



C131 - PADDINGTON INTEGRATED PROJECT

HISTORIC BUILDING RECORDING – PIP TRIANGLE SITE

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1 Introduction

This document reports on the historic building recording of the Paddington Integrated Project (PIP) Triangle Site located to the north west of Paddington station (Drawing 1). Although not listed, the site was identified within the Site Specific Written Scheme of Investigation (Doc. No C131-MMD-T1-RGN-B071-00002 Rev 2) as containing features of historic interest that warranted archaeological recording prior to their demolition. The scope of the record is in accordance with those recommendations being undertaken to a Level 2 record as defined in *Understanding Historic Buildings: A guide to good recording practice* (English Heritage, 2006). The recording work has been undertaken by Steven Handforth, Built Heritage Specialist at URS/Scott Wilson Ltd on behalf of Crossrail Limited (CRL).

Non-listed built heritage assessment and recording forms part of the archaeological mitigation strategy for Crossrail Limited (CRL). The definition of non-listed built heritage adopted follows Information Paper D22 Archaeology and encompasses above ground historic features and structural elements of historical interest.

1.1 Aims

The aim of the building recording is to provide a record of the PIP Triangle site prior to its demolition. The principal objective of the work is to produce an illustrated written document in which the existing fabric, appearance and form of the PIP Triangle site is detailed. In addition to this, the document aims to identify significant archaeological features reflecting the form and function of the area at the various stages in its development.

This was undertaken through onsite analysis comprising a photographic survey supplemented by documentary research (comprising maps, photographs and other historical documentation held in various archives and libraries) in order to establish the historical context of the relevant parts of the site. The report interprets the findings of this photographic survey in light of the documentary research undertaken.

1.2 Methodology

Numerous site visits were undertaken prior to, and during the demolition works to allow access to all areas of the site including the vaulted areas to the east. The main structures that were focused on for the photograph record were the Shunt Tunnel, the nine former stable vaults and the buttress to the west. In addition to this, to provide an understanding of the site's evolution, more modern assets were also recorded including the Goods Ramp and the rooms located below.

A written description of these buildings was produced using the photographic survey information and notes taken during on-site observation. This has identified features of archaeological and architectural interest and evidence for the chronological and structural development of the area. As well as general photographs close-up views were used to record any fine or complex details, typical and usual features, signage, dates, mouldings, manufacturer's marks or other markings which contribute to an understanding of the structure's history, materials and their provenance.

The written record was supplemented by documentary and historical research comprising an examination of the relevant documentary (primary and secondary), pictorial and cartographic

sources. These sources were critically examined and integrated into the overall interpretation of the site. Sources were consulted at a number of locations including the Network Rail Archive (York), the National Railway Museum, Westminster Archives and the London Metropolitan Archives.

Historic images are included within the text as figures whilst all photographs are located in Appendix 1 as plates. Drawings providing a site location plan (Drawing 1), features plan (Drawing 2) and photographic location plans (Drawings 3 -4) are provided in Appendix 3. The photographic location plans (Drawings 3-4) correspond with the plates in Appendix 1, with P1 being plate 1 and so forth. Where surfaces such as flooring were photographed vertically these are identified on the photographic plan by a pink circle.

The photographic survey was undertaken using both black and white 35mm prints and colour digital images. These images have been collated and indexed in accordance with the requirements of Management of Research Projects in the Historic Environment (MoRPHE, 2006). The contents of this archive will be submitted to the Museum of London. Additional copies of the report will be sent to the Greater London Historic Environment Record and the National Monuments Record (Swindon). In addition, an online OASIS form will be filled out which will provide information on the location of the report and archive.

1.3 Scope

The area surveyed within this building recording document is highlighted in Drawing 1, Appendix 2. The main interest of the site is its original brick vaulted stable blocks, which, although of very little architectural interest, have much historical interest due to their association with the Grade I listed Paddington Station. In many instances the historic fabric of these vaults was obscured by concrete render but where possible, photographs and analysis were undertaken to any exposed sections to provide a record of the structure's original appearance and to aid the understanding of its original construction. In addition to the stables the shunt tunnel is of interest due to its association with the development of the railway in this area.

The document also focuses on identifying and analysing other items of historic interest such as the western buttress, historic street surfacing and fixtures and fittings. Later additions including the 1930s alterations are included to aid the understanding of the evolution of the site but are not analysed in detail due to their perceived low significance both architecturally and historically.

The structure of the document, incorporating those features mentioned above is as follows:

- Section 2 provides a brief historical background and chronology of Paddington as a whole to place the PIP triangle within its historic landscape context. This is followed by a detailed analysis of the chronological development and history of the PIP Triangle Site.
- Section 3 provides a descriptive record of the PIP Triangle Site, and is based on on-site observations and supplemented with historic drawings where relevant. This section details current site conditions, recording only that which was accessible and visible.
- Section 4 provides a detailed analysis of the site using the findings from the onsite analysis in conjunction with the documentary research to aid the understanding of the significance of aspects of the site in terms of their functionality and architectural and historic interest.

2 Documentary Analysis

2.1 Historical Background –Paddington up until 1850s

Paddington evolved from a medieval village into a suburb within central London, situated on the junction of Roman Watling Street and the road to Harrow. During the 16th and 17th centuries it was still a small settlement centred around a village green. In 1756 Marylebone Road was constructed to connect Islington to Paddington and this gave rise to increased housing, commercialism and industrialisation of the area, particularly with the construction of the Grand Union Canal in 1801. The completion of Brunel's Great Western Railway (GWR) in the 1840s completed this phase of industrialisation of the area.

The World's first underground railway opened in 1863, running from Bishop's Road to the north of Paddington Station and then extended to Praed Street Station in the following year. This was constructed using a cut and cover method.

The Rocque 1746 map shows the site as lying in open fields. The valley associated with the line of the Westbourne Valley is depicted to the east (Figure 1). The Greenwood 1824 map shows that nearly 100 years later the area has undergone considerable development with the construction of the Grand Union Canal to the north of the site. Other than Bishop's Lane and field boundaries which cross the site, no structures are illustrated within the PIP Triangle site (Figure 2).



Figure 1 - 1746 Rocque map



Figure 2 - 1824 Greenwood map

A plan of Paddington Station dated to 1845 shows that the station was originally located to the west of Bishop's Bridge Road whilst a Goods Depot was located to the east (Figure 3). The PIP Triangle site was located to the north east of the original entrance to Paddington station on an embankment which separated the goods shed from the canal to the north (Figure 4). The actual existing Paddington station constructed by Brunel was not constructed until 1854 (Figure 5).

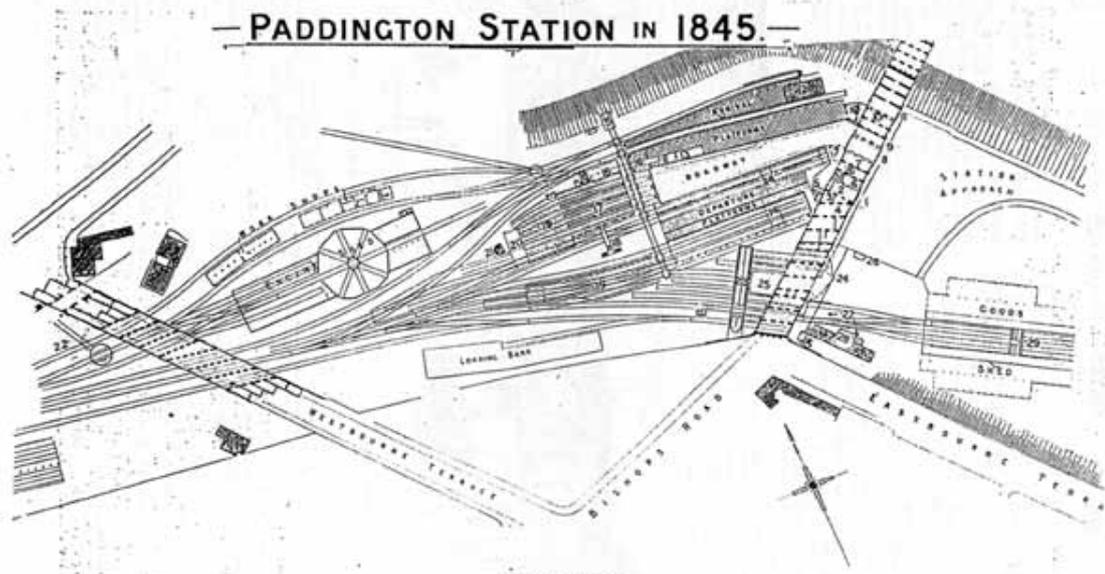


Figure 3 – Plan of Paddington Station, 1845



Figure 4 - View of the original Goods Depot east of Bishop's Bridge Road. The location of the PIP Triangle site prior to its construction can be seen at the embankment to the rear of the picture

2.2 Development of PIP Triangle site

In 1854, the Goods Depot was relocated to the west of Bishop's Bridge Road (then Bishops Road) and accessed via a Goods Ramp that connected to London Street to the east and to Bishop's Bridge Road to the west via a side road to the north (Figure 5).

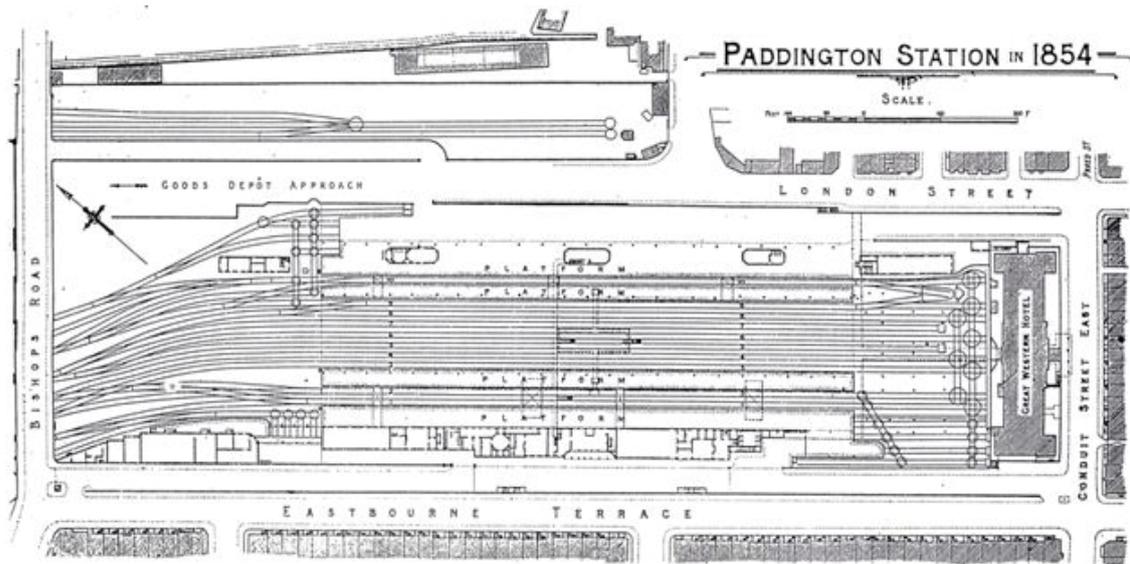


Figure 5 - 1854 map of Paddington Station, the rough triangle of which the Triangle Site would later reside is visible to the top left of the picture

By 1863 this set up had changed drastically with the construction of Bishops Bridge Station directly to the south west of the PIP site. As a result of this development, the embankment that had previously separated the original goods shed from the canal was replaced with a retaining structure and a high level coal depot with associated tracks (Figure 6). It was during this period that the triangular formation of the PIP Triangle began, with a new access road coming off Bishops Bridge Road, running parallel to the east of it before sweeping around in a triangular shape towards the Goods Ramp which sloped west under the bridge (Figure 7-8). These new ramps were supported by brick vaults, a number of which still survive and shall be discussed further in Sections 3 and 4.

