SKANSKA COSTAIN STRABAG Working on behalf of HS2

HS2

High Speed Rail (London – West Midlands) Act 2017

HS2 Ltd

London Borough of Camden

Euston Cavern and Shaft

Schedule 17 Plans and Specifications Written Statement for Information

LBC.PS.10002

Document Reference: 1MC03-SCJ-IN-STA-SS01_SL03-000001

Contents

List of Tables

List of Figures

1 Introduction

1.1 Background Information

Table 1: Schedule 17 Address Details and Description of Works

Site	Details
Scheme	High Speed Two
Applicant	High Speed Two (HS2) Limited
Applicant Address	*c/o Agent:* SCS Railways Joint Venture (SCS) Black Arrow House 2 Chandos Road NW10 6NF
Site Address	Park Village East, London Borough of Camden. NW1 2DU The works are located at: X528665 (Easting), Y183468 (Northing)
Description	Submission under Schedule 17 of the High Speed Rail (London-West Midlands) Act for approval of the Euston Cavern Headhouse and associated permanent earthworks, walls, road vehicle parking and artificial lighting equipment.

1.2 Terms of Reference

1.2.1 This Written Statement is compiled in accordance with the High Speed Two (HS2) Phase 1 Planning Memorandum and Planning Forum Notes (PFNs) as required by the planning regime established under Schedule 17 of the High Speed Rail (London – West Midlands) Act 2017 ('the Act').

1.2.2 The submission documents for this Plans and Specifications application under Schedule 17 of the Act have been prepared in accordance with PFN1, PFN2 and PFN3. The engagement undertaken to inform the preparation of this Plans and Specification submission has been compliant with PFN4 and PFN5.

1.2.3 This statement provides the London Borough of Camden with information to assist the determination of the Plans and Specifications submission under Schedule 17, in relation to the above description of works.

1.2.4 The information in this Written Statement is provided for information to assist in determining the request for approval. It is not for approval.

1.3 Introduction to High Speed 2

1.3.1 HS2 is a new high speed railway network that will connect major cities in Britain. It will bring significant benefits for inter-urban rail travellers through increased capacity and improved connectivity between London, the Midlands and the North. It will release capacity on the existing rail network and so provide opportunities to improve existing commuter, regional passenger and freight services.

1.3.2 Phase One of HS2 will provide a dedicated high speed rail service between London, Birmingham and the West Midlands. It will extend for approximately 230km (143 miles). Just north of Lichfield, high speed trains will join the West Coast Main Line for journeys to and from Manchester, the North West and Scotland.

1.3.3 For further information on HS2 and the route through the London Borough of Camden please refer to the Planning Context Report for the London Borough of Camden, deposited with the Council by HS2 Ltd.

1.4 High Speed Rail (London – West Midlands) Act 2017

1.4.1 The Act provides powers for the construction and operation of Phase 1 of High Speed Two. HS2 Ltd is the nominated undertaker in relation to the works subject to this Plans and Specifications submission.

1.4.2 Section 20 of the Act grants deemed planning permission for the works authorised by it, subject to the conditions set out in Schedule 17. Schedule 17 includes conditions requiring the following matters to be approved or agreed by the relevant LPA.

- Construction arrangements (including large goods vehicle routes);
- Plans and specifications;
- Bringing into use requests; and
- Site restoration schemes.

1.4.3 This is therefore a different planning regime to that which usually applies in England (i.e. the Town and Country Planning Act) and is different in terms of the nature of submissions and the issues that the LPAs can have regard to, in determining requests for approval.

1.4.4 Schedule 17 of the Act sets out the grounds on which the LPA may impose conditions on approvals or refuse requests for approval.

1.4.5 This Written Statement includes information supporting the Plans and Specifications submission in relation to the matters outlined in **Table 2** below.

Table 2: Schedule 17 Plans and Specifications Submission Details

Site	Details
Plans and Specifications (permanent works)	• **Paragraph 2: Building Works** – Headhouse, planter boxes • **Paragraph 3: Earthworks** – Earthworks required for construction of above ground permanent Headhouse works, and limited sections of vehicle access and Park Village East planter • **Paragraph 3: Fences and Walls** – Compound and reinstated Park Village East parapet walls (to comply with U&A ref ID: 1067),, and vehicle access gate • **Paragraph 3: Road vehicle parking** – Maintenance vehicle parking • **Paragraph 3: Artificial lighting equipment** – Surface mounted luminaires

1.4.6 The works to which this application relates, and the cumulative impact of the works in conjunction with other HS2 development, have been assessed and are compliant with paragraph 1.1.3 (bullet point 2) of the HS2 Phase 1 Environmental Minimum Requirements General Principles[1].

1.5 High Speed Two: Code of Construction Practice

1.5.1 HS2 Ltd as the nominated undertaker is contractually bound to comply with the controls set out in the Environmental Minimum Requirements (EMRs). The EMRs include the HS2 Code of Construction Practice (CoCP).

1.5.2 The works subject to this request for approval of Plans and Specifications will be undertaken in accordance with the Code of Construction Practice, and with the Class Approval issued by the Secretary of State (March 2017)[2].

1.5.3 The Schedule 17 Statutory Guidance issued by the Secretary of State (February 2017)[3] and updated in May 2021[4] provides guidance to all planning authorities determining requests for approval under Schedule 17 to the Act. Paragraph 20-22 of the updated Statutory Guidance states that planning authorities should not through

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618074/General_principles.pdf
[2] https://www.gov.uk/government/publications/high-speed-rail-london-west-midlands-act-2017-class-approval
[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/592755/hs2-schedule-17-statutory-guidance.pdf
[4] https://www.gov.uk/government/publications/high-speed-rail-london-to-west-midlands-act-2017-schedule-17-statutory-guidance/high-speed-rail-london-west-midlands-act-2017-schedule-17-statutory-guidance

the exercise of Schedule 17 seek to modify or replicate controls already in place such as the Environmental Minimum Requirements.

1.6 Structure of Written Statement

1.6.1 This Written Statement is structured as follows:

- A description of the location and main characteristics of the area in which the works will be carried out is provided in **Section 2**;
- **Section 3** describes the main works being undertaken in the area, as set out in Schedule 1 of the Act, and those that are the subject of this Schedule 17 Plans and Specifications submission;
- The design approach and rationale for the works which are the subject of this Schedule 17 Plans and Specifications submission are described in **Section 4**;
- **Section 5** summarises the pre-submission consultations that were undertaken, including a list of the consultees, dates, attendees at meetings and a brief summary of the outcome of these discussions;
- A high-level programme for the works and how they fit into the wider programme for other works in the area, as set out in Schedule 1 of the Act, is provided in **Section 6**; and
- **Section 7** identifies any other main consents, or known forthcoming consents associated with the works.

2 Site Location and Characteristics

2.1 Site Location

2.1.1 The application site (hereafter known as 'the site') is located on vacant land, 0.9km to the north-west of London Euston Station. The site lies within the existing cutting for the West Coast Mainline (WCML) and to the north-east side of Park Village East, a residential road in the London Borough of Camden (**Figure 1**, **Figure 2** and **Figure 3**).

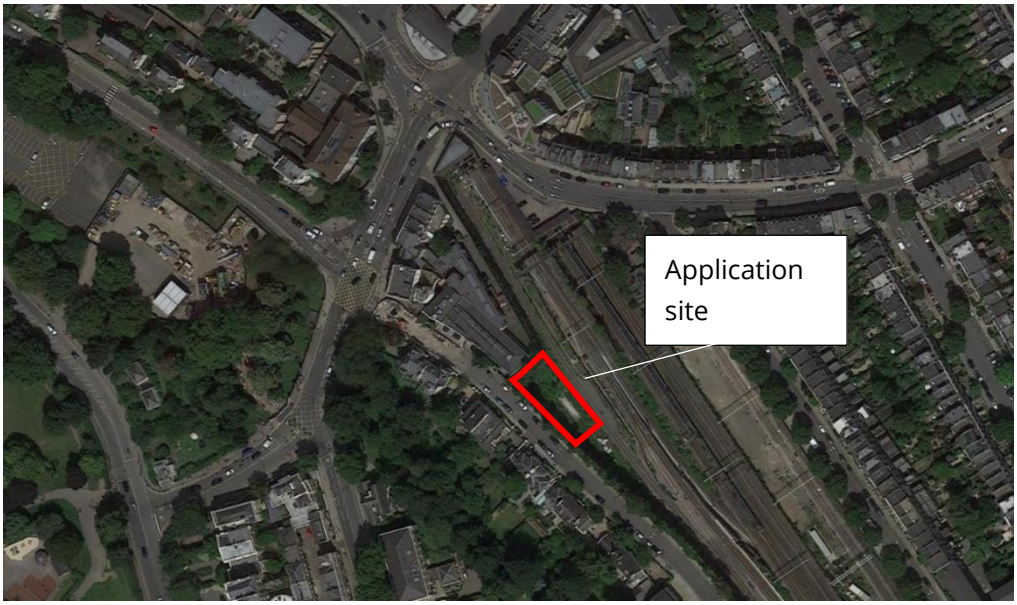


Figure 1 Aerial view of site and surrounding area (Google Maps, 2019)

Figure 2 View of site from south on Park Village East

Figure 3 View of site from south-east across railway cutting

2.1.2 Park Village East adjoins Granby Terrace and Stanhope Street to the south, and Gloucester Gate to the north, providing a link through the residential area to the

west of Regent's Park. Mornington Street Bridge is to the south of the site while the existing Parkway Street Tunnels lie to the north (**Figure 4**).

2.1.3 The nearest public transport links include Mornington Crescent Underground Station (to the east) and Camden Town Underground Station (to the north-east), alongside key bus routes through Albany Street (to the south-west) and the A4201 (to the north-west). Further details of the surrounding highway network are summarised in **section 2.4**.

