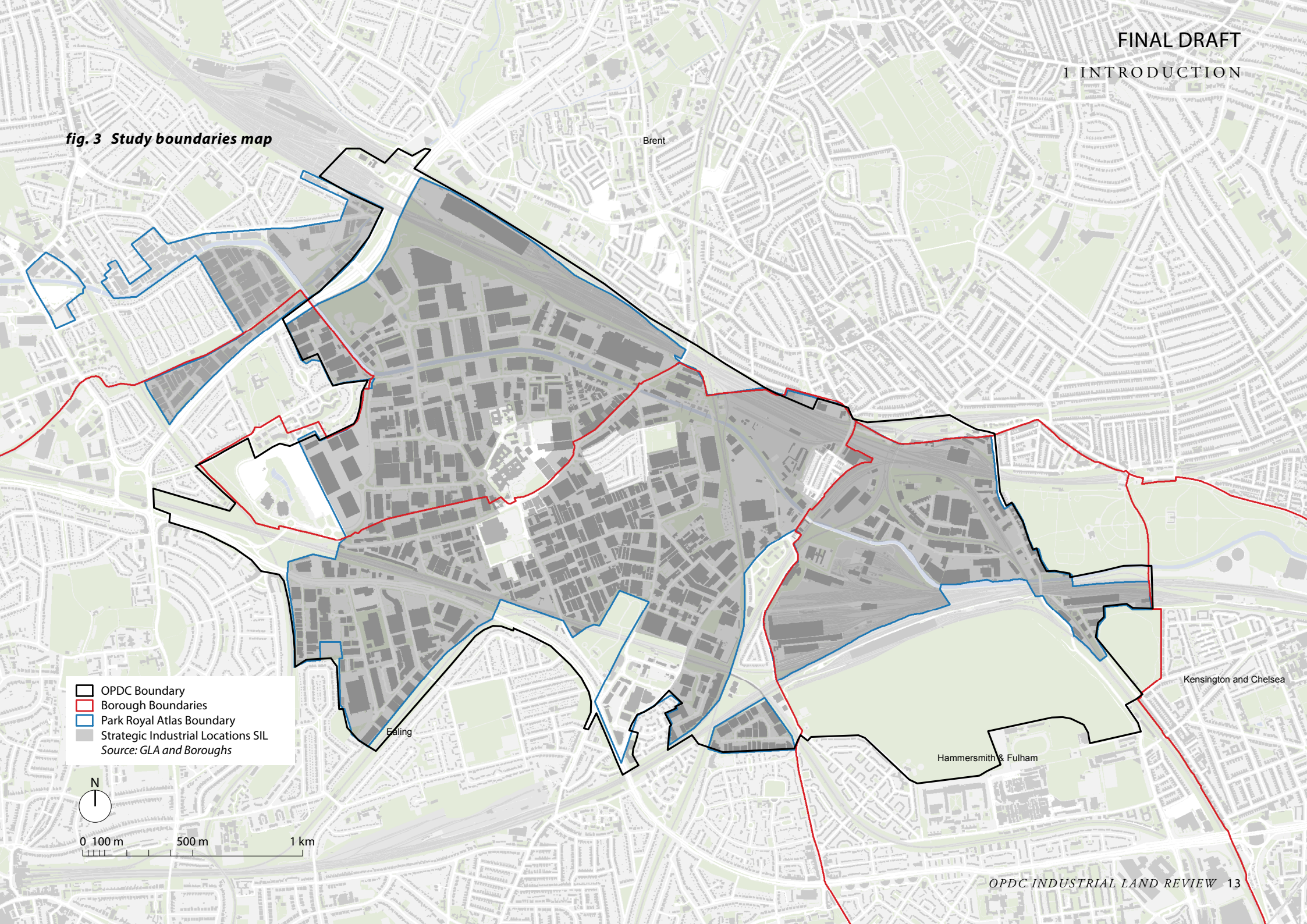
1.21 Within Old Oak, 24,000 new homes are envisaged and space for 55,000 new jobs alongside new streets, parks and other infrastructure. Within Park Royal, 1,500 new homes are also envisaged outside of industrial locations along with a potential for 10,000 new jobs identified in the London Plan and an improved built environment. Some of these jobs have already been delivered and are included in the figures within this study due to new development.

1.22 As well as promoting the comprehensive mixed use regeneration of Old Oak, as a local planning authority the OPDC will protect existing Strategic Industrial Locations (SILs) in Park Royal and will drive the long term regeneration of the area and attract long-term investment to the area. Wormwood Scrubs will continue to be protected by its designation as Metropolitan Open Land and the 1879 Wormwood Scrubs Act.

1.23 The OPDC is responsible for all planning functions in its area, including the production of a Local Plan. Prior to the adoption of the Local Plan, the Opportunity Area Planning Framework (OAPF), London Plan and local boroughs' Local Plans will be used to manage development.

1.24 The OPDC's Local Plan will provide greater detail, evidence and policies than are contained within the OAPF and it will have greater material weight in the determination of planning applications. The future Local Plan will also deal with setting the boundary for the SIL and provide specific policy guidance for employment uses and is currently planned for adoption in early 2017.

fig. 3 Study boundaries map



2 POLICY AND EVIDENCE BASE

INTRODUCTION

2.1 This Industrial Land Review (ILR) provides the technical research, known as evidence base, to inform the development of the OPDC's Local Plan employment policies. The Local Plan sits within a hierarchy of planning policy and guidance at national, regional (London-wide) and local spatial scales. The ILR considers the following planning policy, guidance and underpinning evidence base to inform its methodology and recommendations. This section sets out the hierarchy of policy documents and existing evidence base relevant to the ILR.

PLANNING POLICY

National

2.2 The National Planning Policy Framework (NPPF) identifies economic sustainability as an element of sustainable development. Specifically it identifies the role of the planning system in: *"contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure"*

2.3 At the heart of the NPPF, the core planning principles seek that planning should: "proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities"

2.4 Specific NPPF guidance (paragraphs 18 to 22) identifies that the planning system "does everything it can to support sustainable economic growth" and to achieve this local planning authorities should "plan proactively to meet the development needs of business and support an economy fit for the 21st century". A critical element of this is identified to be addressing potential barriers to investment and drawing up Local Plans that support these aspirations.

2.5 In developing a Local Plan, the NPPF (paragraph 160) requires Local Planning Authorities to have a "clear understanding of business needs within the economic markets operating in and across their area" and should work closely with stakeholders in developing evidence base. Paragraph 161 goes on to identify how this evidence base should be used and is expanded in the Planning Practice Guidance on "housing and economic development needs assessments".

2.6 The Planning Practice Guidance for 'Housing and economic development needs assessments' sets out how an assessment should be carried out and its component parts.

London

2.7 Old Oak and Park Royal sits within an arc of west London Opportunity Areas that include Vauxhall Nine Elms, Earls Court and White City alongside other regeneration opportunities which are envisaged to deliver a total of over 84,000 new homes and 145,000 new jobs.

London Plan

2.8 The London Plan provides guidance for Strategic Industrial Locations (SIL) which seeks the delivery of industrial uses, workspace for small and medium sized enterprises (SMEs) or new emerging industrial sectors and small scale services for industrial occupiers. Specifically, it identifies the Park Royal estate as a SIL and a potential outer London development centre for logistics, media (parts of) and industry/green enterprise and emphasises the need to secure and enhance strategic logistics facilities. With regard to office floor space, the London Plan states that SILs are not appropriate for large scale office development and industrial uses should be prioritised over smaller scale office development.

2.9 The London Plan's opportunity area guidance identifies Park Royal as one of London's key industrial locations, with potential to meet modern logistics and waste management requirements as well as other industrial type functions. It also identifies the potential for mixed-use intensification in areas outside of SIL with good public transport accessibility. In total potential for 1,500 new homes and 10,000 new jobs are identified. The opportunity area guidance for Old Oak identifies that 55,000 new jobs and 24,000 new homes could be delivered, capitalising on the public transport improvements envisaged for the area while displacing existing uses within Old Oak.

Park Royal OAPF

2.10 A Park Royal Opportunity Area Planning Framework (OAPF) was published in 2011, but predated the commitment to bring forward the High Speed Rail project (HS2) in Old Oak and was largely predicated on maintaining Old Oak as an industrial area with improvements to the environment of Park Royal.

Draft Old Oak and Park Royal OAPF

2.11 A draft Opportunity Area Planning Framework (OAPF) for Old Oak & Park Royal was published in February 2015 for public consultation to provide high-level guidance for safeguarding Park Royal, regenerating Old Oak and protecting Wormwood Scrubs in light of the HS2 proposals. Specifically it seeks to guide the release of SIL within Old Oak and provides guidance for improving Park Royal. This document was adopted in October 2015.

2.12 The draft OAPF updates the information provided in the Old Oak Vision document published by the Mayor in 2013 which did not cover Park Royal and suggested 19,000 new homes and 90,000 new jobs for Old Oak.

Land for Industry and Transport SPG

2.13 The Land for Industry and Transport SPG provides guidance to:

- ensure an adequate stock of industrial capacity to meet the future needs and functional requirements of different types of industrial and related uses in different parts of London, including that for good quality and affordable space;
- plan, monitor and manage the release of surplus industrial land so that it can better contribute to strategic and local planning objectives, especially those to provide more housing (including affordable housing) and, in appropriate locations, to provide social infrastructure and to contribute to town centre renewal; and
- ensure the provision of sufficient land, suitably located, for the development of an expanded transport system to serve London's needs.

2.14 The SPG includes indicative borough level monitoring benchmarks for the transfer of industrial land to other uses over the period 2011-2031. Specific to Park Royal, the SPG identifies Park Royal to include both Preferred Industrial Location and Industrial Business Park elements. It highlights the key role Park Royal plays in logistics and that the area has a strong demand for both smaller (2,000 sqm) and larger (10,000 sqm) premises.

Local

Hammersmith and Fulham

2.15 Hammersmith and Fulham's Core Strategy (2011) recognises Park Royal as a regeneration area with a long-term vision to transform it with substantial mixed-use development, made possible principally by the projected HS2 rail line and Crossrail. It recognises the potential for 1,600 homes and 5,000 jobs and supporting facilities in a high quality environment focused on the Grand Union Canal. The Council promotes Old Oak Common Sidings and the former North Pole Eurostar Depot as a major rail interchange between the proposed High Speed 2 line, Crossrail, The Great Western Line and the West and North London lines.

2.16 Whilst the Old Oak Common Sidings are currently safeguarded for Crossrail and designated as a Strategic Industrial Location (SIL), in the longer term, the Council promotes the sites use for mixed use development.

Brent

2.17 Brent's Core Strategy (2010) recognises the need for regeneration in Park Royal to provide new business opportunities and jobs and Policy 12 states that the Council will work with the GLA and neighbouring Boroughs to secure the 'opportunity area' objectives for Park Royal. This includes the redevelopment of 50 hectares of land for employment uses and the creation of 4,400 new jobs between 2007 and 2017, significant public transport improvements in relation to First Central and improvements to orbital public transport links to Wembley.

Ealing

2.18 Ealing Council's Core Strategy (2012) seeks to retain business and industry throughout Park Royal, promote Park Royal as a centre for green industry, to improve cycle access, promote the use of the Grand Union Canal for freight transport and promote a Green Enterprise District. It also seeks to improve routes to and from North Acton station and the Strategic Industrial Location. It recognises the potential for 2,000 office jobs and 1,500 residential units at North Acton in a mixed commercial and service development.

2.19 The Ealing Development Sites DPD (2013) allocates the Southern Gateway for mixed-use development including residential and employment with ancillary retail and community uses, and provision of new public spaces.

EXISTING EMPLOYMENT EVIDENCE BASE

2.20 Three spatial tiers of employment land studies exist for the OPDC area:

London

GLA Industrial Land Demand and Release Benchmarks Study (2011)

2.21 This document identifies future demand for industrial land across London and compares it with the current and planned supply to act as a measuring/monitoring tool. It identifies that industrial production sectors are expected to continue to decline while warehousing and logistics activity will continue to grow alongside waste management uses. Specific to Park Royal, it identifies that speculative industrial development is likely to be limited and confined to small and medium sized units in selective parts of London, including Park Royal.

GLA London Industrial Land Baseline (2010)

2.22 This study quantifies and maps the supply of industrial land (including vacant industrial land) in London, with tabulated outputs at borough level. Data is supplied for land designated in Strategic Industrial Locations (SIL), Locally Significant Industrial Sites and other, non-designated sites. Time series data is provided for 2001, 2006 and 2010.

Sub-regional

West London Economic Assessment (2011)

2.23 Six west London local authorities (including Hammersmith & Fulham, Brent and Ealing) commissioned the delivery of this document to provide an understanding of the West London economy. Specific to Park Royal, this study identifies that there is a strong demand for logistics in Park Royal and that Park Royal has the potential to benefit from green industries.

Local

GLA Park Royal Atlas (2014)

2.24 The Park Royal Atlas identifies how many and what types of employment uses are currently active in Park Royal. Of the 1,934 workplaces, 30% are small office spaces with those in large warehouses comprising 63%. Many of these are used by microbusinesses that count for 75% of workplaces.

LB Brent Employment Land Demand Study (2013)

2.25 Demand: The study forecasted demand showing that there is projected to be a decrease in demand for industrial land of between 18ha and 23.7ha in the period 2013 to 2029 in Brent. This is due largely to a forecast decrease in industrial employment as projected by the GLA. It is difficult in the LB Brent context to differentiate between industrial/manufacturing land uses (B2 and B1c) and logistics/warehousing (B8) as these two uses are generally mixed and to a certain extent interchangeable on industrial estates in the borough. However, there is likely to be relatively more demand for B8 land uses than B2 uses. However, overall it is projected that over the planning period there will be decreasing demand for industrial uses as a whole.

2.26 Supply: On the supply side the field survey assessed that generally the borough has a good and fit for purpose industrial land supply. There are many strongly performing areas in the borough, in particular the four SILs, one of which being Park Royal. However, the Northfield Industrial Estate in Park Royal is identified to have a number of negative characteristics of being in close proximity to residential uses and inadequate parking or servicing.

LB Ealing Employment Land Review (2010)

2.27 Demand: The review supports the GLA's previous London Industrial Release benchmarks published in 2007. This proposes that Ealing should decrease its net stock of industrial land by 14ha, equivalent to 57,000 sq m of floorspace (3% of the total industrial stock). For general industrial and warehousing the review also suggests that policies need to accommodate the continued decline in the manufacturing sectors but encourage the growing warehouse and distribution sector.

2.28 Supply: Park Royal is identified as one of the clusters of employment sites and as the primary centre for industrial premises within the Borough by providing accommodation for the vast majority of industrial occupiers. The area provides a mixture of accommodation from small dated accommodation to new large units. Occupiers range from trade counters and workshops to large national distribution occupiers. The site is generally well maintained and there is significant evidence of renewal. There is a general shift from manufacturing to distribution and further redevelopment is identified to be market driven. The strong strategic and local access along with the limited operational constraints results in high demand and high rental levels. Consequently, the review proposes that site should retain its existing employment use as the site does not require public intervention.

LB Hammersmith & Fulham Employment Land & Premises Study (2005) and Updating Statements (2009 & 2010)

2.29 Demand: The most recent evidence base document (Updating Statement 2010) identifies that the decline in demand of industrial floorspace continues from the original Employment Land and Premises Study (2005), with stock having further declined from 192,000 sq.m. to 155,746 sq.m. This fall is largely attributed to the loss of 23,500 sq.m. of floorspace through the mixed use redevelopment of the former Presolite factory in Larden Road. Apart from larger industrial buildings awaiting development, including the Dairy Crest building and some riverside sites, the vacant industrial sites continue to be small in nature and often integrated within mixed use or residential areas. The review states that many of the industrial sites comprise older style buildings not appropriate for more modern users without adaptation. In addition, as sites are vacated they may not be appropriately located for some of the newer kinds of activities identified by the GLA research as the growth areas including waste and logistics. In these circumstances a more liberal release of land may be warranted especially if more modern floorspace can be located in a more accessible area at an increased density.

2.30 Supply: There is no outstanding pipeline for significant industrial or warehousing development in the borough. The last significant development activity for these uses was in the Hythe Road area for the substantial waste processing facility at the Powerday site. Two self storage schemes, one in Hythe Road area (Scrubs Lane) and the other in Townmead Road, have been completed in recent years and since the completion of the ELPS. It is likely that significant additional floorspace for these uses will not be provided in this borough outside of the SIL area. Additional capacity could however be provided by the upgrading of sites within the SIL area..

OTHER EVIDENCE BASE

Old Oak Strategic Transport Strategy

2.31 A strategy transport strategy for Old Oak will be developed to demonstrate how future demand can be accommodated. The transport strategy aims to improve local connections and facilitate regeneration of the area, whilst minimising any negative impact on the transport network and its users. A specific study for Park Royal will also be undertaken.

Objectives

- Minimise congestion on the surrounding highway network
- Improve connectivity throughout the OA and the surrounding area
- Ensure the future freight / servicing demands within the OA can be accommodated

Current transport issues

- Highway network: congested with limited spare capacity
- Public transport accessibility: poor access with stations and bus stops on the periphery.
- Pedestrian/cycle network: poor quality with barriers presented by the canal and railway lines.
- Freight: high volume of vehicle freight transport which causes delay to other traffic.

Interventions required to mitigate current issues and the impact of development

- New London Overground station(s) at Old Oak
- Improved frequencies on the London Overground
- A potential extension of Crossrail 1 to the WCML
- Increased bus frequencies and new/ extended routes operating
- New walking network
- New cycle connections
- Demand management policies to reduce car mode share
- Improved site access to Old Oak alongside new and improved road connections
- Highway improvements

Forthcoming evidence base

2.32 During the development of the OPDC Local Plan, the OPDC will be undertaking a range of studies, including retail, housing, environment, transport and heritage, to inform policy development which may also impact on employment policies.

3 EMPLOYMENT SITES

INTRODUCTION

3.1 This section of the review identifies and analyses the employment sites across the OPDC area to better understand the physical, economic and environmental aspects of how the industrial employment land is currently used. The analysis is based on the detailed quantitative and qualitative data gathered in early 2014 for the Park Royal Atlas study boundary. This data has been updated and expanded with fieldwork and desk research in early 2015 to cover the whole OPDC.

3.2 The analysis follows the criteria for qualitative assessment set out in Land for Industry and Transport Supplementary Planning Guidance (SPG) (GLA, 2012) which supports the London Plan policies to ensure an adequate stock of industrial land and seeks to retain low cost business accommodation where there is demand. The criteria set out in paragraphs 4.14-4.16 of the SGP cover economic, land use and market demand aspects of industrial sites. This chapter focuses on the economic and land use criteria which are combined into a series of indicators by which each site is assessed. Additional indicators such as site typologies and street presence have been included to better understand and analyse the existing fabric and potential of the industrial sites. Market demand criteria are addressed for the whole OPDC area in chapter 5.

3.3 The following pages explain how the employment sites have been identified and analysed. They create the basis for the quantitative analysis of plot ratios and employment densities that follows. These numbers are then given some context with a qualitative analysis that looks at the vacancies, services for workers, accessibility for goods transport, the level of local employment, public transport accessibility, travel to work and customer and supplier locations. Analyses of street presence and environmental impact then estimate the overall effect of each site on the area, enabling the sites to be considered within the wider setting. Finally, an overview of the sites affected by redevelopment is provided.

OWNERSHIP BOUNDARIES

3.4 There are a wide range of ownership boundary patterns across the OPDC area. Subareas E3 and E4 for example are characterised by older long warehouses on narrow plots. Many of these warehouses have been split into smaller units and so have some of the land parcels. At the opposite end of the spectrum there are subareas, such as B2, with more modern standalone warehouses and industrial estates on much larger land parcels often owned and managed by a single business. Often these land parcels were previously the sites of large purpose built factories that had moved or closed down such as the Guinness and Heinz factories.

3.5 The current ownership boundaries are a result of the original companies and industrial developments in Park Royal. The diverse pattern of land parcels is the framework that has provided a diverse workplace units types, scales, prices and tenures that provide the conditions for a diverse mix of business activities.

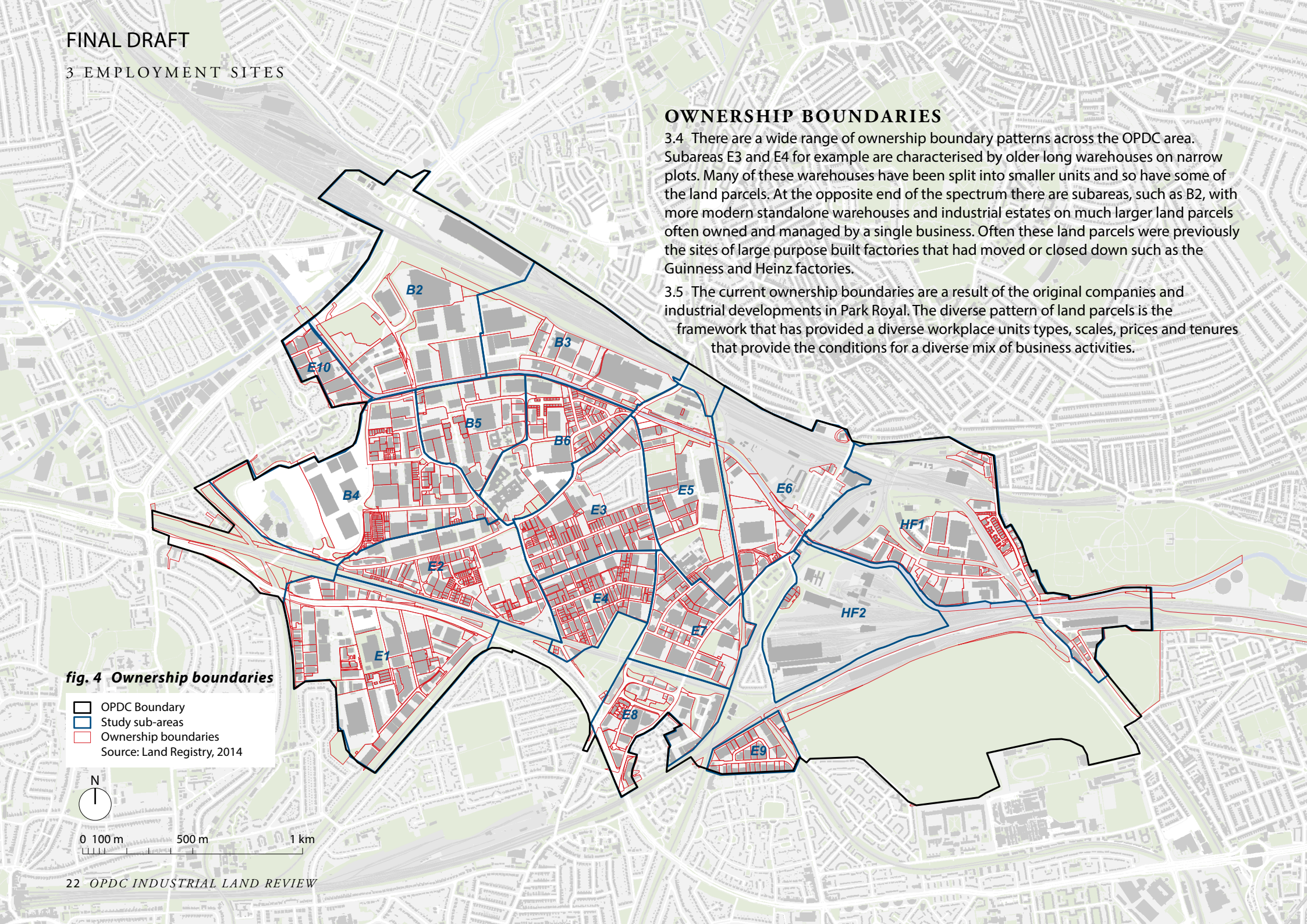


fig. 4 Ownership boundaries

EMPLOYMENT SITES

3.6 Within the 650ha of the OPDC area, 300 employments sites have been identified, covering 355 ha or 55% of the total area. The rest of the area is mostly made up of transport infrastructure, green spaces and residential sites. The sites are based on logical groupings or subdivisions of the ownership boundaries based on similar business uses or typologies to provide a sound geographical subdivision for the following categorisations and analyses.

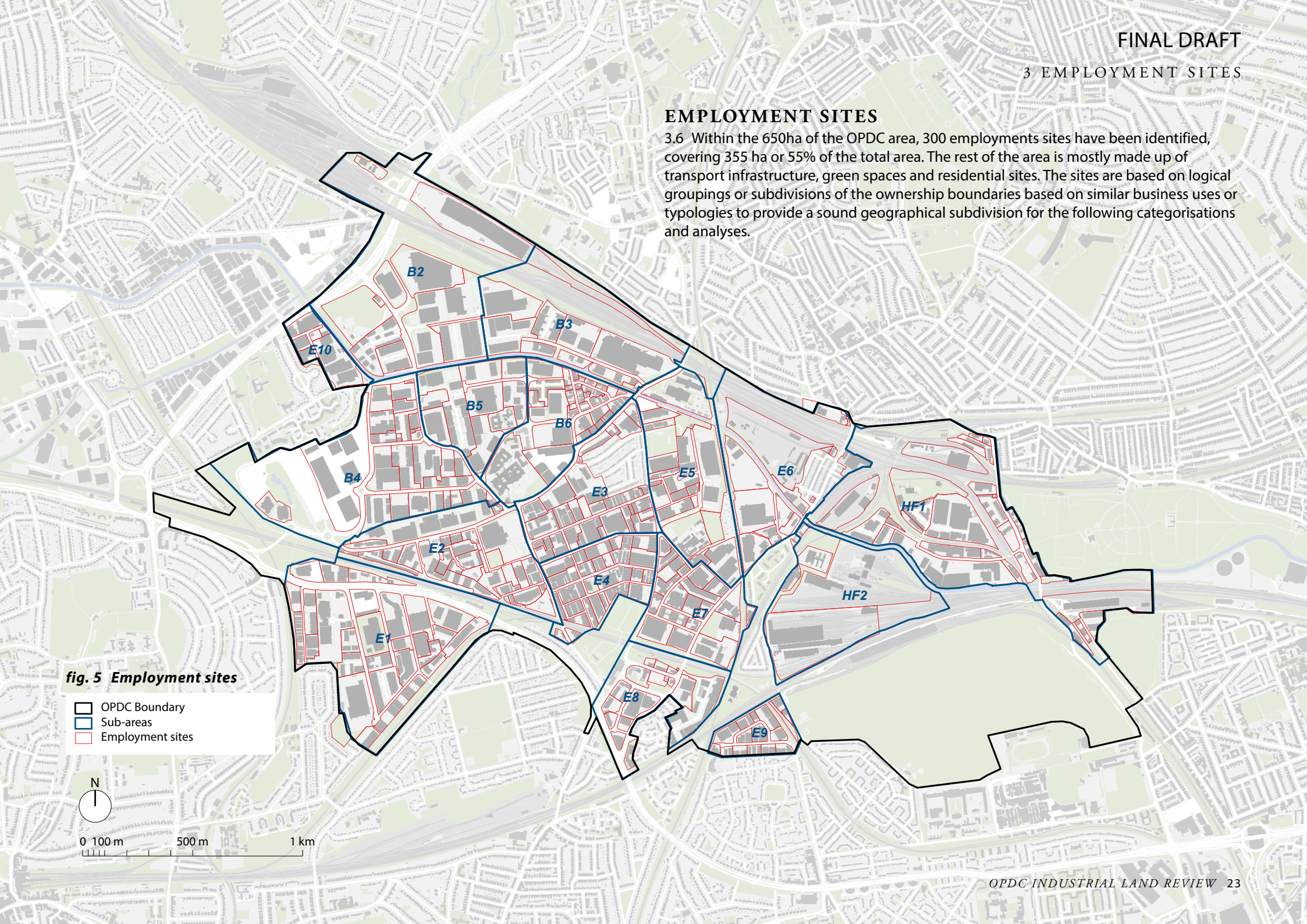


fig. 5 Employment sites

LAND USE

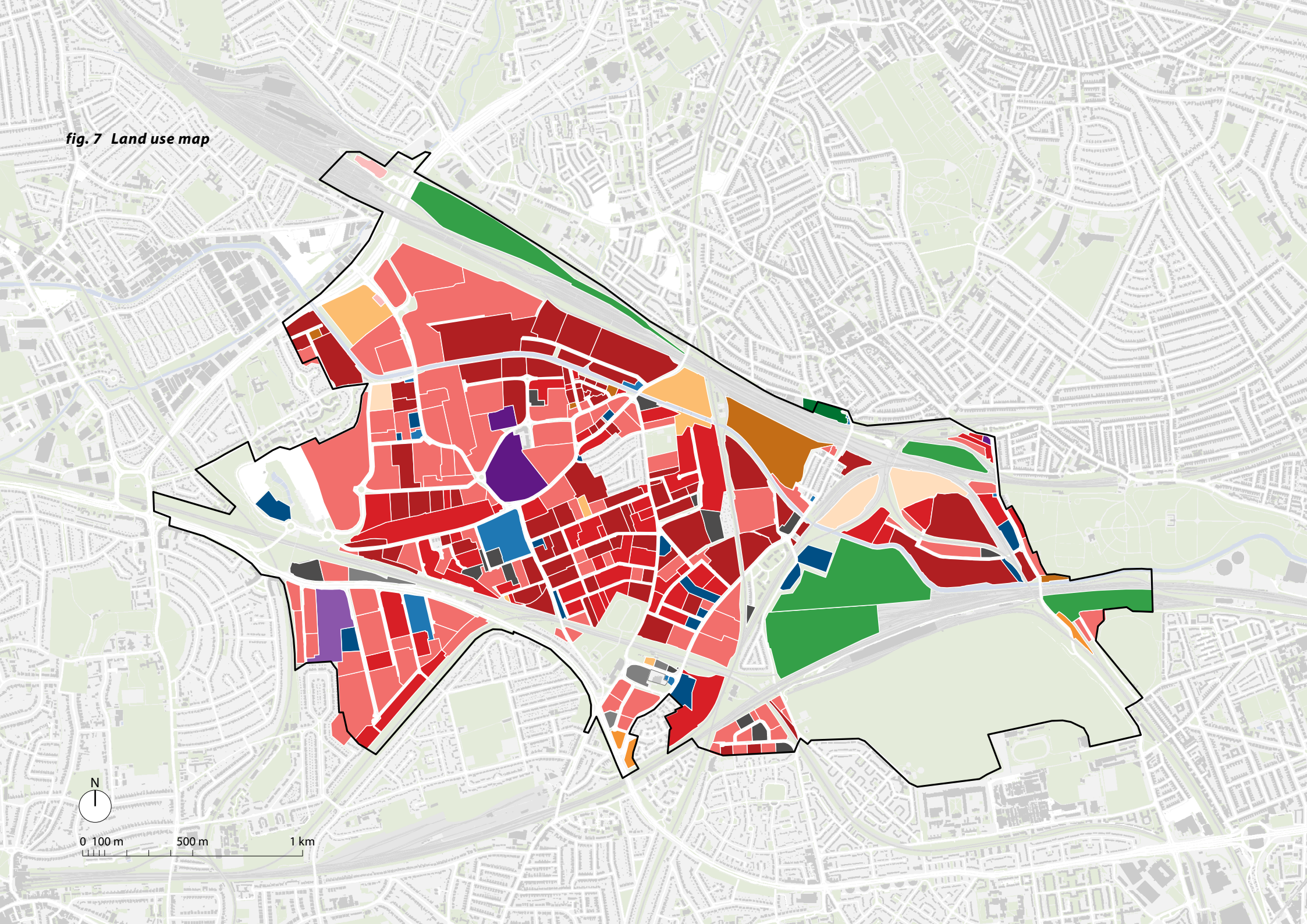
3.7 The employment sites have been categorised using the land use categories defined in *London's Industrial Land Baseline* (GLA 2010). These land use categories are split into industrial and non-industrial. They reflect only the main activities of all the business units on that site, meaning that they cannot represent the diversity of uses on some of the sites. Some of the sites are difficult to categorise, for instance wholesalers can be difficult to distinguish from retailers and wholesale businesses or trade counters are categorised as warehouse land use because they do not fall under the wholesale market or retail categories.

