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Appendix

Volume 2

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General Introduction

Introduction to King’s Cross Central

King’s Cross Central (KXC) is one of the most significant opportunities for urban regeneration in the UK today. The site comprises almost 70 acres of brownfield land, stretching from the Euston Road, between King’s Cross and St Pancras Stations, back north towards the Maiden Lane estate, approximately one mile away.

The site is located on one of the UK’s first inter-modal transport interchanges, dominated in the 19th Century by goods traffic using canal, train and road. Much of the related built heritage is still intact, north of the canal, as a series of 19th century buildings forming the Goods Yard. The buildings were predominantly designed for the Great Northern Railway, some by Lewis Cubitt, the architect of King’s Cross Station.

At the southern end of the site, between the stations, are several historic buildings, once part of the complex street pattern of this area, but now more isolated, due to the ongoing redevelopment of transport facilities of this area.

Today, the area is still strongly linked to its transport heritage. Much of the site is defined by the two Grade I listed stations, the extension to St Pancras station for the Channel Tunnel Rail Link terminus and the rail link itself as it curves towards the tunnel portal on its way to Stratford.

Introduction to ASG and the Landowners

Argent St George, together with London & Continental Railways (LCR) and Ewel are the developers and landowners taking forward the redevelopment of King’s Cross Central. Our vision is to create a vibrant new ‘city quarter’ to provide thousands of new jobs and hundreds of new homes, as well as creating a place for people to ‘be’ with all of the associated shops, restaurants, cultural and community uses that this entails.

Part of this vision is the re-use of existing buildings which would give King’s Cross Central a unique character and appeal. There are opportunities to open up to the public what were private buildings and to bring them back to life through the incorporation of active uses such as shops, cafés, restaurants, museums, galleries and other public uses such as higher education.

Authors of the Initial Conservation Plans

These Initial Conservation Plans have been written by Argent St George and their historic buildings advisors, International Heritage Conservation and Management (IHC&M), with input from other members of the KXC masterplanning team, including Purphryios Associates and Ailies & Morrison.
Purpose and Scope

These Initial Conservation Plans (ICP) have been written to support the Main Site outline planning application for King’s Cross Central. It is intended that they should provide the following for each of the buildings that the Applicants propose to retain and refurbish:

i. A description of the particular building (‘Understanding the Asset’ in the building’s ICP);

ii. An assessment of the building’s significance, including an assessment of the surrounding landscape (Assessment of the Significance’ in the building’s ICP);

iii. The identification of works that would enhance the building, add to the interpretation of the building and its history and / or be required to bring the building back into use based on the range of uses specified in the outline planning application. It is anticipated that these works would form a part of any proposal for refurbishment (‘Defining the Objectives’ in the building’s ICP);

iv. Refurbishment parameters within which works described in ‘Defining the Objectives’ would be designed in detail and carried out through the life of the phased development (‘Refurbishment Parameters’ in the building’s ICP);

v. The identification of possible future conservation measures and interventions that may be required later, depending on specific future schemes, land uses and occupiers and the parameters within which these proposals would be carried out. These measures and interventions have not been applied for at this stage and are simply our current ‘best guess’ of the types of work that may be needed later, as part of a detailed scheme for refurbishment, to support one or more of the range of land uses applied for (ICP Appendix).

At this stage we are not able to be specific about use and internal fit-out and it is therefore not possible to be precise about the extent of works required for each building.

There are, however, some works that we are certain are required in order for the building to function within any of the range of uses we have identified, whilst maintaining a strong historical character. These works, required to facilitate the refurbishment and re-use of the buildings for any combination of the specified uses, are set out in Annex E to the Main Site Development Specification. They are also included within ‘Defining the Objectives’ in each of the Initial Conservation Plans, where they are put within their wider historical context. Similarly, the refurbishment parameters in the Main Site Development Specification Annex E are the same as those within the Initial Conservation Plans, as identified at ‘iv’ above. Should there be any conflict between the works and parameters listed in Annex E of the Development Specification and this document, Annex E will take precedence.

Future Development of the Full Conservation Plans

It is acknowledged that the notion of Initial Conservation Plans is relatively novel. However, these Initial Conservation Plans indicate our proposed approach to the conservation of these buildings, whilst acknowledging that many details would inevitably come forward later.

Over time the Initial Conservation Plans would be translated into Full Conservation Plans to inform and support future choices. With more defined uses, it would also be possible to reassess the potential works in item v. of the list above (and the Appendix of the ICPs) and either discard them as not required for the specific use or to bring them forward as definite works and parameters. The Conservation Plans (both ‘initial’ and ‘full’) are intended to be active, useful documents, to aid the Applicants, Camden Council, English Heritage and other interested parties.

The precise approach to progressing the Conservation Plans will depend on the way in which future schemes are carried forward. If proposals are advanced with a specific user in mind, it is likely that Full Conservation Plans would be developed relatively early, including aspects of the management and long-term maintenance of the building. If proposals are advanced speculatively, it may not be possible, or even desirable, to provide full details on all topics initially. We are mindful that promoting a full scheme for a particular use speculatively might mean the unnecessary loss of internal features that a subsequent identified user might have retained. We are also conscious that different occupiers are likely to require different occupation agreements and arrangements and these, together with the particular uses, would partly determine future management and maintenance regimes. In these cases, the Full Conservation Plan is likely to evolve through a number of stages, each one appropriate and relevant to the stage reached in the refurbishment and use of the particular building.

In all cases, the Conservation Plans, whether ‘initial’ or ‘full’, are, and will remain, live documents to provide a framework for works to, and the management of, the buildings as they exist today.

The ‘Full Conservation Plans’ are likely to include:

- Risk assessments (security of funding, accidental damage, future adaptations, sustainability etc);
- Policies for further investigative work, documentary research, and recording;
- Policies for conservation (of the fabric, the finishes, the landscaping);
- Policies for modern (permanent) interventions to accommodate the specified uses;
- Policies for temporary works;
- Policies for the management of works to the building, including the use of trained and experienced teams;
- Policies for the management and maintenance of the operational building.
Use of the Conservation Plans

The chart opposite (Fig. 1) sets out the broad intentions regarding the evolution of the Conservation Plans and their integration with the processes of future approvals, design, construction and management.

Stage 1 shows the work that has been done to date to prepare these Initial Conservation Plans in support of the outline planning applications and the works applied for.

Stage 2 outlines a likely process for the evolution of a scheme and the initial refurbishment of a building. It highlights the possibility that this stage could be split into a number of sub-stages. As has already been discussed, this may be appropriate, and even desirable, for schemes that are progressed speculatively. In other cases, stages 2a, 2b and 2c may be more appropriately dealt with as a single stage.

Stage 3 covers the main construction and refurbishment works and subsequent operation of the buildings.
King's Cross Central Conservation Policies

The number of existing buildings on the King's Cross Central site, together with the range of heritage features within the public realm has led us to develop a series of conservation policies that consider the site as a whole, rather than on a building by building basis.

We will continue to apply the following, general heritage conservation principles, throughout the redevelopment of the former railway lands at King's Cross Central. They are consistent with international heritage conservation charters:

The Value of its Site and its Resources

- King's Cross has a powerful heritage of great historical significance, with buildings, structures and features of national importance and a distinct ‘sense-of-place’;
- The area’s original development was an incredibly vigorous manifestation of Victorian society and its economic activity, in particular the interchange and distribution of goods to service the substantial expansion of Victorian London. Today’s this human vigour and activity is reflected in the historic buildings, structures and surfaces that remain at King’s Cross, its urban form and, in particular, the inter-relationships between the canal, railways and roads;
- The character and special interest of the Goods Yard complex, to the north of the Regent’s Canal, stems largely from the totality of the historic urban grain i.e. the group value of the various buildings, structures, spaces and surfaces within the Conservation Area;
- The surviving street furniture, such as granite setts and kerbs, and functional iron townscape features such as bollards and gas lamp brackets, are part of the historic robust streetscape and part of the character of the area.

General Regeneration and Development Principles

- The heritage environment affords us a tremendous advantage and opportunity, in terms of establishing a cultural identity and the sense of place necessary to generate economic, social and environmental value. Historic buildings are a valuable material resource and can contribute directly to the prosperity of the economy;
- Physical survivals of our past should be valued and protected for their own sake, as a central part of our cultural heritage and our sense of identity. Our proposals should therefore build on the sense of place afforded by the historic environment, to create a new quarter for London;
- Successful redevelopment and regeneration will generate economic value. This is a desirable objective. Economic prosperity can secure the continued vitality of Conservation Areas and the continued use and maintenance of historic buildings. Successful conservation can also secure the economic vitality of associated new buildings;
Our proposals should reflect and benefit from the proper assessment of the historic buildings, structures, surfaces and wider conservation areas. – one that evaluates and understands their character, value and significance, together with the potential for their integration within the development proposals;

The site includes two major groups of ‘frontal’ heritage buildings – the stations in the south together with the German Gym and the Goods Yard buildings in the north. These afford the opportunity to define two of the civic spaces for King’s Cross, linked together by public routes;

These two civic spaces are the starting point for a robust urban framework of connections, routes and spaces, to bring people into this previously ‘private’ transportation site;

Retained heritage buildings and features should be embedded within this urban framework, within the fabric of the city, to bring vitality and new life and secure their long-term future. We do not favour the artificial creation of a ‘heritage park’, with old buildings set apart, disconnected from the rest of Greater London;

The urban framework should observe important spatial relationships and allow important views to survive;

King’s Cross has a strong townscape character. It is a hard, robust urban area. This provides a clear physical and historical framework for the future development of the area as a whole and its landscape treatment;

We should work with others to devise and deliver a co-ordinated strategy for St Pancras and King’s Cross Stations and the environment of the Euston Road. The removal of the temporary concourse at the front of King’s Cross Station and the restoration of the original façade should be a central tenet of the strategy;

The proposals should address “negative features” within the Conservation Areas, including the petrol filling station close to York Way, the absence of a publicly accessible link across the Canal into the Goods Yard and the detailing of access from York Way;

We must balance the need to conserve the historic environment with the economic, social and environmental benefits of development and regeneration;

In assessing that balance, we will want to retain and accommodate heritage buildings that can enhance the public realm of the new city quarter (irrespective of any planning and legal considerations) and be put to good economic use, for example commercial or residential occupation;

We will make every effort, therefore, to ensure that listed buildings and other valuable heritage resources are retained and incorporated into the future development of the site, in an appropriate setting and context;

Many historic buildings, structures and surfaces are capable of being re-used in exciting new ways that will give them a new life. Others, however, because of their nature, condition or location, may not have the same potential. There may be strong and valid reasons why we should consider their removal;

We will justify and assess any proposals to remove listed buildings or other valuable heritage features, within the context of PPG15; and

We should undertake thorough documentation of heritage assets before any works are undertaken, particularly where features are planned to be removed/demolished. It may also be appropriate to undertake recording during any works. Any materials removed from buildings approved for demolition or conservation will be considered as salvage and considered for possible reuse.

Adapting Buildings for Re-Use

In general, the Goods Yard buildings have tremendous potential for use within their existing envelopes;

Retaining and accommodating heritage buildings, to provide for new, economically viable uses may, however, mean some redevelopment and intervention;

In making judgements about retention, adaptation and re-use, we should aim to identify viable uses that are compatible with the special interest of the historic buildings, their fabric, interior and setting;

In some cases, the special interest or qualities include the spaces and layout of the building and the architectural or technological interest of the surviving structure and surfaces, as well as more obvious visual features;

The degree of impact caused by adaptation and re-use is not, therefore, simply a function of fabric loss. A small intervention could have a significant impact on the special interest or qualities of a building. Conversely, a larger intervention (in terms of fabric loss) could have a less significant effect on its special interest and special qualities;

Interventions and adaptations commonly do not have a negative impact on a building’s special interest. For some buildings, cumulative changes, reflecting a diverse history of use and ownership, are part of the special interest and, in this context, new alterations or additions have positive merit. This is especially so where they are generated within a secure and committed long-term ownership;

Missing structures and fixtures should be reinstated where there is good evidence of past function, form and fabric and where this would make a positive contribution to the group value of the heritage asset and combined new use(s);

Overall, a realistic, imaginative and flexible approach should be adopted to any alterations and changes of use, to reflect the needs of a rapidly changing world;

If key components are removed, as part of interventions, they may be reused in the scheme and/or have meaningful museum value;

We should avoid alterations and changes that will tie historic buildings to a particular, specialist use that may not provide long-term viability, vitality and flexibility;
• The preservation of facades alone and the gutting and reconstruction of interiors is not normally an acceptable approach for the re-use of historic buildings;

• Future interventions would be designed for longevity, so that there is no progressive loss and change of form and fabric. This will help to authentically sustain them.

New Development Within the Historic Context

• Good new building, high quality design, thoughtful planning and intelligent land uses are desirable objectives in their own right;

• Good new design does both complement and enhance the historic environment and create a rich historic environment for the future;

• We should encourage a contemporary, bold imaginative design approach that complements and enhances existing features;

• New buildings that stand alongside historic buildings should follow fundamental architectural principles of scale, height, massing and alignment and use appropriate and compatible materials;

• We will ensure that the benefits of both old and new are fully respected and integrated into the spatial masterplan.
Western Coal Drops and Viaduct: Initial Conservation Plan

Understanding the Asset

The Western Coal Drops and Viaduct are located to the west of the Granary complex, within the Goods Yard. When built, they were an important part of the inter-modal functions of the yard, with trains entering at the upper level, goods being dropped and held at the intermediate level, before being distributed to carts at the lower level and also barges in the Stone and Coal basin to the west.

Located at the lower (canal) level, they sit within some of the original landscaping of granite sets and have a number of other original features associated with the functions of the yard.

As part of the King’s Cross Central Development, they will be a distinctive part of the public spaces, with strong links to both Granary Square and the canal. They form the western boundary to the Square, leading people up past the granary complex and on into the north of the site.

Description

The Western Coal Drops and Viaduct would be refurbished and adapted following these principles:

Western Coal Drops

i. The building is rectangular on plan, some 100 m by 15 m. It was originally designed and built with three levels: the upper with railway tracks for loaded coal wagons, the intermediate level with coal storage hoppers, and the lowest for coal merchants to load their horse-drawn carts from the hoppers. As converted for general goods traffic in 1897-9, the building was effectively divided into two levels, with the intermediate level becoming mezzanine space within the lower level, and this arrangement has remained.

ii. The building is divided into 16 equal north-south bays, with brick piers at 20 feet (6.1 m) spacing.

iii. At the lower level, each bay of the east wall is spanned by a segmental arch. All of these arches, except that in the southernmost bay, were originally open to allow vehicle access. They have since been infilled with brickwork incorporating doorways and occasional windows. Raised platforms about 1.1 m high have been inserted, no doubt to facilitate loading and unloading of goods when the building was converted from its original purpose. The slightly-projecting platform edgings are of brick, topped by a substantial timber strake to protect road vehicles and brickwork from damage, supplemented by a 0.15 m radius cast iron quadrant-section kerbing set forward of the brickwork.

iv. At lower level the southernmost bay originally, and has ever since, housed an office (now apparently disused). The east wall in this bay appears original, with a central doorway flanked on either side by a window. All have round-headed arches. The windows have stone sills and cast iron frames. The door has a fanlight. Above the door is a sign “The Dockers Tavern”, indicating use for film locations.
v. A cast iron column from the adjacent viaduct stands in front of each brick pier, and at the same spacing.

vi. At the former intermediate level a number of arches retain a timber hatch that opened by sliding sideways. These are presumably associated with the coal storage hoppers but, with the total removal of all internal equipment, no further conclusions can be drawn.

vii. At the upper level also, each bay of the east wall was spanned by a segmental arch, and all but one still are. All of the arches are open, except in the southernmost and northernmost bays described in the next paragraph. In the seventh bay from the north, the arch has been removed by a full-height rectangular opening that has been cut out, now spanned by a cast iron beam as a lintel, with a lifting beam. The vestigial arch springings show that this enlarged opening is a later alteration. These openings are now fitted with roller shutters, or are otherwise infilled. The slightly-projecting platform edgings are of brick, topped by a substantial timber strake to protect road vehicles and brickwork from damage.

viii. The southernmost bay (formerly housing the wagon traverser at this upper level) has a ‘blind’ segmental arch, above a stone sill and three panels of recessed brickwork. The northernmost bay is similar, although the infilling brickwork in the arch (possibly a later insertion) had a rectangular window, itself later infilled with brickwork.

ix. The west wall of the building appears originally to have been generally similar to the east wall, with arched openings between brick piers. The lower level bays were open to allow loading of road vehicles with coal, except at the southernmost bay which had two windows, since infilled. The upper level likewise was open. A simple brick string course can be seen on the outer wall face, midway between the two levels of openings, from inside the Western Goods Shed.

x. One bay on the upper level of this wall - the eighth from the southern end of the building - is of solid brickwork, presumably to provide longitudinal stability to an otherwise rather flimsy structure. Solid brickwork is shown in the corresponding bay of the east wall on early plans, but this is no longer present.

xi. The construction of the Western Goods Shed (qv) immediately to the west resulted in the west wall effectively becoming a party wall. The 1930s railway plan in the RCHME report on the Western Goods Shed suggests that most of the openings in the west wall at both levels of the building remained unfilled, allowing direct interchange of goods between the two buildings. Since then, as far as can be seen with limited access, the openings have been infilled, presumably to allow the multiple tenancy of the two buildings.

xii. There are two blocked window openings and a central blind or infilled arch in the west wall of the southernmost bay at lower level, and a further blocked opening above the recessed wall panels at upper floor level. This section of wall is now shared with the Western Goods Shed.

xiii. At lower level the north wall of the building serves as a retaining wall. This has not yet been accessible for inspection. At upper level it originally had four openings for the railway tracks, since infilled, and is now largely masked on its north face by the later building on the platform. What can be seen in the narrow space between this building and the Western Goods Shed is a later brick infill.