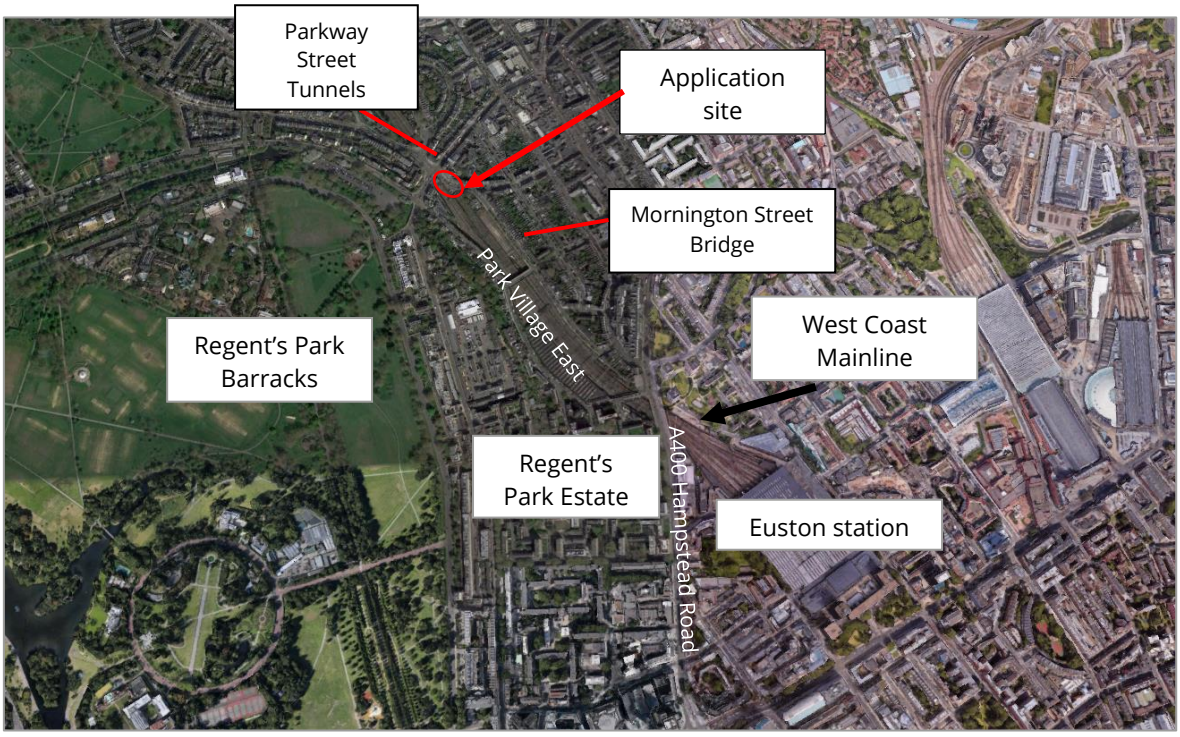


Figure 4 Aerial view of Euston and surrounding area (Google Maps, 2019)

2.2 Adjacent Land Uses

2.2.1 At street level, on Park Village East, Park Village Studios are situated immediately to the north-west. Across the highway, to the south-west, is Georgian housing, including the Grade II* Listed Nash Villas.

2.2.2 North-east of the site, within the railway cutting, is the Grade II listed Parkway Tunnel and Cutting. Across the cutting, there is a row of Grade II listed Georgian terraced dwellings on Mornington Terrace. **Figure 5** contains images of the local area.

Figure 5: Images of the locality. Top row (left to right): Park Village Studios; and Nash Villas on Park Village East. Bottom row (left to right): View of Mornington Terrace; and view towards Park Village East across railway.

2.2.3 Euston Station, is located to the south east and is one of Britain's busiest mainline rail stations, providing connections to cities north of London. The station will be expanded to accommodate the new terminus for HS2 train services. Railway tracks and associated operational land are located to the north and east.

2.2.4 Regent's Park lies approximately 300m to the west of the site and is one of London's largest and most significant areas of open space. Closer to the site, there are other smaller open spaces and play areas throughout the residential areas immediately to the west. Regent's Park Barracks is approximately 150m to the west of the site.

2.3 Environmental Characteristics

Natural Environment

2.3.1 Regent's Park Site of Metropolitan Importance (SMI) lies approximately 300m to the west of the application site (**Figure 6**). The Park contains mature parkland trees, a small, enclosed woodland, an ornamental lake and a grassland area managed specifically for wildlife.

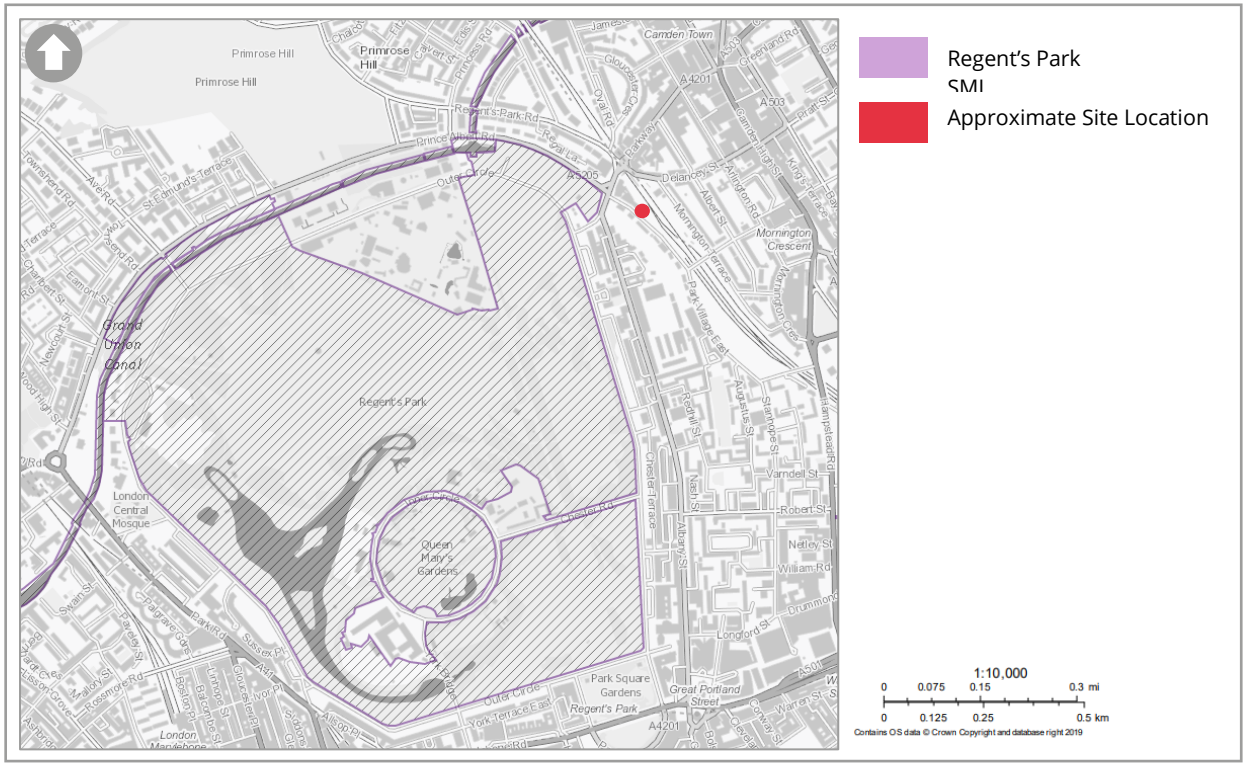


Figure 6: Location of the Regent's Park SMI in relation to the Euston Cavern Headhouse (Approximate location in red) (Source: SCSJV Maps)

2.3.2 As the site is separated from Regent's Park SMI by the intervening streets, it is not anticipated that construction works will have any impacts on the SMI.

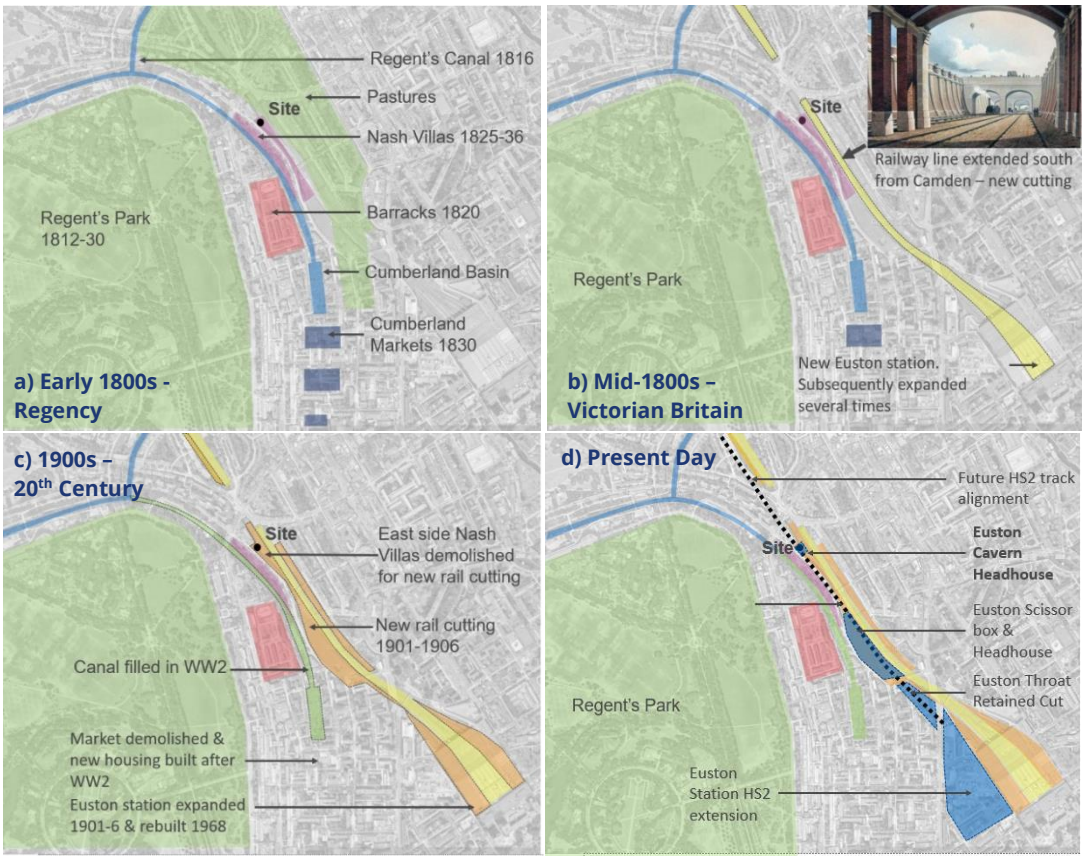
2.3.3 Furthermore, the proposed works are situated within the Limits of Deviation of the HS2 Act, as on Parliamentary Plans Sheet no. 1-02 and Parliamentary Sections Replacement Sheet no. 4-01. As such, the impacts and effects assessed in the Environmental Statement (ES) for the works would remain unchanged. In considering Regent's Park SMI, the ES did not expect any impacts from the Scheduled Works.

