
Planning Statement

Former GSK Offices, Stockley Park, Hillingdon

July 2021

Prologis UK Limited

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



Contents

1.	Introduction	1
2.	Background	4
3.	The Proposed Development	8
4.	Planning Policy Context	14
5.	Material Planning Considerations	18
6.	Conclusion	39

Appendix 1 – Logistics Real Estate and E-Commerce, Prologis Research (Jan 2021)



Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



1. Introduction

- 1.1 This Planning Statement has been prepared in support of a full planning application submitted to London Borough of Hillingdon by Prologis UK Ltd. ('the applicant') for the redevelopment of the former GSK offices, Stockley Park.
- 1.2 The application site comprises the land occupied by the former GSK offices, made up of 3 buildings, and associated parking, including a large amount of surface level parking and a multi-storey car park. The site forms part of the wider Stockley Park commercial area and is located to the east of the development known as Prologis Park West London (formerly known as Stockley Park Phase 3).
- 1.3 Prologis recently secured planning permission for the redevelopment of this site to provide two industrial warehouse buildings, with associated parking, landscaping and other supporting infrastructure (LPA Ref. 39207/APP/2020/2188). This application secured a resolution to grant planning permission at Planning Committee in December 2020 and GLA Stage 2 sign off in March 2021. The Decision Notice was issued in June 2021.
- 1.4 However, following interest from a specific occupier a revised scheme has been designed for the use of the site as a highly sustainable, last mile distribution facility which will provide quality new logistics floorspace for a last mile delivery operator. There has been a very significant increase in demand for last mile distribution facilities across the country in order to keep pace with the increase in consumer demand from e-commerce. These facilities need to be located in more densely populated urban areas and are designed to effectively service the final part of a product's journey from shelf to customer, known as the last mile.
- 1.5 The proposed development seeks to redevelop the site to provide a last mile delivery facility (Class B8 use), comprising a warehouse for the storage, sorting and loading of deliveries measuring circa. 13,533 sqm (GEA) in total. The proposals also seek to the erection of an adjacent four-storey decked van storage facility for delivery vehicles, with capacity for approximately 800 vans. The proposals also include ancillary surface level staff car parking, retained and enhanced landscaping as well as other associated infrastructure.

Description of Development

- 1.6 The application seeks full planning permission for the following redevelopment proposals:

Redevelopment of the site to provide a last mile delivery centre (Use Class B8) and ancillary offices together with associated van storage deck and parking, access arrangements, landscaping and infrastructure."

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



Overview of Development

- 1.7 The proposals seek the comprehensive redevelopment of the site, comprising the construction of a new last-mile delivery facility (Class B8 use). The redevelopment proposals comprise a total of two structures, consisting of the main warehouse unit, to be used for the storage, sorting and loading of deliveries. The warehouse unit will be located toward the eastern section of the site, comprising circa 13,000sqm floorspace. The scheme will then also comprise an adjacent multi-storey decked van storage structure, which will be four storeys in height.
- 1.8 Larger vehicles undertaking deliveries to the warehouse will access and exit the site from a new two-way vehicular entry point in the southwest corner of the site from Ironbridge Road, entering into a loading yard to the south of the warehouse unit, and then exiting via the same route. The smaller delivery vans, undertaking the 'last-mile' delivery function, will enter and exit the site through retained vehicular access point from Ironbridge Road. Employees will also use this access to enter and exit the staff car park. All vehicles will therefore access the site from Ironbridge Road, via Horton Road, with no direct access proposed from Stockley Road (A408).
- 1.9 The impact of the proposals upon both the views of the site from the nearby Green Belt and the Grade II Registered Park and Garden are effectively mitigated through the implementation of a detailed landscaping strategy. Enhanced tree planting is provided along the southern site boundary, to mitigate impacts upon the adjacent Grand Union Canal, with further screening along the northern and western site boundaries seeking to break up the impact of the built form from short and long-range views. The existing green space along the eastern site boundary is enhanced within the development proposals, providing a greater quantum of green space whilst providing enhanced landscaping and flood attenuation and water features. Tree planting will be incorporated within the staff car parking area and within the vehicular access points along the eastern site boundary.

Supporting Documents

- 1.10 This Planning Statement should be read in conjunction with the accompanying plans and drawings submitted as part of the application, as well as the following documents which have been prepared to address the full range of material planning considerations:
- **Air Quality Assessment** prepared by AECOM;
 - **Circular Economy Statement** prepared by Turley;
 - **Construction Management Plan** prepared by WSP;
 - **Covering Letter** prepared by Savills;
 - **Delivery and Servicing Plan** prepared by WSP;

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



- **Design and Access Statement** prepared by Michael Sparks Associates;
- **Drainage Details** prepared by RPS;
- **Ecology Statement** prepared by Ecology Solutions;
- **Energy Statement** prepared by Yonder;
- **Existing and Proposed Plans, Elevations and Sections** prepared by Michael Sparks Associates;
- **Fire Safety Statement** prepared by WSP;
- **Flood Risk Assessment** prepared by WSP;
- **Transport Assessment** prepared by WSP;
- **Framework Travel Plan** prepared by WSP;
- **Outline Delivery and Servicing Plan** prepared by WSP;
- **Geo-Environmental Assessment (Phase 1)** prepared by WSP;
- **Geo-Environmental Assessment (Phase 2)** prepared by WSP;
- **Heritage Impact Assessment** prepared by Savills;
- **Landscape Visual Impact Appraisal and Landscape Details** prepared by BCA;
- **Noise Impact Assessment** prepared by AECOM;
- **Statement of Community Involvement** prepared by Connect;
- **Sustainability Statement** prepared by Turley;
- **Circular Economy Statement** prepared by Turley; and
- **Whole Life Carbon Assessment** prepared by Turley.

2. Background

- 2.1 The site measures approximately 6.3 ha in size and is broadly rectangular in shape. The site is located between Iron Bridge Road North and Stockley Road (A408). To the south, the site is bound by the Grand Union Canal and towpath which is managed by the Canal and River Trust. Stockley Park Country Park and Golf Course, an extensively landscaped public park provided on a historic landfill site, is immediately to the north of the site, across Horton Road.
- 2.2 A site location plan is provided in **Figure 2.1** below.

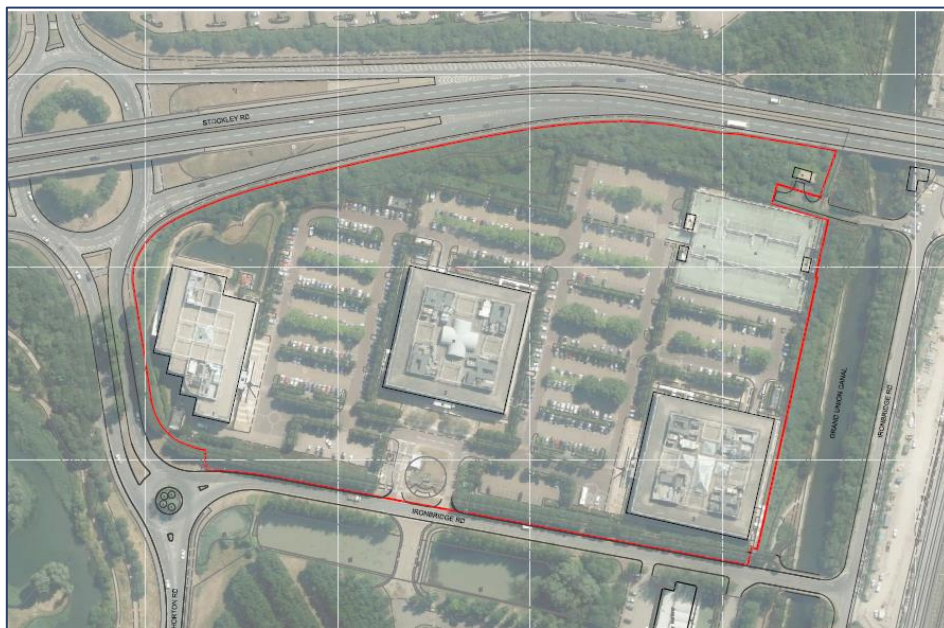


Figure 2.1: Site Location Plan

- 1.11 The site forms part of the wider well-established Stockley Park commercial area and is located to the west of the development known as Prologis Park West London (formerly known as Stockley Park Phase 3). This site is characterised by large industrial buildings, currently occupied by a data centre operator. To the east, beyond Stockley Road, the Stockley Park office campus, largely characterised by a range of large low density office buildings ranging from two to four storeys, set within landscaping and car parking.
- 1.12 The GSK site currently comprises 3 large office buildings totalling approx. 31,575 sqm of Class B1(a) floorspace. The buildings are surrounded by a substantial amount of ancillary surface level car parking. In the south eastern corner of the site there is also a large multi-storey car park associated with the GSK offices.

These buildings are now vacant. The principle of the demolition of these buildings has been established under the extant Prologis consent (LPA Ref. 39207/APP/2020/2188).

- 1.13 The Council's Proposals Map illustrates that the site is surrounded by land within the Green Belt. Some existing hardstanding areas and part of the existing multi-storey car park in the south-eastern corner of the site encroach into the Green Belt at present.
- 1.14 The site also forms part of the wider Stockley Park Grade II Registered Park and Garden, designated by the Gardens Trust in August 2020.
- 1.15 The site is bordered by trees and landscaping along each of the site boundaries, helping to screen it from the surrounding highways and from the canal. The site is currently accessed from one combined vehicular and pedestrian access on Ironbridge Road.
- 1.16 The site is located within Flood Zone 1 and is not located within a conservation area and there are no listed buildings on or within the vicinity of the site. There are no other environmental designations affecting the site.
- 1.17 The site is located to the west of Stockley Road / A408, less than 1km north of M4 Junction 4. West Drayton Station is located approximately 1.2km west of the site, offering National Rail services to London Paddington, Reading and Oxford. This station will also be serviced by Crossrail. There are a number of bus routes in the vicinity of the site, including on Horton Road, which offer services towards Heathrow, Clayton Road, Belmont Road and Hayes and Harlington. The site has a PTAL of 1b -2.
- 1.18 Further to the south of the site, beyond the canal and railway, is an area of residential properties.. These residential properties are located 145m south from the site. Industrial and commercial uses continue south along the line of Stockley Road towards the M4, including estates developed by Prologis and Segro, Heathpark Golf Course and two hotels.

Planning History

- 2.3 In December 1984 outline planning permission was granted for Phase 1 of Stockley Park to comprise a mixed use development on 131.43ha (LPA Ref. 27951/B/81/1955). This included the GSK site.
- 2.4 A number of reserved matters applications were subsequently submitted and approved pursuant to the original outline application. Of relevance is the reserved matters approval for the erection of the three buildings on the GSK site, approved in May 1990 (LPA Ref. 37601/A/89/778).

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



- 2.5 In June 1997, planning permission was subsequently granted for the erection of a 208 space multi-storey car park at the site (LPA Ref. 3760/H/96/334). GSK have occupied the buildings for office use since first occupation in 1990. GSK have now vacated the site.
- 2.6 In July 2020, an application was submitted to LBH seeking the redevelopment of the site to provide two new industrial and logistics units (Class B1c/B2/B8 use), with associated parking and landscaping arrangements (LPA Ref. 39207/APP/2020/2188). This application was presented to the Planning Committee in December 2020 and secured a resolution to grant planning permission. The Decision Notice was issued in June 2021, following GLA Stage 2 sign off and completion of the S106 agreement.