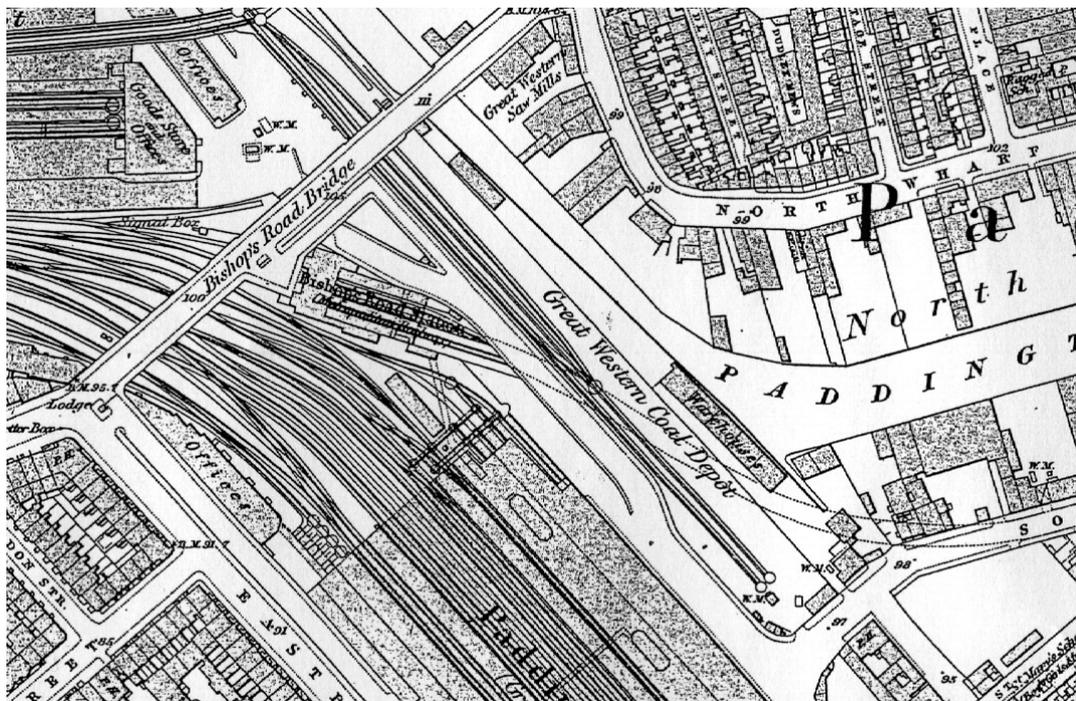


Figure 6 - 1872 map showing Bishop's Road Station and the changes that occurred to the Triangle site

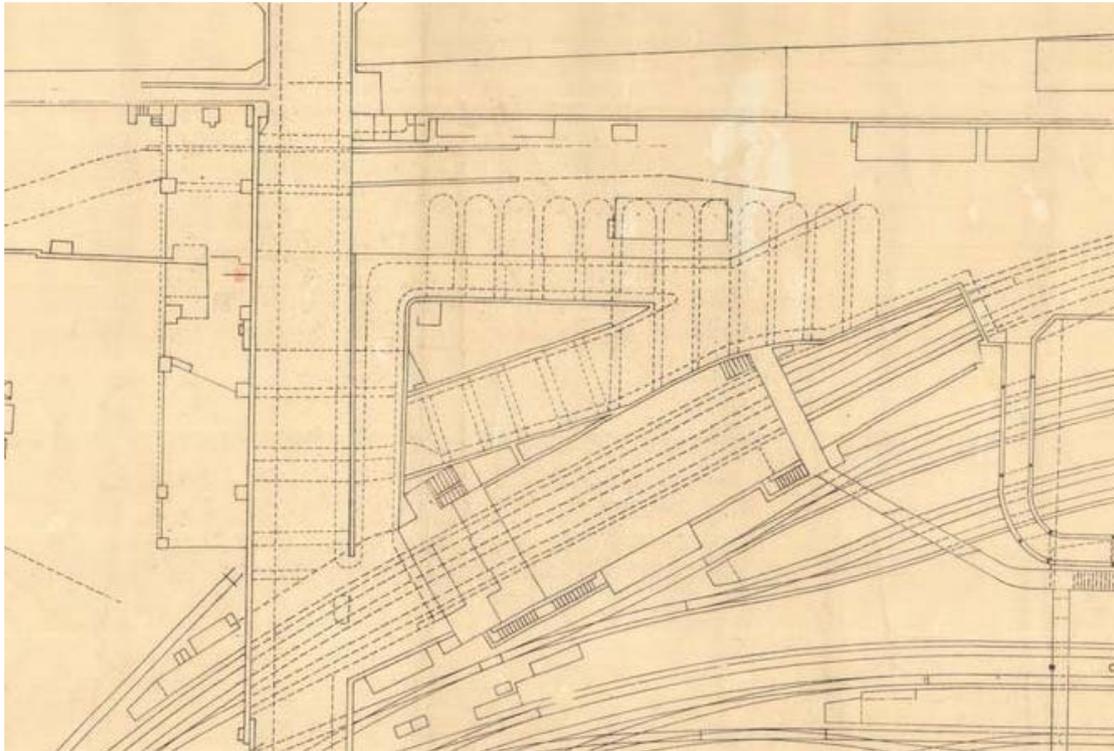


Figure 7 - 1928 map showing the new formation of the site and original extent of the stables

The vaults were originally used as stables for horses that were utilised to aid the transportation of goods from the Goods Depot to the west to the South (Figure 7). In addition to this other rooms were created under Bishop’s Bridge Road and the access road, which were used to cater for the carmen who would have driven vehicles used for the transportation of goods. These rooms included dining areas, a kitchen and a scullery (Figure 8).

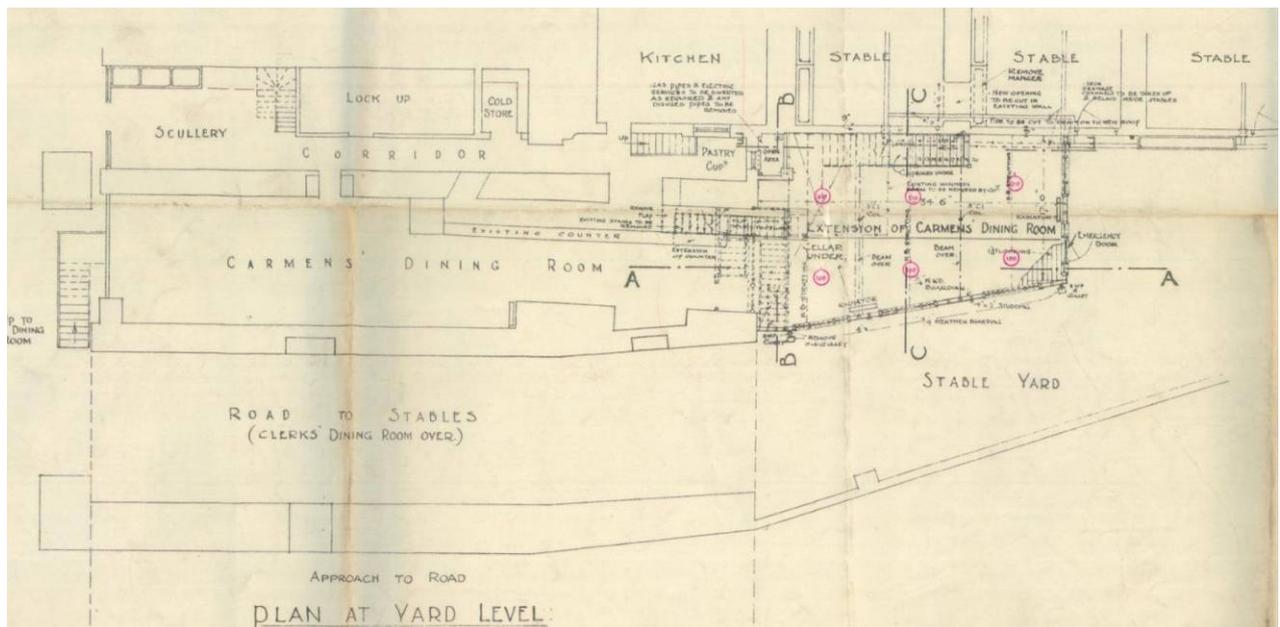


Figure 8 – Showing original access to stables from the west and original function of rooms (source: G.W.R. Paddington Goods Depot: Extension of Carmen’ Dining Room, Architectural Department 1928)

Major alterations occurred in the 1930s when Bishops Bridge Road Station was completely rebuilt and reoriented in order to increase the number of platforms. It was during this period that the station lost its name and was incorporated into Paddington Station. These works resulted in the demolition of the vaulted access road that ran parallel to Bishops Bridge Road and connected to the Goods Ramp in a triangular formation and with it a large majority of the dining rooms and stable structures located beneath the roadways. A new taxi ramp was then built and orientated north-west to south-east and was constructed on concrete piers over the top of the northern platform and track of the Hammersmith and City Line. To the north of this a new Goods Ramp was built in the place of the existing one which necessitated the truncation and re-fronting of the stables to the north along with the demolition and alteration of numerous vaults below (Figure 9).

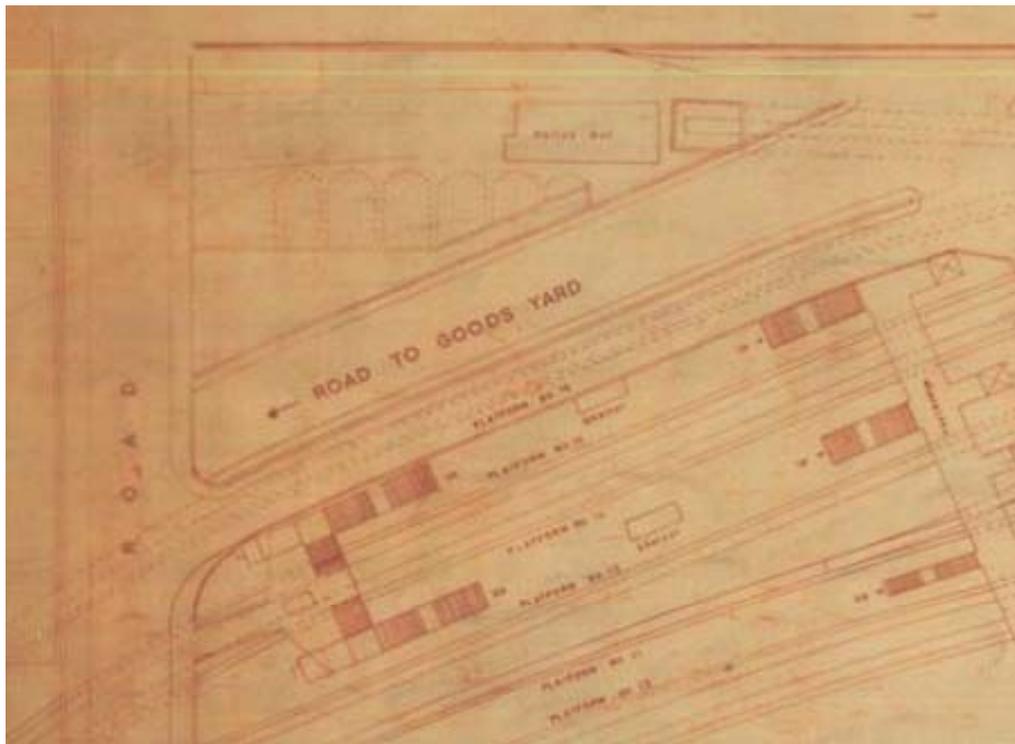


Figure 9 – 1969 plan showing impact of the 1930s works including truncated vaults, new goods road, taxi rank and extant shunt tunnel.

These alterations also resulted in the construction of the shunt tunnel. The tunnel was used as an engine spur in conjunction with the construction of the new Paddington station that replaced Bishops Bridge Station. The tunnel housed electric locomotives which were used to take over from the steam engines on their approach to the underground network to the east (Figure 10).

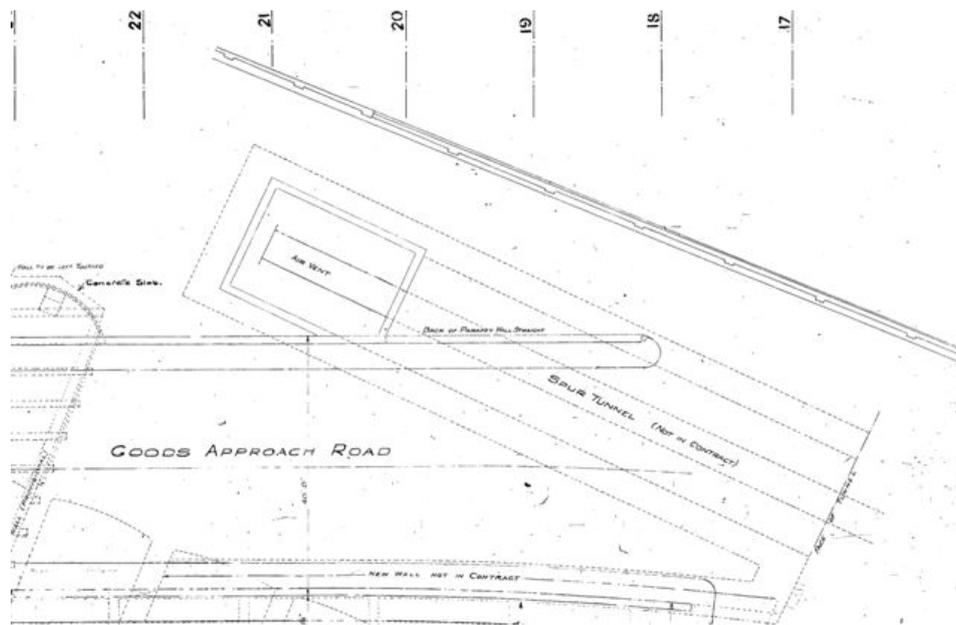


Figure 10 – Plan of shunt tunnel (source: G.W.R Paddington Station Improvements: Bishops Road Station, Goods and Taxi Approach Roads. General Plan of Reinforced Concrete Work, Contract No. 11, Drawing No. 2)

The theme of incorporating structures within ramps and bridges continued with the 1930s improvements with a number of rooms being constructed underneath the new Goods Ramp. The function of these rooms were similar to those that preceded it with men's dining rooms and kitchens identified in historic map analysis (Figure 11). With changes in transportation, the need for horses was reduced and as such the stables were no longer used for their original purpose, being utilised as stores, sculleries, lavatories and other associated uses (Figure 11). During this period the majority of vaults were internally altered, this predominately took the form of their internal layouts being completely encased in concrete and original stone setts being removed (Figure 11). The only vaults to escape this treatment were located to the east, numbers 7-9 (Appendix 2, Drawing No. 2), although they did experience other alteration works that impacted upon their appearance which shall be described in Section 4.

