

Elephant Park H1 Development

Environmental Statement, Volume 4 – Non-Technical Summary

May 2021

Prepared by Avison Young



**AVISON
YOUNG**

**Elephant Park, H1 Development, Southwark
Environmental Statement, Volume 4: Non-
Technical Summary**

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For and on behalf of Avison Young

1. Introduction

- 1.1.1 In March 2013 Outline Planning Permission ('OPP') (reference: 12/AP/1092) was granted for a residential-led development known as Elephant Park. The subject area of the OPP comprises an area of land occupying 9.71 hectares (the 'Masterplan Site') within the administrative area of the London Borough of Southwark ('LBS') located to the west of Elephant and Castle Railway Station. At the time of achieving the OPP, the Masterplan Site comprised the Heygate Estate but this has since been demolished and delivery of Elephant Park is now well advanced. The OPP comprises Plots H1 to H7, H10, H11a, H11b, H12, H13, PAV1 and a new park at its centre. Reserved Matters Applications ('RMA') have been submitted and approved for all Plots but Plot H1. As such, the development approved by the OPP comprises detailed permission for Plots H2 to H7, H10, H11a, H11b, H12, H13, the Park and PAV1 and outline permission for Plot H1 (the 'Approved Development').
- 1.1.2 The Elephant Park OPP was subject to an Environmental Impact Assessment (EIA) and, therefore, was accompanied by an Environmental Statement (the 'March 2012 ES') and subsequently an ES Addendum (the 'September 2012 ES Addendum'). In addition, an Updated ES dated August 2020 (the 'August 2020 ES') was submitted in support of the submission pursuant to the OPP of an Updated Detailed Phasing Plan for Elephant Park.
- 1.1.3 Lendlease (Elephant and Castle) Limited (the Applicant) is now submitting a stand-alone full 'drop-in' planning application (the 'Planning Application') in relation to land comprising Plot H1 of the OPP (the 'Site') for an office-led building (the 'H1 Development'), as an alternative to developing Plot H1 under the OPP. The H1 Development would become part of the Elephant Park development alongside the remainder of the Approved Development. The proposals for the Site for which detailed planning permission is sought would provide:
- One building of ground plus 17 storeys (including a mezzanine floor) with a basement level and rooftop plant.
 - Commercial floorspace (all under Use Class E of the Town and Country Planning (Use Classes) Order 1987 (as amended)) totalling 58,365 sqm Gross External Area ('GEA'), broken down as follows:
 - 49,565 sqm GEA of office floorspace.
 - 6,795 sqm GEA of flexible offices / medical or health floorspace.
 - 1,728 sqm GEA of offices / retail / professional services / food and drink floorspace.
 - 277 sqm GEA of flexible offices / retail / professional services / medical or health floorspace.
 - Public realm works, including hard and soft landscaping, and highway works to the neighbouring streets, principally to create Sayer Street North, with alterations to Deacon Street and incidental works to Elephant Road and Walworth Road.
 - Servicing carried out from an internal loading dock, accessed from Deacon Street, with vehicles both entering and exiting from Walworth Road.
 - A car free development other than allocated accessible spaces to be located on Deacon Street.
 - Cycle parking within the basement, accessed from Walworth Road.

1.1.4 The above proposals are known as the 'H1 Development'.

1.1.5 The Planning Application description of the H1 Development is as follows:

"Redevelopment of the site to provide a building of ground plus 17-storeys (including a mezzanine floor) with basement and rooftop plant providing office floorspace (Class E) and flexible office/retail/food and drink/medical and health floorspace (Class E), including ancillary cycle parking, accessible car parking, servicing, landscaping, public realm improvements and other associated works incidental to the development."

1.1.6 Avison Young was commissioned by the Applicant to carry out an EIA of the H1 Development. EIA is a formal procedure underpinned by The Town and Country Planning (EIA) Regulations 2017 (the 'EIA Regulations') as amended. The procedure must be followed for certain types and scales of development. The EIA process systematically identifies and assesses the likely significant environmental effects of a development, during enabling and construction works and on completion and operation of a development. The process also offers an opportunity to promote an iterative design process whereby the likely significant adverse and beneficial effects of a project can be avoided or minimised, and encouraged and maximised, respectively.

1.1.7 Where EIA is required, the results are reported in an Environmental Statement (ES). The ES allows the relevant determining authority, in this case LBS, to consider all likely significant environmental effects arising from a development. The ES is a material consideration to the planning determination process. The EIA addressed both the likely beneficial and adverse effects of the H1 Development during the enabling and construction works required to facilitate the H1 Development (the 'Works') and of the H1 Development once completed and operational.

2. The Existing and Future Site and its Surrounds

Within the Site and Masterplan Site - Existing

- 2.1.1 The Site and the Masterplan Site, are located within the administrative boundary of London Borough of Southwark (LBS), as shown within **Figure 1**. As shown in **Figure 2** the Site is located on the western edge of the Masterplan Site.

Figure 1: The Site and Masterplan Site Location

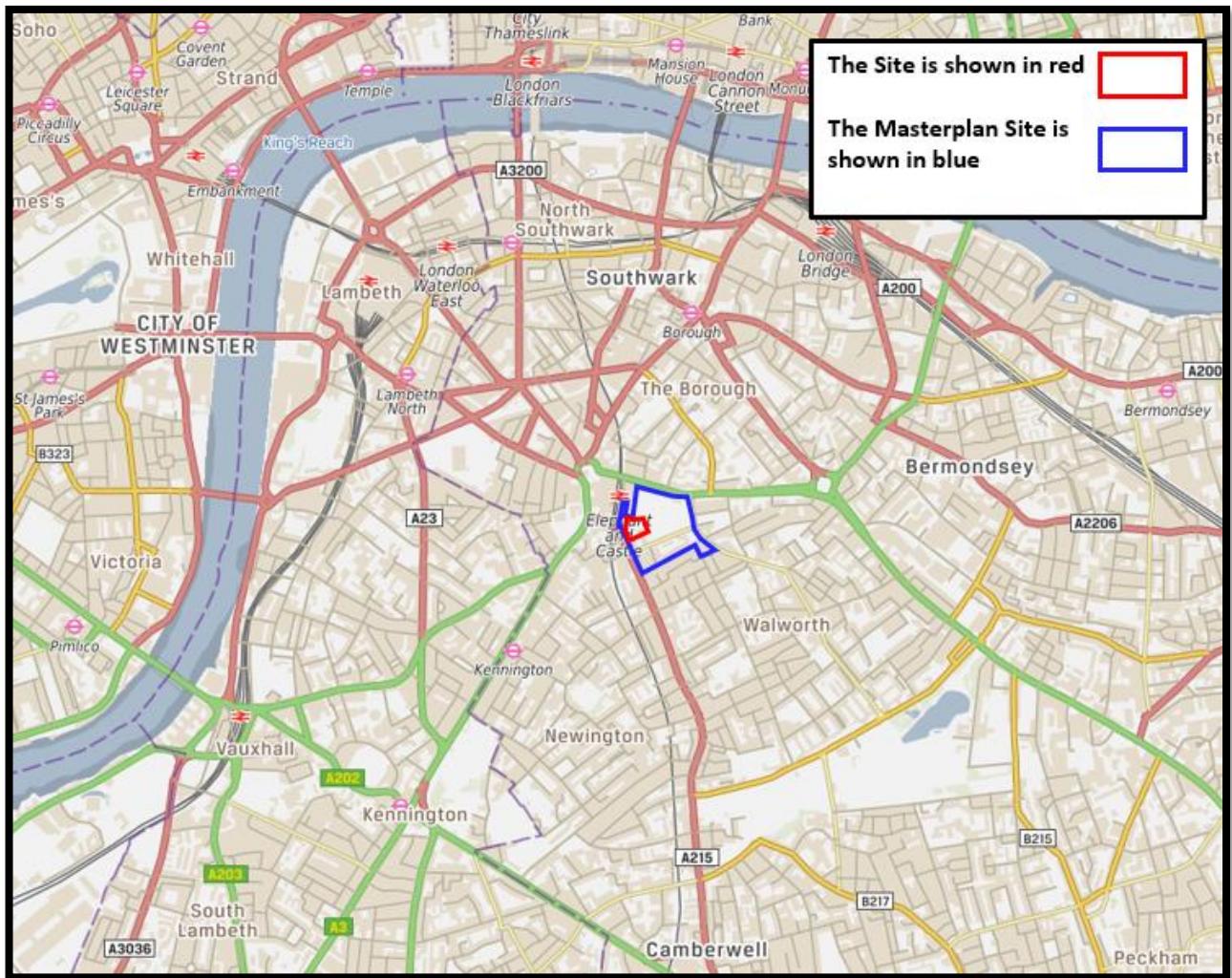
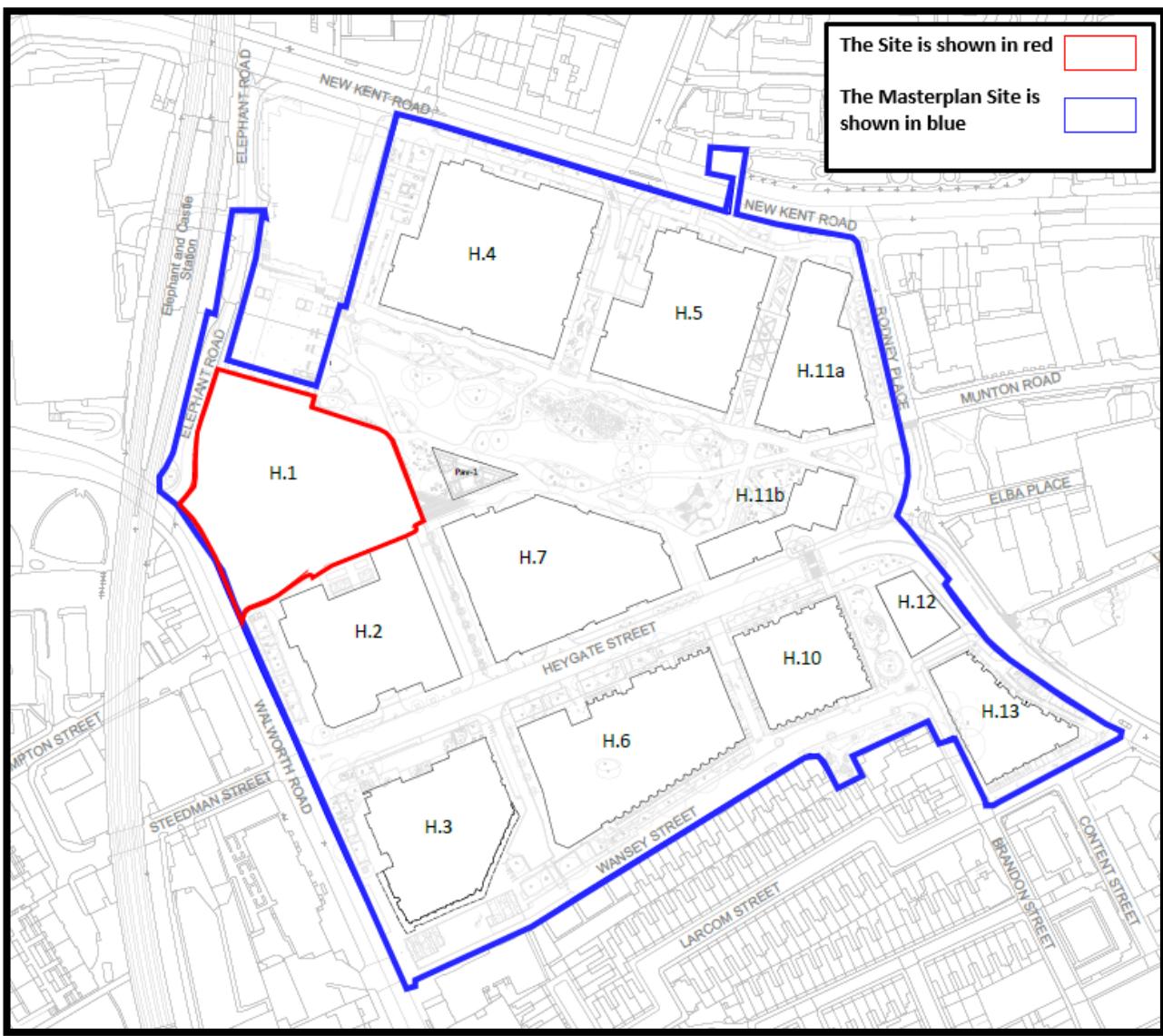


Figure 2: The Site and Masterplan Site



2.1.2 The Site comprises an area of 0.78 ha and as shown in **Figure 2** is bound by:

- Elephant Road and Walworth Road (A215) to the north-west and south-west respectively.
- Plot H2 (complete and occupied) of the Approved Development to the southeast which comprises predominantly residential accommodation, with retail and food and beverage uses at ground floor.
- A pavilion (PAV1, currently under construction) and the new park (under construction) of the Approved Development to the northeast.
- Castle Square to the north.