Pre-Application Consultation

- 1.19 Prior to the submission of this planning application, the applicant has been involved in detailed pre-application discussions with planning, design, conservation and transport officers at London Borough of Hillingdon, with the most recent pre-application meeting held in February 2021. The proposals have been largely well received by officers, albeit information requested in respect of transport and highways impacts, air quality impacts and landscape visual impact. Detailed reports to cover these aspects, among other technical matters, are enclosed with this application.
- 1.20 The proposals were also discussed with the GLA at a pre-application meeting in November 2020. The proposals were well received by officers, and the pre-application advice note from the GLA stated:

The presumption against the loss of office floorspace in this location must also be balanced against the benefits of industrial provision. The site is well-suited for industrial development, located adjacent to and with easy access to the A408 and the wider strategic road network, the M4 and the M25, as well as being located within the emerging Heathrow Opportunity Area surrounding the airport. It is also important to consider the increasingly industrial character of this part of Stockley Park given the adjacent Prologis Park West London, and new industrial development would contribute to creating a clearly defined industrial cluster. However, further information should be provided on the market demand for and supply of logistics facility in this part of London to allow officers to assess this against demand for office floorspace in this location.

- 1.21 The applicant has also engaged with the Parks and Gardens Trust in respect of the sites listing as part of the Stockley Park Grade II Registered Park and Garden. It was noted that the landscaping features that were well received in respect of the previous Prologis proposals for the site (LPA Ref. 39207/APP/2020/2188) had been retained and enhanced as part of this last mile delivery centre scheme. Strong landscape boundary is provided, with planting provided within the site and staff parking areas where possible. Features such as ornamental ponds are recreated on the site frontage and the art sculpture is retained.

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



- 1.22 Consultation has also been undertaken with the Canal and River Trust and Hillingdon Canal Partnership in respect of the proposed development impacts on the Grand Union Canal and towpath and the proposed landscaping features and enhancements which were generally well received.
- 1.23 In terms of public consultation due to the ongoing Covid-19 pandemic it has not been possible to undertake consultation 'in person'. However, virtual consultation has taken place with a dedicated project website with information boards enclosed and opportunity for people to leave comments, queries and feedback. A full Statement of Community Involvement has been prepared by Connect and submitted with this application. This details that there has been little feedback received in respect of the proposals, noting the sites distance from closest residential dwellings and location within a defined employment location. Some concerns were raised in respect of traffic and air quality impacts and supporting technical assessment of these matters are enclosed with the application.

3. The Proposed Development

Proposed Use

- 1.24 The rapid growth of online shopping, and with it the consumer's desire to receive goods more quickly and efficiently, has meant that logistic market has had to adapt to new customer demands. A key part of the solution to meet this new consumer demand, economic investment and environmental sustainability is the development of 'last mile' facilities, which are specifically recognised and supported in the London Plan.
- 1.25 Last mile distribution is the term used to describe the final leg of a product's journey from shelf to customer. In the traditional retail model, this is usually the customer travelling to the shops or supermarkets to buy goods. For online retail, the final leg is carried out by the retailer delivering goods to the end consumer's door. For both models, goods are delivered by HGVs from larger national or regional distribution facilities to refill the stock in shops, supermarkets and to last mile distribution facilities. Last mile logistic facilities seek to locate the last mile facility closer to consumers.
- 1.26 This application seeks to respond to this demand and will deliver a high quality and modern last mile distribution facility for Hillingdon, creating a significant number of new jobs and private sector investment.
- 3.1 The proposed development comprises a warehouse for the storage, sorting and loading of deliveries measuring circa. 12,100 sqm in total. The proposals also seek to the erection of an adjacent four-storey decked van storage for delivery vehicles, with capacity for approximately 800 vans. The proposals also propose ancillary surface level staff car parking, retained and additional vehicular routes and enhanced landscaping.
- 3.2 The proposed development has been discussed both with the LB Hillingdon and the GLA during pre-application meetings. The Council have acknowledged that the principle of redevelopment from office to industrial/logistics uses has been agreed via the extant consent in respect of the alternate Prologis scheme for the redevelopment of the site (LPA Ref. 39207/APP/2020/2188).

Design Approach

- 3.3 The redevelopment proposals present a significant opportunity to provide visually interesting development at the site, delivering a significant amount of high-quality employment floorspace whilst preserving and enhancing the surrounding landscape. The architects have sought to ensure that the buildings will provide an attractive setting when viewed from short and long-range views, with the proposed elevations and landscaping subject to notable design development and refinement to ensure the site is appropriately screened.

Layout, Height and Massing

- 3.4 The layout of both the warehouse unit and the adjacent decked van storage structure has been designed to minimise the resulting impact of the proposed development on the surrounding landscape.
- 3.5 The location of the staff car park, and enhanced Green Belt buffer, help to effectively distance the built form proposed on-site from the adjacent highway, with set back of the warehouse unit, along with enhanced tree planting along the southern boundary, seeking to avoid any impacts upon the adjacent Grand Union Canal. Meanwhile, landscape buffers within the staff car park and along the western site boundary seek to further break up the built form, to improve visual amenity and reduce the apparent massing and bulk of the buildings, integrating within the wider landscape setting to a greater extent.
- 3.6 The proposed buildings will rise to a maximum of height of 18m above ground level, which is comparable to the building heights approved under the extant planning consent.
- 3.7 The proposed site layout is provided at **Figure 3.1 below**

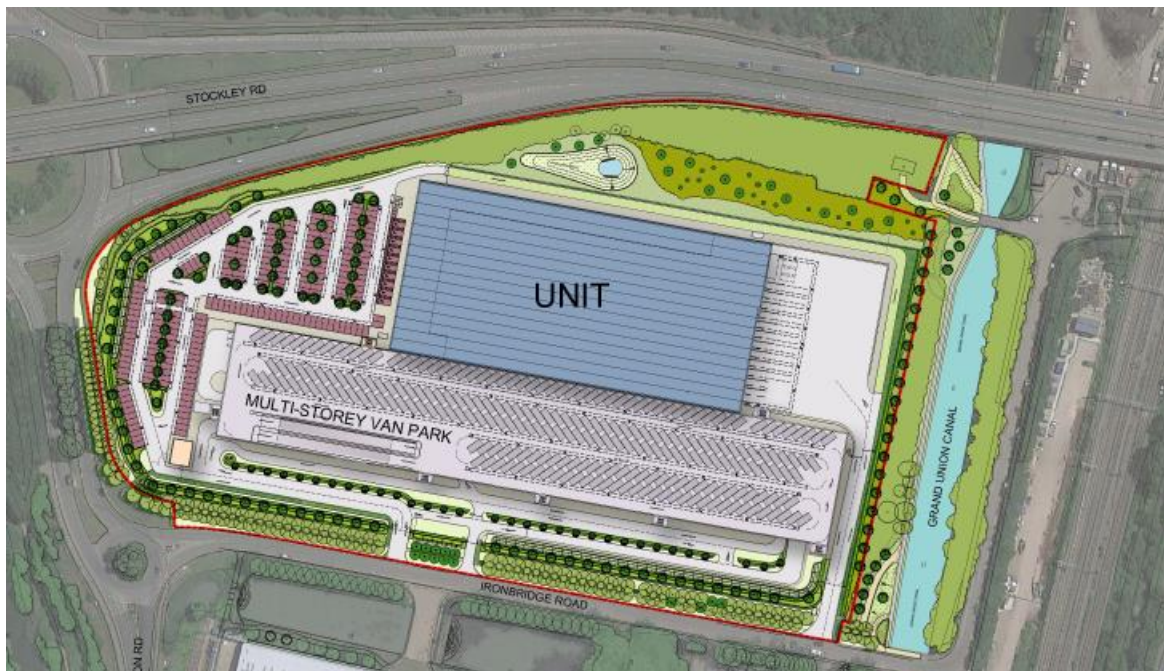


Figure 3.1: Proposed Site Layout

Materials

- 3.8 The proposed materials palette will be high quality and the warehouse building designed to complement the existing buildings on the wider Stockley Park Estate, including the existing units within the adjacent Prologis Park West London on the opposite side of Iron Bridge Road North. The material palette selected will also help to effectively integrate the proposals into the wider landscape, when considering the Green Belt and Registered Park and Garden setting of the site.
- 3.9 Further details on the materials proposed are included within the Design and Access Statement prepared by Michael Sparks Associates and submitted in support of this application.

Landscaping

- 3.10 Potential impact of the proposals upon both the Green Belt and the Grade II Registered Park and Garden are sought to be effectively mitigated through the implementation of a detailed landscaping strategy, the effect of which will be to enhance the views and setting of the site.
- 3.11 Enhanced tree planting is provided along the southern site boundary, to mitigate impacts upon the adjacent Grand Union Canal, with further screening along the northern and western site boundaries seeking to break up the impact of the built form from short and long-range views.
- 3.12 The existing green space along the eastern site boundary is enhanced within the development proposals, providing a greater quantum of green space whilst providing enhanced landscaping and flood attenuation features. Tree planting will be incorporated within the staff car parking area and within the vehicular access points along the eastern site boundary.
- 3.13 The avenue of lime trees is retained and enhanced along the Iron Bridge Road frontage.
- 3.14 Within the site tree planting is proposed to break up the surface level parking. The scheme has been designed to be as green and leafy as possible to reflect the character of the wider Stockley Park, and is considered to enhance the landscaping features compared to the previous GSK buildings.

Access, Parking and Servicing

- 3.15 Larger vehicles undertaking deliveries to the warehouse will access and exit the site from a new two-way vehicular entry point in the southwest corner of the site from Ironbridge Road, entering into a loading yard to the south of the warehouse unit, and then exiting via the same route.

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



- 3.16 Delivery vans undertaking the 'last-mile' delivery function of the proposed development will enter and exit the site through retained vehicular access points from Ironbridge Road. These vehicles will be stored overnight in the multi-storey van deck, which is expected to accommodate approximately 800 van spaces.
- 3.17 Employees will use the existing access points from Ironbridge Road to enter and exit the staff car park, located in the northwest corner of the site. All vehicles will resultantly access the site from Ironbridge Road, via Horton Road, with no direct access proposed from Stockley Road (A408).
- 3.18 The decked, multi-storey van storage area will rise to 18m high and comprise space to store around 711 vans. These spaces would be operational and used by van drivers who will arrive at the Site by their own means to pick up their van to make deliveries. By storing vans on-site the intended occupier is enabled to meet its aim to improve the environmental efficiency of its fleet. For example, the storage spaces will benefit from 20% active EV charging infrastructure from 'day 1' with 80% of spaces passive and able to be converted in the future.
- 3.19 Separate parking would be provided for staff working on the Site with 237 spaces proposed. The provision of staff parking takes into account the proposed shift patterns, need to reduce parking pressure on surrounding area but also the need to promote sustainable travel. It is proposed that 20% of car parking will be provided with active EVCP, and 80% with passive EVCP provision. Additionally, 10% of employee car parking spaces will be designed under accessible standards.