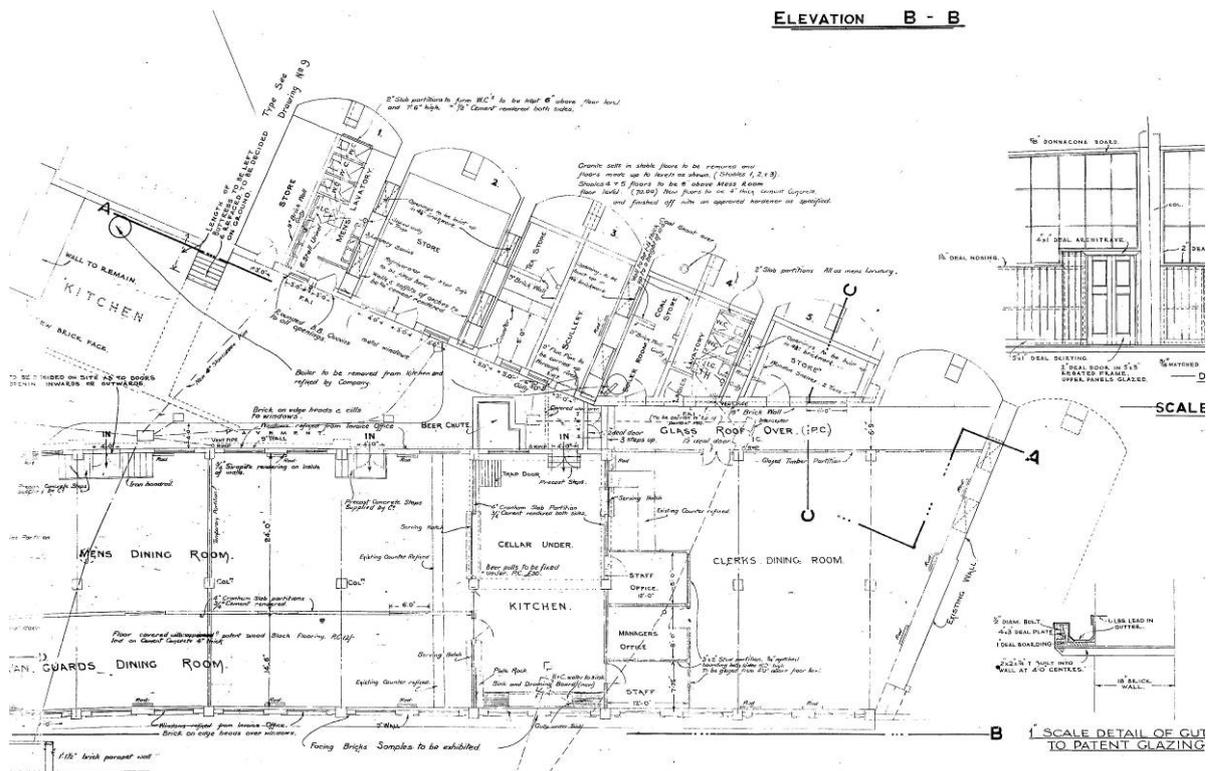


Figure 11 - 1930s remodelling of the Triangle site

The mid to late 20th century saw numerous changes in and around the site. The Goods Depot that the Goods Ramp once served was slowly phased out of use between the 1970s and 80s and with it the use of the vaults and rooms beneath the ramp. Bishop's Bridge was also demolished in 2005 to incorporate a wider structure to ease traffic movement.

Having described the historic evolution of the surrounding area and the PIP Triangle site a general description of the site shall be given before an analysis of historically significant features is provided.

3 Description

The Triangle site features a surviving late 19th century vaulted stable block, heavily altered, truncated and refaced in red brick in the 1930s. The rest of the site is predominately made up of additional 1930s structures including a truncated Goods Ramp and rooms below along with the shunt tunnel. In addition to this, stone setts are also still extant on the Goods Ramp and within the Upper Triangle site. Much of the internal fabric of the structures was lost in the early 20th century when the vaults were converted and rendered in concrete, what follows here is a description of both the Upper and Lower Triangle sites including detailed descriptions of the vaults and shunt tunnel.

3.1 Upper Triangle

The Upper Triangle site is fairly plain in character containing a gravelled area adjacent to the canal which rests in part on the vaults below (plates 1-7). This area features few surviving areas of historic interest with the exception of intermittent stone setts. In addition to this there are visible remnants of earlier structures including the concrete base of the former police station (6-7). Running at an angle to this upper section survives the former Goods Ramp area which features a proportion of original granite setts most of which are covered with tarmac (plates 10-12). The Goods Ramp is separated from the upper section of the site by a smooth red brick parapet wall in the English bond with a concrete coping (plate 13).

3.2 Lower Triangle

The Lower Triangle site is made up of an open yard bounded to the north by the continuous red brick façade of the re-fronted vaults (plates 1, 8, 9 & 15), to the east by the truncated Goods Ramp (plate 15,) to the south by the red brick and concrete foundations of the taxi ramp (plate 9) and to the west by a car park (plate 9). The open area contains no elements of historic interest. The brick fronted vaults that front onto the open yard area are very plain in character featuring apertures surmounted by concrete lintels, four panel door openings and plain metal multi paned windows. There is visible scarring on the façade where previous structures have been tied into the building (plates 16-18). Of more historic interest is the surviving buttress to the west of the façade. The unit is made of stock bricks with some engineering bricks to its southern face remaining (plate 19).

During the course of the recording, sections of the Goods Ramp were demolished allowing further access into structures underneath the good ramp (plate 15). Heading east, underneath the ramp fragmentary remains of the 1930s dining room remain. There is little of note here with regularly spaced concrete stanchions supporting the concrete ceiling above (plates 20-22). To the west of the dining room are some surviving plain office rooms (plates 24-25).

To the north of the dining area are further brick fronted vaults of the same design as the ones fronting onto the open yard (plates 26-28). Vault 6 is visually different to the others vaults however in that it features a relatively wide stairway to its entrance door. Other items of note in this area include remnants of parquet flooring outside vault 4 (plate 29).

Having provided a general outline of the site, each surviving vault shall be described in detail before the shunt tunnel is addressed.

3.2.1 Vault 1

Vault 1 is partitioned into a western and eastern room. The western room had been completely encased in concrete and retains some ceiling fixtures dating the mid 20th century. Historic plans show this room to have been used as a store after the 1930s conversions (Figure 11), although there was a heating system still extant within the room (plate 31). On its northern extent remain sections of a truncated semicircular horizontal buttress, and on its western elevation a number of corbels were still visible (plate 30).

The eastern section of the room was much more cluttered, having been previously used as a men's lavatory. The vertical buttress detail to the north of the room had been obscured by the insertion of a partition wall. A water tank and other modern fittings were also still extant (plates 32-34). Modern timbers were visible above which provide evidence of a previous suspended ceiling. Above this, on the southern elevation was located a ventilation window. Original corbel features were also extant.

3.2.2 Vault 2

Vault 2 was a much larger space than vault 1 due to there being no partition wall truncating the room. The lack of such wall provided a clearer view of the room's structural arrangement. Again, the room had been entirely cased in concrete obscuring much of the original fabric of the structure. To the north a semicircular horizontal buttress was clearly visible, to the centre of which was located a vertical buttress (plates 36 & 39). Flanking either side of the room on the east and western elevations were two sets of niches. Two of which contained segmental heads and flat bases (plates 38-39), one of similar composition but taller in height (plate 37 & 41) and another with an inverted arch to its base (plate 36). An existing core hole that had penetrated one of these niches showed that the niches were in fact openings originally (plate 40). This is supported by documentary evidence (Figure 11). Also extant in this room were original corbels that would have supported a ceiling structure (plates 36-37).

3.2.3 Vault 3

Vault 3 presented a room that has been divided into an east and west section by a partition wall. The western section of this room is further divided into two rooms by a partition wall running west to east (plate 42). To the northern section of the room a section of the vertical buttress was visible as were some historic bricks to the horizontal buttress where the render above had flaked off revealing an English bond in stock bricks. The walls within both rooms showed evidence of having been previously wallpapered supported by historic plans that showed the room as being used as tea store and counting room (Figure 11). Corbels were also present within the room (plate 45) as was a 1930s four panelled door (plate 44). The eastern room was more enclosed with the retention of its 1930s suspended ceiling which was supported by the original stable corbels (plates 46 & 48). Two niches were also extant in this room, one with an inverted arch and one with a flat base (plates 47-48).

3.2.4 Vault 4

Vault 4 displayed numerous features of historic interest. The composition of the room was similar to Vaults 1 and 3 having a central partition dividing the room into an east and west section. The western section was the only vault that featured surviving fragments of its original surface treatment, found at the top of the horizontal buttress in the form of brick paviors (plate 49). Above this was located a coal chute (plate 51) which is a surviving fragment of the 1930s coal store (Figure 11). To the southern section of the room surviving elements of what was once the boiler room were extant with a chimney flue being still visible in the ceiling (plate 50) and other equipment below (plate 52). Again, as with the other rooms, a number of corbels are also present (plates 50 -51). There was no surviving door in this room with only a plain rectangular opening remaining (plate 53). To the eastern section of the room part of the original vertical brick buttress was visible (plate 54) as were a 9 paned metal window (plate 55), a 1930s door (plate 56) and original ceiling corbels. Evidence of a later inserted suspended ceiling was visible in the form of charred timbers (plate 57). As with the other vaults however the majority of historic fabric was obscured by concrete render.

3.2.5 Vault 5

Vault 5 was a similar composition to Vault 2 being open with no central partition wall. At the northern end a vertical buttress surrounded by a horizontal buttress were visible (plate 58), a

section showing the form of these units is provided in figure 12. The western elevation showed exposed brickwork in the same bond and brick as those exposed in the other vaults (plates 59-60). Another set of four niches were visible in the room, all evidence of previous openings (plates 59-61). Further corbels were extant providing evidence of a previous ceiling structure (plates 59 & 61). An 18 paned metal fixed window was also visible within the room (plate 62).

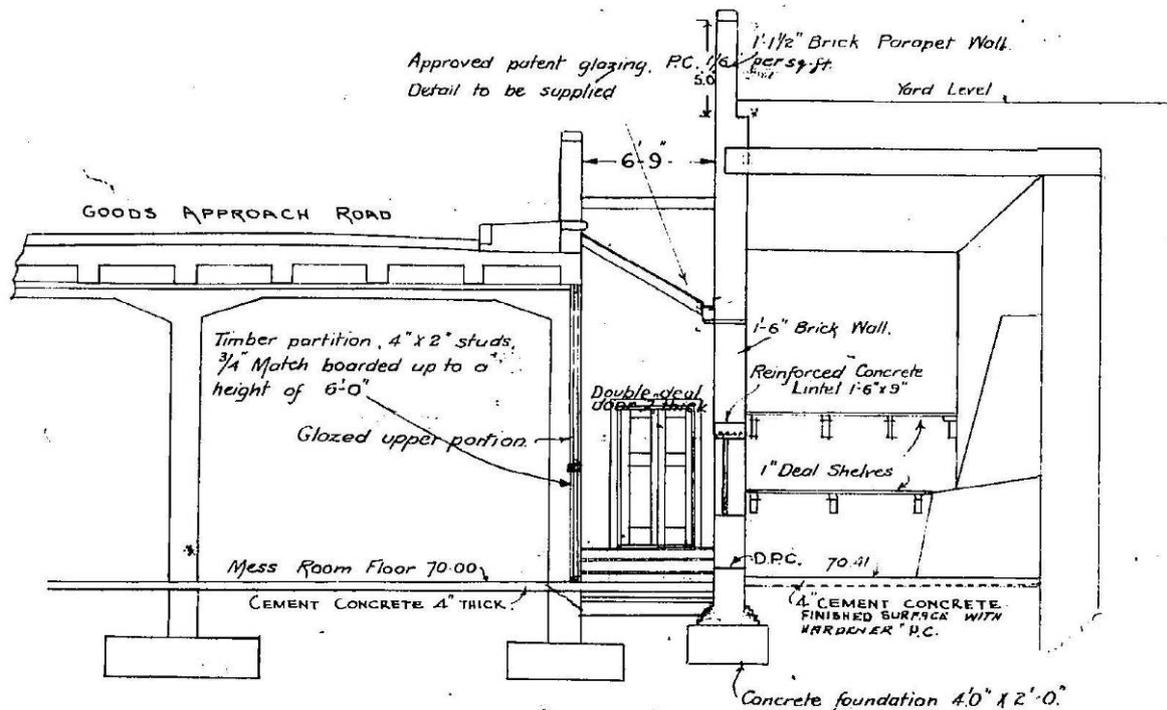


Figure 12- 1930s alterations showing a cross section of Vault 5 to the right

3.2.6 Vault 6

Vault 6 is the smallest of the vaults and also at a much higher level than the previous units being accessed via an external stairway (plate 63). No documentary evidence survives detailing the nature of the room, although from its internal makeup it would appear to be a cloak room, with panelled walls and coat hooks still surviving (plates 63 & 64). As with the other vaults, a vertical buttress and corbels are visible (plates 63 & 64). Other items of note include two small stands that may have been used as a storage unit as part of the 1930s conversions. Like Vault 5, the room also features a plain 18 paned window (Plate 66) and corbels.