Heritage

2.3.4 The heritage context of the application site's vicinity is characterised by both the Victorian-era West Coast Mainline rail cutting to the east, and the Nash Villas and wider Regent's Park setting to the west.

2.3.5 **Figure 7** illustrates the history of the surrounding area and highlights how both John Nash's Regent's Park Masterplan in the early 19th century, and the development of the railway during the 19th and 20th centuries have had a considerable influence on the characteristics of the area.

2.3.6 The adjacent railway cutting itself is a significant heritage asset. It remains largely unchanged since circa 1905, with elements of 1870s work evident in some areas. The cutting retains its original rail character and is important in understanding the development of one of the first inter-city railways, as conceived by engineer Robert Stephenson. These features provide a strong historic character and appearance to the area, as they have played a part in the evolution of railway engineering since the mid-19th century (see **Figure 7**).



a) Early 1800s: Regency –
- John Nash's masterplan "Rus in urbe" mixed typologies
- Nash villas and other housing established on Park Village East
- Large areas still used as pastureland

b) Mid 1800s: Victorian Britain –
- London & Birmingham Railway main line extended to new Euston Station in c.1837
- Remnants of Grade II heritage listed original tunnel and cutting adjacent to site

c) 1900 to 20th Century:
- Expansion of Euston station and railway cutting
- Nash Villas on eastern side of Park Village East demolished to make way for siding in early 1900's
- Canal and basin filled during WW2

d) Present Day:
- Further expansion of Euston station and lines for HS2

Figure 7: Historical context of the surrounding area

2.3.7 Today, the railway cutting is located approximately 13m below contemporary street level. These features are therefore only visible from certain standpoints in the surrounding streets.

2.3.8 West of the site is Regent's Park Conservation Area, which covers the eastern part of John Nash's Regent's Park masterplan development of the early 19th century. It comprises Nash's picturesque villas on Park Village East to its eastern boundary and part of Regent's Park. The concept of development around Regent's Park was established after a design competition in the early 1800's, after which John Nash sold building leases for approved designs. Control over development was implemented for this area via the creation of the Regent's Park Conservation Area, immediately to the west of the site.

2.3.9 The various designated heritage assets in the vicinity are summarised in **Table 3** and **Figure 8**.

No.	Listed Asset	Type	Distance to application site
1	Nash Villas along Park Village East	Grade II*	Opposite site, across Park Village East highway
2	Nash Villas along Park Village West	Grade II*	~90m to south-west of site
3	Regents Park Conservation Area	N/A	Adjacent to west boundary of site
4	Albany Lodge	Grade II	~120m to south-west of site
5	York & Albany Public House	Grade II	~85m to north-west of site
6	Mornington Crescent No's 1, 2-35 and 261/263	Grade II	~400m to east of site
7	Stone piers with lamp standards on Mornington Street Bridge	Grade II	~180m to south-east of site
8	Parkway Tunnel & Cutting	Grade II	~115m to north of site
9	Nash Villas along Gloucester Gate	Grade I	~150m to south-west of site
10	Regents Park Historic Park & Garden	Grade I	~190m to south-west of site

Table 3: Designated heritage assets in proximity to application site

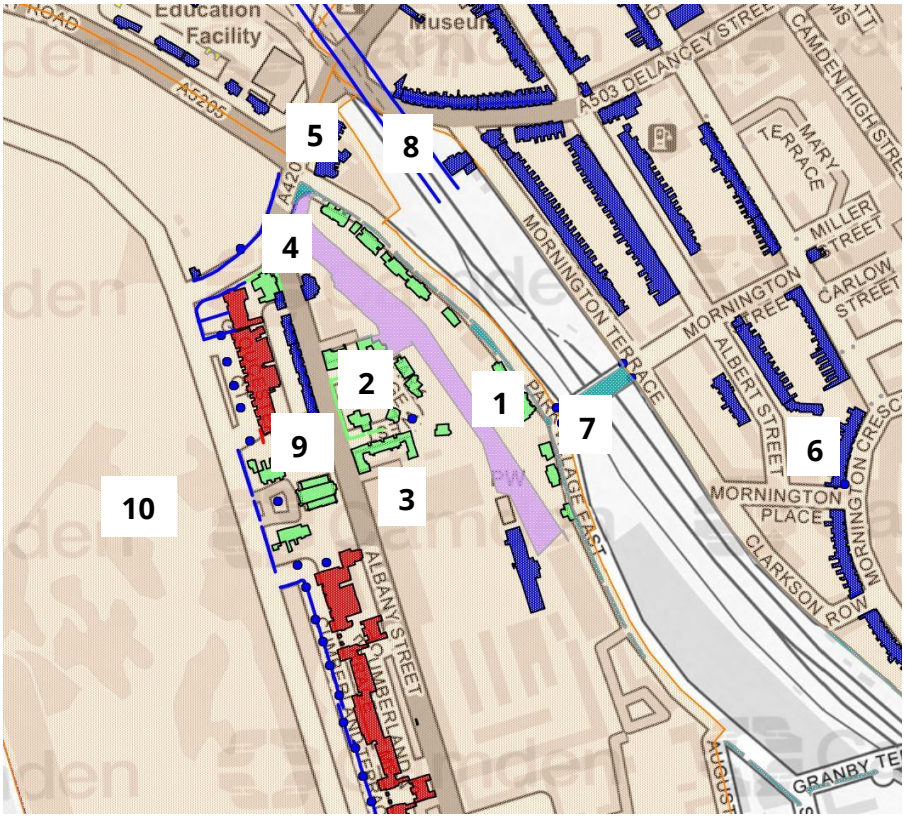


Figure 8: Designated heritage assets in proximity to Euston Cavern Headhouse

2.3.10 There are also several non-designated heritage assets near the site which contribute to the special character of the area.

2.3.11 These comprise the locally listed structures associated with the expansion of the London to Midland Railway at the beginning of the 20th century. Other locally listed structures include Mornington Street Bridge, the wall to the west of the rail cutting which runs south from 1 Park Village East to Granby Terrace, and the wall to the east side of the cutting along Mornington Terrace and Clarkson Row.

2.3.12 These retaining walls are included as 'street features or other structures' on Camden's Local List (adopted on 21 January 2015), which details non-designated heritage assets within the Borough.

2.4 Surrounding Highway Network

2.4.1 The highway network in the vicinity of the Euston Cavern Headhouse is illustrated in **Figure 9**.

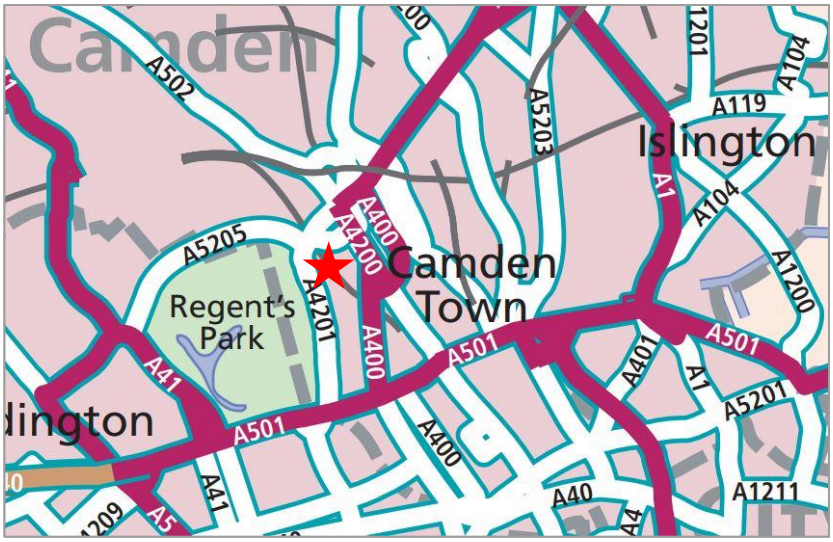


Figure 9: Highway network in area surrounding the application site (red star)
(Source: Transport for London Basemap)

2.4.2 The A400 Hampstead Road runs to the east of the southern extent of Park Village East, continuing northwards and ultimately connecting to the A1. Granby Terrace Bridge, which will be extended as part of the HS2 works, is also adjacent to the southern extent Park Village East

2.4.3 The southern extent of Park Village East has onward connections to the A400 Hampstead Road and A501 Euston Road.

2.4.4 Westwards, the A501 Euston Road leads to the A40 Westway, which in turn then links to the M25 and M40 motorways. Eastwards, the A501 connects to the A1, and to the A10 and the A11 via Commercial Street. To the west of the site, the A5205 links to the A41, which continues north to join the North Circular and M1 motorway. To the north of the site is Parkway Road which joins with the A5205.

3 Description of the Works

3.1 Introduction

3.1.1 This Written Statement supports the Schedule 17 submission for the approval of plans and specifications for the Euston Cavern Headhouse and Shaft (hereafter known as the 'Euston Cavern Headhouse') located in the London Borough of Camden.

3.1.2 The Plans and Specifications submitted for approval are listed in the proforma accompanying the application. A summary of the proposed works for approval is provided in **Section 3.2** below.

3.1.3 **Section 3.4** summarises the indicative mitigation relevant to the works being submitted in accordance with paragraph 7.5.2 of the Planning Memorandum.

3.1.4 **Sections 3.5 – 3.8** provide information on other aspects of the works to assist in understanding the context of planned construction methodology and how HS2 Environmental Minimum Requirements (EMRs) controls apply to the works being submitted for approval. The information in **Sections 3.5 – 3.8** is not for approval under Schedule 17.