2.1.3 The Masterplan Site comprises an area of 9.71 ha and is bound by:

- New Kent Road (A201) to the north.
- Rodney Place and Rodney Road to the east.
- Wansey Street to the south.

- Walworth Road (A215) and Elephant Road to the west.
- 2.1.4 The Site is void of permanent structures but currently accommodates a modular building for Masterplan Site welfare. This is associated with the on-going implementation of the Approved Development, including construction set-down. There is also a small area of temporary public realm on south side of the Site, used as a meadow, pathways and seating areas.
- 2.1.5 The Masterplan Site is currently undergoing redevelopment in accordance with the Approved Development. In relation to the Masterplan Site, at the time of writing:
- Construction works are complete (and buildings are occupied) for Plots H2, H3, H6, H10, H12 and H13 of the Approved Development.
 - Construction is nearing completion for Plots H4 and H5 including associated public realm, with construction works ongoing for Plot H11a and PAV1.
 - Above ground work has not yet commenced in relation to Plots H7 and H11b, which are currently used for various temporary purposes including site offices, a construction compound and temporary landscaping. H11b has been technically implemented through the carrying out of a material operation on the site.

Surrounding the Masterplan Site - Existing

- 2.1.6 Existing land uses surrounding the Masterplan Site as are follows:
- Immediately to the north of the Masterplan Site, fronting New Kent Road, land uses are predominantly residential, comprising multi-storey buildings including Albert Barnes House, St. Matthews Court, Tavern Court and Cartwright House. St. Mathews Church is also located to the northwest of the Masterplan Site, at the corner of Meadow Row and New Kent Road. Rachel McMillan College Annexe of South Bank University is located at the corner of Falmouth Road and New Kent Road.
 - To the east of the Masterplan Site, land uses are more varied. The disused Crown and Anchor Public House is located at the corner of New Kent Road and Rodney Place, which is now boarded up. Immediately adjacent to the public house there is an industrial unit, currently comprising the Drawing Room (part of Tannery Arts Ltd) which can be hired out as an exhibition space. There are also residential flats and green open space, Victory Community Park, fronting Rodney Road. Victory Primary School is located at the junction of Rodney Road and Heygate Place. Trafalgar Place (formerly referred to as 'Phase 1 of the Heygate Regeneration' and now complete and operational), on a site bounded by Rodney Road, Victory Place and Balfour Street, is located beyond the southernmost tip of the eastern boundary of the Masterplan Site.
 - Beyond the south-eastern boundary of the Masterplan Site the land use is predominantly residential with three storey houses and four to six storey residential buildings. Town Hall on Walworth Road is located directly to the south of the Masterplan Site, at the corner of Wansey Street and Walworth Road. Newington Art Academy London is also located on Walworth Road beyond the south-western boundary.
 - Along the south-western boundary of the Masterplan Site there is a mix of land uses including three to four storey buildings with retail on the ground floor and residential on the upper storeys. There is also a multi-

storey residential building, Julian Markham House, providing student accommodation (Unite Students) with retail use on the ground floor. Retail, residential, hotel and office uses along Walworth Road also include Kwik Fit, Staysafe London, Eurotraveller Hotel Express and Dashwood Studios. The Mosaic Multicultural Church is also located on the south-western boundary of the Masterplan Site.

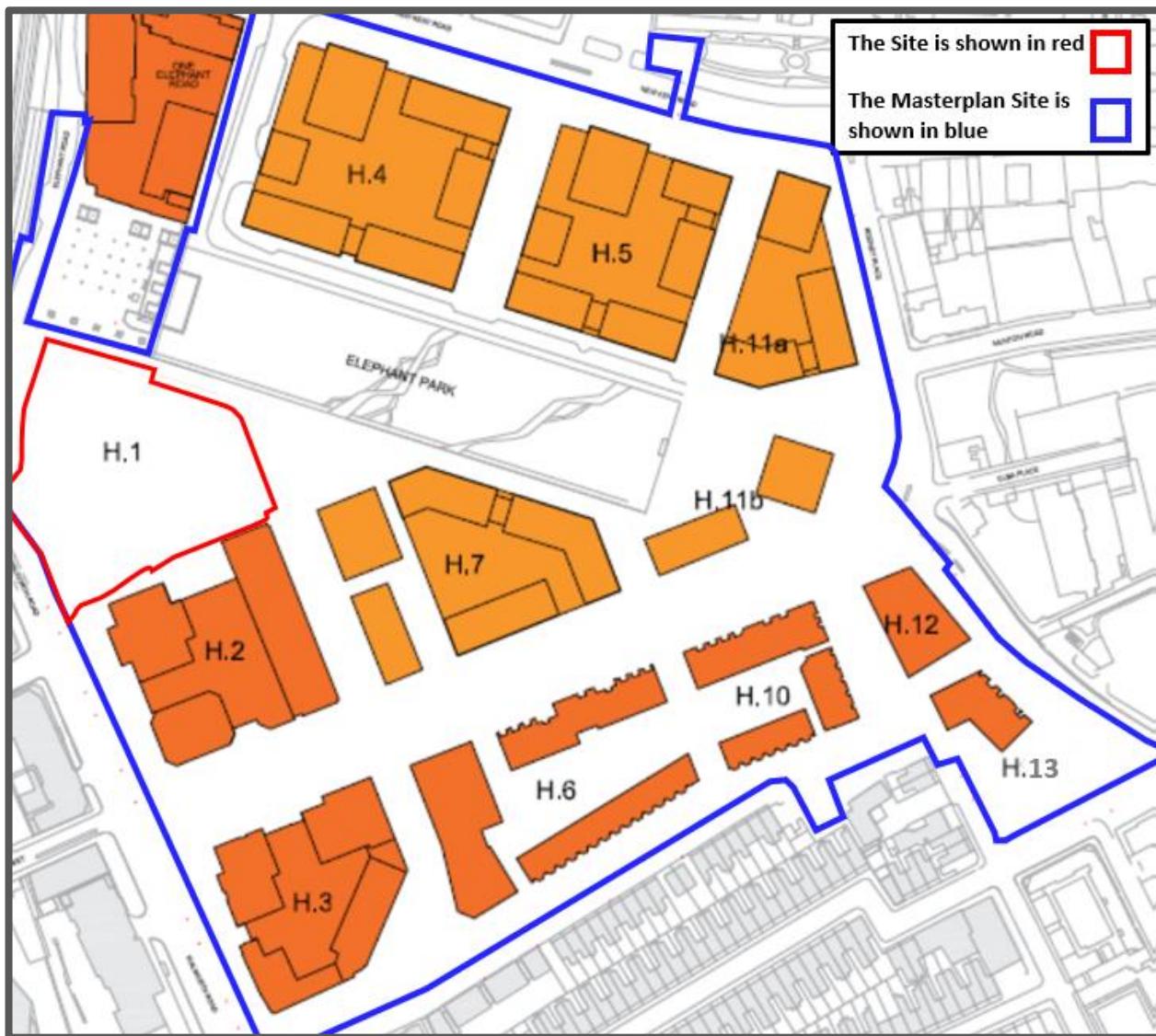
- To the west of the Masterplan Site, fronting Elephant Road, is the now closed Elephant and Castle Shopping Centre. Beyond the western boundary there are a number of retail uses including restaurants, a café, a night club and vehicle servicing companies accommodated in the railway arches. Elephant and Castle Overground Railway Station and associated railway lines are also located beyond the western boundary of the Masterplan Site. The Elephant and Castle Shopping Centre closed in September 2020, making way for a mixed-use redevelopment incorporating retail, leisure, residential and student accommodation (planning application reference: 16-AP-4458).
- 2.1.7 The primary land use surrounding the Masterplan Site is residential. Beyond the Masterplan Site boundary there are housing estates to the north, south and southwest, including the Draper, Newington and Alberta Housing Estates to the southwest, the Peabody Estate, Nelson and Browning Estates to the south, and Rockingham Estate to the north. Strata, which is 43 storeys in height, is also located beyond the western boundary of the Masterplan Site.
- 2.1.8 With regard to transport infrastructure within proximity of the Masterplan Site, two junctions (hereafter referred to as the 'Northern Roundabout' and the 'Southern Junction') are located to the north-west and south-west of the Site respectively. There is a raised railway viaduct located to the west of the Masterplan Site beyond Elephant Road.
- 2.1.9 Public transport facilities within the vicinity of the Masterplan Site include the following services:
- Southeastern and Thameslink services from Elephant and Castle Station located to the west of the Masterplan Site utilising the aforementioned raised railway viaduct. Destinations include Sevenoaks, London Blackfriars, Sutton and St Albans City.
 - Northern Line and Bakerloo Line London Underground Limited (LUL) from Elephant and Castle London Underground Station with entrances located to the west of the Masterplan Site in two locations north and south of the Northern Roundabout.
 - Numerous bus services.
 - Santander cycle hire docking stations to the west of the Masterplan Site near the Southern Junction.
- 2.1.10 There are a number of retail and leisure facilities within the vicinity of the Masterplan Site. Retail uses, including pubs, restaurants, a night club and takeaway establishments are located to the south and north of the Masterplan Site, primarily on Walworth Road, Elephant Road in the railway arches and New Kent Road. Victory Park, located to the east of the Masterplan Site, also provides play space.
- 2.1.11 Education facilities surrounding the Masterplan Site include:
- Victory School to the east.

- St. John's Walworth Church of England Primary School to the south.
 - Ark Globe academy to the north.
 - Crampton School to the south-west.
 - London College of Communication to the north-west.
 - London South Bank University to the north-west.
 - Notre Dame Roman Catholic Girls' School to the north-west.
- 2.1.12 There are light industrial uses, car parking, cafes, restaurants and a club within the arches beneath the railway viaduct to the west of the Masterplan Site, beyond Elephant Road. There are also office and business uses, including the Department of Health located within Skipton House to the north-east of the Masterplan Site.
- ## Within the Site and Masterplan Site - Future
- 2.1.13 As outlined in **ES Volume 1, Chapter 1: Introduction**, this ES assesses the likely significant effects of the H1 Development in the context of a 'likely future baseline' with all other elements of the Approved Development (with the exception of Plot H1 in its outline consented form) complete and operational. Therefore, the likely future land uses within the remainder of the Approved Development include residential, retail, business, community and cultural, and leisure uses, an energy centre and open spaces. The likely future baseline land uses within the Site are assumed to be the same as those currently existing within the Site as outlined in **paragraph 2.1.4**.
- 2.1.14 **Table 2** outlines the likely future baseline land uses and heights for the Masterplan Site (Approved Development), except for Plot H1.

