

1MCo3 Main Works – Contract Lot S1

Heritage Agreement Method Statement (HAMS) for Monitoring and Conservation Management of Ground Movements due to Below Ground Construction at York & Albany Hotel, 127-129 Parkway – ADP-ESCT-02

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Contents

1	Introduction	4
1.1	Project Context - Schedule 18: Listed Buildings	4
1.2	Purpose	4
1.3	Scope	6
1.4	Engagement	7
1.5	Assumptions & Limitations	8
2	Definitions and abbreviations	9
3	Responsibilities	10
3.1	Management and design	10
4	Building Information	11
4.1	Asset Identification	11
4.2	Extent & Context	11
4.3	Description	21
	Exterior	22
	Interior	23
4.4	Setting	24
4.5	Condition	25
4.6	Significance	26
5	Asset Protection - Design Rationale	26
5.2	Technical Standard	26
5.3	Phase 3 Ground Movement Assessment	27
5.4	Building Damage Assessment	27
	Heritage Sensitivity and Magnitude of Effects	29
	Environmental Minimum Requirement	29
6	Mitigation	30
6.2	Asset Protection Management Plan	30
6.3	Detailed Mitigation Design	31
7	Monitoring	31
7.2	Ground movement baseline trends	32
7.3	Additional monitoring requirements and options	33
7.4	Preferred monitoring system	34
7.5	Monitoring Specification	34

Building	35
7.6 Installation, maintenance, removal and repair	37
Location	37
Installation	37
Removal	38
Access	39
8 Conservation Management	39
8.1 Visual Inspection	39
8.2 Trigger Values	40
8.3 Monitoring Action Plan	40
8.4 Conservation (repair) schedules	41
9 Heritage Conservation Summary	42
10 References	43
Appendix A – Instrumentation Design Drawings (as proposed in SCSjv WP203.3 Designer Monitoring Plan – 127 & 129 Parkway (1MCo3-SCJ_ABX-ST-PLN-SSo1_SLo3-000001))	44

List of figures

Figure 1 Site location

Figure 2 York & Albany, 127 & 129 Parkway main elevation

Figure 3 Plan based on Regent's Park Masterplan

Figure 4 Greenwood Map of London 1828 (York & Albany circled)

Figure 5 Greenwood Map of London 1828 (York & Albany detail)

Figure 6 Benjamin Davies' Topographical Survey of the Borough of Marylebone (1834)

Figure 7 Ordnance Survey 1878

Figure 8 1854 proposals by James Pennethorne

Figure 9 Ordnance Survey 1895

Figure 10 Ordnance Survey 1915

Figure 11 Plan for nos. 127 & 129 Parkway (1922) from the National Archives

Figure 12 faience-tiled inter-war pub frontage

Figure 13 ground floor plan submitted with planning application LPA: 2006/0215/P for refurbishment undertaken in 2006.

Figure 14 historic staircase

Figure 15 Phase 2 GMA contour

Figure 16- Example of a 3D prism

Figure 17 Example of tiltmeter

List of tables

Table 1 – List of abbreviations and definitions used in this document	9
Table 2 –Environmental Statement Assessment	30
Table 3 - References	43

1 Introduction

1.1 Project Context - Schedule 18: Listed Buildings

- 1.1.1 High Speed Two (HS2) is a network of new high speed lines across Britain planned and built in two phases: Phase One will connect London with Birmingham and the West Midlands. Phase Two will extend the route to Manchester, Leeds and beyond. Powers to construct and operate the railway have been secured through the High Speed Rail (London – West Midlands) Act 2017 (the Act), which received Royal Assent on 23 February 2017.
- 1.1.2 The Secretary of State has appointed High Speed Two (HS2) Ltd as the nominated undertaker responsible for delivering Phase One of HS2. HS2 Ltd is an executive non-departmental public body, sponsored by the Department for Transport. Skanska Costain Strabag Joint Venture (SCSjv) is the Main Works Contractor constructing thirteen miles of twin-bore tunnels on the HS2 route to its southern terminus at Euston.
- 1.1.3 Schedule 18 'Listed Buildings' to the Act concerns how legislation in respect of listed buildings under the Planning (Listed Buildings and Conservation Areas) Act 1990 ("the 1990 Act") applies to the Phase One works. Paragraph 1 of Schedule 18 disapplies aspects of this legislation from the Phase One works. There is no requirement for listed building consent for the purpose of:
- demolition, alteration or extension in respect of the listed buildings set out in Schedule 18 Table 1, or which are listed on or after 30 September 2013
 - heritage or monitoring works in respect of the listed buildings set out in Schedule 18 Table 2, or which are listed on or after 30 September 2013.
- 1.1.4 Following Royal Assent, HS2 Ltd entered into Heritage Agreements with London Borough of Camden and with Historic England (dated 20th February 2017) concerning the Schedule 18 listed buildings within the London Borough of Camden.
- 1.1.5 Clause 2.1 of the Heritage Agreement permits HS2 to undertake works to Schedule 18 listed buildings, subject to a Heritage Agreement Method Statement (HAMS). This details the proposed works and is submitted to the local authority for their approval, in consultation with Historic England where required.

1.2 Purpose

- 1.2.1 This HAMS:
- addresses the requirement of Clause 2.1 of the Heritage Agreement to submit a method statement describing heritage and monitoring work designed to protect heritage significance and avoid or minimise harm to the historic fabric and setting of 127 & 129 Parkway. It outlines an asset protection management strategy, design

rationale and technical method statement for installing monitoring devices, for undertaking generic remedial repairs to historic fabric and arranging urgent temporary works if building damage predictions are exceeded and present additional risk to building structure/serviceability

- is the subject of a Schedule 18 application requesting approval for the monitoring and conservation management of ground movements due to below ground construction at York and Albany Hotel. This Schedule 18 application is prepared according to procedures set out in HS2 Phase One Heritage Consents Strategy (HS2-HS2-EV-STR-000-000008).

1.2.2 The HAMS informs:

- stakeholders, including the consenting authority - it explains how SCSjv will:
 - avoid or minimise harm to heritage significance during tunnel construction through the careful installation and operation of building movement monitors at 127-129 Parkway
 - use monitoring information to manage timely responses to building movement and undertake conservation repair works at 127-129 Parkway in co-ordination with tunnel construction.
- Asset Protection Teams - describes heritage conservation measures to be incorporated in sub-contractors' Risk Assessment and Method Statements (RAMS) when undertaking works for heritage and monitoring purposes at 127 & 129 Parkway.

1.2.3 This HAMS contains the following information:

- an up-to-date location plan (Figure 1)
- statement describing the heritage significance of the listed building (section 4 Building Information)
- a description of the relevant HS2 below ground construction works and predicted building damage (section 5.3 Phase 3 Ground Movement Assessment (GMA))
- a specification for the proposed monitoring instrumentation and a method statement for installation, maintenance, removal and conservation repairs (sections 7 Monitoring)
- drawings at a suitable scale showing the specified instrumentation locations (Appendix A).

1.2.4 This HAMS also describes:

- a mitigation design rationale (section 6 Mitigation) and conservation management plan (section 8 Conservation Management) for undertaking predicted remedial repair to avoid or minimise the potential risk of harm or loss of heritage significance at the

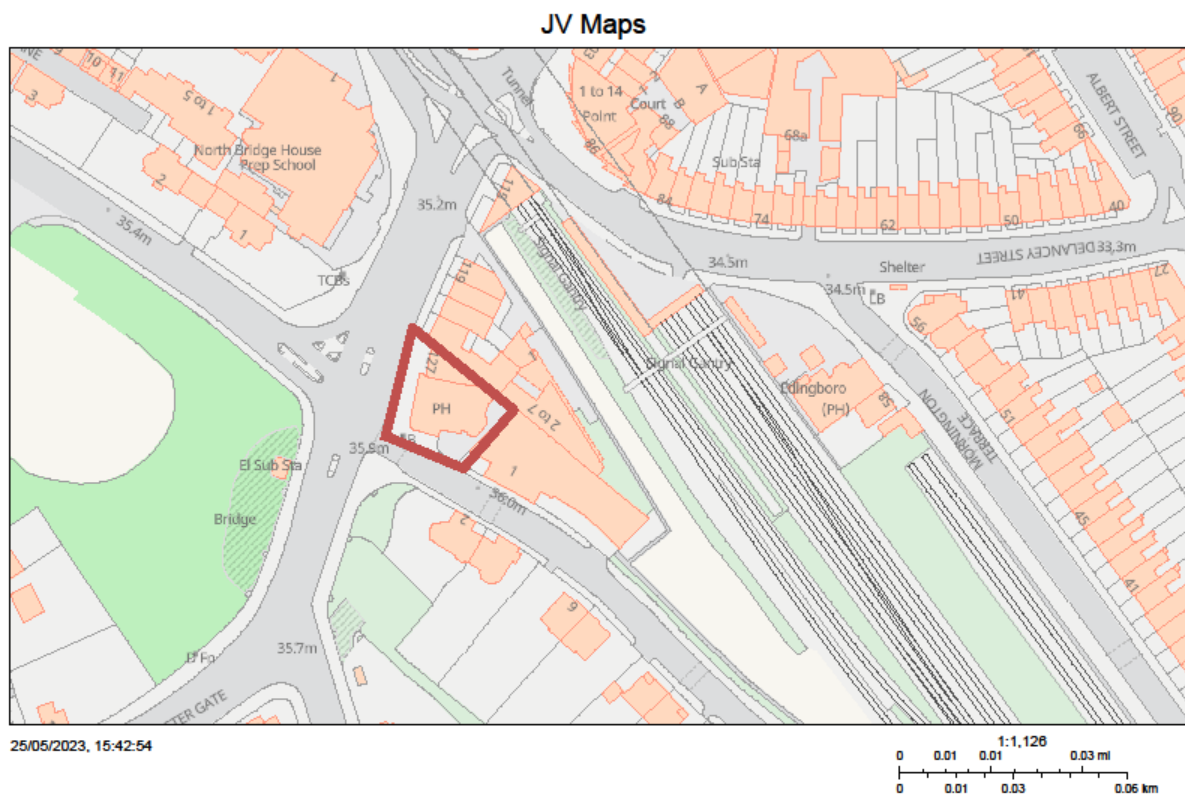
listed building.

1.3 Scope

York and Albany Hotel, 127 and 129 Parkway includes a three-storey public house (No.129) designed and built by John Nash as part of the 1823 masterplan for Regent's Park. An attached two storey stable/garage (No.127) is a later infill, subservient in scale and character to the pub, which has been integrated into a remodelled and extended interior that now operates as a hotel and restaurant venue. The Hotel is situated on the west side of the Network Rail (NR) cutting approach to Euston Station (Figure 1 (prepared using OS 1:126 scale) and Figure 2).

- 1.3.1 York and Albany Hotel, 127 and 129 Parkway, a grade II listed building (list entry 1113147), is included in Schedule 18 (Table 2: Buildings authorised to be altered or extended for heritage or monitoring purposes).

Figure 1 - Site location



IMPORTANT: THIS DOCUMENT IS UNCONTROLLED
The data shown within this map could be out-of-date. Please ensure that you are always using the latest available data

Figure 2 –York & Albany, 127 & 129 Parkway main elevation



- 1.3.2 This method statement is for temporary installation of instruments to accurately monitor the heritage asset prior to, during and following HS2 permanent construction works. It is a precautionary procedure to identify ground movements and resulting building structural responses so that appropriate measures to protect the asset can be deployed and engaged to prevent harm to heritage significance.
- 1.3.3 Specifically, monitoring instruments will provide data to inform remedial measures that are further outlined in this method statement as dynamic components of a conservation management plan designed specifically as a response to the predicted effects of HS2 tunnel construction.

1.4 Engagement

- 1.4.1 HS2 Phase One Heritage Consents Strategy (Document no.: HS2-HS2-EV-STR-000-000008) require pre-submission discussion with the relevant local authority and Historic England (where applicable) on works affecting Schedule 18 listed buildings. The purpose of this discussion is to agree action to protect the significance of Schedule 18 Listed Buildings.
- 1.4.2 Pre-submission consultation with London Borough of Camden and Historic England on proposals for temporary installation of monitoring devices by fixing to the listed building occurred during a regular monthly meeting held on 1 February 2023.

1.4.3 In response the London Borough of Camden Senior Planner (Conservation) advised SCS Railways that a HAMS for York and Albany Hotel monitoring and conservation management should be submitted for Schedule 18 consent.

1.4.4 The Camden conservation team have further advised on the proposals detailed in this HAMS. The monitoring and conservation management design set out in the HAMS benefits from the technical advice provided.