3.8 The employment sites in the OPDC area are predominantly industrial. 92% of the employment land is categorised as industrial uses. Only 2% of the employment land has been identified as vacant which means that there is little opportunity to redevelop industrial sites without replacing existing uses. However the specific site categories should not be given too much weight as they often hide a mix of land uses including general industry, light industry, warehouses and offices. They are mainly useful as a basis for the land use scenarios in Chapter 7.

fig. 6 Land use areas

Land use	Area (ha)	Area (%)
Industrial	**328**	**92.1%**
A General industry	83	23.4%
B Light industry	50	14.1%
C Warehouses	116	32.6%
D Open storage	9	2.4%
E Self storage	1	0.4%
F Utilities	10	2.8%
G Land for buses	1	0.3%
H Land for rail	42	11.8%
I Waste management and recycling	8	2.1%
J Other industrial	1	0.2%
K Vacant industrial	7	1.9%
Non-industrial	**28**	**7.9%**
L Offices	9	2.4%
M Retail	6	1.7%
N Community services	7	1.8%
O Recreation and leisure	4	1.2%
P Residential	2	0.6%
Total	**356**	**100.0%**

fig. 7 Land use map



SITE TYPOLOGIES

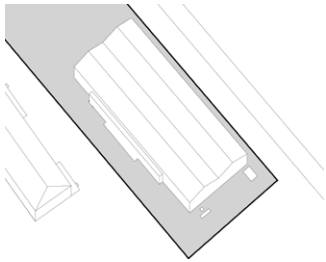
3.9 Categorising the employment sites by typology provides a better overview of the character of the OPDC area. The categories describe the spatial configurations and building types on the sites. They have been identified by analysing the diverse site typologies in Park Royal and other industrial areas in London.

3.10 The four main site typologies, business centres, dense light industrial, industrial estates and standalone warehouses, account for 75% of the employment land in the OPDC area. The intensification studies in chapter 6 focus on these four because they are relatively standard typologies that are repeated across the OPDC in various forms. Specific industrial sites are included because they have very different configurations depending on their use.

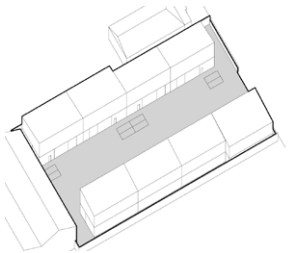
3.11 Most of the recently built sites in Park Royal are modern large standalone warehouses or industrial estates with units of varying sizes that are aimed at more established companies that can pay premium rents. At the same time there are also several examples of older dense light industrial sites that have been subdivided which have been categorised as business centres and provide small workplaces at more flexible conditions. Together the four main site typologies provide a diverse range of workplace units and conditions to cater to the needs of a diverse range of business units sizes and sectors.

3.12 Main site typologies

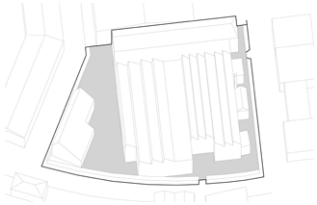
Standalone warehouse
Large industrial warehouses, distribution centres or transport depots that have their own access routes, car parking, yarBusd space, integrated office space and security facilities. They are typically occupied by a single business with a transport and distribution or general industry land use. Standalone warehouses are typically more modern, built in the last 30 to 40 years and have large yard spaces.



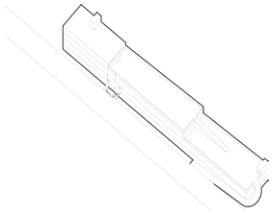
Industrial estate
Purpose built terraced warehouses often with integrated office space occupied by individual businesses and accessed off a shared yard or car park. Typically unit sizes are smaller than in standalone warehouses. The main land uses associated with industrial estates are transport and storage followed by light industry and general industry. Industrial estates are also typically more modern, built in the last 30 to 40 years.



Dense light industrial
Older industrial warehouses and factories that have been subdivided and repurposed over a number of years, typically with little yard space or formal parking. Their main land uses are general and light industry followed by transport and distribution.



Business Centres
A mix of multi-storey and single-storey buildings, often reused factories or warehouses, divided into small units that are rented out to multiple businesses. Parking is generally provided, although there is rarely yard space for large-scale loading and unloading. They are categorised under office or light industrial land use.



3.13 Other site typologies

Specific Industrial
Large custom built factories, utilities sites and substations.

Open industrial land
Largely open industrial land used for storage, or other uses.

Hotel and office
Standalone office or hotel buildings.

Retail park
Large, single storey retail warehouses with large amounts of customer parking.

Street frontage
Traditional high street type premises with small retail units on the ground floor and office or residential above.

Business in residential
Businesses found within residential blocks and/or areas that are primarily residential. Typically schools, doctor's surgeries, some small retail and community centres.

Vacant land
Land which is currently unused, and has few or no built structures on it.

fig. 8 Site typologies map

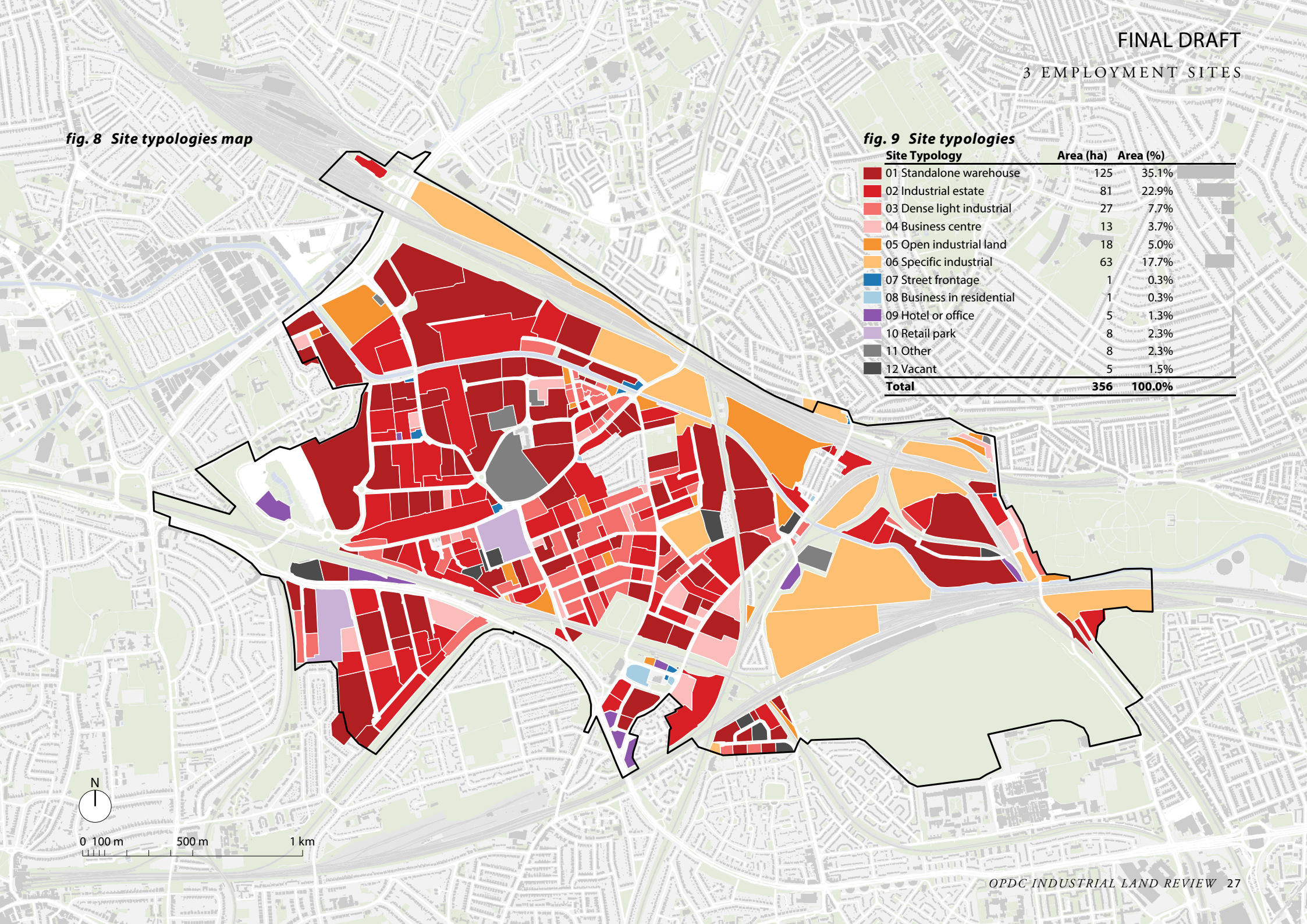


fig. 9 Site typologies

Site Typology	Area (ha)	Area (%)
01 Standalone warehouse	125	35.1%
02 Industrial estate	81	22.9%
03 Dense light industrial	27	7.7%
04 Business centre	13	3.7%
05 Open industrial land	18	5.0%
06 Specific industrial	63	17.7%
07 Street frontage	1	0.3%
08 Business in residential	1	0.3%
09 Hotel or office	5	1.3%
10 Retail park	8	2.3%
11 Other	8	2.3%
12 Vacant	5	1.5%
Total	**356**	**100.0%**

PLOT RATIO

3.14 The plot ratio provides a comparison of the proportion of built floor area to land area. It has been calculated by dividing the total gross external floor area (GEA) for all floors of all buildings on a site divided by that site's land area. The GEA for each workplace unit is calculated by multiplying the area of the building footprint measured to the outer most building edge from the Ordinance Survey (OS) Mastermap, updated where necessary, with the estimated proportion and number of floors used by the workplace unit. The plot ratios vary across the OPDC area from 0%, for a vacant site to 450%, for a multi-storey business centre. The average across the OPDC is 69%, which would be equivalent to a 1 storey building covering 69% of each employment site. Most industrial buildings in the OPDC area are single storey double height often with a small proportion of offices on the ground or first floor.

3.15 Industrial sites have a lower average plot ratio than non-industrial uses because of their need for yard service and parking space. The four main site typologies, standalone warehouses, industrial estates and business centres have differing average plot ratios. Business centres have the highest average plot ratio as they often contain multi-storey buildings while standalone warehouses have the lowest average plot ratio because they are often aimed at logistics related uses that require large yard spaces and the industrial floorspace is typically on a single floor. While dense light industrial sites have a higher average plot ratio, they often have insufficient yard space for many industrial business uses. In areas with a high proportion of dense light industrial sites such as subareas E3 and E4 this can cause congestion due to the streets being used for parking and deliveries.

fig. 16 Plot ratio by land use

Land use	Plot Ratio
Industrial	**65%**
A General industry	69%
B Light industry	78%
C Warehouses	67%
D Open storage	10%
E Self storage	93%
F Utilities	13%
G Land for buses	18%
H Land for rail	30%
I Waste management and recycling	30%
J Other industrial	29%
K Vacant industrial	46%
Non-industrial	**95%**
L Offices	126%
M Retail	52%
N Community services	106%
O Recreation and leisure	32%
P Residential	82%
Average	**69%**

fig. 15 Plot ratio map

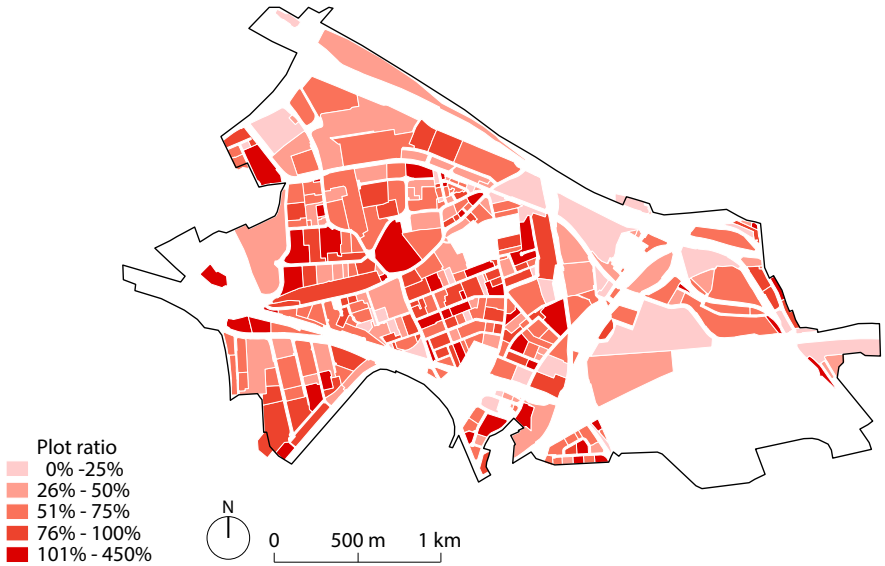


fig. 14 Plot ratio by site typology

Site typology	Plot Ratio
01 Standalone warehouse	66%
02 Industrial estate	70%
03 Dense light industrial	83%
04 Business centre	107%
05 Open industrial land	12%
06 Specific industrial	31%
07 Street frontage	55%
08 Business in residential	45%
09 Hotel or office	121%
10 Retail park	32%
11 Other	73%
12 Vacant	61%
Average	**69%**

EMPLOYMENT DENSITY BY FLOOR AREA

Employment densities by floor area provide an overview of how much built floor space is available per employee. For each employment site the total gross external area over all floors (explained previously in the Plot Ratio section) is divided by the estimated number of jobs to obtain the average employment density. The job numbers for around one third of the businesses have been estimated based on field observations and information obtained from businesses. These have been used to calculate average job densities for each building type in the Park Royal Atlas (large warehouses, small warehouses, workshops, small office, large office, retail, yards and other) and estimate the employment of the rest of the business units by building type defined in the Park Royal Atlas

EMPLOYMENT DENSITY BY SITE

3.16 The distribution of employment across the OPDC area is best visualised using the site employment density, which estimates the average number of jobs per hectare for each site. It is based on the job number estimates for each site, as estimated for the employment density by gross floor area. Although, in general, the employment density map follows the general pattern of the plot ratios map, there are exceptions where the employment densities by floor area are particularly high or low due to the types of buildings and activities on a site. Of all site typologies, business centres have the highest employment density, while hotels and offices are both closer to the overall average, despite having higher plot ratios.

3.17 The average site job density estimated in the OPDC area is higher than previous estimates ranging from 48 to 155 jobs per hectare for general industry and warehousing sites in both inner and outer London (London's Industrial Baseline, 2010). This could be explained by the high industrial real-estate values as explored in the Market Profile chapter. The map shows that there is little correlation between location and site job density. This suggests that there could be potential to locate industrial uses with greater employment densities close to public transport hubs.

fig. 17 Employment density by floor area

Site Typology	m2/worker
01 Standalone warehouse	91
02 Industrial estate	54
03 Dense light industrial	55
04 Business centre	50

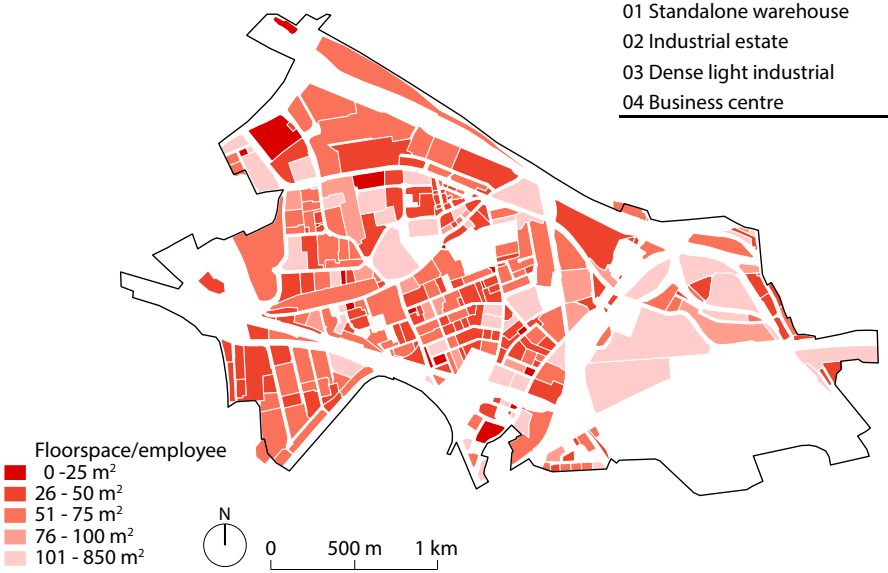
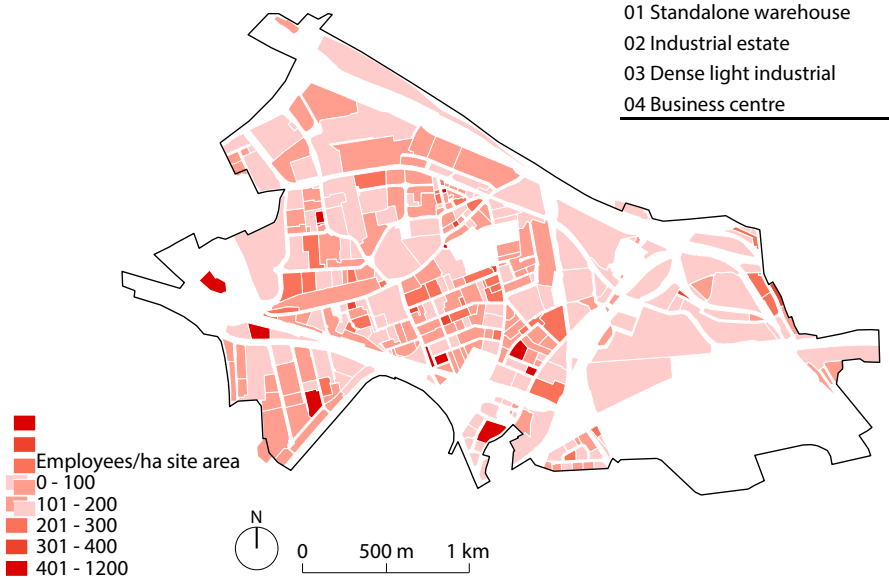


fig. 18 Employment density by site area

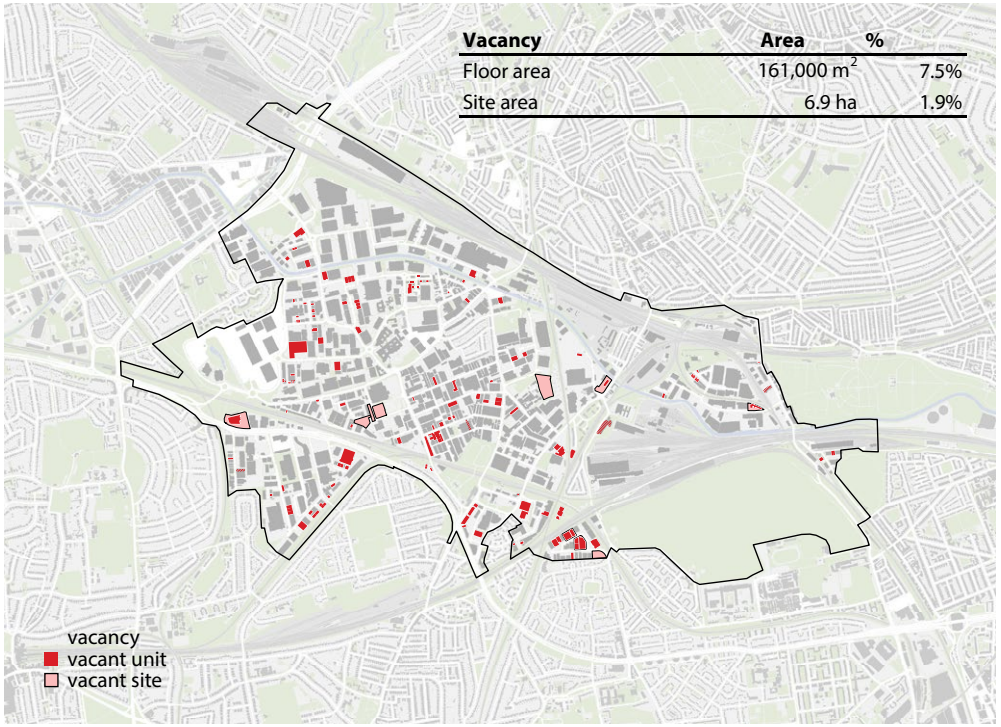
Site Typology	Workers/ha
01 Standalone warehouse	114
02 Industrial estate	144
03 Dense light industrial	191
04 Business centre	304



VACANCY

3.18 There are only a handful vacant sites and units left in the OPDC area. New buildings that are still incomplete or in the process of being let have been categorised as unknown rather than vacant for this study. Several previously vacant sites have been developed over the last year and businesses are in the process of moving in. Only 2% or 7 ha of the total site area and 7.5% or 160,000m^2 of the floor space was found to be vacant. The vacancy rate is discussed in the Market Profile chapter. Given the diverse range of workplace unit sizes and conditions in the OPDC area, this makes finding a suitable unit in Park Royal difficult for industrial businesses. To avoid stunting economic growth in the area options to increase the provision of diverse industrial units should be a priority and is explored later in the intensification chapter.

fig. 19 Vacant sites and units



Vacancy	Area	%
Floor area	161,000 m^2	7.5%
Site area	6.9 ha	1.9%

SERVICES

3.19 Private and public services for the workforce and residents in Park Royal, such as health services, restaurants and retail, are thinly spread across the OPDC area and account for approximately 10% of the floor space. Retail and restaurants make up only 5% of the floor area and the few cafés and restaurants tend to be concentrated in particular areas. There are also no town centres where workers can have lunch or access services within walking distance. Some of the larger businesses provide in house canteens to their workforce.

3.20 There is at least one day-care located at the centre of Park Royal within a business centre. A dozen religious communities congregate in units within Park Royal, however these are non-conforming uses and do not provide services to the community that live and work in the OPDC area as most members come from outside the area in the evenings or on weekends.

3.21 The provision of more public and private services along the main pedestrian routes could help to improve the pedestrian experience in Park Royal, making it more attractive for people to walk to lunch or walk to public transport nodes at the edge of Park Royal. A greater presence and better distribution of local services would provide meeting places and create opportunities for business to aggregate. Encouraging open canteens could support those without and help to reduce lunchtime traffic.

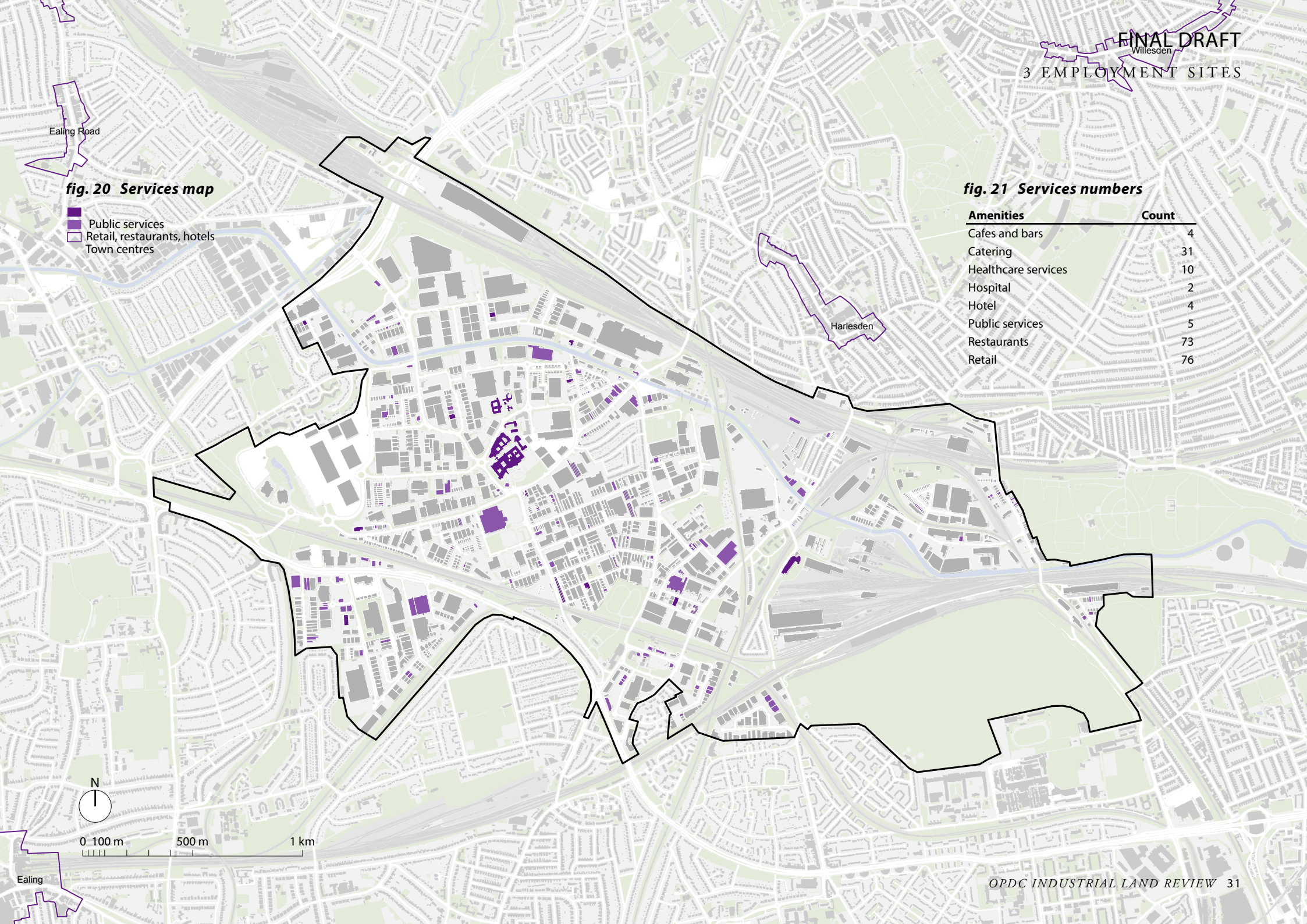


fig. 20 Services map

Public services
Retail, restaurants, hotels
Town centres

fig. 21 Services numbers

Amenities	Count
Cafes and bars	4
Catering	31
Healthcare services	10
Hospital	2
Hotel	4
Public services	5
Restaurants	73
Retail	76

ROAD INFRASTRUCTURE

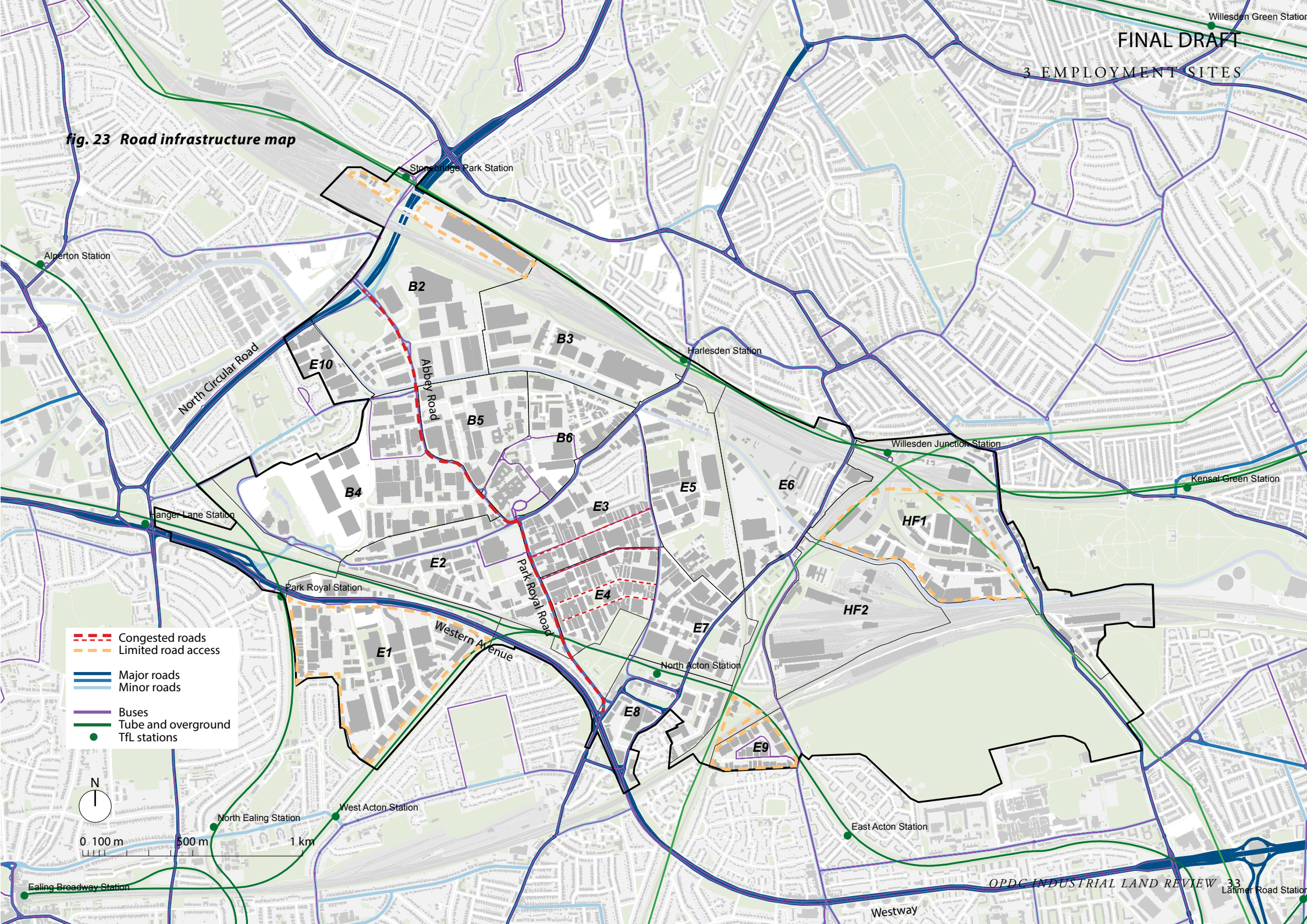
3.27 The OPDC area is well located in relation to the strategic road network. The railway lines and canal are today rarely used to transport goods. Road accessibility was cited most often by businesses as the advantage of being located in the area when interviewed for the Park Royal Atlas (GLA, 2014). However, road congestion is an issue to which both goods transportation and driving to work contribute. Because there are only a few access points to the main Park Royal area the routes in and out are easily congested. In addition, on some internal streets such as those in sub-areas E3 and E4, there is often little room left to manoeuvre between parked cars and waiting or manoeuvring lorries, amplifying the congestion problems. Other sub-areas are isolated with limited access points. This is currently the case in the central part of subarea HF1 which is part of the Old Oak Common redevelopment plan. Also most of subarea E1 can only be accessed from the slip road along one side of Western Avenue.