xiv. The lower part of the south wall is of yellow stock brick, with pilasters at either corner and at mid-length and a continuous shallow plinth. There are three openings in each bay, with semi-circular arched openings. The westernmost accommodates a door with a segmental arched opening within a recessed panel. The other five are windows, some with cast iron frames, some infilled, with stone sills and recessed undersill panels. Above these is a simple string course, and above that six recessed brick panels.

xv. The upper part of the south wall appears to have been rebuilt when the conversion to a goods shed was carried out in 1897-9, presumably to enclose what had previously been an open upper level here. It is of reddish brick, and continues the three pilasters from below up to just under eaves level. These are capped with stone. Four windows with cast iron frames have plain concrete or steel-encased concrete lintels over.

xvi. Internally, the building is best described from the roof downwards. All bays apart from the southernmost bay are similar and can be described as one.

xvii. The double-pitched roof is clad with corrugated iron over timber boarding, and with corrugated translucent plastic sheeting. The boarding is badly stained, indicating extensive damp penetration and potential rot damage.

xviii. The roof covering is supported on timber purlins, carried on a series of clear-span composite queen-rod trusses spanning 48 feet (14.6 m) at 10 feet (3.05 m) spacing – half the spacing of the brick piers. Each truss has timber principal rafters and collar beams with cast iron junction boxes. Queen-rods and tie-rods are wrought iron flats, while the diagonal struts springing from the junction of queen-rods and tie-rods are elegant slender cruciform cast iron sections with visible entasis. This junction is made by a bolt passed through a clevis formed on the end of the strut.

xix. The canopy on the east side of the building has corrugated asbestos sheeting on timber purlins, supported on I-section rolled steel beams cantilevered from the wall piers. These beams pass through the tops of the piers below the padstone bearings of the roof trusses, projecting slightly into the building. Each projection is tied down by twin round bars into a channel section built into the cross wall below.

xx. Below the beams are decorative cast iron brackets set on small carved padstones. The beams support timber purlins on which is corrugated asbestos sheeting, with a back-fall towards the eaves and a gutter of galvanised riveted steel sheet. The canopy fascia is a timber truss supporting timber valancing. This distinctive feature is in poor condition, and the line of the canopy edge undulates to indicate past movement of its supports.

xxi. The platform at upper level inside the building is about 0.9 m above the adjacent ground level on the viaduct. Originally, four railway tracks ran into the building from the north. Each track was supported by pairs of cast iron beams. During the 1897-9 conversion, three of these tracks were removed leaving only the westernmost, and the three pairs of beams were used to support the new platform. The remaining track and its pair of beams were lowered by about 0.6 m. This track was finally removed c. 1990 and the platform has been extended westwards.
xxii. The construction here is described in some detail as it represents the vestiges of the only surviving coal-handling arrangement at King’s Cross apart from the similarly limited evidence in the Eastern Coal Drops.

xxiii. The cast iron beams span 20 feet (6.1 m) between the brick cross-walls, on which they bear onto padstones. (It is clear from the mezzanine level below that these padstones have not been raised, but rather that those supporting the westernmost track were lowered.) The beams are of inverted T-section but with a small lip or flange on one side only of the inverted stem, or web, of the T. The web is hump-backed, varying in depth from 8 inches at the walls to 14 inches at midspan (some 210 and 370 mm). The large bottom flange also widers towards midspan on one side only - the side below the web lip - from 12 inches (about 320 mm) at the wall to 14-15 inches (370-380 mm) wide at midspan. The bottom flange is typically 1 inch (38 mm) thick.

xxiv. The pairs of beams are placed with their web lips facing outwards, offering a clear rectangular space of 5 feet 8 inches (1.73 m) between the webs. Onto the flanges were set longitudinal timber sleepers to which the running rails were secured at the standard gauge of 4 feet 8 inches (1.435 m). This arrangement provided a virtually continuous slot between the rails so that the wagons could discharge their coal into the hoppers below through their bottom-mounted doors.

xxv. The platform inserted in 1897-9 was at almost exactly 1.0 m above the rail level of the single track into the building (removed c.1990). The platform edge was carried on substantial timber trusses spanning between the cross-walls. The platform as a whole is probably carried on similar trusses, timber joists, and the cast iron beams. The platform surface is generally asphalt on timber boarding.

xxvi. The edge of the platform on the upper level of the Western Goods Shed projected through openings in the original west wall of the Western Coal Drops. Although these openings have now been infilled or boarded off to separate different tenancies, this confirms that the two buildings were interconnected while handling railway goods.

xxvii. Several lines of partitioning has been installed across in the upper level allowing the space to be occupied by a number of different tenants as workshops and storage, but losing the sense of space when the level was entirely open.

xxviii. The lower level is occupied also by a number of tenants. The interiors in the bays inspected here were similar.

xxix. The upper level is now separated from the intermediate and lower levels by a tongued and grooved timber ceiling carried on timber joists supported off the bottom flanges of the cast iron beams, which are exposed. Partial mezzanine floors have been inserted, carried on rolled steel beams, some of which bear onto stone corbels. This was practical because of the generous resulting storey height of above 4 m in the lower level following removal of the coal hoppers.

xxx. The southernmost bay, where the wagon traverser was originally sited, is different.

xxxi. The eastern two-thirds of this bay at both lower and upper levels now comprises office space, with a generous ceiling height in the lower level of over 4 m. Originally only the lower level was used as offices, as the traverser ran overhead.

xxxi. The remainder of this bay is now occupied by a concrete staircase leading up to the upper level. In the north wall of this bay at upper level can be seen the projecting ends of the westernmost pair of cast iron beams that supported the single railway track into the building after 1897-9. The timber ceiling over this area is badly damp-stained.

xxxii. The platform north of the Western Coal Drops, and the single-storey building that now occupies it, are described below. The building is of relatively recent origin, and has served variously as a bakery, offices and other uses.

xxxiv. There is a narrow open alley between this later building and the Western Goods Shed. This alley was, until c.1990, the route of the one surviving railway siding running into the drop building. A second siding terminated against the east side of the north end of the platform. The 1930s railway plan in the RCHME report (see Clarke) on the Western Goods Shed shows a third siding running centrally into the platform area, flanked on either side by the twin column lines of a steel canopy roof. By the time of the Goad insurance plan of c.1942 this siding has gone; where it ran into the platform at its northern end there is now a concrete ramp up to the platform. A fourth siding ran south along the full eastern side of the platform.

xxv. The raised stock brick platform is of the same height as the platform within the Western Coal Drops.

xxvii. The steel-framed canopy, now enclosed within the building, comprises two rows of circular tubular stanchions, each supporting twin I-beams (unusually laid on their side) spanning north-south and supporting profiled metal decking. This decking has a double-butterfly profile east-west, with ridge points at the east and west edges and at mid-width. The valleys occur over the stanchions, which are presumed to double as downpipes for rainwater.

xxviii. The east wall of this building is of yellow stock brick, while the north and west walls are of concrete blockwork. Internal partitions are of lightweight studding.

Western Coal Drops Viaduct

xxxviii. The Viaduct as it is today is structurally in two parts: the northern part along the east side of the Coal Drops, re-erected from the west side, and the new construction to the south of this, serving the upper level of the Western Goods Shed. Both provided road access and continue to serve this role. The roadway in both is carried on trough decking - a deeper, heavier, and stronger version of corrugated iron, much used in bridge construction. This is formed from wrought iron or steel plates pressed into a U-shaped profile but with sloping sides. Alternate plates are then inverted, and the resulting corrugated profile is secured by riveting adjacent plates together at mid-depth or their sides where they overlap. The decking spans onto secondary beams, which in turn span onto riveted plate girders or I-beams, which are carried on circular cast iron columns.
The northern part, to the east of the Drops, is about 5 m wide at the north end and 8 m wide at the south end. The eastern edge of the Viaduct is convex on plan. It loosely follows the curve of the adjacent Eastern Coal Drops Viaduct, with a maximum width of about 10 m, but there is a crescent-shaped gap between the two structures that allows some daylight down to ground level here.

The northern part of the Viaduct has 16 bays of structure, echoing the 16 bays of the Western Coal Drops. Each bay has between three and six north-south secondary beams, depending on the bay width, and spanning onto east-west riveted plate girders at 20 feet (6.1 m) spacing.

The secondary beams here are generally plate girders, or more correctly boiler-plate girders, with web plates riveted to twin angles forming the top and bottom flanges. There are no flange plates. This form of construction is suitable for modest loadings, and generally dates from the third quarter of the 19th century, although even then it was more common to form plate girders with flange plates connected to web plates by angles, as the flange plates could be sized to give the required bending strength for the loads to be carried.

Each of the western line of columns stands in front of a brick pier of the Western Coal Drops and is strapped to the pier near its head. These straps appear to be intended to provide lateral and longitudinal stability to the Viaduct, which otherwise is unbraced. The eastern line of columns supports the primary beams with no lateral connection between column heads. However, pierced lugs either side of each head suggest that such bracing might either have been intended, or - more probably - had been provided in the structure’s previous location on the west side of the Coal Drops. Other rivet or bolt holes in the beams and girders attest to previous connections used when the Viaduct stood to the west of the Drops.

A notable feature of this part of the viaduct is an expansion joint detail in the seventh bay to the north. In all other bays the secondary beams are secured at either end to a primary beam by riveting to the beam web and bolting to a cast iron support bracket carried on the bottom flange of the primary beam. However, in this particular bay the northern end of the secondary beams simply sit unconnected into a ‘shoe’ formed of riveted plate. This allows unrestrained longitudinal movement at mid-length of the viaduct - an unusually mature provision for thermal movement over the 100 m or so length of the viaduct.

The southern part of the Viaduct is of more irregular plan form. Column location had to take account of ground level road access into the basement of the Western Goods Shed and likewise road access northwards along the eastern side of the Western Coal Drops. As a result, columns are at up to 9 m spacing, and a number of the primary and secondary beams meet in non-orthogonal intersections at column heads.

At the south end of the Western Coal Drops, the Viaduct is set back to create a rectangular lightwell, allowing natural light down into the area below and into the south wall windows of the ground floor office.

Both primary and secondary beams in this southern part are generally rolled I-sections, with longer spans and heavier-loaded sections being augmented by riveted flange plates. Several beams bear the name ‘DORMAN LONG’ rolled into the web. This was a well-known iron and steel company, based in Middlesbrough, which was among the first to roll structural sections in steel as an alternative to wrought iron from the late 1880s.

Cast iron columns bear maker’s plates ‘W RICHARDS & CO. LEICESTER’, as do some of the cast iron protective quadrant-section kerbs fitted around them, separated by a concrete infill. (The same company in this same period supplied the cast iron columns in the lower level of the Western Goods Shed (qv), and had earlier supplied the cast iron columns that support the 1888 West Handside Canopy roof (qv) to the west and north of the Midland Goods Shed.

The dating of the Viaduct construction (1897-9) and the presence of the name of Dorman Long on the rolled beams in the southern part of the Viaduct strongly suggests that steel was used for the beams here. It is more probable that the girders in the re-used northern part of the Viaduct are of wrought iron. Sampling for metallurgical analysis could confirm this.

The condition of the trough decking and beams varies from good to severely corroded locally, no doubt as a result of water leakage from poorly-maintained road surfacing. However no evidence of imminent structural distress was noted.

The handrail along the eastern edge of the northern part of the Viaduct comprises two horizontal tubular steel rails carried on uprights. These are either relatively modern steel joint sections, or cast iron uprights, some of these bearing the railway company’s cast-in initials GNR, as are to be found also on the Pimlico Viaduct and elsewhere in the Goods Yard. New steel beams have been inserted in sections to carry the handrail.

The ground surface below the Viaduct retains its granite sets.

The Viaduct inevitably changes the nature of the covered spaces below, which would otherwise be open to the sky. Not least, it provides a dry environment. The lower level of the east side of the Western Coal Drops is effectively fronted by a simple arcade, while the southern part of the Viaduct creates an undercroft in a large triangular space between the southern end of the Drops, the discreet entrance to the lower Western Goods Shed, and the Wharf Road Viaduct.

History and Function of the buildings

Western Coal Drops

The Western Coal Drops were built in 1859-60 to augment the goods yard’s coal-handling capacity. They were sited between the earlier Eastern Coal Drops on the east and the 1850-1 Coal and Stone Basin on the west. This was entered from the Regent’s Canal under a cast iron bridge carrying the canal towpath.

The building was on three levels. Four railway tracks at upper level brought in loaded coal wagons. Their cargo was discharged into storage hoppers at an intermediate level. From these, coal merchants’ carts could be loaded at ground level.

Emptyed coal wagons were run south onto a traverser in the southernmost bay of the drops. This transferred them sideways onto a viaduct immediately to the west of the building, on
which they could be returned northwards to their origin for reloading. This Western Coal Drops Viaduct (qv) was probably of timber when first built, but appears then to have been rebuilt in iron, possibly in the last quarter of the 19th century.

iv. Wagon handling inside the Drops building and on the traverser was probably by horses, and later by capstans operated by hydraulic power. Several capstans and fairleads survive on the Eastern Coal Drops Viaduct as evidence of these wagon shunting methods.

v. The late 19th century growth in general freight traffic led to the conversion of the Western Coal Drops for general outwards goods traffic in 1897-9, at the same time as the new large two-level Western Goods Shed was being erected over the site of the viaduct and the Coal and Stone Basin, immediately abutting the drops building.

vi. The iron viaduct was dismantled, and re-erected as the northern part of a viaduct on the east side of the Coal Drops, providing road access to the upper level. A new section of viaduct was built to the south of the re-erected viaduct, serving the Western Goods Shed and also giving access between the Western Coal Drops and Wharf Road and the southern part of the goods yard. A timber canopy was added on the eastern elevation of the Coal Drops.

vii. Major alterations were also made within the Western Coal Drops themselves during these works.

viii. The paired cast iron beams carrying the westernmost railway track were re-set at a lower level, while a new road-to-rail transfer platform was constructed, supported on the paired cast iron beams formerly carrying the other three tracks, these being removed. The platform level was raised above ground level on the adjacent viaduct to assist unloading from road vehicles. A canopy was added along the east side over the road vehicle unloading area, with timber valancing, on decorative cast iron brackets and cantilevered 1-section rolled steel beams.

ix. The coal hoppers were removed from the intermediate level, which became effectively mezzanine space for the lower level offices and stores.

x. The building continued in use as a goods depot throughout most of the 20th century. The decline in railborne freight led to the eventual cessation of goods handling here, and the last track was removed c.1990.

xi. The Western Coal Drops continue in multiple-tenancy use as workshops and storage. The single-volume upper level was divided into separate tenancies by partitioning c.1994.

xii. The 1913 Ordnance Survey 1:2500 plan shows the three easternmost railway tracks that previously ran into the building, now terminating against its north gable wall. Subsequent to this, the platform within the building was extended northwards into the open air, possibly as an addition to increase the number of railway goods vehicles that could be loaded at the same time. A 1930s plan of the Western Goods Shed reproduced in the RCHME report on that building shows a central siding running into this platform, flanked on either side by the twin column lines of a steel canopy roof.

xiii. A much more recent building now occupies the platform, retaining the canopy as part of its structure.

Western Coal Drops Viaduct

xiv. The Western Coal Drops (qv) were originally constructed in 1859-60 with high-level rail access for coal wagons using tracks entering the building from the north. A viaduct with three railway tracks was built on their west side, adjoining the Coal and Stone Canal Basin, for the return of empty wagons once these had discharged their coal in the Drops. Wagons were transferred from the Drops onto the Viaduct by a traverser in the southernmost bay of the Drops building.

xv. The original structural form of the Viaduct is unknown. It was probably of timber when first built, but appears then to have been rebuilt in iron, possibly in the last quarter of the 19th century.

xvi. An increase in freight traffic led the Great Northern Railway in the late 1890's to decide on the building of a new Western Goods Shed immediately to the west of the Drops. The Drops themselves were to be converted to serve as a general goods transit area with the installation of a road-to-rail transfer platform on their upper level, which would continue to be served by rail.

xvii. The new Western Goods Shed would occupy the footprint of the Viaduct on its original site. Consequently, the Viaduct was taken down and re-erected on the east side of the Drops, to afford road vehicle access to the platform, sections of which projected through wall openings on the east side of the Drops.

xviii. A large new section of Viaduct, on a roughly triangular plan, was erected to the south of the relocated section to give road access to the upper level of the east side of the new Western Goods Shed.

xix. These works were carried out in 1897-9.

xx. At that time road freight vehicles would have been mainly horse-drawn carts and vans. The Viaduct continues to provide road access to these two buildings today, but carrying lorries and trucks.

xxi. Other than changes in road surfacing, and the more recent handrail on the eastern edge of the Viaduct, there is little evidence of significant alteration of the Viaduct structure in over a century.
**Assessment of Significance**

The Heritage Importance of the Western Coal Drop and Viaduct

**SUMMARY: THE HERITAGE IMPORTANCE OF THE WESTERN COAL DROPS**

**ARCHITECTURE AND FABRIC**

The repeated arches on both levels along the east side create a pleasing rhythm.

The internal structure of paired cast iron beams, originally provided as part of the coal drop operations is relatively unusual. It was successfully incorporated when the building was converted to a goods shed.

This conversion also introduced a canopy on the eastern side of the building at its upper level. The canopy is a distinctive feature of railway goods sheds, although it is often lost when these buildings are re-used. Suitably repaired, it would give specific identity to the building.

**SETTING**

When built, the Western Coal Drops were at the heart of the coal trade in the goods yard. They were surrounded by the earlier Eastern Coal Drops and their Viaduct, the Coal and Fish Offices to the south, and the Drops’ own Viaduct and the former Coal and Stone Canal Basin to the west - its site later being occupied by the Western Goods Shed.

**SIGNIFICANCE RELATED TO TYPE**

Fully enclosed coal drops were relatively uncommon structures, and few survive today. More common were open-air drops, such as those designed by Pimms and built just south of the canal on what is now the Camley Street Natural Park.