Sustainability and Energy

- 3.20 As part of the approach to sustainable design, regulated operational emissions have been reduced by 101% (as detailed in the Energy Assessment) and will be met entirely by on-site energy generation through solar PVs. Therefore the development can be considered zero carbon at operation.
- 3.21 Key sustainability features have been incorporated including designing the buildings to achieve a BREEAM Very Good rating as a minimum, mitigating construction stage emissions, reducing operational emissions and managing the environmental impacts of development.
- 3.22 A Whole Life Carbon Assessment and Circulate Economy Statement have been provided to demonstrate commitment to reducing the environmental impact associated with all phases of the new buildings life cycle.
- 3.23 Overall the proposed development will deliver resource efficient buildings and a net zero carbon logistics unit, capable of adapting to climate change.

Key Planning Benefits

3.24 These proposals will provide a wide range of planning benefits for the site and surrounding area, as set out below:

- The development will deliver a significant amount of high quality logistics floorspace (Class B8 use) which responds to an identified local and regional need for such uses, and is well located to optimise the excellent accessibility of the site.
- There is a specific occupier for the proposed last mile delivery centre which has a requirement to operate from this location, to improve the efficiency and sustainability of their operations.
- The future occupier will create around 100 new jobs opportunities, ramping up to over 220 people operating out of the warehouse during the busiest times of the year. In addition to this around 500 drivers will be required to support the distribution operation. New jobs will also be created as a result of the construction of the development.
- A commitment to the delivery and operation of the last mile centre will ensure the economic benefits associated with the site will be delivered promptly.
- The development proposals have evolved through detailed pre-application discussions with officers to provide a high quality design response to the constraints and opportunities of the site, and are considered to reflect a detailed, design-led approach to optimising the use of this previously developed site.
- The proposed buildings comprise high quality, sustainable design, seeking to provide an attractive working environment for employees whilst reflecting the wider character and material palette used in the wider Prologis Park West London estate.
- The site has been designed to respond well to the surrounding context and will not have a detrimental impact on any neighbouring occupiers.
- Significant landscaping and planting proposed along the site boundaries will help to screen the site in respect of the site's Green Belt and Listed Park and Garden status, whilst also improving the quality of the environment, including along the Grand Union Canal towpath.
- Removal of built footprint within the Green Belt, along with the enhancement of existing green space to improve the setting, quality and overall quantity of the Green Belt land.
- Creation of new pedestrian and cycle route along the canal towpath.

Planning Statement

Former GSK Offices, Stockley Park, Hillingdon



- The high quality landscape strategy proposed will result in net biodiversity improvements and is expected to increase the ecological value and benefits of the site and local area, as well as helping to reduce visual impacts upon the surrounding landscape.
- Sustainable design and construction measures will be utilised and mean overall the proposed development will deliver resource efficient buildings and a net zero carbon logistics unit.
- A commitment by the proposed operator improve the environmental efficiency of its fleet and move towards all vans being electrified. The proposals therefore include 20% active EV charging infrastructure from 'day 1' with 80% of spaces passive and able to be converted in the future.

4. Planning Policy Context

4.1 The redevelopment proposals for the site have taken account of relevant national, regional and local planning policy and guidance. This section of the Planning Statement sets out a brief summary of the relevant planning policy documents, whilst the following section demonstrates compliance with these policies.

4.2 In accordance with Section 38(6) of The Planning and Compulsory Purchase Act (2004), planning applications should be determined in accordance with the development plan unless other material considerations indicate otherwise. The development plan for the site comprises:

- London Plan (2021)
- The Hillingdon Local Plan: Part 1- Strategic Policies (November 2012)
- The Hillingdon Local Plan: Part 2 - Development Management Policies (January 2020)
- The Hillingdon Local Plan: Part 2 - Site Allocations and Designations (January 2020)
- The West London Waste Plan (July 2015)

National Planning Policy

4.3 At the national level, the Government published the revised National Planning Policy Framework (NPPF) in July 2021. The NPPF provides an overarching framework for the production of local policy documents and is a material consideration in the determination of planning applications.

4.4 In accordance with the NPPF, decision should apply a presumption in favour of sustainable development. Paragraph 11 states that for decision-taking this means “*approving development proposals that accord with the development plan without delay*”;

4.5 Chapter 6 of the NPPF relates to building a strong and competitive economy. Paragraph 81 offers support for proposals that foster economic growth, particularly where it responds to future changes and drives innovation, stating that planning decisions should help to create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity.

4.6 Chapter 11 sets out how planning policies and decisions should promote an effective use of land, and this should be in a way which makes as much use as possible of previously developed or ‘brownfield’ land. The entirety of the Site is previously developed land.

4.7 Chapter 16 of the NPPF sets out guidance in relation to conserving and enhancing the historic environment. Paragraph 194 states that when determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting.

The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. Likewise, when determining an application, Paragraph 197 identifies key criteria with which such proposals should be assessed against, replicated below:

- a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- c) the desirability of new development making a positive contribution to local character and distinctiveness.

Strategic Planning Policy

- 4.8 The London Plan (2021) comprises the spatial development strategy for Greater London and sets out the Mayor of London's strategic objectives and targets to encourage sustainable growth and development. For the avoidance of doubt, reference to the 'London Plan' henceforth refers to the 2021 iteration, as opposed to the now-superseded 2016 London Plan.
- 4.9 London Plan Policy GG5 states that in order to conserve and enhance London's global economic competitiveness, those involved in planning must seek to ensure London's economy diversifies, planning for employment-related redevelopment in the 'right locations' to support economic development. Policy E1 also lends support in principle to the redevelopment and change of use of surplus office space to other uses, whilst noting that the diverse office markets in outer and inner London should in certain instances be consolidated, supported by improvements to walking, cycling and public transport connectivity.
- 4.10 London Plan Policy E4 requires a sufficient supply of land in different parts of London be provided and maintained to meet current and future demand, to support land uses including 'last mile distribution' Class B land uses. Policy E4 further notes that the provision of industrial capacity should be prioritised in suitable locations, including sites accessible to the strategic road network, well-connected by public transport, walking and cycling and housing. In addition, Policy T7 states proposals for new distribution facilities should be supported, where they do not lead to unacceptable impacts upon London's strategic road networks and in instances where they help to reduce emissions from freight trips and enable sustainable last-mile movements by electric vehicles.
- 4.11 Concerning the historic environment, as per London Plan Policy HC1 development proposals affecting heritage assets, and their settings, should seek to conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings.

Local Planning Policy

4.12 The current statutory development plan for the London Borough of Hillingdon comprises the Local Plan: Part 1 – Strategic Policies (November 2012), the Local Plan: Part 2 – Development Management Policies (January 2020) and the Local Plan: Part 2 – Site Allocations and Designations (January 2020).

4.13 The Strategic Policies Plan (2012) identifies Stockley Park as part of the Heathrow Opportunity Area and recognises its iconic status. As for the role that the park could play in the future growth of the borough it states:

However, it's out of town location means improved public transport links, in particular north-south links and connections with Hayes and West Drayton town centres is essential for a sustainable future for the Park. The Park is situated out of town which promotes car dependency and increases impacts on air quality.

4.14 The Local Plan Part 2 Site Allocations Plan designates Stockley Park as a Locally Significant Employment Location (LSEL) and an Office Growth Location. Enclosed below is an extract of the adopted Policies Map:



Figure 4.1 – LBH Policies Map (2020) Extract

4.15 The Site Allocations Plan states:

Stockley Park is a strategic office location covering an area of some 67 hectares.... The Council's intention is that the site should continue to primarily accommodate B1(a) office uses over the period of the Plan in high quality landscaped surrounds.

4.16 The Local Plan Part 2 Development Management Policies sets out policies which define the different employment land designations (including LSEs) and covers the loss of offices in locations such as Stockley Park. Policy DME 1 Employment Uses on Designated Employment Sites covers the definition of Locally Significant Employment Locations (LSEs) of which the subject site is one. It states:

The Council will support light industrial, office and research & development activities (B1(a) (b) (c) Use Classes) within Locally Significant Employment Locations (LSEs).

4.17 The site is also bound by Green Belt land on all sides, despite much of this comprising highways and previously developed land. The existing multi storey car park at the GSK site currently extends approximately 291 sqm into the green belt. This is discussed further below.

4.18 It is also noted that the site is now located within a Grade II Registered Park and Garden, as of August 2020. As such, the relevant local heritage-led planning policies will be considered below, in Section 5 of this Planning Statement.

5. Material Planning Considerations

- 5.1 This section of the Planning Statement sets out the key planning considerations relating to the development proposals, with reference to the planning policy framework set out in the previous chapter.

Principle of Development

- 5.2 The site currently comprises Class B1a (office) floorspace, and is allocated as a Locally Significant Employment Location and Office Growth Location, as identified in the Council's local plan. The redevelopment proposals comprise the comprehensive redevelopment of the existing site to provide high quality last mile distribution floorspace, with a four-storey decked van store.

Loss of Office Floorspace

- 5.3 Paragraph 81 of the NPPF states planning decisions should help to create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity.
- 5.4 London Plan Policy E1 lends support in principle to the redevelopment and change of use of surplus office space to other uses, whilst noting that the diverse office markets in outer and inner London should in certain instances be consolidated, supported by improvements to walking, cycling and public transport connectivity.
- 5.5 At the local level, Development Management Policy DME3 states "Proposals involving loss of office floorspace in preferred locations for office growth should include information to demonstrate that:
- i) *the site has been actively marketed for two years;*
 - ii) *the site is no longer viable for office use, taking account of the potential for internal and external refurbishment; and*
 - iii) *surrounding employment uses will not be undermined".*
- 5.6 It is important to take account of most recent evidence available, including the Stockley Park Office Market Assessment (June 2020) that was prepared by Savills in support of the previous application for the redevelopment of the site. That assessment demonstrated that there is a strong need for additional industrial and logistics floorspace in the local area, and no significant need for new office (Class B1a) floorspace. This is demonstrated to a large degree by the significant amount of vacant office floorspace within Stockley Park at the present time. As such, there is greater need for the proposed industrial use rather than retaining the

significant quantum of Class B1a floorspace and the assessment concludes that the loss of the offices at the GSK site would enhance performance of the industrial property market and not be detrimental to the office market. The conclusions of the Savills Office Market Assessment (June 2020) were accepted by the Council previously and remain valid in the context of this planning application.

- 5.7 Importantly, the principle of redeveloping the site and comprising the loss of existing office accommodation to provide high quality new industrial and logistics floorspace has already been agreed as part of the extant planning permission for the site (LPA Ref. 39207/APP/2020/2188). The officers committee report for that application concluded:

In assessing this application, officers have balanced the need to protect office floorspace in this location required by the Local Plan against a wider set of objectives within the Local Plan and the London Plan to retain employment capacity and support the local economy. The combined evidence with regard to the demand for industrial land and the levels of vacancy in the wider Stockley Park campus are considered sufficient in this instance to demonstrate that the site is no longer viable for office use.