3.28 Road maintenance was the necessary improvement mentioned the most by businesses. Most businesses in the OPDC area depend on the transport of goods from their suppliers and to their customers. Almost all of this happens by road despite the railway lines and canal around and through the area. Close access to the North Circular Road and the Westway or Western Avenue as well as the proximity to central London are therefore key factors for many businesses to be located in Park Royal.

3.29 To keep goods flowing in and out of Park Royal, strategies for alternative modes of transport for goods and workers and improved roads need to be explored. This will be especially important to mitigate the effects of construction traffic from Old Oak.

fig. 22 On street parking

fig. 23 Road infrastructure map



SUPPLIERS AND CUSTOMERS

3.22 In the Park Royal Atlas (GLA, 2014), interviewees were asked to select the locations of their primary suppliers and customers. The responses show the important synergies within Park Royal of businesses supplying each other. They also demonstrate that not only most customers, but also 50% of businesses rely on London based suppliers. The responses appear to give credence to Park Royal's status as London's kitchen and workshop, with large numbers of food and other manufacturers as well as car repairs having a primarily local to London-wide customer base.

3.23 Their location within the OPDC area is important to many of the businesses not only because of the proximity to customers in central and west London but also their proximity to customers in the local area and the close proximity to other businesses within the OPDC area. This emphasises the need to protect and provide as much diverse industrial business space possible within the OPDC area.

LOADING AND YARDS

3.24 Ground floor access is essential to the operation of most industrial businesses in the OPDC. Most industrial sites require ground floor loading doors and sufficient yard space for loading, unloading and parking. Developers building the modern warehouses and industrial estates in the area are careful to balance the amount of built floor space and yard space.

3.25 The OPDC area offers interesting examples of efficient use of sites. An existing building on one site had previously been used by a single business was renovated into a business centre and parking was added to a second storey roof. The investment of adding ramps and strengthening the structure to provide parking was deemed essential by the owners to attract tenants. On another smaller site, the developer that built a new small scale industrial estate made sure that everyone unit had sufficient yard space for parking and loading. However these businesses still don't have the necessary shared space for deliveries with articulated lorries.

3.26 While currently most industrial businesses require units with yard space at grade there is very little vacant land to deal with rising demand. New strategies will be necessary to use land more efficiently and intensively while still providing the yard and parking space necessary for industrial businesses.

fig. 24 Average yard to site proportions

Site typology	% Yard
01 Standalone warehouse	40%
02 Industrial estate	36%
03 Dense light industrial	28%
04 Business centre	35%

TRAVEL TO WORK

3.30 While the OPDC area workforce lives across London, the largest proportion of workers are local and live within the three surrounding boroughs. Other industrial areas in London also provide local employment. While there are a large number of people that live across west London that drive to work in the OPDC area, those living locally or further afield will tend to take public transport and other modes of travel to get work. This may be due to weak north-south public transport links in west London as well as the lack of 24 hour public transport operation.

3.31 Accessibility to public transport varies greatly across the OPDC area according to the Public Transport Accessibility Level (PTAL) map from 2014. PTAL shows the level of accessibility to the public transport network from each point in London taking into account walking time and service availability. While some areas of the OPDC close to TfL stations and the Central Middlesex Hospital have high levels of accessibility, much of the rest of the area is poorly served and some bus routes through Park Royal are relatively inefficient. This means that people have to walk further through industrial areas that do not feel safe, especially at night. The efficiency of the bus routes that serve parts of the area are also affected by the congestion and poor road maintenance mentioned earlier.

3.32 Improvements in public transport, walking and cycling links to the local area and north-west London can help reduce congestion and demand for parking in Park Royal, freeing up much needed road and yard space for business activities.

fig. 27 Public transport accessibility levels map

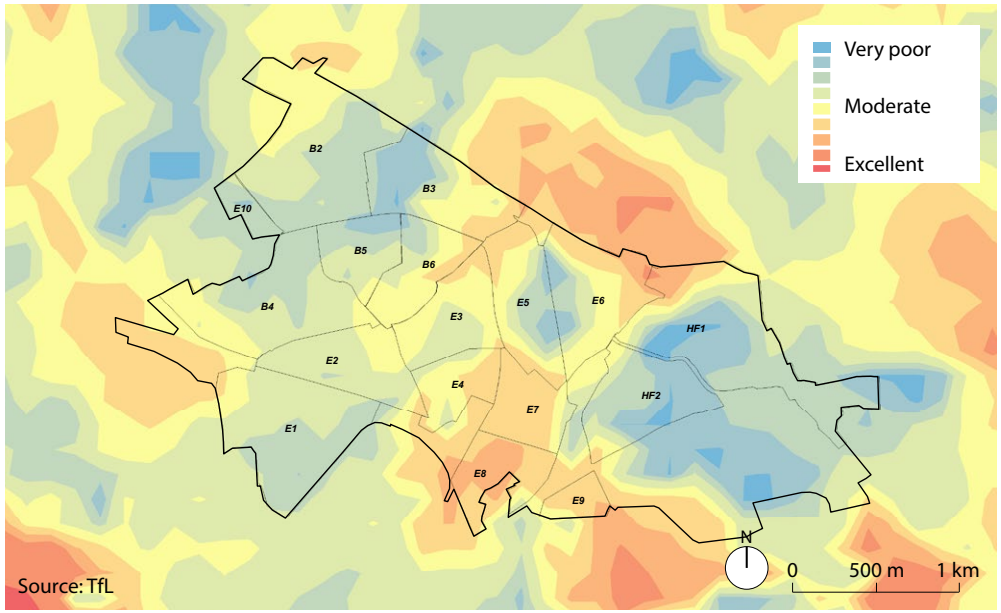
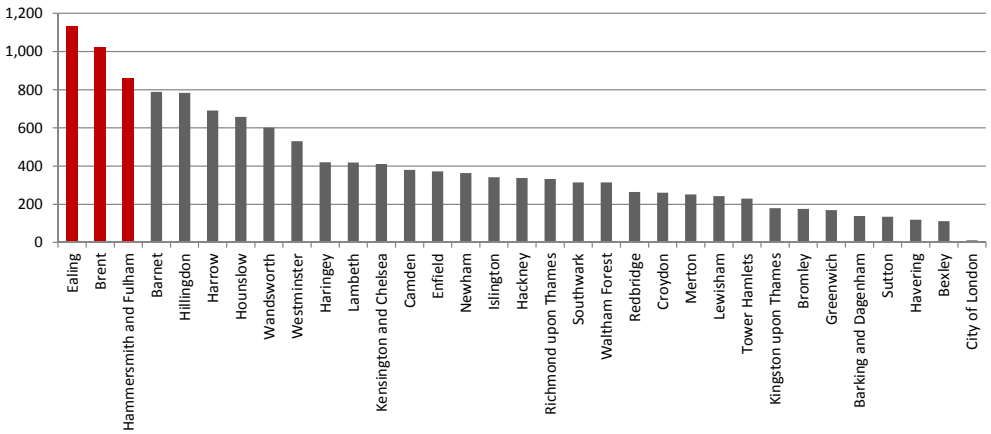
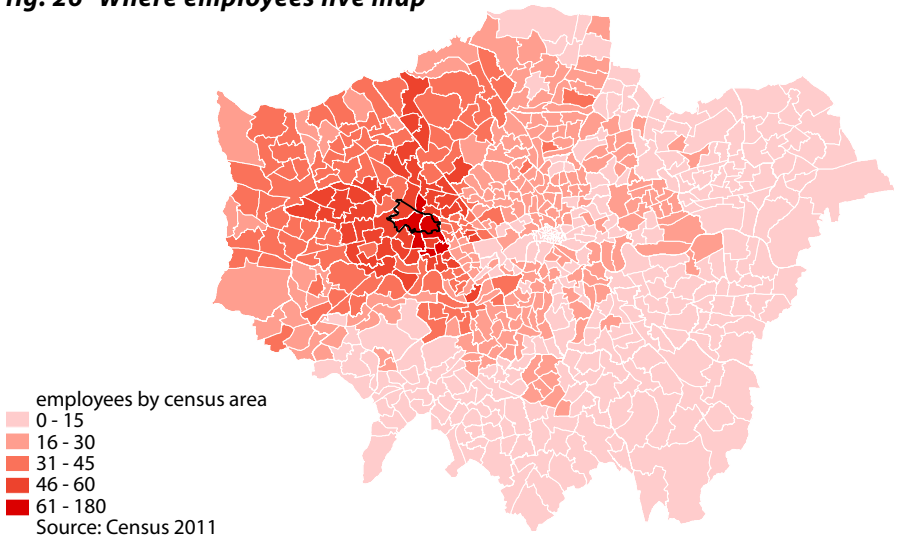


fig. 25 Where employees live by borough



Source: Census 2011

fig. 26 Where employees live map



STREET PRESENCE

3.33 Although the mix of business sectors makes the OPDC area a lively industrial area, much of this remains invisible from the street. The quality of the public realm of the area is defined in great part by the by the street presence of the employment sites. This street presence has been rated based on the accessibility, visibility from the street and clarity of signage of each employment site. For some businesses street presence is important because they benefit from walk-in customers that are in the area for other business. For instance, workers will have lunch in the cafes on the street or builders will order structural steel from a supplier they notice in passing so that they can pick it up when they visit one of the many trade counters in the area.

3.34 Increased street presence in certain areas of Park Royal can be good for business as well as help to increase walking, cycling and public transport use in the area by increasing activity on the streets and making them feel safer.

IMPACT ON ENVIRONMENT

3.35 To better understand the necessity for certain industrial businesses to be buffered from more sensitive land uses such as residential and office uses the impact on the environment of employment sites has been estimated. This is based on the estimated degrees of noise, air pollution and heavy traffic caused by the business activities on each site. According to this assessment, only 36% of the employment sites are estimated to have a very high impact on their surroundings. Standalone warehouses are most often found in this category, often due to the amount of heavy traffic they generate. Furthermore, there are a couple of employment sites that generate a lot of noise and air pollution, such as waste handling sites and some general industry sites. These sites are often located at the fringes of the area along rail lines and yards that are separated them from the surrounding residential areas.

3.36 To allow industry in Park Royal to function to its full potential within SIL, adjacent residential or office development would need to be located so as to not be negatively affected by noise, air pollution or traffic from industrial businesses. Buffers or transition areas between industrial sites and new development should be considered as well as the potential to reduce the impact on the environment of Park Royal businesses by supporting the shift to green production and distribution processes and technologies.

fig. 28 Street presence

Estimated level	Area (ha)	% Area
Very low	67	19%
Low	154	43%
Neutral	81	23%
High	52	15%
Very high	2	1%
Grand Total	**356**	**100%**

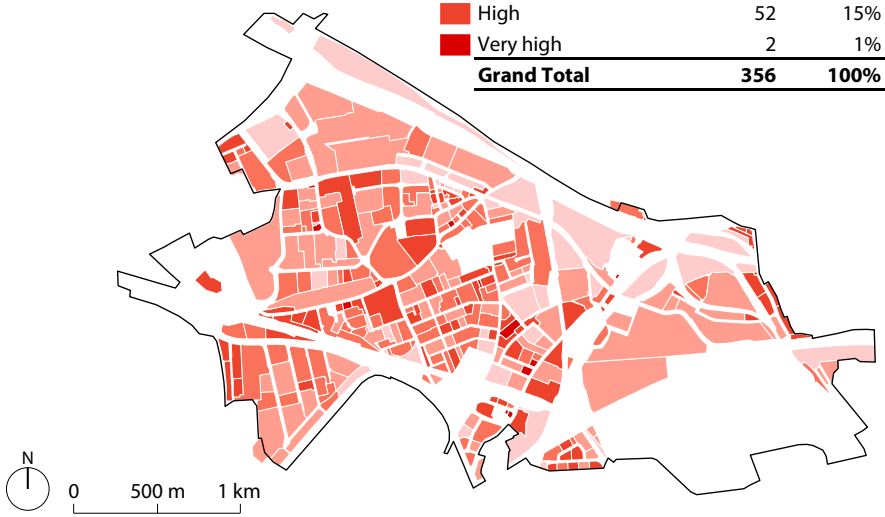
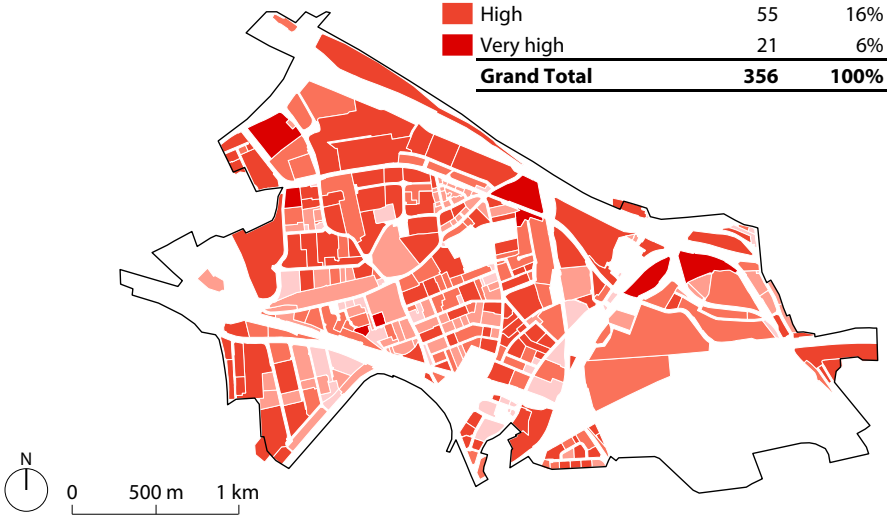


fig. 29 Impact on environment

Estimated level	Area (ha)	% Area
Very low	18	5%
Low	160	45%
Neutral	102	29%
High	55	16%
Very high	21	6%
Grand Total	**356**	**100%**



AFFECTED SITES

3.37 The Old Oak redevelopment proposals in the OAPF together with the sites for the construction of HS2 will affect around 29% of the land within the OPDC area, most of it industrial. This employment land currently contains an estimated 23% of the business units within the OPDC area, around 350 businesses, providing around 6500 jobs. In addition there are also some sites that are vacant or with current industrial or town centre retail uses within Park Royal which are not designated as Strategic industrial locations. Employment on these sites could also be affected as well as some of the surrounding industrial uses if these sites were to be redeveloped with residential uses.

3.38 Supporting the retention of some of these businesses within the area would be beneficial to the diversity of the local economy and local employment. Land owners could be encouraged to support the relocation of businesses from the Old Oak and HS2 to appropriate sites within Park Royal and the surrounding boroughs.

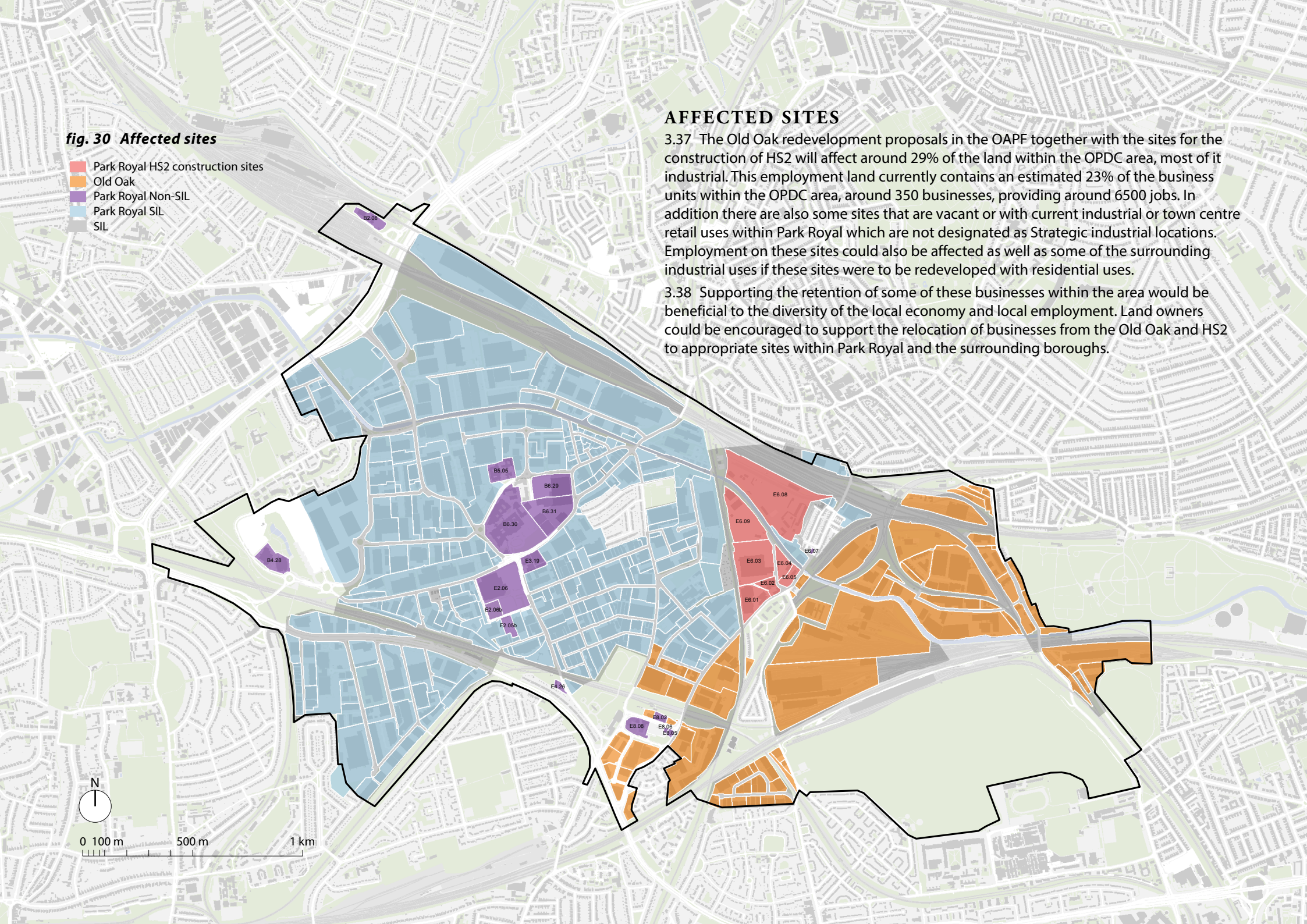


fig. 30 Affected sites

4 QUANTITATIVE SUPPLY AND DEMAND

INTRODUCTION

4.1 To assess the future demand for industrial space (built floorspace and land) within the Old Oak and Park Royal Development Corporation (OPDC) area, we provide two complementary analyses. We begin in this chapter with a quantitative assessment for the period 2011 – 2031, based largely on planning data and considering Old Oak and Park Royal in the context of West London. This period (11-31) differs from the plan period but aligns with the GLA Industrial Land SPG (2012). As we detail below this SPG provides guidance to the Boroughs concerning how much industrial land should be released to maintain a reservoir of land for industrial uses in London. Although published three years ago the SPG remains the only strategic guidance which can be used to guide cross boundary planning in London.

4.2 In the following chapter we provide a market analysis that covers the same geography but focuses on qualitative aspects, including the profile and requirements of occupiers and the potential for intensification.

4.3 In both chapters, we start by considering today's requirements but focus on the potential for future change. This is important, because today's business occupiers may not be the ones we expect or want to accommodate on the finite amount of good-quality strategic industrial land that will be available in West London in future.

DEMAND

4.4 Before we assess demand, it will be useful to define it. In the present context and in principle, the demand for industrial space is the industrial space that would be provided in the plan period if land supply was not constrained, either by planning or competing land uses. Demand reflects the quantity and qualitative mix of space that would be occupied and financially viable, so business want to use it and landowners and developers want to provide it.

4.5 Demand is hard to assess, partly because land supply has never been completely unconstrained. All assessments of demand can be coloured by previous policies and constraints in supply. High demand for a scarce resource will tend to manifest itself in increased rents and values, and very low vacancy rates, possibly below the 5% frictional vacancy rate required for efficient market operation. Therefore demand assessments, including the London industrial benchmarks discussed later in this section, must be considered minimum estimates of the true demand for land.

4.6 Another difficulty is that it would not make sense to assess demand within the OPDC area in isolation, because the space businesses want to occupy there, and how much they are prepared to pay for it, will depend on what is available in the wider market area. In other words, the demand for space in Old Oak and Park Royal, in the sense defined above, will depend on the balance of demand and supply across the wider market.

4.7 Below, therefore, we analyse demand, supply and the balance of the two across the three boroughs that contain the OPDC area, before drawing implications for the OPDC area itself.

4.8 The next section deals with future demand over the period 2011-2031, as assessed by the Benchmark Studies and translated into policy by the Mayor's Supplementary Planning Guidance (SPG). In the following section we assess actual and planned land supply since the 2011 base date and compare it with the benchmarks, to assess the present and foreseeable balance of supply and demand to date.

CURRENT DEMAND

Overview

4.9 Demand for industrial land in London is forecast by the Industrial Land Demand and Release Benchmarks studies, which (under this and similar titles) have long been a key component of the evidence base for the London Plan. The most recent version of this evidence was published in December 2011 and its findings are reflected in the Mayor's Supplementary Planning Guidance, Land for Industry and Transport (September 2012).

4.10 The Benchmarks study forecast the London-wide demand for industrial space defined to include land for warehousing, waste, utilities and transport as well as manufacturing, over the period 2011-31. It then advised on where that demand should be met, taking account of both demand and the capacity of different boroughs to accommodate it. The SPG translates the study's conclusions into policy: for London as a whole it aims to ensure that the assessed demand is met in full, and within London it aims to steer that demand to the places that are most able to accommodate it.

4.11 The calculation in the Benchmarks study started from the 'industrial baseline', which was the stock of industrial land as at 2010. This was estimated following a comprehensive survey of London. The study went on to forecast demand over the period, measured as a change in stock. The forecasts suggested that the land required would fall over the period. In other words, the net demand for industrial space would be negative despite growth in the warehousing (logistics), waste and utilities sectors.

4.12 Therefore the Benchmarks study indicated that a certain amount of existing industrial land in each borough could be released over the plan period, consistent with demand being met. The SPG reconciled the London-wide and borough level estimates in the Benchmarks Study with more local employment land reviews and produced an integrated strategic benchmark for each borough on this basis. The SPG requests boroughs manage their losses in line with the SPG benchmark figures. The SPG benchmarks are not site-specific, or even specific to certain types of sites. Boroughs are expected to provide additional local evidence (particularly where there is no up-to-date local employment land review) which tests the SPG benchmarks in more detail and develops site specific conclusions and recommendations.

The baseline stock

4.13 The London Industrial Land Baseline (2010) report found that the West London sub region in 2010 accommodated around 2,100 ha of industrial land.

4.14 The report also provides an indication of what type of use this land was in. For West London as a whole and the three OPDC boroughs warehousing was the predominant use. But West London, and partially the OPDC boroughs of Ealing and Brent, still accommodated a sizable stock of land in manufacturing use. Around 400 ha of land was in manufacturing use in the three boroughs.

FUTURE DEMAND

General and Light Industry (Manufacturing)

4.15 The Benchmarks study used employment projections to estimate future (long term) market demand for industrial land. In this context general and light industrial land is that used for manufacturing purposes.

4.16 The projections suggested declining employment in manufacturing sectors over the projection period (2011-31). Because of the large stock of manufacturing jobs in the three boroughs the analysis suggested some loss of industrial land was justified.

4.17 The chart below shows the expected loss of jobs across London. Both Ealing and Brent with their large manufacturing sector structures were projected to have some of the largest job losses in London.

fig. 31 Stock of industrial land in West London, 2010, ha

Source GLA Industrial Land Baseline Survey, 2011

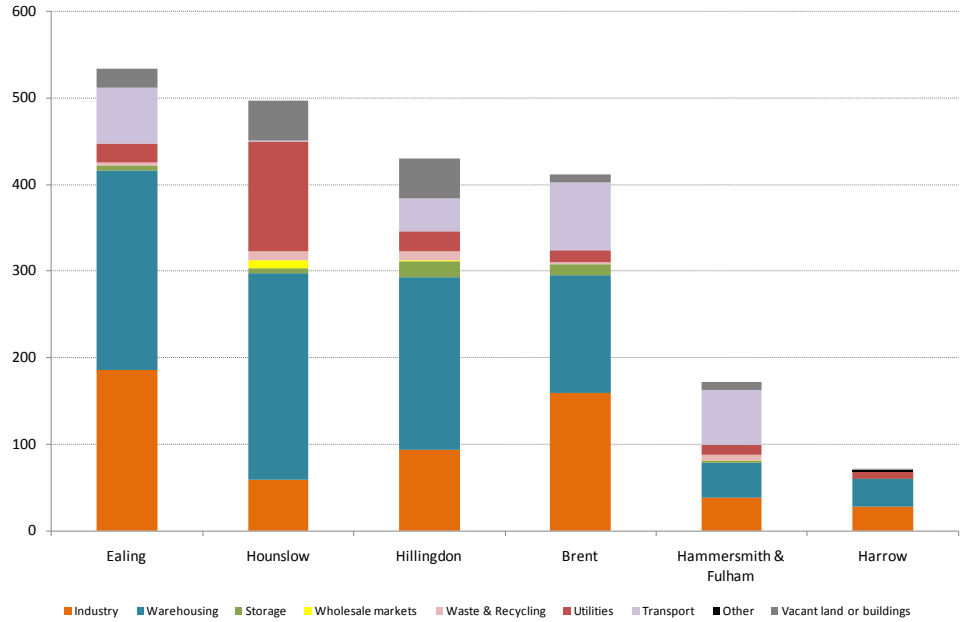


fig. 32 Projected Change in manufacturing job numbers, 2011-2031

Source GLA Industrial Land Release Benchmarks report (2011)

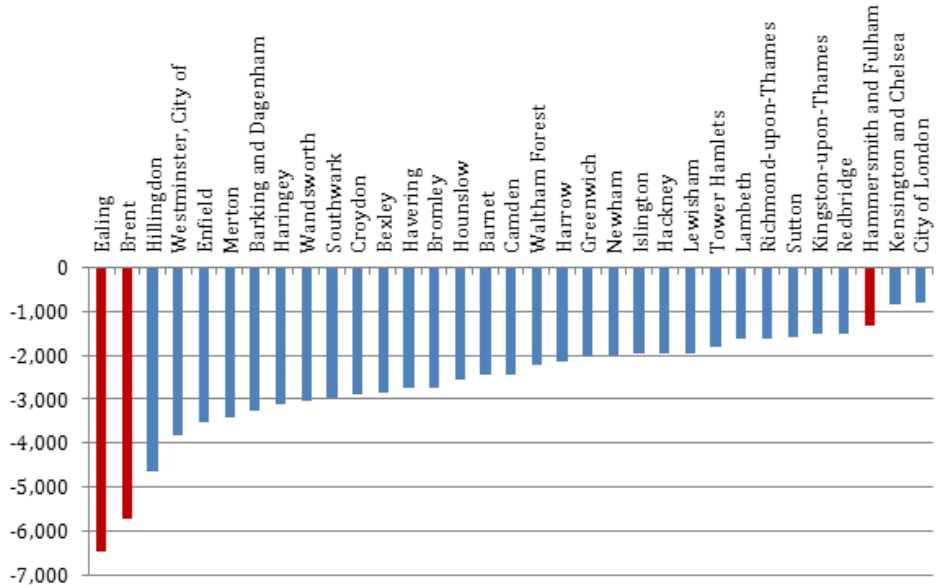
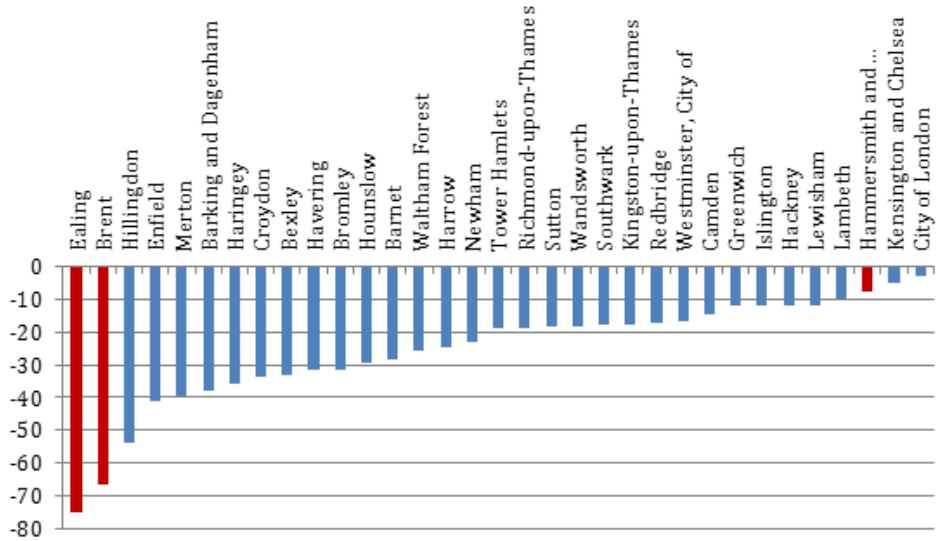


fig. 33 Demand for industrial land, 2011-2031, ha

Source: Industrial Land Release Benchmarks report (2011)



4.18 The benchmarks study translated the projected decline in jobs into land using employment densities and plot ratios. For industrial land demand, the result was that the three OPDC boroughs combined could release around 150 ha of the 400 ha of stock over the plan period.

Warehousing (logistics)

4.19 The Benchmarks report calculated the demand for logistics space in a different way to industrial land. The report found that the demand for logistics space was not related to numbers of jobs, but rather to the flow of goods needed to support London and its growing population and economy. As London's population and its economy grows, the demand for logistics space also grows.

4.20 To distribute this total growth between boroughs, the report used a formula that took account of each borough's past growth and each borough's current capacity. Thus, those boroughs which had seen most warehouse growth in the past, and those which had most capacity at the base date, were allocated more growth for the future. That capacity was defined as land which at the base date was in manufacturing use, so as manufacturing declined it could be re-used for warehousing. For West London, this formula favoured the boroughs of Ealing and Brent.