1.5 Assumptions & Limitations

1.5.1 This method statement has been produced using information generated by SCSjv/Design House, SCSjv sub-consultants and sub-contractors and from online resources available at the time of writing.

1.5.2 The SCS Asset Protection, Engagement and Monitoring Teams visited the site to undertake internal measured survey, external inspection and a CCTV drainage survey. Further sources of information include historical building plans & sections obtained from the London Borough of Camden, information provided by agents acting for the owner of York & Albany, and the findings of targeted intrusive investigations conducted by GBG Ltd/Capel in 2023. Information and images presented in this method statement include the result of these site observations and surveys.

1.5.3 Relevant technical guidance and analysis that informed the preparation of this HAMS are available on request, including:

- HS2-HS2-CV-STD-000-000004 Po3 Technical Standard - Civil Engineering Instrumentation and Monitoring ·
- HS2-HS2-TN-STD-000-000005 Po3 Technical Standard - Ground movement and assessment from underground construction
- HS2 Specification for Civil Engineering Works' Series 4500 – Instrumentation and Monitoring' (HS2-HS2-CV-SPE-000-014500)
- HS2-H S2-EN-STD-000-000009 Technical Standard – Sound, Noise and Vibration Instrumentation and Monitoring · High Speed Rail London-West Midlands)
- HS2 Environmental Minimum Requirements Annex 1: Code of Construction Practice Para 13.2.18 to 13.2.31 <https://www.gov.uk/government/publications/environmental-minimum-requirements>
- SCSjv Phase 3 Ground Movement Assessment Report - Building Assessment Euston Cavern and Shaft - Euston Throat West S1 (1MCo3-SCJ_SDH-GT-REP-SSo1_SL03-000018 Co3.2)
- SCSjv Survey for Design Assessment [Heritage] York & Albany Hotel, 127-129 Parkway, London, NW1 7PS, SCSMW_03249 [Heritage] (1MCo3-SCJ_OTB-PM-REP-

S000-000011)

- SCSjv Designers Monitoring Plan - Area East Buildings Package 2 (EB2) - S1MDL
Code: Document no.: 1MCo3-SCJ_SDH-GT-PLN-SSo1-000002
- SCSjv WP203.3 Designer Monitoring Plan – 127 & 129 Parkway Document no.:
1MCo3-SCJ_ABX-ST-PLN-SSo1_SLo3-000001
- SCSjv Historic Building Report for the York & Albany Pub 127 Parkway (SCSMW 03249) and 129 Parkway Document no: 1MCo3-SCJ ABX-EV-ASM-SSo1_SLo3-000001
- SCSjv Area East Asset Protection Section 1 – York and Albany Interpretation of Findings from Intrusive Investigations Document no.: 1MCo3-SCJ_BLY-ST-REP-SSo1_SLo3-000005
- SCSjv GMA Refinement and Mitigation Report Area East Asset Protection Section 1 York and Albany Hotel APD-ESCT-01 (1MCo3-SCJ_RBG-ST-REP-SSo1_SLo3-000003)
- The Crown Estate Guidelines and Standard Specification to Architects for the Regent's Park, Kensington Palace Gardens, St. James's, Pall Mall South, Haymarket and Lower Regent Street Residential and Commercial Estates, Seventh Edition January 2014

2 Definitions and abbreviations

Table 1 – List of abbreviations and definitions used in this document

Abbreviation	Definition
APES	Additional Provision Environmental Statement
DC	(Building) Damage Category
DH	Design House
EMR	Environmental Minimum Requirements
ES	Environmental Statement
GIS	Geographical Information Systems
GMA	Ground Movement Assessment
HAMS	Heritage Agreement Method Statement
HS2	High Speed 2 Ltd
I&M	Instrumentation and Monitoring
OS	Ordnance Survey
PDF	Portable Document Format

Abbreviation	Definition
NR	Network Rail
RAMS	Risk Assessment Method Statement
SCJv	Skanska Costain Joint Venture
SCL	Sprayed Concrete Lining
SCSjv	Skanska Costain Strabag Joint Venture
SES	Supplementary Environmental Statement
TBM	Tunnel Boring Machine

3 Responsibilities

3.1 Management and design

- 3.1.1 HS2 is responsible for meeting the commitments described in HS2 Information paper C3: Ground Settlement. Following the processes set out in Information paper C3, SCSjv has considered how harm to third party property assets can be avoided or minimised in advance of tunnel construction and is planning appropriate remedial works during or following construction.
- 3.1.2 Asset Protection activities are the responsibility of the SCSjv Area Technical Lead, supported by the Asset Protection core team, including the SCSjv Heritage Technical Lead.
- 3.1.3 Technical specialists provide additional support:
- SCSjv Survey for Design Assessment [Heritage] York & Albany Hotel, 127-129 Parkway, London, NW1 7PS, SCSMW_03249 (1MCo3-SCJ_OTB-PM-REP-S000-000011) was prepared following a visual inspection by Byrne Looby
 - Phase 3 Ground Movement Assessment S1 (1MCo3-SCJ_SDH-GT-REP-SSo1_SL03-000018 Co3.2) provided by Design House (DH), using baseline data simulating the phased construction of the excavation and tunnelling works obtained from the 'North' and 'Central' ETW LS-DYNA models
 - Internal intrusive site investigation was undertaken by framework sub-contractor GBG/Capel and an interpretive report (1MCo3-SCJ_BLY-ST-REP-SSo1_SL03-000005) produced by sub-consultant Byrne Looby
 - Historic Building Report (1MCo3-SCJ ABX-EV-ASM-SSo1 SL03-000001) is prepared by framework sub-consultants Alan Baxter Ltd
 - Mitigation Report (1MCo3-SCJ_ABX-ST-ASM-SSo1_SL03-000002) and Designer's

Monitoring Plan (1MCo3-SCJ_RBG-ST-PLN-SSo1_SLo3-000003) are prepared by framework sub-consultants Robert Bird Group.

4 Building Information

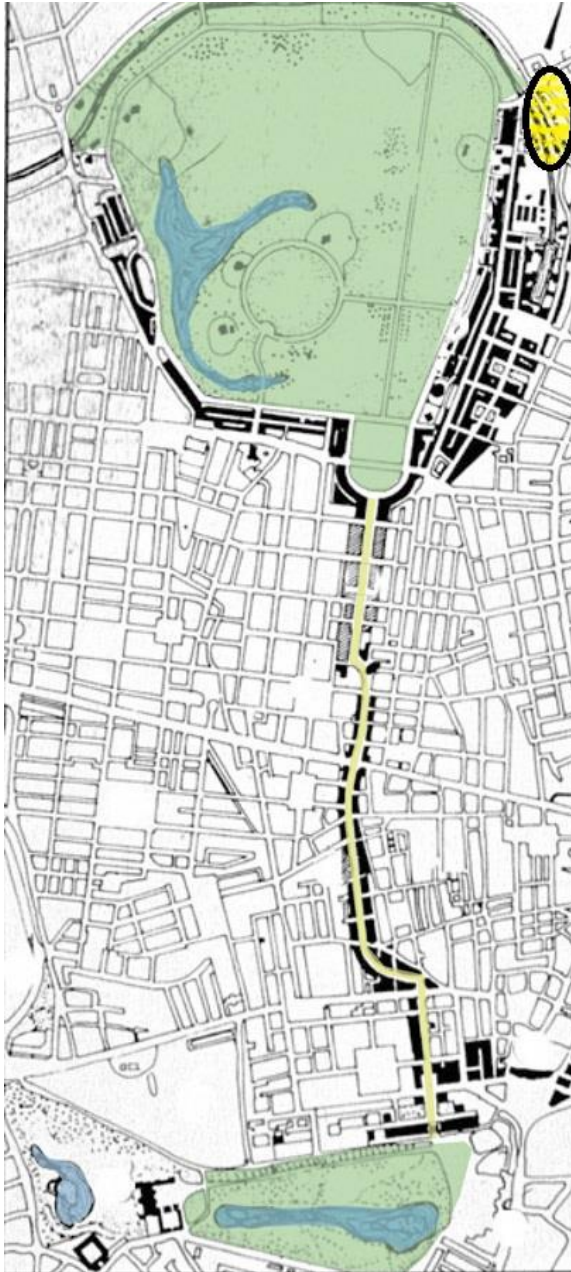
4.1 Asset Identification

- 4.1.1 The 'York and Albany Tavern,' a historic architectural and social focal point at the junction of Parkway and Park Village East, was built shortly in advance of the detached villas laid out between 1826 and 1832 to Nash's Regent's Park village suburb design. It is named after the Duke of York & Albany, 2nd son of George III and brother to the then Prince Regent.
- 4.1.2 The ground floor has been totally remodelled internally and externally to form a large open plan space that extends across 127 and 129 Parkway. Internal ground floor cross walls were progressively removed during the 20th century, whilst retaining the stair layout from ground floor to the upper storey of no. 129.
- 4.1.3 A major refurbishment and comprehensive remodelling conducted in the late 20th century lowered and strengthened the basement level and connected a rear three storey plus basement hotel extension to the historic building by a multi-storey glazed link.
- 4.1.4 The primary façade and floor plans to 129 Parkway remains unaltered at first floor level and above. However, a notable alteration that contributes to the significance of the building is the early 20th century four-bay faience tile clad entrance frontage with large windows and integral doorways. This replaced a previous façade installed when the ground floor was extended creating a first-floor balcony that overlooks Parkway and wraps around the return into Park Village East, following the line of an original external colonnade. Corresponding sections of the original external load bearing masonry wall have been replaced with internal cast-iron columns supporting a metal beam inserted at first floor.

4.2 Extent & Context

- 4.2.1 Nash's Regent's Park masterplan envisioned a place of leisure for London's social, political and aristocratic elite. It provided ornamental parkland for the exclusive use of residents of villas and grand terraces bordering the Park to the east, south and west (Figure 3). The neoclassical Cumberland Terrace and Chester Terrace occupied the eastern edge. The neighbouring Park Villages (East and West), located to the north east, were designed as suburbs of Italianate and Gothic villas. These were bisected by the Collateral Cut, a branch of the Regent's Canal that terminated at a basin to the south at Cumberland Market.

Figure 3 Plan based on Regent's Park masterplan (Park Village East highlighted)



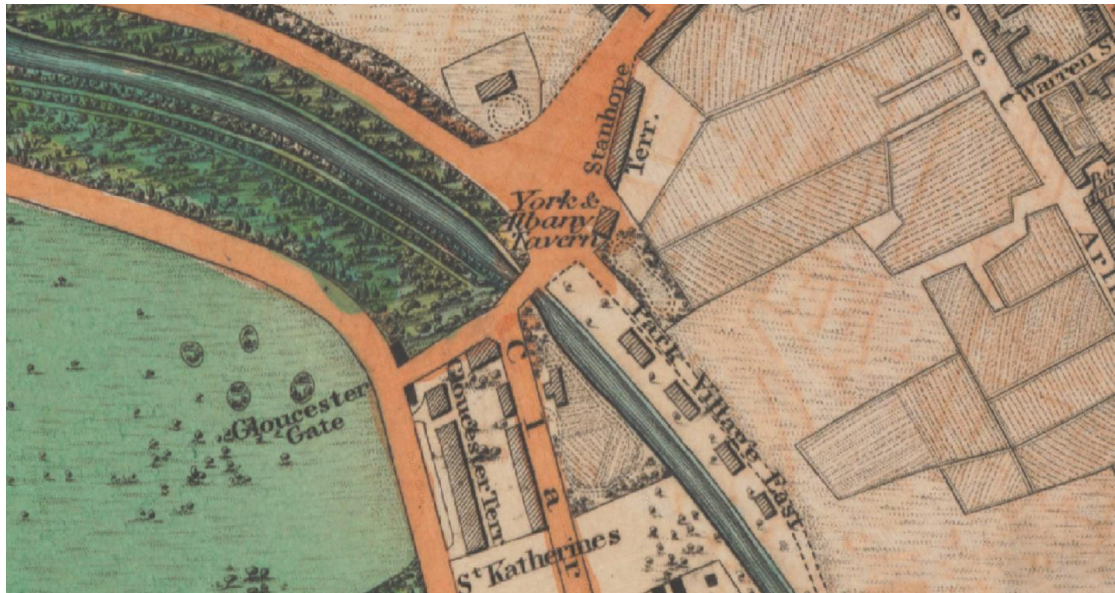
- 4.2.2 The York and Albany Tavern was constructed in c.1826-27 on land leased by John Nash. The 1828 Greenwood Map (Figures 4 & 5) shows that the eastern side of Park Village East had not yet been built and it is likely the pub was the first of the building to be constructed at the suburb estate.