3.2.7 Vault 7

Vault 7 is of interest because it was not converted to store rooms or internally lined with concrete in the 1930s works (plates 67-70). However, the insertion of the new Goods Ramp necessitated the removal of the majority of its ceiling with a concrete structure and the insertion of modern bricks to its eastern facade (plates 71 & 73) and parts of its south western façade (plates 70-72). The southern façade has also been truncated with a new front in red brick and a timber plank and batton door opening out onto the railway tracks (plate 72). Although all the floor surfaces have been removed, much of the original brick work survives to the northern and western extents as does the buttress that characterises many of the other vaults (plates 67-70). Of interest here, on the western facade are two blocked up apertures (plate 69) that are of a similar form to those niches identified in the other vaults. Half way down the room there are also straight joints apparent in the wall, and a change in the height of the floor level, suggesting the room was originally divided into two (plate 70).

3.2.8 Vault 8

Vault 8 is a relatively small vault that appears to have been originally constructed of two rooms, one to the north and one to the south (Figure 7), although the northern section was demolished as part of the 1930s alterations. The southern section has also been truncated to the south with a new 1930s façade inserted with plank and batten door (plates 76 & 77) as part of the reconstruction of Bishops Bridge Station and the expansion of both underground and suburban services works. The room is plain in character, being constructed of stock bricks with much efflorescence to the bricks and sulphur deposits (plates 75, 77 and 78). Numerous tables and hooks to the walls were also identified suggesting the room was used as some form of workshop after it was no longer used as a stable (plates 74 & 75). To the northern extent there is a boarded up opening which may have been used as a light well as the original layout of these stables would have had little natural light within them (Figure 14 & plate 74). The interesting thing of note here is that no corbels survive due to low height of the vaulted ceiling which was raised by 6 inches in the 1930s (Figure 13).

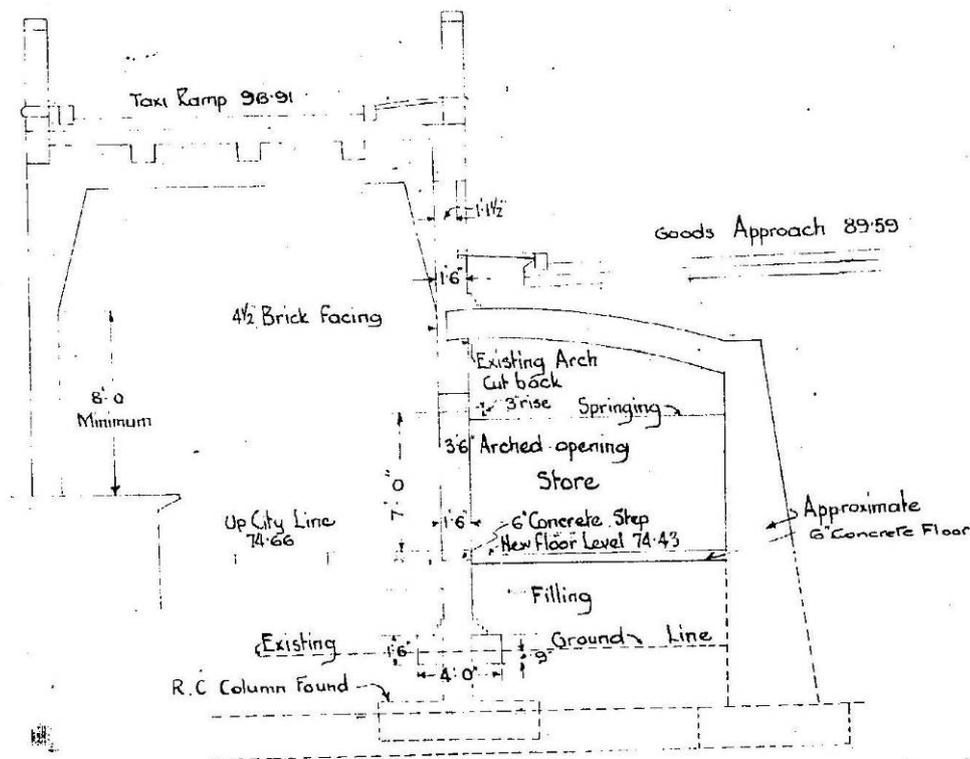


Figure 13 – Showing alterations to Vault 8 and its small scale (source: G.W.R Paddington Station Improvements: Bishops Road Station, Goods and Taxi Approach Roads, Foundation Plan and Sections, Contract No.11, Drawing No. 7)

3.2.9 Vault 9

Vault 9 is very similar to Vault 8 in its make up but is far smaller. There appeared to be new brickwork to its eastern elevation and it featured a similar plank and batten door similar to that of Vault 8 (plate 80 & 83). In addition to this there were heavy sulphur deposits to the arched ceiling (plate 8) and remnants of historic nail pegs in the masonry (plate 82). As with Vault 8 this room featured no corbels due to its relatively low ceiling height.

3.2.10 Shunt tunnel

The shunt tunnel had been initially covered over by a concrete plinth. As part of the demolition works however this concrete plinth was removed and the original ventilation shaft exposed

(plate 84). The structure itself was fairly plain in character being made up of engineering bricks on its external envelope (plate 85) and red bricks internally to its ceiling (plates 86-87). A large proportion of its historic fabric had been obscured by concrete render to the south and a modern day retaining wall to the north (plate 87). The shunt tunnel had been divided into two with a partition wall, with the section to the east not being demolished as part of the works (plate 88).

4 Analysis

The existing PIP Triangle site represents only a fragment of the original 1860s complex of stables and dining rooms for carmen that were associated with the original goods shed to the west of Bishop's Bridge Road. The construction of the Bishops Bridge Road Station in the 1930s along with the reconfiguration of the access routes in and out of the site saw much of the historic fabric removed and replaced with modern dining halls. In addition to this the original complex of stables were either demolished completely or truncated and faced with red brick. Being no longer used as stables they were also lined in concrete and many of their internal apertures bricked up and concreted over. Even much of the fabric from this replacement phase had been completely removed upon site inspection. The site does however provide fragmentary evidence of how the goods station to the west of Bishop's Bridge Road was aided in its operations. This section shall provide a discussion of the significance of those surviving elements placing them within their historic context.

As discussed previously the Upper Triangle site presents little of historic interest due to the lack of extant fabric. There are remnants of the former police station in the form of a concrete base and a parapet wall dating to the 1930s. The upper section of the Goods Ramp also survives, although of little architectural merit, it is the last surviving remnant of the access route that was used to access the Goods Depot. In addition to this, numerous historic granite paving setts were also extant albeit mostly concealed under tarmac or rubble.

The lower triangle however provides an interesting study of the composition and functionality of the original stable yard. From documentary research, the stables appeared to be far longer in their extent than they are today (Figure 7), as a result of the 1930s truncation however much of their original form and context has been lost. Despite this, numerous assumptions and deductions can be made from documentary analysis and onsite evaluation.

The blocked up niches that were visible in Vaults 1-7 were originally open (Figure 11) and likely used to provide a means of ventilation between the stable rooms, they may have also been used as a means of access for stable works or provided a means of transporting hay between each unit. These niches are likely to be of a similar form and composition to those exposed in Vault 7 (plate 69).

It is likely that the original stables were divided into two rooms, one to the north and one to the south. Evidence for this can be found in Figure 7 which shows Vaults 7-9 being much longer in length and featuring a division running east to west across them. This is reinforced by Figure 14 which shows the vaults after the 1930s works. Vault 7 is clearly divided into two whilst numbers 8 and 9 have had their northern sections removed. It is unlikely that there would have been access between the northern and southern sections of the vaults as Vaults 8 and 9 show no visible scarring and the brickwork is identical to the rest of their original fabric (plate 74 & 81). In addition to this, Vault 7 displays a distinct change in surface half way down its length in its flooring level and also displays straight joints in the walling material where new brick work has been inserted where the rounded back of the southern vault has been removed (plate 70). The south west section of the vault also displayed new red brick work half way up the existing wall the south west section. This would suggest that the roof was raised to be in line with the northern section of the vault. The fact that Vaults 8 and 9 feature no corbels would also suggest that the roof in Vault 7 had to be raised due to the originally low ceiling height of the southern section of the room which would have presumably been akin to Vaults 8 and 9. Both Vaults 8

and 9 appear to have been separate units altogether therefore with an access route being located to their southern elevation (Figure 14).



Figure 14 - Full extent of vault 7 seen here are 8 and 9 to the right. Note access to the south route that divided (source: G.W.R Paddington Station Improvements: Bishops Road Station, Goods and Taxi Approach Roads. General Plan of Reinforced Concrete Work, Contract No. 11, Drawing No. 2)

The surviving corbels within Vaults 1-7 provide an insight into what the rooms may have originally looked like. The corbels would suggest that there was previously an upper room to the stable rooms. Historically the upper rooms of stables were often used for either accommodation, with the occupants upstairs benefitting from the heat emitted from the animals below or more often than not they were used as hay lofts, safe from vermin attack and also relatively dry being raised off the ground. Figure 15 also partially supports this idea as it describes the area as 'lofts'. The detailing of rectangular shapes to the bottom of these vaults may also provide evidence for either a light well or a method of hay delivery, although there was no extant evidence to support this theory onsite.

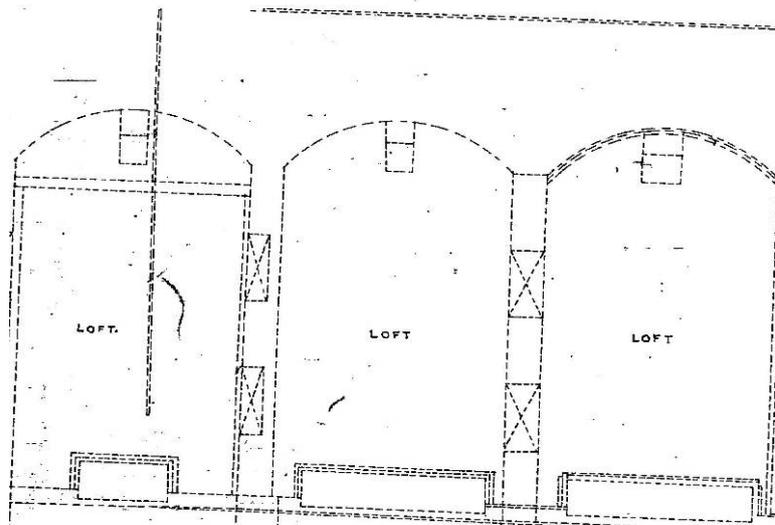


Figure 15 - Plan showing vaults described as loft areas (source: G.W.R Paddington Station Improvements: Proposed New Position of Police Hut)

The open area to the west of these stables, although originally a similar shape to what it is now was originally located slightly further south with its existing northern extent containing the full extent of the vaults that are now only partially extant. Surviving elements of structures located within the Lower Triangle were also visible on the facade of Vault 3 in the form of scarring (plate 18).

The thick surviving buttress shown in plate 19 is one of the sole surviving remnants of the former approach road that was removed in the 1930s. Figure 16 clearly shows the original layout of the area and the buttress would have originally been located to the north east of the kitchen. This plan also provides evidence for an original access road to the stables running under Bishops Bridge road to the south of the dining rooms.

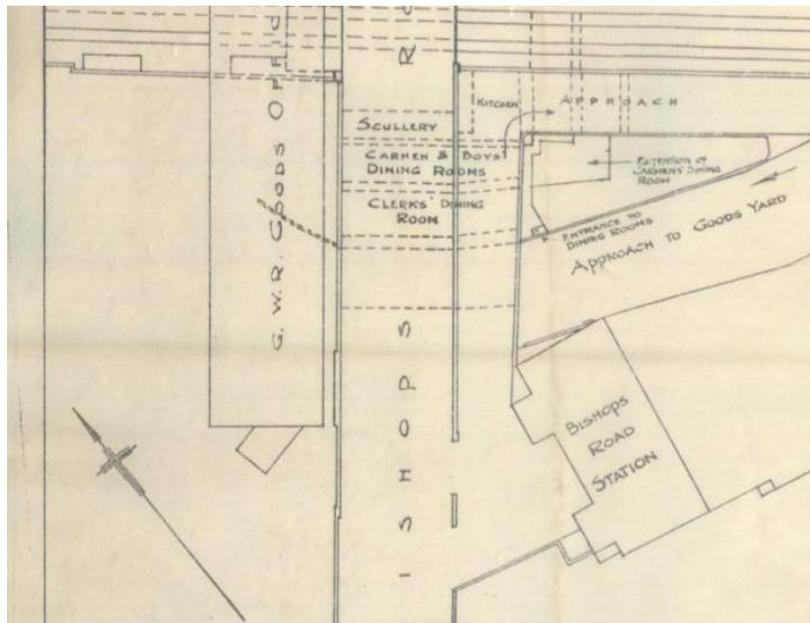


Figure 16 – Original layout of PIP Triangle prior to 1930s alterations (source: G.W.R. Paddington Goods Depot: Extension of Carmen’ Dining Room, Architectural Department 1928)

5 Conclusion

The existing PIP Triangle site represents a fragment of the original 1860s complex of stables and dining rooms that were associated with the original goods shed to the west of Bishop's Bridge Road. Although the construction of the Bishops Bridge Road Station in the 1930s saw much of this fabric removed, documentary analysis and onsite evaluation have revealed an interesting insight into the functionality of the original site.