Table 2: Likely Future Baseline Land Uses and Heights of the Masterplan Site (Approved Development) except for Plot H1

Plot	Land Uses	Approved Maximum Height in Storeys
H2.	C3 Residential. A1-A5 Retail & Café / Restaurant.	Between 10 and 31 storeys.
H3.	C3 Residential. A1-A5 Retail & Café / Restaurant.D1 Community.	Between five and 19 storeys.
H4.	C3 Residential. A1-A5 Retail & Café / Restauranty.D2 Leisure.	Between eight and 25 storeys.
H5.	C3 Residential. A1-A5 Retail & Café / Restaurant. D2 Leisure.	Between eight and 25 storeys.
H6.	C3 Residential. A1-A5 Retail & Café / Restaurant.	Between three and 16 storeys.
H7.	C3 Residential. A1-A5 Retail & Café / Restaurant. D2 Leisure.	Between nine and 25 storeys.
H10.	C3 Residential.	Between three and 10 storeys.
H11a.	C3 Residential. A1-A5 Retail & Café / Restaurant. B1 Business.	Between 10 and 19 storeys.
H11b.	C3 Residential. A1-A5 Retail & Café / Restaurant.	Between 11 and 25 storeys.
H12.	D1 Community. Sui Generis Energy Centre & Ancillary Visitors / Café.	Four storeys.
H13.	C3 Residential.	Between three and seven storeys.
PAV1.	A1-A5 Retail & Café / Restaurant. D1 Community.	Single storey.

2.1.15 In addition, the Approved Development includes areas of open space, including a new park (known as The Park), gateway spaces, pocket parks and new streets. **Figure 3** shows the layout of the Approved Development except for Plot H1.

Figure 3: Layout of the Approved Development except for Plot H1

Surrounding the Masterplan Site - Future

- 2.1.16 A review of the August 2020 ES, in addition to a search of online databases¹ and planning portals², was undertaken to identify significant schemes, which represent likely future land uses surrounding the Masterplan Site. The schemes are set out within **Section 5** of this NTS. They are considered as part of the cumulative effects assessment (and will not be included within the likely future baseline which only relates to the Masterplan Site / Approved Development).

1 <https://maps.london.gov.uk/map/?ldd>

2 <https://www.southwark.gov.uk/planning-and-building-control/planning-applications/planning-register-search-for-view-and-comment-on-planning-applications>

3. The H1 Development and its Implementation

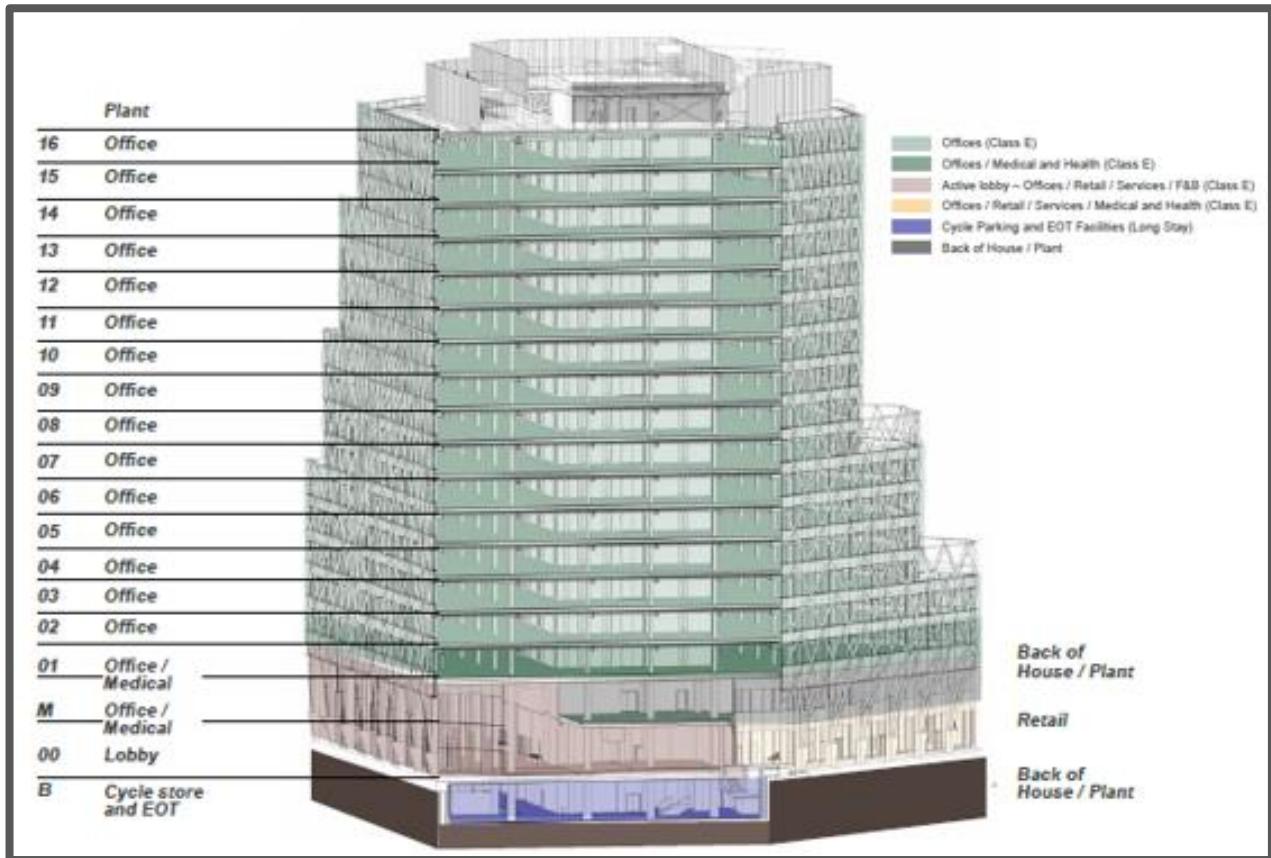
3.1.1 The Planning Application includes a set of plans, elevational drawings and other information drawn in detail, forming a set of planning application drawings, which have been submitted to LBS for approval.

3.1.2 The Development would provide the following:

- One building of ground plus 17 storeys (including a mezzanine floor) with two basement levels and rooftop plant.
- Commercial floorspace (all under Use Class E of the Town and Country Planning (Use Classes) Order 1987 (as amended) totalling 58,365 sqm Gross External Area (GEA), broken down as follows:
 - 49,565 sqm GEA of office floorspace.
 - 6,795 sqm GEA of flexible offices / medical or health floorspace.
 - 1,728 sqm GEA of offices / retail / professional services / food and drink floorspace.
 - 277 sqm GEA of flexible offices / retail / professional services / medical or health floorspace.
- Public realm works, including hard and soft landscaping, and highway works to the neighbouring streets, principally to create Sayer Street North, with alterations to Deacon Street and incidental works to Elephant Road and Walworth Road.
- Servicing carried out from an internal loading dock, accessed from Deacon Street, with vehicles both entering and exiting directly from Walworth Road.
- A car free development other than allocated accessible parking spaces to be located on Deacon Street.
- Cycle parking within the basement, accessed from Walworth Road, and within the public realm at ground floor.

3.1.3 The H1 Development would comprise a single building, located centrally within the Site and in the western portion of the Masterplan Site. The H1 Development comprises ground plus 17 storeys (including a mezzanine level) with a basement level and rooftop plant, extending to a maximum height of 85.730 m AOD (including rooftop plant). The building would complete the Walworth Road frontage of the Approved Development, with the tallest element situated adjacent to the railway line to the west of the Site and stepping down towards the neighbouring residential buildings to the south-east of the Site (where the building would be ground plus four storeys (including the mezzanine level)).

3.1.4 At ground floor level the uses would comprise lobby and flexible floorspace suitable for offices / retail / professional services / food and drink / medical or health, with areas for cycle access. At mezzanine and first floor level uses would comprise flexible floorspace suitable for office / medical or health. Second floor level and above would comprise office use only. Cycle parking, together with shared building plant and a surface water attenuation tank would be provided at basement levels (Basement Level 1 and Basement Mezzanine). Uses at each floor level are shown in **Figure 4**.

Figure 4: Land Uses of the H1 Development (Source: Modified from ACME)

3.1.5 The H1 Development proposes affordable workspace to meet the LBS emerging policy requirement that 10% gross new floorspace be affordable. As an alternative to the proposed affordable workspace, there is also a possibility that a new health hub to serve the local area could be provided within the H1 Development. The need for the health hub is existing, and is not generated by the H1 Development, however LBS has identified the H1 Development as a potentially suitable location. In order to accommodate this potential, medical or health use has been sought alongside office use for 6,992 sqm Gross Internal Area (GIA) within the lower floors of the H1 Development. Whilst planning permission is being sought for the health hub within the H1 Development, it remains an alternative to the affordable workspace and if its provision is not supported by LBS, the affordable workspace will be provided instead.

3.1.6 The Site layout and ground floor of the H1 Development are shown in **Figure 5** and **Figure 6** respectively.

Figure 5: Site Layout of the H1 Development (Source: Modified from ACME)