The Western Coal Drops were erected only a few years later than the Eastern Coal Drops, but represented an advance in the efficient handling of coal traffic.

**SIGNIFICANCE RELATED TO INTANGIBLES**

The building, despite the loss of all coal-handling provisions, allows the process - essentially gravity-fed - to be visualised between coal wagon, storage hopper, and the coal merchant’s horse and cart.

**SUMMARY: THE HERITAGE IMPORTANCE OF THE WESTERN COAL DROPS VIADUCT**

**ARCHITECTURE AND FABRIC**

The two sections of the Western Coal Drops Viaduct, built probably less than two decades apart at the end of the 19th century, illustrate the structural transition from wrought iron to steel. The earlier northern section in wrought iron was dismantled from the western side of the Drops and reassembled on the east side when the Western Goods Shed was built. The later southern section made early use of rolled and riveted steel sections, with longer spans.

The carefully-detailed movement joint midway along the northern section is evidence of mature and thoughtful design.

**SETTING**

The three viaducts, side by side, are defining elements, creating a complex and interesting spatial arrangement at both upper and lower levels.

**SIGNIFICANCE RELATED TO TYPE**

Coal drops and their associated viaducts were once common structures in railway yards and in ports and along the riverside in coal-mining areas. These are becoming increasingly few in number. Unusually, the King’s Cross Goods Yard retains two sets of coal drops and their viaducts very close together.

**SIGNIFICANCE RELATED TO INTANGIBLES**

The Viaduct is a ‘tough’ but efficient and pleasing feature in a major industrial complex, providing essential road access to the upper level of the Western Coal Drops and the Western Goods Shed.

The lower level has a characterful atmosphere, especially at the northern end.
Notable Features

The notable features of the Western Coal Drops and its history are:

1. An important building of c.1860 which embodies the structural developments in coal drop design that took place immediately following the construction of the Eastern Coal Drops;
2. A building with strong structural, typological, functional and visual relationships with the Eastern Coal Drops;
3. The exterior walls and arches of the upper and lower levels express architecturally the cellular division of the building and the functions within it;
4. Internal structure, namely the cast iron beams and padstones that carried both the track and suspended coal bins and the internal cross walls, which were constructed with openings probably to assist flexibility of use between adjoining spaces;
5. Roof trusses that typologically relate to others in the Goods Yard complex;
6. Original offices on the ground floor at the south end, including their external openings;
7. Solid wall infilling the endmost arches at upper level, to provide a buttressing effect as in the Eastern Coal Drops;
8. The viaduct on the building’s east side, which makes sense of the building and was essential to its operation (a rail viaduct was originally sited on the building’s west side, where it carried returning empty wagons, and was relocated to the east side when the Western Goods Shed was built, to provide direct road vehicle access to the upper level loading platforms);
9. The upper level loading platforms, eastern canopy and supporting cast iron brackets from the goods shed conversion of 1897–8;
10. The lower level loading platforms from the conversion of 1897–8, later converted to lock-up stores; and
11. Local diagonal strutting to the roof tie beams, supporting heads of former platform cranes following the goods shed conversion.

These features are annotated in various drawings and photographs.
The notable features of the Western Coal Drops Viaduct and its history are:

12. Structure originally on west side of Western Coal Drops, as return route for empty coal wagons after unloading in Coal Drops;
13. Taken down and re-erected in 1897-8 on east side of Western Coal Drops, at the time the building was being converted to goods shed, so as to provide road vehicle access to the new loading bank at upper level;
14. Upper level roadway forming covered area to south of Western Coal Drops constructed at same time (1897-8), providing road vehicle access to adjacent newly-built Western Goods Shed;
15. The two structures differ in detail, but both comprise granite sett road surfacing laid onto riveted buckle plates on primary and secondary riveted plate girders carried on hollow cylindrical cast iron columns;
16. Slotted joints in girders at mid-length of earlier portion of viaduct provide for thermal expansion movement - an early example of such explicit provision;
17. Viaduct alongside Western Coal Drops carried on two lines of columns allowing free road vehicle access to loading doors on lower level of Drops; pleasing gentle curve of viaduct towards north end, particularly evident from below;
18. Roadway of covered area to south carried on rectangular/triangular column grid pattern, laid out to allow vehicle access into lower level of Western Goods Shed;
19. Buckle plates and riveted girders of southern structure are probably of steel, well-established by then in bridge-building; and
20. Lower roadways also paved with sets.

These features are annotated in various drawings and photographs.
Summary of building's individual and Group Value

The built heritage value of the Western Coal Drop and Viaduct is considered to be high.

The overall group value of the Goods Yard is considered to be very high. The Goods Yard complex has an exceptionally well coordinated layout, reflecting the interchange of goods between rail, road and canal. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current Use

The Western Coal Drops are currently used as workshops. The Viaduct is currently part of the access arrangements to the workshops.

They are part of a private site and so are closed to the public.

Objectives and Aspirations

The objectives and aspirations for Western Coal Drops and Viaduct as part of the Goods Yard are:

- To secure the future of the building through viable uses;
- To create a new piece of public realm at the lower (canal) level between the Wharf Road arches and the Western and Eastern Coal Drops;
- To create links at upper levels between the Western and Eastern Coal Drops and the Wharf road Viaduct;
- To refurbish the building and structures and bring them back into active use, creating a 'hub' for people, drawing them through the site;
- To facilitate movement between the two levels through ramps, stairs and lifts within and around the building;
- To improve the interpretation of the original functions of the building.
Works to Facilitate Future Uses

The buildings original function has resulted in large clear spans at the upper levels, with small spaces between arches at the lower levels, all with relatively low levels of natural light. In order to achieve our aspirations for the buildings and the Goods Yard as a whole, some works would be required to promote pedestrian movement through the Coal Drops Yard and to bring the buildings up to a modern standard, particularly with regard to accessibility and daylighting.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. The demolition of the modern ‘Bakery’ extension and associated modern cladding. This is the subject of an application for conservation area consent submitted alongside the planning application as shown on Parameter Plan KXC 011;
2. The refurbishment of the canopy;
3. The creation of ramped access to the upper level loading platforms;
4. The opening up and glazing of the arches at the upper levels;
5. The glazing of the arched openings on the east side of the lower level;
6. The removal of internal partitions at the upper level;
7. The installation of new services;
8. The installation of new stairs and lifts; and
9. The resurfacing of the viaduct.

These works are shown in Figures i to xii which show the existing building. The demolition of the modern ‘Bakery’ extension is shown in green.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the ‘Works to Facilitate Future Uses’ would be carried out. These will form part of the briefing documents for any works.

These alteration works would be undertaken in accordance with the following parameters:

1. The existing building form and fabric would be substantially retained, subject to the works described above and its structural integrity would be maintained;
2. The offices at the southern end of the Western Coal Drops would be substantially retained;
3. At least 90% of the existing cast iron beams within the floor structure would be retained;
4. The deeper ‘butressing’ sections of wall at the upper levels at the ends of the Western Coal Drops would be retained;
5. At least 90% of the existing cast iron brackets for the canopy would be retained;
6. The upper level loading platforms would be substantially retained;
7. Access from the viaduct level to upper level platforms and from ground to the lower level platforms would be created;
8. At least 50% of the existing granite sets on the viaduct would be retained;
9. At least 90% of the beams supporting the viaduct would be kept;
10. Service access to both the upper and lower levels would be created; and
11. No new basements would be created beneath the building.

The Western Coal Drops and Viaduct refurbishment parameters and the features to which they relate are annotated in Figures xiii to xxiii, which show the existing buildings in plans, photos, sections and elevations.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare detailed schemes for the refurbishment of the Western Coal Drops and Viaduct. The applicants would submit these detailed schemes for approval by the local planning authority. The detailed scheme(s) for the Western Coal Drops and viaduct would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the buildings, as part of the Coal Drops complex.

No works could or would take place until the detail scheme(s) had been approved.
Eastern Coal Drops and Viaduct: Initial Conservation Plan

Understanding the Asset

The Eastern Coal Drops and Viaduct are located to the west of the Granary complex, within the Goods Yard. When built, they were an important part of the inter-modal functions of the yard, with trains entering at the upper level, goods being dropped and held at the intermediate level, before being distributed to carts at the lower level.

Located at the lower (canal) level, they sit within some of the original landscaping of granite sets and have a number of other original features associated with the functions of the yard, including capstans, fairleads and part of the hydraulic network.

As part of the King’s Cross Central Development, they will be a distinctive part of the public spaces, with strong links to both Granary Square and the canal. They form the western boundary to the Square, leading people up past the granary complex and on into the north of the site.

Description

Eastern Coal Drops

i. The Eastern Coal Drops were built in 1850 for the transfer of coal from railway wagons to road carts, with intermediate storage, under the cover of an overall roof. The southern three-fifths was converted for warehousing and other uses in the later 19th century. The unaltered northern part was severely damaged by fire in 1985. The Eastern Coal Drops Viaduct (qv) is attached to the western wall.

ii. The drops building is on an unprecedented scale, approximately 153 m (502 feet) long and 14.5 m (48 feet) wide and arranged on three levels. Four railway lines ran longitudinally at high level, entering from the embanked goods yard at the northern end. There were storage hoppers at mezzanine level and coal merchants’ bagging-up spaces, open-fronted to the east and west, at ground level. The structural module is 3.05m (10 feet) long, repeated 50 times. Cross-walls at 6.1 m (20 foot) centres and a longitudinal spine wall divided the mezzanine and lower levels into two lines of 24 originally identical cells. Formerly there was a mechanical traverser on the upper level in the twenty-fifth double bay at the southern end, where the ground floor contained offices.

iii. The walls are of multicoloured stock brick (yellow-faced purple fabric 3032), laid in English bond. Internal structures are of timber with a limited use of iron, and a slate clad roof upon composite timber roof trusses, now missing in the northern part. These 45 foot span ‘queen-rod’ roof trusses are of a type often employed in the mid 19th century in industrial buildings. They are mostly of timber, but they use wrought iron queen-rods suspended from cast iron junction boxes where the strainer beam meets the principal rafters. There are diagonal struts of timber in the outer panels. The principal rafters continue to the ridge. There is a second, lighter hanger rod from the apex to the centre of the strainer beam. Purlins (six on each side plus the ridge piece) support vertical close-boards, and probably common rafters above them, beneath the slates. Every second truss is supported on internal stiffening piers that rise from the cross-walls. The rail tracks ran on way-beams of vertically-paired timber baulks, with open voids between them and timber-planked walkways
alongside them. At the side walls, these walkways were supported on timber plates on stone corbels, and these continue to carry the warehouse floor in the converted part.

iv. Above the centre of each bagging-up bay, midway between the cross-walls, there is a cast iron cross beam of unequal-flanged I section standing on cast iron Tuscan columns. The inner ends of the beams are seated on padstones in the spine wall. The columns stand on functional cast iron plinths that were probably concealed by protective kerbs. The storage bins were supported on substantial 9 inch (0.23 m) square timber bridging joints, spanning between the cross-walls and seatings cast on the beam. The timberwork of the coal bins has mostly been destroyed by fire, but in two bays there remain examples of the devices used to control the discharge of coal from the bottoms of the bins. In one, there are cast iron prongs that could be lifted and lowered by a lever; the other has a wrought iron grille that would be similarly adjusted. Stone corbels across the corners below some bins are of uncertain purpose. In some of the bins there are lozenge-shaped small openings in the spine wall, probably for cross-ventilation.

v. The long elevations, where unaffected by the warehouse additions, have large, round-arched openings at the upper level, between piers at 3.05 m (10 foot) centres. A compact brick cornice and frieze supports the eaves gutter. Recessed within the arches there are brick parapets, with York stone copings and rectangular panels further recessed decoratively within them. Each northernmost arch has an original infilling of brickwork, to act as a longitudinal buttress to the whole line. Immediately below track level there is a deep, projecting band of brickwork with a subsidiary brick cornice within it.

vi. To span the openings at ground level, segmental arches spring alternately from the cross-walls and from lozenge-shaped cast iron skewbacks standing on the cast iron Tuscan columns. These skewbacks are actually dummies, cast as end-plates to the internal cross-beams. The abacus of the column capital appears to be cast with the beam above and the echinus is a separate, non-functional, hollow casting. A blind oculus is formed in the brickwork in the spandrel above each column, filled flush with the otherwise plain wall of the mezzanine coal bins and apparently purely for decoration.

vii. The northern end of the structure abuts a brick retaining wall. At track level there was, before the fire, a full-width opening beneath a vertical-boarded gable. The end piers have stone entablature blocks. The southern end has a similar vertical-boarded gable, above a brick end wall. This wall was probably altered in the warehouse conversion. The single-storey office attached to this wall is later.

viii. The first double bay from the south contains the site of the traverser that transferred wagons laterally on wheeled platforms before the warehouse conversion. It is marked internally by cast iron lintels on stone padstones embedded in the side walls of the upper level, and by part of a raised platform (now concealed) at mezzanine level.

ix. The southern 30 bays of the building were converted for warehousing before 1882. All levels appear to have been arranged into three units of 10 bays each, with repetition of some features in each of these modules. The upper and lower arcades were infilled with brickwork containing windows and doorways, while windows were inserted in the mezzanine on the eastern side, cutting through the string course. The ground floor and mezzanine windows have cast iron frames with segmental heads, while the upper floor windows are half-round 'lunettes' with vertical panes and timber glazing bars. The half-round windows have York stone sills, reused from the copings of the former parapets but reset at a higher level. The recessed panels of the former parapets remain below, and the brickwork above is recessed so as to perpetuate the architectural form of the previously-open arcade.

x. There are two loading doors on the upper level on the eastern side, one at the 12th bay from the south with a cat-head beam, and the other more norterly with a wrought iron wall crane. The latter has a timber platform at sill level, on metal brackets. Since the viaduct to the Gasworks ran at high level against the Eastern Coal Drops for the first 35 bays from the north, which included the bay with the crane, the installation of the crane must post-date the demolition of the viaduct circa 1907-14. It was evidently second-hand, since it is of a mid 19th century style. The presence of the viaduct may also have been a reason behind the many blind panels in the northern half of the eastern façade of the Coal Drops.

xi. There are two narrow, inserted loading doors in the mezzanine on the eastern side at the 12th and 26th bays, below the upper loading doors. At ground level there are substantial doorways in the first and second units at the 9th and 18th bays from the southern end, where the 1906 plan shows stable, and a further such door in the 14th bay, near the entrance to a former goods lift.

xii. In addition to alterations for the conversion to warehousing, the upper levels of the eastern and western walls in this double bay show evidence of having been rebuilt in the 20th century, although faithfully in style and details - perhaps after war damage. On the east elevation, the two southernmost bays on the upper floor have been rebuilt (again possibly following war damage) with a single segmental-headed window that lights a post-1976 internal landing of the south-east staircase. There are two stones set just beneath the plain brick cornice at the ends of the southern two bays, which correspond to those that support the cast iron lintel over the traverser on the west elevation, although they are shallower and so possibly supported the ends of two short spans of lighter load. The original offices beneath at ground floor have three round-headed windows on the eastern side, the central one converted from a doorway.

xiii. The southern end wall has bold brick piers at the corners and a central brick pier. Below the timber gable, four half-round windows echoing those of the eastern elevation are set within rectangular recesses. The recessed-panel motif of the side-wall parapets is repeated here, but on a different module, three on each side of the central pier. How much of the above pre-dates the warehouse conversion is unclear. The mid-level string course continues round. Two mezzanine windows are cut into it in the western half, but there are no mezzanine windows in the eastern half, probably because the residual traverser structure reduced the usefulness of this space.

xiv. The west wall’s lower level is only visible to the south of the Eastern Coal Drops Viaduct and beneath the arching of the Viaduct (where it is similar to elsewhere). In the southern part the brickwork is painted black. A late 20th century window occupies the southern bay, with a segmental arch-headed doorway in the second bay from the south leading to the stairs that give access to the upper floors. The timber supports a canopy over the entrance survive, and there is a raised concrete platform in front of the south-west corner of the building at ground floor level, on the site of a loading bank that still survived in 1976.
The southern three upper-level bays on the west side of the building have been rebuilt three times since initial construction. Currently only the middle bay of the three has an arch. There are two padstones, one at the southern end of the southern bay and the other towards the southern end of the third bay from the south. They are visible externally, and support an unequal I section cast iron beam that carried the cornice and roof over the traverser opening. The internal structure indicates the sequence of events. It seems that the building was originally built without a traverser, as the insertion of the northern padstone truncated the southern part of the arch in the third bay from the south. The brickwork was rebuilt, and the remains of the arch blocked, to create the edge of the traverser opening beneath the padstone. The absence of a traverser in the original building supports map evidence indicating that the Eastern Coal Drops Viaduct was built between 1860 and 1865 (PRE: RAIL 236/295 Part 12). When the traverser opening was blocked, after the southern end of the building had been converted into a warehouse, the arch in the second bay from the south was reinstated as part of the blocking. It is not certain whether a southernmost arch was reinstated. Probably following Second World War bomb damage, the brickwork of the southern bay was rebuilt. The line from which the wall was rebuilt can be seen externally where there is a change in the coursing and brick texture, just to the south of the second bay’s arch.

The bays to the north have arches with various periods of blocking. Some have the distinctive rectangular recesses towards their bases, and some have half-round windows at their tops in the same style as the majority of those on the east elevation. There are currently five entrances at this level, accessed from the Viaduct by late 20th century staircases covered in light timber structures with lean-to roofs. A first floor (unpowered) capstan is set into the external brickwork to the north of the southernmost doorway beneath a cast iron lintel. The surrounding brickwork suggests it may date to the early warehouse period. There is one remaining external timber canopy that extends across the 14th to 16th bays from the south. Pairs of several timbers on the external wall face, with internal surviving east ends, indicate that there were once external canopies spanning the sixth to eighth bays and the 26th to 28th bays from the south. Each canopy was supported on four timber beams cantilevered out from the building and extending beneath, and strapped to, the western ends of the roof trusses’ tie-beams internally.

