

3.0 SITE AND DEVELOPMENT DESCRIPTION

Site Context

- 3.1 The Site (see Figure 1.1) is located within the London Borough of Hillingdon, approximately 4km northeast of Heathrow Airport. North Hyde Gardens forms the eastern boundary of the Site and Nestles Avenue runs along the southern boundary. The Grand Union Canal and the Great Western Railway Line form the northern boundary. Commercial units accessed from Vivesh Close are situated along the western boundary. Hayes and Harlington train station is situated 600m to the north east of the Site.
- 3.2 Beyond the Site, the British Airways Component Engineering facility is situated to the northeast beyond the Grand Union Canal. Minet Country Park is located to the northeast of this facility beyond the railway line. A large electricity sub-station is situated adjacent to the Site to the east beyond North Hyde Gardens. Residential areas are located to the south of the Site along Nestles Avenue.
- 3.3 The A312 Parkway and Bulls Bridge Roundabout is located 150m southeast of the Site, north of junction 3 of the M4.

Site Description

- 3.4 The Site is approximately 12.28 hectares (ha) in area and is currently vacant and comprises buildings of the former Nestlé Factory. It is enclosed by railings, with mature trees along the southern frontage on Nestles Avenue. In 2012, Nestlé announced the planned closure of operations on the Site and the transfer of the whole of its UK coffee operation, including manufacturing, filling and packing to Tutbury in Derbyshire. Manufacturing on the Nestlé site finished in late 2014. SEGRO purchased the factory site from Nestlé in early 2015 and leased back the factory to Nestlé, so that it could undertake decommissioning until October 2015.
- 3.5 In total, 10 buildings are located within the Site, the majority of which connect via a large central factory building through passageways and infill structures. These buildings occupy the majority of the Site, with loading and parking located in the eastern and south eastern area of the Site. These buildings housed roasting and drying plants and chocolate manufacturing facilities for Nestlé, as well as a boiler house, coffee grounds combustion plant (CGPP) and an amenities building.

3.6 The Site is located within the Botwell: Nestlé, Hayes Conservation Area. The following local listed heritage assets are located within the Site:

- Nestlé Works (Main Factory Building);
- Nestlé Works (Gates and Railings);
- Nestlé Works (Former Canteen); and
- Nestlé Works (Lodge).

3.7 Further information on the locally listed features are provided in Chapter 9 Built Heritage.

3.8 The Site also includes Wallis Garden a large green space located in front of the main factory building which includes a number of mature trees.

Development Description

3.9 The Development comprises the following:

"Part-Demolition of existing factory buildings and associated structures, and redevelopment to provide 1,381 dwellings (Use Class C3), office, retail, community and leisure uses (Use Classes A1/A3/A4/B1/B8/D1/D2), 22,663 sq m (GEA) of commercial floorspace (Use Classes B1c/B2/B8 and Data Centre (sui generis)), amenity and playspace, landscaping, allotments, access, service yards, associated car parking and other engineering works".

3.10 The layout of the Development is shown on the Masterplan at Figure 3.1.

3.11 The Development will include the demolition of the majority of the existing buildings on the Site, but the locally listed Nestlé Works (Gates and Railings), Nestlé Works (Former Canteen) and the majority of the southern, western and eastern elevations of the Nestlé Works (Main Factory Building) will be retained as part of the Development. Further information on the proposed demolition works is provided in Chapter 5 Construction Methodology and Phasing.

Land Use

3.12 The land uses proposed within the Development are detailed in Table 3.1 below.

Table 3.1: Land Uses

Land Use	Gross Internal Area (GIA) (SQM)	Gross External Area (GEA) (SQM)	Number of Units
Residential (C3)	109,621	120,688	1,381
Commercial Units	21,884	22,663	4

Land Use	Gross Internal Area (GIA) (SQM)	Gross External Area (GEA) (SQM)	Number of Units
(B1(C)/B2/B8 and data centre)			
Flexible Commercial/Community Use (A1/A3A4/B1/B8/D1/D2)	2,760	2,986	8-10
Total Habitable Floorspace	134,687	146,203	
Undercroft/Basement Car Parking	11,736	11,984	
Total	146,423	158,187	

3.13 The residential element of the Development is in the western part of the Site in six blocks of development, with the supporting non-residential uses contained within the former canteen building and the redeveloped parts of the Main Factory Building (see Figure 3.2). The commercial element of the Development is located at the eastern part of the Site, contained within three buildings, which house four units (unit 2 & 3 are in one building) (see Figure 3.2).

Residential

3.14 The residential buildings comprise blocks B, C, D, E, F, G, H and I, as shown on Figure 3.2. The buildings vary in height between ground + 1 storey and ground + 10 storeys (see Figure 3.3 & 3.4). The taller buildings are generally located towards the northern part of the Site adjacent to the canal and railway line, with lower rise buildings towards the south, although there is variation in heights of the buildings across the masterplan.

3.15 The tallest proposed building is Block B9, which is 35.965 m (67.865 m AOD), the height of which has been dictated by aviation safeguarding restrictions (see Figure 3.3 & 3.4).