3.1.5 The Euston Cavern Headhouse is a Key Design Element, and therefore a Design & Access Statement (DAS) has been produced in accordance with Planning Forum Note 3. Design and Access Statement (Document ref: 1MC03-SCJ-IN-STA-SS01_SL03-000002) is submitted for information as part of this Schedule 17 Plans and Specifications submission.

3.2 Works for Approval

3.2.1 The relevant scheduled work, as set out under Schedule 1 of the Act, to which this Schedule 17 submission relates is:

- **Work No. 1/1** - *A railway (23.48 kilometres in length) partly in tunnel, commencing at a point 235 metres east of the junction of North Gower Street with Drummond Street passing north-westwards and terminating beneath a point 80 metres north-west of the bridge carrying Ickenham Road over the Marylebone to Aylesbury Railway. Work No. 1/1 includes shafts at Cobourg Street, Mornington Street, Granby Terrace, Parkway, Adelaide Road, Alexandra Place, Canterbury Works and Greenpark Way, a station at Old Oak Common and a Crossover Box at Victoria Road.*

3.2.2 As above, Work 1/1 includes a shaft at Parkway, now referred to as Euston Cavern Shaft, which will be approximately 100 metres to the north-west of Mornington Street bridge, in the railway cutting adjacent to Park Village East. The Shaft will extend upwards from the new high speed rail tunnels to provide safe emergency escape for passengers.

3.2.3 The works associated with the above scheduled works submitted for Schedule 17 approval are:

- Headhouse building;
- Planter boxes;
- Earthworks;
- Road vehicle parking in Headhouse compound;
- Park Village East parapet wall and vehicle access gate; and
- Artificial lighting equipment.

3.2.4 The grounds for approval of the proposed works are summarised in **Table 4**. Details of each work are included below at **3.2.11** – **3.2.33.**

Table 4 The works submitted for approval and their possible grounds for refusal of approval under the HS2 Act

Works submitted for approval	Possible grounds for refusal of approval under the HS2 Act
Headhouse and Planter boxes	As 'Building Works' under Sch.17, Part 1, Paragraph 2: (5) (a) That the design or external appearance of the works ought to, and could reasonably, be modified – (i) To preserve the local environment or local amenity, (ii) To prevent or reduce prejudicial effects on road safety or on the free flow of traffic in the local area or, (iii) To preserve a site of archaeological or historic interest or nature conservation value. (b) the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.
Minor earthworks to hardstanding area and limited sections of vehicle access and Park Village East planter	As 'Earthworks' under Sch.17, Part 1, Paragraph 3: That the design or external appearance of the works ought to, and could reasonably, be modified – a) To preserve the local environment or local amenity, b) To prevent or reduce prejudicial effects on road safety or on the free flow of traffic in the local area or, c) To preserve a site of archaeological or historic interest or nature conservation value. That the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits

Park Village East parapet wall and vehicle access gate	As 'Fences and walls' under Sch.17, Part 1, Paragraph 3: That the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.
Road vehicle park	As a 'Road vehicle park' under Sch.17, Part 1, Paragraph 3: That the design or external appearance of the works ought to, and could reasonably, be modified— a) to preserve the local environment or local amenity, b) to prevent or reduce prejudicial effects on road safety or on the free flow of traffic in the local area, or c) to preserve a site of archaeological or historic interest or nature conservation value. That the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.
Artificial lighting equipment	That the design of the equipment, with respect to the emission of light, ought to, and could reasonably, be modified to preserve the local environment or local amenity. If the development does not form part of a scheduled work, that the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.

3.2.5 As the design develops, future Schedule 17 Plans and Specification and site restoration submissions will be made for the works associated with the reinstatement of the planted area and low level wall directly adjacent to the site.

3.2.6 There are a range of HS2 works in the area surrounding the application boundary for this Schedule 17 application. **Figure 10** provides an overview of the context of other Schedule 17 applications in the immediate surrounding area.

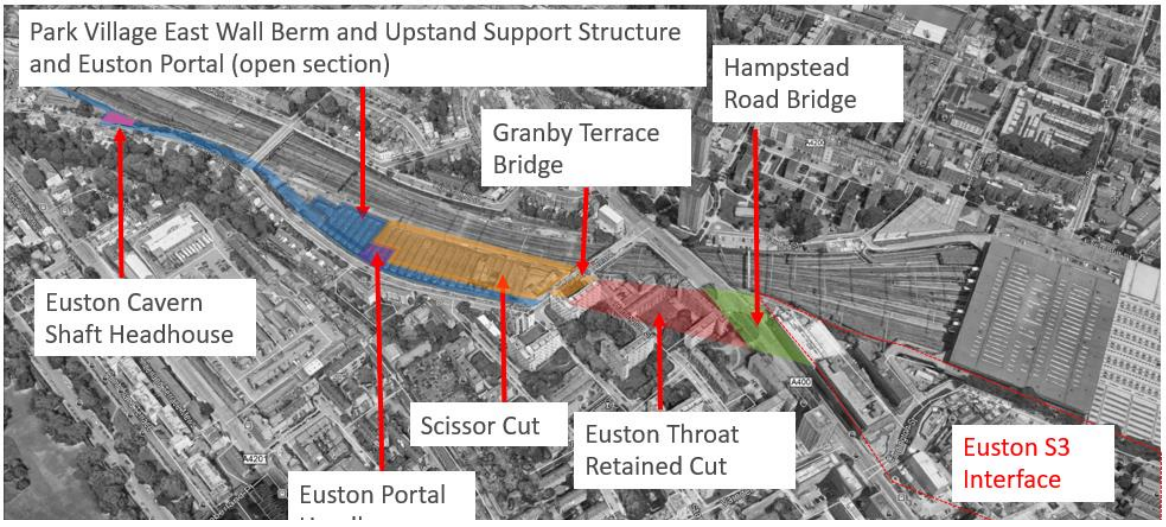


Figure 10: HS2 works in proximity to Euston Cavern Headhouse

3.2.7 The Park Village East Berm and Upstand Support Structure and Euston Scissor Box (open section) was granted approval, under Schedule 17, on 17 March 2021 (LPA ref: 2021/0126/HS2) by the London Borough of Camden.

3.2.8 The Park Village East Wall Berm and Upstand Support Structure is a six metre by three metre structure that will structurally support the existing Park Village East (PVE) retaining wall.

3.2.9 The Berm and Upstand will be located in the railway cutting, adjacent to the existing PVE retaining wall and extending from Euston Scissor Box (open section), westwards to Parkway Tunnel. It will therefore adjoin the Euston Cavern Headhouse to both the south-east and north-west.

3.2.10 The design development and rationale of the interface with these assets is dealt with in Section 4 of this Statement and the accompanying Design and Access Statement (document no. 1MC103-SCJ-IN-STA-SS01_SL03-000002).

Works for Approval: Paragraph 2 – Building Works

3.2.11 The above ground element of the Headhouse is the primary permanent work that requires approval under Paragraph 2, Schedule 17 of the HS2 Act as 'Building works'.

3.2.12 The below ground Euston Shaft, Crosscut and HS2 Euston Tunnels (illustrated in **Figure 11**) do not require approval by virtue of Paragraph 30, Schedule 17 of the Act.

3.2.13 The above ground element of the Headhouse (for approval under Schedule 17) is a three storey structure that encloses the upper section of the Euston Shaft. As per **Figure 11**, it comprises:

- One upper storey at street level, accessible from Park Village East;

- Two lower storeys below the level of Park Village East, and above the existing track level of the West Coast Main Line corridor.

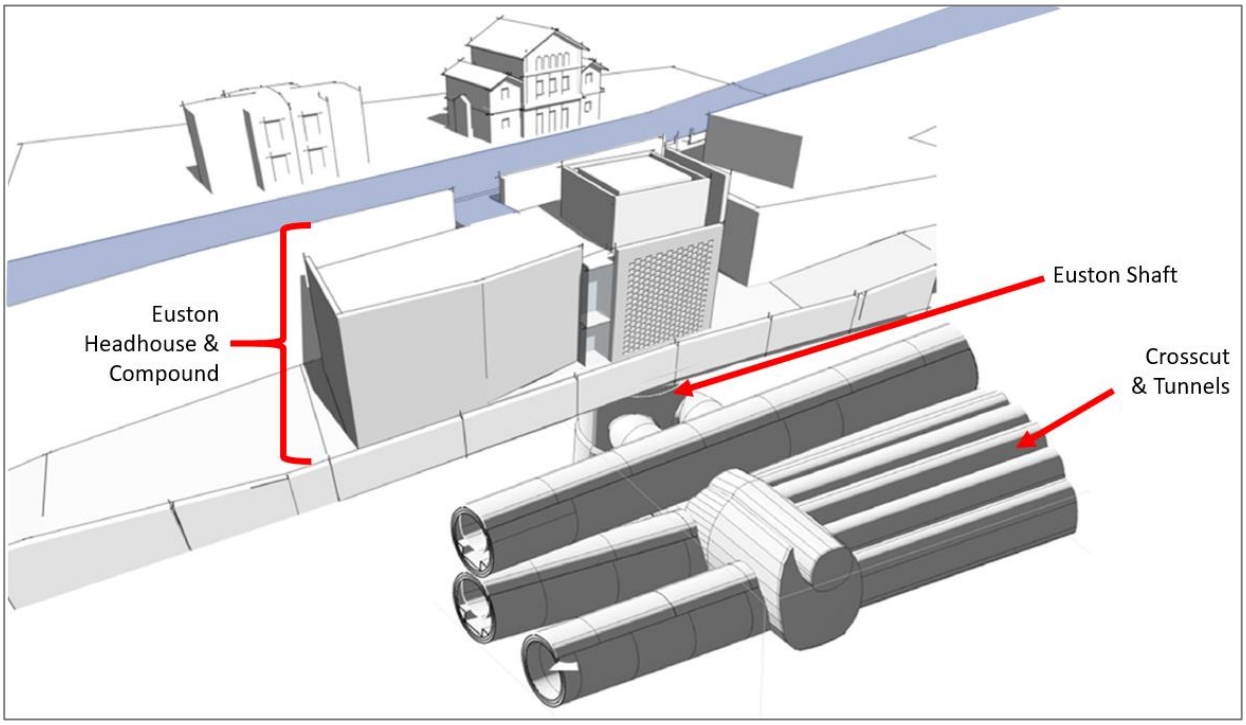


Figure 11 Above and below ground elements of the proposal.