- 5.8 The proposed use is considered to be more in keeping with the character of the western part of the Stockley Park employment area, which has undergone change and is now a high quality industrial location. It will be consistent with the employment uses already operating at the adjacent Prologis Park West London. Furthermore, it is considered that the wider function of Stockley Park as a preferred office location, comprising the existing office park to the east of Stockley Road will not be undermined and is likely to be consolidated and enhanced as a result of the proposed development. This will remain one of the primary office locations within the borough.
- 5.9 It is therefore considered that the proposed development complies with the requirements set out in the London Plan and also Local Plan Policy DME3, demonstrating there is no demand for current office floorspace and that release to logistics use (Class B8 use) wouldn't impact on overall supply of office floorspace or the wider character of function of Stockley Park.

Proposed Last-Mile Distribution Use

- 5.10 The proposed development for a last mile distribution centre would provide circa. 13,000sqm of new warehousing floorspace, alongside a multi-storey decked van store, with ancillary staff car parking and notable soft and hard landscaping enhancements.
- 5.11 London Plan Policy E4 requires a sufficient supply of land in different parts of London be provided and maintained to meet current and future demand, to support land uses including 'last mile distribution' operations. Policy E4 further notes that the provision of additional industrial capacity should be prioritised in locations

accessible to the strategic road network that provide capacity for logistics and essential industrial-related services supporting London's economy and population, are suitable for last mile distribution services or that support supply chains and local employment in industrial activities.

- 5.12 London Plan Policy T7 also states proposals for new distribution facilities should be supported, where they do not lead to unacceptable impacts upon London's strategic road networks and in instances where they help to reduce emissions from freight trips and enable sustainable last-mile movements by electric vehicles.
- 5.13 In terms of intensifying the use of this brownfield site, in accordance with the aspirations of the London Plan, the existing buildings on the GSK site represent an inefficient use of land, with limited plot coverage and a significant amount of surface level car parking. The existing arrangement does not maximise employment density in this accessible and sustainable location and it has been demonstrated and agreed that there is limited demand for office accommodation in this location.
- 5.14 In contrast, the demand for new industrial and logistic facilities has shown sustained growth in recent years as a result of changing consumer patterns. A significant challenge for London authorities is to ensure that there is sufficient land available to meet the needs of this growth sector and to meet the demand being generated by London's increasing population. Since the Covid pandemic, this challenge has been magnified as demand has accelerated. It has been a key tool in supporting lock down measures and ensuring that food, goods and medicines get delivered to the public in an effective way. Online shopping could remain an important component of the UK's defence against the disease.
- 5.15 Today, the most advanced online retailers do not operate from standard B8 warehouses because it imposes significant constraints on their ability to operate efficiently and sustainably. Each operator will have their own layouts developed to meet their needs, although common themes include a need for the space to accommodate operational van spaces (which crucially underpins last mile distribution facilities). There is therefore clear demand for the built environment to provide solutions that can better support occupiers' operations and to achieve efficiency.
- 5.16 The proposals have been designed to meet the requirements of a specific last mile distribution operator who are keen to locate to this area in the borough to help improve the efficiency and sustainability of their operation. The future occupier will create around 100 new jobs opportunities, ramping up to over 220 people operating out of the warehouse during the busiest times of the year. In addition to this around 500 drivers will be required to support the distribution operation.
- 5.17 In terms of the proposed distribution use, the site is well located and connected to the local and strategic highway network, demonstrating the appropriateness of the location for the proposed uses. The site is located

with access to Stockley Road, via Horton Road, which in turn provides direct access to the M4 approx. 1.5km south of the site.

- 5.18 Prologis have commissioned the Massachusetts Institute of Technology (MIT) to carry out research (**Appendix 1**) into the carbon footprint of e-commerce compared to traditional in-store shopping. The research uses global data and it concludes that carbon emissions for online shopping are 36% lower than in store shopping with most of that saving due to transport. This saving can be explained by the fact a single van route will carry out multiple deliveries to consumers, replacing individual journeys to stores by those consumers. It also notes that urban fulfilment centres close to consumers (rather than from facilities outside the urban core) can save a further 50% of transport-related greenhouse gas emissions and reduce overall footprint per package by an average of 10%. Placing goods as close as possible to the end consumer minimises final delivery distances and congestion.
- 5.19 The occupier is also committed to working towards using a 100% electric fleet or alternative low emissions fuel. This will further benefit the area in terms of vehicle emissions and air quality impact, particularly when the projected timescales for adoption of electric or low emission fuels within the occupiers fleet is compared to the vehicles used by the general population in carrying out the individual in-store trips they are replacing.

Summary

- 5.20 It has been robustly demonstrated, and agreed with the Council and GLA previously, that there is no demand for office floorspace in this location. In comparison, the provision of high quality logistics floorspace for use as a last mile distribution centre will meet an identified need for this type of use in the Borough. The proposed last-mile distribution operations will not undermine the efficient operation of the wider Stockley Park employment area, including the existing office park to the east of Stockley Road, and will intensify the employment use and number of jobs generated on site, as well helping to provide floorspace to meet an identified demand for such use which will improve the efficiency and sustainability of the proposed occupiers operations.
- 5.21 The proposed development is therefore considered to be compliant with the relevant London Plan and Local Plan policies, and thus is deemed acceptable in planning policy terms.

Development in the Green Belt

- 5.22 Paragraph 147 of the NPPF states that “inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances”.

5.23 NPPF Paragraph 149 sets out that the construction of new buildings should be regarded as inappropriate in the Green Belt. However, Paragraph 149 goes on to identify exceptions to this, including the following:

Limited infilling or the partial or complete redevelopment of previously developed land, whether redundant or in continuing use (excluding temporary buildings), which would:

- *not have a greater impact on the openness of the Green Belt than the existing development; or*
- *not cause substantial harm to the openness of the Green Belt, where the development would re-use previously developed land and contribute to meeting an identified affordable housing need within the area of the local planning authority.*

5.24 At the local level, Policy DME1 4 of the Local Plan states that redevelopment on sites in the Green Belt will be permitted only where the proposal would not have a greater impact on the openness of the Green Belt.

5.25 As shown on the Council's Proposals Map, the existing site is bound by Green Belt land on all sides. This includes a very narrow strip which lies between the existing GSK site and the Stockley Road embankment, albeit the 'corner' is chamfered and the Green Belt does not extend up to the obvious eastern boundary of the dual carriageway. At present, the existing multi storey car park in the south eastern corner of the site extends approximately 291 sqm into the Green Belt.

5.26 In considering the impact on the openness of the Green Belt, it is important to note that due to the reduced extent of built footprint and careful orientation of the warehouse building and van storage deck, the proposed scheme will remove any built development from the Green Belt.

5.27 The proposed scheme will enhance and expand the planning and soft landscaped boundary along the eastern boundary of the site. The proposed scheme will therefore remove any built development or hardstanding from the Green Belt. This is considered to be a significant improvement and the scheme would have a significantly lesser impact on the openness of the Green Belt than the existing development.

5.28 The proposed warehouse building will also lie further from the southern edge of the site boundary compared to the existing building, which creates some distance between the Green Belt and the canal. This creates a better relationship with the southern boundary and the edge of the Green Belt and allows the scheme to retain significant planting and landscaping along the canal.

5.29 Taking the above into account, it is clear that the proposed development comprises the redevelopment of previously developed land in the Green Belt, which would not have a greater impact on the openness of the Green Belt than the existing development, and would improve the landscape setting and reduce built

development in the Green Belt. It therefore meets the exceptions test set out in the NPPF and under policy DME1 of the Local Plan.

Design Quality

- 5.30 A detailed description of the main design principles underpinning the proposed development is set out in the submitted Design and Access Statement prepared by Michael Sparks Associates. The design development has evolved through extensive discussions with LBH planning, design and landscaping officers.
- 5.31 National, regional and local planning policy promotes high quality and inclusive design in new development. The NPPF makes it clear that the Government attaches great importance to the design of the built environment. Good design is considered to be a key aspect of sustainable development and is indivisible from good planning.
- 5.32 The NPPF also states that new development should function well and add to the overall quality of the area, should be visually attractive and sympathetic to local character and setting. Development should also optimise the potential of a site.
- 5.33 At the regional level, Policy GG1 of the London Plan states that the design of new buildings and the spaces they create should help reinforce or enhance the character, legibility, permeability and accessibility of the neighbourhood. London Plan Policy D5 further states that the Mayor will require all new development in London to achieve the highest standards of accessible and inclusive design. Policy D3 states that development proposals should seek to enhance local context by delivering buildings and spaces that positively respond to local distinctiveness through their layout, orientation, scale, appearance and shape, with due regard to existing and emerging street hierarchy, building types, forms and proportions. Policy D3 also requires proposals to be of high quality, with attractive, robust materials used.
- 5.34 At the local level, Local Plan Part 1 Policy BE1 requires new development to improve and maintain the quality of the built environment. All new buildings should be of a high quality design and make a positive contribution to the local area in terms of layout, form, scale and materials. Design should incorporate a clear network of routes that are easy to understand, inclusive, safe and secure.
- 5.35 The proposed development has been designed to meet the requirements of specific end occupier, a national online retailer and logistics operation.
- 5.36 The proposed warehouse building to be used for the storage of goods (Class B8 use) and extend to circa. 13,000 sqm in total with a maximum height of 18m. Some ancillary office accommodation will be provided within the warehouse, located in the front elevation of the building so as to provide an active commercial frontage to Horton Road / Stockley Road.

- 5.37 The proposed van deck will be used for the storage of the delivery vans. The van deck extends to 4 storeys (maximum 15m height) and is open on the top floor. The van deck is located to the west of the site and will front Iron Bridge Road.
- 5.38 The layout of the scheme has been designed to ensure efficient vehicle circulation and access to and from the site, as well as to retain and enhance the significant landscaping buffers along the site boundaries. This includes retaining the double row of lime trees along Iron Bridge Road. The buildings have also been set back from the canal and significant landscaping buffer provided along the southern boundary of the site. The proposed layout also removes any built development from the Green Belt.
- 5.39 In terms of the appearance of the warehouse building, this has been designed to be reflective of the character of the surrounding area, including the existing commercial units in adjacent Prologis Park West London. The building will have a slightly curved roof and metallic cladding is proposed. Careful consideration has been given to the choice of materials and elevation detailing to provide articulation to all of the proposed new buildings and visual interest and diversity within the site. This approach creates attractive high quality elevations and the materials have also been chosen as they will be robust and durable.
- 5.40 The appearance of the van deck has also been carefully considered and is covered in metal fins to hide the vans stored within, albeit there will be some visibility through the fins and it won't read as a solid, blank elevation. The fins have a wood-effect finish to provide a more natural appearance to the building and to soften the appearance of the structure and help it to fit in with the wider landscaped surroundings.
- 5.41 The proposed grade-level staff car parking and service yard have also been landscape-led given the aspirations of local policy to create an employment scheme that sits within open space and landscaped areas.
- 5.42 In summary, the proposed development seeks to provide a high quality commercial development which will provide a significant amount of employment floorspace and economic benefit for the local economy. The design approach is seen to respond positively to the principles outlined in national, regional and local planning policy. As such, it is considered the proposals are acceptable in planning terms.