3.16 The proposed residential unit mix is set out in Table 3.2.

Table 3.2: Residential Unit Mix

Unit Type	Number of Units	Percentage of Units %
Studio	111	8
1 Bed	567	41
2 Bed	570	41
3 Bed	133	10

Unit Type	Number of Units	Percentage of Units %
Total	1,381	100

- 3.17 The number and mix of residential units in each development block, with habitable room count is shown in Table 3.3 below.

Table 3.3: Number of units per Residential Block

Block	Number of Units
B	490
C	212
D	132
E	179
F	295
G	55
H	18
Total	1,381

- 3.18 Elevations and sections of the proposed residential buildings are provided in Figure 3.5-3.9. The new buildings will be predominately brick, ranging in colour from dark to lighter shades. The retained facades of the main factory building and the refurbished canteen will be rendered or painted, in keeping with the existing design of the buildings. Further details of the design of the Development are contained within the Design and Access Statement.

Commercial

- 3.19 The commercial proposals seek planning permission for 22,663 sq m of commercial floorspace within four units, with a proposed flexible use class of B1c, B2, B8 and data centre (sui generis) for unrestricted 24 hour use, 365 days a year, together with ancillary office, landscaping, access, service yards and associated car and cycle parking. The proposed new employment floorspace will provide an estimated minimum of 369 and a maximum of 536 new full time equivalent jobs.

- 3.20 Table 3.4 below shows the floor space proposed in each unit.

Table 3.4: Commercial Floor Space (GEA)

Unit	Unit SQM	Office Space SQM	Plant SQM
Unit 1	7,096	699	25

Unit	Unit SQM	Office Space SQM	Plant SQM
Unit 2	2,011	300	25
Unit 3	2,857	392	25
Unit 4	7,748	1,460	25

- 3.21 Each commercial building is located at the perimeter of the commercial part of the Site, arranged around a central area that provides service yards and car parking for the units. The layout of the buildings ensures permeability through the site and provides access to the canal and proposed public realm (see Figure 3.10). Illustrative elevations of the commercial units are provided in Figure 3.11-3.13.
- 3.22 Unit 2-4 will be ground + 3 storeys in height (with a maximum ridge height between 15 and 17m above ground level). Unit 1 will be ground + 1 storey (with a maximum 18m ridge height above ground level) (see Figure 3.3 & 3.4). This allows for two storeys of office accommodation and the ability to increase the capacity of the units through the insertion of a mezzanine floor, should this be required by any future tenants.

Supporting Uses Provision

- 3.23 A range of other commercial, retail and community uses are proposed as part of the masterplan proposals, with these uses predominately located within the refurbished former canteen building and the rebuilt main factory building. The majority of these uses have an intended end use, however, in order to maintain flexibility across the masterplan, a range of uses are proposed for each of the units, so that potential tenants could occupy any of the units within the Development. The provision is summarised in Table 3.5 below.

Table 3.5: Schedule of Supporting Uses

Block	Unit	GEA (SQM)	Intended Use	Flexible Uses Sought
F1	2	179	Business Suite (B1)	A1/A3/A4/ B1/B8/D1/D2
F4	1	40.7	Canoe Storage (B8)	
H	3	173.8	Café (A3)	
I	4/5	371.8	BRAM (B1)	
I	8/9	538.9	Management Office (B1)	
I	6	1,000.4	Community Centre/Gym (D1/D2)	
I	7	350.4	Children's Nursery	
I	10	330.8	Children's Nursery	
Total		2,986		

Access and Highways

- 3.24 Vehicular access into the commercial element of the Development will be via North Hyde Gardens (utilising the existing Site access). The main vehicular access to the residential element of the Development will be via Nestles Avenue, the existing vehicular access opposite Harold Avenue will be re-opened and a new access to the west will be created.
- 3.25 The Development will include one existing and two new streets which will link to Nestles Avenue and provide pedestrian and cycle access. An area has been safeguarded on the Site for potential future development of a footbridge to link to the north side of the canal.

Parking

- 3.26 A total of 712 residential parking space on the Site, equivalent to a ratio of approximately 0.5 parking spaces per residential unit (see Figure 3.14). A total of 2,186 cycle parking spaces are to be provided.
- 3.27 It is proposed to provide a total of 19 parking spaces for the café, gym, nursery and office elements of the Development.
- 3.28 The proposed level of car parking for the commercial uses are as follows:
- Unit 1- a total of 73 spaces, 15 with electric charging facilities and 8 with passive provision for electric charging.
 - Unit 2- a total of 21 spaces, 4 with electric charging facilities and 2 with passive provision for electric charging.
 - Unit 3- a total of 31 spaces, 6 with electric charging facilities and 3 with passive provision for electric charging.
 - Unit 4- a total of 88 spaces, 18 with electric charging facilities and 9 with passive provision for electric charging.