Figure 4 Greenwood Map of London 1828 (York & Albany Tavern circled).



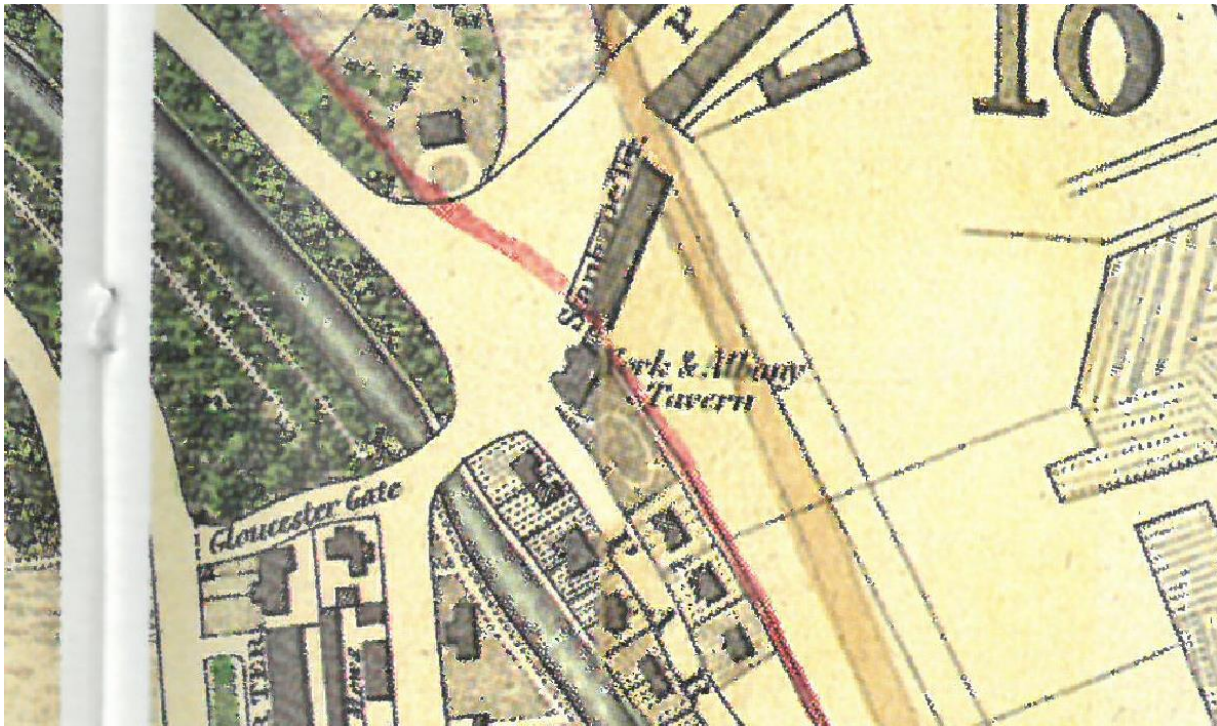
4.2.3 The Greenwood Map (Figure 5) also confirms that the building labelled 'York & Albany Tavern,' was purpose-built as a public house and that the Southampton Estate developed the adjoining 119-125 Parkway (formerly Stanhope Terrace) concurrent with Nash's Park Village East. The gap between the pub and Stanhope Terrace to the north, indicates that No. 127 Parkway had yet to be built, although it is likely to have served as stables from an early date. To the south east of the pub, a long garden is shown extending part of the length of Park Village East, understood to be the tea garden.

Figure 5 Greenwood Map of London 1828 (detail showing York & Albany Tavern)



- 4.2.4 Construction of a pub at the outset of a speculative development was common at the time. Girouard (Girouard, p. 37) noted that 'the pub was often the first stage of a speculative development, with the builder as the first licensee.' He cites an 1854 article in the Builder describing the "propinquity of these palaces to each other in Camden and Kentish New Towns is quite ridiculous". This arrangement had two advantages - the pub could be used by workers or used as an office during the building project and the lease for the licenced site could be sold for a good price to raise further capital for building.
- 4.2.5 Benjamin Davies's Topographical Survey of the Borough of Marylebone (Figure 6) shows that, even by 1834 the villas along the eastern side of Park Village East were still to be built. However the York & Albany Tavern was now fronted by two large bay windows (Figure 6). This is confirmed in 1835, when Charles Mayhew was commissioned by the Crown Estate to conduct a survey of Regent's Park. A series of regularly interspersed columns outside the principal building envelope suggests the presence of a street-facing portico wrapping around the building's west and south elevations, which support a canopy.

Figure 6 Benjamin Davies' *Topographical Survey of the Borough of Marylebone* (1834)



- 4.2.6 The opening of the London to Birmingham Railway in 1838 dramatically changed the Park Village East setting (Figure 7). The railway emerged from a tunnel into a cutting that followed the boundary to the rear gardens of the villas on the east side of Park Village East. This coincided with further development of residential estates to the east.

Figure 7 1878 Ordnance Survey

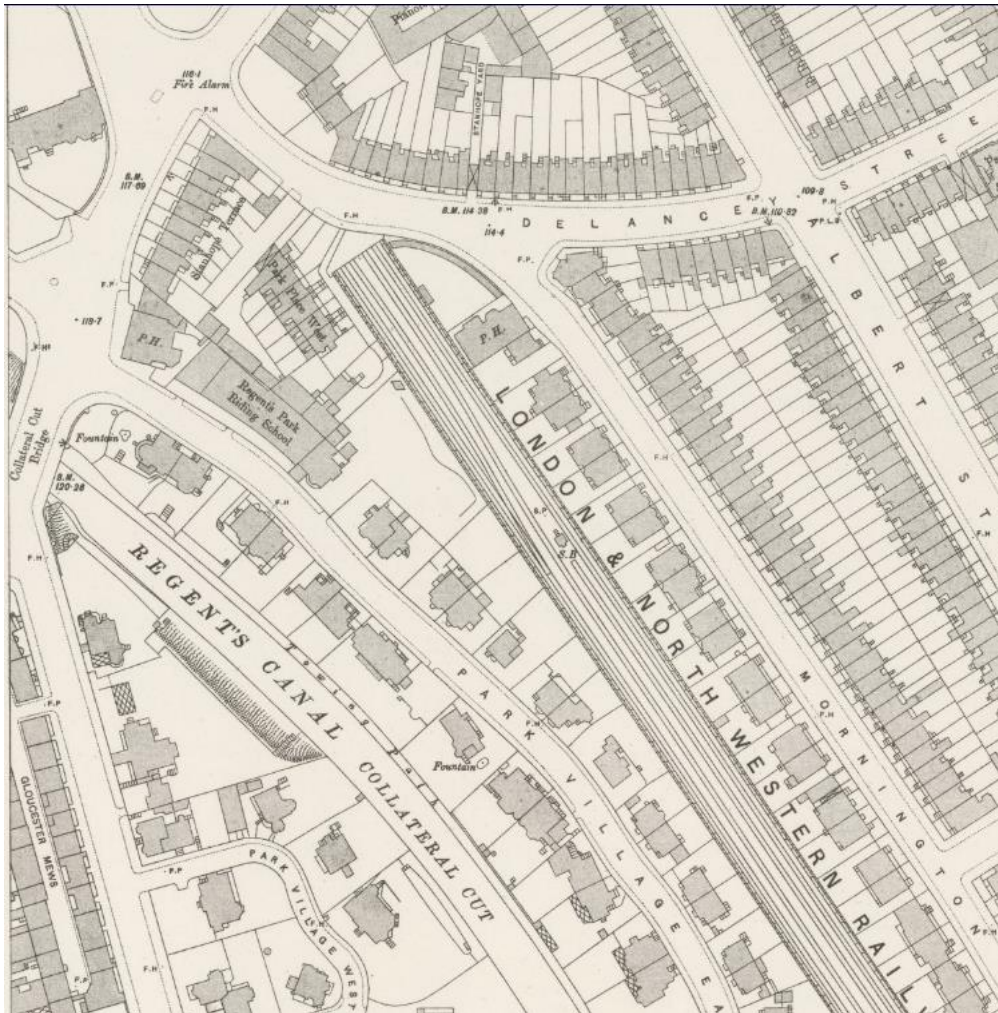


- 4.2.7 Housing development, concurrent with railway construction, infilled the Southampton Estate on the eastern side of the cutting, completing a contiguous pattern of residential streets through to Camden Town. Mornington Terrace mirrored the design code used by Nash at Park Village East, setting out semi-detached villas with rear gardens overlooking the railway cutting. The Edinboro Castle, corresponding to the York & Albany, is a landmark at the north end of Mornington Terrace, and establishes a pair of public house, located either side of the Parkway railway cutting, accessed from the principal commercial route from Camden Town to Regent's Park (Figure 7).
- 4.2.8 Proposals in 1854 by Nash's successor, architect James Pennethorne, show a series of alterations that expand the ground floor of the York & Albany (Figure 8). The most substantial change is the demolition of the west exterior wall and two bay windows, located behind the street-facing portico, and subsequent westward and southward extension of the ground floor up to the line of the former portico. To carry the load of the demolished ground-floor walls, five cast-iron columns were evenly interspersed along the building's former exterior wall line. The evolution of the stables occupying the adjoining triangular plot to form no. 127 progresses through insertion of a tap room within a single storey structure.

Figure 8 1854 proposals by James Pennethorne



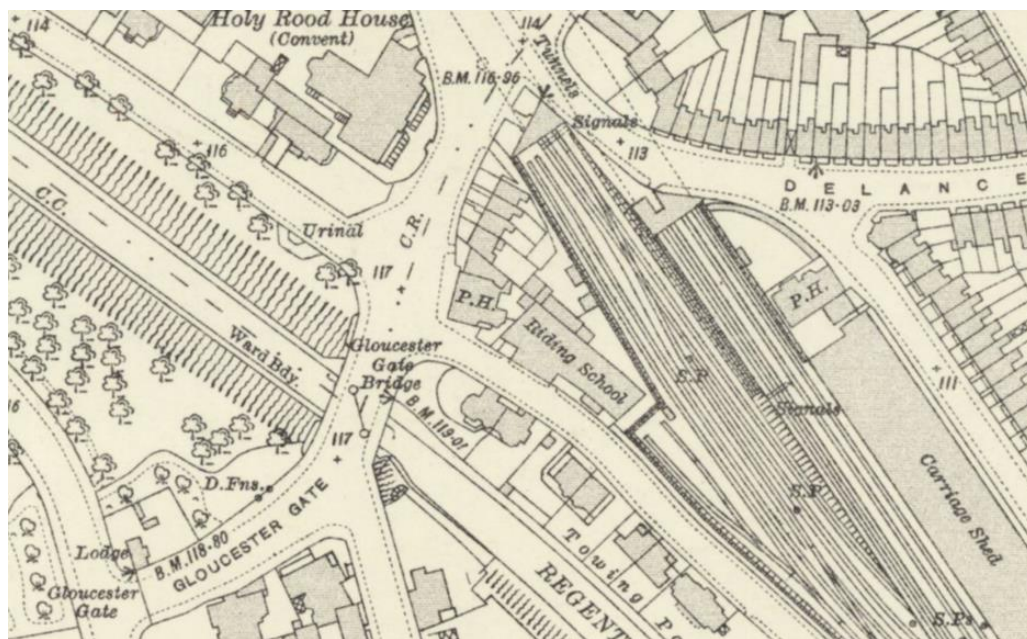
- 4.2.9 In 1892 a riding school constructed, infilling of the garden with a red-brick, Flemish-style building (No. 1 Park Village East) extending the length of the plot (Figure 9).