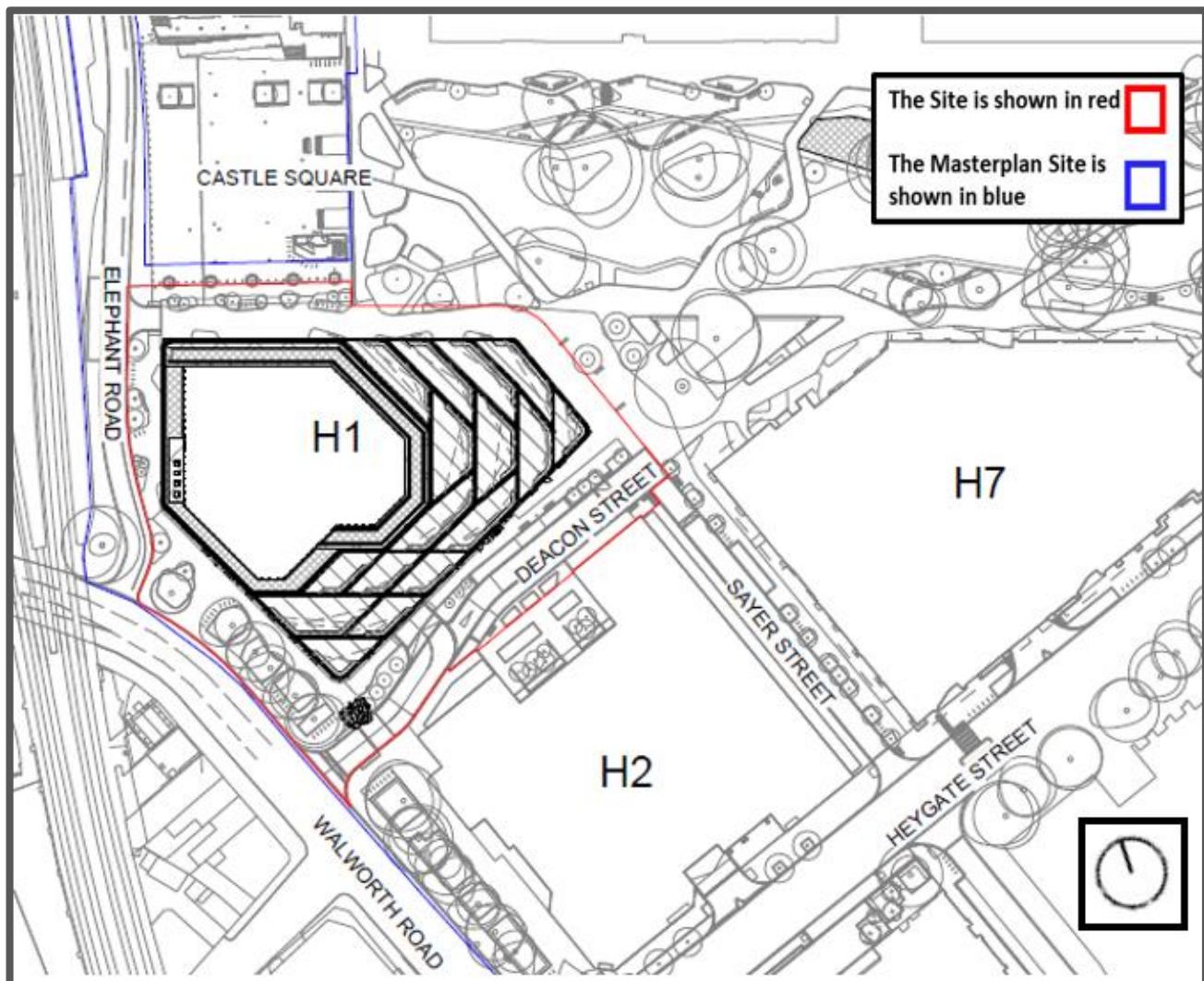
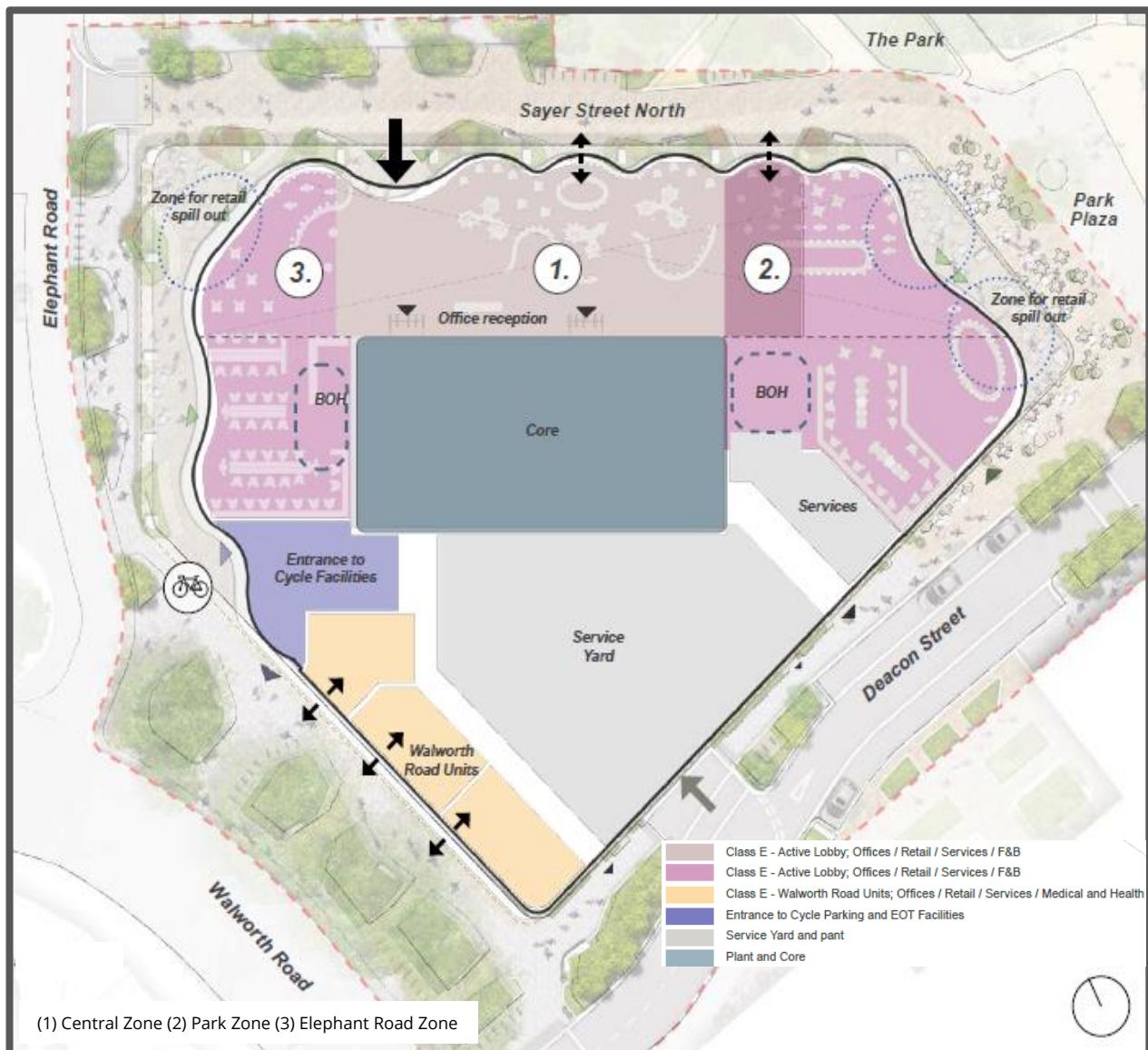
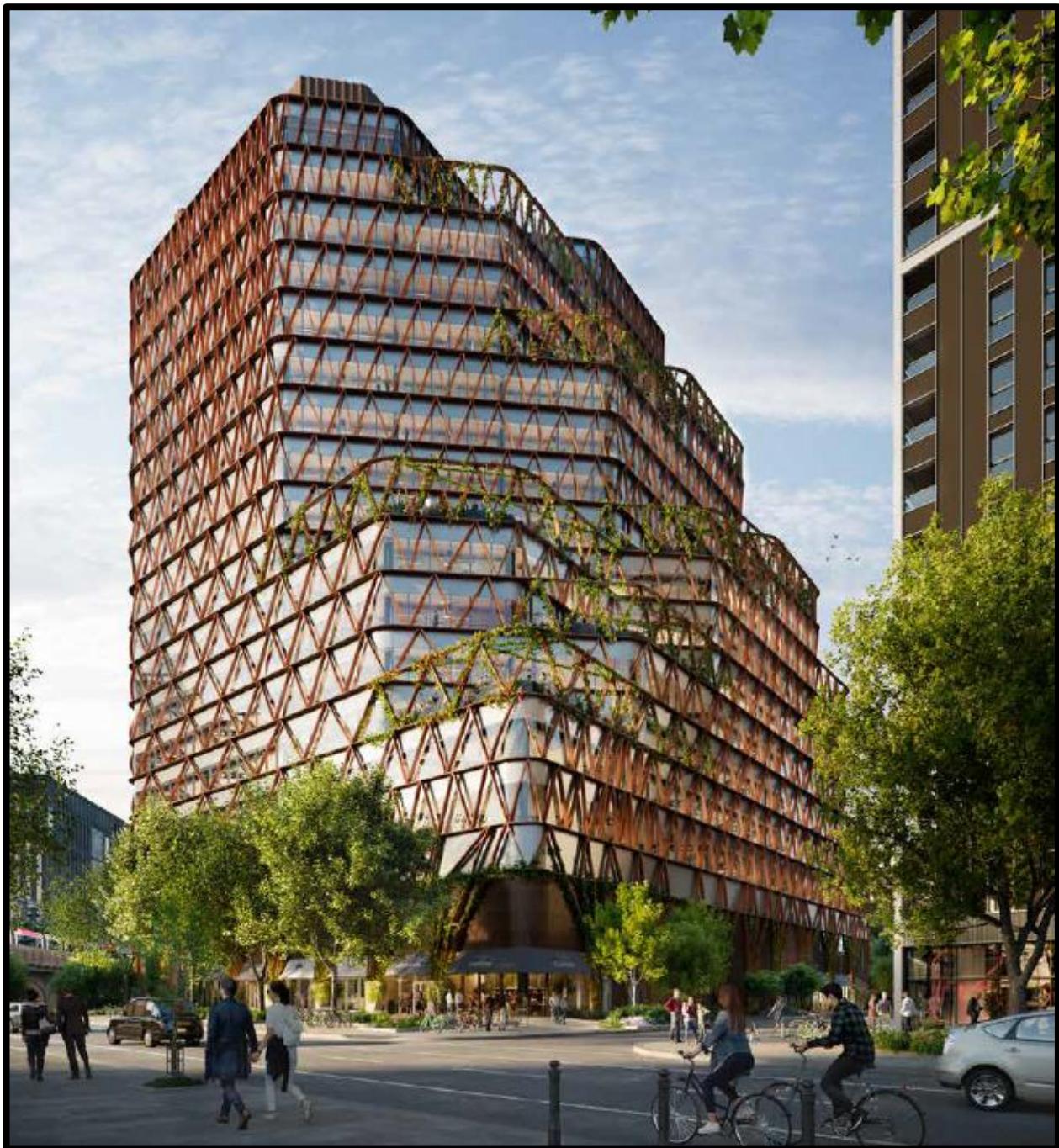


Figure 6: Ground Floor Layout of the H1 Development (Source: Modified from ACME)

- 3.1.7 The main office entrance would be situated along the north elevation fronting Sayer Street North as it turns to meet Elephant Road, ensuring maximum visibility and accessibility for workers and visitors accessing the building from Elephant and Castle Rail and Underground Stations.
- 3.1.8 The H1 Development would be serviced from a ground floor internal service yard, with parking bays for trucks and vans, accessed from Deacon Street with vehicles both entering and exiting from Walworth Road. All servicing would be carried out from this internal service yard. The H1 Development would be a car free development other than allocated accessible parking spaces to be located on Deacon Street. The H1 Development would provide 855 long stay cycle spaces in the basement and 96 short-stay cycle spaces within the public realm at ground floor level.
- 3.1.9 The H1 Development building facade would be a unitised system, defined by horizontal and diagonal aluminium fins placed in front of the glazing. As the H1 Development building rises it reduces in size by the formation of a series of landscaped terraces stepping inwards to the south, east and west (see **Figure 7** and **paragraph 3.1.13**). The façade concept of diagonal fins continues by wrapping around each terrace.