Green Infrastructure

- 3.29 Over 3 ha of publicly accessible green and landscaped space, including 35,612 sq m of public open space, and 9,025 sq m of semi-private amenity space will be provided as part of the Development. Key areas include:
- Wallis Gardens - will be retained, enhanced and opened to the public as part of the Development.

- Trim Trail – a 1.5km connecting the residential and industrial parts via a Site-wide loop with fitness, heritage and culture nodes along the route.
- Sandow square – a new central public square at the centre of the residential development.
- Canal street garden & Canal Square – A new public square adjacent to the canal.
- Coffee Park – Adjacent to the railway line, providing a running track.
- Milk street Gardens - A small pocket park.
- Podium courtyards - Semi-private amenity spaces.
- Viveash Square provides proposed allotments.

3.30 A total of eight children's play areas are also provided within the Development.

3.31 The masterplan has been designed to accommodate the majority of the existing trees on Site, including the trees in Wallis Gardens, along Nestles Avenue and along the western and northern boundary adjacent to the railway track. Green roofs are proposed for all buildings with the exception of the former canteen building to maximise biodiversity. The landscape masterplan is provided at Figures 3.15 and 3.16.

Lighting

3.32 External lighting will be minimised as far as possible, but will be consistent with satisfying requirements for safety and security. Light pollution will be minimised by designing the external lighting in accordance with the Institute of Lighting Professionals guidanceⁱ.

Drainage

3.33 The Site is located in Flood Zone 1 and is therefore at low risk of flooding from fluvial or tidal sources. Flood risk from other potential sources including canals and reservoirs, groundwater and public sewers is assessed to be low.

3.34 Surface water drainage arrangements are proposed to comprise controlled off-site discharge to public sewer plus, for the northern half of the residential development and in agreement with the Canal and River Trust, controlled discharge into the adjacent Grand Union Canal.

3.35 In respect of discharge to the public sewer, this is to be achieved through the use of below ground storage vessels and where possible, permeable paving acting as a tanked system.

3.36 The overall capacity of the surface water network has been calculated based on a 1 in 100 year return period storm, with an additional 20% climate change allowance for the commercial part of the Development and a 40% allowance for the more sensitive residential element.

- 3.37 The foul water flows are to be collected by a gravity system and discharged off-site via existing Thames Water sewers in Nestles Avenue, subject to Section 106 public sewer connection agreements with Thames Water.

Energy, Sustainability, and Climate Change

- 3.38 Through careful detailed design and use of appropriate technology, the Development will offer an appropriate and effective response to climate change issues. The Development proposals satisfy the key environmental targets set out in the emerging Local Planⁱⁱ and other policy documents.
- 3.39 The Development includes a range of features that will enable it to adapt to the potential effects of climate change including windows of limited size with deep reveals, balcony overhangs which provide summer shade and where necessary, solar control glazing. Detailed assessment has shown that with these measures there is no risk of overheating of the proposed residential units.
- 3.40 As set out above, green roofs are proposed for all residential buildings with the exception of the former canteen building to maximise biodiversity (the commercial units will not have green roofs). The roofs will also contribute to reducing rainwater run-off as part of a range of measures to enable the Development to cope with increased rainfall intensity. A range of water conservation measures will be implemented to reduce the calculated residential water consumption to below 105 litres per day for each resident, and each dwelling will have an individual water meter.
- 3.41 In terms of energy efficiency, the proposed dwellings will be designed to exceed the requirements of Part L1A: 2013ⁱⁱⁱ by provision of enhanced insulation and energy efficient plant and equipment. The residential element of the Development will be heated by a community heating system with condensing gas boilers and a gas Combined Heat and Power (CHP) system. The community heating network will be capable of being connected to a district heating scheme should one be developed in the locality in the future. In addition, substantial photovoltaic panel arrays are proposed for the roofs of some of the buildings with a combined rating of 378 kWp, and these will contribute a further significant reduction in carbon dioxide emissions (see Figure 3.17). The combination of the energy efficiency measures, the CHP unit and the photovoltaic panels will result in overall emissions for the residential element of the Development that are 35% below the 2013 regulatory baseline.

- 3.42 The focus of the energy strategy for the commercial element of the Development is on CO₂ reduction by using a highly efficient building envelope with high efficiency mechanical and electrical services, along with air source heat pump renewable technology. The commercial element of the Development will achieve a CO₂ emissions reduction of 37.90 % over the Building Regulations 2013 compliant baseline scheme. The passive/energy efficiency measures are predicted to achieve a 34.38% CO₂ reduction over the baseline building regulations compliant scheme.
- 3.43 Standalone Sustainability Statements and Energy Statements have been submitted alongside the planning application and further information on energy, sustainability and climate change is provided in these documents.

References

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- ⁱ Institute of Lighting Professionals (2011) Guidance notes for the reduction of obtrusive light, GN01
- ⁱⁱ London Borough of Hillingdon (October 2015) Site Allocations and Designations Local Plan Part 2 (Revised Proposed Submission Version)
- ⁱⁱⁱ The Building Regulations 2010 Conservation of Fuel and Power in new dwellings.