4.2.12 Nevertheless, change on this scale demanded an engineering and architectural design that could repair ruptured neighbourhoods. Stephenson and Nash's elegant architectural design provided a design template for the public realm that was adapted and subtly manipulated to respond to its immediate setting. A direct consequence of railway expansion at the beginning of the 20th century is a comprehensive Edwardian townscape that employed a refreshed form of architectural classicism to resolve disjointed late Georgian and Victorian residential suburbs into a more coherent form of culturally distinct neighbourhoods by:

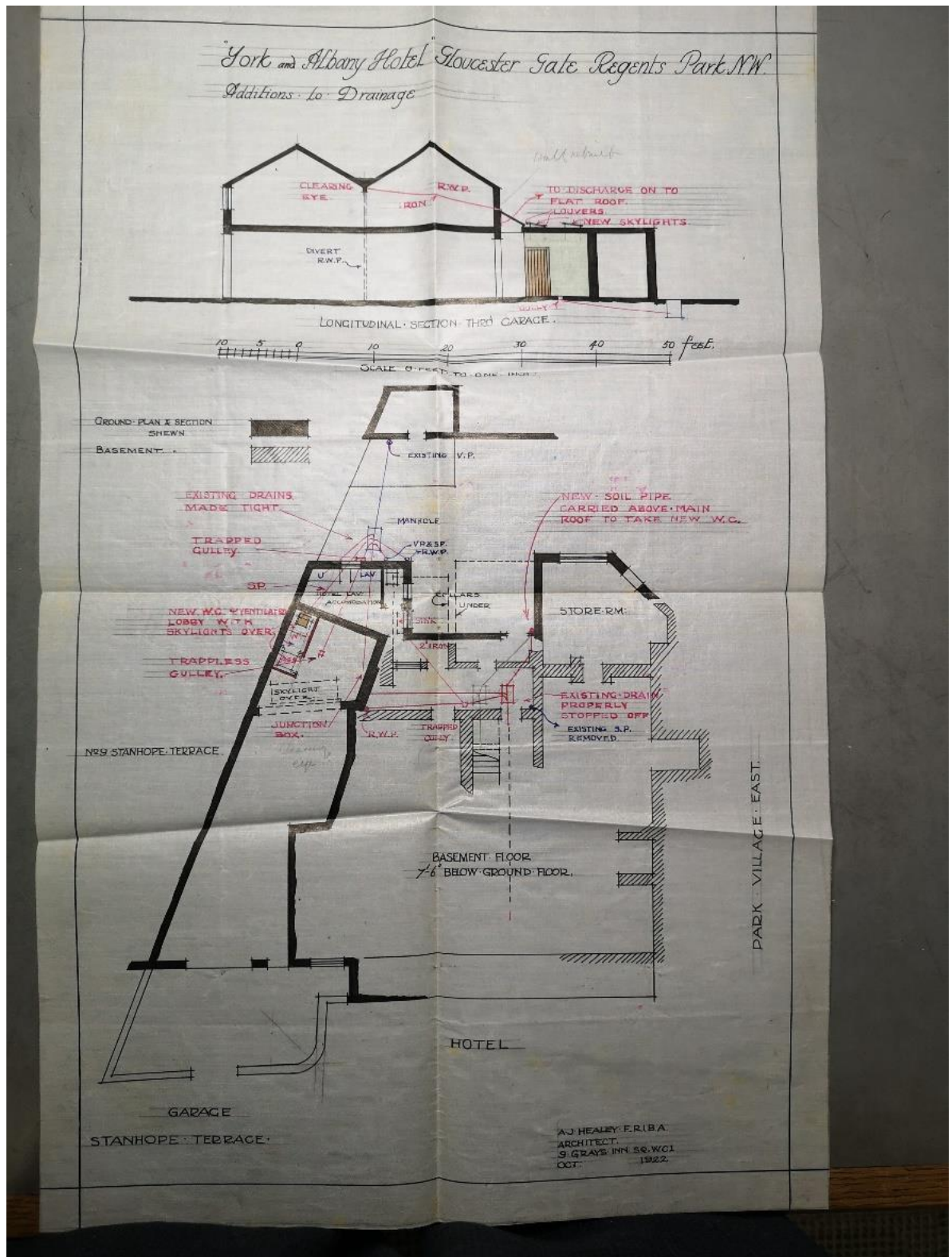
- knitting new railway infrastructure into the existing urban design
- simplifying connections and strengthening definition of neighbourhood boundaries
- creating new landmarks and streetscapes, such as Mornington Street Bridge and the Park Village East retaining wall and ornamental raised planters.

Figure 10 1915 Ordnance Survey Map



4.2.13 York & Albany, 127 & 129 Parkway undergoes very modest changes at this time - no. 127 is shown by 1904 to be two storeys with a staircase in the north-west corner of the site. Horse stables are shown in the eastern portion, while a coach house occupies the western range immediately off the street. A plan of 1922 indicates the building is later used as a garage (Figure 11).

Figure 11 Plans for Nos. 129-127 Parkway (1922), from the National Archives



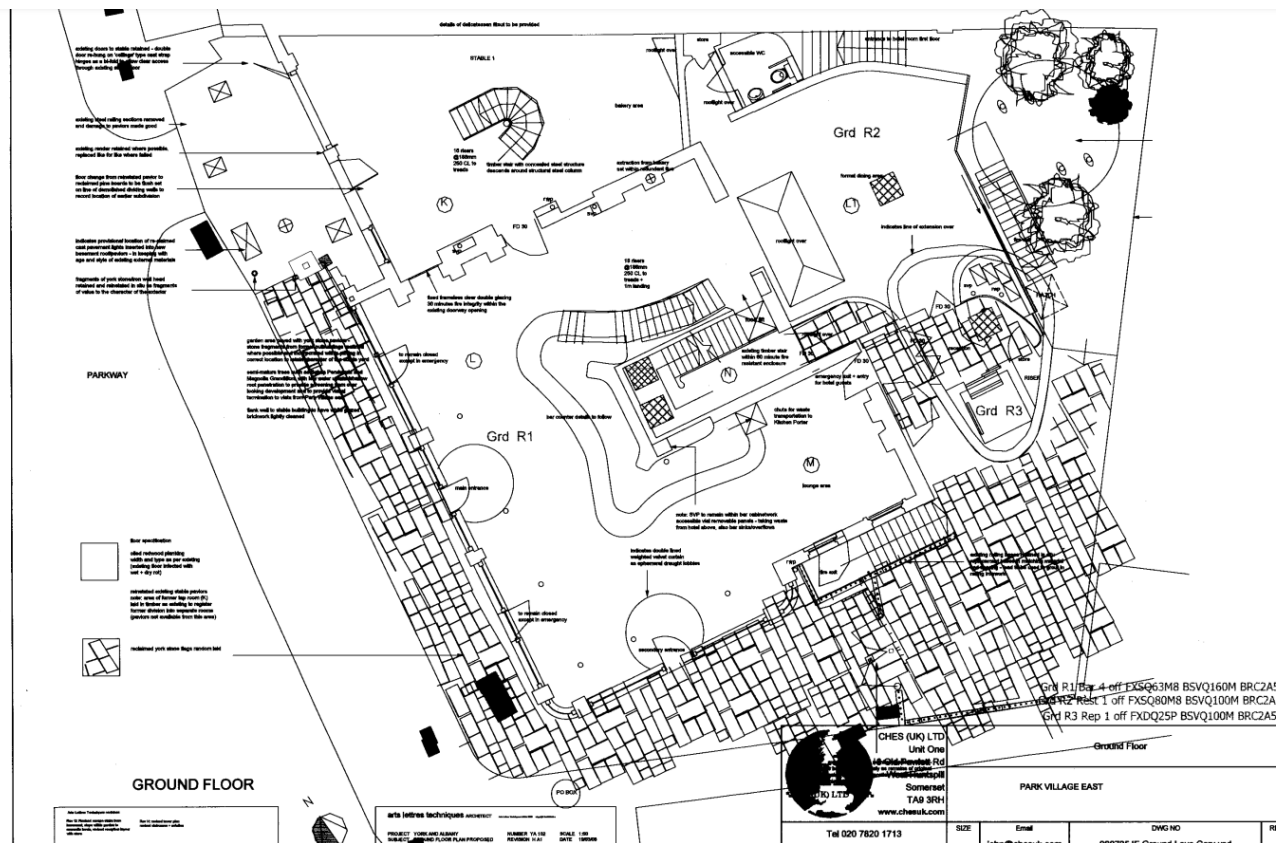
- 4.2.14 A ground-floor plan of the pub present in the deeds of 1937 shows that, by this date, the ground-floor pub front had been replaced with the faience elevation that can be seen today (Figure 12).

Figure 12 faience-tiled inter-war pub frontage



- 4.2.15 From 1922 until 1999, 127 Parkway had continuously function as a garage, although the pub had been derelict since the 1980s until the property was refurbished, underpinned and extended in 2006-8 (Figure 13; LPA: 2006/0215/P). Historic works that compromised the stability mechanism were fully and comprehensively remediated during the 2008 structural works.

Figure 13 Ground floor plan submitted with planning application LPA: 2006/0215/P for refurbishment undertaken in 2006.



4.3 Description

4.3.1 The Historic England list entry includes a brief architectural description.

York and Albany Public House, 127 and 129 Parkway (grade II, list entry number 1380134)

Public House (No.129) and stables (No.127). No.129 of c. 1826-7, No.127 mid C19. Earliest building associated with the Park Village East development by John Nash on land leased by himself. Stuccoed brick; slate roofs. EXTERIOR of No.129: north front of 3 storeys; 5-window range. Glazed tile ground floor inserted 1920/5 divided into 3 bays and glazed between the piers, wrapping round into west elevation. First floor with 5 arched French windows. Moulded string course at second floor, which is lit through 5313 unhorned sashes. Moulded cornice and balustraded parapet. 2 stacks on east wall plane, one to west wall. West elevation is 5-window range. Ground floor with 2 blocked ground-floor windows to right of 1920/5 frontage. Stucco scored as rustication. First-floor platband. 2 blind first-floor windows to left and 2616 unhorned sashes to right. Moulded second-floor string course continues. Second floor with 2 blind windows and 2313 unhorned sashes, separated by a blocked window. Balustraded parapet continues. Attached to south is a 2-storey; one-window range extension of early C20. INTERIOR of

No.129: ground floor opened into single retail area. Front wall supported on cast-iron columns. Bar counters and shelves of 1970s. To rear, in former billiard room, is a pyramid iron-framed roof light. Stick baluster open-string staircase with a ramped and wreathed handrail. First-floor assembly room occupies entire north frontage, with an office partitioned off at the east end. EXTERIOR of No.127: 2 storeys; 3-window range. Double timber carriage doors to left of a pedestrian door and a blind window. 3313 unhorned sashes to first floor. Roof with internal gable end stack to east. INTERIOR of No.127: paved stable flooring. Partitions and fittings removed.

- 4.3.2 An updated detailed description has been prepared to inform SCS asset protection considerations. Separate exterior descriptions are provided for both buildings, but a single interior description recognises that nos. 127 and 129 Parkway are now combined to serve as a single hospitality venue.

Exterior

127 Parkway

- 4.3.3 No. 127, to the north, is a two-storey building with basement. Its principal, street-facing elevation is of three bays and faces west onto Parkway. Its ground floor contains the entrance to the 'Street Pizza' section of the pub, comprising a northern bay containing a modern glazed concertina door (which appears to be integrated into a historic opening with the remnants of hinge leaves on either side of the door frame), followed by a second, modern timber doorway in the central bay, and terminated in the southern bay by a ten-over-ten sash window.
- 4.3.4 The first floor contains a further three bays of smaller, three-over-three sash windows with shallow segmental arched heads. The building is topped by a plain plat band and parapet. To the north, abutting the south elevation of No. 125 Parkway, is a broad pier extending from ground-floor to parapet level, and at roof-level, a chimney extends from No. 127 to the roof ridge of No. 125.
- 4.3.5 The forward portion of No. 127 is spanned by a shallow pitched slate roof with its slopes oriented east-west. The western slope of its rear section, however, is glazed, while the east slope is slate.

129 Parkway

- 4.3.6 129 Parkway, the principal pub structure, is a three-storey building with basement. Its external ground floor elevation is characterised by an inter-war, yellow and green faience-clad façade which extends from the principal building line of the south and west elevations onto the street. Modern awnings cover the three glazed bays of the building's street-facing, west elevation, and the façade curves southward as it follows the bend of the Park Village East junction.
- 4.3.7 The first and second floor are each of five bays. The first floor comprises a piano nobile of tall balcony windows topped by semi-circular fanlights and set into tall round-headed arched

openings with deep jambs. A moulded string course separates the first and second floors, with the latter featuring a further five bays of three-over-three sash windows set into segmental-arched openings. The building is topped by a cornice followed by a simple balustrade interspersed with six rectangular piers. All four elevations of No. 129 from the first floor upwards are rendered in cream-coloured stucco scored with light rustication.

- 4.3.8 The south elevation of No. 129 Parkway, the only other street-facing elevation onto Park Village East, features a loosely five-bay arrangement. The protruding faience shopfront returns immediately before the easternmost two bays of the ground floor, which are instead two six-over-six sash windows set into the more deeply scored banded rustication of the principal pub building.
- 4.3.9 The first floor of the south elevation, unlike the principal, west elevation, contains a central blind bay, leaving a pair of six-over-six sash window bays on its east and west ends. The second floor contains five bays of segmental-arched, three-over-three sash windows. However, the central window opening has been blocked. At parapet level, a four-pot chimney stack is located to the centre-west of the balustrade.
- 4.3.10 Adjoining onto the rear, east elevation of No. 129 Parkway, and visible from Park Village East, is a modern three-storey extension of constructed in the early 2000s. It connects to the building via a fully glazed linking section, while the easternmost portion of the extension presents a fully rounded façade to the street with windows only on its north-eastern side.