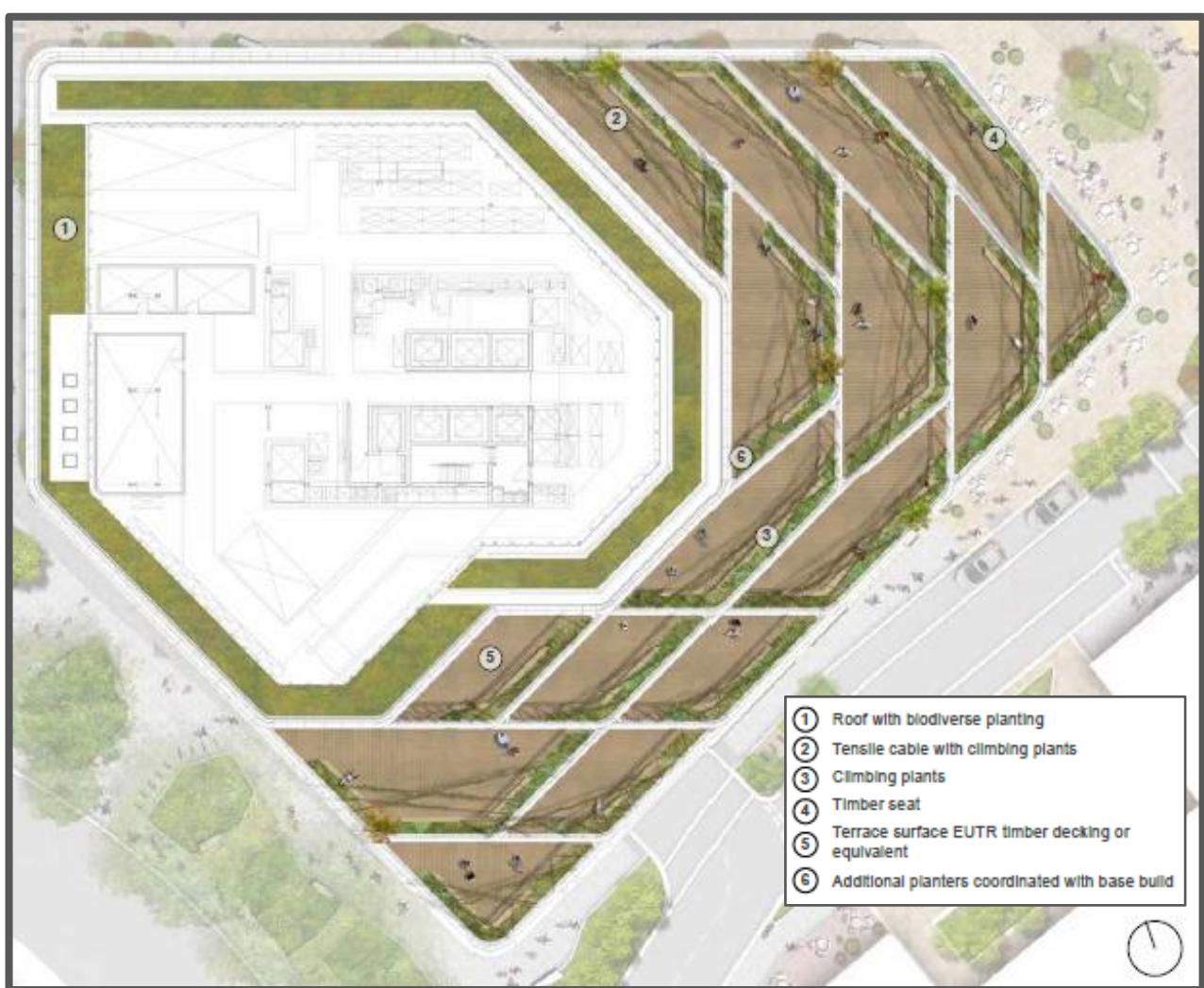
Figure 7: Illustrative view from Walworth Road looking Northwards (Source: ACME)



- 3.1.10 The H1 Development would play an important role in the wider Elephant Park masterplan establishing the western edge of The Park and helping define Sayer Street North. The H1 Development's public realm aims to create a series of attractive and inviting spaces that both contribute to the proposed buildings' setting and uses and add to the enjoyment of the wider community.
- 3.1.11 The public realm of the H1 Development has been designed to ensure clarity and safety of movements for all users, distinguishing clearly between the needs of pedestrians, vehicles and cyclists. Sayer Street North will be a pedestrian priority route and cycle route. Trees and street furniture, such as benches and cycle stands, would be positioned to avoid pedestrian pinch points and allow clear views along the lengths of the footpaths.

- 3.1.12 The planting strategy provides elements required as part of mitigation to afford suitable wind conditions at ground floor level. These measures include additional trees included to the west of the Site and large movable planted pots at ground level along the south-eastern side of the H1 Development.
- 3.1.13 As shown in **Figure 8** the stepped approach to the massing of the H1 Development facilitates the provision of external private amenity space serving the office accommodation in the form of roof terraces, which will also allow for a strong visual connection between The Park and the H1 Development building, whilst responding positively to the Site's prominent position on Walworth Road. By the omission of glazing, the diagonal fins that wrap around each terrace would create a lattice for terrace plants to climb (as illustrated in **Figure 7**). Together, fins and planting would create privacy for residents of nearby buildings and visual amenity for occupiers of the H1 Development and its neighbours.

Figure 8: Illustrative Roof and Terrace Plan (Source: Modified from ACME)



- 3.1.14 The Development incorporates a Site-wide surface water strategy that would achieve a minimum of a 50% reduction to the existing runoff rate generated by the 1 in 100 year rainfall event (an event that has a 1/100 or 1% probability of occurring within any one-year period). As per the existing situation, all surface water runoff from the Site would be discharged to the existing Thames Water sewers. However, the flow of surface water runoff would

be restricted and reduced via a combination of Sustainable Drainage Systems, including an on-Site attenuation tank. The H1 Development is designed to attenuate the 1 in 30-year storm event plus climate change with no surface flooding, with allowance for climate change and no risk to properties or public for a 1 in 100-year storm plus climate change. Even by increasing the climate change allowance to 40% the models demonstrate that there will be no onsite flooding affecting the H1 Development.

- 3.1.15 The H1 Development would benefit from connection to a dedicated heating network for the Approved Development, located in Plot H12, fed from a natural gas Combined Heat and Power plant. The proposed cooling strategy for the commercial office areas is mechanical cooling via energy efficient passive chilled beams with floor plenum ventilation. Along with passive design measures to reduce energy consumption, this approach gives the opportunity for up to a 38% reduction in regulated CO₂ emissions over Part L2A 2013 for the H1 Development.
- 3.1.16 Enabling works for the H1 Development are anticipated to commence in Q2 2022. Once enabling works are complete, the construction works would commence in Q4 2022. Accounting for the completion, handover and occupation of all buildings and associated public realm works, the construction works are anticipated to complete in Q4 2025. As such, 2026 is considered to be the year when the H1 Development will be fully complete and operational. In addition, the likely significant effects associated with the Works necessary to implement the H1 Development take into account the potential overlap in construction with other elements of the Approved Development, in accordance with the Updated Detailed Phasing Plan provided in **ES Volume 3, Appendix 2.4** (i.e. a potential for overlap with Plots PAV1, H7, H11a and H11b (noting, as outlined in paragraph 2.1.5, that H4 and H5 are nearing completion and so wouldn't overlap with the Works for the H1 Development)).
- 3.1.17 A Construction Environmental Management Plan (CEMP) sets out how the Works would be carried out and the Applicant's intentions for managing environmental effects during the Works. This was submitted as a standalone document alongside the wider Planning Application.

4. Alternatives and Design Evolution

- 4.1.1 In line with the EIA Regulations, the ES provides a description of what would reasonably be considered to result at the Site in the event of no redevelopment occurring at the Site (the 'No Development' scenario). In the 'No Development' scenario, the Site would likely remain vacant. This would greatly limit the potential of the Site, especially with regard to the relationship with its surrounds, existing and future users (including the remainder of the Approved Development) and would result in the lost opportunity for the following key benefits within the Site and surrounds:
- No new retail and food and drink facilities, and potentially a health hub.
 - No public realm improvements or improved connections between the Site and surrounds, including the Approved Development.
 - No creation of office floorspace, including an affordable provision, or associated jobs.
 - No improved pedestrian and cyclist permeability within the Site.
- 4.1.2 Accordingly, whilst a description of the 'No Development' scenario is required for the purposes of the EIA Regulations, the 'No Development' scenario was never considered as a reasonable alternative by the Applicant for the reasons stated above.
- 4.1.3 The OPP Scenario alternative encompasses Plot H1 as defined in the Approved Development through the OPP. In this scenario H1 has outline consent for a residential-led building, with commercial uses at ground floor, to a maximum height of 82.55m AOD, and residual floorspace within the maximum amounts permitted under the OPP. However, the mix of residual floorspace would not optimise the development of the Site, because the majority of the residual floorspace is formed of supporting uses intended to activate the ground plane, and would fail to optimise the delivery of jobs within the Elephant and Castle Opportunity Area. It would also fail to achieve the vision for placemaking at Elephant Park by failing to deliver a significant new office building and therefore not bringing employment opportunities and investment along with daytime activity to the area to complement the residential focus of the Approved Development. For these reasons, whilst the OPP Scenario is a permitted scheme and therefore a reasonable alternative, it is not the preferred solution by the Applicant for the Site.
- 4.1.4 The Site context was analysed in detail and a number of key factors impacting the H1 Development's layout and operation were considered in the design process. The following key constraints, opportunities and considerations were identified:
- **Below Ground Constraints** including the adjacent TfL Bakerloo Line Exclusion Zone, previous building foundations, utilities / services and roots of existing trees.
 - **Above Ground Constraints** including offset distances from H2, from the kerbline and from existing trees; and alignment of the main façade with The Park edge and Plot H7;
 - **Visual Influence** - The massing of H1 was developed in considerations of London View Management Framework (LVMF) and Local views.

- **Relationship to Surrounding Context** - The form of the building was designed to respond to the existing and emerging surrounding context within the Masterplan Site and the Elephant and Castle Town Centre (the tall buildings of Strata, Elephant One and One the Elephant, and smaller buildings towards Walworth Road).
- 4.1.5 In view of the above, and in response to an extensive consultation process, during the pre-planning process the design of the H1 Development evolved in response to a combination of factors, as follows:
- **Massing** – the tallest part of the H1 building was located in the north-western portion of the Site, with the south-east, south and south-west facades of the H1 building stepping down to respond to heights of smaller Victorian buildings on Walworth Road, the lower rise residential blocks of the Approved Development and the smaller scale buildings of Deacon Street and Walworth Road; ; The ‘shoulders’ of the H1 building were lowered towards The Park to improve the visual relationship between the H1 Development and The Park; and the H1 building was carefully positioned to align with the edge of The Park and residential Plot H7 within the Approved Development to allow for visual continuity along The Park’s edge.
 - **Microclimate** - The analysis of the sun path and shading greatly influenced the position of the steps on the H1 Building, ensuring the form respects established principles for inner city environments and ensuring the adequate provision of suitable levels of daylight and sunlight to the surrounding public realm (including The Park) and neighbouring buildings. Wind microclimate studies also influenced the design by highlighting areas of potential concern, allowing targeted mitigation measures to be developed to minimise any adverse effects. For example, together with the retention of trees along the eastern side of Walworth Road, additional proposed trees to the west of the Site would successfully mitigate conditions otherwise too windy to be suitable for strolling. The proposed planting strategy would also include ‘large movable planted pots’ at ground level along the south-eastern sides of the H1 Development where long term seating is intended.
 - **Flood Risk** - the Flood Risk Assessment (FRA) completed for the H1 Development confirmed that ground floor levels and basement entrances needed to be raised above the design flood level (above +3.200 m AOD). Consequently, the finished floor level of the H1 Development was raised up by 160 mm to +3.320 m AOD at its lowest point.