4.21 For the three OPDC boroughs the growth in land required for warehousing and logistics uses largely offsets forecast losses in manufacturing. For the three OPDC boroughs combined the requirement was for 119ha of additional land over the plan period.

4.22 Because there is no new supply of land the evidence assumed that much of this growth would be achieved by re-cycling former manufacturing sites. Essentially because there is no new supply of land in London all the positive demand for new logistics (warehousing) space would need to be accommodated on existing (manufacturing) employment sites. But in doing so the character of these sites would change as former factories, vacated as manufacturing in London continued to decline, would be redeveloped (or re-used) by the growing logistics market.

fig. 34 Additional land required for logistics 2011–31

Source: Industrial Land Release Benchmarks report (2011)

Borough	Hectares
Brent	61.1
Ealing	42.5
Hammersmith and Fulham	15.4
OPDC boroughs	119

Waste, utilities and transport

4.23 Similarly to land for logistics the Benchmarks report makes positive allowance for additional waste and utilities land. As the population grows so too will the amount of land needed to accommodate the required services. For the three OPDC boroughs combined it forecasts positive demand for 10ha of additional land over the plan period.

4.24 For transport uses the report also shows positive demand London-wide, but it does not apportion that demand between boroughs.

All Industrial uses combined

4.25 The above analysis was used by the GLA to inform the Land For Industry and Transport SPG which is used by the Boroughs to inform their local policies. The SPGwas informed by the analysis discussed above but when making recommendations the SPG flexed the data to reflect local circumstances. For the three boroughs the SPG shows boroughs combined can release 89 ha of industrial land for other uses in 2011-31, of which:

- 39 ha in Hammersmith & Fulham
- 26 ha in Brent
- 24 ha in Ealing.

4.26 Looking at evidence we can see that the headline figure of 89ha hides larger changes in the character and makeup of the retained stock of land.

4.27 The underlying assumption driving the benchmark 89ha is that manufacturing will continue to decline in London. This decline will free up a large amount of land which was formally occupied by factories. This land can be re-used to accommodate growing logistics, waste and utilities activities. The balance (89ha) is land which, by 2031, we don't expect to be used for any 'industrial' type activity and can be released from the industrial stock. This is the land which can be used for housing and other uses.

4.28 But if land is not recycled in the way that the evidence assumed, if sufficient former factories are not redeveloped or re-used for the growing sectors London will be short of land for logistics, waste, transport etc.

4.29 Also if manufacturing land is released too quickly there will be a shortage of land for manufacturing activates.

4.30 If the benchmarks are exceeded in their totality; there will be insufficient land for all the industrial uses.

4.31 The evidence suggests that this may be happening in the OPDC boroughs, as we explain in the next section.

SUPPLY AND DEMAND BALANCE

Overview

4.32 In this section we assess the actual and planned supply of employment land in the OPDC boroughs since the 2011 base date and compare it with the SPG benchmarks.

4.33 The GLA has worked with the Boroughs to estimate how much land has been lost over the last 5 years. From this we can estimate whether land is being released too fast and whether there is likely to be a growing shortage of industrial land in the three Boroughs before any further losses from within the OPDC area.

4.34 The results of this analysis show that within only 5 years (of the 20 year period the benchmarks cover) the three boroughs have released more than 60% of their total benchmark values. One borough, Ealing, has released almost all of its benchmark quantity of land while Hammersmith and Fulham have released around 50%.

4.35 The table below updates the benchmarks to 2015 with known losses which have been agreed with the Boroughs.

4.36 The evidence to date shows that should this rate of loss continue the three boroughs are at risk of releasing all their Benchmark values within only 10 of the 20 year period i.e. twice as fast as the SPG recommended.

4.37 In addition it is very likely the boroughs will continue to loose further land from the supply. All three boroughs still have a number of unimplemented planning permissions which will result in further losses. They also have outstanding development plan allocations, such as the large Southall regeneration proposals in Ealing or Wembley Park regeneration in Brent which will probably result in further losses over the life these development plans. Finally sites will be lost through the operation of the Borough criteria based (windfall) policies.

4.38 We cannot robustly evidence the scale of these losses because most don't yet benefit from planning permission. It is also the case that Boroughs will seek to secure replacement employment floor space to try to minimise the scale of losses. But looking at the losses to date and considering the scale of losses at Old Oak the key message is very clear. The three boroughs are releasing industrial land at rapid rate and are likely to exceed the benchmark values in the next few years if this trend continues.

CONCLUSIONS AND IMPLICATIONS

4.39 The Mayor's Land for Industry and Transport SPG, informed by the Industrial Benchmarks Study, indicated that the three OPDC boroughs should monitor the release of industrial land against a benchmark of 89 ha between 2011 and 2031.

4.40 From the new data collected by the boroughs we can see that over 60% of this land has already been lost in only 5 years. The rate of loss is more than double that suggested in the Benchmarks. In Ealing almost the full benchmark value has already been lost leaving no 'headroom' between 2015 and 2031.

4.41 We cannot robustly estimate future losses. But we know that there will inevitably be additional losses as outstanding planning permissions are implemented and development plan allocations worked through. What this means in practice is that West London is running increasingly short of industrial land. And that too many former manufacturing sites are being redeveloped for non-industrial uses and not enough are being recycled for the growing industrial sectors. The benchmarks values only 'balance' if some former manufacturing land is redeveloped (or reused) for growing logistics sectors.

4.42 In summary, across the three boroughs it is likely that the supply of industrial land over the plan period will fall significantly short of the assessed minimum demand. For prime industrial locations within the area, such as the OPDC area, the result is that demand for industrial land – the amount that would be taken up for industrial uses if made available to the market – exceeds physical capacity, as frustrated demand from the wider market focuses on the remaining land that is still reserved for industry. Thus, for practical purposes there is no limit to the demand for industrial uses in Old Oak and Park Royal. The market evidence in the next section confirms that view.

fig. 35 Industrial benchmarks and known losses

Source: GLA, PBA & Boroughs

	Benchmark value (ha)		Actual loss (ha)			Remaing land to release (ha)		
	2011-2031	pa	2011-2015	% of Benchmark	pa	2015-2031	% of Benchmark	pa
Brent	26	1.3	12	46%	2.4	14	54%	0.9
Ealing	24	1.2	22	92%	4.4	2	8%	0.1
H&F	39	2.0	20	51%	4.0	19	49%	1.3
Three Boroughs	89	4.5	54	61%	11	35	39%	2.3

5 MARKET PROFILE

MARKET DEMAND TRENDS

5.1 In London and the UK, the overall level of business demand for property tends to reflect macro-economic conditions, particularly GDP and employment growth. At an individual firm level a wide range of factors influence demand, including business growth and restructuring, such as merger and acquisition activity. In the industrial and distribution market, changes in the way businesses manage their logistics and supply chain operations are significant drivers of property demand.

London trends

5.2 As UK economic growth improved last year, the take-up of industrial floorspace across London increased. According to JLL, industrial take-up across Greater London, involving all unit sizes from 1,000 sq ft, was 17% higher in 2014 compared with 2013; separate data from Lambert Smith Hampton (LSH) show an even larger uplift of 34%.[1] The increase in take-up coupled with limited new speculative development has resulted in a significant reduction in availability. According to JLL, available industrial floorspace across Greater London was 12% lower at the end of 2014 compared with a year earlier.

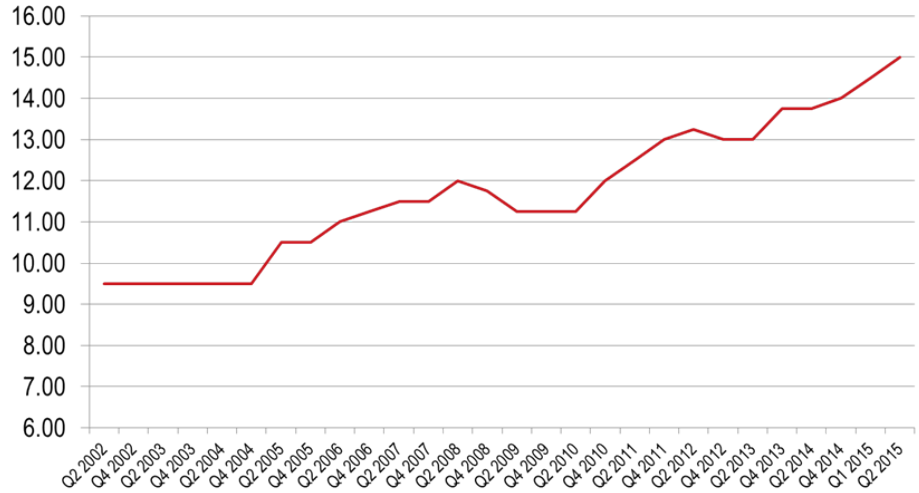
Old Oak and Park Royal trends

5.3 The Old Oak and Park Royal market has seen similar trends in demand and supply, and in many respects has led the recovery in industrial markets in London. Industrial take-up within Old Oak and Park Royal, based on the Park Royal Atlas boundary, increased by 15% in 2014 compared with 2013, with an annual average level of gross take-up of 58,985 sq m (634,910 sq ft) over the past three years. Available supply in this area at the end of 2014 stood at approximately 100,000 sq m of industrial floorspace, representing a vacancy rate of under 6% of the total industrial stock (based on the Park Royal Atlas figure for the industrial stock of 1,735,729 sq m). As a result, achievable industrial rents in Old Oak and Park Royal have increased significantly over the past three years, as highlighted in the following graph.

5.4 The Old Oak and Park Royal market is one of London's primary industrial property markets due primarily to its proximity to central London (Central Activities Zone) and its good connectivity to main roads, notably the A40 and A406, North Circular. Many businesses consider Old Oak and Park Royal to be a strong location to service customers in London or the wider South East, which are the UK's largest economic regions.

5.5 Market demand in Old Oak and Park Royal is predominantly for industrial space, reflecting the area's Strategic Industrial Location (SIL) designation. The area does not attract significant demand for offices, mainly due to the industrial nature of its built environment, the skills base of local labour, the area's relatively limited public transport access (notably London Underground stations) compared with more established office locations in west London and a lack of amenities (such as shops and cafes/restaurants) which office occupiers typically require.

fig. 36 Prime industrial rents in Old Oak and Park Royal



Demand for offices

5.6 Over the past 10 to 15 years, the only sizeable new office development that has taken place in Old Oak and Park Royal has been at First Central, on the former Guinness brewery site. This site is being promoted by a JV between London & Regional Properties and Guinness Ltd and its development reinforces our general observation about limited market demand. The first building at this site was completed in 2002 and let to Diageo. The second building (First Central 200) was developed speculatively and completed about 10 years ago, and subsequently acquired by Wainbridge in 2011. It still has some 6,743 sq m (72,578 sq ft) available on Levels 4, 5 and 6. Bechtel Limited, an engineering, construction and project management company, has leased around 8,268 sq m (89,000 sq ft) here on the ground, first, second and third floor. The remainder of this park has capacity for a further three high quality office buildings, with planning consent totalling around 60,385 sq m (650,000 sq ft). Excluding First Central, the office stock in Old Oak

1 *JLL, UK Industrial Property Trends Today, March 2015; Lambert Smith Hampton, Industrial & Logistics Market 2015*

and Park Royal is mainly in older buildings. More established office locations in west London, which attract stronger demand, include Hammersmith and Chiswick.

5.7 Clearly, if Old Oak is redeveloped as anticipated, including with a new Crossrail and HS2 interchange, then this would make this area significantly more attractive for major office occupiers. However, it is not possible to highlight or predict demand at this stage. Long-term, demand is expected to be generated by a 'game changing' investment in transport infrastructure and housing in this area, coupled with a growth in office-based employment in London and potential capacity at Old Oak.

Sectors

5.8 The demand for industrial premises in Old Oak and Park Royal comes from a wide diversity of 'industrial sectors', as highlighted by the Park Royal Atlas. However, three broad activities (rather than sectors) are particularly important sources of demand, namely: food and drink manufacture; film, TV, media and related activities and logistics activities, including retail distribution and express delivery. In addition, parts of Old Oak and Park Royal also attract significant demand from businesses undertaking car repair, maintenance and servicing. Niche industrial users, such as self-storage operators and trade counters, are also represented, with both of these types of occupiers looking for premises with good visibility on, or close to, main roads.

INDUSTRIAL OCCUPIER REQUIREMENTS

Size

5.9 The type of industrial property businesses require is partly a function of their size and partly a function of what they do. Micro businesses (with less than 10 employees) typically start off in shared 'managed workspace', but may also operate from small units, usually within a terrace development. Small and medium sized businesses (SMEs) are usually found in relatively standard industrial buildings, although small units are often developed as part of a terrace, whereas larger (medium-sized and large) units are more likely to be detached. Large businesses often operate out of standard buildings, although bigger buildings may also need to be 'built to suit' for specific operational requirements. This is often the case with specialist manufacturing facilities, for example, or warehouses with specialist operational requirements, such as automated storage and retrieval systems. Large businesses are more likely to operate out of detached, rather than terraced, buildings.

Use of Space

5.10 From an operational perspective, businesses generally want premises that provide clear, unobstructed, industrial floorspace so that they can organise their activities in whatever way suits them best and change the layout over time if they wish. The industrial area needs to have appropriate doors for inbound and outbound deliveries; in small and medium sized premises this access is typically provided by a level-access door or doors, whereas larger units (typically from about 3,000 sq m to 4,000 sq m) tend to have dock-level loading to allow efficient service from an articulated lorry, in addition to level-access loading.

Loading / servicing

5.11 The type of loading doors is usually reflected in the size of external yards. Small and medium-sized buildings serviced via level access doors are more usually part of a terrace while larger buildings that provide dock-level loading are more often detached buildings with larger yard areas often with a minimum yard depth of 35 metres in front of the loading bay. The yard space also caters for separate car parking spaces.

Ancillary office

5.12 In addition to the industrial floorspace and external yard, businesses require some office floorspace. In small units this is sometimes provided at first floor above the industrial floorspace, but in modern developments the office space is usually provided at first floor level (or first and second floor level) so as to allow a full height industrial / warehouse space. The internal height of the industrial space usually varies by size of space. Modern units typically provide a minimum of 6 metres clear internal height, with units from 1,000 sq m more usually providing 8 metres, and units above 2,000 sq m, 10 metres. Unit of 3,000 sq m and over typically provide a clear height of 12 metres.

Floor to ceiling heights

5.13 The height that businesses actually require depends on the activity they undertake. For example, food manufacture and processing usually takes place on a single floor, so companies undertaking these activities do not usually require very high buildings above say 5 to 6 metres. This is true also of many types of light industrial and assembly activities. However, companies undertaking storage and distribution activities often want more height to enable them to install racking for pallets, or other types of storage, as this will enable them to make best use of the space. In some cases, these businesses may want buildings that provide 12 metres or more of internal height to permit high racking systems, including automated storage and retrieval systems (ASRS). Some businesses may also want relatively high buildings so as to install one or more mezzanine floors. We are aware of companies that have installed mezzanine floors in buildings offering 6 metres clear height; a 10-metre clear height may permit two mezzanine floors.

5.14 Higher buildings can be considered as one way of intensifying the industrial land, either by permitting mezzanine floors or by enabling the occupier to make better use of the cubic capacity of the buildings.

WHAT DEVELOPERS WANT TO PROVIDE

5.15 Developers want to provide buildings that meet occupier requirements but they also need to take account of investment market requirements. This is true whether the developer is a 'developer-trader', who usually develop buildings and sell the completed product to either an owner occupier or an investor (such as a pension or insurance fund), or an 'investor-developer' who own and manage the stock it creates.

5.16 Where a developer is building a speculative development for the market it will aim to appeal to the widest possible range of occupiers whilst also meeting investor requirements. As a result, major developers tend to favour relatively standard industrial developments which are often aimed at medium-sized and larger businesses. This is partly because small units are more expensive to build. In addition, many small businesses have weaker financial credentials than medium and larger businesses and are, therefore, seen by both developers and investors as a higher risk, which adversely affects value. By contrast, medium and larger sized units are attractive to developers and the investor market because they have a wide market appeal to established businesses with relatively strong financials and the units are less management intensive than smaller units.

5.17 The above considerations tend to mean that major developers often favour medium and larger sized units over small ones, even where there is strong demand for the latter, as is the case in today's market. Smaller developers may partly meet this demand, or the market may fail to adequately address this need. In Park Royal for example, Sidney Newton Limited recently completed a small 7-unit scheme known as Newton Business Park on Standard Road which we understand attracted more than 400 enquiries. All seven units have been let or sold.

VIABILITY

5.18 In the current market the competition for standard industrial development opportunities in Park Royal is intense and developers are prepared to bid over £4.9 million per ha (£2 million an acre) when appropriate opportunities arise. For example, in September 2014 FSP Property acquired Gormley House, Wallow Road on behalf of Canmoor Developments for £6,275,000. This property is a mixed use asset comprising business units, offices and external storage areas with frontage to Waxlow Road. The property is let to Gormley (Masonry Services) Ltd until 23rd June 2015 at £489,724 per annum. The site offers a prime redevelopment opportunity on 0.92 ha (2.265 acres). The purchase price reflects a net initial yield of 7.37% and a price of £6.85 million per ha (£2.77million per acre).

5.19 The value that developers will pay for land is effectively the 'residual' from a development appraisal that compares the development value that a development will create with the total acquisition costs (land, construction costs, professional and marketing fees and finance) assuming a target level of profit. In the current market, a developer will typically target a profit on cost of between 12.5% and 15% for a speculative development and around 10% for a pre-let/pre-sold development, where the risk is reduced.

5.20 At present, development values are supported by both the high level of rents achievable in the market and the low level of investment yields.[2] Over the past couple of years, speculative development in Park Royal has become increasingly attractive because rents have been rising, investment yields have been falling and the market balance between demand and supply has moved in favour of developers, as available supply (vacancy) has fallen and demand has strengthened.

5.21 The previous figure shows how prime industrial rents in Old Oak and Park Royal have increased while the following figure shows how prime industrial investment yields in Old Oak and Park Royal have fallen over recent years.

2 The gross development value is determined by multiplying the rental area of the development by the rent and then multiplying this Gross Market Rental Value (MRV), adjusted for any assumed rent free period, by the inverse of the investment yield.

fig. 37 Prime industrial investment yields in Old Oak and Park Royal

PROPERTY MARKET DEMAND 2031

5.22 This section does not consider the future level of property demand in 2031 but rather whether it is reasonable to envisage any significant changes in the type of industrial space businesses may require or developers may provide. In particular, given what our analysis shows about the loss of industrial land in the boroughs of Brent, Ealing and Hammersmith and Fulham, the focus of this section is on how changes in demand may affect development densities (ie the amount of floorspace, gross external area) provided for a given land area.

Current Trends

5.23 The first point to make is that changes in demand for industrial buildings over the past 15 to 20 years have been relatively modest, and evolutionary. Indeed, looking back over the past 15 to 20 years, in our assessment the two main changes in industrial building demand have involved:

1 More demand for higher buildings.

2 More demand for buildings with more external yard space.

Trend 1

5.24 The first trend reflects demand to maximise storage space within a given floor area. This trend has been more significant outside of London, reflecting the location of larger storage facilities, such as National Distribution Centres (which are often located in the Midlands) and Regional Distribution Centres. Reflecting this trend, speculative industrial properties that are being developed now are generally as high as, or higher than, comparable buildings built 15 to 20 years ago.

Trend 2

5.25 The second trend reflects a movement to more just in time distribution, in which the building supports rapid throughput rather than stock-holding. This trend is more important in London than elsewhere because of the significance of just in time supply and the lower significance of storage. In this case occupiers tend to require buildings with larger yard areas to accommodate a higher volume of inbound and outbound deliveries. In today's market there is significant demand from larger occupiers for their own self-contained, and secure, yard space.

5.26 One factor that has been driving this trend over recent years has been the growth of online shopping and the related growth in parcel volumes. Parcel distribution networks tend to be based on a hub and spoke design with the central hub acting as a sortation centre whilst local parcel centres (spokes) act as local collection and distribution centres. The central parcel hubs are usually located in the Midlands, but London has a significant number of local parcel distribution centres. Both the hub and spokes tend to be relatively low density facilities. New facilities are often based on a 'cross dock' design, with separate loading provision on different sides of the building for inbound and outbound vehicles.

5.27 Looking forward over the next 15 to 20 years we believe these two trends are unlikely to change significantly. We suspect that the major changes in height have already occurred but that the trend in demand for more yard space will continue.

Future trends

5.28 There are two other changes that may take place over the next 15 to 20 years in so far as these would appear to represent logical responses to business challenges or property market conditions.

1 More demand for shared user facilities;

2 Demand for multi-storey industrial space (potentially supply-led).

Trend 1

5.29 The first potential change is that we may see more demand from companies for shared user facilities, where they are able to secure the use of a building or network of buildings without having to lease or own their own dedicated premises, or in addition to having dedicated facilities. This change could be facilitated by interest from logistics companies in managing these types of buildings.

5.30 One example of a shared user facility is a retail consolidation centre (RCC). To date there are a relatively small number of such centres in the UK, and those that have been set up have been have been mainly driven by landlord initiatives rather than demand from retailers. The following table lists some examples. To date, RCCs, have mainly been established to service certain airports, major shopping centres and Regents Street in central London. Looking forward over the next 15-20 years, we believe we could see more retail consolidation centres (or similar centres to service the catering/ hospitality industry) in London due to the high costs associated with operating dedicated warehouses, potential cost and service benefits and other issues, such as congestion.

5.31 Another example of this change would be more demand from companies for space within managed facilities. Within Park Royal, for example, the Dephna Group provides a range of managed facilities, including kitchen space and music studios, which business are can hire on a flexible basis. Demand for this type of space could increase in line with wider predictions of a growth in the 'sharing economy'.[3]

Trend 2

5.32 The second change we may see is some demand for multi-storey warehousing, which could be considered an appropriate response to the loss of industrial land in London and the likely intensification of competition for land as London's population grows. We consider this potential change in more detail in a later section.

3 Debbie Wosslow, Unlocking the sharing economy, November 2014.

fig. 38 Examples of retail consolidation centres in the UK

Source: JLL

	Location	Operator
Heathrow Retail Consolidation Centre	Prologis Park, Heathrow	DHL
Meadowhall	Sheffield	Clipper Logistics
Bristol Broadmeads	Bristol	DHL
Clipper Enfield	Enfield	Clipper Logistics
Bluewater	Greenhithe	
Westfield Stratford	8 miles from shopping centre	DHL
Manchester Airport		Norbert Dentressangle
Services Norwich city centre	Snetterton	Foulger Transport
Gatwick Airport Consolidation Centre		DHL

REDEVELOPMENT AND REPLACEMENT

5.33 In our assessment standard industrial buildings typically have an economic life of between 40 to 50 years before they become physically or functional obsolete, hence the re-development and replacement of Park Royal's existing stock will be a gradual process.

5.34 Based on GLA research, the development density of older industrial buildings in Old Oak and Old Oak and Park Royal is around 75 to 80 per cent (ie GEA to site area). This relatively high density reflects the fact that many older buildings were originally built to meet the requirements of manufacturing companies that had less need for big yards for deliveries, or to meet the demand for warehouses to hold stock rather than to support rapid throughput distribution.

5.35 Our research suggests that when older buildings are redeveloped for new then densities decrease. For example, SEGRO is redeveloping five out-dated buildings on the Westway Industrial Estate off Old Oak Lane to replace them with six new speculative buildings (four of c 5,000 sq ft and two of c 12,000 sq ft each) totalling c 44,000 sq ft on a site of approximately two acres.[4] This equates to a plot density of around 50%. According to SEGRO, 'all of these units will have extended yard space to allow vehicles to manoeuvre safely' and, as a result, it is most likely that the plot density of the new development will be lower than the density of the demolished buildings.

5.36 The table below highlights some recent industrial developments that have been completed in Park Royal and the approximate development densities involved. The highest densities have generally been achieved by the provision of office floorspace on first and second floor levels.

5.37 In addition to the above, Goya Developments secured planning consent for a 4,864 sq m (52,362 sq ft) speculative development on Victoria Road on a site of approximately 1.01 ha (2.5acres), which represents a development density of 48%. However, this development is now unlikely to proceed as the land falls within the HS2 safeguarded zone.

4 *Size and site details from SEGRO press release 'Redevelopment of Westway Industrial Estate, Park Royal begins', 27 January 2015*

fig. 39 The re-development of Park Royal. Selective speculative industrial developments

Source: JLL. Floor areas based on property brochures and site areas on brochures or reports. Figures may not be exact.

Property/ Location	Developer/ investor	Land area Ha (acres)	Developed floorspace	Plot ratio	Comment
Westway Industrial Estate W3 7XR	SEGRO	c 0.81 ha (2 acres)	c. 4,088 sq m (44,000 sq ft) in 6 units	c. 50%	Demolition underway.
Origin. Rainsford Road NW10 7EW	SEGRO	9.71 to 10.12 ha (24-25 acres)	Phase 1: 3 spec buildings totalling 14,697 sq m (158,200 sq ft). Phase 2: D& B for 28,100 sq m (302,480 sq ft).	42% to 44% depending on land area	First phase completed in 2014.
Central Park, Central Way, NW10 7NS	Goya and SWIP	2.63 ha (6.50 acres)	15,111 sq m (162,651 sq ft) in 9 units	57%	Speculative development completed in 2012. All units built with full height warehouse space with first floor offices.
Vision Industrial Park, Kendal Avenue W3 0RA	Canmoor and British Airways Pension Fund.	Reported as c 1.62 ha (4 acres)	11,682 sq m (125,750 sq ft) in 16 units	72%	Speculative development completed in 2009
Thunder & Lightning, Rainsford Road NW10 7RX	Canmoor & Standard Life	2.10 ha (5.2 acres)	15,945 (171,634 sq ft) in 2 units: 10,012 sqm (107,772 sq ft) 5,933 sq m (63,862 sq ft)	76%	Speculative development completed in 2008. Both units built with full height warehouse space and offices on first and second floor.

5.38 The above analysis highlights a significant range in densities. The Origin site is a relatively low density development (c 42 to 44 per cent depending on the exact land area) reflecting the fact that the units are all detached with their own self-contained secure yards, 40 metres deep in the case of the three speculative units competed in phase 1.

5.39 Clearly the density of development achievable on any specific site will reflect a range of factors including most importantly the configuration of the site, the size of the external yard space and the level of office floorspace incorporated into the development (eg the density of the Thunder & Lighting development is driven up by relatively tight yard space and two floors of office space). However, our analysis suggests that where existing buildings are redeveloped with standard single-storey buildings then the plot density will generally be lower.

5.40 We believe that most densities for new single storey industrial / warehouse buildings on Park Royal delivered by the market are likely to be between 50% and 60%over the next 15-20 years.

MULTI-STOREY DEVELOPMENT

5.41 To meet the ambitions of increasing job capacity in Park Royal, one intuitively obvious way in which industrial densities could be increased is through the development of multi-storey buildings. However, only one such building has been speculatively developed in the UK and this was not generally well received by the market. In addition, there is uncertainty over the commercial viability of such developments compared with existing ground floor buildings.

UK examples

5.42 To date the only speculative multi-storey warehouse developed in the UK is the X2 development at Hatton Cross, Heathrow, which was originally developed by Brixton plc, prior to its acquisition by SEGRO – the building's current owner.

5.43 When developed, X2 provided eight separate units on two levels (ground and first floor) with a total floorspace of 21,774 sq m (234,381 sq ft). It was designed to be multi-occupied with a focus on airport cargo and airport-related occupiers with high throughput requirements, rather than storage. Each unit has a clear height of 6 metres and two level access doors. The ground floor units have a floor loading of 30 kN/sq m with the first floor units having a floor loading of 15kN/sq m. Each unit incorporates office space at first floor level.

5.44 X2 provides two separate access points, one for commercial vehicles and one for cars with two pedestrian gates. Car parking for 169 cars is provided. The upper floor is serviced by two one-way ramps for commercial vehicles. All the units have dedicated yard areas with a minimum depth of 33 metres.

5.45 X2 was completed in 2008. The first letting was to Airworld Services Ltd which leased units 1, 2 and 3 on the ground floor and expanded into unit 4, thereby taking the whole of the ground floor. On the upper level, Unit 5 (3,393 sq m/36,524 sq ft) was let to Freightnet Handling which also leased unit 6 (2,556 sq m/27,513 sq ft). Westgate Handling Services leased unit 7 (2,550 sq m/ 7,452 sq ft). Unit 8 (3,151 sq m/ 33,916 sq ft) remains vacant and available.

5.46 X2 was received with caution by the market, with occupiers being particularly cautious about the ramp access, which was one reason why Brixton developed two separate ramps in the first place. The building was relatively slow to let, although this may have been partly due to its completion prior to the recession and specific issues with the building's design rather than the fact that it was a two-storey building. For example, X2 was considered very densely developed. In addition, asking rents were initially relatively high compared with comparable off-airport buildings on the south side of the airport.

View of multi-storey warehousing in the UK

5.47 As a result of the X2 experience and the subsequent downturn in market conditions, multi-storey development has not re-appeared on the industrial market agenda in the UK. However, the pressure on industrial land in London, particularly in west London, may change perceptions. It should also be noted that multi-storey buildings do exist in a number of other major cities where land supply for logistics is very constrained, notably Tokyo, Hong Kong and Shanghai.

5.48 One issue is clearly commercial viability, and this is difficult to assess because of a number of unknowns. For example, whilst a multi-storey development would enable a developer to increase the rental area it is likely that the achievable rental levels would be lower than with a standard ground level development, particularly as occupiers would expect a discount for taking upper floor space. In addition, we suspect that the investment market would expect a higher yield to reflect greater risk, which would reduce the development's overall value. The building costs for a multi-storey development would also be significantly higher than for standard ground level building, although we do not know by how much. According to an article in the Architects Journal, the X2 building was 50 per cent more expensive to build per sq m than a single-storey building but, countering this, the development represented a development density of 86 per cent on a site of 2.6 ha compared with say a 45 per cent density for a standard ground floor building.[5]

Multi-storey modelling

5.49 We have undertaken three separate hypothetical development appraisals for a multi-storey development on 2.02 ha (5 acres), assuming a 50%increase in building costs compared with a standard building and a development density of 86% (comparable with X2). For the first two appraisals, we assumed that the building is designed to be let to a single occupier. In both cases we assumed a 10% discount for rents compared with a standard building but in one appraisal we assumed the yield was 50 bp (0.5%) higher than those that might apply to a single storey warehouse, and in the other we assumed it was 100 bp (1.0%) higher. In the third appraisal we made some adjustments to reflect a multi-unit development designed to be let to a number of occupiers; the adjustments included reducing the development density to c. 80%. We assumed the same rent free period of 6 months in each case. Based on these assumptions, we believe such as a speculative development could be commercially viable in Park Royal in the current market although more in-depth appraisals would need to be undertaken to test this more thoroughly. In addition, there are clearly a range of 'real world' issues that would need to be addressed including identifying a suitable site and a willing landowner.