The recording document revealed a significant survival of historic setts to the upper triangle and although of little significance, they do provide an insight into the predominant flooring materials of that period. Due to the condition of the surviving stables much had to be inferred from documentary evidence to understand their original context and historical significance. It would appear that these units were originally open to one another with apertures being located where blocked up niches now exist. Also the presence of corbels provides evidence of original upper floors possibly used for accommodation or hay storage. Vaults 8-9 provide evidence for what the southern extents (now demolished) of the other vaults may have looked like with low lying ceilings and exposed stock brickwork.

In addition to this, and although of lesser historic interest, the 1930s works provide an insight into the original layout of new dining areas and the approaches towards the reuse of historic structures at that time. The exposed shunt tunnel was of little architectural significance but does provide an insight into the construction of shunt tunnels of that period. Overall the site provides an interesting example of the evolution of historically significant railway related infrastructure despite its extensive loss of historic fabric.

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Cartographic Sources

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1824 Greenwood Map

1862 Stanford Map

1872, Ordnance Survey map. Scale 25": 1 mile. Sheet xxxiii.

1894-96, Ordnance Survey map. Scale 25": 1 mile. Sheet xxxiii.

1914, Ordnance Survey map. Scale 25": 1 mile. Sheet xxxiii.

Appendix 1 - Plates

6.1 Upper Triangle



Plate 1 - View towards Goods Ramp (right) and truncated vaults (left) from Bishop's Bridge Road



Plate 2 View towards Upper Triangle site from Bishop's Bridge Road, note the shunt tunnel (obscured by concrete here) is located to the far end of the picture near the parapet wall



Plate 3 View across Upper Triangle site towards Paddington Station



Plate 4 View across Upper Triangle site towards Bishop's Bridge Road



Plate 5 – Granite setts located on Upper Triangle site



Plate 6 – View towards good ramp showing parapet wall and concrete base to former police station



Plate 7 – Upper Triangle site showing concrete base to former police station and granite sets to front of photograph



Plate 8 – View from Goods Ramp towards truncated vaults



Plate 9 – View from Goods Ramp showing Lower Triangle site



Plate 10 – View up Goods Ramp showing historic granite sett partially covered by tarmac

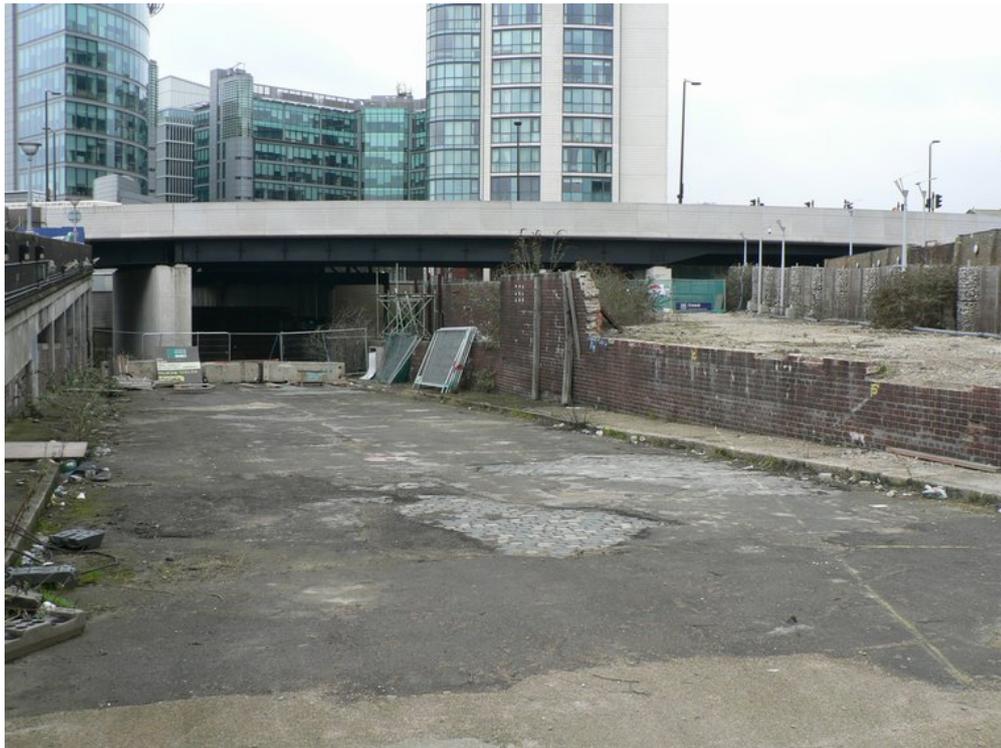


Plate 11 – View down Goods Ramp towards Lower Triangle site



Plate 12 - View down Goods Ramp towards Lower Triangle site



Plate 13 – View of parapet wall from Goods Ramp

6.2 Lower Triangle open area



Plate 14 – View towards truncated brick vaults



Plate 15 - View towards former dining rooms, note partial demolition to right permitting further access



Plate 16 – Detail of openings to Vault 3



Plate 17 – Facade of refaced and truncated brick vaults



Plate 18 - Detail of former partition to brick vaults outside Vault 3

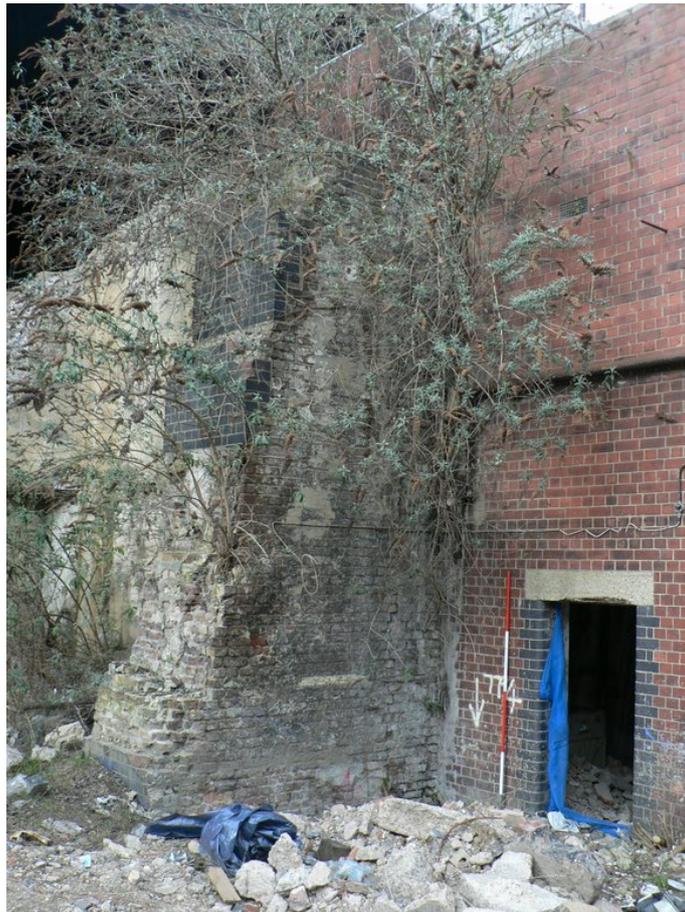


Plate 19- Large Buttress to left of picture with opening to Vault 1 to right



Plate 20- View towards Vault 6 taken in former dining room



Plate 21 – View from Vault 6 through dining room



Plate 22 – View showing internal stanchions of dining room, far wall to left lies western section of Vault 7

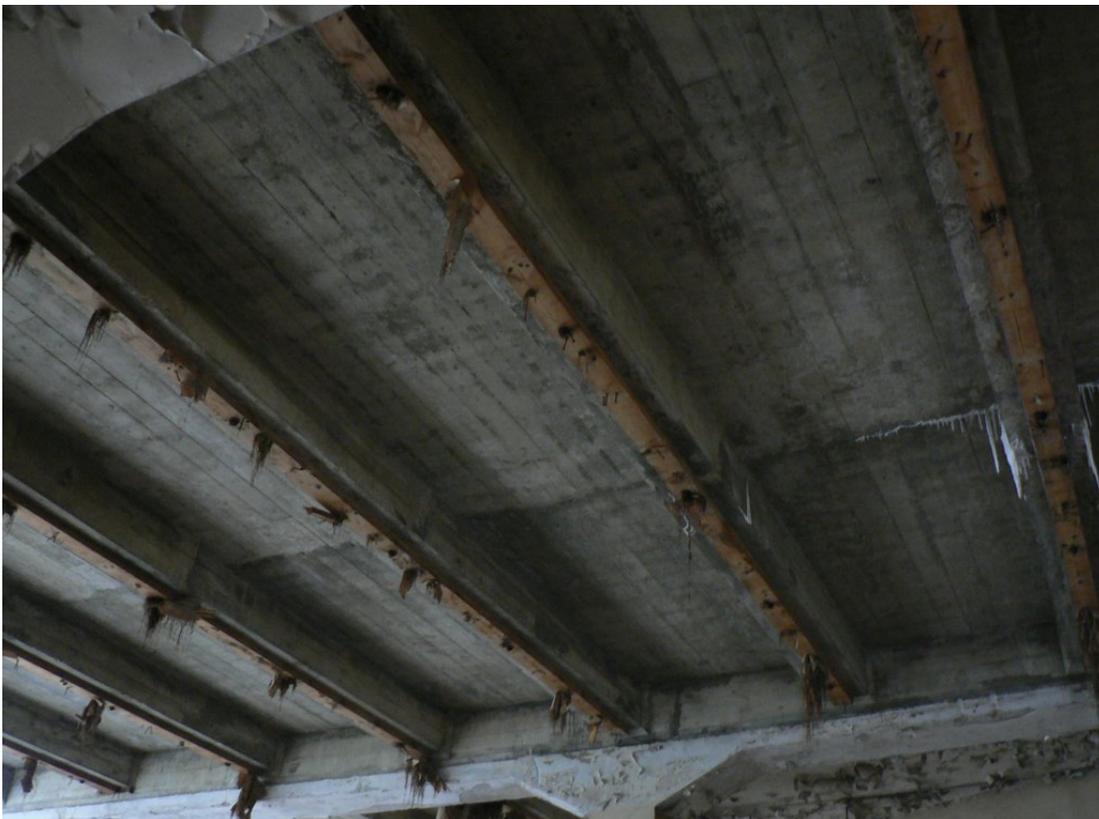


Plate 23- Concrete ceiling structure to dining room



Plate 24 – Former 1930s office space to west of dining room



Plate 25 - Former 1930s office space to west of dining room

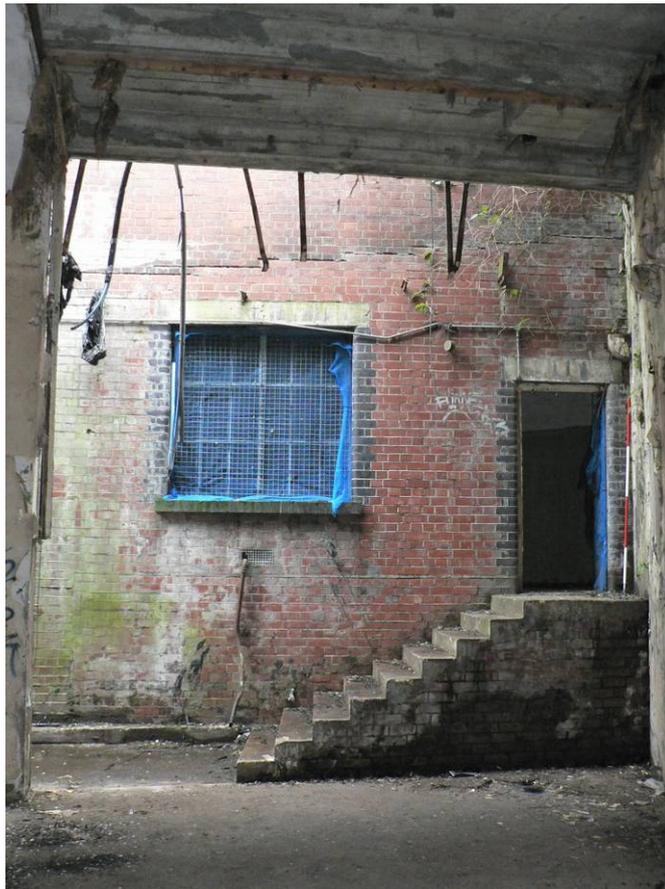


Plate 26 – Façade of Vault 6 showing raised level facilitated by stairs



Plate 27 – Façade of Vault 5



Plate 28 – Façade of Vault 4



Plate 29 – Parquet flooring outside Vault 4

6.3 Vault 1



Plate 30 – Concrete lined western section of vault one, note corbel to left and horizontal buttress to rear



Plate 31 – View towards door in western section. Note heating apparatus to right of picture



Plate 32 – Eastern section of vault showing modern fixtures and toilet facilities



Plate 33 - Eastern section of vault showing modern fixtures and toilet facilities



Plate 34 - Eastern section of vault looking towards door



Plate 35 - Eastern section of vault showing ceiling detail and opening for previous upper storey

6.4 Vault 2



Plate 36 – View towards inverted niche and buttressing



Plate 37 – View showing niche and corbels



Plate 38 – View showing partially blocked niche and metal 9 paned window



Plate 39 – Partially obscured vertical buttress and partially blocked niche to left