3.2.14 To the roof, edge protection is an intrinsic safety feature when working at height in a rail and lineside environment. The management of risks for health and safety with collective safety features is considered more effective because they provide an ALARP (As Low As Reasonably Practicable) approach against hazards which ensures staff are not exposed to excessive hazards during inspection and maintenance activities. In order to design, construct and operate the Railway, HS2 Ltd is required to comply with legislation and several regulatory bodies that govern and enforce health and safety as set out under the Development Agreement with the Secretary of State (SoS) so that safety risks are as low as reasonably practicable.

3.2.15 The proposed Headhouse will comprise a guardrail within the perimeter of the roof, at a minimum distance of 0.6 metres from the roof edge and with a minimum height of 1.1 metres for safety.

3.2.16 The below ground elements (not for approval under Schedule 17) include the HS2 Euston tunnels - these will comprise three mined tunnels, including Downline, Upline East and Upline West, extending from the new portal outside Euston Station to the Euston Cavern. The Euston Cavern is the bifurcation chamber for the Upline East and Upline West mined tunnels in interface with the Upline TBM tunnel. These converge

into two bored tunnels from Euston Cavern, north-westwards to the proposed Old Oak Common station. Both the mined tunnels and the bored tunnels will have an internal diameter of 7.55m, with the mined tunnel lined by SCL (Sprayed Concrete Lining) / cast in-situ and the bored tunnel lined by precast segments. These tunnels will have a length of approximately 7.5km.

3.2.17 The Euston Shaft will provide an intervention and egress point from the existing ground level, at Park Village East. This will be utilised as an operation, maintenance

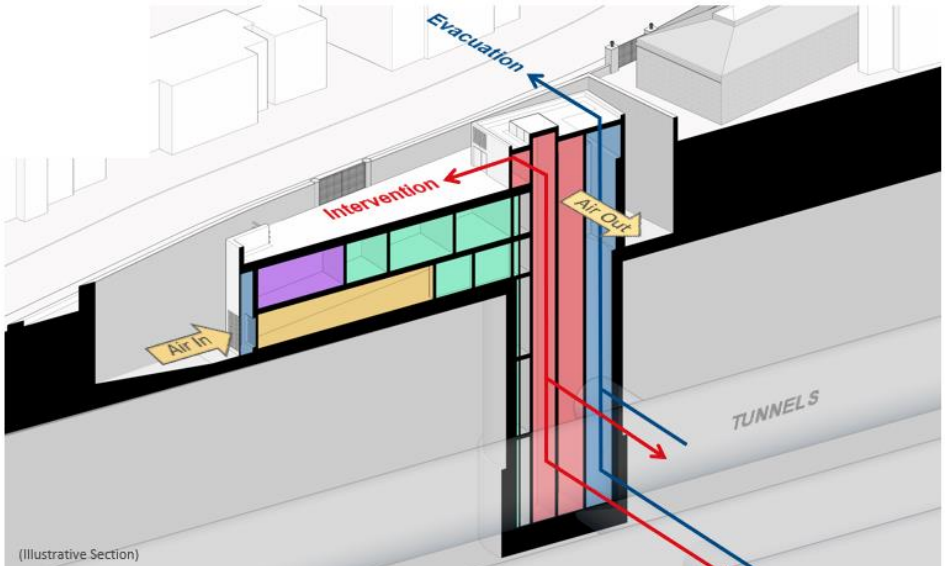


Figure 12 Illustrative section of the Euston Cavern Headhouse

and emergency services access to the tunnels when needed and provide an evacuation point for passengers using the HS2 services in the event of an incident in the tunnels below (**Figure 12**). It will also have a drainage function whereby it will collect, transport and store pumped water from rainfall, tunnel seepage, firefighting operations and runoff from around the Shaft area and Headhouse roof. It will be located approximately 460m to the north of the proposed HS2 Euston Tunnels portal.

3.2.18 In addition to the Headhouse, within the site compound, the planter boxes will require approval under Paragraph 2, Schedule 17 of the HS2 Act as 'Building works'. The planters are situated along the southern edge of the site and directly east of the access door into the Headhouse building.

3.2.19 Although not for approval under Schedule 17, there will be a bank of condensers located adjacent to the north façade of the Headhouse building. Details of these structures are shown on drawings 1MC03-SCJ_SDH-LS-DGA-SS01_SL03-290110 and 1MC03-SCJ_SDH-AR-DGA-SS01_SL03-290011 for information only.

Works for Approval: Paragraph 3 - Earthworks

3.2.20 The primary works that require approval under Paragraph 3, Schedule 17 of the HS2 Act as 'Earthworks' are those earthworks necessary for the construction of the above ground permanent Headhouse works.

3.2.21 There are also minor earthworks proposed to limited sections of the Headhouse vehicle access and Park Village East planter, as demarcated on drawing no. 1MC03-SCJ_SDH-AR-DLO-SS01_SL03-290001.

Works for Approval: Paragraph 3 – Fences and Walls

3.2.22 The Park Village East parapet wall will form a boundary wall between the Headhouse compound and the northern edge of the Park Village East highway corridor (see drawing no. 1MC03-SCJ_SDH-LS-DSE-SS01_SL03-292120). The wall will be constructed like-for-like to the existing wall as part of the reinstatement works for the existing Park Village East retaining wall parapet that runs along the length of Park Village East. The wall reinstatement works will be completed, after construction of the Euston Cavern Headhouse.

3.2.23 Only the location of the section of reinstated wall that forms part of the boundary for the site is for approval under this Schedule 17 Plans and Specifications submission.

3.2.24 The sections of the reinstated parapet wall further south of the site will be subject to a future Schedule 17 Plans and Specification submission, as highlighted in yellow in **Figure 13**.

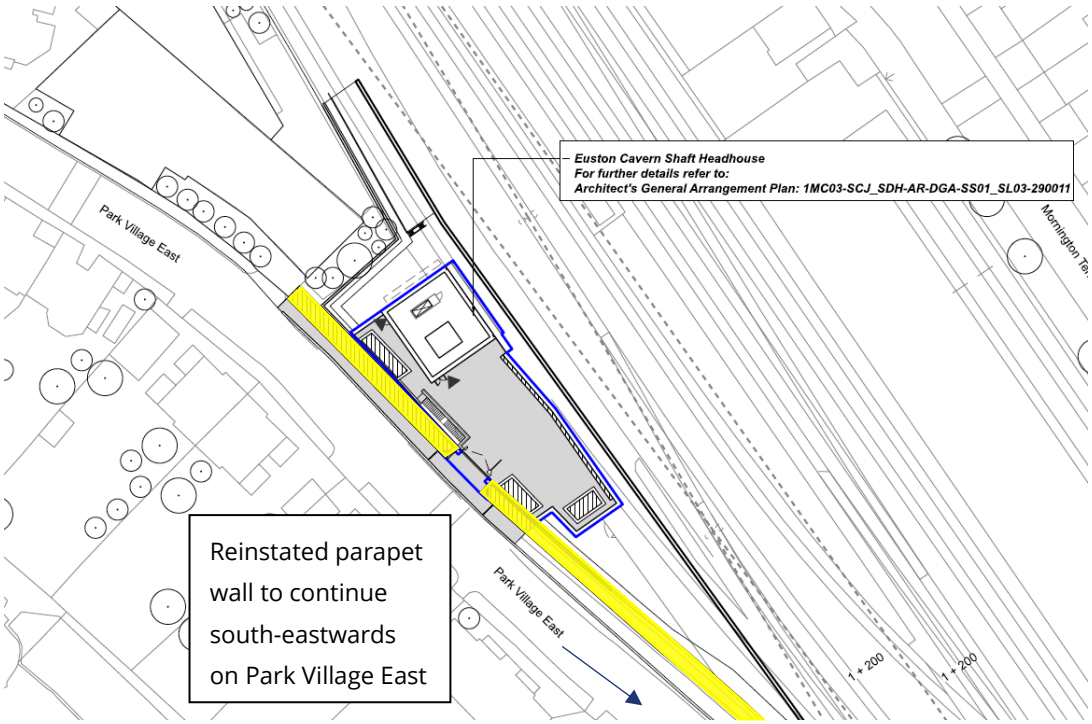


Figure 13 Amended extract of Landscape Overview Plan (drawing no. 1MC03-SCJ_SDH-LS-DGA-SS01_SL03-290101) showing PVE parapet wall for reinstatement in yellow.

3.2.25 The site will be accessed via an approx. 6m wide gate sufficient for emergency vehicle access. The gate is a steel structure that will be timber clad to sympathise with the local vernacular.

Works for Approval: Paragraph 3 – Road Vehicle Park

3.2.26 Within the Headhouse compound, there will be an approx. 416m^2 area of hardstanding for the parking of maintenance or emergency vehicles (**Figure 14**).

Figure 14: Visualisation of proposed road vehicle park

3.2.27 In terms of materiality, Yorkstone slab and setts paving, and granite kerbs with a natural finish suitable for vehicular loading and heavy loading within the compound is proposed.

Paragraph 3 – Artificial Lighting Equipment

3.2.28 The Euston Cavern Headhouse will feature external artificial lighting. Luminaires will either be fixed to the headhouse building or attached to the internal wall of the compound area, such that they face into the compound. The permanent lit luminaires are fixed on the headhouse above the entrance doors at 3m and adjacent to the entrance gate on the compound wall at 2.2m and 1.3m. The height of the PVE wall is approximately at 2.8m. Therefore, the light spillage from the site to the Park Village East highway will be minimal. Details of luminaire fixing heights and light spillage when the site is unoccupied can be found on 1MC03-SCJ_SDH-ELDGA-SS01_SL03-290453. Under Schedule 17, only the design of the artificial lighting unit itself and location are subject to approval. As such, lux levels are not for approval under Schedule 17, however these are provided for information on plan as well.

3.2.29 Lighting columns have not been designed for this site.

3.2.30 When the site is unoccupied, the compound will not be illuminated in order to minimise lighting pollution, except for the compound entry and key access points to the headhouse building. These areas will be permanently lit throughout night-time period to ensure a minimum illumination level of 5 lux.