Interior

- 4.3.11 As the building is used as a restaurant and as a hotel, it was not possible to view all the interior spaces. Based on available floorplans, the historic plan form is still partially discernible at first- and second-floor levels, as confirmed during examination of a partial section of the first floor.
- 4.3.12 The inspection focussed on those areas where there was clear evidence for substantial alteration in particular the principal ground-floor hospitality space and basement service areas.
- 4.3.13 At both basement and ground-floor levels, there is an opening in the party wall between Nos. 127 and 129, a modern insertion for the restaurant. The basement of No. 129 was lowered to maximise space and is several steps lower than the basement of No. 127. There is a large, modern staircase (brick and concrete) with a splayed basement end leading into the lower-ground level of No. 129 which is built against the historic north wall of the stair shaft. Now occupied by the kitchen and additional seating, all fabric is of modern appearance.
- 4.3.14 At ground-floor level, the historic fabric is fragmentary. Some of the cornicing, flower and foliage ceiling decoration is of late-19th century appearance. Key-hole intrusive survey undertaken in 2022 found that the plaster decoration above the ground-floor restaurant space was not original and suspended by lightweight steel elements from the floor structure above. Equally, the ceiling rosettes are modern additions, and to the rear of the pub, the cornicing

and ceiling decorations are also of modern appearance although designed in a sympathetic style.

- 4.3.15 The iron columns at ground-floor level, first inserted in the mid-nineteenth century, are visible. The timber flooring is a recent replacement. To the rear of the pub, the floor plan has been curtailed by the addition of the c.2006 modern hotel extension.
- 4.3.16 The most prominent survival of historic fabric in the building is the dog-leg staircase in No. 129 which continues up through the building and dates to the early-nineteenth-century construction of the public house and survive intact with timber treads, rectangular spindles, and a curved timber handrail (Figure 14).

Figure 14 historic staircase



- 4.3.17 At first and second floors, the nineteenth-century plan form has been retained except for the insertion of modern bathrooms. The wide panelled doors and timber flooring date to the early nineteenth century. Fireplaces, plasterwork and cornicing are modern.

4.4 Setting

- 4.4.1 The setting contributes to historic and architectural interests, specifically elite late Georgian suburban residential architectural design and consequent social and cultural interactions that influence 20th century urban and transport planning and design outcomes in the locality.

- 4.4.2 The York and Albany Hotel is an integral design element of John Nash's Park Village East suburb and contributes to the wider significance of this aspect to the Regent's Park Conservation Area. It serves as a traditionally styled architectural focal point at the north end of Park Village East at the junction with Parkway, which since the mid-19th century has been the principal commercial route between Regent's Park and Camden Town. It retains the character of a 19th century public house and continues to offer hospitality services as originally intended.
- 4.4.3 Park Village East comprises a garden suburb of architect designed villas in a setting that has changed dramatically since construction, especially after the widening of the Euston Approaches railway cutting and demolition of the villas along the eastern side of Park Village East in 1901-1905. Complex changes disrupt the intended suburban setting but reflect early and mid-20th century urban design narratives that interplay with Nash's intended illusion of 'rus in urbe':
- the gentrified character, picturesque aesthetic and the variety of architectural designs employed at York & Albany and its related Park Village East villas contributes a lingering sense of Nash's landscape design vision within a contemporary, dynamic urban townscape.
 - key features, particularly the pub frontage, have been replaced, and other features introduced, such as the detached extension. The later historic and contemporary styles retain architectural quality standards and compliment the original classicism
 - the public house contributes an architectural design vocabulary that highlights fashionable late Georgian tastes. This informed subsequent Victorian and Edwardian urban design evident in surrounding streets and also the interface of historic railway infrastructure with the public realm
 - the later widening of the Euston Approaches railway cutting gave prominence to the public house (plus associated riding school) as the sole survivor of the detached properties that formerly backed onto the original western side of the railway cutting. The effect is mirrored on the eastern side by the matching reductions in semi-detached villas on Mornington Terrace that also occurred in 1900-1905.

4.5 Condition

- 4.5.1 Planning application reference 2006/0215/P and 2006/0216/L include record photographs taken in the early 2000s before subsequent refurbishment works. These show a building in extremely poor condition. Historic defects include cracking in the masonry walls and deterioration in the ends of post tensioned timber floor beams at their support locations. These defects have since been repaired and further structural improvements achieved through works to the basement and the recent rear extension.

- 4.5.2 The exterior and interior of the building now is in good condition, given the age and type of construction. Minor repairs will be required as expected for structures of this age and structural configuration, e.g., ponding water issues should be addressed at various locations with flat top roofing.

4.6 Significance

- 4.6.1 The significance of this asset is on architectural and historic interests, specifically the social importance of public houses to late Georgian and Victorian London's expanding urban population and the correlation of architectural fashions with contrasting and changing social perceptions. The setting makes a key contribution to heritage significance.
- 4.6.2 The buildings' external aesthetic and its contribution to group value of the surviving eastern side of Park Village East reflects late Georgian urban design and planning and further illustrates the dramatic consequences of suburban expansion overlapping with London's earliest Victorian intercity railway infrastructure.
- 4.6.3 Internally the main hospitality and functional spaces at ground floor and basement level retain very little of the original layout or architectural decorative detailing. The provenance of the principal stair and the arrangement of the upper floors is less severely compromised and is the key internal feature contributing to heritage significance.

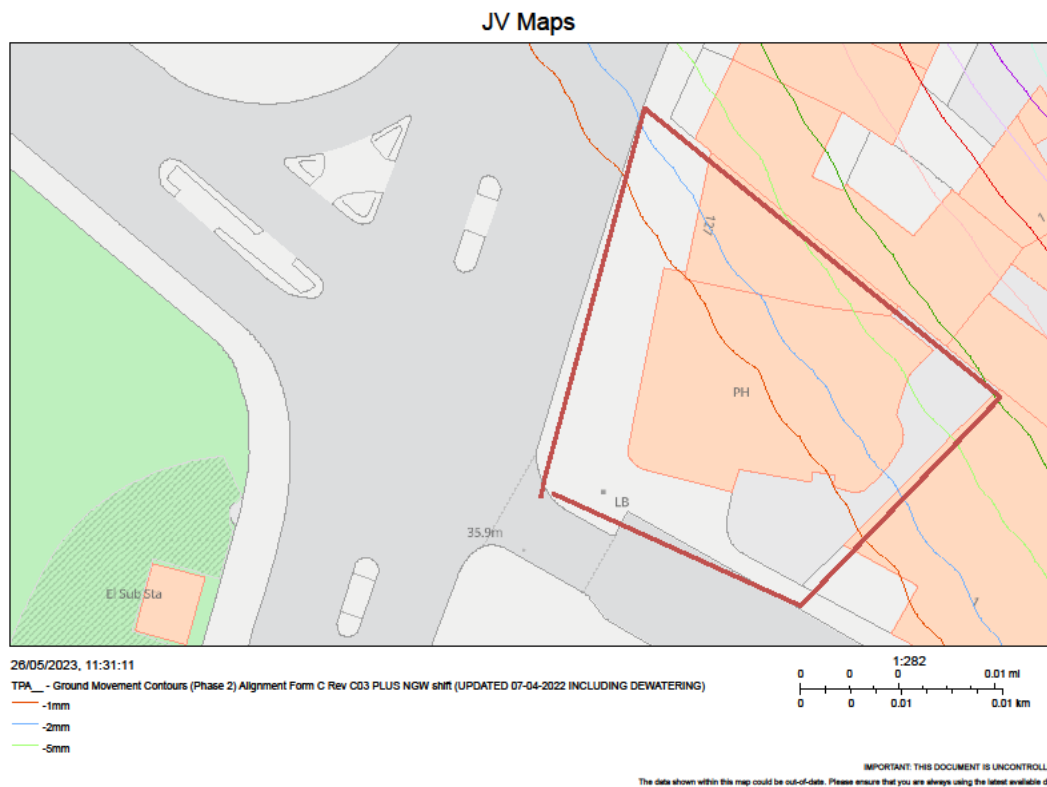
5 Asset Protection - Design Rationale

- 5.1.1 The process for determining potential harm to property because of ground movement caused by HS2 underground construction has generated information that defines the scope of works set out in this method statement.

5.2 Technical Standard

- 5.2.1 HS2 Technical Standard HS2-HS2-TN-STD-000-000005 – Ground Movement and Assessment from Below Ground Construction details a three phase Ground Movement Assessment (GMA) process.
- 5.2.2 The York & Albany is located within the HS2 project zone of influence, as defined by Phase 2 GMA 1mm contour (SCS Railways JV Maps GIS system (Figure 15) and is at risk due to potential ground movements induced by HS2 construction. The asset met sensitivity criteria (listed building) that require a Phase 3 GMA.

Figure 15 Phase 2 GMA contour



5.3 Phase 3 Ground Movement Assessment

5.3.1 Phase 3 Ground Movement Assessment Report - Building Assessment Euston Cavern and Shaft - Euston Throat West S1 (1MCo3-SCJ_SDH-GT-REP-SSo1_SLo3-000018 Co3.2) considered structural and heritage impact to 57 Mornington Terrace due to permanent construction works:

- Euston Tunnel (TBM)
- Sprayed Concrete Lining (SCL) Crossover Tunnels
- Euston Cavern Shaft
- Euston Cavern
- Connections between Euston Cavern, Euston Cavern Shaft and SCL tunnels.

5.4 Building Damage Assessment

5.4.1 The Phase 3 GMA includes a Building Damage Assessment based on material properties consistent with the building typology and age. Burland et al. (1977) define six damage categories that distinguished between three principal criteria:

- Burland damage categories 0 to 2 only - affects to visual appearance

- Burland damage categories 3 & 4 – affects to serviceability or function
 - Burland damage category 5 - affects to building stability.
- 5.4.2 Current assumptions are not expected to change the Phase 3 GMA Building Damage Assessment and Heritage Sensitivity outcome.
- 5.4.3 The building has been assigned a Building Damage Category of 3 (Moderate) due to a combination of:
- predicted vertical and horizontal ground movements
 - potential compromised local stability system at the south and west elevations at ground floor level due to the historic removal (total or partial replacement with columns) of internal and external masonry load bearing walls.
- 5.4.4 A refinement of the Phase 3 GMA damage assessment has been undertaken, which involves further analysis and investigation of the building to assist in detailed mitigation design (1MCo3-SCJ_RBG-ST-REP-SSo1-000003 Rev Co1). This refinement, which benefitted from the Michael Barclay Group detailed design for the 2006 refurbishment, concludes that the building can withstand predicted ground movements with no significant permanent damage:
- predicted damage to masonry walls is within the lower bound of Category 2 'slight; at worst, amounting to approximately 2mm wide masonry cracks
 - distortion of non-structural panels and cladding panels should not exceed Category 2 'slight; resulting in aesthetical damage, such as cracking of plaster and potential window and door jamming
 - extensive areas of glazing and tiling are more sensitive to movements and in places are already cracked indicating susceptibility to damage from relatively small building movements.
- 5.4.5 Risk to building serviceability and/or stability is limited (potential for disruption of rainwater goods and external utility services/drainage connections), but shear cracking could exacerbate historic damage in sensitive areas, such as:
- stucco render finishes
 - sensitive glazed façades with tiled wall finishes.
- 5.4.6 The potential risks during HS2 below ground construction works requires a mitigation response that complies with the requirements of the HS2 Technical Standard - Ground Movement and Assessment from Below Ground Construction (HS2-HS2-TN-STD-000-000005).
- 5.4.7 The distinction between visual or aesthetic harm and major serviceability and/or structural stability damage is an important threshold that determines the appropriate measures.

Anticipated superficial cracking is manageable, other than where it effects heritage features that are sensitive or susceptible to harm.