Plate 40 – Core hole showing blocked niche was originally hollow



Plate 41 – Niche with internal ledge

6.5 Vault 3



Plate 42 – Modern internal partition wall



Plate 43 – Exposed brickwork in English Brick Bond

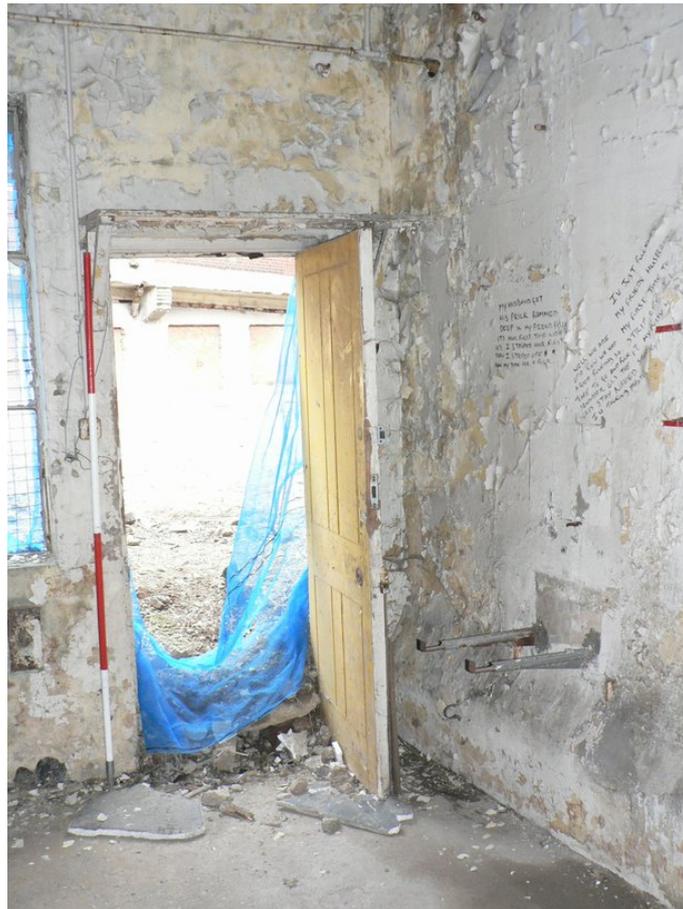


Plate 44 – View towards doorway



Plate 45 – Corbel brackets



Plate 46- Obscured brackets, note corbels supporting roof above



Plate 47 – View towards doorway and niche to left



Plate 48 – Detail showing niche and corbels

6.6 Vault 4



Plate 49 – The only vault to have exposed paviors to vertical buttress surround

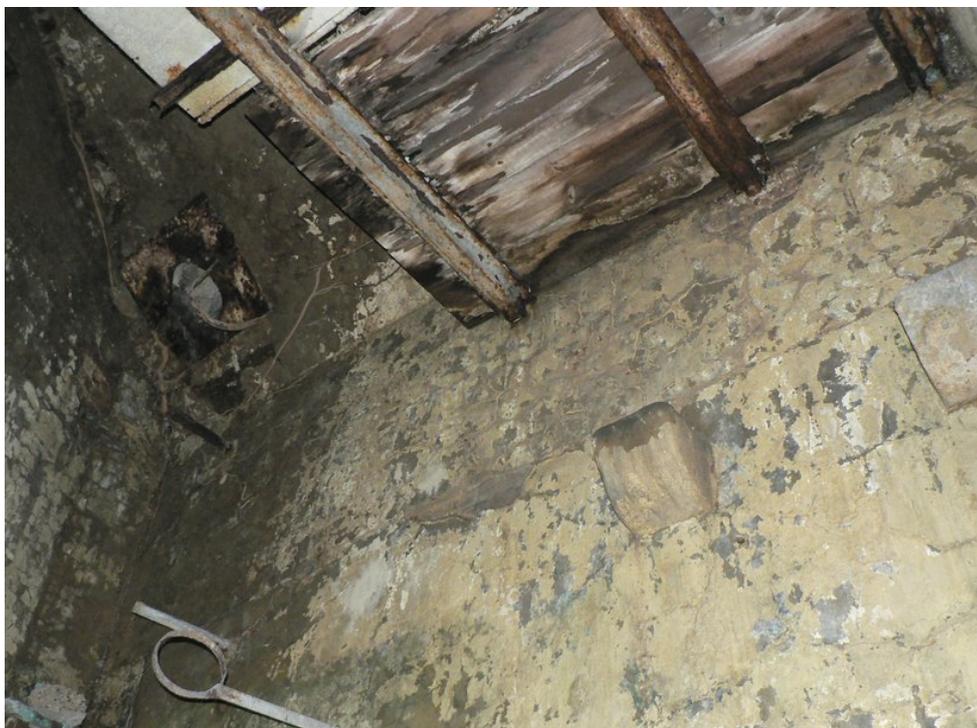


Plate 50- Ceiling detail showing chimney flue and corbels



Plate 51- Former coal shute



Plate 52 – Former boiler apparatus beneath chimney flue



Plate 53 – Door surround



Plate 54 – Part of brick buttress obscured by partition wall



Plate 55 – Typical metal window detail



Plate 56 – Modern timber four panel door



Plate 57 – Former ceiling detail, now charred

6.7 Vault 5



Plate 58 – Buttress and surround



Plate 59 – Niche and corbels above



Plate 60 – Exposed brick work showing English Bond



Plate 61 – Niche and corbel detail



Plate 62 – Typical window detail, here with 18 panes

6.8 Vault 6



Plate 63 – Vault with surviving wood panelling and coat hooks



Plate 64 – Concrete rendered buttress and panelling



Plate 65 – Former stand holders



Plate 66- Typical metal window, here with 18 panes

6.9 Vault 7



Plate 67- Vault showing exposed brickwork and buttress

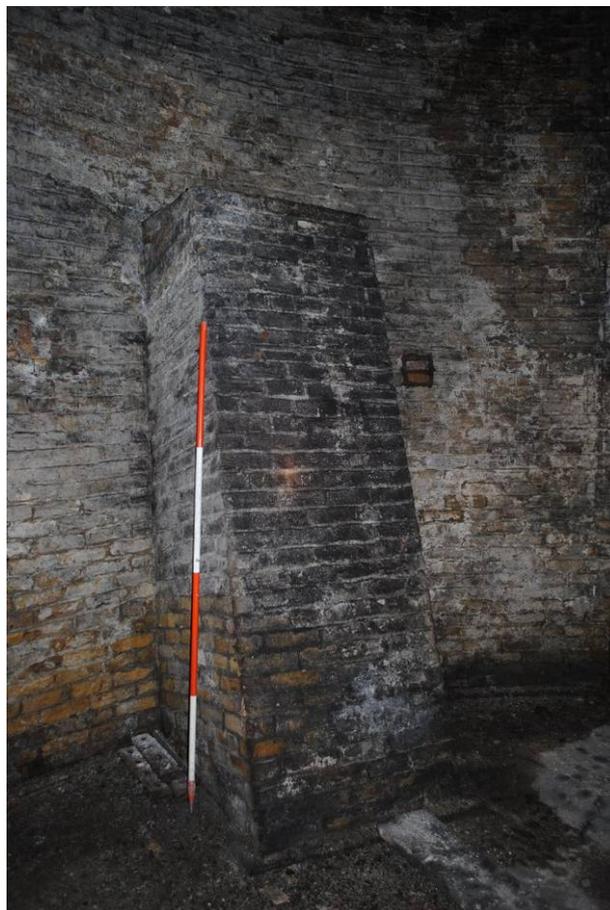


Plate 68 – Brick buttress



Plate 69 – Blocked up former archways



Plate 70 – Western elevation of vault, showing straight joint of wall to centre and change of floor level suggesting the room was originally divided into two.