Landscape and Visual Impact

- 5.43 NPPF Paragraph 130 seeks to ensure new development is visually attractive as a result of good architecture and appropriate landscaping. Paragraph 131 sets out the important contribution that trees make to the quality of a place and that opportunity should be taken to incorporate new trees within development.
- 5.44 Local Plan Policy DMHB 11 states new development should include landscaping and tree planting to protect and enhance amenity, biodiversity and green infrastructure.

- 5.45 The proposed redevelopment of the site to provide a last-mile distribution centre includes a comprehensive landscaping strategy, revised and enhanced throughout the design evolution process. Full details of the landscaping proposals are set out in the various landscape concept plans, prepared by Barry Chin Associates (BCA) in support of this application.
- 5.46 Enhanced tree planting is provided along the southern site boundary, to mitigate impacts upon the adjacent Grand Union Canal, with further screening along the northern and western site boundaries seeking to break up the impact of the built form from short and long-range views.
- 5.47 The existing green space along the eastern site boundary is enhanced within the development proposals, providing a greater quantum of green space whilst providing enhanced landscaping and flood attenuation features. Tree planting will be incorporated within the staff car parking area and within the vehicular access points along the eastern site boundary.
- 5.48 The landscape strategy developed for the proposed scheme seeks to facilitate a development which effectively integrates within its surroundings, and sits in keeping with the wider Stockley Business Park character area. This will help to create a positive relationship between the development and its surrounding environment. It is envisaged that over time the shrub and tree planting proposed for the development will mature to provide an attractive landscape setting, which assimilates the new development into the immediate surroundings.
- 5.49 The landscape created will be managed in accordance with sound ecological principles to improve the overall biodiversity of the site. Considering the landscaping and biodiversity features proposed, the scheme will achieve an Urban Greening Factor of 0.4 which is considered to be an excellent score for a commercial development of this nature and exceeds London Plan Policy G5 requirements.
- 5.50 An assessment of Landscape and Visual Impact has also been prepared by BCA. This assessment identifies primary mitigation measures to be implemented within the development proposal, alongside the aforementioned soft landscaping measures, to enhance the integration of the proposed built form within the wider landscape setting. These measures include, but are not limited to:
- A muted colour palette of subtle grey colours will be used for the façade treatment of the main warehousing unit, whilst a subtle timber cladding will be used on the multi-storey van deck, allowing views through when viewed face on, and appearing as a solid when viewed from a side angle.
 - A barrel vaulted roof design will help to visually reduce the massing of the warehouse unit.

- The layout of the proposed development has been designed so as to locate the service yard to the south of the warehouse unit. Firstly, this provides a degree of set back to the warehouse from the canal-side, whilst also ensuring an active frontage bounds the canal.

5.51 The implementation and ongoing maintenance of the landscape strategy will provide an important element of mitigation, which will help to soften and assimilate the development in to the local landscape, thereby minimise the residual effects of the proposals. In addition, the primary and secondary mitigation measures outlined within the supporting Landscape and Visual Impact Assessment will help to further assimilate the built form within the wider setting of the site. As a result of these strategies, the proposed redevelopment of the application site would not give rise to significant landscape and visual effects, and is considered acceptable in planning terms.

Heritage Considerations

5.52 The NPPF requires proposals to conserve heritage assets in a manner appropriate to their significance. Paragraph 194 states that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

5.53 Paragraph 201 of the NPPF emphasises that where a proposed development will lead to less than substantial harm to the significance of a heritage asset, this should be weighed against the public benefits of the scheme. London Plan Policy HC1 notes development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings.

5.54 At a local level, as per Development Management Policy DMHB1, the Council will expect development proposals to avoid harm to the historic environment. Development which has an effect on heritage assets will only be supported whereby:

- i) it sustains and enhances the significance of the heritage assets and puts them into viable uses consistent with their conservation;
- ii) it will not lead to a loss of significance or harm to an asset, unless it can be demonstrated that it will provide public benefit that would outweigh the harm or loss, in accordance with the NPPF;
- iii) it makes a positive contribution to the local character and distinctiveness of the area;
- iv) any extensions or alterations are designed in sympathy, without detracting from or competing with the heritage asset;

- v) the proposal would relate appropriately in terms of siting, style, scale, massing, height, design and materials;
- vi) buildings and structures within the curtilage of a heritage asset, or in close proximity to it, do not compromise its setting; and
- vii) opportunities are taken to conserve or enhance the setting, so that the significance of the asset can be appreciated more readily.

5.55 The site is located within the Stockley Park Grade II Registered Park and Garden, following its designation in August 2020. As such, given the setting of the site and the wider heritage matters to be considered subsequently, a Heritage Statement prepared by Savills is submitted in support of this application.

5.56 It is noted within the Statement that the Park's significance is primarily derived from its historic interest through its planned nature and original principles for use of the land and the buildings within the business park which forms one of the three main areas of the Park. The Park further derives significance through its place in the early phases of business park development in England and its associative values with input of a multi-disciplinary team during the 1980s.

5.57 The Park's architectural interest derives from the key buildings located to the east of Stockley Road, within Phase 1 of the Park, and their group value, as well as the contribution made by the designed landscaping seen across the business park and the relationship of built form with the verdant setting of the Park. The significance of the Registered Park is resultantly derived from all three parts of the Park (public park, golf course and business park) as a holistically designed entity in the 1980s.

5.58 The Heritage Statement notes that the site at present makes a lesser contribution to the significance of the Registered Park in comparison with the wider Phase 1 development of the business park. The character of the site is deemed to be one of a contained single entity, separate in effect to the rest of the business park, with Stockley Road providing a division to the legibility of the business park as one unit. The key elements of the landscaping aspect of the Park do continue to the west of Stockley Road, albeit not as strongly, and the relationship of the built form to the landscaping is not as legible.

5.59 It is considered that the proposed redevelopment of the site, and in particular the built form and design considerations integrated within the proposals, continue the key principles of the planned business park through retention and enhancement of the landscaping around and within the site. This is seen to echo the design principles achieved across the wider business park, according with the primary objectives championed by the original designers. As noted previously within this Planning Statement, the proposed built form on-site is designed to be high quality, with integrated landscaping and wider design measures helping to soften the built form on-site and integrate the proposals within the wider setting and landscape subsequently.

- 5.60 It is noted that the proposed built form on site would differ in scale, form and layout in comparison to the existing buildings on-site. However, it is considered that the revised layout of the site through the proposed redevelopment, and the subsequent landscaping strategies implemented subsequently, will comprise a more sympathetic and congruent design and form, which again will help to integrate the proposals effectively, both within the setting of the business park and the wider Registered Park and Garden.
- 5.61 In summary, it is considered that the design of the proposals accords with the relevant national, regional and local planning policies concerning heritage and the historic environment. The proposals provide an enhanced scheme on-site, helping to improve the setting of the Registered Park and Garden whilst avoiding detrimental harm to the quality and amenity of the area as a result. As such, the proposals are considered acceptable and appropriate for the location and surrounding context.

Ecology and Biodiversity

- 5.62 At the national level, NPPF Paragraph 174 seeks positive improvements in the quality of the natural environment including achieving net gains for nature and biodiversity. The NPPF seeks to minimise the impacts of development on biodiversity and geodiversity, and sets out guidance for local planning authorities to follow in developing policy.
- 5.63 Policy G5 of the London Plan 2021 notes that Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.
- 5.64 At the local level, Policy DME1 7 of the Local Plan states the design and layout of new development should retain and enhance any existing features of biodiversity or geological value within the site.
- 5.65 The application is supported by an Ecology Assessment prepared by Ecology Solutions.
- 5.66 There are no statutory designations of nature conservation value within the site or adjacent to it. The nearest statutory designated site is Yeading Meadows Local Nature Reserve (LNR), situated some 3.1km to the northeast beyond existing residential and commercial development. There are no Sites of Special Scientific Interest (SSSIs) within 5km of the site. Owing to the distances concerned and the intervening land uses, the redevelopment of the site would have no effect on this statutory designated site, or on other such sites in the wider area. The site is not subject to any non-statutory designations. There are no protected habitats or species present on the site.

- 5.67 The supporting Ecology Assessment concludes there is no overriding ecological reason why the site could not be redeveloped subject to the implementation of mitigation and enhancement measures. The proposals therefore accord with planning policy with regard to nature conservation at all administrative levels.

Transport and Parking

- 5.68 At the national level, the NPPF sets out the Government's aspiration to manage patterns of growth to make the fullest possible use of public transport, walking and cycling, focusing development in locations which are sustainable and accessible.
- 5.69 At a regional level, the London Plan outlines the Mayor of London's strategic target for 80% of all trips in London, by 2041, to be made by foot, cycling or public transport. Policy T4 states that transport assessments/statements should be submitted alongside development proposals, to ensure that impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed.
- 5.70 The site is well located for access to the local and strategic highway network. The A408 Stockley road borders the site to the east and is a main route for traffic in the area. It is a dual carriageway and provides a connection to the M4 in the south.
- 5.71 There is also good pedestrian infrastructure surrounding the site, including Iron Bridge Road North and Stockley Road with wide and well-lit pavements on either side of the road.
- 5.72 South of the site is the Grand Union Canal which provides access to Iron Bridge Road North for pedestrians and cyclists using the towpath. The Towpath provides a continuous segregated route connecting areas such as West Drayton and Hayes.
- 5.73 In terms of access to public transport, the site benefits from a PTAL of 1b – 2. However, there are bus stops on Horton Road approximately 150m from the site access and both West Drayton and Hayes and Harlington train stations can be reached via the canal towpath, the closest of which (West Drayton) is approximately 1.5km away.
- 5.74 In accordance with national and regional requirements, this application is supported by a Transport Assessment, prepared by WSP, which details the proposed operation of the last mile delivery centre and fully considers the effect of the proposed development in terms of car parking, cycle parking provision and trip generation.

Vehicular Access

- 5.75 The main servicing access into the Site will be provided from Iron Bridge Road North in the south-western corner of the Site. This access will primarily serve HGV traffic but also act as an exit for staff and visitor cars.
- 5.76 An additional vehicular access, in the same location as the current Site access, is also being proposed from Iron Bridge Road North and will provide separate access and egress for operational vans, as well as access for staff and visitor car parking.
- 5.77 All vehicles would therefore access the Site from Iron Bridge Road after leaving Horton Road, with no direct access proposed from the A408 Stockley Road or Horton Road.
- 5.78 The design of the Site will be aimed at minimising interaction between staff cars, vans / van drivers and HGVs with separate accesses and routes around the Site where possible.

Van Driver Storage

- 5.79 In addition to the car parking provided for employees of the warehouse, it is proposed to provide 711 van storage spaces within the multi-storey van deck. This would be operational and provided for van drivers and for storage purposes and would be used to store vans overnight. As such, it is considered that these van storage spaces should be accounted for separately to the car parking provision.
- 5.80 The proposed scale of the van fleet allows for the required number of parcels to be delivered in a round of deliveries. This number of vans allows each delivery journey to be optimised, i.e. each van is fully loaded and makes one delivery run per day. They are loaded to ensure that they can deliver goods for at least 6 hours in a single journey. This ensures the efficiency of operation and reduces vehicle movements to and from the Site.
- 5.81 If the number of vans were to be reduced, vans would need to make more journeys and run empty more often, leading to more vehicle movements. In this respect, the proposed operation adopts the principles of freight consolidation and in doing so makes the most efficient use of vans and minimises journeys when they are not fully utilised.
- 5.82 The van drivers would arrive at the site by various means of transport, including bus, train, cycle, walk and private car, collect a van and leave the Site to make deliveries. Once all deliveries have been made, drivers would return the vans to the Site and leave using their chosen travel mode.
- 5.83 By storing vans on-site the proposed occupier is able to meet their target to improve the environmental efficiency of its fleet and for all delivery vans being electrified by 2030. The van storage spaces will benefit from 20% active EV charging infrastructure from the outset with 80% of spaces passive and able to be converted in the future.