Recent sound-proof cladding now hides various features but, from the study of 1980s photographs, the general arrangement of the loading doors on the western side, at their furthest extent, appears to have comprised four or five doors per warehouse unit (extending beyond the canopies), in alternate bays separated by blind panels which would have accommodated the roll-back of the sliding doors. The overhead runway for one such door survives internally in the seventh bay from the south. In the northwesternmost warehouse, where the last use was observed in 1976 to have been an electrical workshop, the doorways had been converted to large casement windows, except for one that survives at the northwesternmost end, hidden externally behind a temporary cabin.

Internally, in the warehouse conversion, the beams supporting the tracks were moved further apart and slightly raised in level to support a timber floor. Timber stanchions with bolster heads (cut from surplus beams) were inserted beneath them in place of the coal bins. The relocated beams (in four lines) rest on timber wall-plates on the cross-walls, instead of on the padstones for the former way-beams (in eight lines). The edge beams remain supported, as originally, on three stone corbels in each double bay length. The way-beams remain on their old alignment in the third bay from the south, next to the site of the traverser. The upper level was subdivided by brick partition walls into three units of 10 bays each, and provided with skylights in the roof. The spine wall and sections of the cross-walls were removed from the mezzanine level. A chimney stack rises from each of the gable and dividing walls. One fireplace remains on the top floor, at the south of the northwesternmost warehouse. Another may be expected in the ground floor office at the southern end, where the chimney has three chimney pots rather than two.

When inspected in 1976, the staircases within the warehouses were seen to be of timber with open treads, but these have since been replaced. The southernmost warehouse had a system of ramps from floor to floor for access by barrows or handcarts. Parts of these remain, blocked off and cut through by new staircases at the southern end. A late 19th century goods lift through all floors, hand-operated by rope and pulley, is the survivor of four that were observed in 1976 and five shown on the 1906 plans. A pair of unusual curved wing walls within the middle unit on the ground floor was associated with one of these lifts, and the 1906 plan shows a second such pair in the northern unit which may also remain.

The remaining goods lift is located against the west wall in the 21st bay from the south and the inserted dividing wall. It is timber-framed, and retains its operating mechanism. It probably dates to the late 19th century warehouse conversion. Part of its mechanism bears the inscription: ‘R WAVGOOD & Co LONDON, ENGINEERS (with the last word written beneath the firm’s name). It has a loading capacity of 7 cwt (about 350 kg). At the time of writing, the lift is in good condition and still operates. This now rare type of lift is similar to the others seen in 1976. They were free-standing, so this one may have been moved. It is built in front of one of the half-round windows inserted in the arched when the building was converted into warehousing before 1882, confirming that this window arrangement dated to that period rather than later.

Access was not possible to most of the lower-level cells for inspection. However access was gained to the 14th, 15th, and 16th bays from the south, which were a single unit. Although the lower cells between the cross-walls had been separated by a further transverse partition beneath the cast iron beam, and a doorway had been cut through the cross-wall between the 14th and 15th bay, much of the original fabric survived. The longitudinal spine wall had been perforated in the 14th and 15th bays, and this must have taken place elsewhere.

In the south-west ground floor entrance lobby there is a door leading into the original southern offices (not accessible). It is not known whether the fireplace survives in this office.

Against the south wall of the Eastern Coal Drops there is a single-storey yellow stock brick office extension (brick fabric 3035, using the archaeological system of building material classification), with blue engineering brick quoins. Its principal south elevation has two widely-spaced windows (one at either end of the elevation) and a door and window set closely together in the centre. The roof is hipped at the west end and gabled at its east end, and has a late 20th century machine-made corrugated tiled covering. The building was probably built around 1890 (for an analysis of its dating see Phasing Analysis below). The 1976 investigation found this interconnected with the office at the southern end of the original building (although not shown thus on the 1906 plan), and it bore a faded signboard (since replaced) with the name of Bagley & Co Ltd, Glass Bottle Manufacturers, Knottingley, Yorkshire.
xxiv. New fabric has been inserted in the late 20th century conversion of the warehouse portion, but the structure has not been significantly altered except for the relocation and fire-enclosure of staircases. The ground floor spaces are let for light industrial and studio uses, and the mezzanine is partly subdivided for small office units. The northern part of the mezzanine is circulation space for the nightclub that occupies the whole of the top floor, with a large well for staircase access from entrance doors at ground level, on the western side beneath the Viaduct. On the top floor, the windows and skylights have been boarded over, and all surfaces have been painted in dark colours. Various structures have been inserted within parts of the roof space, comprising high-level offices and timber walkways between them.

xxv. The northern two-fifths of the range remains derelict and roofless after the fire, with most timber severely charred or missing, and with fractures in the brickwork as the result of thermal expansion. The brickwork still stands full-height, with scaffold shoring.

Adjacent Structures

xxvi. To the east of the southern end of the Eastern Coal Drops are the ruins of the bottom of the western wall of the hydraulic power station that provided the motive power to much of the Goods Yard, including the hydraulic capstans and probably the Coal Drops traversers. The walls survive as the retaining wall of a car park at the western end of the Granary group’s forecourt. The brickwork here is yellow stock brick (fabric 3035), which tended to be used in the later 19th to 20th century in the Goods Yard. Only the plinth and the sills of six ground floor windows survive. The two northern windows are those of the hydraulic accumulator tower. The intention to install hydraulic power is mentioned in Weale’s 1851 description of the Goods Yard, and it was in use by 1853 when noted in the Illustrated London News. This was a period when the technology was rapidly being taken up by major railway companies. The hydraulic pumping station is shown on Stanford’s 1862 map, Humber’s 1865 plan and the 1871 Ordnance Survey, to the east of the extant ruins. By the time of the 1882 plan (PRO: RAIL 236/562, part 1B), the building had been extended to the west into the lower level yard with the same footprint as the extant remains. On this plan it is referred to as ‘Engines & Boilers for Hydraulic Apparatus’. It was still standing in 1879, but has since been demolished. The west end of the retaining wall on the south side of the car park has brick corbels and an arch from the hydraulic pumping station’s boilerhouse. To its south-east is a retaining wall representing a survival from the stables that were adjacent to the Boiler House. There are two stone sandstone corbels surviving from these stables.

xxvii. To the north of the hydraulic pumping station’s ruins, there is a retaining wall to the higher-level part of the Goods Yard. This wall runs parallel to the Western Transit Shed. The east face of this wall incorporates a fireplace of what appears on the Goad Plans as a small single-storey building. To the west of this wall, immediately to the north of the ruins that project into the lower-level yard, are two brick plinths with sandstone copings, surmounted by substantial timber posts. These were situated beyond the north wall of the former accumulator tower, and may have supported the high-level viaduct that carried tracks over the canal to the Pancras Gas Works retort houses on the south bank. This viaduct was built between 1865-6 and 1871 (it appears on the 1871 Ordnance Survey map) and was demolished before 1914. It filled much of the space between the Eastern Coal Drops building and the retaining wall to its east. Another brick plinth built against the end of the seventh cross-wall, 43 metres from the northern end of the Coal Drops, probably also supported this viaduct. The structure appears to have been partly tied in to the Coal Drops’ east wall at two levels, if not supported off it, since subsequent making-goof of the brickwork could formerly be seen, above and below the mezzanine, on the line of each of the first seven cross-walls from the north.

xxviii. Between the Eastern Coal Drops and the retaining wall of the higher level roadway to the west of the Western Transit Shed is a long red-brick mid 20th century building. It is shown on the 1938 partial revision of the Ordnance Survey and is described on the 1942 Goad plan as ‘Mess Rooms’. It has concrete flooring and concrete lintels above its openings. It has a north-south gabled roof. Apart from its massing and roof profile, which harmonise with the other Goods Yard buildings, it is of little historical interest, being a common form of building whose materials are not sympathetic to those used in the Goods Yard.

Eastern Coal Drops Viaduct

xxix. The Viaduct consists of some 24 segmental arches built with blue engineering brick laid in English bond. The spans at 20 feet (6.1 m) centres align with the double bays of the Coal Drops, allowing access from the lower-level yard via the arches into the lower level of the Coal Drops. The protruding mortar visible in joints on the brick arch soffits indicates that these arches were built directly off timber formwork.

xxx. Precast reinforced concrete cantilever brackets support a concrete edge beam, on which is built the pavement of concrete slabs, along the outer edge of the Viaduct. This represents a mid 20th century widening of the Viaduct. The concrete in many of these brackets has cracked and spalled, indicating corrosion of the reinforcement. The Viaduct deck here has an asphalt surface, with areas of concrete visible beneath where this has suffered damage. The Viaduct is drained through pipes set into recesses in the western face of its piers. A steel handrail consisting of L section posts supported on steel brackets is set alongside the reinforced concrete brackets mentioned above. It may represent a separate, and presumably later, phase of work. The handrail has two rails branded with steel supports set into the pavement and the brickwork of the wall under. The handrails are joined to the eastern handrail of the P大量 oil Viaduct at their northern end.

xxxi. At its northern end, the Viaduct is abutted on its west side by the P大量 Viaduct (qv), and access to the arches there is through the latter viaduct. The four presumed northermost spans were not accessible for inspection or visible from outside, although there is a doorway through the northern pier of the 20th arch from the south, into the next arch north. Similar openings occur in at least some of the other piers, as may be seen in the 12th arch from the south.

xxi. South of here and clear of the P大量 Viaduct, the arches were formerly open, facing onto the low-level yard. Five arches towards the north remain open. A few arches at the south end had been infilled with brickwork or closed off by steel doors by 1976 and others have followed. The 12th arch from the south is now a low-level entrance to the nightclub, leading eastwards via a raised concrete platform to stairs within the Eastern Coal Drops. A good example of a 19th
century type of semi-portable cast iron platform weighing machine is displayed here.

xxxiii. There is some cracking in the brickwork at the south-west corner of the Viaduct. This may be due to some ground movement, or wartime bomb damage.

xxxiv. On the Viaduct deck there are five timber structures with lean-to roofs built over five sets of steps serving doors to the nightclub. These are of relatively recent construction.

xxxv. There is a group of capstans and fairleads at the southern end of the Viaduct deck. Two fairleads are located either side of the Viaduct opposite each other; one is set into a recess in the Coal Drops’ west wall, and the other is on the Viaduct’s west pavement. Two fairleads flank a capstan some 2 m from the southern end of the Viaduct. The fairleads are set on concrete bases, while the capstan is set into a cast iron housing. The fairlead nearest the Eastern Coal Drops’ wall has its outer casing missing, leaving only its base and spindle.

xxxvi. At the southern end of the Viaduct’s west face there is a length of cast iron hydraulic pipe extending from the ground, bearing the number “1984” (this is presumed to be a specification or part number rather than a date, as the hydraulic system here was abandoned many years earlier).

xxxvii. A recent steel staircase immediately alongside the Viaduct’s southern wall rises to provide access from the south-west doorway into the ground floor of the Coal Drops, up to the upper level of the Viaduct in its south-west corner. It stands on a concrete platform that has remodelled an earlier one that was seen in 1976.

xxxviii. A broken granite guard stone protects the projecting south-west corner of the Viaduct.

History and function of the buildings

Eastern Coal Drops

i. The Eastern Coal Drops were opened by the Great Northern Railway (GNR) in 1851 as a major component of the Goods Yard, to handle all-important coal traffic, excepting that part which was transferred to canal barges in the Coal and Stone Basin, which was on the site of the Western Goods Shed (qv).

ii. Coal wagons were shunted in trains into the northern end of the building at high level, and discharged through their bottoms into timber storage bins at intermediate level. These bins discharged through chutes in their bottoms, with regulating gates, directly into carts, or else to be bagged up into sacks for customer delivery.

iii. By 1865, a traverser had been installed at the southern end to speed the turnaround of wagons. The empty wagons were transferred sideways by the traverser, possibly comprising two platforms on wheels, sharing a single pair of transverse rails, onto a parallel track on the original Eastern Coal Drops Viaduct built immediately to the west (qv). There, trains were formed up for their return to the coalfields. This avoided reversing them along the lines by which they had entered and blocking the arrival of loaded wagons.

iv. In the roadways near the southern end of the building, there were weigh-offices with weighbridges for measuring the coal conveyed by each cart leaving the Eastern and Western Coal Drops. By 1865 there were six of these weighbridges, reduced to one by 1894 when the use of the coal drops had declined. They have now gone entirely.

v. Although covered from the rain (an unusual feature for coal drops in the mid 19th century) the upper level was open at the sides through arches to disperse the dust and noise from falling coal. The lower level was open at the sides for the same reasons, and for carts to back in. But it was divided internally by a spine wall and cross-walls to form cells for different coal-merchant tenants, and to support and stabilise the heavily-loaded structure above. The shallow intermediate level was blind, to conceal the bins, the brick oculi in the side walls being apparently purely decorative although possibly conceived originally for ventilation.

vi. The success of these coal drops is demonstrated by the building of the similar, though smaller, Western Coal Drops (qv) in 1859-60. However, the haughty attitudes of the GNR company to its customers, and its illegal trading in coal, led to a legal judgement in 1860 which forced it to give up its own management of the coal drops, and to lease them to the coal merchants as tenants. Also, although economical of labour, bottom discharge from the wagon into a coal drops bin damaged the coal. In 1865, Samuel Plimsoll persuaded the company to build for him south of the canal an extensive range of improved coal drops to his patent that would not break up the coal (see Plimsoll Viaduct). These changes, and the construction by the GNR of single-level coal yards to the north of the site and elsewhere in London, reduced the use of the Eastern Coal Drops for their original purpose, and before 1882 the larger part of this building was converted to warehousing and other uses.

vii. Between 1865 and 1871, a viaduct was erected along much of the eastern side of the Coal Drops to connect the Goods Yard sidings to the Pancras Gas Works across the canal. The structure of this viaduct appears to have been partly supported off or tied into the Coal Drops brickwork, at the line of each cross-wall in the northern seven double bays of the eastern façade. This viaduct was demolished between 1907, when the gas works closed, and 1914. The subsequent making good of the brickwork can be seen, and the brick base of one viaduct pier remains.

viii. As converted before 1882, the upper and mezzanine levels of the Eastern Coal Drops were divided vertically by walls into three warehouse units for use by tenants; the 1921 Goad plan shows them occupied by two bottle merchants and a hardware warehouse. One bottle merchant, Bagley’s of Knutsford, is remembered in the current name of the building. The ground floor had diverse uses, including stables and a blacksmith’s workshop and forge, which was still present, but disused, in the 1970s.

ix. For vertical circulation, the new warehouses had five hand-operated goods lifts, one of which remains. The southern warehouse had internal ramps and a ground-level loading bank at the south-west corner. The middle warehouse had a loading door on each level facing east, with a cathead beam for a hoist pulley. Later, the northern warehouse had similar doors, with a reused wall crane. At the upper level on the western side, loading doors opened onto a siding on the Eastern Coal Drops Viaduct.
x. The insertion of the warehouses blocked off the traverser from the coal drops, reverting to the pre-1865 situation except that the introduction of capstan shunting by hydraulic power would have eased the task of retrieving the empty wagons. One of the sidings on the Viaduct took on a new use, delivering goods to the warehouses. The Viaduct (xvi) was rebuilt slightly lower and shorter after 1921, and its new level created conventional ‘banks’ in each of the western doorways, to assist the unloading of railway goods vans.

xi. By 1942, only the northern 12 structural bays were used as coal drops, with storage indicated beneath the other eight. Improvised cladding with doors and windows was fitted to their ground floor openings.

xii. By 1970, the tracks had been removed from within the Coal Drops; by 1982, the tracks on the Viaduct also had been lifted. The whole building was vacant in 1976, but rehabilitation of the southern end for other uses was commenced by the present lessees around 1980.

xiii. The northern end was devastated in 1985 by a fire which started in a ground floor workshop there.

Eastern Coal Drops Viaduct

xiv. There were two phases of viaduct serving the Eastern Coal Drops. The original viaduct was built between 1860 and 1865, at the same time as the traverser was installed at the southern end of the Eastern Coal Drops. It carried three railway tracks. Structural evidence surviving in the Coal Drops’ west wall, confirmed by a c.1860 site plan, indicates that the building was initially built without a traverser. Initially, coal wagons would have both entered and left the Coal Drops from their northern end. The original viaduct would have been built alongside the Coal Drops on their western side when it was decided to install the traverser. Wagons, after unloading in the Coal Drops, would be transferred by the traverser at the southern end of the building sideways onto the Viaduct. This extended beyond the southern end of the Coal Drops and their traverser. The 1865 Humber plan shows that the extended southern end of the Viaduct was “for breaks” (sic). Evidently brake vans, which were vehicles that had to be attached to the back of a goods train before continuous braking was introduced in wagons, were taken to the southern end of the Viaduct. Unloaded wagons were carried individually by the traverser onto the Viaduct, where they were coupled together into trains. Once the last wagon had been coupled to the others, the brake van would then be coupled to this rear wagon, and the train would leave the north end of the Viaduct, hauled by a steam locomotive. Horses would originally have been used to haul wagons within the Coal Drops and on the Viaduct. Hydraulic capstans were later used to move them.

xv. The Viaduct with its traverser is shown on the 1871 and 1894 Ordnance Survey maps. An 1882 plan of the Goods Yard in the Public Record Office shows that the southern 30 bays of the Eastern Coal Drops had by then been converted to warehousing (the southernmost bays being a bottle warehouse), while the northern 20 bays remained in use as coal drops. Loading doors were inserted in the western wall of the Eastern Coal Drops’ upper level, allowing goods to be loaded and unloaded from the warehousing onto wagons on the Viaduct’s easternmost track. The two tracks to the west remained in place, and would have been used as sidings. (Conversion of the southern section of the Coal Drops as warehousing prevented the continued use of the traverser to serve the remaining northern bays of coal drops.) The earlier Viaduct was still in place on a Great Northern Railway plan of 1906 and on the 1921 revision of the Good Fire Insurance Plan, which shows that its structure was of cast iron columns and wrought iron girders and a timber deck (by then covered with concrete).

xvi. The current blue-brick Viaduct was built after 1921. The rebuilt structure was slightly shorter than its predecessor, as it no longer had to extend as far south as the traverser. It served the three loading bays of the warehousing. These were protected from the elements by canopies. On the southern end of the Viaduct were hydraulically-powered capstans and fairleads (which still survive in various states); these were provided to pull wagons along the three tracks on the Viaduct. A fairlead set into the west wall of the Coal Drops towards its southern end would also have been part of this system of traction.

xvii. The warehousing probably ceased to be used as such in the 1960s; the siding which served it had been lifted by 1976. The western two tracks continued to serve as sidings, but these tracks too had been lifted by 1982 and their ballast removed. The present asphalt surface has trenches in it, aligned with rainwater pipes, suggesting that this may be the original waterproof surface beneath the ballast.

xviii. The Viaduct currently serves as a high-level pedestrian and road access to the southern part of the top floor of the Eastern Coal Drops, which since the 1980s has been converted into a nightclub. The current exits from this onto the Viaduct are enclosed by modern temporary structures and lightweight porches built off brick stairs sitting on the Viaduct’s road surface.