Heritage Sensitivity and Magnitude of Effects

- 5.4.8 The sensitivity of the listed building and magnitude of heritage impact considers ground movement effects on building construction type and on specific design features that contribute to heritage significance.
- 5.4.9 A system of scoring, following London Underground Movement Guidelines (HS2 Technical Standard - Ground Movement and Assessment from Below Ground Construction (HS2-HS2-TN-STD-000-000005, Table 10), considers two criteria:
- sensitivity of the structure to ground movements and interaction with adjacent buildings
 - sensitivity to movement of particular features within the building.
- 5.4.10 The York & Albany Hotel, 127 & 129 Parkway is assigned:
- building structural sensitivity of 1 due to the large, glazed openings at ground floor and sensitive tiled façades and wall finishes.
 - feature sensitivity scoring of 0.
- 5.4.11 In summary, York & Albany Hotel is likely to experience new localised superficial cracks to rendered stucco/tiled walls that could affect finished surfaces and decorative design features. The magnitude of heritage impact is moderate (HS2 Technical Standard - Ground Movement and Assessment from Below Ground Construction (HS2-HS2-TN-STD-000-000005), Table 11).
- 5.4.12 Adverse effects can be minimised by:
- implementing a monitoring-based conservation strategy that includes arrangements for potential remedial repairs due to effects of ground movements as a result of HS2 tunnelling (Asset Protection Mitigation Strategy Category 2b).

Environmental Minimum Requirement

- 5.4.13 The HS2 scheme design and associated construction and logistics planning has continued to be developed following publication of the HS2 London-West Midlands Environmental Statement (ES) (and subsequent Supplementary Environmental Statements (SES) and Additional Provision Environmental Statements (AP ES)).
- 5.4.14 The controls contained in the HS2 Environmental Minimum Requirements (EMR) ensure that impacts which have been assessed in the relevant ES will not be exceeded and, if possible, reduced.

Table 2 –Environmental Statement Assessment

Name	Designation	Value	Construction Impact		
			Nature of impact	Scale	Effect
Park Village East	Listed building, conservation area	High	The asset is located within the 10mm settlement contour associated with the construction of the Proposed Scheme portal and the revetment replacement works. Mitigation will involve the monitoring of settlement impacts and the use of tunnel construction and revetment construction techniques that reduce and stabilise settlement.	Medium	Major adverse

5.4.15 Table 2 summarises the construction impact based on the design assessed in the November 2013 ES, as amended by subsequent Additional Provision ES documents. Both 127 & 129 Parkway were assessed as part of Park Village East.

5.4.16 The asset specific Phase 3 GMA for York & Albany demonstrates the latest design produces a Building Damage Category 3 (moderate) with moderate magnitude heritage impact. Cracks to walls may materialise and services/drainage may also be impacted that affects serviceability. This conclusion does not alter the more general ES assessment and there are no additional significant environmental effects.

5.4.17 This HAMS details the mitigation actions that have been informed by the Phase 3 GMA and accord with the broader requirements identified in the November 2013 ES, as amended by subsequent Additional Provision ES documents. The arrangements set out in sections 6, 7 and 8 of this HAMS further details a method statement for mitigation through monitoring and conservation management in accordance with SCS Asset Protection and Inspection & Monitoring (I&M) plans and procedures.

6 Mitigation

6.1.1 Information generated through asset protection processes has been used to define the mitigation response to the potential harm to York and Albany Hotel set out in this method statement.

6.2 Asset Protection Management Plan

6.2.1 SCS Asset Protection Management Plan (1MCo3-SCJ-EN-PLN-Sooo-000002) sets out the framework for the design and implementation of measures that respond to the Building Damage Assessment presented in the concluding GMA analysis, ensuring Third Party Assets are suitably protected from ground movements arising from S1/S2 London Tunnels Contract tunnelling and excavation activities.

- 6.2.2 Intended measures for protecting York & Albany accord with the Management Plan, comprising Monitor, React and Repair Strategy (Asset Protection Mitigation Strategy Category 2b) during and following tunnel construction.

6.3 Detailed Mitigation Design

- 6.3.1 GMA Refinement and Mitigation Report Area East Asset Protection Section 1 York and Albany Hotel APD-ESCT-01 (1MCo3-SCJ_RBG-ST-REP-SSo1_SLo3-000003 Co1) reviews various alternative mitigation options, including at-source ground treatment measures and underpinning.
- 6.3.2 It considers a Monitor, React and Repair Strategy as most suitable, especially from a heritage conservation perspective. It concludes:
- current monitoring systems shall be maintained (SCSjv Designers Monitoring Plan - Area East Buildings Package 2 (EB2) - S1MDL Code: Document no.: 1MCo3-SCJ_SDH-GT-PLN-SSo1-000002).
 - supplementary monitoring proposals are detailed in section 7 Monitoring
 - a risk-based Asset Action Plan will define specific monitoring trigger values that will determine further safeguarding actions based on the timely management of mitigation interventions in response to actual movements
 - all repair and remedial repair work conducted at the property will meet required quality and conservations standards. Subject to freeholder agreement, SCSjv intend to adopt The Crown Estate Guidelines and Standard Specification to Architects for the Regent's Park, Kensington Palace Gardens, St. James's, Pall Mall South, Haymarket and Lower Regent Street Residential and Commercial Estates, Seventh Edition January 2014
 - repair of predicted cracks will follow completion of permanent construction works, as outlined in section 8 Conservation Management. More generic remedial repairs may also be aligned with freeholder maintenance schedules
 - urgent works will be undertaken if predictions are exceeded, and the observed rate or magnitude of ground movement affect building serviceability or stability. Framework contractors are on standby to undertake any necessary interventions, i.e. damage to utility connections, or damage to waterproofing systems that compromise serviceability or inhabitability of buildings.

7 Monitoring

- 7.1.1 Monitoring proposals take into consideration the existing ground movement baseline (section 7.2) and apply further guidance and requirements detailed in:

- HS2 Specification for Civil Engineering Works – Series 4500: Instrumentation and Monitoring – Construction Document no.: HS2-HS2-CV-SPE-000-014500
- SCS Instrumentation and Monitoring Statement S1 and S2 Document no.: 1MCo3-SCJ-CL-STA-Soo1-000001
- Designers Monitoring Plan - Area East Buildings Package 2 (EB2) - S1MDL Code: Document no.: 1MCo3-SCJ_SDH-GT-PLN-SSo1-000002
- Asset Specific Mitigation Designers Monitoring Plan Area East Asset Protection Section 1- York and Albany Hotel - APD-ESCT-01 (1MCo3-SCJ_RBG-ST-PLN-SSo1_SLo3-000003).

7.2 Ground movement baseline trends

- 7.2.1 Comprehensive ground movement records have been collected by both the Early Works (SCjv) and Main Works (SCSjv) contractors as part of the 'Network Rail Ground Movements Mitigation Scope.' The focus has been on understanding how mitigation works to Network Rail's Park Village East Retaining Wall could influence ground movements affecting property and rail assets in the vicinity. The adopted approach is based on Designers Monitoring Plan - Area East Buildings Package 2 (EB2) - S1MDL Code (1MCo3-SCJ_SDH-GT-PLN-SSo1-000002).
- 7.2.2 This provides a robust baseline record of seasonal movements and local spatial trends with reference to key third party assets, including York & Albany, 127 & 129 Parkway.
- data from routine patch scanning has been collected at 127 & 129 Parkway between the start of April 2019 and mid-February 2020 by CSJV.
 - levelling data has been recorded on the pavement outside York & Albany, 127 & 129 Parkway from the end of June 2018 to the present day.
 - monitoring data has been collected to record movements at the following elevations:
 - patch scanning has been undertaken on the front (road facing) facades of York & Albany, 127 & 129 Parkway
 - there is no significant movement shown by the patch scanning data, with recorded measurement not exceeding technical margin of error (+/-3mm)
 - precise levelling data shows the following seasonal movements:
 - approximately +/-7mm vertical movement through the seasons. However, magnitude of seasonal movement changes fractionally year on year.
 - satellite monitoring data from the period 2011-2020 has also been used to gauge historic patterns of ground deformation prior to the commencement of the HS2 Park Village East Retaining Wall mitigation works (Sixense, November 2022, Atlas InSAR

Ground Displacement Monitoring HS2 S1S2 East Variation of Works Historical Study). This evidence is consistent with the patch scanning and manual precise levelling.

- satellite monitoring data is also available from April 2020 to the present day in regions of good reflectivity. The vertical displacement shown by the monitoring is also consistent with the manual precise levelling where seasonal movements are apparent.

7.2.3 The 'Network Rail Ground Movements Mitigation' monitoring system will be maintained as a baseline record for measuring movements attributable to seasonal and current/future construction and related events across the wider area.

7.3 Additional monitoring requirements and options

7.3.1 Specific monitoring proposals for individual Damage Category 3 (DC3) residential buildings, including York & Albany Hotel, 127 & 129 Parkway, are intended to supplement the continuing 'Network Rail Ground Movements Mitigation Scope' area monitoring strategy. The following proposals are based on the Asset Specific Mitigation Designers Monitoring Plan Area East Asset Protection Section 1- York and Albany Hotel - APD-ESCT-01 (1MCo3-SCJ_RBG-ST-PLN-SSo1_SLo3-000003).

7.3.2 Additional instrumentation and monitoring will focus on recording specific measurements to inform implementation of mitigation measures to protect York & Albany Hotel, 127 & 129 Parkway from the effect of below ground construction, including:

- localised ground movement data to determine:
 - tunnel ground movements and any variance against Phase 2/3 GMA predictions
 - potential association with observed deflections and cracking of DC3 listed building within the 1mm settlement contour
- asset specific deflections and cracks to:
 - verify if asset is behaving as predicted in the Phase 3 GMA, both during and after construction
 - provide early warning that initiates timely interventions required to avoid potential harm to the asset, in accordance with an established hierarchy of trigger values linked to a monitoring action plan (refer to 8.3)
- **ground movement** and **asset specific** data to be reviewed in combination to:
 - re-calibrate trigger values if ground movement data/asset specific observations are not consistent with Phase 2/3 GMA predictions
 - update the monitoring action plan to make appropriate adjustments for timing and type of preventative/mitigation measures and implementation in sequence with key construction

trigger activities.

- 7.3.3 In accordance with HS2 Technical Standard - Civil Engineering Instrumentation and Monitoring (HS2-HS2-CV-STD-000-000004), monitoring will continue until the rate of settlement (or heave) is equal to or less than 2mm per annum (as determined by a minimum of four readings over a period of 4 months). The rate considered will exclude seasonal effects. For third-party assets, the cessation of monitoring will be subject to agreement with the third party.

7.4 Preferred monitoring system

- 7.4.1 Subject to access, baseline data gathering will be a combination of manual and automated data logging.
- 7.4.2 Manual and fully automated monitoring systems have been considered for measuring vertical settlement and horizontal displacement to the building. Instrumentation has been selected so that different options remain available should circumstances require a change in method:
- fully automated system would provide data enabling movements to be tracked hourly and daily. A secure set-up arrangement is required to ensure no loss of visual and digital connectivity over the extended timescales that monitoring is required to operate. It could also require instrumentation that has a greater visual presence.
 - a manual system relies on brief regular (weekly/monthly) access to the property (including private outdoor space) to collect data using a mechanical Total Station to read measurements from reflective prisms attached to the building. It produces a less frequent record of building movements but is less constrained by connectivity and only requires discrete instrumentation attached to the property.
- 7.4.3 The risk of interruptions to connectivity resulting in loss of continuity in monitoring data and the level of intrusion affecting residents have been considered. High frequency automated monitoring data recording is not essential, and the predicted effect of ground movement can be effectively and safely managed through a part-manual system.
- 7.4.4 Primary method of data collection will manually log data using a mechanical Total Station to read 3D prisms, supplemented by automated logging of tiltmeter data. A fully automated system would require a change in recording device but is unlikely to require any changes to instrumentation attached to the listed building.

7.5 Monitoring Specification

- 7.5.1 Monitoring instruments will measure:
- settlement and horizontal displacement
 - relative movement between each side of a crack

- 7.5.2 Primarily 3 D prisms of various sizes (Figure 16) and tiltmeters fitted to 0.5m beam (Figure 17) will be used. Devices will measure movements affecting the composite building and adjoining ground surfaces. The devices illustrated are typical examples, but specific instruments used may vary according to situation.
- 7.5.3 Table 3 details the maximum monitoring system instruments required.
- 7.5.4 Proposed locations across both properties are shown in full in Appendix A Instrumentation Design Drawings. Subject to SCS I&M Team recommendations, minor variations to the monitoring scheme design may be necessary to ensure effective data capture through the duration of the monitoring period.

Building

- 7.5.5 3D prisms (data recorded using mechanical Total Station) attached to external walls at the top and bottom of each façade. (If colour options can be sourced and are available, instruments that best match the external building appearance will be installed.)

Figure 16- Example of a 3D prism



- 7.5.6 Tiltmeters are in areas that are less accessible, specifically the enclosed external walls forming the later rear extension (Appendix A).