Staff Car Parking

- 5.84 Separate parking would be provided for the general staff (not van drivers) working within the site, with 237 spaces proposed in total. The volume of parking has been designed to take account of the shift patterns and overlap between these throughout the day
- 5.85 According to Policy T6 of the London Plan and with regard to the Site location within LBH (Outer London), car parking should be provided at a ratio of up to one space per 100sqm of GIA. However, whilst this site will have a use class of B8, it does not operate like a traditional B8 site and this should be taken into consideration when considering parking requirements.
- 5.86 Travel planning will be in place at the site and sustainable modes of travel will be encouraged, particularly as it is expected the work force will come mainly from the local community, but a suitable allowance for parking is required to avoid any overspill parking on the local roads.
- 5.87 Having regards to the Councils maximum adopted parking standards for Class B use (2 spaces plus 1 space per 50 – 100 sqm of gross floorspace) would allow for car parking numbers in the range of 272 – 137 spaces. The proposal for 237 spaces at the site is within this range.
- 5.88 It is proposed that 20% of car parking will be provided with active EVCP, and 80% with passive EVCP provision.
- 5.89 The development will also provide 10% blue badge spaces equating to 24 blue badge parking spaces.

Trip Generation

- 5.90 A comprehensive assessment exercise has been undertaken to indicate the potential impacts on the highway network and other modes because of the development.
- 5.91 The proposed development trip generation has been forecast using bespoke data based on the operation and capacity of the site. This data is based on existing sites, also run by the proposed operator, across the UK and Europe. The assessment outlines that there would be a negligible increase in daily traffic when compared to the former operation of the GSK offices previously on the Site. The assessment outlines there would be decrease in daily traffic when compared to the extant planning permission for the redevelopment of the site to provide 2 x general industrial warehouse units (LPA Ref. 39207/APP/2020/2188).

Cycling

- 5.92 London Plan Policy T5 encourages development proposals to help remove barriers to cycling and create a healthy environment in which people choose to cycle. Development proposals should seek the provision of

appropriate levels of cycle parking which should be fit for purpose, secure and well-located. Developments should provide cycle parking at least in accordance with the minimum standards set out in Table 10.2 of the London Plan.

- 5.93 Based on the above standards the London Plan suggests 41 cycle parking spaces (long and short stay) are required, whilst the LBH cycle parking standards require just 27 spaces (same as London Plan long stay requirement).
- 5.94 It is proposed that the redevelopment of the site will subsequently provide 60 cycle parking spaces in total. The development will provide cycle parking at around double the London Plan and LBH requirements in recognition of the higher staff numbers associated with the site compared to traditional B8 uses.
- 5.95 Safe and secure cycle parking will be well located across the site at key locations to encourage staff and visitor use.

Summary

- 5.96 Further details are provided within the Transport Assessment, Travel Plan, Outline Construction Logistics Plan and Delivery and Servicing prepared by WSP and submitted with this application. The assessments collectively concluded that there will be no adverse highways impacts as a result of the proposed development.

Energy and Sustainability

- 5.97 The NPPF encourages local planning authorities to adopt proactive strategies to mitigate and adapt to climate change. Paragraph 7 of the NPPF states that “the purpose of the planning system is to contribute to the achievement of sustainable development”.
- 5.98 Chapter 9 of the London Plan focusses primarily on ‘Sustainable Infrastructure’. Of particular relevance in regard to energy and overheating considerations is Policy SI2, which notes that major developments should be net zero-carbon, reducing carbon dioxide emissions from construction and operation, and minimising energy demand in line with the energy hierarchy as follows:
- Be lean: use less energy and manage demand during construction and operation.
 - Be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly. Development in Heat Network Priority Areas should follow the heating hierarchy in Policy SI3 Energy infrastructure.
 - Be green: generate, store and use renewable energy on-site.

- 5.99 Policy SI2 also notes that in meeting the zero-carbon target a minimum on-site reduction of at least 35 per cent beyond Building Regulations is expected. Residential development should aim to achieve 10 per cent, and non-residential development should aim to achieve 15 per cent through energy efficiency measures. London Plan Policy IS4 meanwhile states development proposals should minimise internal heat gain and the impacts of the urban heat island through design, layout, orientation and materials, whilst demonstrating through a supporting energy strategy how they will reduce the potential for overheating and reliance on air conditioning systems.
- 5.100 At the local level, Local Plan Policy DME1 2 states that all developments are required to make the fullest contribution to minimising carbon dioxide emissions in accordance with London Plan targets.
- 5.101 The Energy Assessment prepared by Yonder and submitted with this application sets out the approach to incorporating sustainable and energy efficiency measures to reduce the carbon emissions associated with the proposed development.
- 5.102 The enclosed Energy Assessment confirms that the development will achieve a 31% CO₂ Be Lean saving. Total emissions (BER) have been assessed to improve the Baseline Target Emissions Rate by 100%, therefore exceeding London Plan targets and achieving net zero carbon. This has been achieved through fabric savings, low energy lighting and a proposed 770 kWp of solar panels on the roof of the warehouse building.
- 5.103 A Sustainability Statement has also been prepared by Turleys and submitted with the application. This details the range of key sustainability measures incorporated into the design of the development which mean Overall the proposed development will deliver resource efficient buildings and a net zero carbon logistics unit, capable of adapting to climate change.
- 5.104 As part of the approach to sustainable design consideration and in accordance with London Plan Policy SI7 a Circular Economy Statement has also been provided by Turleys and submitted with this application. The development aims to reuse as much of building elements such as possible in order to minimise waste generated from the site clearance and construction. Where possible, the building and associated infrastructure will be disassembled with individual components directly used onsite or elsewhere. Some of the key circular economy commitments incorporated into the design of the development include the following:
- Prologis has invested heavily in a construction specification that maximises energy and resource efficiency. The end occupier has also invested in sustainability and an efficient specification.
 - Prologis and the future occupier seeks to specify the use of recycled materials wherever viable including steel content and aggregates
 - Many of the main construction materials required achieve an A rating in the Building Research Establishment's (BRE) Green Guide to Specification.

- A commitment to deliver a circular building that achieves the BREEAM 2018 Very Good environmental assessment rating and where possible targeting 'Excellent' minimum standards within energy and water sections.
- Through a contribution to the Cool Earth scheme, an aim to protect 510 acres of endangered rainforest, averting emissions equivalent to 5 times of the embodied carbon of the development.
- Targets and commitments will be refined on an ongoing basis as this is a D&B Contract. During State 4 and 5, the primary contractor will include the Circular Economy targets as agenda item within regular meetings.

5.105 The various commitments will be driven forward by Prologis and the end occupier. Actual performance against these targets will be submitted at practical completion. Lessons learned will also be captured throughout the design and construction process and used to inform circularity principles of future projects.

5.106 Finally, a Whole Life Carbon Assessment (WLC) has also been prepared by Turleys and submitted with this application. The WLC assessment has demonstrated a significant saving in carbon hotspots which have reduced the total embodied carbon of the development by 10%. Furthermore, regulated operational emissions have been reduced by 101% (as detailed in the Energy Assessment) and will be met entirely by on-site energy generation through solar PVs. Therefore in line with Policy SI2, the development can be considered zero carbon at operation as defined by the London Plan.

Air Quality

5.107 The London Borough of Hillingdon (LBH) is designated as a whole-borough Air Quality Management Area (AQMA).

5.108 The NPPF requires development proposals to minimise increased exposure to poor air quality and for LPA's to develop planning policies to ensure that pollution is minimised.

5.109 London Plan Policy SI1 states that London's air quality should be significantly improved and exposure to poor air quality, especially for vulnerable people, should be reduced. Policy SI1 seeks the submission of an Air Quality Assessment alongside major development proposals.

5.110 Local Plan Policy DMEI 14 states development proposals should demonstrate appropriate reductions in emissions to sustain compliance with and contribute towards meeting EU limit values and national air quality objectives for pollutants.

5.111 The majority of the Borough, including the application site, is designated as an Air Quality Management Area (AQMA). An Air Quality Assessment has been undertaken by AECOM and is submitted in support of this application.

5.112 A qualitative assessment of the potential impacts on local air quality from construction activities found that the construction works associated with the proposed development would constitute a medium-risk site overall for dust and particulate matter (PM10) impacts. The potential for temporary local air quality impacts to arise from the operation of vehicles and non-road mobile machinery was also identified. However, it is noted that through good site practice and the implementation of suitable mitigation measures (set out within the AQA in greater detail), the impact of construction related emissions would be reduced, and excessive releases prevented. The residual impacts of construction phase activities on air quality would therefore be considered to be temporary, short-to-medium term, local and of negligible significance.

5.113 An assessment of the potential air quality impacts associated with the operational phase of the Proposed Development was undertaken using air dispersion modelling in accordance with the Department of Environment, Food and Regional Affairs' most recent guidance on local air quality management. The changes to local air quality arising from the operation of the proposed development in the planned opening year of 2022 were found to be negligible and not significant.

5.114 As per the AQA, the proposed development is expected to be air quality neutral in respect of building-related emissions according to the Mayor of London's guidance. In respect of transport-related emissions, the proposed development is not considered to be air quality neutral, and may require measures to be implemented to offset emissions of key pollutants. Suggested mitigation measures are presented within the supporting AQA, although it is noted that final measures to be implemented will be discussed and agreed with LBH.

5.115 Overall, the proposed scheme is predicted to have a negligible impact on local air quality, which is not considered to be significant. The proposed development does not conflict with national or local policies, or with measures set out in LBH's Air Quality Action Plan and there are no constraints to the development in the context of air quality which cannot be overcome through practical mitigation measures. As such, it is considered that the proposed development is acceptable in planning terms with regard to air quality considerations.

Noise and Vibration

5.116 NPPF Paragraph 185 sets out that policies and decisions should aim to avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development, by mitigating and reducing noise to a minimum, including through the use of conditions. In addition, the NPPF recognises that development will often create some noise.

5.117 Policy D14 of the London Plan 2021 notes that residential proposals should seek to reduce, manage and mitigate noise to improve health and quality of life. Such proposals should seek to mitigate and minimise the

existing and potential adverse impacts of noise on, from, within, as a result of, or in the vicinity of new development without placing unreasonable restrictions on existing noise-generating uses. Where development cannot be located a significant distance from existing noise sources, due to site-specific constraints, Policy D14 encourages the mitigation of any potential adverse effects resulting from noise-generating sources through applying good acoustic design principles within the development.