5. Approach and Environmental Impact Assessment Methodology

- 5.1.1 The EIA was undertaken in accordance with the EIA Regulations and best practice guidance using established methods such as site surveys, reviews of available reports and data, computer modelling, consultation with relevant organisations and specialist assessments.
- 5.1.2 An early stage of the EIA process involved undertaking a 'Scoping Study'. The purpose of the 'Scoping Study' was to identify the likely significant environmental effects that could arise from the H1 Development and therefore provide the focus of the EIA. The findings of the scoping exercise, along with details of the proposed methods for the specialist assessments, were presented in a Scoping Report which was informally submitted to LBS on the 7th December 2020.
- 5.1.3 Following receipt of the EIA Scoping Report, a meeting was held on 17th December 2020 with LBS (and their advisors, LUC) to gain agreement to the EIA strategy and scope of the ES as set out in the EIA Scoping Report. This meeting confirmed the EIA strategy (particularly the assessment against likely future baseline conditions) and scope of the ES was agreed to by LBS (and their advisors, LUC).
- 5.1.4 Through the EIA scoping process, it was identified that the H1 Development would likely give rise to a number of significant environmental effects that would, therefore, warrant assessments as part of the EIA process. These were categorised within the key environmental topics listed below:
- Socio-economics (completion and operational effects only) (refer to **ES Volume 1, Chapter 7: Socio-economics**).
 - Air quality (completion and operational effects only) (refer to **ES Volume 1, Chapter 8: Air Quality**).
 - Wind microclimate (refer to **ES Volume 1, Chapter 9: Wind Microclimate**).
 - Daylight, sunlight and overshadowing (refer to **ES Volume 1, Chapter 10: Daylight, Sunlight and Overshadowing**).
 - Greenhouse Gasses (refer to **ES Volume 1, Chapter 11: Greenhouse Gasses**).
 - Effect interactions (refer to **ES Volume 1, Chapter 12: Effect Interactions**).
- 5.1.5 Each of the above issues are addressed in the ES, with a 'Chapter' dedicated to each of these issues. The townscape, visual and above ground heritage effects were presented in a separate volume (**ES Volume 2**) of the ES.
- 5.1.6 In each Chapter and **ES Volume 2**, a description of the assessment methodology was provided together with a description of the relevant environmental aspects of the Site and surrounding area. This was followed by an assessment of the likely significant effects of the H1 Development (both beneficial and adverse) and any additional measures that should be adopted to reduce or offset any significant adverse effects identified during the assessment. Such additional measures would be related to elements of the H1 Development's design that were

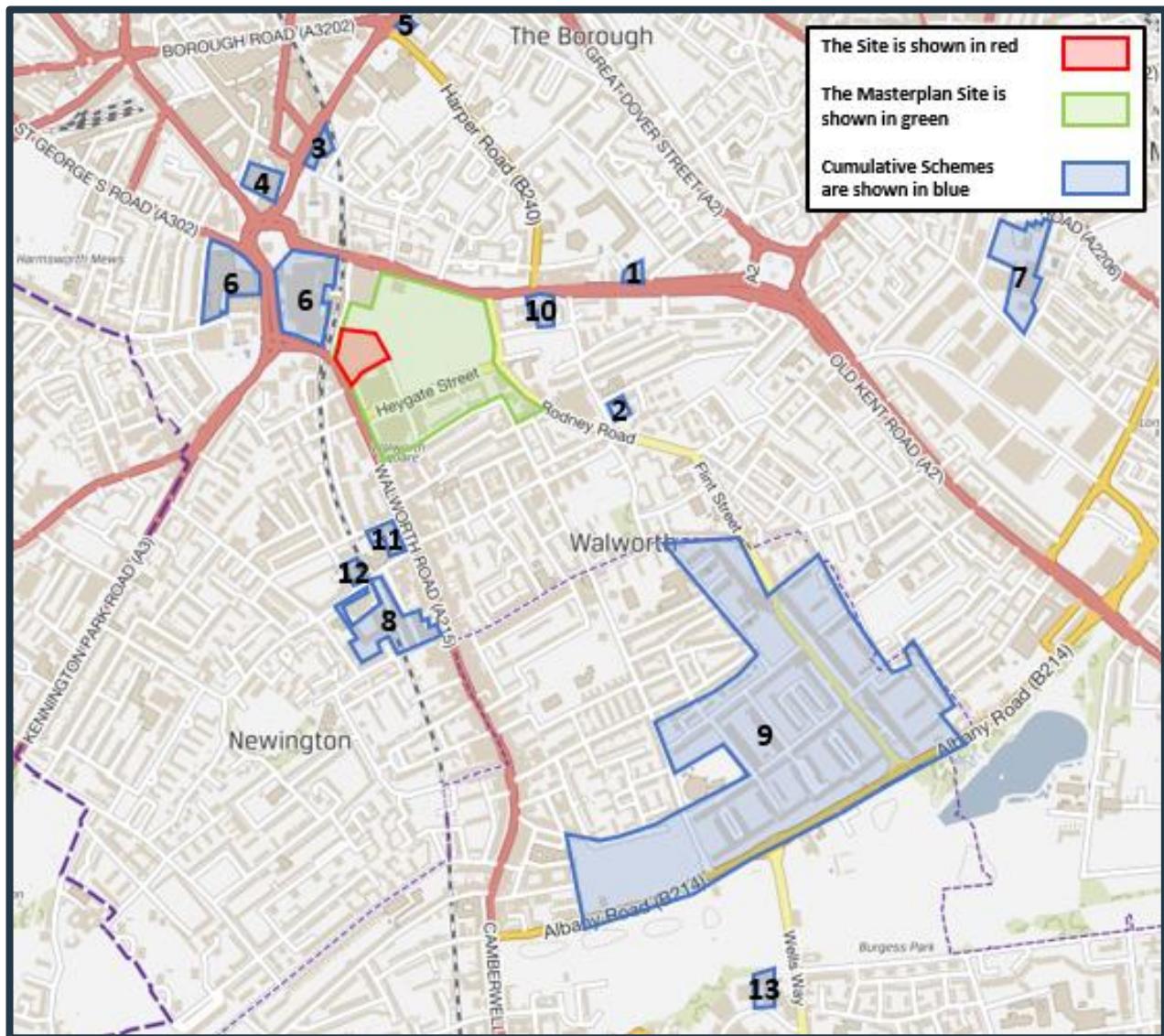
not already incorporated into the H1 Development or additional environmental management controls that would automatically be required via legislation or standard means, irrespective of the need for EIA. The ES also provides an assessment of the likely residual effects that would remain after the application of any additional mitigation measures, as well as the cumulative effects of the H1 Development together with other relevant Cumulative Schemes. Cumulative Schemes considered are detailed in **Table 3 and Figure 7**.

Table 3: Cumulative Schemes within 1.5 km of the Site's Boundary

Planning Application Reference and Address	Location Relative to the Masterplan	Description	Status
Ref: 19/AP/5389. 221 New Kent Road.	295 m east. Labelled as '1' in Figure 9 .	Demolition of existing warehouse building and erection of a part t, part 6 and part 9 storey building providing 200 hotel rooms (Class C1) and 1,354sqm of work / maker space at ground floor (and mezzanine) (Flexible Class B1) as well as ancillary café / restaurant and bar facilities (Class A3 / A4), along with associated landscaping, servicing yard and access works.	Submitted 25 th September 2019 and currently being determined.
Ref: 19/AP/1506. Salisbury Estate Car Park, Balfour Street, London, SE17 1PA.	175 m south-east. Labelled as '2' in Figure 9 .	Redevelopment of the existing car park to provide 26 residential units in a 5 storey block with maximum height of 21.8m AOD (5 x 3 bed 5 person flats, 9 x 2 bed four person flats & 9 x 1 bed 2 person flats, 2 x 2 bed wheelchair units and 1 x 1 bedroom wheelchair unit) together with new private amenity space located within a rear courtyard as well as improving the landscaping of the existing pedestrian link between Chatham Street and the open green space to the south of the site for public use. Two disabled parking spaces to be provided to the north of the site accessed off Chatham Street.	Approved: 12/11/2019.
Ref: 19/AP/0750. 5-9 Rockingham Street & 2-4 Tiverton Street, SE1 6PF.	300 m north-west. Labelled as '3' in Figure 9 .	Demolition of existing buildings and erection of a 21-storey building (max height 70.665m AOD) with basement and associated roof plant to provide 6,042.3sqm (GIA) of new commercial floor space and redevelopment of 3 railway arches to provide 340.1sqm of flexible commercial space (A1, B1, D1, D2) with associated cycle parking storage, waste / recycling stores and new public realm.	Approved: 31/01/2020.
Ref: 18/AP/4194. Skipton House, 80 London Road, London, SE1 6LH.	240 m north-west. Labelled as '4' in Figure 9 .	Part retention, part demolition, reconfiguration and re-cladding of existing building and extension to create six additional storeys to accommodate 41,750sqm office space (Use Class B1) at upper floor levels, a 780sqm gym (Use Class D2) and 993sqm flexible retail/commercial uses (Use Class A1/A2/A3) at ground floor level with associated cycle parking, landscaping, ancillary servicing and plant and all associated works.	Submitted on 24 th December 2018 and currently being determined (scheme has resolution to grant)..
Ref: 18/AP/0657. Land At 19 – 21 & 23 Harper Road, 325 Borough High Street & 1-5 & 7-11 Newington Causeway, London, SE1 6AW,	500 m north. Labelled as '5' in Figure 9 .	Demolition of existing buildings and redevelopment to provide construction of a part 5, part 7, part 8 and part 13 building a mixed-use development comprising 328 hotel rooms (Class C1) 20 no. residential dwellings (Class C3), offices, workspace and works.	Approved: 03/06/2020.

Planning Application Reference and Address	Location Relative to the Masterplan	Description	Status
Ref: 16/AP/4458. Shopping Centre Site Elephant And Castle 26, 28, 30 & 32 New Kent Road, Arches 6 & 7 Elephant Road, * London College Of Communications, London SE1	70 m west. Labelled as '6' in Figure 9 .	Phased, mixed-use redevelopment of the existing Elephant and Castle shopping centre and London College of Communication sites comprising the demolition of all existing buildings and structures and redevelopment to comprise buildings ranging in height from single storey to 35 storeys (with a maximum building height of 124.5m AOD) above multilevel and single basements, to provide a range of uses including 979 residential units (use class C3), retail (use Class A1-A4), office (Use Class B1), Education (use class D1), assembly and leisure (use class D2) and a new station entrance and station box for use as a London underground operational railway station; means of access, public realm and landscaping works, parking and cycle storage provision, plant and servicing areas, and a range of other associated and ancillary works and structures. In the Council's opinion the proposal may affect the setting of the following listed buildings and conservation areas: Metro Central Heights, Newington Causeway; Metropolitan Tabernacle, Newington Butts; Michael Faraday Memorial, Elephant and Castle; the Imperial War Museum, St George's Road; and the Obelisk at St George's Circus. Elliot's Row; St George's Circus and West Square Conservation Areas and the listed buildings therein, and the Walcot Square Conservation Area in Lambeth.	Under Construction
Ref: 15/AP/2474. Rich Industrial Estate, Crimscott Street, London, SE1 5TE & Willow Walk, London, SE1.	1.3 km east. Labelled as '7' in Figure 9 .	Demolition of four existing buildings and electricity substation and the development of a phased mixed-use scheme ranging from 3-9 storeys plus basements (maximum height 34.03m AOD) comprising a series of new buildings and retained / refurbished / extended buildings to provide a total of 19,468sqm (GIA) of commercial, retail, art gallery and storage floorspace (Use Classes A1, A2, A3, B1, B8 and D1) and 406 residential units (Use Class C3) plus associated highway and public realm works, landscaping, car and cycle parking, infrastructure works and associated works.	Approved: 07/12/2017 (Under construction).
Ref: 15/AP/1062 Manor Place Depot Site, 17-21 & 33, Manor Place, SE17	260 m south. Labelled as '8' in Figure 9 .	Demolition and redevelopment to provide 270 residential units (Class C3) within new buildings ranging from 2 to 7 storeys, a refurbished 33 Manor Place (Grade II listed) and 17-21 Manor Place and 3,730sqm (GEA) of commercial floorspace, comprising 1,476sqm (Classes A1 / A2 / A3 / B1 / D1 / D2) within 9 refurbished railway viaduct arches and 2,254sqm (Class B1) within the refurbished Pool House and Wash House (Grade II Listed), with associated works including disabled car parking spaces, cycle parking, landscaping and access improvements.	Construction started in mid-2017.
Ref: 14/AP/3844. Aylesbury Estate. Land Bounded by Albany Road, Portland Street, Bagshot Street, Alvey Street, East Street & Dawes Street, London, SE17.	900 m south-east. Labelled as '9' in Figure 9 .	Outline application for: demolition of existing buildings and phased redevelopment to provide a mixed use development comprising a number of buildings ranging between 2 to 20 storeys in height (12.45m - 68.85m AOD) with capacity for up to 2,745 residential units (Class C3), up to 2,500sqm of employment use (Class B1); up to 500sqm of retail space (Class A1); 3,100 to 4,750sqm of community use; medical centre and early years facility (Class D1); in addition to up to 3,000sqm flexible retail use (Class A1/A3/A4) or workspace use (Class B1); new landscaping; parks, public realm; energy centre; gas pressure reduction station; up to 1,098 car parking spaces; cycle parking; landscaping and associated works.	Outline planning permission granted 05/08/2015 (In construction and applications being submitted pursuant to Reserved Matters).