5.50 Potentially, one way in which such as development may be realised is through a build to suit development for a specific occupier as opposed to a speculative development for the market. This is something that might work for a dedicated occupier (eg a major retailer) or for a logistics company which could operate the building either for a dedicated customer or as a shared user facility.

Business units on top of ground floor industrial

5.51 Another type of multi-storey development would involve the provision of small business workshop, office or studio units above ground floor industrial warehouse space, but this type of development is currently very rarely built. We are aware that Workspace Group was planning such a development at Victoria Road in Park Royal and secured planning permission for a development which included studio units on first and second floor above ground floor trade counters. Its proposal totalled some 6,886 sq m (74,120 sq ft) on a site of 1.01 ha (2.5 acres), representing a development density of 68%However, Workspace sold this site to Goya Developments and the development has not taken place. Goya subsequently secured consent for a conventional industrial scheme of 4,864 sq m (52,362 sq ft) reflecting a development density of 48%.

5.52 We have undertaken a high level hypothetical development appraisal involving ground industrial/warehouse space and first floor business units; based on what we consider to be reasonable assumptions for building costs, rents and yields, this type of development would appear to be viable in the current Park Royal market. As with the multi-storey warehouse modelling, a more in-depth appraisal would need to be undertaken to test this more thoroughly.

Stacked, or roof-top, car parking

5.53 Another potential way of intensification could be achieved by stacking car parking spaces or by enabling car parking on the building's roof. For example, Bodin's building at 114-120 Victoria Road in Park Royal has a ramp up to the roof of the building for car parking. Both approaches could potentially enable a higher level of development density for a given land area, subject to viability.

5 *Architects Journal, 12 November 2008. Ramped warehouses, by EPR Architects and Cornish Architects.*

PROPERTY MARKET CONCLUSIONS

5.54 The industrial property market in Old Oak and Park Royal is currently characterised by strong occupier demand, limited available supply, low vacancy rates, rising rental levels and low investment yields. This is a very attractive market for many businesses and for developers and investors. Whilst occupiers want choice, developers and investors are attracted by the large pool of businesses and the limited supply of property and land.

5.55 Developers want to provide buildings that meet occupier requirements but also need to consider the requirements of investors. As a result, major developers tend to build speculative units that are targeted at medium and larger businesses rather than micro or small businesses.

5.56 When sites are redeveloped, the development density of the new development is generally lower than the density of the replaced space. This reflects the larger yards associated with new buildings, which reflects market demand, as many occupiers want their own self-contained and secure yard areas. However, the new buildings are also typically taller than the older buildings they replace. Overall, therefore, re-development typically leads to lower plot densities but the additional height of the new buildings may permit an intensification of economic activity.

Multi-storey warehouse in Park Royal

5.57 In addition to intensification through additional height, we believe that in the current market a multi-storey warehouse development would be viable in Park Royal and such a development would have a higher plot density than a standard new ground floor development. However, the market has been very cautious about multi-storey warehouse development. Therefore, we suspect this type of development will make only a very limited impact (or none at all) on the re-development of Park Royal over the period to 2031. Potentially, for example, if one such building was developed and this proved successful (either on a built to suit or speculative basis) this might lead to further development but the highly fragmented nature of land ownership in Park Royal and the limited number of large sites are significant constraints, in addition to market perceptions.

5.58 It is also possible that we could see some intensification of land by the development of small business units on top of ground floor industrial /warehouse space, but we suspect the potential for this is quite modest. These types of development are very rare.

5.59 A further way we could see some intensification is through more shared user facilities, such as retail consolidation centres or other types of common user facilities. This type of development may represent an intensification of land use by permitting a more intensive economic activity and by reducing the need for each business using the shared facility to have its own building. The availability of managed workspaces for industrial activities (such as food manufacture), such as provided by Dephna Estates in Park Royal, could have a similar affect.

5.60 Another form of intensification could potentially be achieved by decking car parking spaces or possibly by enabling roof-top car parking. We are aware of some examples of these but have not assessed their viability in the current market.

5.61 Overall, however, we think the potential for intensification over the period 2031 will be quite modest, bearing in mind the length of life of a standard building (40-50 years) and the comparatively modest rate of redevelopment (as a percentage of the total industrial stock).

5.62 Having regard to the plot densities of recent developments, and the pattern of land ownership in Park Royal, we believe an overall plot density of 60% is a reasonable guide for the purpose of forecasting future industrial floorspace at Park Royal. However, for forecasting future industrial floorspace we would suggest a higher plot density (eg 75 per cent) in those parts of Park Royal where land ownership is highly fragmented and where densities are already above average. This is the case, for example, in the area incorporated by Minerva Road, Standard Road, Gorst Road and Sunbeam Road (subareas E3 and E4). The fragmented nature of land ownership in this area means that it is less likely that larger sites, offering relatively large external yards and lower site densities, will be developed.

5.63 Although we think that it is possible that Park Royal may see a multi-storey warehouse development or a multi-storey building involving ground floor industrial/ warehouse space with small units above, we think the impact of either will be modest in the planning timescale (2031/2035) and, therefore, would not suggest a separate density assumption for these types of development.

6 INTENSIFICATION

INTRODUCTION

6.1 The previous Quantitative Supply and Demand and Market Profile chapters of this study identify an increasing demand for industrial workspace and land in the OPDC area but decreasing overall supply of industrial land in the area and the three surrounding boroughs. In response, this sections looks at the potentials and barriers of intensifying the use of the current industrial employment sites in Park Royal based on their characteristics and the needs of the businesses using them. The following three intensification studies explore through text and sketches several options for more intensive alternatives based on the four typical industrial site typologies in Park Royal: warehouses, industrial estates, dense light industrial and business centres.

6.2 Based on the previous site analysis combined with interviews of businesses and industrial developers it is clear that while there is strong demand for ground floor industrial units with yard space there is also an issue with congested roads. The intensification of sites in Park Royal has the potential to free up ground floor space for the businesses that need it by providing space on upper floors for businesses that can function without ground floor and yard space such as workshops, offices and artist studios. Currently 85%, over 1000 of the businesses identified in the OPDC area, occupy premises with a ground floor. Of those, 45%, over 450 businesses are non-industrial and most of them, other than the shops, and restaurants, could be located on upper floors just as well as on the ground floor. Some light industrial businesses could also function on upper floors, especially if provided with the necessary facilities to do so. Currently 5%, over 60 of the industrial businesses in the OPDC area, are already located on upper floors. However, to avoid worsening congestion and provide sufficient yard space additional businesses on upper floors would only have access to limited yard and parking space at ground level.

6.3 One barrier to implementing many of the proposals is overcoming the conservative nature of most industrial development in London as discussed in the market demand section. Many of the options discussed would require specialist industrial site developers and management firms to take on new roles or work together to deal with the more intense design, planning and management necessary for more intensive industrial sites. As the conditions of the industrial site market evolve the public sector can play a role in supporting and encouraging industrial developers to adapt and innovate to provide the spaces required by a diverse range of industrial businesses.

STUDY A: STANDALONE WAREHOUSES

6.4 Recent redevelopment in Park Royal has seen the construction of modern warehouses aimed mainly at logistics businesses. While these sites have lower than average plot ratios, the high interior spaces and exterior yards are more efficiently used. Such sites could have the potential to be more intensively used without compromising the efficient functioning of the main warehouse tenant. Study A looks at options to modify the design of a typical standalone warehouse site so that it can be used more intensively and the barriers faced.

1. **Edge workspace** –Additional thin multi-storey building with workspaces can be built on one or two sides of the standalone warehouse, preferably along a street frontage. This must be planned so that the warehouse yard space is not reduced nor the loading bays obstructed. These workspaces can provide savings on wall structure, insulation and heating costs for the warehouse they serve as a buffer to outside. The workspaces need to be flexible enough to accommodate diverse light industrial workshop uses so that they can be let out to growing businesses of different sizes. The workspaces should be independent from the warehouse with a separate entrance so that they can be managed separately and possibly even be under separate ownership. To not encroach on the warehouse yard space, the workspaces should have only limited client parking and space for small deliveries. The site would therefore need to be well located for public transport access so that employees do not need to drive to work. There are several existing examples of warehouses in Park Royal with adjacent office space and workshop space shared by different businesses.
2. **Rooftop Workspace** –Workspaces can also be added above the warehouse. While this will increase the structural costs for the warehouse below, the analysis in the market demand chapter suggests that this type of development can still be feasible. There are some existing examples of independent office floors above warehouses of various sizes in Park Royal.
3. **Street frontage** – Locating workspaces and their entrance facing the road can create a more active street frontage and more vibrant streetscape. As could appropriately located ancillary retail uses where they operate from their manufacturing premises. There are a number of food manufactures who operate ancillary retail from their premises. There may also be merit in locating additional appropriate shops, services or restaurants at the ground floor but this needs to be considered as part of the wider retail strategy for the area.
4. **Complementary uses** – The business using the warehouse could benefit from complimentary business uses in the adjacent workspaces. For instance a café would be beneficial for the workers while small flexible enterprises may be able to provide other complimentary services to the business.
5. **Rooftop agriculture** – The roof structure can be specified to support roof top agriculture on the large roof area to grow fresh ingredients that can be sold to food businesses within the area. There are several successful rooftop urban agriculture projects in other cities that use the roofs of warehouses to produce vegetables to sell locally. Often these are added on the roofs of existing warehouses.
6. **Rooftop energy** – Photovoltaic panels can supply the electricity necessary for some of the businesses on the site, helping to make them more self-sufficient and sustainable. This can also help to reduce the load on the power grid and help to reduce the costs of reserving the power supply for new industrial floor space. The increased local demand for clean technology could also support the growth of a greener local economy and provide a local market and testing ground for start-up and established businesses developing and supplying green technology products.

fig. 40 Study A: typical site

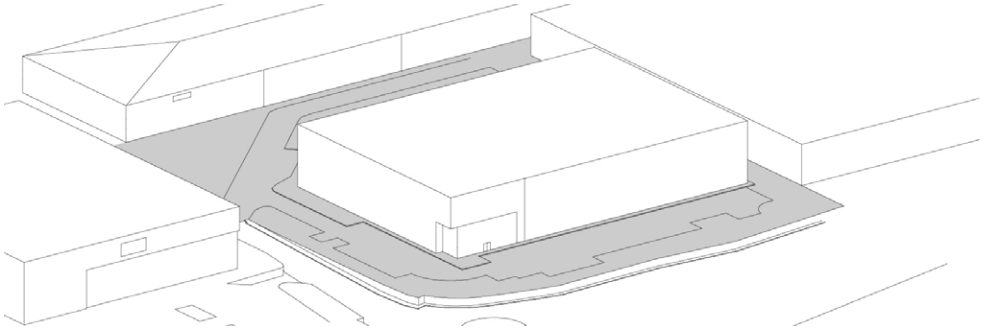


fig. 41 Study A: intensified floorspace options

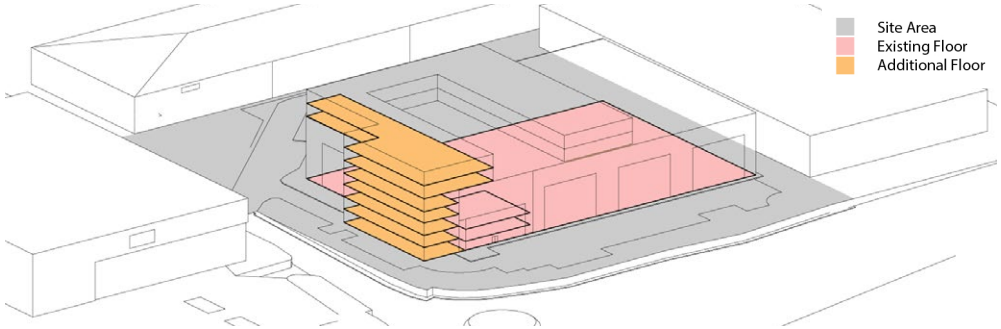
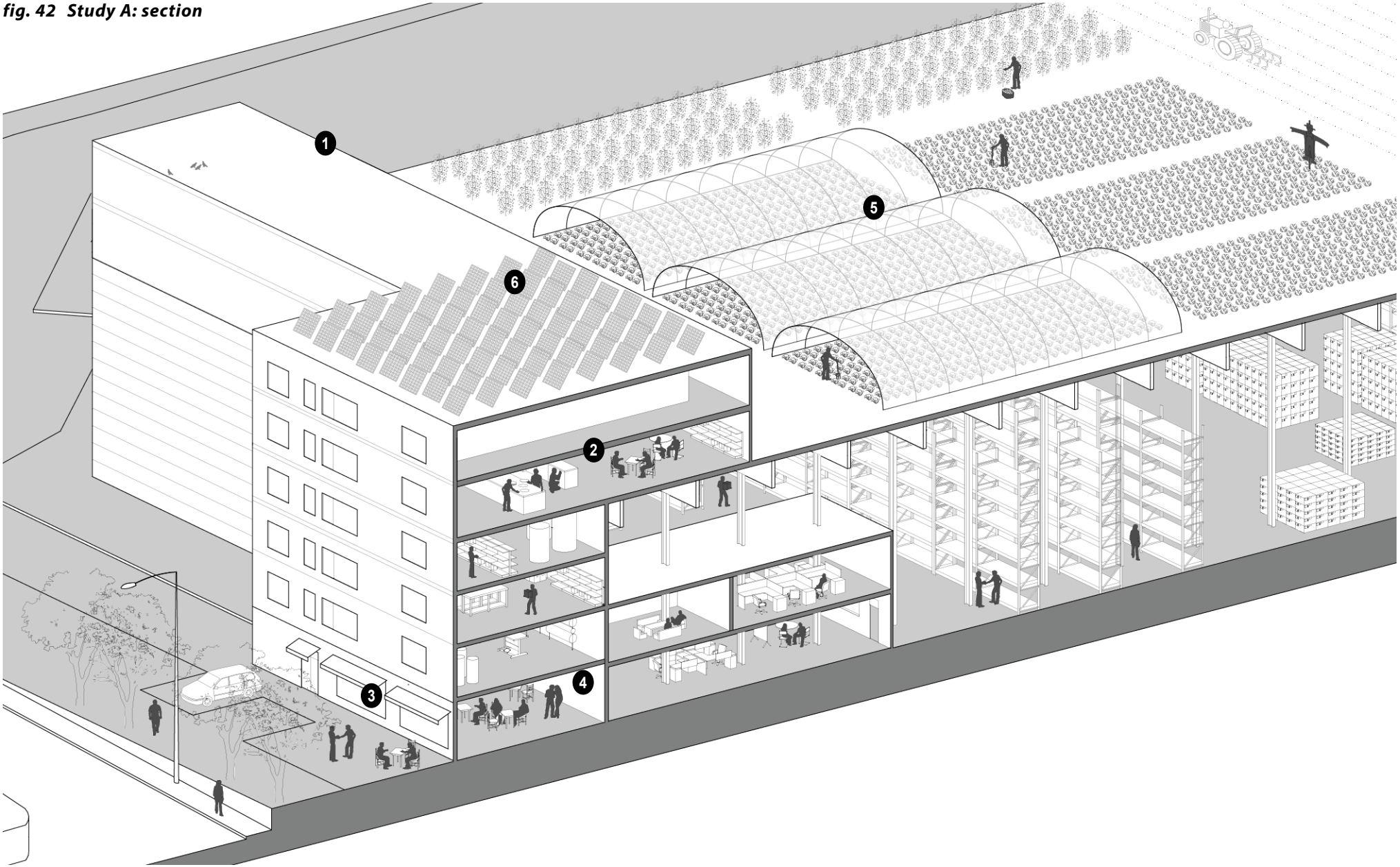


fig. 42 Study A: section



STUDY B: INDUSTRIAL ESTATE

6.5 A wide range of examples of the industrial estate site typology have been built in Park Royal over recent decades, from larger terraced warehouses on the former Heinz factory site to a row of smaller warehouses on an infill site amongst older warehouse buildings. They all follow a similar layout of terraced warehouses with some office space at the front and a large loading door opening onto a central yard and parking space area. The standardised units accommodate a very wide range of businesses, some of which use their yard space intensively, others which use it for car parking and others that don't use it at all. Study B explores options how such an industrial estate could be built more intensively while providing sufficient yard space for industrial businesses.

1. **Rooftop yard and warehouses** – Small warehouses and yard space can be provided on a second level above what would normally be a single level of warehouses. A large amount of space would be needed for a ramp so this option would need to be efficiently planned. The assessment of larger multilevel warehouse in the market demand section suggests that this can be as viable as building just one level of warehouses. While adding structural costs and limiting loading for activities on the upper floors it can also provide additional rental income. To keep the additional ramp access and structural costs down, access to the upper deck could be limited to vans while a ground floor loading bay for large lorries can be shared by all the business on the site.
2. **Rooftop workspace** – Multi-storey industrial estate typologies could also include flexible workspace above any smaller ground floor warehouse units. These spaces would be limited to uses that require only limited yard and visitor parking space at ground level such as workshops, artist studios, offices and shared workspaces. These units would be accessed via a shared lift, stairs and access deck to keep costs to a minimum. The possibility of adding workspace above a warehouse with the simple addition of a staircase should also be planned for. As mentioned, there are several examples of workspaces above warehouses across Park Royal.
3. **Shared loading bay** – For deliveries by large lorries, a shared loading facility can be provided for the whole site and could even be shared with neighbouring sites. This would cut the cost for businesses to rent yard space they only need intermittently and would avoid the need to unload large lorries in the street which congests the streets.
4. **Roof energy** – As in Study A: Standalone Warehouse, photovoltaic panels can supply the electricity necessary for some of the businesses on the site, helping to make them more self sufficient and sustainable. This can also help to reduce the load on the power grid and help to reduce the costs of reserving the power supply for new industrial floor space. The increased local demand for solar panels could also support the growth of a greener local economy and provide a local market and testing ground for businesses developing and supplying ecological products.

fig. 43 Study B: typical site

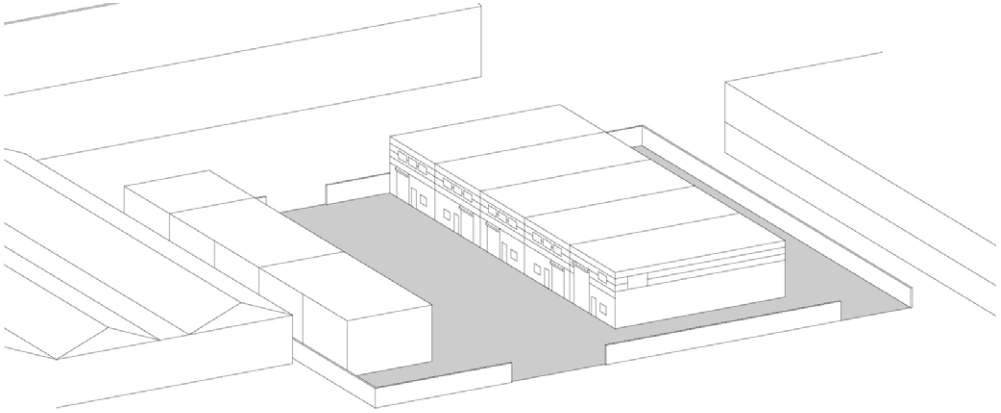


fig. 44 Study B: intensified floorspace options

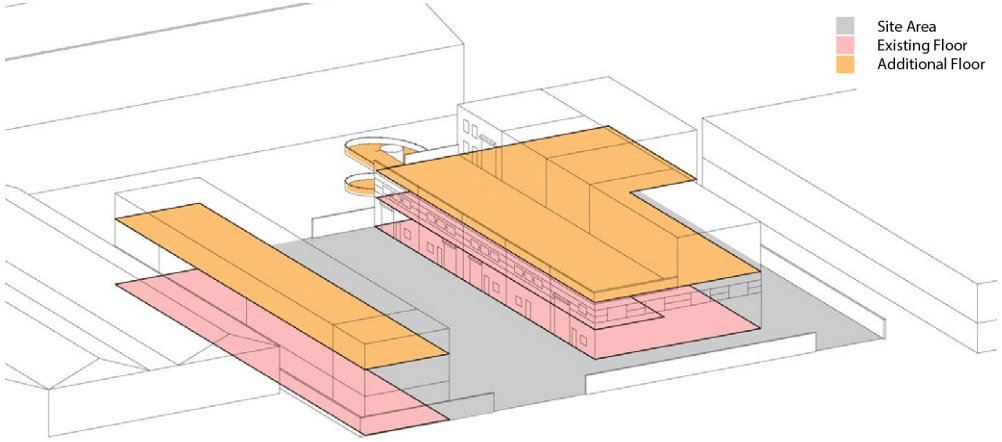
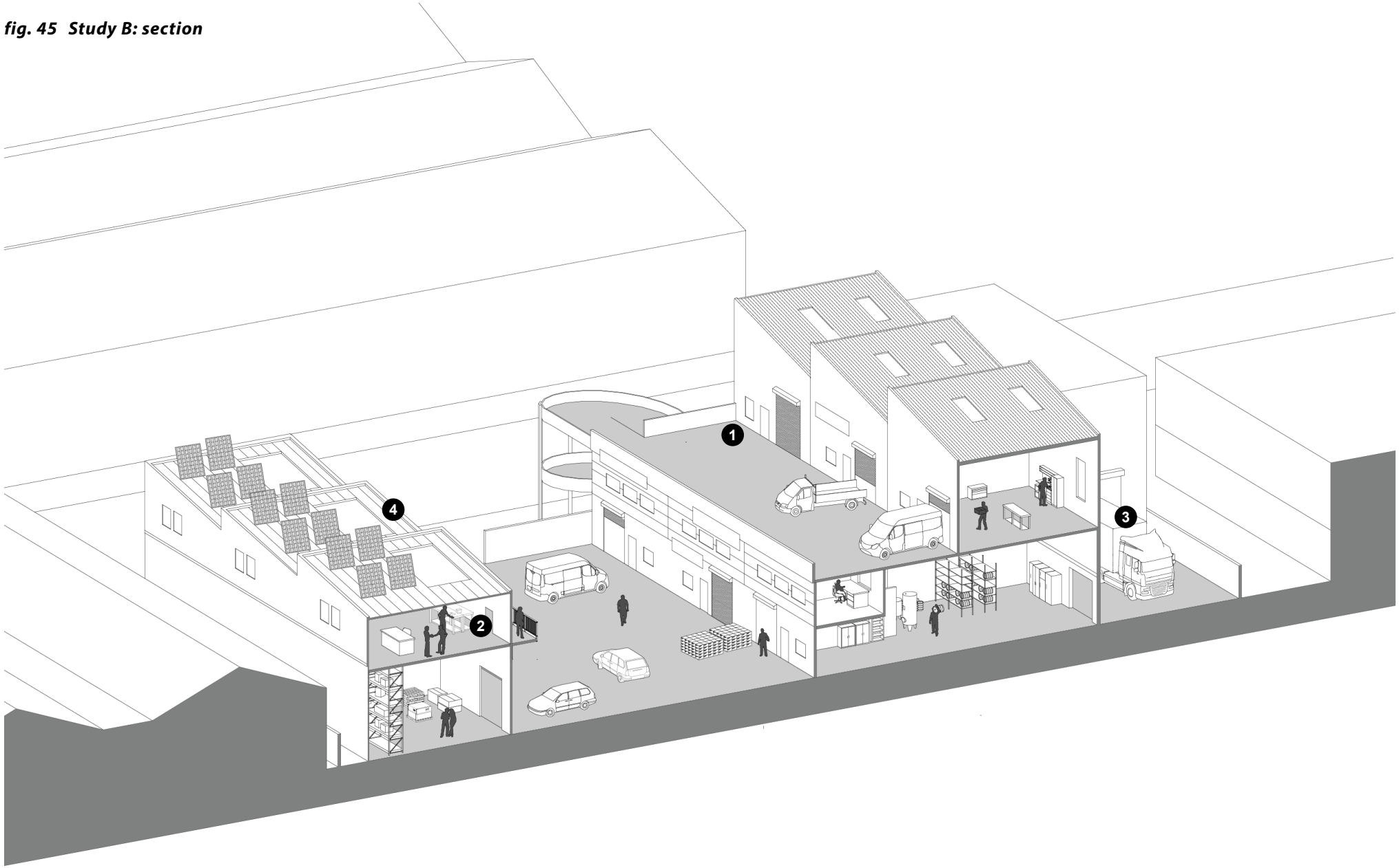


fig. 45 Study B: section



STUDY C: DENSE LIGHT INDUSTRIAL AND BUSINESS CENTRE

6.6 These two site typologies are grouped together because business centres are often dense light industrial sites that have been subdivided into multiple smaller units. In Park Royal some of these business centres run by specialised management companies have been fitted out with kitchens to provide convenient start-up space for food businesses. Additional workspaces and the smaller costs of renovating compared to a new building help to keep the rental costs at an affordable level for a diverse range of start-up and growing businesses. This study proposes various options to incrementally modify and add to a former factory site which includes various warehouse, workshop and office workspaces used by a wide range of smaller businesses.

1. **Rooftop workspace** – Additional floors could be added to the top of a multi-storey warehouse building where the walls and foundation permit and the lifts and stairs can be extended upwards. The additional storey with a new well insulated roof can improve the energy efficiency of the building and may also allow for the easier integration of a more efficient heating system for the building if necessary. These spaces would be targeted at offices, workshops, artist studios or shared workspace uses that do not require parking or delivery space because the limited yard space on the site is often already in use. This is possible on sites with good public transport connectivity in the area. For this reason, the site would need to be well located for public transport access. Some of the additional space can also be used for shared meeting rooms and communal space which can provide the opportunity for more and better interaction between businesses.
2. **Raise warehouse roof** – To provide more flexibility and space for expanding businesses in warehouse units the roof can be raised to provide additional height for shelving or a mezzanine floor for additional floor space. Many of the older warehouses have limited height and poorly insulated roofs. Lifting the roof can also provide the opportunity to insulate it, provide natural light through it and also to safely deal with any roofing materials containing asbestos. Additional or new supporting and roof structure may be necessary.
3. **Street frontage** – Some of the existing workspaces can be opened up towards the street with shop fronts so that some businesses can sell their products directly to customers, while livening up the streetscape.
4. **Complementary uses** – Small businesses could benefit from complimentary business uses in the adjacent workspaces. They can provide each other business goods and services or provide services for employees such as a cafeteria.

fig. 46 Study C: typical site

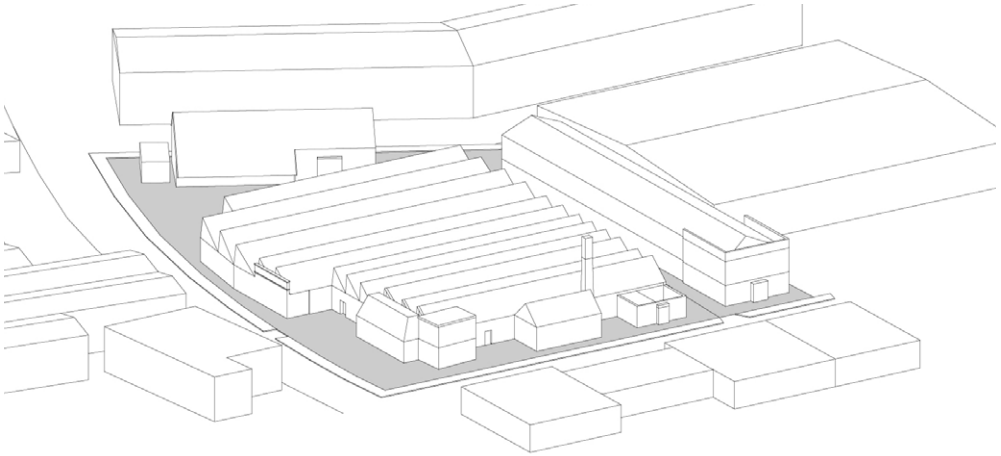


fig. 47 Study C: intensified floorspace options

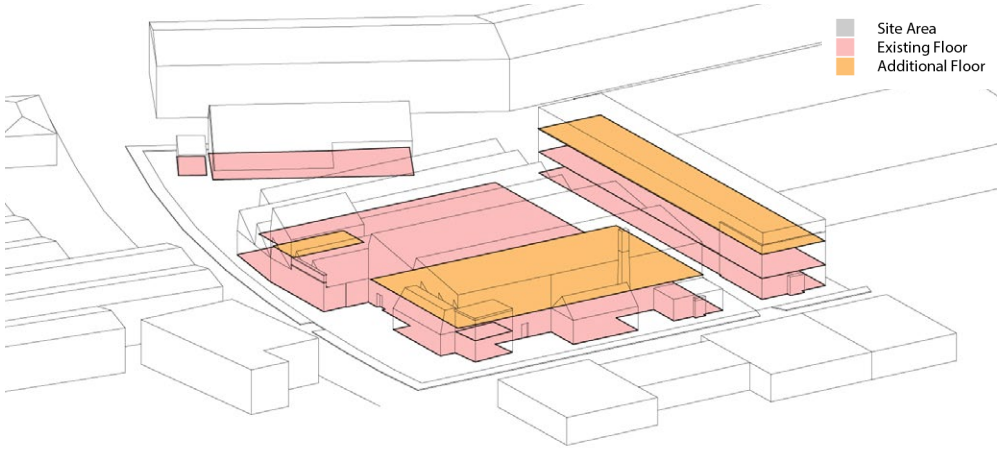
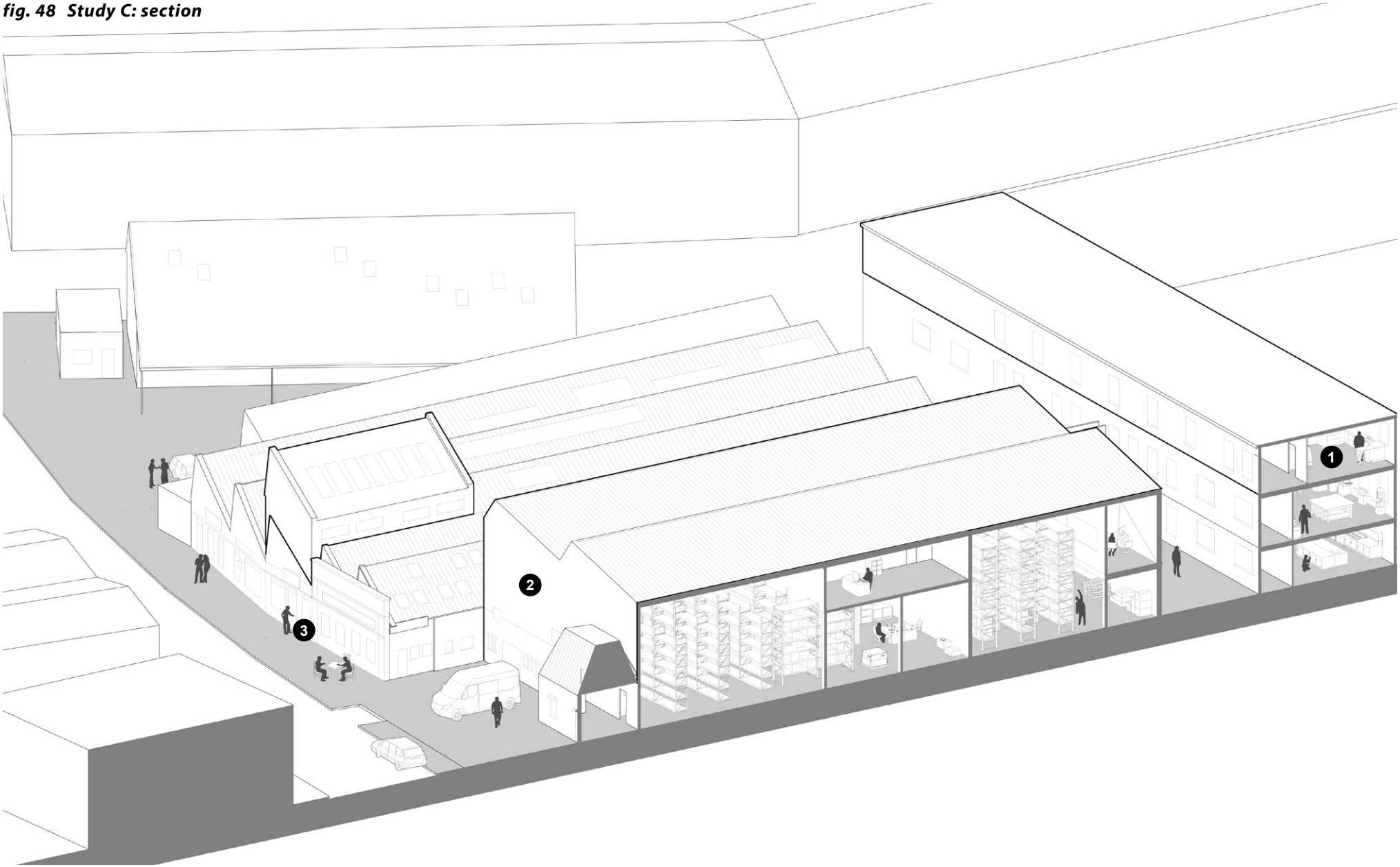


fig. 48 Study C: section



7 SPATIAL SCENARIOS

INTRODUCTION

7.1 In the previous quantitative supply and demand section we have established that the three Boroughs are likely to exceed their indicative industrial land benchmarks values by a considerable margin. This suggests a growing shortage of land for industry, logistics, transport waste and other associated uses in West London. The release of Old Oak will only exacerbate this shortage.