Figure 17– Example of a tiltmeter



7.5.7 On appearance, internal and external cracks will be monitored using tell tales or monitoring studs.

Table 3- Instrumentation specification

Asset/Item	Instrumentation	Monitored parameters	Number	Comments	Frequency of data recording
Buildings	3D prism targets on building façades	Settlement Horizontal displacement	30 maximum	Monitoring at locations identified on drawings in Appendix A.	Minimum monthly for baseline monitoring. Increased frequency during construction works adjacent to site TBC.

Asset/Item	Instrumentation	Monitored parameters	Number	Comments	Frequency of data recording
Crack width for major crack	Crack width gauge, remote electronic or manual, as agreed with contractor and Visual Inspection engineer.	Change in crack width	TBC	Locations as shown on drawings in Appendix A. Potential for additional locations where further cracks are identified. Cracks to be monitored to be selected by contractor and Visual Inspection engineer. Cracks to be monitored separately in the horizontal and vertical directions (not perpendicular to the crack).	Remote read out to central computer or manual readout, depending on accessibility and as agreed with contractor and Visual Inspection engineer
All frequencies to be adjusted according to progress of works and movement trends. Changes to be proposed by the Engineering Manager for discussion and agreement at Monitoring Review meetings.					

7.6 Installation, maintenance, removal and repair

Location

- 7.6.1 Instrument locations shown in Appendix A are approximate and will be adjusted as necessary by the sub-contractor, depending on the as found conditions, SCS I&M Team recommendations and the owner's agreement. Final locations for prisms will provide good line of visibility to the Total Stations.

Installation

- 7.6.2 All works to comply with hold point procedures, including 'Permits to Drill' as detailed in:

- Method Statement and Risk Assessment - Installation and Monitoring of Instrumentation and Monitoring on Parkway Third Party Assets - Document no.1MC03-SCJ_SOU-CL-MST-SS01_SLO3-000006.
- Task Briefing Sheet - Installation and Monitoring of Instrumentation and Monitoring equipment at Edinboro Castle - EUSTON CAVERN SHAFT - Document No. 1MC03-SCJ_SOU-CL-REC-SS01_SLO3-000012.

- 7.6.3 Instruments attached to the building (3D prisms and tiltmeters) will be firmly secured in line with the manufacturer's instructions to ensure effective monitoring and accurate measurements throughout the required period of operation. This is nominally taken as a minimum of 5 years, but total duration will be determined in line with the criteria set out in

para 7.3.3 of this method statement, i.e., as required under HS2 Technical Standard - Civil Engineering Instrumentation and Monitoring (HS2-HS2-CV-STD-000-000004.

- 7.6.4 Access systems used to install instruments at height will not require a fixing that directly attaches to the building.
- 7.6.5 Instrument fixings that require bolting to the building will employ the minimum number of drilling points to comply with safety requirements and ensure effective operation of the instrument.
- 7.6.6 Drilling will only take place into plain stucco surfaces or into exposed brickwork mortar joints. There is to be no drilling into external faience tiling, decorative rendered surfaces, mouldings or stringcourses. Location of fixing points will avoid proximity to edges (i.e., less than 80mm) or areas of fragile render, which could result in surface spalling or excessive damage to surface finishes. This applies to all edges, including those created by deep stucco channels that imitate masonry joints.
- 7.6.7 Holes of 8-10mm diameter will be drilled at a maximum depth of 50mm and fitted with an expansion sleeve or nylon plug. Stainless steel screws and washers are to be used, to ensure durability and prevent staining.
- 7.6.8 Monitoring devices (prisms) attached to the external faience tiles will be fixed using adhesive only (Pereira, Sílvia R. M et al, 2015). To minimise the risk of damage to tile surface during removal, an acrylic resin, such as Paraloid B72 ® or Paraloid B44, should be used and any fixing/unfixing arranged under supervision by an experienced conservator. Acrylic resins have been shown to be an effective bonding agent for historic exterior tiles (Pereira, Sílvia R. M et al, 2015). It has a well-established use in the conservation of historic material and, being solvent soluble, can be removed without significant risk of surface damage or harm to health.
- 7.6.9 The sub-contractor's Method Statement and Risk Assessment (RAMS) will include a description of the listed asset and define hold points to ensure implementation of control measures for working on and in its proximity. Prior to installation work commencing, a copy of the sub-contractor's RAMS will be provided to the London Borough of Camden Conservation team and Historic England.
- 7.6.10 A Toolbox Talk will be issued to all those working on the asset at the start of the shift and a SCS heritage specialist will undertake regular inspections and oversee installation work.

Removal

- 7.6.11 Following completion of monitoring all instrumentation and fixings will be removed and any fixing holes filled to match the surrounding surface render/mortar.
- clean surface and remove loose render/mortar
 - new mortar to match the colour of existing mortar/render

- point and form mortar joints/rendered surfaces to match existing profiles
- repaint where required, to maintain a consistent colour and texture.

Access

- 7.6.12 Careful consideration will be given to access systems for installation and removal of monitoring instruments that avoids the use of scaffolding directly tied to the listed structure. Alternatives include mobile elevated working platforms (MEWPs), cherry pickers and freestanding platforms. However, given the constraints of the properties and disruption to residents, a temporary fixed scaffold may be the only viable solution.
- 7.6.13 Tying in of a temporary scaffolding will ensure the scaffold is safe to work at from height, but also protects those at street and basement level underneath.
- 7.6.14 Scaffold contractors will agree a fully detailed design specification for the listed building:
- following the same process for attachment and removal of monitoring devices, as described in 6.5.8.to 6.5.16
 - there will be minimal fixings into the fabric of the buildings. Fixings are not required at basement or ground level so are to be used at first floor and attic levels only
 - fixings will be carefully located to avoid sensitive features, including decorative plaster and/or brickwork forming cornicing, window or door architraves or pilasters.
- 7.6.15 Careful installation and remedial work will minimize any permanent visual impact of any scaffolding works.

8 Conservation Management

8.1 Visual Inspection

- 8.1.1 The property will be visually inspected by an appropriately experienced structural engineer. Inspections will occur monthly during or after critical construction activities predicted to affect the property. A report will be produced and re-issued for each inspection so that each visit is recorded in a single document.
- 8.1.2 This report will include high-resolution photographs supplemented by sketches as required, detailing all visual and measured changes, such as:
- new cracks or enlargement of existing cracks
 - evidence of spalling of masonry or plaster
 - any other new defects
 - signs of new water ingress

- evidence of subsidence.

8.1.3 The frequency of visual inspections may increase in response to Monitoring Trigger Levels.

8.1.4 Change in frequencies of the visual inspections are to be confirmed at the regular SCSjv Monitoring Review Meetings.

8.2 Trigger Values

8.2.1 Trigger values are based on the Phase 3 GMA of HS2 permanent works only (i.e. excluding temporary works). Seasonal and daily variation due to background environmental effects will be considered when applying the trigger values.

8.2.2 Trigger values for building crack widths are:

- Green – 10mm
- Amber – 15mm
- Red – 20mm

8.3 Monitoring Action Plan

8.3.1 The Monitoring Action Plan includes procedures for:

- the production, assurance, interpretation, and presentation of monitoring data
- actions to be taken by specified parties in the event of monitoring trigger values being exceeded.
- actions to be taken in the event of interruption to monitoring during the construction phase (e.g., due to monitoring system malfunctions).
- arrangements for regular reporting on the items detailed above to the London Borough of Camden Conservation team and Historic England.

8.3.2 The following monitoring actions are to be taken at the breach of trigger levels:

- Green – review frequency of visual inspection.
- Amber – increase frequency of visual inspection, review movements of the asset and crack widths against prediction of movement and update subsequent predictions to account for movement. Cracks that reach amber trigger level should be exposed (stucco render/plaster removed in a 200mm x 200mm zone and masonry inspected).
- Red – increase frequency of visual inspections. Review specific cracks and assess stability of building. Introduce temporary works if required.

8.3.3 The structural engineer inspecting the properties will routinely assess the building for stability and safety and recommend any temporary measures that may be immediately required, regardless of whether instrument trigger levels are met.

8.3.4 Any breach of trigger levels requiring temporary works will be reported and temporary works designs issued to London Borough of Camden Conservation team and Historic England for - information prior to works proceeding.

8.4 Conservation (repair) schedules

8.4.1 All required repairs will follow the design principles, standard brief, specification, technical details and safe working practices described in The Crown Estate Guidelines and Specification to Architects for the Regent's Park, Kensington Palace Gardens, St. James's, Pall Mall South, Haymarket and Lower Regent Street Residential and Commercial Estates 7th Edition.

8.4.2 A conservation (repair) schedule will be prepared prior to installation of monitoring instruments and subsequently maintained as planned actions are updated. The conservation (repair) schedule will be routinely reviewed until monitoring requirements have been fully met, instrumentation removed, and all necessary repairs completed.

8.4.3 The conservation (repair) schedule will include:

- identification of the property
- a list of all repair items required, to be described room-by-room or by reference to external elevation, including reference to the Inspecting Engineer's and other specialist reports and requirements
- an inventory of the historic items, including fixtures and fittings to be preserved or restored
- programme and timescale allowed for the works
- the standard specification for workmanship and materials including painting and stucco repairs
- a list of drawings that are approved by leaseholder/freeholder
- details of the monitoring procedure for the work, including the contact details of a Conservation Consultant Architect who will confirm works have been carried and completed in accordance with The Crown Estate covenants included in the lease or building agreement.

8.4.4 Other than the drilled bolt fixing holding the monitoring instruments in place, typical damage resulting from the tunnelling works is expected to be cracks within the masonry walls perpendicular to the street.

8.4.5 A typical repair strategy will be:

- remove surrounding render to check for propagation of crack within masonry.
- cracks <5mm should be infilled/repointed
- cracks greater than 5mm will have mortar joints raked out, tie-bars installed across the crack and infilled/repointed.
- render/mortar composition/type to be determined and matching material reapplied to complete repair.
- internal and external redecoration.

8.4.6 All conservation (repair) schedules and detailed design (technical drawings and RAMS) will be issued to London Borough of Camden Conservation team and Historic England for review and comment prior to works proceeding.

9 Heritage Conservation Summary

9.1.1 Installation of monitoring instruments is a temporary arrangement to ensure accurate monitoring of the heritage asset prior to, during and following HS2 permanent construction works. It is a precautionary procedure to identify ground movements and resulting building structural responses so that appropriate measures to protect the asset can be deployed and engaged to prevent potential systemic or structural harm that may result in loss of serviceability and/or stability and impact to heritage significance.

9.1.2 Specifically, monitoring instruments will provide data to inform decisions on managing and mitigating effects on heritage assets during the planned HS2 tunnelling operations; providing a record of ground movements that will:

- observe and record changes affecting the building to:
 - check and validate modelled predictions
 - calibrate mitigation responses with the sequence of construction activities
- ensure interventions required to mitigate potential harm to heritage assets are undertaken in timely accordance with an established hierarchy of trigger values and related pre-planned actions.

9.1.3 Installation of monitoring instruments does not result in loss of heritage significance and offers specific protections and benefits as part of a conservation management process.

9.1.4 There is negligible harm to historic fabric:

- monitoring instruments are to be installed with minimum fixings

- all devices will be removed on completion of monitoring requirements and there are no permanent additions or alterations to the listed building.

- 9.1.5 The temporary visible presence of monitoring devices does not change the contribution of setting to the significance of the heritage asset. Instrument visibility is limited by the minimum use of devices required to meet the monitoring requirements, retaining the optional use of automated devices that will only be deployed if circumstances require additional monitoring capabilities.
- 9.1.6 Following completion of HS2 asset protection measures, including remedial repairs, there will be no permanent change to the building or its setting.