Architectural Analysis

Eastern Coal Drops

i. The Eastern Coal Drops’ construction on three levels presented an innovative solution to the problem of transferring coal from rail to road. This was a large building with potential for grandeur. With the open arcing of the sides of the building, it would have been reminiscent of a Roman aqueduct.

ii. The building was designed with elegance in mind as well as function. Thus the blind oculi have no practical use. Together with the slim columns, the oculi confer a lightness on the structure, enhanced by the open arches. The delivery and departure functions are expressed by the arcing. The storage functions of the bins, in the unaltered northern section, are expressed by the blind oculi and the string course. The brickwork is built in the functional English bond rather than the refined Flemish bond.

iii. The columns are of an unusual form and were made with more than one casting. Although the abacus appears to be part of the column (when it is in fact part of the beam), the diamond-shaped end-plates refer to the fact that the arches are sprung from the beam.

2.7 Eastern Coal Drops
iv. The original lower-level yard’s masonry structures consisted of the arched Wharf Road Viaduct and the Eastern Coal Drops. These smaller-scale structures, each with repetitive small arches, would have contrasted with the larger scale of the buildings and spaces of the Granary, Transit Sheds and Granary Basin. The arches, however, echoed the blind arches of the Western Transit Shed, and were subsequently echoed in turn in the Western Coal Drops.

v. As with all of the early Goods Yard buildings, the Eastern Coal Drops combined brick, timber, cast iron and wrought iron in an empirical way.

vi. The conversion to a warehouse maintained the classicism of the building. The introduction of lunette windows above recessed panels, blocking the openings on the upper level, respected the original design. The original form of the south elevation is uncertain, but the relationship of their surrounding brickwork to the six recesses between mezzanine and upper levels is a variation upon that in the altered blockings of the east and west elevations. The six recesses and the pilasters are therefore more likely to predate the conversion, while both the brickwork above the recesses and the windows are likely to be part of the conversion. However, the need to light the mezzanine floor led to the relatively insensitive insertion of the windows through the string course.

vii. The southern office building detracts from the architectural effect, as its materials and overall form contrast with those of the Coal Drops.
Assessment of Significance

The Heritage Importance of the Eastern Coal Drop and Viaduct

SUMMARY: THE HERITAGE IMPORTANCE OF THE EASTERN COAL DROPS

ARCHITECTURE AND FABRIC
The regular rhythmic pattern of arches, openings, columns, and other features in the long facades combine to generate a sense of grandeur while using simple forms and materials.

The spatial divisions and structural elements that preserve evidence of the building’s original construction and its subsequent adaptation are essential components of its significance; and they illustrate its historical development. These include:

- The tripartite division of the building cross-section into track (upper) level and road (lower) level - both expressed by arcades - and the bin (mezzanine) level, which is expressed by the string course, blind oculi, and later inserted windows
- The surviving cross-walls and cast iron columns and beams
- The remaining longitudinal way-beams and corbels in the mezzanine
- Later interventions, such as the lunette windows, the hand-operated lift, the lower-level timber doors, the upper-level western canopies, and fabric relating to the traverser.

Evidence relating to the building’s historic operation is provided by features such as the vestiges of the coal storage bins and their mechanisms, and the powered and unpowered capstans providing hydraulic power for moving wagons.

The remains of the nearby building that housed the hydraulic power-generating apparatus and boilers preserves evidence of how the Goods Yard operated. This represents the earliest survival relating to the use of hydraulic power on this major transport site.

SETTING
The adjacent Eastern Coal Drops Viaduct is an essential component and companion of the Coal Drops; the two together ‘make sense’ of the historic operation of coal-handling in the Goods yard.

The arcading echoes that of the Western Transit Shed, the Wharf Road Viaduct, the Eastern Coal Drops Viaduct and the Western Coal Drops.

SIGNIFICANCE RELATED TO TYPE
The building was pioneering in the design of large-scale coal drops. When built, it formed the centrepiece of the GNR’s London coal trade.

The form of the building and its sheer length was unprecedented for its time. The building represents the sole survivor of a particular stage in the development of the Coal Drops as a functional building type.

Possibly uniquely for a Coal Drops of the time, the building was under the cover of an overall roof.

There are direct typological relationships between the structure of the Eastern Coal Drops and the Western Coal Drops.

SIGNIFICANCE RELATED TO INTANGIBLES
The building’s complex history is easily understood through its surviving fabric.

SUMMARY: THE HERITAGE IMPORTANCE OF THE EASTERN COAL DROPS VIADUCT

ARCHITECTURE AND FABRIC
The Viaduct’s presence is vital to the interpretability of the Eastern Coal Drops’ later phase as a warehouse served by rail, relating to the doors and canopies of the western wall and the delivery of goods by sidings.

The blue brickwork has a bold integrity, although of a later period than most of the other historic features of the site.

Its historical and physical integration with the Coal Drops is clear from its form and construction.

SETTING
This viaduct is one of four that encloses the lower-level yard.

The Viaduct shares important historical and functional links with the surrounding structures and spaces.

SIGNIFICANCE RELATED TO TYPE
Constructionally, the Viaduct is unremarkable, except for its late date of reconstruction.

As the successor to the original iron and timber Coal Drops Viaduct structure, it is important to the building type.

The capstans and fairleads are important as reminders of the shunting of wagons into sidings and as examples of these features of hydraulic power.

SIGNIFICANCE RELATED TO INTANGIBLES
The Viaduct’s historic features relate to the history of the site and the wide range of activities in a major railway goods yard.
Notable Features

The notable features of the Eastern Coal Drops and their history are:

1. An early Coal Drops building, innovative in its three-level arrangement and the provision of a roof for weather protection, that provided a model for later coal drops elsewhere;
2. A building that revolutionised the process of coal importation into London;
3. Tripartite vertical division of the building into upper track level, bins that occupied the mezzanine, and lower cells that provided bagging-up space and road access;
4. Cellular subdivision by nearly imperforate walls (in unaltered northern half);
5. Exterior brickwork expressing these divisions, with upper and lower arcades, panelled brick parapets and string courses, and blind oculi;
6. Solid wall panels at the north end of the upper arcades that provided a buttressing effect;
7. Renewed viaduct (q.v.) on the west side of the Coal Drops 'makes sense' of the building, and was essential to its operation;
8. Office windows at the south-east corner of the ground floor and the office itself, both integral to the building's original use;
9. Roof trusses, typologically relating to other earlier and later roofs in the Goods Yard complex;
10. Cast iron columns and beams with diamond shaped end plates, essential to the building's unique character and expressing the interior structure externally;
11. Surviving features on and in the exterior walls relating to the historic operation of the Coal Drops, notably padstones and cast iron lintels relating to the former wagon traverser at the south end of the building;

12. Internal structural survivals from its early period of use, such as bare brickwork and timberwork (rearranged in the warehouse part), internal corbels, double-depth longitudinal timber beams that supported the tracks, and corner padstones that supported the bins;

13. Remains in one or more bays of devices for control of the flow of coal through the bins;

14. Brick partitions, fireplaces and chimney stacks on the upper floor, representing a change of use to warehousing that lasted for much of the building’s history;

15. Cast iron-framed windows (including inserted mezzanine level windows) and wall crane relating to the building’s warehouse use; and

16. Hand-operated goods hoist, vestiges of access ramps, and canopied loading doors from the warehouse phase of use.

These features are annotated in various drawings and photographs.
The notable features of the Eastern Coal Drops Viaduct and its history are:

17. Early 20th century rebuilding of the original 1850s viaduct that served the Eastern Coal Drops; empty coal wagons would, after unloading, be carried onto the south end of the viaduct from the southern end of the Coal Drops by means a traverser, and would then be hauled away northwards;

18. Later use as sidings serving loading platforms alongside the glass bottle warehouse that occupied the converted southern end of the Coal Drops;

19. Arched configuration in blue engineering brick;

20. Access that the viaduct provides to and from the upper level of the Coal Drops, maintaining the two structures’ historic relationship;

21. Remains of the capstans and fairleads at its southern end for shunting the wagons in the sidings (including that set into the west wall of the Coal Drops); and

22. The hydraulic pipe built against its southern pier at ground level.

These features are annotated in various drawings and photographs.
Summary of Building's Individual and Group Value

The built heritage value of the Eastern Coal Drop and Viaduct is considered to be very high.

The overall group value of the Goods Yard is considered to be very high. The Goods Yard complex has an exceptionally well coordinated layout, reflecting the interchange of goods between rail, road and canal. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current Use

The upper levels of the Eastern Coal Drop are currently used by a nightclub. The lower levels are used for a variety of purposes including workshops and storage.

They are part of a private site and so are closed to the public.

Objectives and Aspirations

The objectives and aspirations for Eastern Coal Drops and Viaduct as part of the Goods Yard are:

• To secure the future of the building through viable uses;
• To create a new piece of public realm at the lower (canal) level between the Wharf Road arches and the Western and Eastern Coal Drops;
• To create links at upper levels between the Western and eastern Coal Drops and the Wharf road Viaduct;
• To Create links between the upper levels of the Eastern Coal Drops and Granary Square;
• To refurbish the building and structures and bring them back into active use, creating a 'hub' for people, drawing them through the site;
• To facilitate movement between the two levels through ramps, stairs and lifts within and around the building;
• To improve the interpretation of the original functions of the building.
Works to Facilitate Future Uses

The buildings original function has resulted in large clear spans at the upper levels, with small spaces between arches at the lower levels, all with relatively low levels of natural light. In order to achieve our aspirations for the buildings and the Goods Yard as a whole, some works would be required to promote pedestrian movement through the Coal Drops Yard and to bring the buildings up to a modern standard, particularly with regard to accessibility and daylighting.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. Restoration of the northern section of the Coal Drops and Viaduct structure damaged by fire;
2. The removal of the modern, single storey, office building at the southern end;
3. The refurbishment of the weather boarding at the southern end of the Eastern Coal Drop;
4. The creation of ramped access to the upper level loading platforms, from the viaduct level;
5. The installation of a pedestrian footbridge linking the Eastern Coal Drops to Granary Square;
6. The installation of a pedestrian footbridge linking the Eastern Coal Drops viaduct to Wharf Road viaduct;
7. New glazing within the arches along the long elevations of the Eastern Coal Drop;
8. The opening up of all arches on the western elevation of the viaduct;
9. The installation of new services;
10. The installation of new internal stairs and lifts;
11. The resurfacing of the viaduct;
12. The removal of the external modern staircase at the southern end of the viaduct; and
13. The removal of the modern timber porches on the viaduct.

These works are shown in Figures i to xiv which show the existing building.
Defining the Objectives
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These would form part of the briefing documents for any works.

These alteration works would be undertaken in accordance with the following parameters:

1. The existing building form and fabric would be substantially retained, subject to the works described above and its structural integrity would be maintained;
2. The envelope of the northern section of the building damaged by fire would be rebuilt to reflect the tripartite structure of the remainder of the building;
3. The deeper 'buttressing' sections of wall at the upper levels at the ends of the Eastern Coal Drops would be retained;
4. At least 90% of the existing cast iron beams within the mezzanine and first floor structures would be retained;
5. The existing cast iron columns and diamond shaped end plates would be retained;
6. The upper level loading platforms would be substantially retained and a means of access created from the viaduct level;
7. The capstans and fairleads at the southern end of the viaduct would be retained;
8. A means of servicing both the lower and upper floors would be created; and
9. No new basements would be created beneath the building.

The features to which these parameters relate are shown in Figures xiv to xviii.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare detailed schemes for the refurbishment of the Eastern Coal Drops and viaduct. The applicants would submit these detailed schemes for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme(s) for the Eastern Coal Drops and viaduct would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the buildings, as part of the Coal Drops complex.

No works could or would take place, until the detailed scheme(s) had been approved and Listed Building Consent had been granted.
Granary Building: Initial Conservation Plan

Understanding the Asset

The Granary is the centre piece of the Goods Yard, the heart of King’s Cross Central. When constructed for the Great Northern Railway in 1851-1852, its location was defined through its connections south to the canal, and the rail lines to the north that carried goods from the North and East of England into London. It now sits at the head of a large space which would become Granary Square as part of the King’s Cross Central development.

It is part of the Granary Complex, which comprises the Granary building, the flanking offices, the Western and Eastern Transit Sheds, and the Assembly Sheds. Connected to the Granary complex on the eastern side is the West Handside Canopy, currently a covered outside space. To the front of the Granary is some of the original landscaping and features which were a part of the functional Goods yard. These include rails and turntables amongst other items, set within the granite sets.

It is proposed to refurbish the building so that it can fulfil a central role in the rejuvenation of the Goods Yard and it is envisaged that an active ground floor, allowing public access into the building would be an essential part of this.

Description

i. The Granary is of six storeys, built in the Classical style and located symmetrically between the Eastern and Western Transit Sheds (qv). Its axis aligns with the central south portal of the Copenhagen Tunnel. Later asymmetrical flanking offices were added on either side (between 1865 and 1871, both qv). The column grid divides the building into seven full-width east-west bays (each approximately 6.9 m wide), flanked by two half-bays, and into seven shorter north-south bays (each approximately 4.0 m wide). The principal elevation is to the south with four projecting bays of loading doors. The north elevation had no loading doors except for openings at ground floor level. The east and west side elevations are almost featureless except for windows that light the staircases at their south ends between the top two floors of the building. The parapet has a deep stone cornice extending around the building.

ii. The ground floor has six arches (now blocked) on each of its east and west sides that originally provided access to the Transit Sheds. The middle four arches on both of these walls were wider than the outer arches. Three railway tracks originally ran east-west through the second to fourth arches from the south. Six turntables in the centre carried wagons to and from the Train Assembly Shed to the north. The arrangement allowed for the flexible use of the railway wagons.

iii. The building was organised so that grain sacks and other goods could be moved between the upper floors of the building and the railway wagons by means of hoists leading through trapdoors with their mechanisms housed in three north-south gantories on the roof. A system of chutes between the floors facilitated the passage of sacks down the building; the chutes enabled sacks to be passed out of the building onto carts in the adjacent roadways. Three emerged from the north side of the building (where there was a roadway that was initially built between 1873 and 1882) and three from the south of the building. A loading bank along the southern two bays of the ground floor, and three set either side of and between the north-south tracks leading to the Train Assembly Shed,
allowed goods to be loaded and unloaded from the railway wagons through the loading doors at the front (south) of the building. The 1873 plan shows four ‘flaps’ in the platforms that originally provided access to the canal dock berthing tunnels beneath the building. The four loading doors on each floor on the south elevation enabled sacks to be lowered externally directly onto waiting carts, by means of a hoist above each line of doors. There were two corner staircases on the south side of the building and two later post-1927 lifts that rose from the north-west and north-east platforms.

iv. Structurally, as is usual with buildings of this scale and period, the timber and iron floor structures and roof are supported on both loadbearing walls and the column grid. The cast iron columns are taller (4.2 m) on the ground floor than on the floors above (where they are 2.4 m high). The columns have the same sections on all floors, except that they become narrower towards the top of the building. The columns have cruciform ribbing and support paired east-west cast iron beams of inverted T section (with a short top flange and a wider bottom flange, as is usual with cast iron beams), the ends of which are supported on bullnose sandstone corbels. The large east-west spacing of the columns (6.9 m) was needed to span the turntables and canal docks. The wide span also necessitated the use of cast iron beams. Although the north-south spanning timber floor joists are hidden above later 19th century plasterboard ceilings on the ground floor and hardwood ceilings on the first to fourth floors, their ends can be seen to be supported on stone corbels, each of which has two small curved brackets. On the fifth floor the column lines support single cast iron beams. The beams carried by the northern and southern lines of columns once supported water tanks housed in the roof space. These were possibly associated with the hydraulic power supply in the building (Guildhall Library MS 149432, 42), and may have had several functions, including acting as a fire-fighting reservoir and supplying water to the hydraulic pumping station nearby. The two central beams support the roof valley and the inner ends of the roof trusses. The columns supporting these two latter beams had water inlets cast into their capitals on their inner facing sides. These indicate that originally the rainwater was designed to drain through the hollow cores of the columns supporting the central valley, and suggest a different, earlier, guttering configuration from that which survives. It is assumed that these columns were connected to internal drains set below the ground floor.