7.2 Although this is only a quantitative conclusion, the conclusion is also mirrored by our property market analysis. The property market analysis confirms a growing shortage of industrial property in west London.

7.3 We do not have a supply of new land in London so most new property requirements can only be met by redeveloping or renewing old and often obsolete stock. In the section above we have explored some potentials and barriers of intensifying the use of the most prevelant types of industrial sites in Park Roya for longer term, policy aspirational, redevelopment scenarios. But for the purposes of this evidence base these options cannot be quantified and taken in account.. These new forms of development are currently unlikely to comprise a significant element of the supply at the end of the development plan. So for this section we base our spatial scenarios on a more conventional assessment of market demand.

7.4 The evidence available shows that market demand is likely to continue to favour the redevelopment of older property for new space designed to appeal to the logistics market. This is where the values are most favourable and market demand highest.

7.5 This market led redevelopment results in the replacement of old property with new industrial units. These units are normally developed at a lower plot ratio than the former property. This is because occupiers value on site servicing yards which allow them to use their site and property much more efficiently (i.e. a higher throughput of goods). Although the plot ratio is lower the replaced industrial space is normally built with a higher eve height with the potential for mezzanine space; so again meaning the new space can be used more efficiently.

7.6 Large sites, with good access are in the highest demand and attract the highest values. This is because this type of site is most suitable for this type of redevelopment. They also appeal to the waste and utilities sectors.

REDEVELOPMENT SCENARIOS

7.7 For the purposes of this study we need to create some redevelopment scenarios building on our analysis above to guide future planning in the Park Royal Area.

7.8 To do this it is helpful to separate the Park Royal area into four distinct parcels.

7.9 The map of affected sites (fig. 30) shows the broad groupings of sites. The boundaries are not perfect; but the geography is robust enough for us to draw out conclusions.

7.10 Starting at the eastern end of the area is Old Oak, moving westwards there are a number of sites which are subject to HS2 works, then the main Park Royal Estate SIL. Finally there is land within our study area not currently designated as SIL. This includes some land near the hospital which has been redeveloped for SIL compliant uses.

OLD OAK SITES

7.11 The Park Royal Atlas suggests that of the 87.3 ha of employment sites in Old Oak almost all are in industrial use. Land for rail is the predominant use covering 31.9 ha of land. But the data suggests this land employs fewer than 400 people. The area as a whole employs around 6,000 people.

Old Oak Industrial Sites

7.12 Under the emerging planning proposals for Old Oak, as presented in the draft OAPF (February 2015) all the traditional industrial space is lost. In addition we are told that all the land currently used for rail is also released. The OAPF envisages the Old Oak area is to be residential led mixed use development. The draft OAPF also suggests de-designating this area from SIL via a future OPDC local plan.

fig. 49 Old Oak Baseline

Source: Park Royal Atlas survey (2014) and OPDC survey update (2015)

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Industrial			
A General industry	13.7	88,803	838
B Light industry	10.2	58,039	1,209
C Warehouses	16.7	117,208	2,592
D Open storage	0.3	256	8
E Self storage	1.4	13,914	124
F Utilities	0.2	347	13
G Land for buses			
H Land for rail	31.9	69,176	390
I Waste management and recycling	6.5	12,081	35
J Other industrial			
K Vacant industrial	1.8	16,706	77
Total industrial	**82.6**	**376,530**	**5,287**
Non-industrial			
L Offices	4.2	49,523	619
M Retail	0.0	186	4
N Community services	0.1	1,669	7
O Recreation and leisure			
P Residential	0.3	7,029	31
Total Non industrial	**4.7**	**58,407**	**662**
Grand Total	**87.3**	**434,937**	**5,948**

7.13 The consolidation of the Strategic Industrial Location to areas within Park Royal reflects London Plan policy 2.17(B)(b), paragraph 2.85 and guidance for the Old Oak Common Opportunity Area to support the release of industrial land as part of a strategically coordinated process to enable higher density development around public transport nodes. The arrival of the High Speed 2, Crossrail and Great West Coast Main Line Station represents a significant development opportunity to support residential and employment growth.

7.14 Above we noted that West London is short of industrial land and there is little scope to create new sites. So there is ample market led demand from industrial and warehousing sites to limit this release or at least seek maximum re-provision of industrial land where sites are redeveloped. However this is unlikely to be a realistic policy response given the significant opportunities generated by HS2 and Crossrail at Old Oak.

7.15 On balance, using this stock of land for Industrial uses, which do not require the level of public transport accessibility provided by the HS2 and Crossrail station does not appear a pragmatic response to the Old Oak opportunity.

7.16 However there is scope to retain some existing light industrial and office business activities and some industrial buildings particularly where they are of possible character value. For example the old multi storey factories on Scrubbs Lane. Some of these characterful buildings are in very light industrial or office use. But a number are still in industrial (B2/B8) and the ongoing use of these properties for industrial uses could be considered 'bad neighbour'. Some of the properties even share party walls with adjacent houses and/or the older property lacks the quality of access and servicing needed to efficiently use them as B2 or B8 property. The access to most of the older properties is directly off Scrubs lane which will become increasingly important in servicing Old Oak. So in this scenario we assume all the industrial space in Old Oak is lost from the industrial land supply. Any buildings retained are most likely to be used for non-industrial uses.

Old Oak Replacement Space

7.17 The OAPF sets out to create 55,000 new jobs at Old Oak as well as 24,000 new homes. The only way that this mix can be accommodated is if the vast majority of the 55,000 new jobs are accommodated in use classes which are fully compatible with high density residential (i.e. broadly A, B1 & D class).

7.18 Given the density of development and the need for future employment space to be compatible with the new high density residential the only compatible industrial use would be light, B1(c) space. But if promoting B1(c) planners need to be aware that compromised industrial space, for example in basements and upper floors accessed by internal goods lifts, is more expensive to operate. Because it is expensive to operate such space often suffers from weak demand.

7.19 For this reason we do not consider promoting replacement B1(c) space as part of a high density Old Oak new mixed use redevelopment scenario except in limited specific circumstances where light industrial units can form a buffer between uses or can be provided on the ground floors of new buildings.

Old Oak Summary

7.20 In this scenario we make no fixed assumption about the mix of uses to be re-provided in Old Oak. We know that all the old traditional industrial stock will be lost and any replacement offer is unlikely to be industrial. Some space may be retained where it has character value. However the most likely scenario is the majority 55,000 new jobs will be provided in office space. So in the table below we assume these jobs will all be provided in B1(a) offices at a employment density of 14.7 square metres per worker in line with inner London boroughs (Industrial Land Demand and Release Benchmarks in London, 2011). This should only be taken as an illustration and the employment density we apply may be a conservative assumption because there is evidence that office space is being used more intensively over time.

7.21 The table below shows the results of this scenario. Because the site already accommodates around 6,000 jobs the 55,000 new jobs in the OAPF results in 49,000 net additional jobs. All of which are in non-industrial sectors. 82.6 ha of land currently in industrial use is lost from the industrial land stock.

fig. 50 Old Oak Scenario

Source: Park Royal Atlas survey (2014) and OPDC survey update (2015)

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Existing industrial	**82.6**	**376,530**	**5,287**
Scenario industrial	**0**	**-**	**-**
Industrial net change	***-82.6***	***- 376,530***	***- 5,287***
Existing non industrial	4.7	58,407	662
Scenario non industrial	**86.9**	**808,500**	**55,000**
Non industrial net change	***82.3***	***750,093***	***54,338***
Scenario net change all uses	- 0	373,563	49,052

PARK ROYAL SIL

7.22 There are 228 hectares of land within the Park Royal SIL and outside the Old Oak and the HS2 sites.

7.23 This reservoir of land accommodates an estimated 28,400. 26,700 of these jobs are on 222 hectares of industrial sites. There are also 1,700 jobs on non industrial sites.

7.24 Our property market review shows there is high demand for all industrial uses. But for users who need SIL land, because they need large sites or 24 hour working, there are few alternative sites. These cannot easily be accommodated outside SIL because they give rise to conflicts with residential uses; nor can they be re-accommodated in Old Oak. So there is a policy rationale to prioritise the core SIL land for these uses.

fig. 51 Park Royal SIL Baseline

Source: Park Royal Atlas survey (2014) and OPDC survey update (2015)

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Industrial			
A General industry	64.7	457,229	8,823
B Light industry	39.1	321,073	6,714
C Warehouses	91.4	590,425	10,260
D Open storage	0.5	432	37
E Self storage			
F Utilities	9.8	12,394	60
G Land for buses	1.2	2,047	37
H Land for rail	10.0	37,760	687
I Waste management and recycling	1.1	5,662	75
J Other industrial	0.2	517	14
K Vacant industrial	3.7	16,054	-
Total industrial	**221.6**	**1,443,594**	**26,707**
Non-industrial			
L Offices	3.2	34,918	1,113
M Retail	2.2	9,771	191
N Community services			
O Recreation and leisure	4.4	14,310	323
P Residential	1.0	5,076	76
Total Non industrial	**10.9**	**64,075**	**1,702**
Grand Total	**232.5**	**1,507,669**	**28,409**

Park Royal SIL – Industrial Land

7.25 There is around 222ha of land in industrial use across Park Royal today; accommodating an estimated 1,444,000 square metres of floor space at a 65% plot ratio. The plot ratio for the built space (i.e. excluding transport, utilities and open storage) is higher at 70% and for light industrial uses this exceeds 80%.

7.26 As discussed above market led demand is most likely to lead to a reduction in these densities over time. Older property will be redeveloped for newer industrial units with increased open yardage and servicing space.

7.27 Although we expect plot densities to fall over time estimating the extent of this reduction in built floor space is complicated. Not all sites will be redeveloped and fragmented land ownerships in some parts of the estate means that not all of Park Royal can be readily assembled to accommodate the larger units developers wish to build. Further demand from transport, waste and utilities sectors (with some Sui Generis uses) is growing and these often demand open land with little or no floor space.

7.28 But a reduction in plot ratios down to 60% does not appear an unreasonable assumption. This leads to a small reduction in built floor space in Park Royal from 1.4 million square metres to 1.3 million square metres.

Park Royal SIL – Industrial Jobs

7.29 Park Royal currently accommodates 26,700 industrial jobs in 1,450,000 square metres of floor space at an employment density of 1:54 square metres. This density is worse than outer London Boroughs which the GLA Industrial Land Release Benchmarks study estimated at 1:43 square metres.

7.30 This is because the large amount of land used for utilities and waste on Park Royal brings the overall density down. These sites are large land/floor space users but employ few people.

7.31 Over time the shortage of industrial land in West London is likely to encourage users to intensify the use of their floor space across all uses. While utilities and waste uses will continue to employ few people the other uses (warehousing & Industrial) will need to intensity their use of space. Across Park Royal we may expect employment densities to reach that seen in other estates in outer London. So here we assume that the use of space is intensified to reach the 1:43 square metres seen elsewhere in outer London.

7.32 Applying this assumption the 1.3m square metres of built floor space could accommodate 4,000 more jobs than today.

Park Royal SIL– Non Industrial Land Uses

7.33 The site analysis suggests the Park Royal SIL accommodates a small amount of non-industrial land uses. Around 11 ha of land in the SIL is classed either as containing mainly office or retail uses. Some of this may be redeveloped for new industrial property although the land values for retail uses means that this is unlikely. So for this scenario we assume no change in the non-industrial land uses on Park Royal.

Park Royal SIL – Summary

7.34 The table below summarises this scenario. For the retained industrial land we assume that continued market led redevelopment reduces the plot ratio over time. But reflecting the more efficient use of this space the employment density improves to reach the 1:43 square metres seen in Outer London more generally. The end result is that the same 222 ha of land accommodates slightly less floor space but slightly more jobs. The scenario has left the amount of non-industrial space (and jobs) unchanged.

fig. 52 Park Royal SIL Scenario

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Existing industrial	**222**	**1,443,594**	**26,707**
Scenario industrial	**222**	**1,329,685**	**30,923**
Industrial net change	***0.0 -***	***113,909***	***4,216***
Existing non industrial	11	64,075	1,702
Scenario non industrial	**11**	**64,075**	**1,702**
Non industrial net change	***0***	***0***	***0***
Scenario net change all uses	**- -**	**113,909**	**4,216**

PARK ROYAL HS2 SITES

7.35 Directly to the west of Old Oak is 17 ha of land which is almost entirely in industrial use.

7.36 All of this land is required to facilitate HS2 works and we understand that this means that at least in the short to medium term the sites will be cleared.

7.37 However once HS2 is completed these sites will available for redevelopment, and so potentially capable of accommodating replacement industrial space.

7.38 For this area we present two potential redevelopment scenarios. The employment land related evidence suggests we should aim to seek maximum (re)provision of industrial property; specified to appeal to the growing logistics and modern manufacturing market that cannot be easily re-accommodated on local quality sites. This suggests redevelopment as a Preferred Industrial Location; much like the Park Royal SIL.

fig. 53 HS2 Sites Baseline

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Industrial			
A General industry	4.8	20,154	313
B Light industry			
C Warehouses	3.2	11,332	150
D Open storage	7.9	7,923	170
E Self storage			
F Utilities			
G Land for buses			
H Land for rail			
I Waste management and recycling			
J Other industrial			
K Vacant industrial	0.5	559	-
Total industrial	**16.4**	**39,969**	**633**
Non-industrial			
L Offices			
M Retail			
N Community services			
O Recreation and leisure			
P Residential			
Total Non industrial	**0**	**0**	**0**
Grand Total	**16.4**	**39,969**	**633**

7.39 But we also test redeveloping the sites as a high density Industrial Business Park.

7.40 We do this because any redevelopment of these sites is likely to be a number of years away and the market may change between then and now.

Park Royal HS2 Sites Preferred Industrial Location scenario

7.41 The HS2 sites accommodate 40,000 square metres of floorspace on 16.5 hectares of largely industrial land.

7.42 This part of Park Royal is already less densely developed than other areas mainly because of the large amount of open land.

7.43 The table below shows the impact redevelopment of the HS2 parcels for new industrial space using the same assumptions as above (60% plot ratio / 1:43 square metres).

fig. 54 HS2 Sites 100% industrial re-provision scenario

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Existing industrial	**16.4**	**39,969**	**633**
Scenario industrial	**16.4**	**98,494**	**2,291**
Industrial net change	***0***	***58,525***	***1,658***
Existing non industrial			
Scenario non industrial			
Non industrial net change			
Scenario net change all uses	**0**	**58,525**	**1,658**

Park Royal HS2 Industrial Business Park scenario

7.44 There may be scope to increase the number of jobs if additional high density employment is promoted. A higher density redevelopment scenario could still conform with the SIL designation but would likely fall under the SPG classicisation of Industrial Business Park (IBP) land as opposed to Preferred Industrial Land (PIL).

7.45 The SPG defines IBP activities as "research and development (B1b), light industrial (B1c) and high value-added general industrial (B2)". It goes on to say that these "generally require significantly less heavy goods access [than PIL]". So it may be a good 'buffer use' between Old Oak and the main Park Royal SIL.

7.46 In this scenario we have assumed the site is provided at a very high plot ratio of 100%. This density of development is normally only considered appropriate for very accessible office sites. But given the proximity of Old Oak this many not be an unreasonable long term assumption to make here.

7.47 For a potential employment density there is no benchmark we can use. Neither the GLA nor the HCA (The HCA Employment Density guide is the common quoted source for ELRSs) provide a reasonable proxy to use for this type of space. So for this scenario we adopt a 1:20 density.

7.48 This assumes the space is used more intensively than industrial space in Park Royal (1:43) because the space is unlikely to accommodate warehousing and logistics activities. But the space is used less intensively than standard offices because the IBP would include an element of R&D and high value industrial. Given the cost of operating from this location the balance is likely to favour higher densities (i.e. more towards offices) than industrial.

fig. 55 HS2 Sites Industrial Business Park redevelopment scenario

	Site Area (ha)	Floorspace (Sq.m)	Jobs
Existing industrial	16.4	39,969	633
Scenario industrial	16.4	164,156	8,208
Industrial net change	0	124,187	7,575
Existing non industrial			
Scenario non industrial			
Non industrial net change			
Scenario net change all uses	0	124,187	7,575

7.49 Using these assumptions the 16.4 ha HS2 sites could collectively re-provide around 7,500 new industrial jobs but in high density IBP type uses.

7.50 However this number needs significant caveats. The market demand case for this kind of development is much weaker than for other industrial property discussed above. Some of the uses, most noticeably offices, could also be accommodated in town centres where the Boroughs would like to see additional office workers to generate footfall in the outer London town centres.

7.51 There is much less evidence this land is needed as an IBP than PIL given that Old Oak will also provide a supply of high density office space. But as noted above the HS2 sites will not be available for a number of years and so it is reasonable to consider this scenario because market demand may change.

PARK ROYAL NON SIL

7.52 There are a number of employment sites within Park Royal that are not on SIL. This includes some retail, leisure uses and most obviously the hospital. They have an important role in providing local jobs and services but are land uses not normally considered in employment and industrial land reviews.

7.53 It is possible that they may be redeveloped in the future; some of the retail sites are very low density single story units with large amounts of ground level parking. Higher land values in the area may encourage redevelopment and renewal. But in this scenario the drive for higher value land uses, including additional retail and housing will drive the commercial logic to redevelop. Making an assumption that such redevelopment will secure additional (lower value) employment space is not robust.

7.54 For the same reason extending the SIL policy to cover these sites is not recommended. But a local policy, controlling redevelopment to secure the integrity of the neighbouring SIL is justified. Any redevelopment of these sites could give rise to additional conflicts with the adjacent SIL land parcels.

7.55 There are two parcels of land that have been redeveloped for new warehouses but are excluded from the SIL, because they were previously hospital land. There is also a vacant site sandwiched between SIL land. Extending the SIL to cover these sites is recommended.

OPDC SUMMARY

7.56 Above we have discussed a number of scenarios for separate parts of the OPDC. Here we bring these together to show a picture of the OPDC as a whole.

7.57 The release of Old Oak from SIL, and its redevelopment for high density mixed uses results in a loss of 82 hectares of land currently in industrial use. But the redevelopment of Old Oak, provides 55,000 new jobs in the area.

7.58 Outside of Old Oak market led redevelopment of older sites in the SIL will result in more modern and fit for purpose stock. This space will be better designed to meet modern business needs with more circulation space and yardage but at a lower plot ratio. The employment capacity improves as this new space is built to be used more efficiently than the space it replaces. Also a tightening market for space encourages greater efficiency.

7.59 A more efficient Park Royal SIL will allow a faster and more efficient flow of goods and services through the finite quantity of land. This will allow the area to support more off site jobs, either by providing necessary goods to allow the wider economy to function efficiently or by providing off site employment as part of the logistics chain.

7.60 The future of the HS2 temporary construction sites is less clear. We have tested two scenarios; one where the sites revert to PIL and another IBP. Any redevelopment is many years away and market conditions will largely dictate the final outcome. But there will remain a need for the land to revert back to some form of industrial use.

7.61 The tables below summarise the scenarios. The total net additional number of jobs ranges between 55,000 and 61,000 dependent on the future of the HS2 parcels.

fig. 57 OPDC Summary with HS2 PIL

	Floorspace (sqm)				Jobs			
Industrial	**OO**	**HS2 PIL**	**PR SIL**	**All**	**OO**	**HS2 PIL**	**PR SIL**	**All**
Existing industrial	**376,530**	**39,969**	**1,443,594**	**1,860,093**	**5,287**	**633**	**26,707**	**32,626**
Scenario industrial	**-**	**98,494**	**1,329,685**	**1,428,178**	**-**	**2,291**	**30,923**	**33,213**
Industrial net change	***- 376,530***	***58,525***	***- 113,909***	***- 431,914***	***- 5,287***	***1,658***	***4,216***	***587***
Existing non industrial	58,407		64,075	122,482	662		1,702	2,364
Scenario non industrial	**808,500**		**64,075**	**872,575**	**55,000**		1,702	**56,702**
Non industrial net change	***750,093***		***-***	***750,093***	***54,338***		***-***	***54,338***
Scenario net change all uses	**373,563**	**58,525**	**- 113,909**	**318,178**	**49,052**	**1,658**	**4,216**	**54,925**

fig. 56 OPDC Summary with HS2 IBP

	Floorspace (sqm)				Jobs			
Industrial	**OO**	**HS2 IBP**	**PR SIL**	**All**	**OO**	**HS2 IBP**	**PR SIL**	**All**
Existing industrial	**376,530**	**39,969**	**1,443,594**	**1,860,093**	**5,287**	**633**	**26,707**	**32,626**
Scenario industrial	**-**	**164,156**	**1,329,685**	**1,493,841**	**-**	**8,208**	**30,923**	**39,131**
Industrial net change	***- 376,530***	***124,187***	***- 113,909***	***- 366,252***	***- 5,287***	***7,575***	***4,216***	***6,504***
Existing non industrial	58,407		64,075	122,482	662		1,702	2,364
Scenario non industrial	**808,500**		**64,075**	**872,575**	**55,000**		1,702	**56,702**
Non industrial net change	***750,093***		***0***	***750,093***	***54,338***		***-***	***54,338***
Scenario net change all uses	**373,563**	**124,187**	**- 113,909**	**383,841**	**49,052**	**7,575**	**4,216**	**60,843**

7.62 Finally; compared to the Benchmarks discussed in Chapter 4 the redevelopment of Old Oak and its release from the Industrial land supply means that the three Park Royal Boroughs are very likely to exceed their benchmark releases. This is even before any additional land is released by the Boroughs themselves.

7.63 In Chapter 4 we calculated that there was only around 35 ha of land left to release. The Old Oak release is nearly 90 hectares of Industrial land. Within the current Industrial Land SPG framework we cannot reconcile this loss. Leaving the three Boroughs to try and re-balance their portfolio to compensate does not appear pragmatic. The release of Old Oak is justified by its strategic significance to London as a whole and this strongly suggests that the GLA needs to re-assess the Strategic evidence as soon as possible. The London wide benchmarks need re-evaluating with an appropriate London wide adjustment to take this strategic release into account.

fig. 58 OPDC land area summary

	Land (ha)			
Industrial	**OO**	**HS2**	**PR SIL**	**All**
Existing industrial	**82.6**	**16.4**	**232.5**	**331.6**
Scenario industrial	**-**	**16.4**	**232.5**	**248.9**
Industrial net change	***- 82.6***	**-**	**-**	***- 82.6***
Existing non industrial	4.7	-	11	15.6
Scenario non industrial	**4.7**	-	**11**	**15.6**
Non industrial net change	**-**	**-**	**-**	**-**
Scenario net change all uses	**- 82.6**	**-**	**-**	**- 82.6**

8 CONCLUSIONS

CONTEXT

8.1 The OPDC area contains 355ha of employment sites which accommodate around 1500 business units in diverse sectors, many of which provide goods and services to London's businesses and residents. 60% of the estimated 36,000 jobs are in industrial sectors and many workers live locally in the three surrounding boroughs. The industrial area grew in the post-war period producing everything from ketchup to busses. After a decline in large manufacturing firms after 1970, today it is one of the most sought after locations for industry in London. It is made up of a patchwork of business sizes and sectors with several clusters including film and TV, food production, vehicle repair and logistics. The Old Oak & Park Royal Development Corporation (OPDC) was set up in April 2015 to guide the regeneration of Old Oak and support industry in Park Royal. This Industrial Land Review (ILR) provides evidence and recommendations for the OPDC and its local plan.

POLICY AND EVIDENCE BASE

8.2 The ILR and Local Plan sit within a hierarchy of documents functioning at different spatial scales. At a national level, guidance is provided for how to produce an employment and industrial land study, while at a London level the guidance and evidence base suggests that across London industrial activities decreasing. Standalone office uses within the Park Royal SIL are not supported by the London Plan and as such the ILR focuses on industrial uses.

8.3 Specific to Park Royal, growth is projected to take place in the logistics and waste management industrial sectors alongside green industries and clean technology with a focus on micro, small and medium sized workspaces. This trajectory is also echoed in local planning documents and research.

8.4 The Greater London Authority has published an Opportunity Area Planning Framework for Old Oak & Park Royal which supplements the London Plan. These documents provide strategic guidance to accompany the OPDC Local Plan to guide development in the OPDC area. Alongside these documents, the ILR and a number of other pieces of technical research will inform the OPDC Local Plan. Once adopted, the London Plan and OPDC Local Plan will form the 'development plan' for the OPDC area.

SITE ANALYSIS

8.5 The OPDC area has been divided into 300 employment sites of varying sizes. Most are categorised as industrial land uses, however the categories mask the diversity of business sectors and mix of industrial and non-industrial activities within each site. There are four main industrial site typologies: standalone warehouses, industrial estates, dense light industrial and business centres.

8.6 Business centre sites have the highest plot ratios and employment densities, standalone warehouses and industrial estates require lower plot ratios to function efficiently. Current site densities suggest that there could be scope to intensify some sites through redevelopment and infill development, especially those close to public transport hubs on the edge of Park Royal and along the main access routes to them. This can help to free up ground floor and yard space on other sites for the businesses that need them.

8.7 The limited supply of vacant industrial employment land at 2% suggest that additional employment generating floor space would need to come from making more intensive use of the sites.

8.8 But this needs treating with care. For many of the firms operating in Park Royal further increasing development densities is not ideal without a number of challenges being addressed. On highway parking and congestion is an issue as firms displace activity onto the highway because their properties were built with too little open yardage, on site servicing space or parking for their staff. The workforce is also affected by congestion, because many drive to work, as well as the limited services, such as cafés in the area. However, there is scope to reduce the number of people driving to work as a large part of the workforce lives locally and the main pedestrian access routes from Park Royal to public transport hubs could be improved by combining services and more intensive sites along them.

8.9 Around 350 businesses and 6500 jobs will be affected by Old Oak redevelopment sites and HS2 construction sites. There is an opportunity to support a diverse local economy and local employment by encouraging land owners to support the relocation of businesses from the Old Oak and HS2 to appropriate sites within Park Royal and the surrounding boroughs. However this is a challenge that will require a more intensive use of industrial land due to low land and floor space vacancy rates

QUANTITATIVE SUPPLY AND DEMAND

8.10 There is evidence of a growing shortage of land across London and Park Royal is the largest reservoir of Strategic industrial locations in West London. It accommodates a wide range of industrial users but is one of the few locations large enough to accommodate strategic property requirements as well as land for waste; utilities and transport. These uses are often cited as 'bad neighbours' and very difficult to accommodate on smaller local scale sites.

8.11 London seeks to balance its stock of industrial land through the use of the industrial land release benchmarks to manage the release of surplus industrial sites, mainly former manufacturing sites, into other uses. But data shows that that industrial land has been being released twice as fast as the benchmarks suggested.

8.12 Also the replacement of former manufacturing space with new logistics property is not as fluid as the benchmarks suggested would be needed to support the London economy. When former industrial sites are redeveloped they are replaced either with new homes or residential led mixed use redevelopment. This puts growing quantitative pressure on the remaining stock of SIL land in London to efficiently service the growing London economy.

MARKET DEMAND

8.13 As the stock of Industrial land diminishes the remaining market demand is concentrated on areas such as Park Royal. New occupiers looking for industrial property in London have less choice of location and some well-established London firms have already been displaced to Park Royal by regeneration elsewhere. Reflecting this, occupier demand for the space at Park Royal is strong, vacancy rates very low, rents have been rising (and are the highest in London) and investment yields are also low.

8.14 Developers are responding to the shortage of industrial land in London by redeveloping and renewing stock so it can be used much more efficiently. Logistics is driving occupier demand today and developers expect this demand to increase as London's population grows. So former manufacturing sites built at high plot ratios, are redeveloped for more efficient but lower density industrial units.

8.15 There is also strong demand from waste, utilities, transport and some Sui Generis uses such as garages, motor trade and building supply firms. This is a smaller source of demand but because these types of activity have little alternative land available they compete with the logistics market for the declining stock of SIL land and property.

INTENSIFICATION

8.16 Despite increasing market demand and decreasing supply of industrial land in Park Royal there is little indication that the industrial development market is looking to intensify industrial sites in London. There are many barriers to intensifying industrial sites in Park Royal, such as the need for yard space, investor and occupier preferences, patterns of land ownership, road congestion, increased construction costs, increased management and decreased occupier flexibility. However, as the land supply for traditional single storey warehouses with yards dries up there is an opportunity in Park Royal to explore strategies to use industrial sites more efficiently and free up ground floor space for the businesses that need it.