10 References

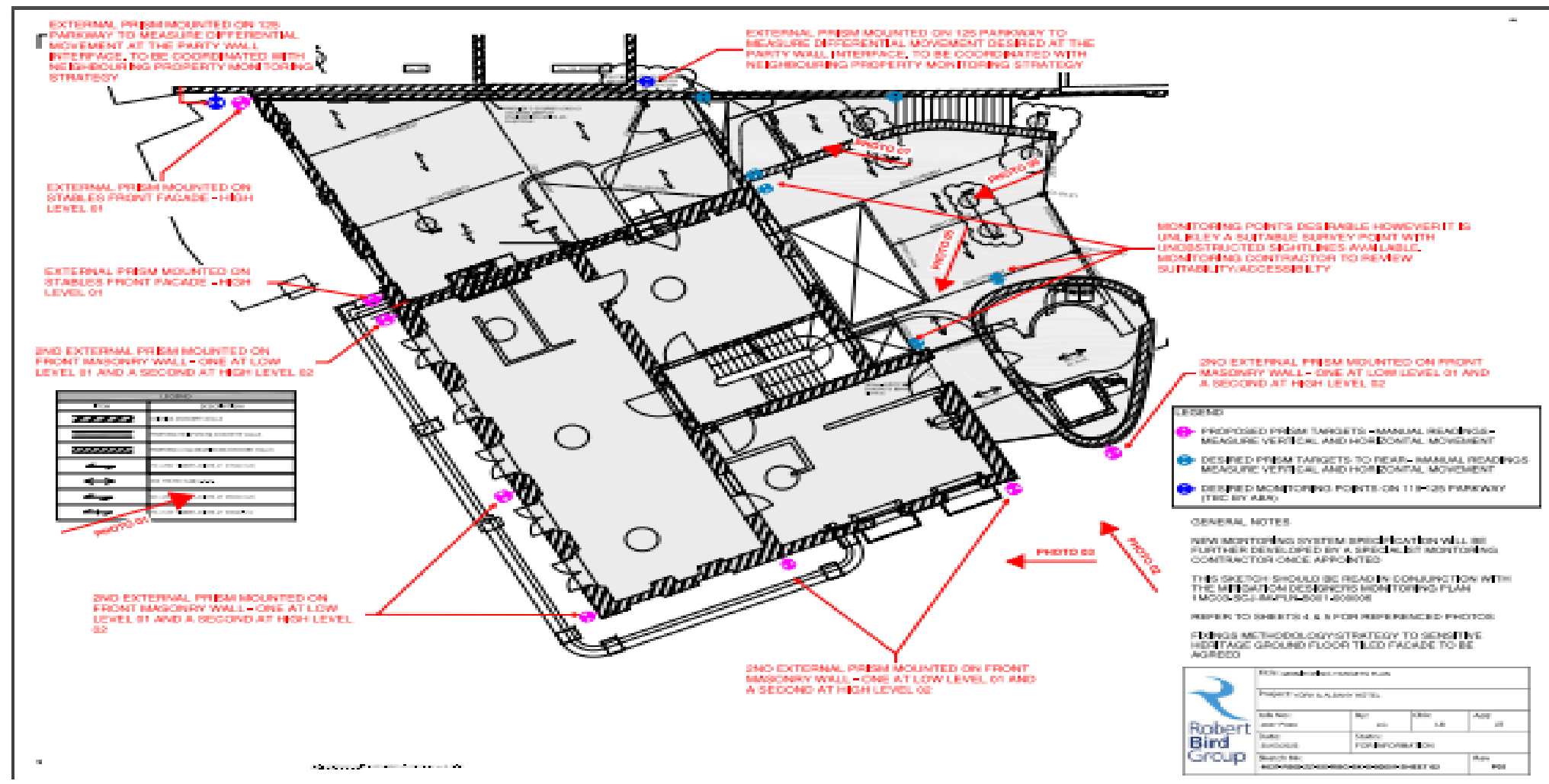
Table 43 - References

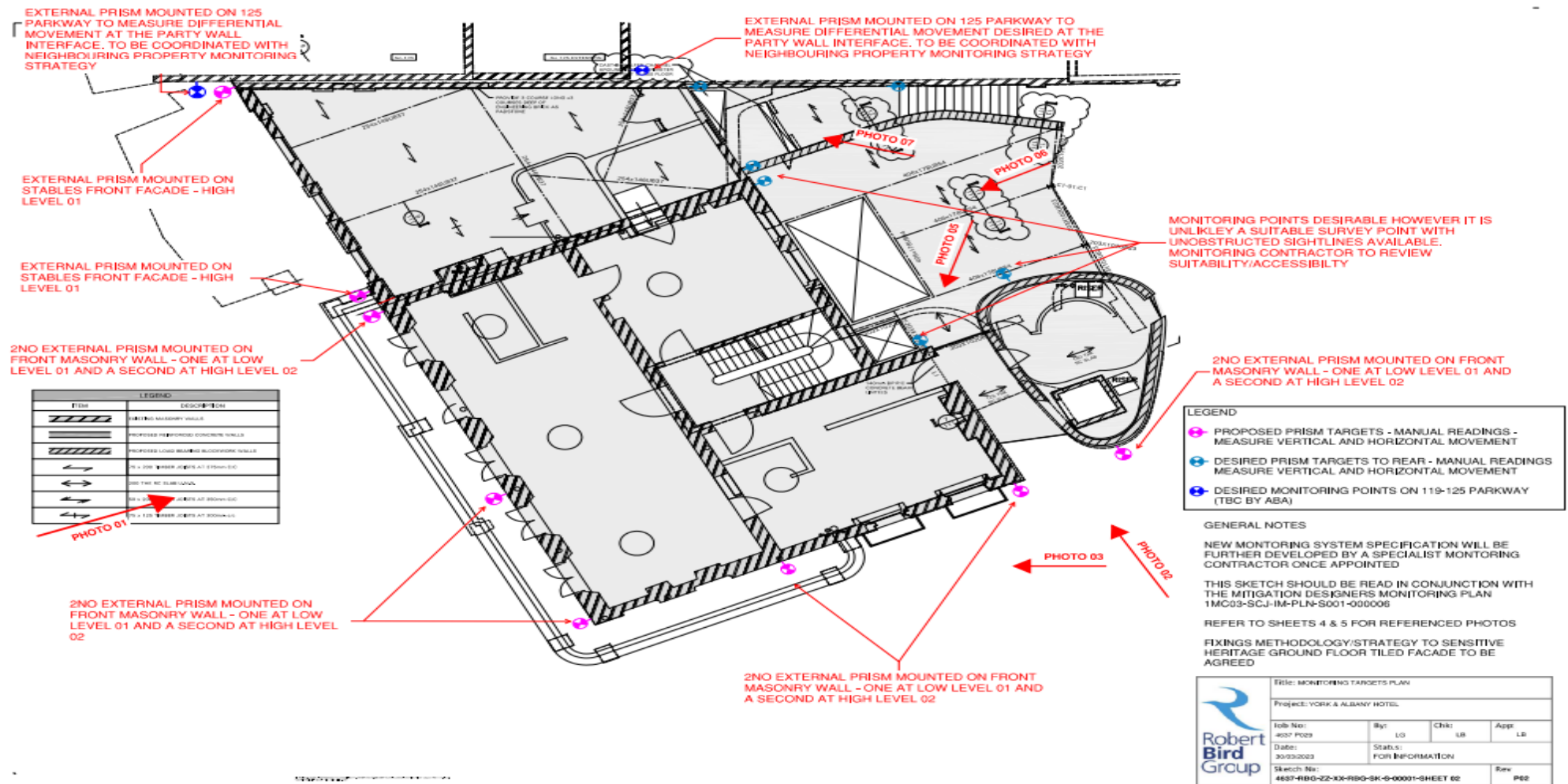
Title	Reference
Guidelines and Standard Specification to Architects for the Regent's Park, Kensington Palace Gardens, St. James's, Pall Mall South, Haymarket and Lower Regent Street Residential and Commercial Estates	The Crown Estate, Seventh Edition January 2014
HS2 Technical Standard - Civil Engineering Instrumentation and Monitoring	HS2-HS2-CV-STD-000-000004 P03
HS2 Technical Standard - Ground movement and assessment from underground construction	HS2-HS2-TN-STD-000-000005 P03
HS2 Specification for Civil Engineering Works' Series 4500 – Instrumentation and Monitoring	HS2-HS2-CV-SPE-000-014500
HS2 Technical Standard – Sound, Noise and Vibration Instrumentation and Monitoring · High Speed Rail London-West Midlands	HS2-H S2-EN-STD-000-000009
HS2 Environmental Minimum Requirements Annex 1: Code of Construction Practice https://www.gov.uk/government/publications/environmental-minimum-requirements	CS755 02/17
SCSjv Phase 3 Ground Movement Assessment Report - Building Assessment Euston Cavern and Shaft - Euston Throat West S1	1MC03-SCJ_SDH-GT-REP-SS01_SL03-000018 C03.2
SCSjv Designers Monitoring Plan - Area East Buildings Package 2 (EB2) - S1MDL	1MC03-SCJ_SDH-GT-PLN-SS01-000002
SCSjv WP203.3 Designer Monitoring Plan – 127 & 129 Parkway	1MC03-SCJ_ABX-ST-PLN-SS01_SL03-000001
SCSjv GMA Refinement and Mitigation Report Area East Asset Protection Section 1 York AND Albany Hotel APD-ESCT-01	1MC03-SCJ_RBG-ST-REP-SS01_SL03-000003

Title	Reference
Victorian Pubs	Girouard, Mark. 1975 (London and New Haven: Yale University Press)
Adhesives for outdoor architectural historic azulejo conservation http://azulejos.lnec.pt/AzuRe/GlazeArch2015/Communications/26%20Adhesives%20for%20historic%20azulejo%20conservation.pdf	Pereira, Sílvia R. M et al, 2015, GlazeArch 2015 International Conference Glazed Ceramics in Architectural Heritage

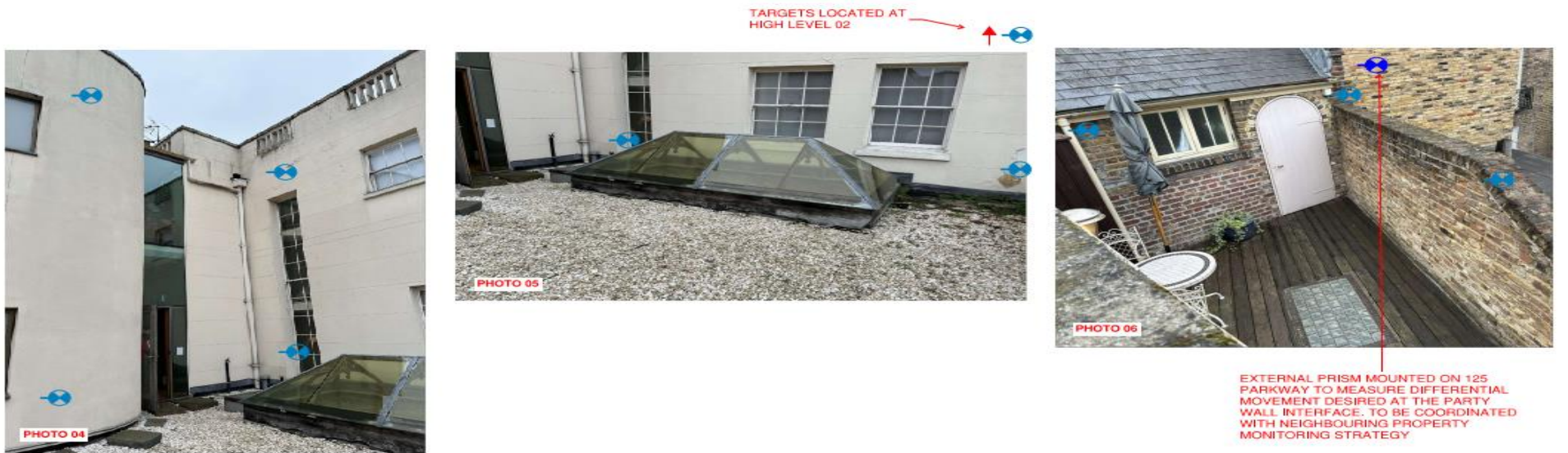
Appendix A – Instrumentation Design Drawings

(as proposed in SCSjv ASSET SPECIFIC MITIGATION DESIGNERS MONITORING PLAN AREA EAST ASSET PROTECTION SECTION 1-YORK AND ALBANY HOTEL - APD-ESCT-01 (1MCo3-SCJ_RBG-ST-PLN-SSo1_SLo3-000003))









LEGEND				
	PROPOSED PRISM TARGETS - MANUAL READINGS - MEASURE VERTICAL AND HORIZONTAL MOVEMENT			
	DESIRED PRISM TARGETS TO REAR - MANUAL READINGS MEASURE VERTICAL AND HORIZONTAL MOVEMENT			
	DESIRED MONITORING POINTS ON 119-125 PARKWAY (TBC BY ABA)			

FILE: MONITORING TARGETS PLAN				
Project: YORK & ALBANY HOTEL				
Job No:	4637-P009	By:	LB	App: LB
Date:	30/03/2023	Status:	FOR INFORMATION	
Sketch No:	4637-RBG-22-KX-RBG-SK-9-00001-SHEET 05	Rev:	P02	