v. Two hipped roofs run east-west with a central flat valley. Each roof has 12 full roof trusses, in addition to two trusses extending across the hips, all of which are original. The roof construction is mostly of timber with cast iron shoes and wrought iron straps and rods. The truss tie-beams are set into cast iron shoes on the external walls (supported on stone corbels, north or south, depending upon the roof), and on the beams that support the roof valleys. Each principal rafter consists of two lengths of timber which meet at the queenposts. These queenposts rise from the tie-beam, and have the usual jowled or joggled profile on their outer side towards the top where they pass between the two lengths of rafter, with their inner sides rebated. This joint is braced by a collar (strainer beam) set into the rebates in the inner faces of the queenposts. The bottoms of the queenposts each have a sloping joggle on their outer sides that supports a raking brace that is tenoned into the lower section of the principal rafter. The upper sections of the rafters are tenoned into both the top ends of the collar and into the inner sides of the queenposts (that pass through to support the roof). A cast iron shoe joins the top two sections of rafter and supports the ridge plate. A wrought iron tie-rod extends from the base of the ridge shoe and is bolted through the collar. A wrought iron strap secures each queenpost to the tie-beam and two wrought iron straps, one on each face, bolted with square bolts, strengthen the joint between the lower section of rafter; the queenpost and the collar. The outer end of the principal rafter is held to the tie-beam by a cast iron shoe. The shoe is bolted from the sides through the tie-beam. There are six purlins to the outer sides of the roof (in addition to a plate that supports the parapet box gutter) and five purlins to the inner sides. The valley is supported on the same cast iron beams as the rest of the roof. Timber beams sit on timber planks that rest onto the two cast iron beams’ lower flanges. These support longitudinal beams that support the planking beneath the roofing felt. The roof is covered with roofing felt, above which is a corrugated zinc roof added in 1990. The original slate roof may survive beneath the present covering, although this is not known.

vi. The external walls are built with a Flemish bond facing, with the internal wall faces being in English bond, using purple stock brick with yellow surfaces. Externally, darker horizontal bands of brick at each floor level are only just discernible today under a century or more of dirt. The quality of construction in wall cores is not known, but they are likely to be solidly built with ‘seconds’ roughly set in crudely placed lime mortar. It is not known if the walls were built on a damp-proof course, but at the time of construction the use of slate for this purpose was common. The bricks are archaeologically classified, according to the ceramic building material fabric numbering system used in Greater London, as fabric type 3032. (Examples of the fabric can be found in the archives of the Museum of London.) The east and west walls narrowed in thickness up the building just beneath each successive floor. The internal pilasters into which are set the corbels supporting the floor beams, however, did not step in as they rose through the building, so that they projected furthest on the fifth floor. The internal brick pilasters in the east and west walls terminate in blind arches on the fifth floor. On the north and south walls there were no pilasters, although the walls narrowed gradually as they rose through the building.

vii. On the principal, front (south) elevation, the end bays have segmental-headed timber-framed casement windows to the staircases in the landings between the ground, first and second floors, and there is a timber-boarded blocked door to the western bay leading to the south-west staircase. The eastern ground floor front entrance is in its original position on the east elevation of the south-east corner bay. There are four loading bays with doors on all floors (blocked with black painted timber boarding in the post-railway period), set into projections in the front elevation’s brickwork, and three bays with segmental-arched windows on all floors set into recessed brickwork in between the projecting bays. The ground floor windows were blocked with timber boarding in the post-railway period. The loading bays are raised above ground level, each having a sill consisting of two large granite blocks. The loading bays are topped above the fifth floor level by stone pulley mountings supported on stone brackets. These have a classical treatment and the canopies sport moulded cornices. The canopies are roofed with Roman-style roof tiles. The parapet is surmounted with a projecting millstone grit cornice that projects further above the loading bays and extends around the building. The ground floor plinth has a sandstone coping, possibly acting as a damp-proof course. Each ground floor opening has numbering painted in white on a square blue background either side (except on the east side of the eastern loading bay). There are two timber signs either side of the ground floor window fronting the third westernmost bay. The central bay has four probably 20th century, cement-lined mortises set beneath the window opening.
viii. The east and west elevations are featureless above the ground floor, except that the south-east and south-west staircase bays are lit by windows on the east and west elevations on the fourth and fifth floors. On the ground floor, the external east elevation is pierced by four wide arches approximately 3.8 m wide, flanked by two smaller arches approximately 2.9 m wide. The southern arch is open and accommodates a doorway between the Granary and the Eastern Transit Shed. The northern arch has an arched recessed bay above at first floor level. On the ground floor’s west wall, only the smaller southern arch and the wider adjacent arch were visible on inspection, the area to the north being obscured by containers. Plans of the building produced in 1990 (Terrestrial Surveys Ltd., Drawing No. 1001/1) show that at that time three of the four wide arches on the west wall were still open. The narrow northern arch had been converted into the entrance to late 20th century toilets housed in the building’s north-west corner bay, which faced onto the Western Transit Shed and was partitioned off from the rest of the Granary’s ground floor.

ix. On the north elevation, the roof of the Train Assembly Shed obscured the external view of much of the elevation. Internal inspection and distant views showed that there were windows in each bay (except for the two end bays) extending across the whole of the elevation above the ground floor, some of which were blocked (including those behind the lift shafts). An original relieving arch appears at the base of the wall in line with the original eastern canal arm beneath the Granary. (The canal dock did not extend beyond the Granary’s north wall, but the arch would have carried the wall over the soft ground in the vicinity of the canal dock.)

x. There is evidence of some rebuilding on the north elevation. An early alteration consisted of a doorway inserted at the west end of the second floor which provided access from the Granary to the high-level offices built in the 1890s over the western bay of the Train Assembly Shed. The steel door within this opening is a late 20th century replacement of the original. With the reconstruction and extension of the east-west road on the north side of the building in the late 1930s the north-east corner brickwork was rebuilt on the ground floor using blue brick to support the steel plate girder spanning the road. The brickwork is braced at the corner by two angled I-section steel braces. The north-west corner of the building was also rebuilt using blue brick. A further blue brick pillaster was built onto the external face of the north wall of the Granary, that supported the girder that carried the south-east corner of the high-level offices of the Train Assembly Shed. This may either date to the 1890s when the offices were built, or to the 1930s, when the road was widened. More recent alterations include the insertion of sliding steel doors and steel shuttering to suit the needs of the lessees of the two ground floor units. Steel doors are set in the third, fourth, and sixth bays from the east, and there is a high-level window in the fifth bay from the east. Most of the ground floor window openings are blocked, some of which had remained windows until they were blocked while others had had their sills lowered to form loading doorways that served the internal platforms.

xi. The original staircases are built within internal brick towers and are located in the south-west and south-east corner bays. They have sandstone steps with a wrought iron handrail. The access between the floors and the staircase is via riveted wrought iron plate fire doors. These were probably inserted in the early 1890s in order to reduce the amount of insurance premium payable (Guildhall Library MS 1494313, 136). Evidence can be seen internally of the blocking of the original side windows that lit the stairs between the ground and third floors, before the 1865-1871 construction of the flanking offices (qv). These areas of the staircases are now lit by segmental-headed windows on the half-landings between the floors on the front elevation. The staircases have mid to late 20th century stud walled extensions that extend into the second southernmost bay on the first to fifth floors. A void beneath the south-west staircase at ground floor level suggests that further stairs may have led down to a basement. It is possible that this may have provided access to the western canal dock.

xii. There are two electric lifts set within blue brick and flotten brick lift shafts in the third and seventh structural bay from the west against the north wall of the building. The openings have concrete lintels. Lifts were first inserted into the building in 1927 (PRO RAIL 390/547). There were three lifts, two of 10 cwt and one of 15 cwt capacity. The current lifts each have a 30 cwt capacity. These were not built as planned. On a drawing dated 1925 the shafts are shown clad in framing with lightweight 4 inch thick walls. The brickwork of the current shafts is 9 inches thick. Although the shafts appear to date to before the Second World War, the lintels over the openings appear to be post-war. It is possible that larger more powerful lifts were inserted after the Second World War into existing 1920s lift shafts, and that the lift doors and openings were remodelled. It is also possible that the lift shafts were wholly rebuilt, re-using the late 1920s materials. There are two brick structures with flat corrugated steel roofs on the roof, housing the motors that operate the lifts.

xiii. There was a system of hoists and trapdoors for the passage of sacks between the floors. The sack hoists’ hydraulic winches were housed in three original extant cabins built on the roof valley, with three wooden gantries running north-south with two pulley wheels on each side below the gantry. The ends of the gantries are apparently encased in cast iron and penetrate the roof spaces to abut the ridge pieces. They are supported on the uppermost roof purlins. The cabins are located over large central hatches in the third, fifth and seventh bays from the west on the third, fourth and fifth floors. There are smaller floor hatches in the bays flanking the large central hatches to their north and south. These descend through all the floors of the building and, before the backfilling of the canal docks, originally extended through the ground floor platforms to the railway lines and canal docks. There were occasional holes in the floor that have been patched up, which may have held services or chutes and some holes for pulley wires.

xiv. There was also a system of timber chutes to pass sacks down the building. Although they were covered over in many places their locations at least are known to survive. On the fifth floor there were two chutes on the south side of the floor, in the second bay from the south and sited in the second and fourth bays from the west. On the fourth floor there were two floor chutes in the bays immediately to the east of those in the floor above, and on the third floor they were in the bays immediately to the east of those on the fourth floor. This pattern of chutes, one bay to the east on each successive floor, continued down the building to the ground floor. On the north side of the building there was one fifth floor chute in the second bay from the north, two bays in from the west of the building. Successive chutes extended one bay to the west on each successive floor to the ground floor.

xv. Internally, on the ground floor part of the original north-east timber platform survives. Its west side, the curved recess on its south-west corner (which originally accommodated a turntable), and part of its southern edge are extant. Its eastern side had been removed from just to the east of the 1920s
from the west a hydraulic pipe rose from the floor near the south wall on the east side second bay from the east.

xxi. On both the east and west ends of the central bay there were timber staircases leading up to the roof. They emerged onto the roof through two cubicles. The 1990 corrugated zinc roof covering ran across the western cubicle, preventing access to the roof at this point. This zinc roof covering covers all of the valley cubicles and the hoist gantries. Inadequate drainage causes rainwater to build up and seep into the north-west corner of the fifth floor. A chimney stack is located on the roof above the north side of the southern bay at its west end. It cannot be seen in the thickness of the wall on the floor beneath, and evidence of it may have been removed below the roof.

History and Function of the Building

i. The Granary was built by Lewis Cubitt as the architectural centrepiece of the Goods Yard complex in 1851-1852. Its five upper floors were initially used to store grain in sacks, mainly received by rail from eastern England. The lower part of the building was devoted to facilities that were used for receipt and despatch by rail (at ground floor level), canal (below ground level), and road (externally). The building was aligned so that its north-south axis was centred on the Copenhagen Tunnel to the north, through which the trains arrived.

ii. On the ground floor three transverse railway lines were connected by wagon turntables to two tracks leading from the Train Assembly Shed (qv) and to the single tracks in the Eastern (arrival) and Western (departure) Transit Sheds. Goods were loaded and unloaded onto platforms along the north and south sides of the building.

iii. Two canal docks penetrated beneath the building from the Granary Basin to the south, with canal barges being loaded and unloaded through large trapdoors in the platforms. There were two further canal docks, one either side of the Granary, passing under the later Banking offices and beneath the southern ends of the Transit Sheds. There was also direct railway wagon access between (at least) the Western Transit Shed (Departures) and the Granary Basin. The southern loading doors on each floor allowed sacks to be loaded into carts on the external roadway. The movement of sacks between floors was through a series of trapdoors, by means of hydraulically-operated hoists that were housed above roof level. There was also a system of chutes which directed sacks down the building for loading into road vehicles on the north and south sides of the building. The earliest concrete evidence for a road along the north side of the building is the plan of the Goods Yard of 1882, with no road appearing on the 1865 plan and the 1871 Ordnance Survey large-scale map. The chutes on the north side of the building could therefore not have been used to load road carts in the early days and may have been added later. The fact that the railway tracks in the Train Assembly Shed are shown on the 1865 Humber plan to have extended to the north wall of the Granary suggests the possibility that the chutes that emerged from the northern side of the building may have been an early feature of the building, and could have been used to load railway wagons for local distribution by rail. The tanks that served the Goods Yard’s hydraulic power system and also provided a reservoir of water for other purposes, such as fire-fighting, were housed in the roof space and were supported on taller columns than those that supported the roof on the fifth floor.
iv. At some time between 1865 and 1873 the transverse lines within the Granary were no longer connected to the track in the Eastern (Arrivals) Transit Shed, presumably to reduce congestion. This rail link had been re-established by 1908, see below.

v. The flanking offices either side of the Granary are absent from Humber’s plan of 1865, but are present on the first edition of the Ordnance Survey of 1871. The need for such increased office space to deal with the operation of the Granary and Transit Sheds provides evidence of the success of the Goods Yard. When the flanking offices were built, access to them was provided from the corner staircases in the Granary. The side windows on the bottom three floors of the staircases were first blocked, and then new windows were inserted on the main south elevation to replace them. The staircases were previously entirely lit from windows in the side walls.

vi. In the early days, grain would have come in by rail and, after storage, gone out mainly by road and canal for local delivery. Local steam flour mills, that appeared largely in response to the railway traffic in the 1850s, processed the grain and perhaps sent flour out again through the Granary. With the late 19th century agricultural slump and the relocation of mills to the Port of London, the goods handled by the Granary diversified.

vii. By 1882 there was a roadway on the north side of the Granary, leading westwards through the adjoining Western Transit Shed (although according to the 1882 plan not eastwards). By this time, the chutes that enabled sacks to be passed out of the building to the north were probably being used to load road carts. Whether the installation of the chutes pre-dated the road or not is uncertain (see above).

viii. With the construction of the Western Goods Shed (1897–1899, qv), the Granary and the adjoining sheds became the inbound goods station, with the outward-bounded traffic being handled by the new Western Goods Shed. When high-level offices were also constructed over the west side of the Train Assembly Shed at this time, access to them was provided from the north-west corner of the second floor of the Granary. The success of this change of use in reducing congestion can be seen in a plan produced after 1908 (PRO: Rail 783/110), which shows that the railway track link between the Eastern Transit Shed and the Granary had been re-established by the reinstatement of one of the turntables linking the two buildings.

ix. The original gas lighting had been replaced by electric light by 1905 (Guildhall Library: MS 14945/20, 42), although some of the gas fittings remain.

x. The canal connections became disused and were infilled around 1920. In 1927, after the Grouping of the railways, the London & North Eastern Railway installed electric lifts to replace the hydraulic hoists (PRO: Rail 390/547). There is some evidence that the lifts have been replaced since by lifts with a greater capacity. It was recorded at that time that the two lower floors would remain for grain and flour storage and that the three upper floors were to be used for continental consigned goods imported via Harwich. It is not certain when most of the internal hydraulic piping was removed, although the insertion of the lifts in the 1920s and the increasing reliance on electric power in the 20th century would have gradually obviated the need for it. It is also not certain when the rainwater from the roof was re-routed through piping to the exterior walls, rather than downwards through the central cast iron columns.

xi. In 1938 the roles of the Western Goods Shed and the Granary and its adjoining buildings were reversed, with the Transit Sheds now becoming the outward-bound goods station. The reconstruction of the east-west road immediately to the north of the Granary in 1936–38, to make it run through both Transit Sheds with an increased width, did not fully sever the rail connections with the Train Assembly Shed to the north, which still ran within the new road surface. This would have increased the efficiency of the interchange of goods between the Granary and road vehicles on the north side of the building from the three sack chutes on the northern side of the building. With the rebuilding of the road, the north elevation of the Granary was altered to accommodate the steel plate girders carrying the adjacent Transit Shed Rank walls and the new steel roof structure spanning over the road. The projecting piers that supported the original roofs of the Train Assembly Shed (shown on the 1873 plan) were at least mostly removed by 1882 (1882 plan), leaving shorter piers (or sections of the Transit Shed walls) projecting from the north-east and north-west corners of the Granary. These piers would have been removed in 1936–1938, with the north-east and north-west corners of the Granary being strengthened with blue brick to support the girders that carried the flank walls of the Transit Sheds over the road. A blue brick pilaster on the north wall of the Granary that supported the pier and wall of the high-level offices of the Train Assembly Shed probably dates to 1936–1938, although it may date earlier than the 1890s when the high-level offices were built.

xii. After the railway access was severed, the building continued as a warehouse and has most recently been mainly used for document storage. The platforms in the southern part of the ground floor were removed, and a concrete floor was laid approximately at the level of the previous track. Enlarged lightweight partitions around the staircases were inserted, probably as a fire precaution. The roof was re-covered in corrugated steel in the late 20th century. The date at which the tanks in the roof space were removed is uncertain, although it probably took place when the piping was largely removed. The roof was re-covered recently in corrugated zinc sheeting over roofing felt. The two northern bays on the west side of the Granary’s ground floor were partitioned off with brick walls and re-orientated to open into the Western Transit Shed. At the time of this report the building was mostly vacant. The ground floor is currently divided by lightweight partitions into two rental units.

Architectural Analysis

i. The Granary was built to the design of Lewis Cubitt to clearly be the centrepiece of the Great Northern Railway Goods Yard. As well as designing the Granary to be flanked by the two Transit Sheds, Cubitt also designed King’s Cross Station and the adjoining Great Northern Hotel. The building was considered to be of considerable architectural merit, and Cubitt displayed a watercolour of the building at the Royal Academy in 1851 (Denford and Woodford, 82), the year of the Great Exhibition.

ii. The building is designed in a sober classical style which, combined with its size, confers a degree of monumentality on the building. It is designed to be seen from the front and its monumentality is emphasised further by the building’s relationship to the two adjoining Transit Sheds. These were built at a much lower height to be recessed from the principal south frontage of the Granary, and
to act architecturally very much like the pavilions on a country house, to point up the central building. This idea was further exploited with later construction of the two flanking offices. The original hipped-roof Transit Sheds, and the lack of adornment, emphasises the restrained classicism of the building. This restrained style would have been considered fitting for a working Goods Yard building.

iii. The building follows all the classical norms. It is raised on a sandstone topped brick plinth, and the orders are implied between it and the cornice. The roofs are hidden in accordance with traditional classical practice. The south frontage is provided with a sense of rhythm, with the four loading bays projecting forward from the main frontage, with smaller repetitive fenestration in the recessed walling in between. The millstone grit stone cornice is quite deep and emphasises the loading bay projections where it breaks forward with them. The moulded hoist canopies further emphasise the projections, their Roman style tegula and imbrice roofing being particularly unusual. The austere side elevations help to draw attention to the frontage.

iv. When viewed from within or around the original basin to the front of the building, it would have appeared to be raised up on a large plinth, adding to the monumental effect. The four symmetrical canal dock entrances that led under the Granary and the Transit Sheds would have added to the classical sense of order. The fact that the building faced the central portal of the Copenhagen Tunnel confirms the fact that the orientation of the Granary group was supposed to form the main axis of the Goods Yard.

v. The symmetry on a north-south axis is carried into the internal layout of the floors and even into the system of trapdoors and the symmetrical staircases onto the roof.