Plate 71 – Eastern elevation of vault

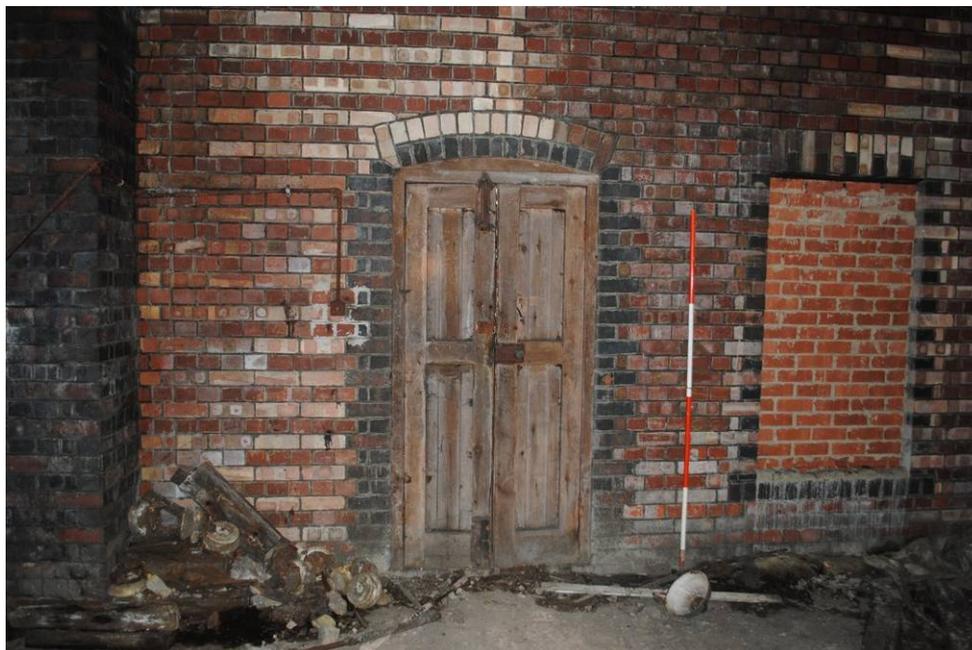


Plate 72 – Opening to track side and bricked up aperture



Plate 73 – Ceiling detail showing inserted concrete frame

6.10 Vault 8

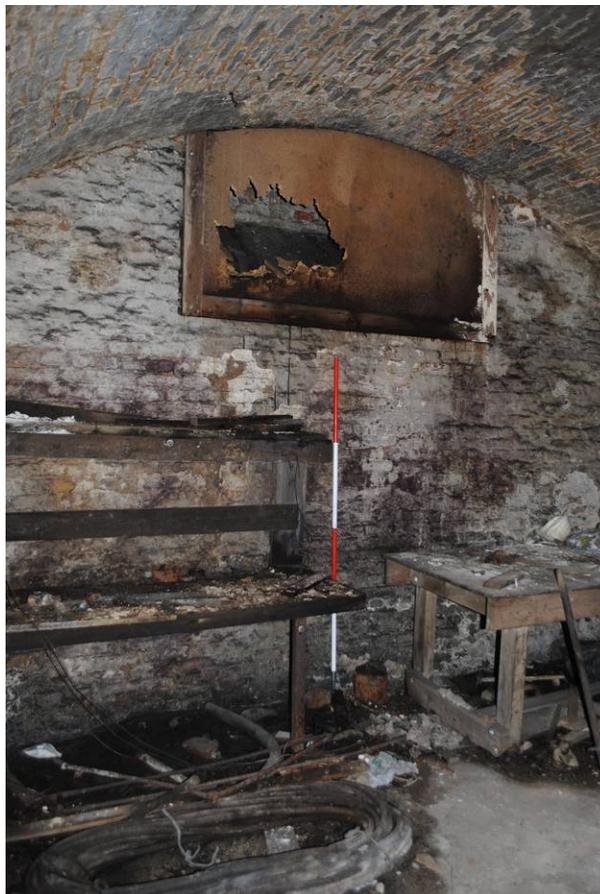


Plate 74 – Previous blocked up opening, possibly a light well



Plate 75 – Note lack of corbels



Plate 76 – Doorway to trackside



Plate 77 – View towards trackside



Plate 78 – Brick ceiling detail

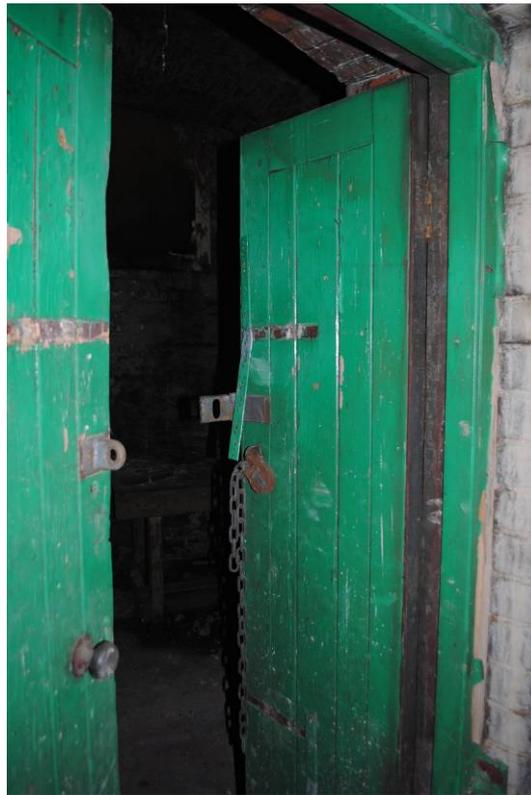


Plate 79 – Plank and batton door detail

6.11 Vault 9

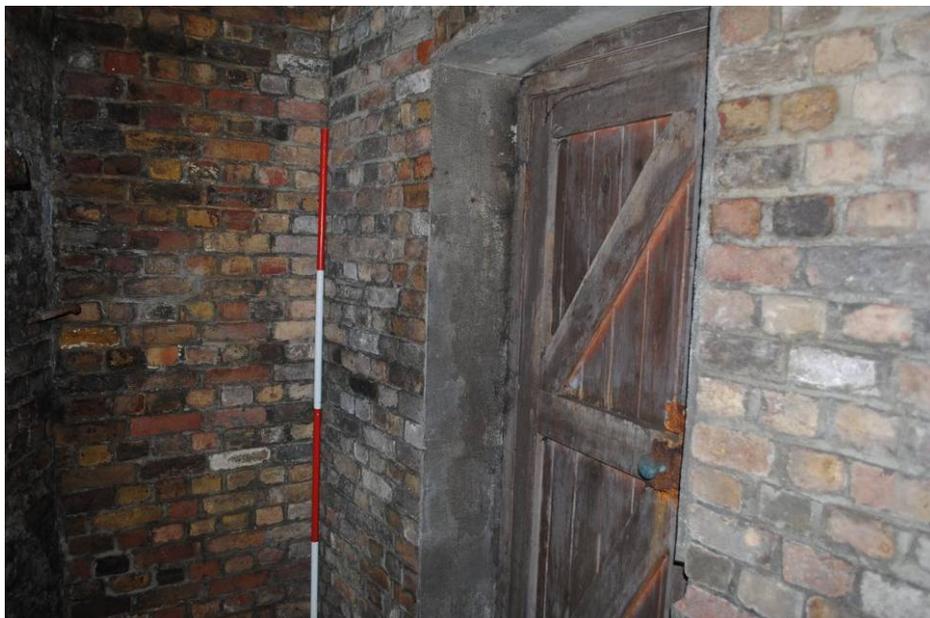


Plate 80 Inside of plank and batton door detail



Plate 81 – Brick detail to side of vault



Plate 82 – Former nail hooks within vault



Plate 83 – Plank and batton door from trackside

6.12 Shunt Tunnel



Plate 84 – Opening to shunt tunnel from Upper Triangle



Plate 85 – Entrance to shunt tunnel from the west, showing retaining structure



Plate 86 – View of ceiling with electric light to right



Plate 87 – View of shunt tunnel



Plate 88 – View west of shunt tunnel, this section is to remain

Appendix 2 – Photographic Register

PHOTOGRAPHIC REGISTER						
FILM NO.	1	NGR	TQ 264 815	FILM TYPE	35mm	
PROJECT	PIP	B&W/COLOUR	B&W	ISO	400	
Frame No.	Building	Description	Direction	Date	Photographer	
1	PIP	View towards Goods Ramp (right) and truncated vaults (left) from Bishop's Bridge Road	NE	22/04/10	SH	
2	PIP	View towards Upper Triangle site from Bishop's Bridge Road, note the shunt tunnel (obscured by concrete here) is located to the far end of the picture near the parapet wall	E	22/04/10	SH	
3	PIP	View across Upper Triangle site towards Paddington Station	E	22/04/10	SH	
4	PIP	View across Upper Triangle site towards Bishop's Bridge Road	W	22/04/10	SH	
5	PIP	Granite setts located on Upper Triangle site	-	22/04/10	SH	
6	PIP	View towards good ramp showing parapet wall and concrete base to former police station	SW	22/04/10	SH	
7	PIP	Upper Triangle site showing concrete base to former police station and granite setts to front of photograph	NE	22/04/10	SH	
8	PIP	View from Goods Ramp towards truncated vaults	NW	22/04/10	SH	
9	PIP	View from Goods Ramp showing Lower Triangle site	SW	22/04/10	SH	
10	PIP	View up Goods Ramp showing historic granite sett partially covered by tarmac	NE	22/04/10	SH	
11	PIP	View down Goods Ramp towards Lower Triangle site	W	22/04/10	SH	
12	PIP	View down Goods Ramp towards Lower Triangle site	SW	22/04/10	SH	
13	PIP	View of parapet wall from Goods Ramp	NW	22/04/10	SH	
14	PIP	View towards truncated brick vaults	N	22/04/10	SH	
15	PIP	View towards former dining rooms, note partial demolition to right permitting further access	NE	22/04/10	SH	
16	PIP	Detail of openings to Vault 3	NE	22/04/10	SH	
17	PIP	Facade of refaced and truncated brick vaults	NW	22/04/10	SH	
18	PIP	Detail of former partition to brick vaults outside Vault 3	NE	22/04/10	SH	
19	PIP	Large Buttress to left of picture with opening to Vault 1 to right	NW	22/04/10	SH	
20	PIP	View towards Vault 6 taken in former dining room	NE	22/04/10	SH	
21	PIP	View from Vault 6 through dining room	SW	22/04/10	SH	
22	PIP	View showing internal stanchions of dining room, far wall to left lies western section of Vault 7	SE	22/04/10	SH	
23	PIP	Concrete ceiling structure to dining room	NE	22/04/10	SH	
24	PIP	Former 1930s office space to west of dining room	SE	22/04/10	SH	
25	PIP	Former 1930s office space to west of dining room	NW	22/04/10	SH	
26	PIP	Façade of Vault 6 showing raised level facilitated by stairs	NW	22/04/10	SH	
27	PIP	Façade of Vault 5	NW	22/04/10	SH	

28	PIP	Façade of Vault 4	N	22/04/10	SH
29	PIP	Parquet flooring outside Vault 4	-	22/04/10	SH
30	PIP	Concrete lined western section of vault one, note corbel to left and horizontal buttress to rear	N	22/04/10	SH
31	PIP	View towards door in western section. Note heating apparatus to right of picture	S	22/04/10	SH
32	PIP	Eastern section of vault 1 showing modern fixtures and toilet facilities	N	22/04/10	SH
33	PIP	Eastern section of vault 1 showing ceiling detail	N	22/04/10	SH
34	PIP	Eastern section of vault 1 looking towards door	S	22/04/10	SH
35	PIP	Eastern section of vault showing ceiling detail and opening for previous upper storey	S	22/04/10	SH
36	PIP	View towards inverted niche and buttressing	NE	22/04/10	SH

PHOTOGRAPHIC REGISTER					
FILM NO.	2	NGR	TQ 264 815	FILM TYPE	35mm
PROJECT	PIP Triangle	B&W/COLOUR	B & W	ISO	400
Frame No.	Building	Description	Direction	Date	Photographer
1	Vault 1	Concrete lined western section of vault one, note corbel to left and horizontal buttress to rear	N	20/07/10	SH
2	Vault 1	View towards door in western section. Note heating apparatus to right of picture	S	20/07/10	SH
3	Vault 1	Eastern section of vault 1 showing modern fixtures and toilet facilities	N	20/07/10	SH
4	Vault 1	Eastern section of vault 1 showing ceiling detail	N	20/07/10	SH
5	Vault 1	Eastern section of vault 1 looking towards door	S	20/07/10	SH
6	Vault 2	View towards inverted niche and buttressing	NE	20/07/10	SH
7	Vault 2	Partially obscured vertical buttress and partially blocked niche to left	NW	20/07/10	SH
8	Vault 2	Ceiling detail above buttress.	N	20/07/10	SH
9	Vault 2	Ceiling detail above windows.	S	20/07/10	SH
10	Vault 2	Southeastern niche with internal ledge.	E	20/07/10	SH
11	Vault 2	Northeastern niche with invert.	E	20/07/10	SH
12	Vault 2	Northwestern niche partially blocked.	W	20/07/10	SH
13	Vault 2	Southwestern niche partially blocked.	W	20/07/10	SH
14	Vault 3	View towards doorway. West room	S	20/07/10	SH
15	Vault 3	Modern internal partition wall. West room	N	20/07/10	SH
16	Vault 3	Exposed brick work showing English Bond. West room	N	20/07/10	SH

17	Vault 3	View towards doorway and niche to left. East room	S	20/07/10	SH
18	Vault 3	Southeastern niche. East room	SE	20/07/10	SH
19	Vault 3	Northeastern niche. East room	E	20/07/10	SH
20	Vault 3	Corbel and suspended ceiling detail.	-	20/07/10	SH
21	Vault 3	Corbel and suspended ceiling detail.	N	20/07/10	SH
22	Vault 3	Entrance door detail.	SE	20/07/10	SH
23	Vault 3	Projecting section to base of wall.	N	20/07/10	SH

PHOTOGRAPHIC REGISTER					
FILM NO.	3	NGR	TQ 264 815	FILM TYPE	35mm
PROJECT	PIP Triangle	B&W/COLOUR	B & W	ISO	400
Frame No.	Building	Description	Direction	Date	Photographer
1	Vault 3	Eastern section of vault showing ceiling detail and opening for previous upper storey.	N	22/04/2010	SH
2	Vault 4	Pavier detail	N	22/04/2010	SH
3	Vault 4	The only vault to have exposed paviors to vertical buttress surround	N	22/04/2010	SH
4	Vault 4	Horizontal buttress and brick paviors	N	22/04/2010	SH
5	Vault 4	Former coal shute and corbels	-	22/04/2010	SH
6	Vault 4	Ceiling detail against partition wall	-	22/04/2010	SH
7	Vault 4	View towards partition wall	N	22/04/2010	SH
8	Vault 4	Parquet floor outside Vault 4	-	22/04/2010	SH
9	Vault 4	View towards northern section of vault	N	22/04/2010	SH
10	Vault 4	View of ceiling detail	N	22/04/2010	SH
11	Vault 5	Western niche with exposed brick work.	W	22/04/2010	SH
12	Vault 5	Western niche with exposed brick work and corbels	W	22/04/2010	SH
13	Vault 5	Ceiling detail	NW	22/04/2010	SH
14	Vault 5	Vertical and horizontal buttress detail	NE	22/04/2010	SH
15	Vault 5	Buttress and corbel detail	NE	22/04/2010	SH
16	Vault 5	Vertical and horizontal buttress detail	NE	22/04/2010	SH

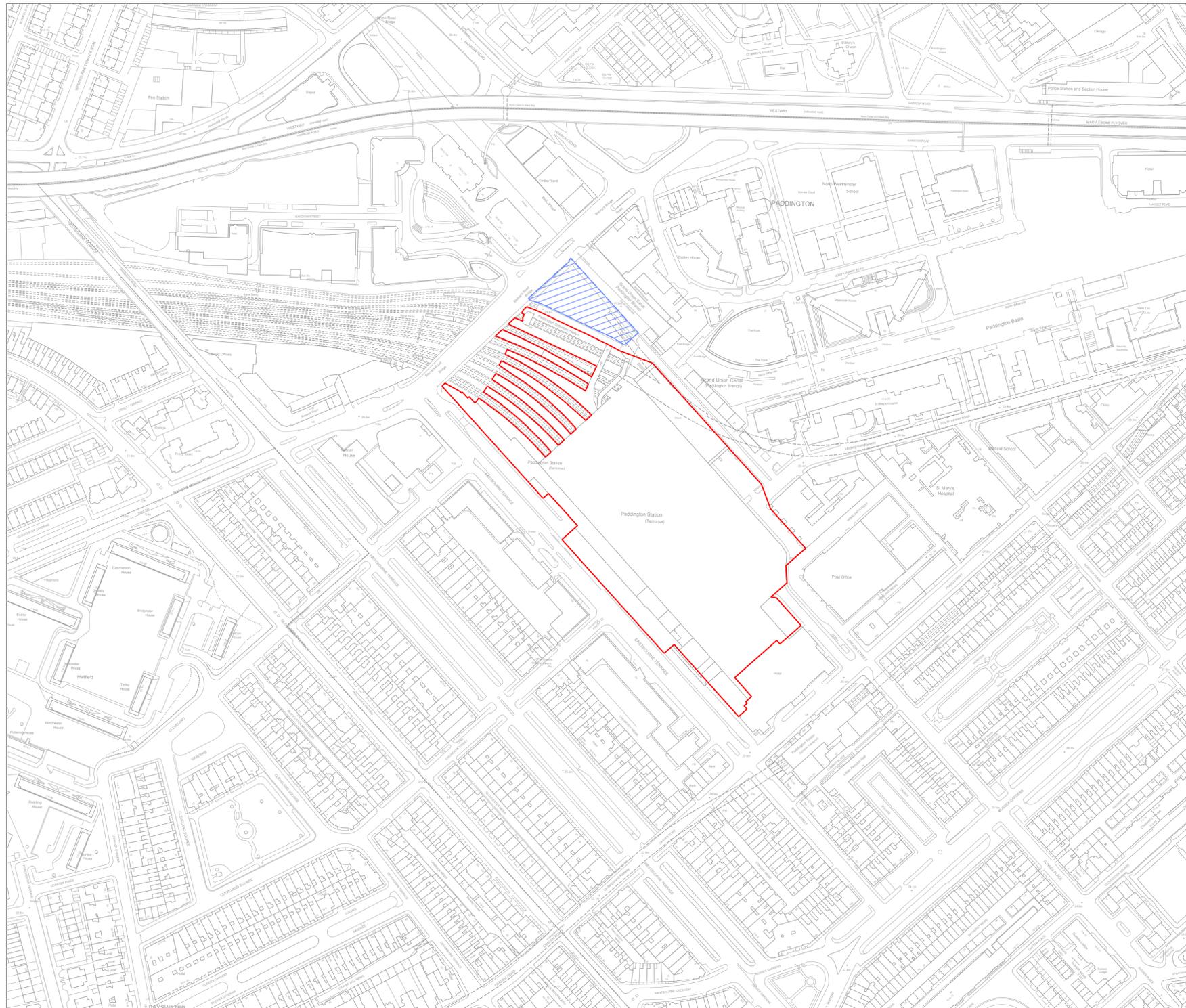
17	Vault 6	Ceiling detail	-	22/04/2010	SH
18	Vault 6	Buttress and panelling detail	E	22/04/2010	SH
19	Vault 6	Steel frame window detail	S	22/04/2010	SH
20	Vault 6	Detail of corbels	W	22/04/2010	SH
21	Vault 6	Buttress and panelling detail	W	22/04/2010	SH
22	Vault 7	View towards buttress	N	22/04/2010	SH
23	Vault 7	View towards buttress	N	22/04/2010	SH
24	Vault 7	Detailed view of buttress	NE	22/04/2010	SH
25	Vault 7	View towards ceiling	N	22/04/2010	SH
26	Vault 7	Concrete decking above inserted brick wall	E	22/04/2010	SH
27	Vault 7	View towards tracks	S	22/04/2010	SH
28	Vault 7	Detail of door and bricked aperture	S	22/04/2010	SH
29	Vault 7	Timber panelled door to railway track	S	22/04/2010	SH
30	Vault 7	Bricked up apertures	W	22/04/2010	SH
31	Vault 7	Bricked up apertures	W	22/04/2010	SH
32	Vault 7	Section of original vault to base and modern wall to top	SW	22/04/2010	SH