8.17 Ground floor space can be freed up for larger warehouses by developing sites to include additional light industrial workplaces on upper floors for businesses that do not require regular use of yard space and parking. Developing new industrial estates with a second storey of yard and warehouse space accessed via ramps and providing shared facilities for larger deliveries could provide a viable solution. Raising roofs, adding floors and freeing up yard space in dense light industrial sites can provide additional space for businesses to start-up, grow and be more efficient.

SPATIAL SCENARIOS

8.18 While HS2 and Crossrail provide a new strategic development opportunity in Old Oak, the release of industrial land in Old Oak and the construction sites for HS2 will exacerbate the shortage of industrial land in the area already confirmed by the quantitative and market analyses. As demand for goods and services in London grows, Park Royal is one of the few locations able to accommodate larger industrial uses.

8.19 Based on how they will be affected by HS2 construction and Old Oak redevelopment boundaries the OPDC employment sites have been split into four groups:

- Old Oak- all be redeveloped as non-industrial;
- Park Royal SIL- all to continue to be protected as a Strategic Industrial Location;
- Park Royal HS2 construction sites – these should be redeveloped as Preferred Industrial Land (PIL) after their use for the construction of HS2 given the shortage of industrial land in the area. Whether redevelopment as a higher density Industrial Business Park (IBP) should be considered would need to be assessed closer to the time; and
- Park Royal non-SIL employment sites – these sites will continue to complement the SIL uses however their redevelopment should be controlled and a small number of specific sites designated as SIL to protect current and adjacent SIL uses.

9 RECOMMENDATIONS

9.1 These recommendations for policy and delivery focus on protecting and maximising the contribution of industrial uses in the OPDC area to support a robust local and regional economy. They are divided into four overarching groups to address the conclusions of the report:

- **Protect** –acknowledges the high demand for industrial land in the OPDC by focusing on how local planning policies should protect industrial land and industrial businesses within Park Royal.
- **Intensify** - focuses on planning policies to use the remaining industrial land efficiently and provide industrial space to more businesses.
- **Expand** – recommends options for the Local Plan and broader strategies to expand the supply of industrial space in the area in response to increasing demand.
- **Support** - focuses on how the OPDC can support the local industrial economy and businesses by facilitating the relocation of displaced businesses within the area and supporting businesses to capture procurement opportunities from development at Old Oak.

PROTECT

Protect industrial uses in Park Royal SIL

9.2 Local Plan policies should reflect London Plan policy 2.17 by permitting only broad industrial type activities outlined in paragraph 2.79 of the London Plan

9.3 Broad industrial type activities that should be permitted are general industrial, light industrial, storage and distribution, waste management, recycling, some transport related functions, utilities, wholesale markets and other industrial related activities.

9.4 Park Royal forms an important function as a reservoir of industrial land in West London. London needs such reservoirs to function efficiently, supply the population and other businesses with goods and services while also accommodating any future manufacturing activity which needs to remain in the capital.

9.5 As a Strategic Industrial Location it is suitable for a wide range of industrial uses. But what sets the SIL aside is that its size and SIL designation means that it is one of the few areas which can accommodate uses which lead to land use conflicts elsewhere. This includes land for waste, utilities and transport but also industrial activities operating 24 hours a day and creating industrial noise.

Reduce non-conforming uses in Park Royal SIL

9.6 Enforcement action should be taken against uses that do not conform to the broad industrial type activities and appropriate supporting uses as outlined in paragraph 2.79 of the London Plan.

9.7 Due to the limited availability of industrial space in the area, enforcement would help to free up space for industrial uses.

Return Park Royal HS2 construction sites to SIL

9.8 Local plan policy should retain the Park Royal HS2 work sites (these are the two northern work sites only). These sites could be promoted for a mix of SIL appropriate uses including Industrial Business Park uses, to ensure that a range of unit sizes and business sectors could be located here in the future.

9.9 Industrial business park uses on this site would help create a buffer between the mixed use area of old oak and the Preferred Industrial Uses across Park Royal. These Park Royal HS2 sites are required as work sites by HS2 until 2026. There would be a land use policy review in advance of this date.

Development adjacent to Park Royal SIL

9.10 Local Plan policies should reflect London Plan policy 2.17 by only permitting development adjacent to SIL if it can demonstrate that the proposed use(s) and design will not compromise current or future industrial activities and industrial intensification within SIL and mitigate any conflicts with new uses.

9.11 Policies should require residential or other non SIL uses near or adjacent to SIL to be designed to a standard allowing the nearby SIL parcels to operate industrial activities 24 hours a day without attracting noise or other amenity complaints. Policies should set environmental and design requirements for development adjacent to the SIL including design standards for minimum noise attenuation and transport standards to enhance the SIL road network for additional industrial traffic.

9.12 In line with the London Plan policy 2.17, development on the edge of the SIL should not hinder the efficient use of land within the SIL. Additional residential and non-industrial development can lead to conflicts with the intensification of industrial uses within SIL. New development should be designed to mitigate potential conflicts through the location of uses on a site and the design of buildings.

INTENSIFY

Efficient use of industrial land

9.13 Local plan policies should require that applications for redevelopment of sites in Park Royal SIL demonstrate that they are making the most efficient viable use of the land.

9.14 This should include demonstrating that the applicant has considered more intensive forms of development with more industrial floor space and higher plot ratios such as multi storey industrial and warehouse units. Applicants should be asked to demonstrate that a more intensive use of the site with additional useable industrial floor space is not commercially attractive or viable at the time the application is made.

9.15 While the market is best placed to determine the correct form and mix of industrial property development the London wide shortage of SIL land means that the OPDC should try to ensure that the remaining stock of land is used as efficiently as possible. The evidence shows that that multi story industrial property may be viable today and with a shrinking land supply there is a reasonable expectation that that it will become both viable and commercially attractive in the future. The policy needs to reflect this possibility and request that applications demonstrate that they are making the best use of the land.

Reduce road congestion

9.16 Local plan policies should require new developments demonstrate how they will contribute to reducing road congestion and encourage walking and cycling with active frontages along main routes.

9.17 This includes using alternative sustainable and innovative transport methods for goods, incentivising employees to travel to work by walking, cycling and public transport and improving the streetscape permeability of sites for walking, cycling and public transport.

9.18 To avoid congestion from parking and deliveries, development proposals should demonstrate that all parking and servicing can be managed within the site or by other means unless specific offsite arrangements are made. This may include shared off-highway parking provision, the use of offsite servicing, the use of consolidation centres and/or the use of innovative transport modes such as autonomous vehicles and drones. The OPDC transport study should look closely at these and other alternatives for future sustainable transport methods. For instance there could be opportunities to trial delivery drones using rooftops as landing areas. Development proposals along main walking and cycling routes to be identified by the transport study should pay particular attention to their streetscape and provide active frontages. Redevelopment proposals that make provision for small scale, walk up, services, retail and leisure which could add to this streetscape should be encouraged along these routes if they do not negatively impact on the functioning of the Strategic Industrial Location.

Intensification pilot projects

9.19 OPDC should initiate an industrial land intensification pilot programme in partnership with interested industrial developers and workspace provider partners.

9.20 This will promote innovation in the industrial development market by mixing industrial spaces with office, workshop and studio spaces. It can demonstrate the feasibility of such a development and its potential to free ground floor and yard space for the industrial uses which need it. It will also create a better understanding of the barriers to intensifying industrial development. Providing workspaces for businesses affected by redevelopment should be a condition for any OPDC support of pilot scheme. The Pilot projects may help test new forms of development which could be rolled out elsewhere.

EXPAND

Adjust Park Royal SIL boundary

9.21 Local plan policies should adjust the SIL boundary in Park Royal to include certain sites currently in industrial use, vacant or with a mix of industrial and retail uses that are adjacent to SIL land or industrial uses.

9.22 These sites should be added to SIL to avoid non-industrial uses from limiting adjacent industrial uses and their future industrial intensification and to protect the supply of industrial space within Park Royal (see following map).

- B6.29 This should be designated to reflect its current industrial use, its location adjacent to industrial uses and to standardise the SIL boundary to address the partial designation of the site as SIL.
- B6.31 This should be designated to reflect its current industrial use, its location adjacent to industrial uses and to standardise the SIL boundary to address the partial designation of the site as SIL.
- E3.19 This should be designated to reflect its current industrial use, its location adjacent to industrial uses. Public facing retail and service uses would still remain on the site.
- E2.05b This should be designated to standardise the SIL boundary and address the industrial uses within SIL on three sides.
- E4.26 This should be designated to standardise the SIL boundary as it is a lone site next railway tracks across the street from an industrial site within the SIL boundary.

Light industrial floor space in Old Oak

9.23 Local Plan policies should support floor space for light industrial uses within development sites in Old Oak to replace current industrial floors space where appropriate or contributes to the preservation of designated heritage assets where they support the transformative regeneration of Old Oak.

9.24 In particular developments should demonstrate they could accommodate light industrial B1c uses where they can act as a buffer between homes and major infrastructure. The light industrial spaces should be on the ground floor or accessed and serviced from the ground floor without compromising residential amenity. They should have diverse sizes and conditions to appeal to the widest possible market of industrial businesses, prioritising those that are will be displaced by development in Old Oak.

9.25 There may be scope for retaining some buildings which are currently in employment use where they have heritage value, such as buildings on Scrubs Lane which could be protected for ongoing light industrial use. Retaining buildings of heritage value can help to give Old Oak character, support placemaking and increase the area's appeal for businesses and residents.

Manage industrial floorspace within the region

9.26 The OPDC should proactively work with the GLA, west London boroughs and the West London Waste Authority to review, manage protect, intensify and expand industrial land within the subregion.

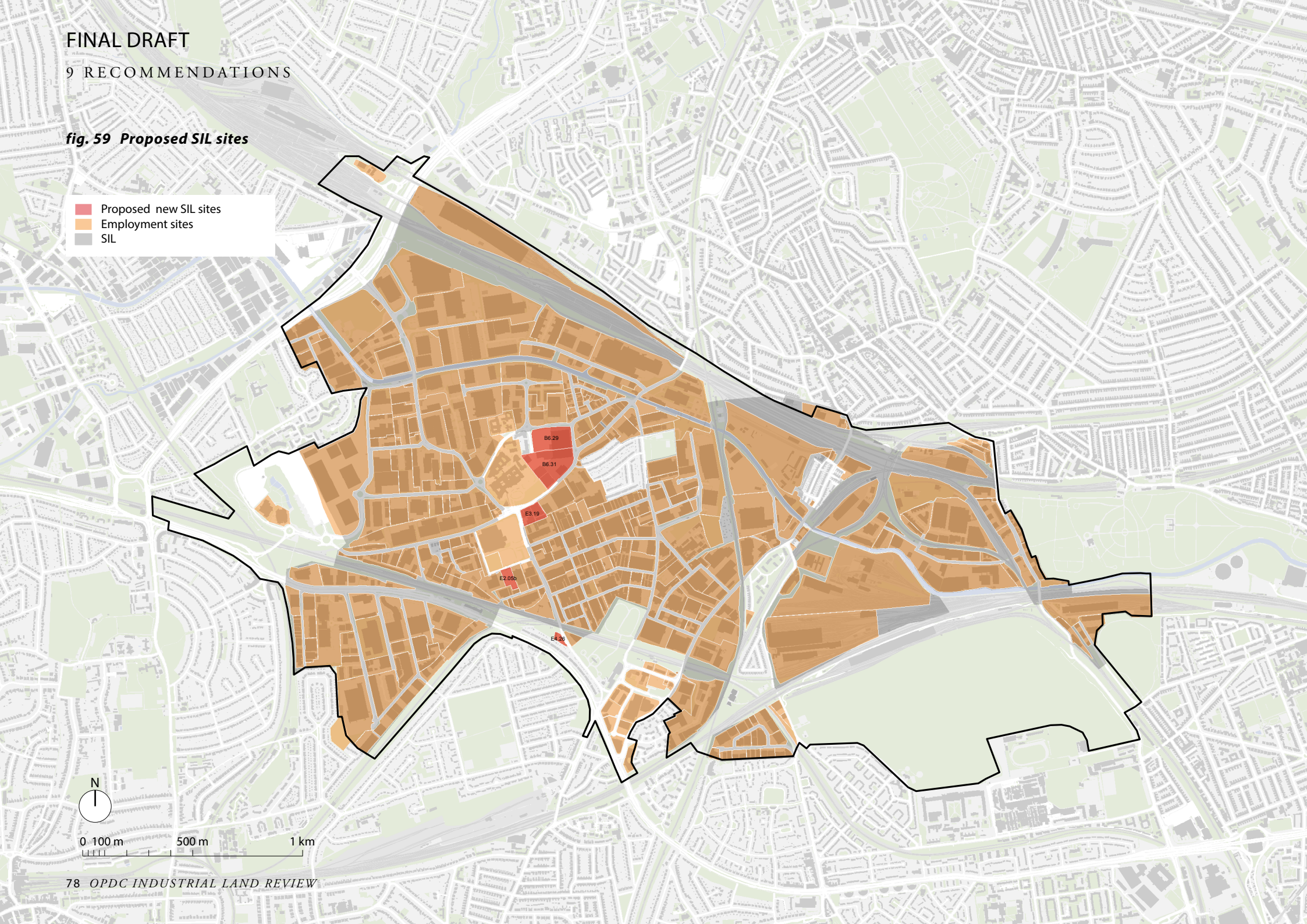
9.27 To ease the increasing industrial market pressures on Park Royal and support the relocation of businesses in appropriate locations in the area ODPC should work with boroughs to identify where industrial spaces could be provided within the area. For instance light industrial B1c class property could be provided as part of mixed use redevelopment schemes within the surrounding area. When considering releasing employment sites outside SIL where they cannot be redeveloped for B2 or B8 uses, the boroughs should consider seeking replacement B1c property.

Industrial space design and planning guidance

9.28 The OPDC should explore with the GLA and west London boroughs the creation of guidance for the design, planning, delivery and management of industrial and light industrial spaces to meet the needs of diverse industrial users.

9.29 Currently much replacement employment space provided by developers on redeveloped industrial sites in London often does not meet the diverse requirements of industrial businesses and are used as office or residential space. Clearer guidance can help to provide flexible spaces that meet the needs of industrial and light industrial businesses.

fig. 59 Proposed SIL sites



SUPPORT

Business relocation

9.30 Local economic policies should support the retention of local economic productivity and activity within the OPDC area through business support policies and a support strategy focusing on businesses directly affected by the HS2 construction sites and the redevelopment of Old Oak.

9.31 There are over 350 businesses and 6500 jobs located within these areas which play an important role in the local economy and local employment. Half of these businesses are not industrial and could potentially relocate within mixed use redevelopment in Old Oak. Intensification policies and pilot projects mentioned earlier for Park Royal can also provide upper floor space for the non-industrial businesses while also freeing up ground floor space for some industrial businesses to relocate to Park Royal. Providing workspaces for affected businesses should be a priority for the more efficient redevelopment of sites in Park Royal and a condition for any OPDC support of pilot intensification schemes.

9.32 The business support policies and action strategy should also provide support for businesses that cannot relocate within the OPDC area to find appropriate workspace within the surrounding boroughs and sub-region when possible. To be more effective, policies and strategy would need to be coordinated with HS2, surrounding boroughs and the west London sub-region.

Low carbon transition

9.33 The OPDC should work with the GLA and other partners to support the transition of Park Royal businesses to become a low carbon manufacturing hub.

9.34 Making industry in Park Royal lower carbon with more efficient distribution processes and technologies would help to improve the local environment, business efficiency and road congestion. This would help mitigate the effects intensifying industrial sites and reduce their potential conflict with adjacent development areas such as Old Oak. Park Royal could become the UK's low carbon manufacturing hub.

Local procurement

9.35 The OPDC should work with HS2, Crossrail, TfL and other stakeholder and landowners to promote and facilitate the procurement of goods and services from local businesses for public and private contracts linked to real estate and infrastructure development in the OPDC area.

9.36 This should include support and training for local businesses to bid for contracts as well as a centralised tendering website and a database of local businesses with their sectors to identify local businesses to invite to tender.

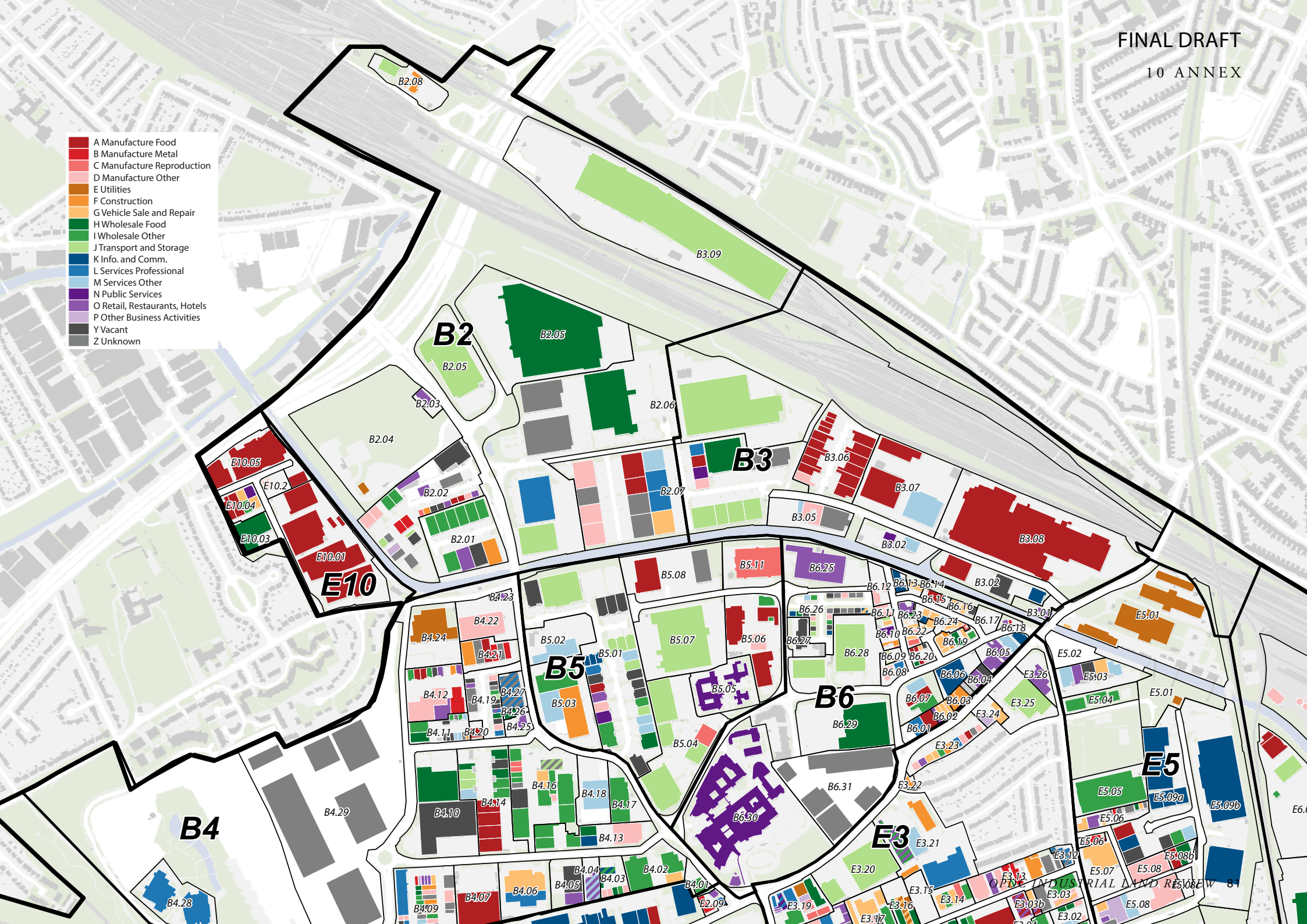
Business listing and online forum

9.37 The OPDC should work with local businesses groups to create a publicly accessible online business directory and map of businesses within the ODPC area and online forum.

9.38 This will facilitate informing businesses of development plans and facilitating discussion amongst businesses and feedback. It can also provide useful business connections for many businesses that are otherwise not very visible in the area.

10 APPENDIX: EMPLOYMENT SITE OVERVIEW

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m^2/employee)	Land use category	Site typology
B2.01	Grand Union Trade Park	10	1.70	12200	0.72	113	108	C Warehouses	02 Industrial estate
B2.02	Tudor Estate	13	2.82	12187	0.43	414	29	C Warehouses	02 Industrial estate
B2.03	Park Royal Service Station	1	0.16	517	0.32	14	37	J Other industrial	11 Other
B2.04	Brent Reuse and Recycling Centre	1	4.64	609	0.01	26	24	F Utilities	05 Open industrial land
B2.05	D-Link Europe + Best Way	2	6.49	39519	0.61	719	55	C Warehouses	01 Standalone warehouse
B2.06	Premier Park	2	11.39	50754	0.45	960	53	C Warehouses	01 Standalone warehouse
B2.07	Premier Park	2	6.83	34670	0.51	770	45	A General industry	02 Industrial estate
B2.08		3	0.68	1671	0.25	105	16	J Other industrial	02 Industrial estate
B3.01	Grand Junction Arms	1	0.24	696	0.29	23	30	M Retail	07 Street frontage
B3.02	Centrus Business Park	4	1.63	6562	0.40	100	66	A General industry	01 Standalone warehouse
B3.05	Gormley House	2	0.82	3657	0.45	91	40	A General industry	03 Dense light industrial
B3.06	Townsend Industrial Estate	3	1.86	14479	0.78	282	51	A General industry	02 Industrial estate
B3.07	See Woo Food & Panalux	2	2.40	22468	0.94	409	55	A General industry	01 Standalone warehouse
B3.08	McVities	1	4.95	28483	0.58	735	39	A General industry	06 Specific industrial
B3.09	Royal Mail Distribution Centre	1	10.00	37760	0.38	687	55	H Land for rail	06 Specific industrial
B4.01		1	0.19	751	0.40	14	55	C Warehouses	01 Standalone warehouse
B4.02		3	0.83	8303	1.00	104	80	C Warehouses	02 Industrial estate
B4.03	AMC Business Centre	20	0.40	2971	0.75	112	27	A General industry	02 Industrial estate
B4.04	Dephna Group (business estate)	14	0.27	1314	0.48	55	24	B Light industry	04 Business centre
B4.05		1	0.58	2554	0.44	14	179	A General industry	01 Standalone warehouse
B4.06	Mak House	2	1.04	4752	0.46	86	55	A General industry	01 Standalone warehouse
B4.07		1	1.02	10228	1.00	284	36	A General industry	01 Standalone warehouse
B4.09	Cumberland Business Park	35	1.74	17488	1.00	465	38	B Light industry	02 Industrial estate
B4.10		1	2.20	32706	1.49	55	595	C Warehouses	01 Standalone warehouse
B4.11	Friarsgate Business Park	9	0.53	3854	0.73	72	54	C Warehouses	02 Industrial estate
B4.12	Genesis Business Park	9	1.11	8920	0.80	176	51	C Warehouses	02 Industrial estate
B4.13	Cumberland Avenue Industrial Estate	5	1.01	8513	0.84	129	66	C Warehouses	02 Industrial estate
B4.14	Whitby Avenue	7	1.73	15628	0.91	359	43	A General industry	02 Industrial estate
B4.16	Space Business Park	28	2.06	20796	1.01	405	51	C Warehouses	02 Industrial estate
B4.17	Abbott House	1	0.56	3249	0.58	55	59	C Warehouses	01 Standalone warehouse
B4.18		1	0.77	4019	0.53	73	55	C Warehouses	01 Standalone warehouse
B4.19	Park Royal Industrial Centre	12	0.84	4082	0.48	77	53	C Warehouses	02 Industrial estate
B4.20	Design House	1	0.09	445	0.50	12	36	L Offices	09 Hotel or office
B4.21		3	0.59	4133	0.70	73	57	A General industry	01 Standalone warehouse
B4.22	European House	1	0.83	5447	0.65	99	55	A General industry	01 Standalone warehouse
B4.23	Abbey point	1	0.06	952	1.49	6	159	M Retail	07 Street frontage
B4.24	Aggregate House	1	1.13	5662	0.50	75	75	I Waste management and recycling	01 Standalone warehouse
B4.25	Abbey Manor	1	0.20	800	0.40	27	30	M Retail	07 Street frontage
B4.26		1	0.07	389	0.59	20	19	C Warehouses	03 Dense light industrial
B4.27	Unimix House	61	0.32	14326	4.43	487	29	L Offices	04 Business centre
B4.28	Diageo, Bachtel	2	1.24	43830	3.53	1000	44	L Offices	09 Hotel or office
B4.29	Origin Business Park	6	9.54	38159	0.40	694	55	C Warehouses	01 Standalone warehouse
B5.01	Abbey Road Industrial Park	17	4.30	25324	0.59	293	86	C Warehouses	02 Industrial estate
B5.02		1	0.90	2377	0.26	20	119	C Warehouses	01 Standalone warehouse


A Manufacture Food
B Manufacture Metal
C Manufacture Reproduction
D Manufacture Other
E Utilities
F Construction
G Vehicle Sale and Repair
H Wholesale Food
I Wholesale Other
J Transport and Storage
K Info. and Comm.
L Services Professional
M Services Other
N Public Services
O Retail, Restaurants, Hotels
P Other Business Activities
Y Vacant
Z Unknown
B2
B3
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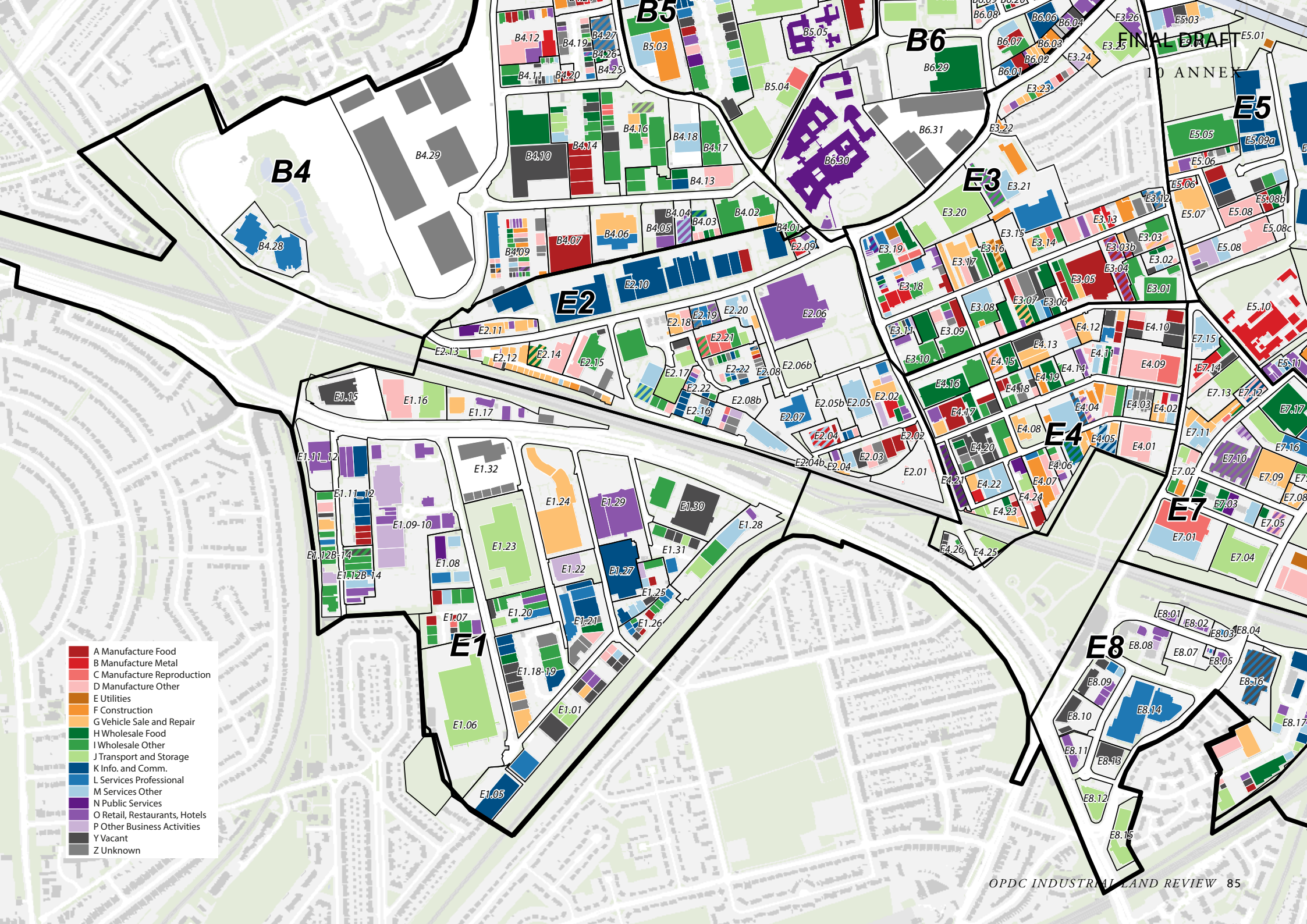
Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m^2/employee)	Land use category	Site typology
B5.03	Abbey Road Corner	3	1.66	9469	0.57	150	63	C Warehouses	01 Standalone warehouse
B5.04	Nucleus Business Park, City Link	6	2.37	13501	0.57	296	46	C Warehouses	01 Standalone warehouse
B5.05	NHS Mental Health Facility	1	1.08	8277	0.77	36	229	N Community services	11 Other
B5.06	Bighams, Concept House, Acme Technology	6	1.61	10614	0.66	289	37	A General industry	01 Standalone warehouse
B5.07	Anglo Pacific	1	2.21	16588	0.75	80	207	C Warehouses	01 Standalone warehouse
B5.08	Greencore	2	1.69	6098	0.36	500	12	A General industry	01 Standalone warehouse
B5.11	Photobox	1	1.01	7287	0.72	150	49	A General industry	01 Standalone warehouse
B6.01		2	0.26	2439	0.93	32	76	B Light industry	04 Business centre
B6.02		4	0.13	1262	0.99	40	31	A General industry	03 Dense light industrial
B6.03		2	0.14	1610	1.17	25	64	A General industry	03 Dense light industrial
B6.04		1	0.17	1210	0.71	14	89	L Offices	03 Dense light industrial
B6.05		5	0.45	5692	1.28	118	48	C Warehouses	03 Dense light industrial
B6.06	Park Royal Studios	1	0.40	2953	0.74	17	174	C Warehouses	01 Standalone warehouse
B6.07		3	0.57	2543	0.45	99	26	C Warehouses	02 Industrial estate
B6.08		2	0.20	1437	0.73	30	48	C Warehouses	01 Standalone warehouse
B6.09	Car Park Steele Road	1	0.08	154	0.19	5	30	D Open storage	05 Open industrial land
B6.10	Fomac House	5	0.22	1610	0.75	58	28	A General industry	03 Dense light industrial
B6.11		2	0.08	687	0.85	23	29	B Light industry	03 Dense light industrial
B6.12		1	0.23	500	0.21	19	26	A General industry	05 Open industrial land
B6.13	Ace and Sound Mastering	2	0.09	1293	1.39	26	50	B Light industry	03 Dense light industrial
B6.14	The Park Royal Garage	1	0.08	346	0.44	13	27	A General industry	01 Standalone warehouse
B6.15	Honeyrose Bakery Ltd	1	0.12	659	0.56	16	41	A General industry	01 Standalone warehouse
B6.16	Drakeglen House	2	0.12	750	0.61	15	50	A General industry	03 Dense light industrial
B6.17		0	0.19	0	0.00	0	-!	D Open storage	05 Open industrial land
B6.18		2	0.07	187	0.25	6	29	B Light industry	07 Street frontage
B6.19	Park Lane Group	7	0.28	2484	0.89	68	37	A General industry	03 Dense light industrial
B6.20	Lower Place Business Centre	6	0.17	672	0.40	19	36	C Warehouses	02 Industrial estate
B6.21		2	0.07	395	0.57	12	32	A General industry	03 Dense light industrial
B6.22		5	0.18	1088	0.59	31	35	A General industry	03 Dense light industrial
B6.23		1	0.07	1065	1.51	33	32	A General industry	03 Dense light industrial
B6.24		6	0.26	1525	0.58	29	53	A General industry	03 Dense light industrial
B6.25	Oliver Business Park	1	1.19	13746	1.15	120	115	A General industry	01 Standalone warehouse
B6.26	Oliver Business Park, BHM	20	0.97	4309	0.44	119	36	B Light industry	04 Business centre
B6.27		0	0.37	1172	0.31	0	-!	K Vacant industrial	11 Other
B6.28	Fedex	2	1.74	10452	0.60	215	49	C Warehouses	01 Standalone warehouse
B6.29		1	1.83	8575	0.47	50	172	C Warehouses	01 Standalone warehouse
B6.30	Central Middlesex Hospital	3	5.37	54997	1.02	262	210	N Community services	11 Other
B6.31	Wave	1	2.64	14688	0.56	0	-!	C Warehouses	01 Standalone warehouse