At the same time as rigidly adhering to the classical norms, Cubitt designed a building that was remarkably flexible in its operation. The spacing of the column grid did not interrupt the operation and symmetry of the canal docks, the railway lines on two axes, or the turntables. It was accomplished by the use of paired cast iron east-west beams to span the resulting 6.9m bays. The fact that grain sacks, and later other goods, could be stored from and moved between three different forms of transport (road, rail and canal), while allowing for the movement of full and empty wagons from the building and between the Transit Sheds and the Train Assembly Shed, proved the practicality of the design. The flexibility of the design, and the complexity of its possible operation, in a way proved its undoing, as the building became prone to congestion. Thus it became necessary to cut the track link between the Granary and the Eastern Transit Shed between 1865 and 1873; and, from 1899, when the Western Goods Shed was built, it only handled one-way traffic. It is possible to see the building’s inability to cope with the volume of traffic as a symptom of the success of the Granary and the Goods Yard and railway in general, which succeeded in attracting more custom than it could cope with.
Assessment of Significance

The Heritage Importance of the Granary

SUMMARY: THE HERITAGE IMPORTANCE OF THE GRANARY

ARCHITECTURE AND FABRIC
The Granary is architecturally a high quality building, designed by Lewis Cubitt to be the centrepiece of the Goods Yard.

There is a remarkable degree of survival of the original fabric and features, preserving much evidence of its original operation.

It is a unique building, not least for integrating three transport modes - canal, rail, and road - in its operation.

The internal cast iron framing of beams and columns combines elegance with functional efficiency.

SETTING
The setting of the Granary, framed by the Transit Shed, backed by the Train Assembly Shed, and fronted on its main south elevation by the Granary Basin, was an integrated design by Cubitt. The survival of these original buildings (and the later flanking offices), and of the relationships between the buildings and the external features, preserves the character of the original composition.

The Granary and the adjacent buildings and spaces incorporate materials, styles and a level of quality of construction also used in Cubitt’s other buildings for the Great Northern Railway, including King’s Cross Station and the Great Northern Hotel. This unity of style and fabric maintains a thematic linkage between, and forms a major component of, both the King’s Cross Conservation Area and this part of the Regent’s Canal Conservation Area.

SIGNIFICANCE RELATED TO TYPE
The large size of the building, its classical treatment and the use of materials, such as stone, confer a degree of monumentality that accords with its current status as the only surviving centrepiece of one of London’s major 19th century trade hubs.

Its well-thought-out layout, the organisation of goods handling, and the use of hydraulic power all qualify it to be regarded as an efficient ‘high-tech’ machine of its time, as well as an imposing example of the large warehouse.

SIGNIFICANCE RELATED TO INTANGIBLES
Historically, the Granary and its linked buildings formed a major hub of London’s freight trade.
Notable Features

The notable features of the Granary and its history are:

1. The Granary is the centrepiece of the King’s Cross Goods Yard, a model development from the height of the Victorian railway boom;
2. The building was constructed 1851-2 to serve the grain trade from eastern England, at the high point of English agricultural prosperity;
3. The building is of considerable size; six storeys high and 55 m by 30 m on plan;
4. The building has a simple, flexible layout;
5. The building is constructed of robust materials: well-burnt, multicoloured stock brick walls, millstone grit entablature, heavy Welsh slate roof cladding (recently overclad);
6. The perspective watercolour exhibited at Royal Academy in 1851 showed bands of slightly darker bricks, now lost in general grime;
7. The building features original timber-framed casement windows;
8. The robust internal structure comprises cast iron columns and beams, supporting substantial timber floors and timber trusses to hipped roof;
9. There are two stone staircases for access, fire-protected by iron doors; one staircase formerly descended to canal level;
10. The southern elevation features bays of windows alternating with loading doors set slightly forward of the windows, supporting simple but bold stone entablatures with massive cornices and blocking courses;
11. The building’s siting and orientation within the Goods Yard reflects the ‘fanning’ alignment of railways from the Copenhagen Tunnel to the north, towards the canal and its basins;

12. The building featured loading docks for canal barges approached by short tunnels. These are now buried but presumed intact beneath the building;

13. There are remains of an unusual internal hoist system, comprising gantries across central valley of the roof, with housing for “jiggers” (hydraulic winches), hoist pulleys, and sites of trap doors below;

14. There are remains of former hoists to some loading doors, with pulleys suspended from timber canopies (roofed with Roman tiles for architectural effect) and internal mountings for former hydraulic winches;

15. There are some remaining internal chutes, used for the despatch of sacks of grain by gravity;

16. There are remnants of the original layout of railway loading platforms on the ground floor, including embayments for former wagon turntables; turntable pits and some rails may remain beneath the present concrete floor slab; the loading door sills are level with former platforms;

17. The building features archways in the side walls for communication with the flanking transit sheds;

18. Overall, the building is little altered and well maintained and currently used for storage use.

These features are annotated in various drawings and photographs.
Summary of the Building's Individual and Group Value

The built heritage value of the granary is considered to be very high. It is a listed building (Grade II) and is identified in the Regent's Canal Conservation Area Statement as making a positive contribution.

The overall group value of the Goods Yard Complex is considered to be very high. Architecturally and historically the Granary forms part of the Goods Yard, a largely undisturbed cluster of transport related buildings of mid to late 19th century age. The layout of the Goods Yard is exceptionally coordinated and there are significant remains of the rail-canal interchange. The group value is enhanced by the quality and consistency of the architecture. In townscape terms, the group is dominated by the Granary though the relationship with the Regent’s Canal has been diminished by the filling-in of the original Granary Basin.
Defining the Objectives

Current Use

The Granary is currently in use as a general storage centre. Both the building itself and the site in which it sits are on private land and are closed to the public.

Objectives and Aspirations

The objectives and aspirations for the Granary are:

- To secure the future of the building through viable uses;
- Refurbish and bring the building back into use as the centrepiece of the Goods Yard;
- Open up the land in front of the Granary as public realm;
- Improve the current setting of the building through the a mixture of surface and artefact conservation and the creation of a major piece of public realm directly in front of it, called Granary Square;
- Use at least the ground floor for an active use, such as a restaurant, café, museum or similar function which would encourage the flow of people through the southern façade;
- Aid the interpretation of the history and original function of the building through information points within the building and/or nearby.
Works to Facilitate Future Uses

The building’s original function as stores is evident in its built form. In order to achieve our aspirations for the building and the Goods Yard as a whole, and bring activity into the space, it would be necessary to carry out works to improve day lighting levels within the building and to increase the permeability at the ground floor.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. The insertion of an atrium or lightwells, within the body of the building;
2. The insertion of new lifts and/or stairs to provide for vertical circulation and means of escape;
3. The installation of new services including fire sprinklers with risers through the building;
4. The removal of the sills of the loading doors to facilitate public access; and
5. The glazing of the existing loading door openings on the south elevation.

These works are shown in Figures i to ix which show the existing building in plans, photographs, elevation and section.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

These alteration works would be undertaken in accordance with the following parameters:

1. The existing building form and fabric would be substantially retained, subject to the works described above and its structural integrity would be maintained;
2. At least 90% of the existing cast-iron columns and 80% of the cast-iron floor beams within the internal structure would be retained;
3. The two existing stone staircases would be retained;
4. The existing stone entablatures, cornice and blocking courses to the loading doors in the south elevation would be retained;
5. Remains of the former hoists to the loading doors in the southern elevation would be retained, together with the timber canopies and surviving parts of former pulley systems including gantries on the roof;
6. The existing archway structures on the ground floor (that provided links to the adjoining Transit Sheds on the east and west elevation) would be retained;
7. The existing roof profile would be maintained, uninterrupted by any attic storeys, plant or other development;
8. No new basements would be created beneath the building; and
9. Any surviving elements of the loading docks and tunnels for canal barges, beneath the Granary and the adjacent 'Granary Square' would be preserved in situ.

These parameters and the features to which they relate are annotated in Figures x to xxiv which show the existing building in plans, photographs, section and elevation.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the Granary building, and its refurbishment. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the building, as the centre-piece of the Granary complex.

No works could or would take place, until the detailed scheme had been approved and Listed Building Consent had been granted.
4.1 Granary Offices
The Granary Offices: Initial Conservation plan

Understanding the Asset

The Granary offices are part of the Granary Complex, sitting either side of the Granary building itself, in front of the Transit Sheds.

Built a little later than the Granary, to provide additional office space, they look out towards the canal and the Fish and Coal Building. There are a number of landscaping features around them which originate from the functional Goods Yard, including rails and turntables set within the granite setts.

As part of the King’s Cross Central Development, the offices would be considered as part of the overall scheme for the Granary Complex, due to the limitations their size places upon them.

Description

Granary Offices – East

i. The offices are long and narrow, being nine bays wide from east to west but only one bay deep. They are of three storeys, with a symmetrical-pitched roof.

ii. The external brickwork is yellow stock brick (fabric type 3035, using the archaeological system of ceramic building material classification) to the east, and purple multicoloured stock brick with yellow surfaces (fabrics 3032 and 3034, using the same classification system) on the western part of the principal, south elevation. The brickwork is laid in Flemish bond to match that of the Granary.

iii. There is a brick plinth with a yellow limestone coping, a projecting brick string between the ground and first floor, and a brick cornice at eaves level. This cornice extends across the east gable wall as a projecting string course, and is also carried to the top of the gable, creating the effect of a pediment on the east elevation.

iv. The six easternmost bays are uniformly spaced, with sash windows. They include the narrow entrance door on the ground floor, set into the fourth bay from the east. The westernmost three bays on the upper two floors are wider, and are separated from the eastern bays by a broad pier. Plans show that there was formerly a cross wall here, which - from some time between 1865 and 1871 until c.1873 - was the western end wall of the building. The three western bays are therefore later infill, first appearing on the 1873 plan. The join in the facing brickwork was carefully executed so as to be invisible after repointing and weathering. The front wall now makes a butt joint with the south-east corner of the Granary, but projects slightly forward of it, as the east end bay of the Granary is set back by one brick.

v. Towards the west end of the front elevation, at ground floor level immediately to the west of the cross wall that formed the building’s west wall before c.1873, there is a former vehicular opening under a concealed girder. This opening is now blocked with matchboarding, with a sash window
within it. This opening allowed continued access to the door of the Eastern Transit Shed, which is now also blocked. Beyond the blocking on the front elevation, at the west end of the ground floor, there is a bay of plain brickwork that supports the wall above, and which first appears on the 1873 plan. Through this, at its west end, is a narrow inserted segmental-headed opening that leads through a passage to a door in the side of the Granary (currently the only access to the Granary from the south). To carry the brickwork, the arch bears against a stone skewback inserted in the brickwork of the Granary, with tumbled-in brickwork aligned to the line of thrust above it. The passage is walled off from the offices.

vi. There is a change in the texture of the brickwork between the west and east parts of the front elevation that aligns with the west side of the sixth window from the east on all floors. It is likely that this change represents the edge of the brickwork rebuilt after the Second World War.

vii. There is a chimney stack in the north-east corner of the building which has angled corner fireplaces on each floor. There is also a similar stack at the rear of the building in the north-west corner of the sixth bay from the west, in the same location as on the 1873 plan.

viii. Internally, the entrance door leads directly to the staircase that gives access to all floors. The internal space is divided by the staircase to create two office areas per floor, with extra partitions in the western portion of the building on the second floor. A rear passage extends part way along the top floor. Modernisation and refurbishment had covered evidence of original fabric in the areas inspected, and it was not possible to gain access to the roof. Access has not been obtainable to inspect the offices of Pickfords Records Management and Bullens (the ground floor offices to the west of the door, the first floor offices, and the eastern offices on the second floor).

ix. The roof is symmetrically-pitched with a shallow slope, and has a corrugated asbestos covering. The internal roof structure was not visible during inspection, but is of short span (about 4.5 m).

Granary Offices – West

i. The offices are of three storeys, six bays wide and one bay deep, with a symmetrically-pitched and gabled roof. They are built against the west wall of the Granary. Unlike the eastern offices, they have no access between the floors within the building. The ground floor has two rooms (the eastern room, formerly the vehicular passageway, has been inaccessible for inspection). The two upper floors each form a single room. The architecture resembles that of the eastern six bays of the eastern offices, although their position relative to the Granary differs.

ii. There is a brick plinth at ground level, a brick string course at first floor level, and a brick cornice at eaves level that extends to the west gable wall as a projecting string course. This also extends up to the top of the gable to create the effect of a pediment.

iii. The external brickwork is built using a mixture of multicoloured stock bricks of fabrics 3032 and 3034 (using the archaeological system of ceramic building material classification) and yellow stock brick of fabric 3035, laid in Flemish bond. The brickwork of the plinths is mostly of the former fabrics, while that used further up the building is mostly 3035. This may be indicative of some rebuilding of the facing brickwork, further evidence of which is the use of blue brick around the vehicular passageway opening.

iv. On the front (south) elevation of the offices, the ground floor has a front door recessed into a larger arch in the west bay. There are two windows occupying the two bays to its east. A rectangular timber-shuttered opening occupies the eastern bays, which internally is formed by the former railway track entrance to the Western Transit Shed. The first and second floors each have six windows on the front elevation.

v. The western elevation has one window to each floor.

vi. There is a chimney stack in the north-west corner of the building, which has angled corner fireplaces on each floor. Another stack is located in the north-east corner of the third bay from the west, although no fireplace was observed on either the first or second floors in this location.

vii. Access to the main ground floor room is currently only from the southern ground floor door. The blocked northern ground floor doorway leading to the Western Transit Shed is visible in the shed’s south wall. The angled corner fireplace in the north-west corner of the ground floor room is a 20th century flint brick replacement of the original. The brick lining of the north-east corner fireplace in this room survives, but no other elements of the original fireplace survive. The ground floor ceiling is of matchboard. There is a blocked window on the east wall of the main room through which it would have been possible to monitor traffic leaving and entering the east door at the south end of the adjoining Western Transit Shed. At the back of the ground floor is a dumb waiter with walls of tongued-and-grooved timber boarding. It does not survive further up the building.

viii. The first floor is accessed from a black-painted 20th century steel staircase in the south end of the Western Transit Shed. An 1873 plan indicates that this is a replacement of an earlier staircase. The staircase is unsafe (pers. comm. Pickfords’ employees). The first floor was (and is still) accessed from the Granary’s south-west staircase. The doorway in the staircases’s west wall was cut through the earlier blocked window that lit the stairs. There is a later, either late 19th or 20th century cupboard built into a recess inserted in the east wall of the room to the south of the door. There is a matchboard ceiling, and conduit along the ceiling for the electric wires that supplied the missing pendant lights, which would have had pendant pipes. There are replacement pendant lights.

ix. The second floor office is painted green, with a 20th century suspended steel-framed ceiling with hardboard panels. Some ceiling panels are degraded and collapsed due to water ingress. The electric lighting consists of a row of electric lights suspended centrally, with the wiring encased in conduit. The lights and conduit probably date to the second quarter of the 20th century. There is a tile surround to a sink (removed) on the north wall of the third bay from the west. Some wall plaster has come away from the north wall, revealing flint brickwork below roof level. This would have been added at some time from the end of the 19th century or the 20th century, but most probably in the 1930s, when the southern end of the adjoining Western Transit Shed was re-roofed.

As with the first floor, access is from the Granary’s south-west staircase, the second floor landing of which is three steps down from the office’s second floor. Windows and surrounding brickwork have recently been replaced. The north-west corner fireplace, which is original to the building and has a slate mantelpiece and surround with painted brick, has suffered some damage.
x. The roof is shallow-pitched and slated. The king-rod roof trusses are of composite construction. Each is of timber with a cast iron ridge shoe and a wrought iron king-rod. A vertical rectangular timber-lined shaft, inserted through the roof, can be seen where the ceiling has been damaged.

xi. The building has external electric lighting, three granite ‘glinters’ close to the wall on the external paving, and a wrought iron bracket fixed externally to the east of the third window from the west on the second floor. There are also telegraph brackets.

History and Function of the Building

Granary Offices - East

i. The Eastern Office building flanking the Granary was built on the site of a shorter office building shown on an 1865-6 plan (Humber), which was located between the two doorways in the south wall of the Eastern Transit Shed. This shorter buildings was itself built in front of the originally-exposed south wall of the Eastern Transit Shed. The 1871 Ordnance Survey shows it rebuilt wider, extending to its present south-east corner and blocking off the eastern vehicular doorway of the Transit Shed. The 1873 plan of the Granary (Hunter and Thorne, page 96) appears to indicate that the building’s upper floors were extended to the west to meet the south-east corner of the Granary, while the vehicular passage at ground level was widened. It was originally built as the offices dealing with the increasing clerical work generated by traffic passing through the Granary group and its sheds.

ii. The different window spacing in the three western bays appears to reflect the extension of the upper floors to the west to meet the Granary between 1871 and 1873. The 1871 map omits the front door but shows a further northern ground floor door giving access to the Eastern Transit Shed. The 1873 plan shows additional access from the Transkit Shed via a staircase that leads to a door on one of the upper floors of the offices. This plan also shows the front door and the chimney stacks in their current location, with the front door recessed within a blind arch, a detail that has been lost through later alterations but which still survives in the western offices on the other side of the Granary. After the 1871-3 extension of the offices to the Granary, there was access from the first and second floors of the Granary staircase into the upper storeys of the offices. The number of access routes and their locations define the buildings, and indicate the operations within these buildings, that were administered from the offices. They were concerned with the business of the Granary and the Transit Sheds, and it was deemed useful to be able to access all floors of the Granary from the offices. Walking through the Granary would also have given access to the upper floors of the western offices.

iii. During the 20th century, the entrance to the Eastern Transit Shed was blocked. The ground floor’s west wall was rebuilt closer to the Granary, narrowing the access to the Granary’s side entrance. Bomb damage led to the rebuilding of part of the south-east of the building in the late 20th century. The offices were also refurbished. The main entrance is currently on the south (front) elevation.

iv. The building’s most recent use was as offices administering the work undertaken in the Granary and adjoining buildings. Subsequent occupancy has been intermittent.