3.2.31 Operational zones are shown on drawing no. 1MC03-SCJ_SDH-EL-DGA-SS01_SL03-290451. The operational zones have been implemented to minimise the illuminated areas when the site is unoccupied, in order to consequentially minimise the impact on the surrounding environment and local wildlife.

3.2.32 Details of lighting units are shown on drawing no. 1MC03-SCJ_SDH-EL-DDE-SS01_SL03-294451. For information, Occupied and Unoccupied site lux levels are shown on drawing nos. 1MC03-SCJ_SDH-EL-DGA-SS01_SL03-290452 and 1MC03-SCJ_SDH-EL-DGA-SS01_SL03-290453 respectively.

3.2.33 All luminaires provided will be at a colour temperature of 2700K. The colour temperature refers to the colour / warmth of the light of the luminaire. The warmer the light, the lower the colour temperature (for reference, candlelight is ~1500K and daylight is ~6500K). Colour temperature of 2700K is the threshold aligned with the HS2 Technical Standard for Ecology and so meets the recommended specification for lighting in close proximity to suitable bat commuting and foraging habitat.

3.3 Landscape

3.3.1 One of the key landscape design objectives for the Euston Cavern Headhouse is to achieve visual mitigation of the structure and compound by integrating it effectively with the railway to the north-east, the Nash-designed Park Village East area (part of the Camden Town Conservation Area) to the west and the residential terraces on the east along Mornington Terrace.

3.3.2 The other key landscape design objective is to ensure No Net Loss of biodiversity, as compensation for the HS2 railway development. The design of landscape areas will restore and enhance ecology and create connections with adjacent green spaces through 'ecological stepping stones' as part of the Green Corridor approach.

3.3.3 The landscape design will also seek to mitigate and enhance views for dwellings and other sensitive receptors that overlook the site.

3.3.4 The hard landscape design integrates and considers the materiality of the following works:

- Stone paved courtyard, which will form the road vehicle park (see **3.2.26** – **3.2.27**);

- Boundary walls (see **3.2.22** - **3.2.27**).

3.3.5 As set out in section 3.4, the soft landscape design elements will be 'for approval' under a separate Site Restoration Schedule 17 application and are provided 'for information' in the current application.

3.3.6 The soft landscape design elements include (**Figure 15**):

- Climbing plants on the inside of the compound's east and south wall; and
- Buffer planting in raised planters along the south and south-west boundary of the Headhouse compound.

Figure 15: Landscape design elements

3.3.7 Further consideration will also be given to opportunities for ecological enhancement and integration. This may include incorporation of bird or bat boxes and bricks, insect hotels, as well as climbers, providing feeding and shelters. These interventions will be co-ordinated with qualified ecologists to make sure that it will be appropriate for local species and surrounding context.

3.3.8 Additionally, the indicative landscape design is being developed to facilitate future urban integration within the vicinity. This will be undertaken as a separate future Schedule 17 application.

3.3.9 This may involve integrating the proposal with wider public realm enhancements on Park Village East and connecting with pedestrian footways.

3.4 Indicative Mitigation

3.4.1 In addition to works which require Schedule 17 Plans and Specifications approval, the overall mitigation scheme for the site includes:

- Ecological planting: to provide additional biodiversity and further replacement habitat.
- Planting along key frontages: to mitigate the visual impact of the proposal for sensitive receptors on Park Village East.

3.4.2 The mitigation will comprise part of a wider site restoration scheme along the Park Village East corridor and so will be subject to a future Schedule 17: Site Restoration application. It has been brought forward as part of this application for information purposes to provide additional context for the proposed development

3.4.3 Details of the indicative mitigation submitted for consultation in accordance with paragraph 7.5.2 of the Planning Memorandum are shown in **Table 5** and are the subject of a separate consultation.

Table 5 Drawings demonstrating indicative mitigation measures

Drawing number	Indicative Mitigation
1MC03-SCJ_SDH-LS-DGA-SS01_SL03-290101 P05	Overview Plan
1MC03-SCJ_SDH-LS-DGA-SS01_SL03-290111 P05	Landscape GA Plan, Indicative Mitigation
1MC03-SCJ_SDH-LS-DSE-SS01_SL03-292121 P05	Indicative Mitigation Cross Sections

3.5 Operational Noise

3.5.1 Operational noise from the Euston Cavern Headhouse has been reduced as far as reasonably practicable in line with HS2 commitments to control and reduce adverse effects of noise from stationary systems. For the civils works, as they relate to stationary systems, particular consideration has been given in the design to: space provision for attenuators on air-moving plant; positioning of terminations and openings to reduce sound transfer to nearby sensitive premises; sizing of systems to

run at peak efficiency; and massing of buildings to attenuate noise from headhouses.

3.5.2 Breakout noise from the civil engineering assets is more than 10dB below the background sound level and that sound from the headhouse under normal operation has been reduced as far as reasonably practicable.

3.6 Construction Method

3.6.1 The works subject to this request for approval of Plans and Specifications will be undertaken in accordance with the HS2 Code of Construction Practice and the Class Approval issued by the Secretary of State (March 2017).

3.6.2 This section summarises the general construction methodology and the main temporary works arrangements. The arrangements described are for information and background only and do not form part of this request for approval.

3.6.3 This main phase of works subject to the Plans and Specifications submission include the construction of headhouse walls, columns and slabs and external fit out and landscaping. An overview of the construction methodology is as follows:

- Construction of piling mat by digging out poor ground and replacing with compacted fill. Installation of rotary bored segmental cased piles for the headhouse and slab. Installation of main shaft secant piles.

- Excavation of piling mat and construction of reinforced concrete slab over whole area of site.

- Excavation of main shaft. At the base of the main shaft secant piles, the lower section of the shaft and downline adits will be constructed using Sprayed Concrete Lining.

- Spoil will be temporarily stored in a muckbin on site and removed via muck wagons.

- Construction of internal shaft walls and slabs. Construction of headhouse steel frame structure and reinforced concrete elements including walls, columns, slabs. M&E installation, internal and external fit out, landscaping and drainage works.

3.6.4 During construction, temporary site access will be via both Park Village East Road and track level. Temporary site offices will be located on top of a steel frame

structure at track level above the shaft with access from Park Village East highway level via a gantry. The steel frame structure will house a gantry crane over the shaft and there will be a tower crane located next to the shaft to move materials from Road level to track level. On Park Village East highway, the footway and one lane of traffic will be closed during construction. Temporary hoarding will be in place within the Park Village East highway for the duration of construction. Parking bays will be suspended immediately adjacent to the construction site, and relocated to the south of the construction site on Park Village East.

3.6.5 An application for consent is planned to be submitted under Schedule 4 of the Act in relation to temporary construction access arrangements.

3.7 Historic Environment

Background

3.7.1 The HS2 Heritage Memorandum (part of the HS2 Environmental Minimum Requirements) explains that a route-wide generic written scheme of investigation (Historic Environment Research and Delivery Strategy (GWSI: HERDS)) has been prepared in consultation with Historic England (HE) and the LPAs. It sets out the research framework and general principles for design, evaluation, investigation, recording, analysis, reporting and archive deposition to be adopted for the design development and construction.

3.7.2 The HS2 Heritage Memorandum also sets out how the historic environment (including heritage assets and their setting) will be addressed during design. The HS2 Environmental Memorandum sets out the approach to landscape and visual mitigation which takes account of the historic environment.

3.7.3 The arrangements for the management of archaeology during construction are not a matter for approval under Schedule 17.

Heritage assets adjoining and neighbouring the site

3.7.4 The works adjoin the existing non-designated Park Village East retaining wall and so will impact on this asset and the parapet wall above.

3.7.5 As such, these elements have been considered as part of the wider HS2 archaeological record for the Euston Cavern Tunnels and Cutting; and the Euston Throat[5].

3.7.6 On the Euston Cavern Tunnels and Cutting record, this was descoped from further archaeological investigation. It was determined through desk-based assessment that, given the depth, location and geology on the area, it was unlikely any archaeological features would be preserved in situ within this area. The record was shared with Greater London Archaeological Advisory Service (GLAAS) in November 2020.

3.7.7 On the Euston Throat record, involving the area to the south-east of the application site, this was also descoped from further archaeological investigation. This included the demolished DB cargo shed which has been subject of an historic building record (non-designated heritage asset)[6]. It also included detailed recording of Park Village East parapet wall and planter (adjacent to the Euston Cavern Headhouse and compound) undertaken by the HS2 Early Works Contractor (EWC). EWC also consulted with GLAAS and Historic England on these aspects including in January and February 2017.

3.7.8 In addition to above, a level 2 historic building recording of the non-designated Railway Cutting Euston to Parkway was carried out by the EWC[7] and the Grade II listed Parkway Tunnel and cutting was recorded in accordance with a Heritage Agreement Method Statement that was approved by Camden in December 2020 (LBC ref: 2020/4629/HS2)[8].

3.7.9 Within the setting of the Grade II* listed Nash Villas along Park Village East, the works will be partly visible.

3.7.10 Additionally, there may be some temporary impacts from vibration during construction of the Euston Cavern Headhouse. This will be assessed and managed under the Environmental Minimum Requirements and Code of Construction Practice (see Section 9 below).

3.7.11 Ground movement assessments are being undertaken to assess the impacts on nearby listed assets, specifically on the Grade II* dwellings on Park Village East. Initial

[5] Relevant HS2 Historic Environment Records include: WP007 Historic Environment Camden Scope Decision Record Euston Cavern Tunnels and Cutting 1EW02-CSJ-DS-REC-S001-000006 and 1EW02 Enabling Works – Area South Historic Environment Camden Scope Decision Record – DB Cargo 1EW02-CSJ-CO-NOT-S001

[6] Project Plan for Historic Building Recording of DB Schenker Shed, Euston Document No. 1D037-EDV-EV-REP-020-000002 and Historic Building Record of DB Cargo Shed:Interim Report. Document No. 1EW02-CSJ-EV-REP-S001-000011

[7] Historic Building Recording of Railway Cutting Euston to Parkway - 1EW02-CSJ-EV-REP-S003-000128

[8] Historic Building Recording of Parkway Tunnel and Cutting - 1EW02-CSJ-EV-REP-S003-000127

results show that the impact would be low (level 2 damage category) and would not require mitigation. Nonetheless, this is currently being reviewed and will be updated accordingly.