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m^2/employee)	Land use category	Site typology
E1.01	Vision Industrial Park	7	1.55	14791	0.95	198	75	B Light industry	02 Industrial estate
E1.05	Park Western	1	0.68	6899	1.02	125	55	B Light industry	01 Standalone warehouse
E1.06	John Lewis Depot	1	4.42	39011	0.88	709	55	C Warehouses	01 Standalone warehouse
E1.07	Kendal Court, Western Avenue Business Park	10	1.06	9606	0.90	160	60	C Warehouses	02 Industrial estate
E1.08	Western Avenue Business Park	4	0.79	5664	0.71	147	38	L Offices	04 Business centre
E1.09-10	Front of Park Royal Leisure Centre	11	4.44	14310	0.32	323	44	O Recreation and leisure	10 Retail park
E1.11_12		6	1.83	12552	0.69	273	46	C Warehouses	01 Standalone warehouse
E1.12B-14		16	1.44	10412	0.72	226	46	C Warehouses	03 Dense light industrial
E1.15		0	1.10	14882	1.35	0	-!	K Vacant industrial	12 Vacant
E1.16		2	0.99	18366	1.86	471	39	C Warehouses	01 Standalone warehouse
E1.17	Western Avenue	4	1.00	5076	0.51	76	67	P Residential	09 Hotel or office
E1.18-19	Westwood Park Trading Estate, Concord Road	9	1.95	16963	0.87	275	62	C Warehouses	02 Industrial estate
E1.20	Concord Business Centre	8	0.81	6014	0.75	147	41	B Light industry	03 Dense light industrial
E1.21	Westpoint Trading Estate & Delphi	7	1.22	16145	1.33	503	32	C Warehouses	02 Industrial estate
E1.22	LH2	1	0.51	2421	0.47	44	55	C Warehouses	01 Standalone warehouse
E1.23	Parcelforce Depot	1	2.15	12838	0.60	238	54	C Warehouses	01 Standalone warehouse
E1.24	Renault London West	1	1.95	13712	0.70	249	55	B Light industry	01 Standalone warehouse
E1.25	Heron Trading Estate	6	0.61	4981	0.82	103	48	C Warehouses	02 Industrial estate
E1.26	Alliance COurt	9	0.59	2633	0.45	94	28	B Light industry	02 Industrial estate
E1.27	Black Island Studios	1	0.70	7807	1.12	142	55	B Light industry	02 Industrial estate
E1.28	333 Western Avnue and land to rear	4	1.15	5375	0.47	106	51	C Warehouses	03 Dense light industrial
E1.29	West 5 Centre	2	1.68	7191	0.43	131	55	M Retail	01 Standalone warehouse
E1.30	Western Avenue Business Park	1	1.80	15149	0.84	95	159	C Warehouses	04 Business centre
E1.31		3	0.67	3679	0.55	56	66	C Warehouses	02 Industrial estate
E1.32	Vacant lot / Wave Trade Park	6	1.31	4480	0.34	98	46	C Warehouses	02 Industrial estate
E10.01		1	3.01	31001	1.03	132	235	A General industry	01 Standalone warehouse
E10.03		1	0.61	3846	0.63	70	55	C Warehouses	01 Standalone warehouse
E10.04	Dan House	6	0.44	2982	0.68	54	55	A General industry	04 Business centre
E10.05		1	1.17	9823	0.84	42	234	A General industry	01 Standalone warehouse
E10.2		2	0.20	278	0.14	32	9	D Open storage	05 Open industrial land
E2.01	Park Royal Readymix Plant	1	0.77	423	0.05	16	27	A General industry	05 Open industrial land
E2.02		12	0.88	6657	0.76	144	46	A General industry	03 Dense light industrial
E2.03	Western Trading Estate	4	0.77	4902	0.64	87	56	A General industry	02 Industrial estate
E2.04		8	0.54	4415	0.82	83	53	B Light industry	03 Dense light industrial
E2.04b		0	0.06	113	0.19	0	-!	F Utilities	06 Specific industrial
E2.05		1	0.55	2680	0.49	100	27	C Warehouses	01 Standalone warehouse
E2.05b		0	0.46	0	0.00	0	-!	K Vacant industrial	05 Open industrial land
E2.06	Asda	1	3.58	11031	0.31	150	74	M Retail	10 Retail park
E2.06b	Vacant plot	0	0.50	0	0.00	0	-!	K Vacant industrial	12 Vacant
E2.07		1	0.95	2623	0.28	48	55	C Warehouses	01 Standalone warehouse
E2.08		0	0.18	0	0.00	0	-!	K Vacant industrial	12 Vacant

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m^2/employee)	Land use category	Site typology
E2.08b	Vacant plot	0	0.43	0	0.00	0	-!	K Vacant industrial	12 Vacant
E2.09	Nat West Bank	3	0.17	1849	1.11	43	43	B Light industry	07 Street frontage
E2.10	Matrix	4	5.45	46987	0.86	864	54	B Light industry	02 Industrial estate
E2.11		7	0.56	4440	0.79	114	39	A General industry	03 Dense light industrial
E2.12		22	0.82	5687	0.69	155	37	A General industry	03 Dense light industrial
E2.13	Granville Works	1	0.13	1602	1.24	35	46	C Warehouses	01 Standalone warehouse
E2.14		3	0.50	3070	0.62	56	55	A General industry	01 Standalone warehouse
E2.15	Vascroft Estate	2	0.93	5219	0.56	64	81	C Warehouses	02 Industrial estate
E2.16	Sovereign Park	18	2.22	15150	0.68	262	58	B Light industry	02 Industrial estate
E2.17		2	0.51	4503	0.88	14	315	C Warehouses	03 Dense light industrial
E2.18		2	0.21	1787	0.84	16	112	A General industry	03 Dense light industrial
E2.19	Dephna Group Coronation Road	8	0.23	2021	0.89	81	25	B Light industry	04 Business centre
E2.20	Atlas Works	2	0.41	1421	0.35	20	71	C Warehouses	03 Dense light industrial
E2.21	Britannia Way	4	0.58	4078	0.71	82	50	A General industry	02 Industrial estate
E2.22	Park Royal Metro Centre	30	0.96	6801	0.71	258	26	B Light industry	02 Industrial estate
E3.01	CKM	2	0.73	7395	1.01	150	49	B Light industry	03 Dense light industrial
E3.02	The Chase Centre	4	0.29	2246	0.78	62	36	B Light industry	02 Industrial estate
E3.03	Corner Chase Road and Minerva Road	7	0.45	4151	0.93	93	45	B Light industry	03 Dense light industrial
E3.03b		18	0.08	413	0.51	18	23	A General industry	03 Dense light industrial
E3.04	Alpha Beta and neighbours	2	0.41	275	0.07	10	27	A General industry	04 Business centre
E3.05		6	1.14	9133	0.80	183	50	A General industry	03 Dense light industrial
E3.06		2	0.15	1647	1.08	38	44	B Light industry	02 Industrial estate
E3.07		11	1.06	10596	1.00	185	57	B Light industry	03 Dense light industrial
E3.08		3	0.59	3544	0.60	47	75	B Light industry	01 Standalone warehouse
E3.09		7	0.64	4779	0.74	58	82	A General industry	03 Dense light industrial
E3.10	Kojac House	3	0.67	6260	0.94	126	50	A General industry	01 Standalone warehouse
E3.11	Premier Business Centre	37	0.18	1645	0.90	67	24	L Offices	04 Business centre
E3.12	Dephna House	23	0.12	919	0.77	43	21	B Light industry	04 Business centre
E3.13		10	0.83	9600	1.16	173	55	A General industry	03 Dense light industrial
E3.14	Cromwell Centre	5	0.37	2062	0.55	51	40	C Warehouses	02 Industrial estate
E3.15	Park Royal Depot	0	0.37	0	0.00	0	-!	F Utilities	05 Open industrial land
E3.16		4	0.41	1904	0.46	41	46	C Warehouses	03 Dense light industrial
E3.17	The Mill Trading Estate	3	0.76	8376	1.10	152	55	A General industry	02 Industrial estate
E3.18		20	1.24	10309	0.83	270	38	A General industry	02 Industrial estate
E3.19		13	0.81	7989	0.98	94	85	B Light industry	03 Dense light industrial
E3.20	Cadogan House	1	1.38	9043	0.66	164	55	C Warehouses	01 Standalone warehouse
E3.21	Frogmore Estate	7	2.23	11022	0.49	211	52	A General industry	02 Industrial estate
E3.22	Wesley House	1	0.06	263	0.44	27	10	L Offices	08 Business in residential
E3.23	Hanover Industrial Estate	11	0.63	2707	0.43	63	43	B Light industry	02 Industrial estate
E3.24		2	0.23	2247	0.97	14	161	A General industry	01 Standalone warehouse
E3.25	Ward-Thomas Removals	1	0.86	4651	0.54	100	47	C Warehouses	01 Standalone warehouse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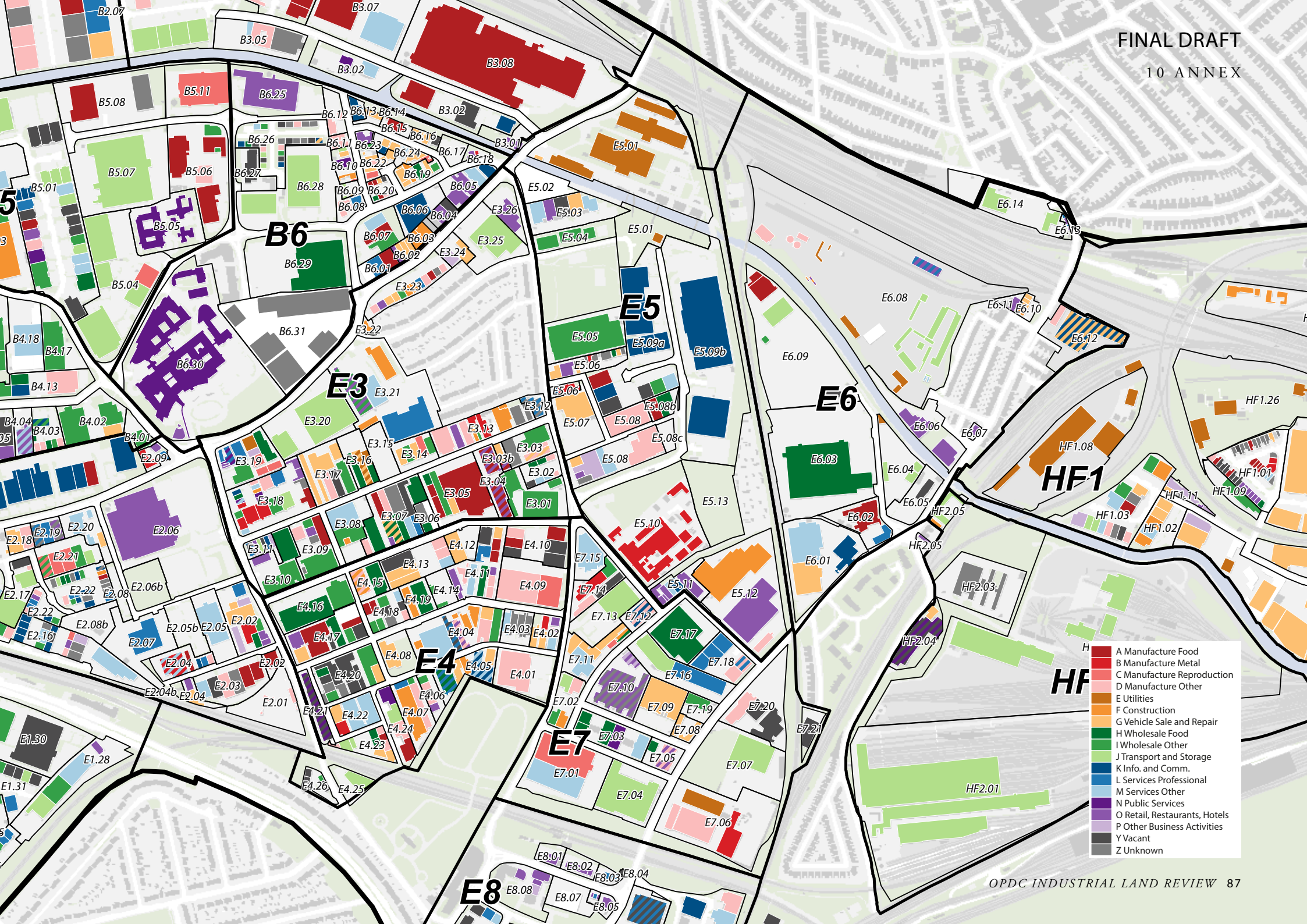
A Manufacture Food
B Manufacture Metal
C Manufacture Reproduction
D Manufacture Other
E Utilities
F Construction
G Vehicle Sale and Repair
H Wholesale Food
I Wholesale Other
J Transport and Storage
K Info. and Comm.
L Services Professional
M Services Other
N Public Services
O Retail, Restaurants, Hotels
P Other Business Activities
Y Vacant
Z Unknown

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m^2/employee)	Land use category	Site typology
E3.26		1	0.37	1709	0.46	44	39	C Warehouses	01 Standalone warehouse
E4.01		1	0.75	3488	0.46	63	55	A General industry	01 Standalone warehouse
E4.02		7	0.30	2322	0.76	73	32	A General industry	03 Dense light industrial
E4.03		3	0.31	1951	0.63	54	36	C Warehouses	02 Industrial estate
E4.04		10	1.12	7596	0.68	174	44	B Light industry	03 Dense light industrial
E4.05		7	0.55	4121	0.74	109	38	B Light industry	03 Dense light industrial
E4.06		4	0.22	1107	0.51	35	31	B Light industry	02 Industrial estate
E4.07		4	0.56	6033	1.09	71	85	B Light industry	03 Dense light industrial
E4.08	Renault Trucks (Stoneridge)	1	0.38	1145	0.30	21	55	A General industry	01 Standalone warehouse
E4.09	JAT Glass	2	0.91	7684	0.85	67	115	B Light industry	02 Industrial estate
E4.10	Oakwood Business Park	3	0.71	4098	0.58	33	124	A General industry	02 Industrial estate
E4.11		11	0.83	5701	0.69	129	44	B Light industry	03 Dense light industrial
E4.12	DAF Royal Parks	1	0.29	1296	0.44	33	39	A General industry	01 Standalone warehouse
E4.13	Bush Industrial Estate	3	0.66	9467	1.44	166	57	A General industry	02 Industrial estate
E4.14		0	0.24	335	0.14	12	27	C Warehouses	05 Open industrial land
E4.15		3	0.32	4994	1.58	102	49	C Warehouses	03 Dense light industrial
E4.16	SHERRYs hair and beauty wholesaler	2	0.81	8284	1.02	151	55	A General industry	01 Standalone warehouse
E4.17		6	0.82	5738	0.70	104	55	A General industry	03 Dense light industrial
E4.18	Sabre House and Bush Industrial Estate	6	0.42	3192	0.76	66	48	C Warehouses	02 Industrial estate
E4.19		2	0.31	2033	0.66	52	39	B Light industry	03 Dense light industrial
E4.20		7	0.80	7439	0.93	65	115	B Light industry	03 Dense light industrial
E4.21	Park Royal Business Centre	36	0.27	3840	1.42	160	24	L Offices	04 Business centre
E4.22		3	0.42	3738	0.88	332	11	B Light industry	03 Dense light industrial
E4.23		10	0.36	2627	0.73	67	39	C Warehouses	02 Industrial estate
E4.24	Sunbeam Centre	4	0.41	3392	0.82	67	51	A General industry	02 Industrial estate
E4.25		1	0.29	1817	0.63	33	55	C Warehouses	01 Standalone warehouse
E4.26	The Courtyard	1	0.19	935	0.50	8	119	C Warehouses	02 Industrial estate
E5.01	Electricity Substation	1	4.75	11672	0.25	34	344	F Utilities	06 Specific industrial
E5.02	Conway / Aecom	0	0.43	0	0.00	0	-!	K Vacant industrial	05 Open industrial land
E5.03	Royal London Industrial Estate	4	0.80	4557	0.57	65	70	B Light industry	02 Industrial estate
E5.04	Brooks Packaging Ltd	1	0.48	3007	0.63	9	334	C Warehouses	01 Standalone warehouse
E5.05	DOOA	1	1.01	8201	0.81	149	55	C Warehouses	01 Standalone warehouse
E5.06	North Acton Road 63	13	0.49	3185	0.65	90	35	A General industry	03 Dense light industrial
E5.07	Solus House	1	0.71	2917	0.41	53	55	A General industry	01 Standalone warehouse
E5.08	Cunard Road	6	1.20	9602	0.80	183	52	A General industry	02 Industrial estate
E5.08b		2	0.21	1480	0.71	35	42	A General industry	03 Dense light industrial
E5.08c		0	0.13	0	0.00	0	-!	K Vacant industrial	05 Open industrial land
E5.09a	Powergate Business Park	5	2.30	23493	1.02	367	64	B Light industry	02 Industrial estate
E5.09b	Powergate Business Park	1	3.96	30859	0.78	561	55	B Light industry	01 Standalone warehouse
E5.10	Vale Inco	1	2.79	14954	0.54	109	137	A General industry	06 Specific industrial
E5.11	Torpedo Factory	5	0.36	3388	0.94	94	36	C Warehouses	03 Dense light industrial


B6
E3
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HF1
A Manufacture Food
B Manufacture Metal
C Manufacture Reproduction
D Manufacture Other
E Utilities
F Construction
G Vehicle Sale and Repair
H Wholesale Food
I Wholesale Other
J Transport and Storage
K Info. and Comm.
L Services Professional
M Services Other
N Public Services
O Retail, Restaurants, Hotels
P Other Business Activities
Y Vacant
Z Unknown

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m²/employee)	Land use category	Site typology
E5.12	Chandos Park Industrial Estate	3	2.22	27486	1.24	519	53	A General industry	02 Industrial estate
E5.13		0	1.05	0	0.00	0	-!	K Vacant industrial	12 Vacant
E6.01	The Royal Plantagenet House and Tudor House	3	1.53	10766	0.71	118	91	A General industry	01 Standalone warehouse
E6.02	Rowan House	2	0.54	3096	0.57	65	48	A General industry	03 Dense light industrial
E6.03		1	3.21	11332	0.35	150	76	C Warehouses	01 Standalone warehouse
E6.04	Park Royal Garage	2	0.68	1018	0.15	36	28	A General industry	05 Open industrial land
E6.05		0	0.47	559	0.12	0	-!	K Vacant industrial	12 Vacant
E6.06	Radford Industrial Estate	1	0.83	3928	0.48	45	87	C Warehouses	02 Industrial estate
E6.07	The Fishermans Arms	1	0.05	230	0.50	8	30	M Retail	08 Business in residential
E6.08	Willesden Freight Terminal	16	7.89	7923	0.10	170	47	D Open storage	05 Open industrial land
E6.09	Redland / Atlas House	4	2.10	5275	0.25	94	56	A General industry	01 Standalone warehouse
E6.10	The New Business Centre	3	0.12	485	0.42	13	36	C Warehouses	02 Industrial estate
E6.11		1	0.10	301	0.32	8	36	C Warehouses	01 Standalone warehouse
E6.12	The Ursula Lapp Estate	3	0.87	4713	0.54	65	73	A General industry	02 Industrial estate
E6.13	Station Offices	4	0.05	132	0.29	4	30	M Retail	07 Street frontage
E6.14	Willesden Depot	1	1.16	2047	0.18	37	55	G Land for buses	06 Specific industrial
E7.01		2	1.40	7440	0.53	9	827	A General industry	01 Standalone warehouse
E7.02	Chase Road Industrial Estate	4	0.37	2144	0.58	44	49	B Light industry	02 Industrial estate
E7.03		6	0.64	5088	0.80	57	90	B Light industry	02 Industrial estate
E7.04		1	0.92	1284	0.14	5	257	C Warehouses	01 Standalone warehouse
E7.05	Europa Studios	28	0.29	3185	1.10	141	23	L Offices	04 Business centre
E7.06	Boden House	4	2.06	17083	0.83	424	40	C Warehouses	04 Business centre
E7.07	Waitrose	1	1.67	3598	0.22	65	55	C Warehouses	01 Standalone warehouse
E7.08	Lewis House	1	0.17	844	0.49	26	32	L Offices	04 Business centre
E7.09	H. R. Owen	1	0.61	3681	0.61	67	55	A General industry	01 Standalone warehouse
E7.10	Acton Business Centre	60	0.82	12055	1.48	366	33	B Light industry	04 Business centre
E7.11		11	0.56	4258	0.77	101	42	B Light industry	03 Dense light industrial
E7.12	Wimpole House	5	0.20	1263	0.65	55	23	B Light industry	03 Dense light industrial
E7.13	TNT	1	0.71	2754	0.39	71	39	C Warehouses	01 Standalone warehouse
E7.14		3	0.44	5646	1.27	45	126	A General industry	03 Dense light industrial
E7.15	DYN Metal	1	0.37	2228	0.60	57	39	L Offices	01 Standalone warehouse
E7.16	Hedley Humpers	2	0.81	4452	0.55	114	39	L Offices	02 Industrial estate
E7.17	Bestway Catering	1	0.81	5301	0.65	96	55	B Light industry	01 Standalone warehouse
E7.18	Jack Wills	3	0.57	3835	0.67	113	34	B Light industry	02 Industrial estate
E7.19		1	0.22	795	0.36	14	55	C Warehouses	01 Standalone warehouse
E7.20	Braitrim House	1	1.08	6424	0.60	40	161	C Warehouses	04 Business centre
E7.21	Vacant site without building	0	0.20	1041	0.52	0	-!	K Vacant industrial	05 Open industrial land
E8.01	Esso Station	1	0.17	347	0.21	13	27	F Utilities	05 Open industrial land
E8.02	Holiday Inn Express	2	0.22	600	0.28	6	108	P Residential	09 Hotel or office
E8.03		1	0.11	329	0.29	16	21	K Vacant industrial	07 Street frontage
E8.04		0	0.01	93	1.00	0	-!	K Vacant industrial	12 Vacant

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m²/employee)	Land use category	Site typology
E8.05		1	0.11	704	0.67	5	141	M Retail	08 Business in residential
E8.06		3	0.05	132	0.28	5	25	M Retail	07 Street frontage
E8.08	Ebbott Court, Trentham Court, Lyra Court	4	0.78	1569	0.20	40	39	P Residential	08 Business in residential
E8.09	Portal West Business Centre	4	0.58	2886	0.50	55	53	C Warehouses	02 Industrial estate
E8.10	The Portal	0	0.51	2947	0.58	0	-!	C Warehouses	02 Industrial estate
E8.11	Ramada Encore Hotel	1	0.31	7029	2.29	31	229	P Residential	09 Hotel or office
E8.12		1	0.35	1852	0.53	34	55	E Self storage	09 Hotel or office
E8.13		0	0.35	1488	0.43	0	-!	C Warehouses	01 Standalone warehouse
E8.14		2	1.39	29008	2.08	1200	24	C Warehouses	01 Standalone warehouse
E8.15		1	0.51	4465	0.87	30	149	E Self storage	09 Hotel or office
E8.16	Perfume Factory	23	1.09	23472	2.15	213	110	L Offices	04 Business centre
E8.17	Victoria Industrial Estate	20	3.84	16684	0.43	251	66	B Light industry	02 Industrial estate
E9.01	Westway Estate	1	0.32	5785	1.82	30	193	K Vacant industrial	12 Vacant
E9.02		1	0.30	1842	0.62	33	55	C Warehouses	01 Standalone warehouse
E9.03	Westway Estate	0	0.29	3564	1.23	55	65	A General industry	03 Dense light industrial
E9.04		1	0.30	1479	0.50	27	55	C Warehouses	01 Standalone warehouse
E9.05		2	0.25	1261	0.51	30	41	A General industry	03 Dense light industrial
E9.06		1	0.24	1443	0.61	26	55	C Warehouses	06 Specific industrial
E9.07	Westway Estate	2	0.73	3901	0.54	44	88	C Warehouses	01 Standalone warehouse
E9.08		0	0.35	2396	0.69	0	-!	K Vacant industrial	12 Vacant
E9.09	Westway Estate	1	0.13	951	0.71	24	39	C Warehouses	01 Standalone warehouse
E9.10	Westway Estate	2	0.68	4865	0.71	94	52	C Warehouses	02 Industrial estate
E9.11		0	0.39	1921	0.49	0	-!	C Warehouses	01 Standalone warehouse
E9.12	Brunel House	0	0.50	5047	1.00	0	-!	K Vacant industrial	12 Vacant
E9.13	Westway Estate	2	0.34	3051	0.91	83	37	C Warehouses	01 Standalone warehouse
E9.14		1	0.34	43	0.01	1	30	A General industry	05 Open industrial land
E9.15	Walking on Wood	0	0.13	919	0.70	0	-!	C Warehouses	01 Standalone warehouse
E9.16		2	0.26	3464	1.35	63	55	C Warehouses	01 Standalone warehouse

Site ID	Site name	Estimated Number of Businesses	Site area (ha)	Estimated gross external building floor area (m2)	Estimated plot ratio	Estimated number of employees	Employment density (m^2/employee)	Land use category	Site typology
HF1.01	Triangle Business Park	17	1.16	4468	0.38	146	31	B Light industry	02 Industrial estate
HF1.02	Apex Industrial Estate	5	0.58	2401	0.42	33	72	B Light industry	02 Industrial estate
HF1.03	Gateway Trading Estate	14	1.51	8807	0.58	142	62	B Light industry	02 Industrial estate
HF1.04		4	0.42	6176	1.47	140	44	B Light industry	04 Business centre
HF1.05		13	0.62	6010	0.97	104	58	C Warehouses	03 Dense light industrial
HF1.06		0	0.31	256	0.08	8	32	D Open storage	05 Open industrial land
HF1.07		1	0.60	1006	0.17	24	42	A General industry	06 Specific industrial
HF1.08	Powerday Recycling Centre	0	2.88	9452	0.33	15	630	I Waste management and recycling	06 Specific industrial
HF1.09		1	0.30	1751	0.58	25	70	C Warehouses	03 Dense light industrial
HF1.10a	Hythe Road Industrial Estate	1	4.76	33863	0.71	268	127	A General industry	01 Standalone warehouse
HF1.10b	Hythe Road	1	1.30	9468	0.73	69	138	C Warehouses	01 Standalone warehouse
HF1.10c	Hythe Road	2	5.77	39741	0.69	400	99	A General industry	01 Standalone warehouse
HF1.11	Regents House	5	0.16	2397	1.53	53	45	C Warehouses	03 Dense light industrial
HF1.12		2	0.28	2015	0.72	31	64	K Vacant industrial	12 Vacant
HF1.13		1	0.32	4729	1.47	30	158	L Offices	09 Hotel or office
HF1.14	Chandelier Building	28	0.51	4038	0.80	142	28	B Light industry	04 Business centre
HF1.15		1	0.46	725	0.16	5	145	C Warehouses	05 Open industrial land
HF1.16	Pentacostal City Mission Inc	1	0.12	1669	1.39	7	229	N Community services	11 Other
HF1.17		1	0.14	395	0.29	5	79	B Light industry	05 Open industrial land
HF1.18	Willesden Diesel Locomotive Depot	4	2.69	13577	0.50	240	57	H Land for rail	06 Specific industrial
HF1.19		1	0.59	2548	0.43	30	85	C Warehouses	01 Standalone warehouse
HF1.20		2	0.03	186	0.55	4	45	M Retail	07 Street frontage
HF1.21		23	1.03	7839	0.76	249	31	B Light industry	02 Industrial estate
HF1.22		49	0.70	6128	0.88	150	41	L Offices	04 Business centre
HF1.23		2	0.55	7597	1.39	60	127	E Self storage	01 Standalone warehouse
HF1.24		14	1.20	5753	0.48	121	47	C Warehouses	02 Industrial estate
HF1.25		1	4.66	10487	0.23	50	210	H Land for rail	06 Specific industrial
HF1.26		1	3.58	2629	0.07	20	131	I Waste management and recycling	06 Specific industrial
HF2.01		1	11.05	32377	0.29	50	648	H Land for rail	06 Specific industrial
HF2.02		1	13.55	12735	0.09	50	255	H Land for rail	06 Specific industrial
HF2.03		0	1.25	6879	0.55	0	-!	L Offices	11 Other
HF2.04		6	0.56	5132	0.91	85	60	L Offices	09 Hotel or office
HF2.05	Old Oak Cafe & Restaurant	3	0.29	1884	0.64	51	37	A General industry	03 Dense light industrial

A Manufacture Food
B Manufacture Metal
C Manufacture Reproduction
D Manufacture Other
E Utilities
F Construction
G Vehicle Sale and Repair
H Wholesale Food
I Wholesale Other
J Transport and Storage
K Info. and Comm.
L Services Professional
M Services Other
N Public Services
O Retail, Restaurants, Hotels
P Other Business Activities
Y Vacant
Z Unknown
E5
E6
E7
E8
E9
HF1
HF2