5.118 A Noise and Vibration Assessment has been undertaken by AECOM and is submitted in support of the application. The results of the assessment indicate a significant adverse impact during the day and an adverse impact at night. However, when context is taken into account, the impact is substantially reduced with absolute noise levels below existing levels, the character of the noise similar to existing and external and internal levels below recommended guidelines. A number of noise minimisation measures are proposed to control noise emissions from the site.

5.119 Operational noise limits at nearby sensitive receptors have been defined in accordance with the LBH noise policy for building services and fixed plant. These noise limits will be adhered to in the design of building services and fixed plant.

5.120 An assessment of changes to road traffic noise levels along the local road networks has identified that there will be a negligible impact. No mitigation measures for development traffic noise is required.

5.121 Best practice measures have been identified to reduce demolition and construction noise emissions and vibration levels as far as reasonably practicable. These measures should be adopted as standard working practices throughout the demolition and construction programme.

5.122 In summary, it is considered that the findings of the Noise and Vibration Assessment demonstrate the acceptability of the proposed development within its setting. Where impacts have been identified to possibly exceed relevant guidelines and standards, suitable mitigation measures are proposed to ensure that these impacts are adequately and robustly reduced, to ensure no adverse harm is caused by the development upon adjacent operations and land uses. As such, these measures will ensure the development is appropriate and suitable in its function and scale within this location, and as such, in accordance with planning policy guidance, is acceptable in planning policy terms.

Flood Risk and Drainage

5.123 The NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas of highest risk.

- 5.124 London Plan Policy SI12 states development proposals should ensure flood risk is minimised and mitigated through sufficient measures integrated within the development. Policy SI13 notes that Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible. Drainage should be designed and implemented in ways that promote multiple benefits including increased water use efficiency, improved water quality, and enhanced biodiversity, urban greening, amenity and recreation.
- 5.125 At the local level, Local Plan Policy DME1 states that proposals that fail to make appropriate provision for flood risk mitigation, or which would increase the risk or consequences of flooding, will be refused.
- 5.126 The Environment Agency Flood Map shows that the entire site is located within Flood Zone 1 (land assessed as having less than a 1 in 1000 annual probability of flooding from rivers). Therefore all uses of land are considered appropriate in this zone.
- 5.127 A Flood Risk Assessment has been prepared by WSP. This confirms that the risk of flooding from pluvial sources to the Application Site ranges from Very Low to High . A Surface Water Drainage Strategy (SWDS) is proposed to manage this risk for the proposed development.
- 5.128 The proposed SWDS includes three attenuation tanks, permeable paving, drainage channels and an extension to the existing pond which have been designed to accommodate events up to the 1% AEP event, including an allowance for climate change (40% increase on peak rainfall intensity). It is proposed that surface water will discharge from the attenuation tanks into the Grand Union Canal to the south of the Site, via an existing Thames Water surface water sewer. The SWDS will mitigate the potential for the proposed development to exacerbate flood risk as a result of pluvial / overland flow sources.
- 5.129 Safe and dry access and egress will be provided via the primary access to the site via Ironbridge Road North, to the west of the Site. Finished floor levels have been set a minimum of 150mm above external finished levels.
- 5.130 The Flood Risk Assessment and proposed mitigation measures show that the proposed development, and its users, will be safe from all sources of flood risk over its lifetime. Proposals for the site are therefore considered to be acceptable in terms of the requirements of the NPPF, London Plan and Local Plan.

Planning Obligations Statement

- 5.131 The Community Infrastructure Levy (CIL) Regulations at Regulation 122 provide limitations on the use of planning obligations. Planning obligations may only be sought where they meet all of the following tests:
- necessary to make the development acceptable in planning terms;

- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

5.132 These tests are further reinforced at Paragraph 57 of the NPPF. The National Planning Policy Guidance (NPPG) also recognises that any planning obligations must be fully justified and evidence and should not prevent development going forward.

Draft Heads of Terms

5.133 In addition to the planning benefits of the proposed scheme, it is anticipated that an appropriate package of Section 106 contributions will be negotiated and agreed with the Council, in accordance with Regulation 122 of the CIL Regulations.

5.134 The Council adopted their Planning Obligations SPD in July 2014. With regards to employment use, the SPD states planning obligations will be sought in relation to employment and skills training.

5.135 Other S106 contributions could include air quality contribution, carbon offset contribution, securing works along the canal towpath improvements and securing an operational Travel Plan and monitoring contribution.

Community Infrastructure Levy

5.136 The Mayors CIL Charging Schedule (MCIL 2) came into effect in April 2019. The Mayor's CIL charges £35 per sqm on all development in Hillingdon, except for education and health uses. The proposed development will therefore be liable for a Mayoral CIL contribution.

5.137 The Council's CIL Charging Schedule came into effect in July 2014. The Charging Schedule sets out that use Class B1 (Office) development will be charged at £35 per sqm and use class B8 development will be charged at £5 per sqm. The proposed development will therefore be liable for a Borough CIL contribution.

6. Conclusion

- 6.1 This Planning Statement has been prepared in support of a full planning application submitted to London Borough of Hillingdon on behalf of Prologis for the redevelopment of the GSK site, Stockley Park, Hillingdon.
- 6.2 The proposed development seeks to redevelop the subject site to provide a last mile delivery facility (Class B8 use), comprising a warehouse for the storage, sorting and loading of deliveries and some ancillary office space measuring circa. 12,100 sqm in total. The proposals also seek to the erection of an adjacent four-storey decked van storage for delivery vehicles, with capacity for approximately 800 vans. The proposals also propose ancillary surface level staff car parking, retained and additional vehicular routes and enhanced landscaping.
- 6.3 The proposed land use will not undermine the efficient operation of the wider Stockley Park employment area, including the existing office park to the east of Stockley Road and will respond to demand for high quality industrial and logistics floorspace in this location, noting the oversupply of office floorspace identified in the Stockley Park Office Market Assessment, prepared by Savills. London Plan policy seeks to support the delivery of last-mile distribution centres in suitable locations and encourages the diversification of London's economy. The principle of development is therefore considered to be compliant with the relevant London Plan and LBH Local Plan policies.
- 6.4 The proposed development has been carefully designed so as to minimise the impact upon, and reduce the amount of built development in, the adjacent Green Belt. The proposals seek to integrate a significant quantum of landscaping and planting, both along the site boundaries and within the site (i.e. in the staff car park) to help screen the proposed development whilst also improving the quality and appearance of the built environment. The scheme will also secure improvements to the towpath along the Grand Union Canal.
- 6.5 Overall, the development will result in the a number of key planning benefits:
- The development will deliver a significant amount of high quality logistics floorspace (Class B8 use) which responds to an identified local and regional need for such uses, and is well located to optimise the excellent accessibility of the site.
 - There is a specific occupier for the proposed last mile delivery centre which has a requirement to operate from this location, to improve the efficiency and sustainability of their operations.
 - The future occupier will create around 100 new jobs opportunities, ramping up to over 220 people operating out of the warehouse during the busiest times of the year. In addition to this around 500 drivers will be required to support the distribution operation. New jobs will also be created as a result of the construction of the development.

- A commitment to the delivery and operation of the last mile centre will ensure the economic benefits associated with the site will be delivered promptly.
- The development proposals have evolved through detailed pre-application discussions with officers to provide a high quality design response to the constraints and opportunities of the site, and are considered to reflect a detailed, design-led approach to optimising the use of this previously developed site.
- The proposed buildings comprise high quality, sustainable design, seeking to provide an attractive working environment for employees whilst reflecting the wider character and material palette used in the wider Prologis Park West London estate.
- The site has been designed to respond well to the surrounding context and will not have a detrimental impact on any neighbouring occupiers.
- Significant landscaping and planting proposed along the site boundaries will help to screen the site in respect of the site's Green Belt and Listed Park and Garden status, whilst also improving the quality of the environment, including along the Grand Union Canal towpath.
- Removal of built footprint within the Green Belt, along with the enhancement of existing green space to improve the setting, quality and overall quantity of the Green Belt land.
- Creation of new pedestrian and cycle route along the canal towpath.
- The high quality landscape strategy proposed will result in net biodiversity improvements and is expected to increase the ecological value and benefits of the site and local area, as well as helping to reduce visual impacts upon the surrounding landscape.
- Sustainable design and construction measures will be utilised and mean overall the proposed development will deliver resource efficient buildings and a net zero carbon logistics unit.
- A commitment by the proposed operator to improve the environmental efficiency of its fleet and move towards all vans being electrified. The proposals therefore include 20% active EV charging infrastructure from outset with 80% of spaces passive and able to be converted in the future.

6.6 This Planning Statement has robustly demonstrated that the proposed redevelopment of the former GSK site is fully compliant with the relevant national, regional and local planning policy guidance. It is therefore respectfully requested that the proposals are recommended for approval without delay.

Appendix 1

Prologis Research (January 2021) – Logistics Realm Estate and E-Commerce Lower the Carbon Footprint of Retail

PROLOGIS RESEARCH SPECIAL REPORT | January 2021

Logistics Real Estate and E-Commerce Lower the Carbon Footprint of Retail



Prologis Park 33 Building 1, Easton, Pennsylvania

With e-commerce setting records during the 2020 holiday season and package deliveries forecast to grow by 80%¹ over the next decade, a new study by the MIT Real Estate Innovation Lab reveals the tangible environmental benefits of online shopping.

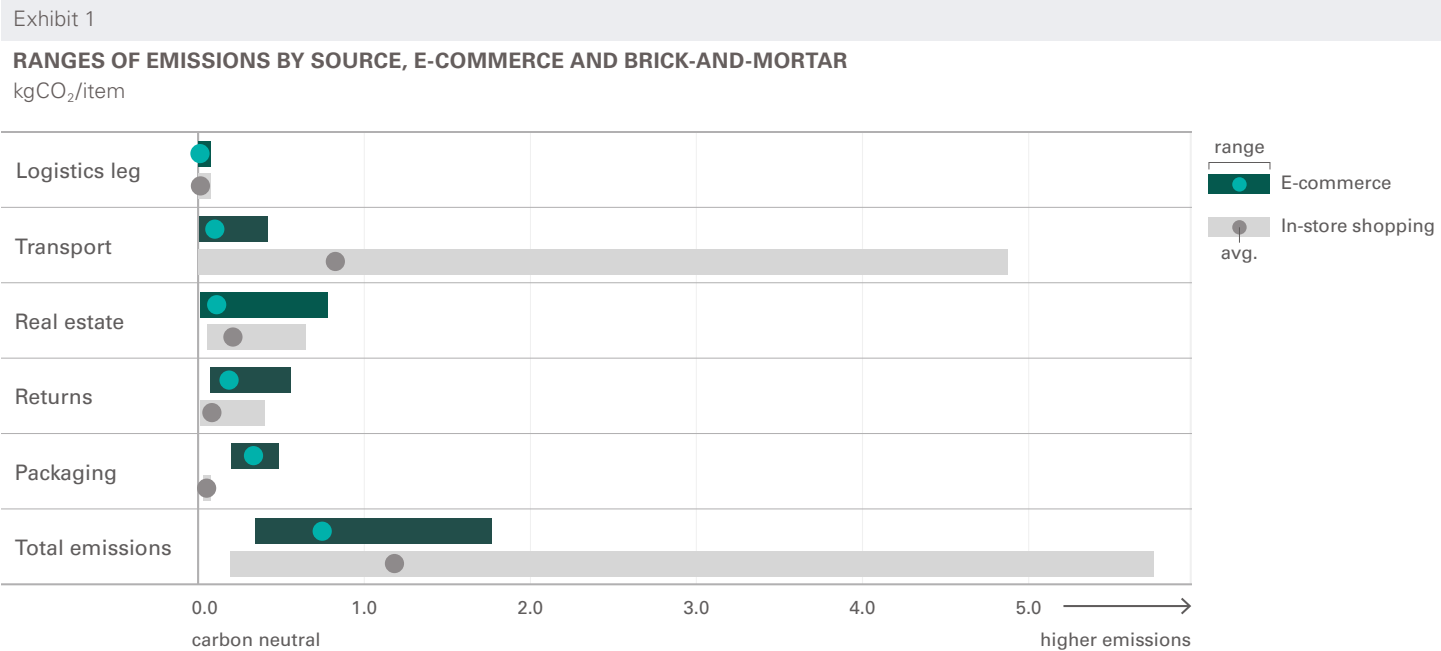
Driven by the stay-at-home economy, online retailing surged and remained at peak levels throughout 2020. Early estimates suggest U.S. online sales grew by upwards of 50%² (y/y) in 2020's expanded holiday shopping season, with similar trajectories in other major e-commerce markets including China, Europe, Japan and elsewhere. Using average emissions results from the MIT study, the share shift to e-commerce resulted in approximately 2.4% fewer emissions per package.