Planning Application Reference and Address	Location Relative to the Masterplan	Description	Status
Ref: 17/AP/3910 and 19/AP/7564. 136-142 New Kent Road, Southwark.	30 m east). Labelled as ' 10 ' in Figure 9 .	<p>Demolition of the existing building and construction of a part 13 storey / part 9 storey block fronting onto New Kent Road and a part 6 storey / part 4-storey block fronting onto Munton Road, to provide a mixed-use development, with basement, providing 81 residential units, 1361sqm of flexible business floor space / non-residential institution (Use Class B1 / D1) and 448sqm of retail floor space (Use Class A1) with associated cycle parking, servicing, refuse and recycling, landscaping and private and communal residential amenity space. Minor material amendment (19/AP/7564) including (but not limited to):</p> <ul style="list-style-type: none"> • Increase in overall height from 46.8m AOD to 49.0m AOD (i.e. +2.2m); and • Changes to the residential unit mix. 	Approved 24 th October 2017, minor material amendment under consideration.
Ref: 13/AP/1122. Chatelain House, 182- 202 Walworth Road, London, SE17 1JJ.	150 m south. Labelled as ' 11 ' in Figure 9 .	Demolition of the existing building and erection of a building ranging in height from 4 storeys to 6 storeys (plus basement) comprising 4,945 sqm (GEA) of use Class A1 (shops), A3 (restaurants and cafes), D2 (Assembly and Leisure) and B1 (Business) floorspace and 54 residential units with associated landscaping, play space, cycle parking and 6 accessible car parking spaces.	Approved 23 rd December 2015, reserved matter applications under consideration.
Ref: 18/AP/0737. Kennington And Walworth Delivery Centre, 111-123 Crampton Street, London, SE17 3AA.	200 m south. Labelled as ' 12 ' in Figure 9 .	Demolition and redevelopment for a mixed use development in a part four-/five-/six- /seven-storey building consisting of 48 residential units (2 studios, 17 x 1-bedroom, 24 x 2-bedroom and 5 x 3-bedroom flats), 221sqm of commercial floorspace (Use Class B1 - office), creation of new public realm, provision of 3 wheelchair accessible car parking spaces and associated landscaping (amendments received).	Approved 1st March 2019.
Ref: 19/AP/2011. 35-39 Parkhouse Street, London, SE5 7TQ.	1.38 km south. Labelled as ' 13 ' in Figure 9 .	Demolition of existing buildings and construction of a mixed-use building ranging from six to 10 storeys in height (35.15m AOD) comprising 100 residential units (Use Class C3) and 1,323 sqm (GIA) of Class B1/B2/B8 floorspace) with associated car parking.	Under consideration.

Figure 9: Cumulative Schemes within 1.5 km of the Site's Boundary

6. What are the Likely Environmental Effects and How Would They be Minimised?

Socioeconomics

The Completed and Operational H1 Development

- 6.1.1 Once complete and operational, the H1 Development is expected to support between 3,900 and 4,300 jobs. There is no employment existing at the Site, and so all these jobs are expected to be additional. Once income and supply chain effects are accounted for, there are expected to be 4,300 – 4,800 additional jobs. Of these, 3,500 – 3,800 are expected to be taken by London residents. The H1 Development is expected to support between 400 and 430 jobs for LBS residents. Employment and skills initiatives by the Applicant are expected to enhance the opportunities for local labour.
- 6.1.2 The H1 Development is expected to supply between 49,351 m² and 58,032 GIA m² of office floorspace, accounting for between 29% and 34% of the excess demand in LBS between 2016 and 2041.
- 6.1.3 Some of the H1 Development office floorspace is allocated for flexible use, which is proposed to be delivered as affordable workspace but with the potential for alternative provision as a health hub if LBS identifies this as its priority. If affordable workspace is deemed the priority use, the H1 Development will meet the emerging policy requirement for at least 10% of the office floorspace to be provided as affordable workspace. Alternatively, some (or all) of the flexible use floorspace could be delivered as a health hub, depending on LBS priorities. The health hub would contain GP consulting space, a pharmacy and outpatient services, along with other general support staff facilities. The health provision would serve the needs of the future population, helping to relieve the excessive demand in the area. If the health hub is deemed the most necessary for the community, it will be delivered in place of some (or all) affordable workspace. This will be agreed with LBS through the determination of the planning application.
- 6.1.4 The H1 Development is expected to supply between 0 m² and 1,954 m² GIA of retail floorspace. If the maximum of 1,954 m² was delivered, it would account for 10% of LBS' retail capacity projection in 2026. The H1 Development is expected to supply between 0 m² and 1,689 m² GIA of food and drink floorspace. If the maximum of 1,689 m² was delivered, it would account for 29% of LBS' food and drink capacity projection in 2026.
- 6.1.5 The H1 Development will provide public realm improvements, including street furniture, and trees. including street furniture, plants, and trees. The H1 Development ties into, completes and enhances the new public open spaces of the Approved Development.

Cumulative Effects

6.1.6 Together with the CEA schemes, the H1 Development will support up to 7,400 jobs in London, up to 88,900 m² (GIA) of office floorspace (over half the excess office capacity required to 2041), 10% of which is expected to be affordable. The schemes could deliver up to 11,400 m² GIA of retail floorspace (over half the spare retail capacity in 2026) and up to 3,100 m² (GIA) of food and drink floorspace (over half the spare food and drink capacity in 2026). Some schemes include medical or health provision, which will be delivered to support the rising population of the area. The CEA schemes are expected to contribute positively to public realm in landscaping and design.

Air Quality

The Completed and Operational H1 Development

6.1.7 The air quality in the area of the Site is relatively poor, particularly along main roads such as Walworth Road and the A201 close to the H1 Development. An assessment was undertaken to determine both the likely effects of the H1 Development on local air quality and the suitability of the Site for the proposed uses within the H1 Development.

6.1.8 Air quality dispersion modelling has been carried out to predict the impacts of additional road traffic on local roads, resulting from the operation of the H1 Development, as well as the expected concentrations of key pollutants at sensitive receptors within the H1 Development. The assessment has considered emissions from the Energy Centre located in the Approved Development and traffic in relation to the Approved Development.

6.1.9 The operation of the H1 Development is not predicted to result in any significant effects on the receptors considered within this assessment in relation to air quality. In addition, the assessment demonstrated that air quality for future users of the H1 Development would also be acceptable.

6.1.10 The H1 Development includes a small amount of flexible use, which could include food and drink uses. Based on the proposed location of these uses within the H1 Development, any cooking odours would be dispersed and diluted away from any odour sensitive uses. In addition, any kitchen ventilation extracts would be designed in accordance with best practice design and appropriate regulations. As such any odours from the H1 Development would also be acceptable.

6.1.11 Overall, the operational phase of H1 Development will not have a significant effect on air quality.

Cumulative Effects

6.1.12 The H1 Development together with other Cumulative Schemes would not give rise to any materially different air quality effects over and above those identified for the H1 Development in isolation.

Wind Microclimate

The Works

7.1.1 The Works would give rise to a range of wind microclimate effects to surrounding receptors. However, as the Works proceed, the effects on wind environment at surrounding receptors would evolve to eventually meet those resulting from the completed and operational Development. No significant additional effects, over and above those for the completed and operational Development would be expected during the Works.

The Completed and Operational H1 Development

7.1.2 An assessment of the likely wind conditions as a result of the H1 Development and the suitability of these in terms of pedestrian comfort were undertaken. The assessment was informed by appropriate meteorological data and detailed wind tunnel testing.

7.1.3 Configurations tested within the wind tunnel were:

- Configuration 1: The Existing Site + the Approved Development (except for Plot H1 in its outline consented form) with Existing Surrounding Buildings (i.e. the likely future baseline).
- Configuration 2: H1 Development + the Approved Development (except for Plot H1 in its outline consented form) with Existing Surrounding Buildings.
- Configuration 3: H1 Development + the Approved Development (except for Plot H1 in its outline consented form) with Existing and Cumulative Surrounding Buildings.

7.1.4 With the inclusion of the H1 Development in the context of the Approved Development and existing surroundings (Configuration 2), slightly calmer wind conditions would occur during the windiest season to the north of Block H2 compared to Configuration 1. However, entrance locations to Block H2 would remain one category windier than desired, thoroughfare location 120 to the west of the H1 Development building would have wind conditions one category windier than suitable, and ground level amenity locations 49 (to the south-eastern side of the H1 Development) and 103 and 105 (to the western side of the H1 Development) would be one category windier than suitable for long-term seating.

7.1.5 The landscaping scheme of proposed trees and large movable planted pots is expected to provide beneficial shelter at thoroughfare location 120 and amenity location 49 where long-term seating is proposed. In addition, should location 103 and 105 become long-term seating in the future, large movable planted pots would be provided to offer beneficial shelter. No additional mitigation would be required for location 2 and 147 given that this would be consistent with the baseline scenario (Configuration 1). The proposed landscaping scheme would be in place before opening and occupation of the H1 Development. No instances of strong winds would occur in configuration 2.

7.1.6 Overall, wind conditions at and surrounding the H1 Development with the proposed landscaping scheme are expected to be suitable for the intended use.

Cumulative Effects

7.1.7 With the inclusion of the cumulative schemes (Configuration 3), slightly windier conditions would occur along Elephant Road, and strolling use wind conditions would persist at entrance locations 2 and 147 to Block H2. Wind conditions at the bus stop 111 along Walworth Road would be one category windier than desired during the windiest season. However, the existing bus stop cover is expected to provide beneficial shelter in this area, and no additional mitigation would be required. No instances of strong winds would occur in this configuration. Overall, wind conditions at and surrounding the H1 Development, with cumulative surroundings, with the proposed H1 Development landscaping scheme are expected to be suitable for the intended use.

Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution

The Works

6.1.13 Construction of the H1 Development would have a gradually increasing effect on the levels of daylight, sunlight, overshadowing and solar glare to existing residential properties, amenity spaces and road and rail viewpoints surrounding the Site as the massing of the H1 Development steadily increases. Those effects that are perceptible as the H1 Development nears completion would be similar to those of the completed H1 Development. No significant light pollution effects are considered to occur as a result of construction.

The Completed and Operational H1 Development

6.1.14 The assessment of likely significant effects in relation to daylight, sunlight and overshadowing on nearby sensitive receptors is in accordance with guidelines contained within the Building Research Establishment (BRE) 'Site Layout Planning for Daylight and Sunlight 2011, A guide to good practice, Second Edition'. For daylight the assessment used the Vertical Sky Component (VSC), No Sky Like (NSL) and Average Daylight Factor (ADF) methods. For sunlight the assessment used the Annual Probable Sunlight Hours (APSH) method. For Overshadowing the assessment used the Transient Overshadowing and Sun Hours on Ground methods.

6.1.15 Following completion of the H1 Development, the results of the assessment show that the surrounding residential properties would experience reductions in daylight amenity. With the H1 Development in situ:

- The properties along Walworth Road would experience significant reductions, however, this is not uncommon where buildings overlook a demolished site and therefore receive disproportionately high levels of daylight in the future baseline condition.
- Mawes House would experience alterations in daylight, however, predominantly kitchens, bathrooms and bedrooms would be affected, which are less sensitive.
- Portchester House and Julian Markham House are student accommodation which are considered to be less sensitive owing to their transient occupancy. Both Portchester House and Julian Markham House have levels

below BRE Guidelines recommendations in the future baseline and therefore experience disproportionate percentage reductions once the H1 Development is introduced. The majority of windows and rooms at these student accommodation buildings are unaffected by the H1 Development.

- At Strata Tower and Tantallon House, the retained levels of daylight are commensurate with the existing levels in the surrounding area and are considered to be acceptable for a high-density urban location.
 - All residential buildings assessed within the Approved Development would experience reductions as a result of the H1 Development, in particular the neighbouring Plot H2. However, this is not unusual given the cleared nature of the Site and its urban context and these buildings were designed as part of the Elephant Park Masterplan in anticipation of a development coming forward on Plot H1.
- 6.1.16 In relation to sunlight, 93.9% of the rooms within the residential properties surrounding the Site would meet the BRE Guidelines criteria following completion of the H1 Development. With the H1 Development in situ:
- Mawes House would experience reductions in sunlight, however these would only impact bathrooms which are non-habitable rooms and are therefore not sensitive to changes in sunlight.
 - Tantallon House would experience reductions in sunlight. However, the reductions in sunlight occur as a function of the balconies intercepting the sun's rays in the summer months, acting as a shading device, but in the winter months, these rooms remain acceptably sunlit.
 - Of the residential buildings within the Approved Development, H2 would not be significantly affected by the H1 Development, with H4 and H7 experiencing only minor reductions in sunlight amenity given the urban context of the Site and its surroundings.
- 6.1.17 In terms of the potential for the H1 Development to result in overshadowing of existing amenity spaces in the vicinity of the Site, all three amenity spaces assessed remain compliant with the criteria set down in the BRE Guidelines, experiencing little to no impact as a result of the H1 Development.
- 6.1.18 The solar glare assessments show that the glare created by the H1 Development would in almost all cases occur beyond 30° from a seated position within a car or a train. Therefore, the limits of the windscreen would block out the glare and this is compliant with guidance. Any instances of potential reflections occurring within 30° would be limited to a small portion of the façade or occurring for only a short period of time.
- 6.1.19 Ten surrounding sensitive properties surrounding the Site and three within the Approved Development have been assessed in relation to light pollution. No transgressions beyond applicable lighting guidance would occur in relation to light pollution at surrounding sensitive properties. Therefore, the effect to all properties is considered insignificant overall.

Cumulative Effects

- 6.1.20 When considering the cumulative scenario, with the Elephant and Castle Shopping Centre Cumulative Scheme in conjunction with the H1 Development, the daylight and sunlight effects to surrounding sensitive properties would remain as per the H1 Development, with no significant additional effects occurring. In relation to overshadowing, two of the surrounding amenity areas, Elephant Park and Elephant Square would experience no change in overall

effects from the H1 Development scenario, with the Podium Terraces experiencing a small amount of additional shadow cast from the Elephant and Castle Shopping Centre Cumulative Scheme.

- 6.1.21 When considering the changes in daylight and sunlight to the future sensitive receptor Elephant and Castle Shopping Centre Cumulative Scheme as a result of the H1 Development, the H1 Development would cause reductions compared to the future baseline. The changes in light are mostly to rooms that have their daylight and sunlight availability limited by a recessed balcony and face directly over the demolished Site. Such reductions are not uncommon where buildings, particularly with balconies, overlook a demolished Site and therefore receive disproportionately high levels of light in the future baseline condition. The proposed amenity areas within the Elephant and Castle Shopping Centre Cumulative Scheme would not be meaningfully affected by the H1 Development. Little to no light pollution impacts from the H1 Development to this future sensitive residential building would occur.

Greenhouse Gases

The Works and The Completed and Operational Development

- 7.1.8 The GHG emissions associated with the Works and the Completed and Operational H1 Development were estimated and the significance of resultant effects were assessed. The assessment took a whole life approach to develop a GHG footprint for the H1 Development, including emissions associated with construction materials, additional construction and operational traffic movements, operational energy consumption and ongoing repair, maintenance and refurbishment activities. The maximum carbon footprint of the completed and operational H1 Development was calculated to provide a conservative assessment.
- 7.1.9 The GHG assessment has identified that the H1 Development will lead to GHG emissions, throughout its lifetime. However, the H1 Development's individual contribution to total Greater London and borough-wide GHG emissions is small. In addition, mitigation is provided to avoid and reduce the GHG emissions, including the H1 Development meeting the requirements of the London Plan, with a reduction of more than 35% in regulated emissions when compared to the Part L of the Building Regulations baseline.
- 7.1.10 It is therefore concluded that although there are effects, these have been minimised through an appropriate degree of mitigation consistent with best practice and guidance.

Cumulative Effects

- 7.1.11 The cumulative effects assessment has identified that the conclusions will not change or be worse than that of the main assessment with regard to GHG emissions.

Townscape, Visual and Above Ground Heritage

The Works

- 7.1.12 The Works would have insignificant effects on built heritage. They would, however, have significant effects on townscape character and local views, particularly close to the Site. The effects on distant views including the LVMF view from Assessment Point 23A.1 in Hyde Park would be insignificant. However, all effects associated with the Works would be temporary and would last until the H1 Development was completed and operational.

The Completed and Operational H1 Development

- 7.1.13 The H1 Development would reinstate a continuous street frontage to the northern end of Walworth Road and would provide definition and activity to the new public open spaces of Castle Square and Elephant Park. The scale of the H1 Development at ground plus 17 commercial storeys would relate comfortably to the existing and emerging tall building cluster at Elephant and Castle. Its height and the massing of the top of the building has been carefully tested to ensure that there would be no effect on the designated LVMF view of the Westminster WHS from Assessment Point 23A.1 on the Serpentine Bridge in Hyde Park. The tallest north-west corner of the H1 Development would address the tall buildings encircling the Elephant and Castle junction. A series of planted terraces would step down towards the south and south-east, to integrate and connect the H1 Development with the adjacent Elephant Park, the new public open space at the heart of the Approved Development. Varying densities and orientations of the diagonal facade fins would bring differentiation and scale to the elevations and a resulting change of transparency to create an animated highly modulated facade. The colour palette was selected in response to earthy and warm colours of the historic context of the Site. The H1 Development would be a distinctive high-quality piece of landmark architecture that would make a strong contribution to the sense of place of the Approved Development.
- 7.1.14 While the H1 Development would be visible in the settings of local designated heritage assets there would be no resulting effects on the appreciation of the heritage significance of any designated heritage assets in isolation.
- 7.1.15 The H1 Development would have significant localised beneficial townscape effects on its surrounding context within about 200m of the Site and some significant beneficial effects further from the Site where streets and spaces align with the H1 Development. Where visible in longer views it would partly screened by the intervening townscape or seen in relation to existing tall buildings. Any potential adverse townscape effects of the completed and operational H1 Development have been mitigated during the iterative design development process prior to submission and all significant effects of the completed and operational H1 Development would be beneficial in nature.
- 7.1.16 The H1 Development would have significant localised beneficial effects on visual amenity within its surrounding context within about 200m of the Site and some significant beneficial effects further from the Site where streets and spaces align with the H1 Development. Where visible in longer views it would partly screened by the intervening buildings or seen in relation to existing tall buildings. Any potential adverse visual effects of the completed and operational H1 Development have been mitigated during the iterative design development process

prior to submission and all significant effects of the completed and operational H1 Development would be beneficial in nature.

Cumulative Effects

- 7.1.17 While the H1 Development and Cumulative Schemes would be visible in the settings of local designated heritage assets there would be no resulting effects on the appreciation of the heritage significance of any designated heritage assets cumulatively.
- 7.1.18 Cumulative Schemes, in particular the Elephant and Castle Shopping Centre redevelopment, which is adjacent to the Site, would increase the cumulative effects on four out of the nine townscape character areas assessed and on seven out of the 17 views assessed in comparison to the H1 Development considered in isolation; all cumulative effects would be beneficial in nature.

Effects Interactions

The Completed and Operational H1 Development

- 7.1.19 Significant residual effect interactions during the completed and operational H1 Development would be extremely limited, comprising:

- **Properties to the north of the Masterplan Site, including Mawes House and Tantallon House, and to the south, including H2** - alterations of internal daylight and sunlight environments and changes to their visual setting.

Properties to the north of the Masterplan Site, including Mawes House and Tantallon House, and to the south, including H2, would experience significant effect interactions between changes to daylight levels, sunlight levels and changes to their visual setting. Mawes House would experience alterations in daylight, however, predominantly kitchens, bathrooms and bedrooms would be affected, which are less sensitive. For Tantallon House, the retained levels of daylight are commensurate with the existing levels in the surrounding area and are considered acceptable for a high-density urban location. For H2, reductions in daylight experienced are not unusual given the cleared nature of the Site and its urban context. With regards to changes to visual setting, these would be beneficial, as described for View 14: Elephant Road which is located to the north of the Masterplan Site and View 16: Walworth Road, located to the south of the Masterplan Site. Accordingly, residual effects interacting at the same time would not result in a worsened adverse effect. Considering this, together with the acknowledgement of the wider regeneration of the surrounding area, no additional mitigation was considered necessary.

- **Buildings H4 and H7 within the Approved Development** - alterations of internal daylight and sunlight environments.

Buildings H4 and H7 within the Approved Development would experience significant effect interactions between changes to daylight and sunlight. However, this is not unusual given the cleared nature of

the Site and its urban context. As such, no additional mitigation over and above that already stated was considered necessary.

- 7.1.20 Considering the above, no additional mitigation would be required to address significant effect interactions during either the Works or the completed and operational H1 Development.

7. What Happens Next?

- 7.1.1 Following the submission of the full planning application, there is an opportunity for any interested parties to comment on the proposals. Due to reasons connected with coronavirus, including restrictions on movement, temporary publicity requirements are currently in place which mean that the Applicant is not required to provide physical copies of these documents on request. Instead the ES and a set of documents supporting the full planning application can be viewed on LBS's website <https://www.southwark.gov.uk/>. In addition, a hard copy will be available at the Site.

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