PHOTOGRAPHIC REGISTER					
FILM NO.	4	NGR	TQ 264 815	FILM TYPE	35mm
PROJECT	PIP Triangle	B&W/COLOUR	B & W	ISO	400
Frame No.	Building	Description	Direction	Date	Photographer
1	Vault 8	Original brickwork visible to rear and left	E	03/09/2010	SH
2	Vault 8	Detail of door from inside vault	S	03/09/2010	SH
3	Vault 8	Door and its surroundings from inside vault	S	03/09/2010	SH
4	Vault 8	Original brickwork visible to western extent	W	03/09/2010	SH
5	Vault 8	Detail of fixings on western elevation	W	03/09/2010	SH

6	Vault 8	Possible re-used rail	S	03/09/2010	SH
7	Vault 8	Possible ventilation duct	N	03/09/2010	SH
8	Vault 8	Ceiling detail	E	03/09/2010	SH
9	Vault 8	External view of door	N	03/09/2010	SH
10	Vault 9	External view of door	N	03/09/2010	SH
11	Vault 9	Brick detail to top of door	N	03/09/2010	SH
12	Vault 9	Ceiling detail	E	03/09/2010	SH
13	Vault 9	Internal elevation including possible former rail	NE	03/09/2010	SH
14	Vault 9	Internal elevation including possible former rail	NW	03/09/2010	SH
15	Vault 9	Internal elevation	W	03/09/2010	SH
16	Vault 9	Internal view of door	S	03/09/2010	SH
17	Vault 9	Internal wall elevation	E	03/09/2010	SH
18	Vault 9	Ceiling detail	E	03/09/2010	SH
19	Shunt	Entrance to shunt tunnel from the upper PIP Triangle	NE	05/08/2010	SH
20	Shunt	Entrance to shunt tunnel	NE	05/08/2010	SH
21	Shunt	View down shunt tunnel showing concrete rendered wall	E	05/08/2010	SH
22	Shunt	Common bond brick detail to barrel vault roof	E	05/08/2010	SH
23	Shunt	Common bond brick detail to barrel vault roof	W	05/08/2010	SH
24	Shunt	Eastern section of shunt tunnel entrance	W	05/08/2010	SH
25	Shunt	Eastern section of shunt tunnel	W	05/08/2010	SH
26	Shunt	Eastern section of shunt tunnel	E	05/08/2010	SH

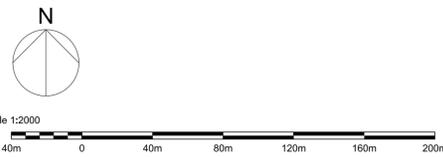


Appendix 3 - Drawings



Key

-  PIP Triangle Site
-  Curtilage of Grade I Listed Paddington Station



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Rev.	Date	Description	By	Chkd	App	Auth
P01	19/11/2010	First Issue	AB	TA	JD	---

Notes

 Crossrail Limited 25 Canada Square Canary Wharf London E14 5LQ	Contract: Paddington Integrated Project (PIP)		Originator: Mott MacDonald Limited	
	Location: Paddington Stn Bakerloo Praed Street			
	Title: Non Listed Built Heritage - Triangle Site		By: A.BARKER	
	Location Plan Drawing No. 1		Chk: T.ABBOTT	
© Crossrail www.crossrail.co.uk		Scale: NTS@ A1		Rev: P01
Drawing and CAD file No: C131-MMD-S-DDL-B071_Z-41003		S4		Suitability: S4

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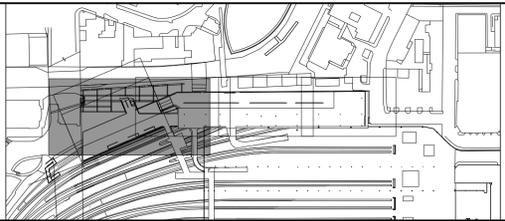
Key

- Site Boundary
- Shunt Tunnel
- Vault Number
- B Late 19th Century Buttress

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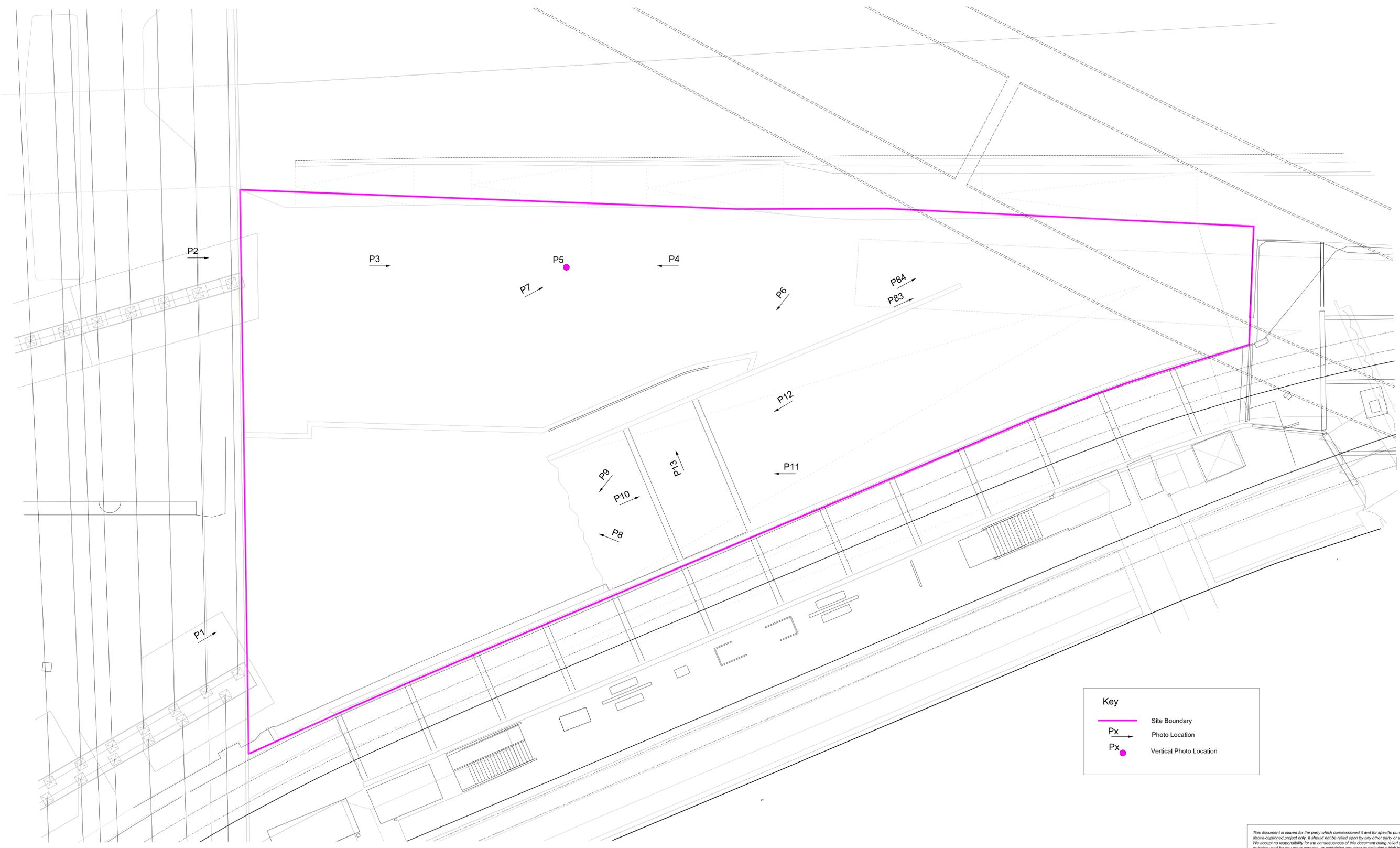
Rev.	Date	Description	By	Chkd	App	Auth
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	<p>Title: Non Listed Built Heritage - Triangle Site</p> <p>Site Boundary</p> <p>Drawing No.2</p>	<p>Scale: NTS@ A1</p> <p>Drawing and CAD file No: C131-MMD-S-DDL-B071_Z-41004</p>	<p>Rev: P01</p> <p>Suitability: S4</p>
	<p>Contract: Paddington Integrated Project (PIP)</p> <p>Originator: Mott MacDonald Limited</p> <p>Location: Paddington Stn Bakerloo Praed Street</p>		<p>By: A.BARKER</p> <p>Chk: T.ABBOTT</p> <p>App: J.DAKIN</p> <p>Auth: ---</p>
	<p>Title: Non Listed Built Heritage - Triangle Site</p> <p>Site Boundary</p> <p>Drawing No.2</p>		<p>Scale: NTS@ A1</p> <p>Drawing and CAD file No: C131-MMD-S-DDL-B071_Z-41004</p>

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Key

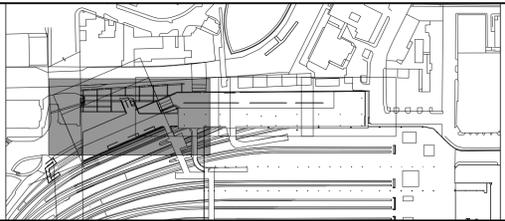
- Site Boundary
- Px Photo Location
- Px Vertical Photo Location

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	<p>Title: Non Listed Built Heritage - Triangle Site</p> <p>Upper Triangle Site</p> <p>Photo Location Plan</p> <p>Drawing No.3</p>	<p>Scale: NTS@ A1</p> <p>Drawing and CAD file No: C131-MMD-S-DDL-B071_Z-41005</p>	<p>Rev: P01</p> <p>Suitability: S4</p>
	<p>Contract: Paddington Integrated Project (PIP)</p> <p>Originator: Mott MacDonald Limited</p> <p>Location: Paddington Stn Bakerloo Praed Street</p>		<p>By: A.BARKER</p> <p>CHK: T.ABBOTT</p> <p>APP: J.DAKIN</p> <p>Auth: ---</p>
	<p>Title: Non Listed Built Heritage - Triangle Site</p> <p>Upper Triangle Site</p> <p>Photo Location Plan</p> <p>Drawing No.3</p>		<p>Scale: NTS@ A1</p> <p>Drawing and CAD file No: C131-MMD-S-DDL-B071_Z-41005</p>

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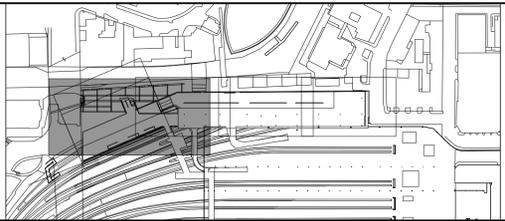
Key

- Site Boundary
- P_x Photo Location
- Vertical Photo Location

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	<p>Title: Non Listed Built Heritage - Triangle Site</p> <p>Lower Triangle Site</p> <p>Photo Location Plan</p> <p>Drawing No.4</p>	<p>Scale: NTS@ A1</p> <p>Drawing and CAD file No: C131-MMD-S-DL-B071_Z-41006</p>	<p>Rev: P01</p> <p>Suitability: S4</p>
	<p>Contract: Paddington Integrated Project (PIP)</p> <p>Originator: Mott MacDonald Limited</p> <p>Location: Paddington Stn Bakerloo Praed Street</p>		<p>By: A.BARKER</p> <p>CHK: T.ABBOTT</p> <p>APP: J.DAKIN</p> <p>Auth: ---</p>
	<p>Title: Non Listed Built Heritage - Triangle Site</p> <p>Lower Triangle Site</p> <p>Photo Location Plan</p> <p>Drawing No.4</p>		<p>Scale: NTS@ A1</p> <p>Drawing and CAD file No: C131-MMD-S-DL-B071_Z-41006</p>

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