3.7.12 The Design and Access Statement (Document no. 1MC03-SCJ-IN-STA-SS01_SL03-000002) demonstrates that the design of the Cavern Shaft and Headhouse has been developed to ensure the structure is in keeping with the appearance of the historic character of the railway cutting and Park Village East. This includes the material palette (primarily brick, but also metal), the massing of the principal building elements and the use of architectural screen walls to the Headhouse where possible. These elements have been proposed to be in keeping with the appearance of the existing historic character of the railway cutting and Park Village East to help assimilate the structure into its surroundings.

3.7.13 The Headhouse has also been designed to appear integral to the railway cutting, with a strong visual relationship with the historical railway infrastructure. For this reason, a predominantly red and blue engineering brick materials palette has been established. This design approach has been guided by pre-application discussions with The Crown Estate, Historic England and London Borough of Camden (see Section 5). Historic England was consulted on the design of the assets within the immediate area during a meeting on 9th March 2020.

3.8 Environmental Management During Construction

3.8.1 The Environmental Memorandum, which forms part of the High-Speed Rail (London - West Midlands) Environmental Minimum Requirements, sets out the arrangements for the management of environmental issues during construction and the Code of Construction Practice (CoCP) sets out specific details and working practices that apply. The CoCP is supported by Local Environmental Management Plans (LEMPs) which include specific measures by topic, relevant to each relevant local authority area. [9]

3.8.2 Environmental management arrangements during construction do not form part of this request for approval of Plans and Specifications under Schedule 17.

[9] The LEMP relevant to the works subject to this Schedule 17 submission is P1S Local Environmental Management Plan - London Borough of Camden and can be found here: https://www.gov.uk/government/publications/local-environmental-management-plans-for-hs2-phase-one

4 Design Approach and Rationale

4.1 Introduction

4.1.1 This section provides an overview of the proposal's design vision, objectives and requirements. It also accounts for the site constraints.

4.1.2 Further detail is supplied in the accompanying Design and Access Statement (document ref: 1MC03-SCJ-IN-STA-SS01_SL03-000002) which is submitted for information as part of this Schedule 17 Plans and Specifications submission. The Design and Access Statement provides in-depth information on the approach, criteria, constraints and rationale of the design.

4.2 Design Principles & Requirements

4.2.1 The design approach for the proposal has been developed through an iterative process of refinement, working with key stakeholders including the London Borough of Camden and the Independent Design Review Panel. Details of engagement are provided in **Section 5**.

4.2.2 The design team has also sought to explore the relationship with the site environs. In particular, significant consideration has been given to the aspects of John Nash's masterplan, to the west, as well as the successive layers of railway heritage, to the east.

Architectural Design Principles

4.2.3 Architecturally, this has resulted in the overall vision of "Duality", which aims to demonstrate the long-established mixed-use typology present in the area. This concept guided the design approach, including materiality choice and how the building related to the heritage assets around it.

4.2.4 As highlighted at **3.7.12**, a predominantly red and blue engineering brick materials palette has been established, with a limited number of details in metal. The upper storey at street level will be built in red brick, while the two lower storeys within the railway cutting will use blue engineering brick to visually connect to the blue brick ribbon of the existing cutting. The metal details are limited to mechanical louvres which are located to the railway cutting façade where they will appear congruous.

4.2.5 In addition to "Duality", the design approach has sought to maintain a subtle, low key design that complements the neighbouring heritage assets. The design aims to

achieve a simple form that expresses the basic functions of the Headhouse, with a shaft rising up from the ground wrapped in brick work.

Landscape Design Principles

4.2.6 The landscape design objectives, as detailed at **Section 3.3**, are:

- To achieve visual mitigation of the structure and compound, by integrating it effectively within both the railway to the north-east and the historic buildings to Park Village East;
- To ensure No Net Loss of biodiversity, as compensation for the HS2 railway development, through restoration and enhancement measures.

Functional Design Requirements

4.2.7 The key requirements of the Headhouse, guided by its functions, are as follows:

- Intervention access for emergency services to respond to incidents such as fire within the tunnels below
- Egress to street level for passengers in the event of such emergencies
- Provision of plant to support life safety functions such as stair pressurisation, electrical and mechanical equipment and control to enable the above
- Additional rail systems equipment required for the functioning and operation of the high speed railway

4.3 Proposed Design

4.3.1 This section will provide a summary of the proposed design against the relevant HS2 Act Grounds for Approval. In accordance with Paragraphs 2 and 3 of Schedule 17, the Local Planning Authority may only consider Schedule 17 applications against certain grounds. These grounds are listed in **Table 4**, by work for approval.

4.3.2 Full details of the design are provided in the accompanying Design and Access Statement (document ref: 1MC03-SCJ-IN-STA-SS01_SL03-000002) and Schedule 17 drawings.

To preserve the local environment or amenity

4.3.3 At street level, the Headhouse will have a height of approximately 4.6 metres (excluding the roof guardrail and lift overrun) and so will not be significantly taller

than the proposed boundary walls. It will also be set approximately 5.4 metres back from the proposed Park Village East boundary, comfortably within the northern corner of the plot.

4.3.4 As illustrated at Figure 30 in Chapter 5 of the DAS, at Year 1 of railway operation, the massing of the Headhouse will be partially screened from public view on Park Village East by the boundary walls, with only the upper part of the top storey visible. At Year 15 of railway operation, when the planting reaches sufficient height, the Headhouse will predominantly be screened by planting along Park Village East.

4.3.5 The Headhouse will also appear subservient within the railway cutting, given the railway cutting's significant depth.

4.3.6 The Headhouse's height and massing will therefore be in-keeping with the existing site context. The simple rectilinear building form will also enhance this subtle appearance.

4.3.7 As demonstrated at Section 5.4 of the DAS, the materiality and detail of the Headhouse will achieve a discrete appearance with a clear visual connection to the historical railway cutting.

4.3.8 Of the proposed elements in **Figure 11**, the Headhouse is the sole element that would be visible in public views from the surrounding streets of Park Village East and Mornington Terrace.

4.3.9 From Park Village East, the Headhouse structure will be viewed in the context of Park Village Studios to the north. Given the similarity in building height with the Studios, the Headhouse will be visually consistent and in character with the existing streetscene.

4.3.10 Viewed from Mornington Terrace, the materials and form of the Headhouse will integrate well with that of the existing cutting.

4.3.11 In terms of preserving amenity, the Headhouse will be sufficiently distanced from neighbouring residential properties so as not to impact their access to light. The operational use of the Headhouse will also mean that privacy would not be affected.

4.3.12 The 'earthworks' associated with the proposal are limited to those as part of the Headhouse construction and those required for creating the vehicle access into the Euston Cavern Headhouse compound from Park Village East. As such, these earthworks will be nominal and will not materially impact the local environment or amenity,

4.3.13 Section 6.8 of the DAS illustrates that the appearance of the 'road vehicle park' will appear congruous with that of the Headhouse and the locality, through the sympathetic choice of materials.

To prevent or reduce prejudicial effects on road safety or on the free flow of traffic in the local area

4.3.14 The Headhouse proposal has been designed with a 416m^2 hardstanding area for the parking and manoeuvring of vehicles. The activities associated with the proposed Headhouse will generate only occasional vehicle traffic for maintenance and emergency access.

4.3.15 Given the sufficient car parking and manoeuvring area, all vehicles will be able to park off-street and so the proposal will not result in prejudicial effects on road safety or to the free flow of traffic in the local area.

To preserve a site of archaeological or historic interest or nature conservation value

4.3.16 As detailed at **3.7.5,** the only nearby archaeological asset has now been demolished and appropriately recorded. As such, there is no archaeological interest to consider on site or in the locality, and so the proposal will not impact any archaeological assets.

4.3.17 In terms of assets of historic interest or conservation value, paragraphs **3.7.9** demonstrates how the design will successfully preserve the historic interest of neighbouring listed buildings, following consultation with statutory stakeholders.

4.3.18 Furthermore, within the DAS, Sections 2.4 – 2.5, Sections 3.3 – 3.4, Section 4.3 – 4.4 and Section 5.4 provide an in-depth illustration of how the design responds to the character of the locality, thereby preserving its special character and setting.

That the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits

4.3.19 The proposal has been positioned on the application site, in order to serve the functions detailed in DAS Sections 4.3 and 5.2. It therefore cannot be positioned in an alternative location within the HS2's permitted Limits of Deviation. The Headhouse utilises the access facility to the Shaft in order to support the emergency egress / intervention function of the Shaft.

That the design of the equipment, with respect to the emission of light, ought to, and could reasonably, be modified to preserve the local environment or local amenity.

4.3.20 As per Section 5.6 of the DAS, on-site lighting arrangements have been designed to minimise the emission of light during the day and at night. The lighting will therefore preserve the visual amenity of the area for neighbouring residents. The lighting equipment will also not impact the local environment and wildlife, because it aligns with thresholds in the HS2 Technical Standard for Ecology and so meets the recommended specification for lighting in close proximity to suitable bat commuting and foraging habitat.

5 Pre-submission Consultation

5.1.1 Pre-submission consultation with the Local Planning Authority, statutory consultees and other relevant stakeholders is summarised in **Table 6** below.

5.1.2 As part of design development, designs have been shared and discussed with London Borough of Camden and a range of stakeholders including the HS2 Independent Design Review Panel. The local community have also been engaged on the design.

HS2 Independent Design Review Panel

5.1.3 The accompanying Design and Access Statement (doc ref: 1MC03-SCJ-IN-STA-SS01_SL03-000002) addresses the HS2 Independent Design Panel Review. The design has been reviewed by the Panel on three occasions where various aspects of the design have been discussed, including the headhouse building, landscaping strategy and lighting design.