Overview

Fact Carbon emissions from online shopping are 36% lower, on average, than those produced by in-store trips.³ Impact E-commerce has a clear sustainability advantage over in-store shopping, even after factoring in higher returns and packaging.	36% Fewer emissions online vs. in-store shopping	Fact Built-out logistics networks, which include urban fulfillment centers, can reduce transportation-related emissions by 50%.³ Impact The carbon footprint per package can be reduced by about 10%.³	10% Fewer emissions per package from built-out logistics networks
Fact E-commerce in U.S. accounted for almost 20% of overall retail sales last holiday season, more than 6 percentage points higher than 2019.⁴ Impact Peak e-commerce sales had a positive effect on carbon emissions.	6% Percentage-point increase in the share of retail sales happening online	Fact For e-commerce, the positive carbon impact of efficient transportation routes is 2.5x the negative impact of excess packaging.³ Fleet electrification increases this advantage further. Impact A full standard van can replace more than 100 individual car trips.³	>100 Car trips replaced by full standard van

Deeper Dive

Carbon emissions from online shopping are on average 36% lower than those produced by in-store shopping.³ E-commerce was the more sustainable option in more than 75% of the base case trials by MIT. For each scenario, the study used 40,000 trials of a Monte Carlo simulation that modeled a variety of consumer behaviors that, in aggregate, are important indicators of environmental impact: number of items purchased, distance to/from store and logistics facility, returns and type of transport. In addition to the base case, 11 other scenarios were studied which changed an aspect of consumer behavior or retailer operations.



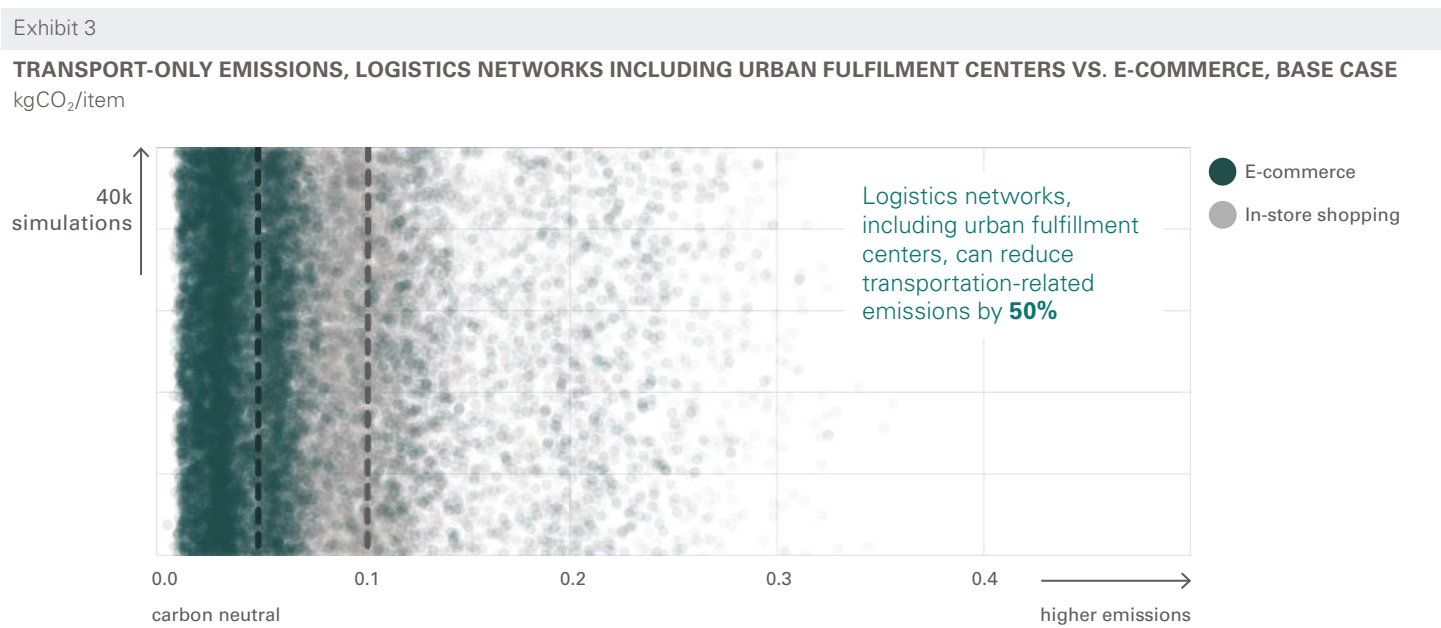
Source: MIT, Prologis Research

Consolidating deliveries on a “circular route” reduces transportation-related emissions by almost 90%.³ Transportation is the largest source of in-store shopping-related emissions and produces 2.5x the carbon emissions of e-commerce packaging, its largest carbon footprint contributor. In the case of direct-to-home delivery, a full standard van can replace more than 100 individual car trips.³ In turn, order consolidation and network optimization reduce costs for e-commerce operators.



Source: MIT, Prologis Research

Direct-to-home delivery from urban fulfilment centers can be a powerful lever to further decrease emissions. Built-out logistics networks which deliver goods from urban fulfilment centers close to consumers (rather than from facilities outside the urban core) can save some 50% of transport-related greenhouse gas emissions and reduce overall footprint per package by an average of 10%.³ Placing goods as close as possible to the end consumer minimizes final delivery distances and congestion. This improves delivery times and reduces costs by maximizing delivery fleet load capacities.



Source: MIT, Prologis Research

Advancements in smart buildings, electrification of vehicles and artificial intelligence (AI) can foster even more sustainable operations. These emerging technologies have the potential to align the interests of consumers, retailers and real estate investors in a mutual quest to lower carbon footprints. MIT modeled three ways logistics real estate users are improving the sustainability of their operations:

- Delivery vehicle electrification.** Using today's energy sources, this technology can decrease average transportation-related emissions by 27%³ and has the added benefit of reduced traffic noise. New vehicle models set to launch this year have a range of 200 miles, which will enable the handling of 90% of last-mile delivery routes in the U.S.⁵ Regulation is further catalyzing adoption and needed infrastructure build-out. Fifteen states and Washington, D.C. have announced plans to electrify all heavy-duty trucks, vans and buses over the next 15 to 30 years. Europe, meanwhile, is leading the introduction of low-emission traffic zones that require electric delivery vans. Today, these low-emission traffic zones apply to two-thirds of the urban areas in which Prologis operates.⁶ Forward-thinking retailers are adopting the technology. Amazon, for example, has ordered 100,000 electric vans and anticipates that the first 10,000 will be on the road next year.⁷
- Packaging.** Packaging is the largest source of emissions for e-commerce (albeit a fraction of the carbon savings from efficient goods transport). Still, innovations in this area have the potential to make online shopping even more environmentally friendly. On average, emissions from packaging are approximately six times higher for online purchases compared to in-store purchases, primarily due to the use of cardboard materials and individual packaging.³ MIT modeled a scenario in which the emissions of cardboard boxes were replaced by emissions of a paper bag in 80% of e-commerce purchases. In this scenario, e-commerce is more sustainable in 90% of all trials; today's base case is 75%. Many retailers are adopting eco-friendly packaging materials, while others are automating packaging—analyzing and recommending the best size and type of packaging for any combination of items. Replacing boxes with bags and padded mailers decreases the volume and weight and of packages, which can contribute to lower emissions.
- Data.** Advanced analytics and IoT-based solutions such as load-pooling and dynamic rerouting could reduce emissions by 10%, unit costs by 30% and congestion by 30%.⁸ This data can support fewer returns, as well. For instance, AI-based solutions can produce size and style recommendations to online shoppers based on previous purchases, minimizing returns. MIT modeled a scenario in which the online purchase return rate decreased by 50%, leading to a lower e-commerce carbon footprint in 80% of trials.

Methodology & Approach

The [MIT study](#) referenced models the carbon footprint of consumer shopping behavior by assembling the pertinent variables and then simulating scenarios where this range of parameters is modified. For this study, a Monte Carlo simulation executed 40,000 trials (10,000 across 4 regions) per 12 scenarios and produced measurable results that were then plotted for interpretation, given the range of consumer behaviors that can change total carbon emissions.

This report cites findings from an independent study conducted by the MIT Real Estate Innovation Lab. Prologis is a long-term partner of MIT's Center for Real Estate and its Real Estate Innovation Lab, and this research was made possible in part through Prologis' support.

Endnotes

1. World Economic Forum (pre-pandemic forecast)
2. Mastercard SpendingPulse (holiday period from Oct. 11 to Dec. 24)
3. MIT
4. Mastercard SpendingPulse (holiday period from Oct. 11 to Dec. 24)
5. Chanje's and Mercedes
6. European Commission and Urban Access Regulations
7. <https://www.aboutamazon.com/news/transportation/introducing-amazons-first-custom-electric-delivery-vehicle>
8. World Economic Forum

Forward-Looking Statements

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About Prologis Research

Prologis' Research department studies fundamental and investment trends and Prologis' customers' needs to assist in identifying opportunities and avoiding risk across four continents. The team contributes to investment decisions and long-term strategic initiatives, in addition to publishing white papers and other research reports. Prologis publishes research on the market dynamics impacting Prologis' customers' businesses, including global supply chain issues and developments in the logistics and real estate industries. Prologis' dedicated research team works collaboratively with all company departments to help guide Prologis' market entry, expansion, acquisition and development strategies.

About Prologis

Prologis, Inc., is the global leader in logistics real estate with a focus on high-barrier, high-growth markets. As of September 30, 2020, the company owned or had investments in, on a wholly owned basis or through co-investment ventures, properties and development projects expected to total approximately 976 million square feet (91 million square meters) in 19 countries.

Prologis leases modern logistics facilities to a diverse base of approximately 5,500 customers across two major categories: business-to-business and retail/online fulfilment.