London Borough of Camden

5.1.4 Pre-application discussions have been held with the London Borough of Camden since 2018 on design development, where particular issues were discussed and agreed. The key issues that were raised and responded to are as follows:

- **Headhouse materiality** – Concern was raised by London Borough of Camden as to whether enough had been done to contextualise the ground level structure within Park Village East and its surroundings. The history and context of the site was further studied and the concept of "Duality" was conceived and applied as a design approach to materiality, reflective of the coexistence of both rail and residential heritage in the area. This resulted in the introduction of brick to the ground level structure. Both the analysis and implementation of brick and colour palette was received positively.
- **Headhouse massing and height** – London Borough of Camden challenged the design team to reduce the overall mass of the building as much as possible to reduce the visual impact on surrounding receptors. The headhouse is a key component of the operation of the railway and therefore is required to meet core functional requirements. However, the design team were able to balance meeting the key requirements and reduce the height of the building at Park Village East level. The Council recognised the efforts to reduce the massing and reducing the impact on the street. The approach of keeping the main mass of the building below Park Village East level conceptually wrapped in a brick ribbon was received positively, along with the reduction in parapet height.

- **Headhouse roof edge protection** – As a result of reducing the headhouse height, a safety restraint system was required for maintenance personnel to access the roof. The design team completed a thorough options appraisal of potential restraint systems, with consideration for its visual impact on the streetscene and neighbouring heritage assets, alongside architectural, health & safety, maintenance and stakeholder considerations. They identified that a guardrail would best meet each of these considerations. However, given that discussions with LBC are still ongoing on this matter, the details of the design, scale, material(s) and finish of the edge protection in the form of drawings and sections will be submitted to and agreed with LBC by way of condition.
- **Headhouse louvres** - London Borough of Camden raised concern with the location of the functional louvre openings on the facades facing Park Village East. In response, the design was developed so all functional louvres face the track side and are concealed behind a perforated screen.
- **Landscape strategy** – It was requested by London Borough of Camden to incorporate as much soft landscaping as possible. As a result, several opportunities for planting have been thoroughly appraised including a green roof to the Headhouse roof, from landscape, ecology, architectural, health & safety, maintenance and stakeholder perspectives. While it was found that a green roof was ultimately not feasible, climber planting to the perimeter wall and new planter boxes have been introduced to the permanent compound.
- **Access gate** – London Borough of Camden were keen on the design to reflect the local vernacular. In response, the access gate has been designed to be clad in dark timber, which is in keeping with entrances gates along Park Village East.

Historic England

5.1.5 Discussions with Historic England have informed the consideration of heritage in the design as it has developed. Ongoing discussions with Historic England have uncovered a preference for the headhouse design to reflect the character of the two environments.

The Crown Estate

5.1.6 Ongoing engagement has been undertaken with The Crown Estate throughout the development of the design.

5.1.7 The feedback revealed The Crown Estate's preference for greater provision of soft landscaping within the site and the agreement of brick colour within the architectural design.

5.1.8 Through the course of discussions with The Crown Estate, a red brick colour was agreed to sympathise with Park Village Studios to the north, with the rest of the

Headhouse structure in a blue engineering brick to integrate with the railway cutting. Greening and planting of the Headhouse site was also agreed.

Public engagement

5.1.9 During the Euston Cavern Headhouse design development, public engagement activities were undertaken. In July 2018, the design team attended five events to seek feedback on the proposals for the above ground structures in the Euston approaches. The events were attended by 98 people and attendees were able to provide comments at the events and also online by return to the Freepost address provided. The feedback received from the community on the design was focused on the following key areas; design changes to the reference design, the material finishes of the headhouse, planting and ecology in the vicinity of the headhouse and the headhouse boundary design.

5.1.10 Further public engagement was undertaken in March 2021 to provide the community an update on the design development. Two virtual events were held where the design team shared key design updates and invited feedback on the updated design. The feedback received during the two sessions covered generally the following areas: headhouse materiality, design response to the local setting, construction impacts on the local residents, operational noise impacts, the massing of the headhouse and parking and access.

Table 6: Pre-submission Consultation with LPA and Statutory Consultees

Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
London Borough of Camden	7th March 2018	Pre-application meeting	SCSJV to provide information on the technical requirements for the intervention shafts within the Euston Approach.
	6th June 2018	Pre-application meeting	SCSJV presented design updates on the Euston Shafts.
	19th March 2020	Pre-application meeting	LBC requested SCSJV to explore brick cladding on the PVE level headhouse further and provide an update on the massing of the headhouse.
	25th March 2020	Pre-application meeting	LBC requested confidence that the design was going to reduce the massing of the headhouse building as much as possible and requested details from independent design review panel.

Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
	8th April 2020	Pre-application meeting	Headhouse sizing still to be confirmed and SCSJV still reviewing materiality and design.
	22nd April 2020	Pre-application meeting	SCSJV still developing façade options to respond to LBC comments.
	28th July 2020	Pre-application meeting	LBC requested SCSJV to explore perforated brick cladding on the PVE level of the headhouse to screen the louvres.
	8th September 2020	Pre-application meeting	LBC requested SCSJV to provide further detailing on the proposed brick treatment on the exterior façade of the headhouse building, entrance splay and pier/copping stone and elevation drawing of the headhouse.
	9th September 2020	Pre-application meeting	LBC requested further details on design and advised on consultation.
	9th February 2021	Pre-application meeting	LBC generally positive with the direction of the design of the headhouse.
	23rd February 2021	Pre-application meeting	LBC raised queries on planting design, parapet height reduction, lighting and SUDS.
	27th April 2021	Pre-application meeting	LBC indicated support of a lower parapet option but raised concerns on the addition of a restraint system involving a guardrail to the Headhouse roof.
	16th June 2021	Pre-application meeting	SCSJV provided an update on the massing of the headhouse.
	6th October 2021	Email	LBC requested further information regarding the impacts of the proposed green roof (now omitted).
	4th November 2021	Email	LBC requested further design details and accepted the rationale behind the

Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
			proposed red brick. LBC requested further greening to the car park, SCSJV to consider this. LBC don't consider there to be a need for the roof railing to the headhouse. SCSJV to provide additional details.
	2nd November 2021	Pre-application meeting	LBC generally in agreement with the proposals but still requested some further design details. SCSJV explained the need for the guardrail detail.
	23rd November 2021	Pre-application meeting	LBC raised concerns on the scale and positioning of the guardrail to the Headhouse roof. SCJV to provide further details.
	23rd February 2022	Pre-application meeting	Page turn of Schedule 17 drawings and documents.
	14th June 2022	Pre-application meeting	Review of final LBC queries.
The Crown Estate	21st August 2019	Pre-application meeting	Requested that the design reflect the character of the local historic environment and integrate planting where possible.
	5th March 2020	Pre-application meeting	TCE queried whether further brick could be introduced for the exterior of the building at PVE street level.
	24th June 2020	Pre-application meeting	TCE requested further information in relation to the screening/planting that could be accommodated within the site compound.
	30th July 2020	Pre-application meeting	TCE supported the introduction of additional brick treatment to the façade of the building and requested the introduction of a green wall be explored.
	16th July 2021	Pre-application meeting	TCE have requested that the design team change the brick colour to red brick to be

Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
			in line with the adjacent Park Village Studios building.
	17th Nov 2021	Pre-application meeting	TCE responded positively to revised Headhouse design, with red brick construction.
Historic England	May 2018	Pre-application meeting	SCSJV to provide design information on the temporary and permanent impacts on the local heritage assets. HE requested that the design of the headhouse building reflect the character of the two environments that it transcends within; rail corridor and Park Village East street level.
	9th March 2020	Pre-application meeting	HE referred back to their earlier advice provided at the meeting held in May 2018.
	25th May 2021	Response to written pre-application advice request	SCSJV applied to Historic England for pre-application advice on 17 May 2021. Historic England responded to state that they did not consider it necessary for them to participate in pre-application discussions – they would instead respond as a statutory consultee at the planning application stage.
The Greater London Archaeological Advisory Service (GLAAS)	30th September 2020	Statutory Consultee Meeting	GLAAS confirmed no archaeological interest that affected the Euston Cavern Headhouse design.
Public Engagement	July 2018	Five events held and a total of 98 people attended.	The key feedback received was in respect to the following themes: - Design changes to the reference design - The material finishes of the headhouse - Planting and ecology in the vicinity of the headhouse - Headhouse boundary design
	March 2021	Two webinars	The key feedback received was in respect to the following themes:

Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
			- Headhouse materiality - Design response to the local setting - Construction impacts - Operational impacts - The massing of the headhouse - Parking and access

6 Construction Programme

6.1.1 A high level programme for the works subject to this submission and how they fit into the overall programme for other works in the area is contained in **Table 7** below. The programme for works on site may vary from the indicative dates shown.

Table 7: Proposed Programme and Sequence of Works

Anticipated Start on Site Date (quarter/year)	Activity	Estimated Completion of Works (quarter/year)
Q4 2021	Site mobilisation	Q1 2022
Q2 2022	Main Shaft / Headhouse Piling	Q3 2022
Q2 2024	Main Shaft SCL	Q3 2024
Q1 2026	Internal structure & headhouse construction	Q3 2027

7 Other Consents

7.1.1 Other main consents likely to be required for the works are summarised in **Table 8** below. Consent requirements may alter during design development and further consents not identified in **Table 8** may be required.

Table 8: Other Consent Requirements

Consent	Works Requiring Consent	To be submitted / approved
HS2 Act, Schedule 4, Part 1	New temporary accesses to the Euston Cavern Headhouse construction worksite	To be submitted
HS2 Act, Schedule 4, Part 1	New permanent access to the Euston Cavern Headhouse operational compound	To be submitted
HS2 Act, Schedule 33, Part 5	Permanent, temporary works or operations that are likely to affect the flow, level or quality of groundwater.	Exemption agreed (9 March 2021)
HS2 Act, Schedule 2	Permanent sewer connection from construction and permanent compound	To be submitted
Any other relevant Schedule 17 Plans and Specifications submissions for adjacent or associated works	Bringing into Use scheduled works comprising the vent shaft at Euston Cavern Headhouse	To be submitted
	Plans and Specifications – Park Village East Berm Wall and Euston Scissor Cut Portal	Approved on 17 March 2021 (LPA ref: 2021/0126/HS2)
	Plans and Specification – Park Village East parapet wall	To be submitted
	Site Restoration – Park Village East	To be submitted