Granary Offices - West

v. The Western Office building flanking the Granary was built between 1865, when it was absent from Humber’s plan, and 1871, when the first edition 25 inch and 5 feet to 1 mile Ordnance Survey maps were surveyed. The building was sited in front of the originally-exposed south wall of the Western Transit Shed. It was erected to handle the growing volume of clerical work required for the increasing goods traffic being handled in the Granary and Transit Sheds. Its location suggests that at least part of its operations were concentrated on the work of the outward-bound goods traffic handled in the Western Transit Shed. Unlike its eastern counterpart its footprint has changed little since it was first built.

vi. It was built to the east of the cart road opening in the south wall of the Western Transit Shed, spanning over the railway track opening in the same wall. A passage was left on the ground floor of the building’s east end for railway wagons and for pedestrian access to the south-west doorway of the Granary that led to the latter’s south-west staircase. The 1871 Ordnance Survey map and an 1873 plan (Hunter and Thorne, page 96) shows a ground floor doorway leading directly into the Western Transit Shed to the north, and another in the location of the surviving doorway. The 1873 plan also shows a staircase leading from the Transit Shed platform to the first floor of the building. There was further direct access to the first and second floors of the building from the Granary, via its south-west staircase. There is, however, no evidence that there was access on foot between the floors within the building. However, a dumb waiter that survives at ground floor level would have facilitated the passage of papers and other small objects between the floors. A window between the original ground floor room and the eastern passage would have allowed for the monitoring of traffic and people entering and leaving the Western Transit Shed and the south-west door of the Granary. The doorway to the Granary was later moved away from the passage, to the front wall.

vii. In the late 20th century, the opening for rail vehicles in the south wall of the Transit Shed was blocked, and a lightweight timber doorway and window was inserted in the same opening on the south wall of the offices.

viii. The windows and much of the internal brickwork between the windows were replaced in the late 20th century.

ix. The building has always been used as offices until recently. It is currently disused.
Assessment of Significance

The Heritage Importance of the Granary Offices

SUMMARY: THE HERITAGE IMPORTANCE OF THE EASTERN GOODS OFFICES FLANKING THE GRANARY

ARCHITECTURE AND FABRIC
The building is a small, purpose-built, Victorian office that retains evidence of its historic development and has undergone some alteration since first built, but has retained its character. It demonstrates simple good manners in its broad sash windows and string course, with some style in the pedimented gable.

It is a characteristic example of the restrained, sub-Georgian styling of the GNR’s office and domestic buildings, built in the local brickwork.

SETTING
This is one of several buildings of similar use, materials and roof form within the Goods Yard, which help to create its character. The subsidiarity in scale of the flanking offices also enhances the monumentality of the Granary and the former Granary Basin space to the front. There are also strong historic operational links between the buildings.

The materials and visible roof are characteristic of those in the Goods Yard and in this part of the Conservation Area.

SIGNIFICANCE RELATED TO TYPE
Together with the other flanking office, the Coal and Fish Offices, and the offices attached to the south end of the Midland Goods Shed, this is now an uncommon example of the type of provision made by the railways in Victorian times for the handling of the voluminous routine business of a goods yard. It is a simple functional building, less aspiring than the goods yard’s principal offices at Regeneration House, but with ample ceiling heights and good daylighting.

The interdependence of its activities and those of the adjoining Transit Shed and Granary is demonstrated by several present and former door openings.

SIGNIFICANCE RELATED TO INTANGIBLES
This is a building with strong visual and operational links with the Granary and the Eastern Transit Shed.

SUMMARY: THE HERITAGE IMPORTANCE OF THE WESTERN GOODS OFFICES FLANKING THE GRANARY

ARCHITECTURE AND FABRIC
The building is a small purpose-built Victorian office that retains evidence of and features relating to its historic development. It has retained its character.

It is a characteristic example of the restrained, classical styling of the GNR’s office and domestic buildings, executed in the local brickwork. It demonstrates simple good manners in its broad sash windows and string courses, and a touch of style in the pedimented west gable and the recessed doorway.

SETTING
This is one of several buildings of similar use, materials and form within the Goods Yard, which help to create its character. The subsidiarity in scale of the flanking offices also enhances the monumentality of the Granary Building and the former Granary Basin space to the front. There are also strong historic operational links between the buildings.

The materials and visible slated roof are characteristic of those in the Goods Yard and in this part of the Conservation Area.

SIGNIFICANCE RELATED TO TYPE
Together with the other flanking office, the Coal and Fish Offices, and the offices attached to the south end of the Midland Goods Shed, this is now an uncommon example of the type of provision made by the railways in Victorian times for the handling of the voluminous routine business of a goods yard. It is a simple functional building, less aspiring than the goods yard’s principal offices at Regeneration House, but with ample ceiling heights and good daylighting.

This is the least altered of the several office buildings, and retains its corner fireplaces, its matchboard ground and first floor ceilings, and the 1930s-style electric light fittings on the top floor.

The interdependence of its activities and those of the adjoining Transit Shed and Granary is demonstrated by several present and former door openings.

SIGNIFICANCE RELATED TO INTANGIBLES
The offices are a building with strong visual and historical operational links with the Granary and the Western Transit Shed.
Notable Features

The notable features of the Granary Offices and their history are:

1. The offices are three-storey buildings added in c.1870 on either side of Granary, to meet increasing clerical needs of goods departments;
2. The offices feature railway carriage openings for former rail access, from the Transit Sheds to the now infilled Granary Basin;
3. There are staircase connections to the Granary and linked connections to the Transit Sheds;
4. The buildings display the characteristic gable-ended style of the company’s simpler buildings, in Georgian tradition of proportions;
5. The buildings are slightly asymmetrical in plan layout but matched in scale, subservient to the Granary;
6. The brickwork is similar to the Granary and other heritage buildings.

These features are annotated in various drawings and photographs.
Summary of Building’s Individual and Group Value

The built heritage value of the granary offices is considered to be high.

The overall group value of the Goods Yard Complex is considered to be very high. Architecturally and historically the offices relate to other thin office buildings added to a number of buildings in the Goods Yard, reflecting the success of the site and the rapid need for more office space. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current Use

The Granary Offices are currently empty though they have been used in recent history as small scale offices. Both the buildings and the site in which they sit are on private land and are closed to the public.

Objectives and Aspirations

The objectives and aspirations for the granary offices as part of the granary complex are:

- Open up the land around the Granary as public realm;
- Improve the current setting of the granary through the creation of a major piece of public realm directly in front of it, called Granary Square;
- Improve permeability between Granary Square and the new uses within the Tranist Sheds and within the footprint of the Assembly Shed.
Works to Facilitate Future Uses

The original function as small scale clerical offices is evident in its relatively domestic built form. In order to achieve our aspirations for the building and the Goods Yard as a whole, a number of alterations would be required, to provide pedestrian access between Granary Square and the Transit Sheds and to bring the buildings back into use, complying with modern standards.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. Establish new pedestrian connections through the flanking offices utilising the former railway carriage openings;
2. Refurbish the roof, replacing the roof covering with suitable materials;
3. The insertion of new lifts and/or stairs to provide for vertical circulation and means of escape; and
4. The installation of new services including fire sprinklers with risers through the building.

These works are shown in Figures i to x which show the existing buildings in photographs, plans, elevation and section.

As details come forward for the Granary Complex and Goods Yard as a whole, it may be necessary to consider further interventions into the flanking offices, for example to provide better permeability, both perceived and actual, between Granary Square and the Transit Sheds.

This would be considered in the context of a scheme for the Granary complex as a whole and after full consideration of design options. Any such interventions would require Listed Building Consent.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

These alteration works would be undertaken in accordance with the following parameters:

1. The existing buildings form and fabric would be substantially retained, subject to the works described above and their structural integrity would be maintained;
2. The existing staircase connections to the Granary and Transit Sheds would be retained;
3. The existing roof profile would be maintained, uninterrupted by any attic storeys, plant or other development;
4. No new basements would be created beneath the buildings; and
5. Any surviving elements of the loading docks and tunnels for canal barges, beneath the offices and the adjacent 'Granary Square' would be preserved in situ.

These parameters and the features to which they relate are annotated in Figures xi to xix.
Implementation

Future applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the flanking offices. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the buildings, as part of the Granary complex.

No works could or would take place, until the detailed scheme had been approved and Listed Building Consent had been granted.
The Transit and Assembly Sheds: Initial Conservation Plan

Understanding the Asset

The Transit and Assembly Sheds are part of the Granary Complex, sitting to the north of the Granary building. The Transit Sheds are located behind the Granary Offices, with the Assembly Shed sitting between them. Built in 1850, they were a central part of the operation of the Goods yard, forming the terminus of the Great Northern railway.

The Eastern Transit shed is also linked to the West Handyside Canopy, and therefore to the Midland Goods Shed.

The sheds form a large part of the granary complex which is the keystone of the Goods Yard. They will be a dominant part of the views from the north and have strong relationship with the Gasholder area to the west.

Description

Eastern Transit Shed

i. The two Transit Sheds were of exceptional size for the period (some 180m long, 25m wide and 7.5m clear height). They have brick outer walls. At the southern end there are six arches in each shed (mostly blocked) leading into the Granary, the north wall of which is also the southern wall of the Transit Sheds. The 1930s roofs have steel roof trusses, and are half-hipped at their south ends and gabled at their north ends, with corrugated asbestos sheeting and top lighting.

ii. The outer walls are of multi-coloured brick of fabric type 3032 and 3034 (using the archaeological ceramic building material classification system), which differ from those in the slightly later Granary. The external walls generally appear as a blind arcade of segmental arches between pilaster strips at 7.6 m centres. Internally, brick pilasters supported the roof trusses (see below). The internal brick pilasters are staggered relative to those outside, on a 3.8m module to support the roof trusses.

iii. On the east wall, even-numbered bays have original segmental-arched door openings which match those of the blind arcade above. Generally, the even-numbered bays originally alternated between having large doors and having smaller doors, while the odd-numbered bays had blind arches and no openings. Some of the original openings have been rebuilt to form rectangular door openings, and additional smaller door openings have also been inserted later. From north to south, between the external arch piers, the sequence of openings was observed thus: blind arch/large opening/ blind arch/small opening/later inserted rectangular opening/large opening/blind arch/small opening/blind arch/large opening/blind arch/later opening enlarged from original small opening/blind arch/large opening/blind arch/later enlarged opening/blind arch with small inserted door/large opening/1938 roadway entrance replacing two bays/blind arch/large opening/blind arch.

At the south end of the east wall, beyond the arcading, there are two inserted windows (now blocked with timber), the upper of which suggests a mezzanine floor at least in the shed's south-east corner. No evidence survives of this internally.

iv. The west wall's original openings did not generally align with those on the east wall. Their totally different functions (those on the west being for rail access, those to the east providing road access) would have made
their alignment opposite each other unnecessary. The west wall has a c.1938 wide opening at its north end under an inserted compound steel girder bearing the rolling marks ‘Appleby-Frodingham 24x7’ and ‘British Steel’. Apart from the opening for the roadway to the north of the Granary, the insertion of which involved some rebuilding of the junction between the Granary and the Transit Shed’s west wall, the rest of this wall to the north of the Granary has been altered little, except for the blocking of former openings. At the south end, where the Transit Shed abuts the Granary, the Granary’s four wide arches flanked by two narrower arches are all blocked, although the three southern wider arches (that originally spanned the railway tracks) were blocked in such a way to create recesses in the Transit Shed’s wall. In the south arch is a door to the Granary. The narrower north arch is set beneath a high-level recess that rises to the level of the roof gutter. Within this recess, set further back from the wall face, is an arched recess.

v. The north wall of the Eastern Transit Shed is a large gable with an original central blind arch. Against this is the profile of a two-storey pitched-roof building. This was shown on the 1865 Humber plan and the 1871 OS plan. The building is shown on the former plan to have included Guards’ rooms, and it was still standing at time of the revision of the Gaol plan of 1942, on which it is described as a “Mess” with “Kitchen”, but it has since been demolished. Its walls do not appear to have been bonded to the main wall. Its fireplace flues, however, remain clearly visible as voids within the north gable’s brickwork. A single railway track originally passed into the Transit Shed through an opening on the west side of this gable end, with a second opening for road traffic on the east side. Today, both openings remain at either end of the wall, although the original shallow arches have been infilled at the top to form rectangular openings for roller-shuttered doors. A smaller third door has been inserted into the central blind arch.

vi. The south wall extends only up to eaves level, reflecting the fact that the roof was originally fully hipped. Above this level, the brickwork of the Granary’s Eastern Offices is recessed from that of the shed. Three fletton brick pilasters built onto the wall of the offices support the hips of the 1938 half-hipped roof.

vii. The Eastern Transit Shed was originally roofed in a single symmetrically-pitched span east-west by exceptionally long-span (78 feet clear) composite timber and iron trusses. The main members were of timber, with wrought iron straps and tie-rods. The trusses also employed cast iron shoes and junction boxes, as widely used in such composite trusses of the time and as survive in the Granary. In 1936-8 these trusses were replaced by straightforward, mainly riveted but partly bolted, steel trusses of Polonceau configuration, fabricated from rolled steel angles joined by gusset plates. At the same time the original roof covering - of slate, with areas of glazing (Goad Sheet 12/400, 1921) - was replaced by corrugated asbestos sheeting.

viii. The Eastern Transit Shed roof is drained by downpipes, which on the external east face are located on the pilasters between the blind arches. Immediately to the east of this building, the open area towards the Midland Goods Shed is roofed over by the trusses of the West Handside Canopy, erected in 1888.

ix. The Transit Shed was originally served by a canal basin entering the building from the south. This is inaccessible at present, and is probably filled in. Stables for railway horses were provided under the platform. The construction of these is described in the English Heritage Inventory of 1988, but access to the stables has reportedly been blocked since then. There is no evidence of access visible at ground floor level, although they may survive hidden beneath the platforms and floor surfaces.

x. The 1936-8 east-west roadway is 15 m wide. The Shed wall above it is carried on a steel plate girder set into a pier on the north-east corner of the Granary.

xi. To the north of the east-west road there are platforms in place, retaining elements of the original platforms. They have however been altered and extended during the life of the building. Among the surviving fixtures relating to the early use of the Transit Shed are some cast iron overhead runway beams from the original internal sliding doors behind the larger openings, and guard stones and some timber rubbing strakes that protected the brickwork from road carts.

Western Transit Shed

xii. The two Transit Sheds were of exceptional size for the period (some 180m long, 25 m wide and 7.5 m clear height). They have brick outer walls. At the southern end there are six arches in each shed (mostly blocked) leading into the Granary, the north wall of which is also the southern wall of the Transit Sheds. The 1930s roofs have steel roof trusses, and are half-hipped at their south ends and gabled at their north ends, with corrugated asbestos sheeting and top lighting.

xiii. The outer walls are of multicoloured brick of fabric type 3032 and 3034 (using the archaeological ceramic building material classification system) which differ from those in the slightly later Granary. The external walls generally appear as a blind arcade of segmental arches between pilaster strips at 7.6 m centres. Internally, brick pilasters supported the roof trusses (see below). The internal brick pilasters are staggered relative to those outside, on a 3.8m module to support the roof trusses.

xiv. On the west wall, even-numbered bays have segmental-arched door openings which match those of the blind arcade above. The even-numbered bays originally alternated between having large doors and having smaller doors. The odd numbered bays were originally blind arches without openings. Some of the original openings have been rebuilt to form rectangular door openings, and additional smaller door openings have also been inserted later.

xv. The east wall’s original openings did not generally align with those on the west wall. Their totally different functions (those on the east being for rail access, those to the west providing road access), would have made their alignment opposite each other unnecessary. The east wall has a c.1938 wide opening at its north end under an inserted compound steel girder bearing the rolling marks ‘Appleby-Frodingham 24x7’ and ‘British Steel’, opposite that on the Eastern Transit Shed. Apart from the opening for the roadway to the north of the Granary, the insertion of which involved some rebuilding of the junction between the Granary and the Transit Shed’s east wall, the rest of this wall to the north of the Granary has been altered
little. Exceptions to this are to be seen where it was altered in 1899 to accommodate the offices above the western bay of the Train Assembly Shed, and where it has been damaged in this same area as a result of the recent fire. At the south end, where the Transit Shed abuts the Granary, the Granary’s four southern arches are blocked. The northern two Granary arches led, in 1990, to a toilet and another room in the Granary that was partitioned off from the Granary and formed part of the Western Transit Shed.

xvi. The north wall of the Western Transit Shed is a large gable with an original central blind arch. Against this can be seen the faint profile of a now-demolished single-storey building with a symmetrically-pitched roof. There is a central clock above the blind arch, with its now-disused mechanism housed within the building. A single railway track originally passed into the Transit Shed through an opening on the east side of this gable end, with a second opening for road traffic on the west side. Between 1871 and 1882 the west end of the wall was altered to accommodate two openings for railway tracks. (This would have necessitated the shortening of the internal roadway.) Today, there is evidence that all the northern openings have since been altered. There is a small attached late 20th century building on this gable end.

xxvi. The south wall extends only up to eaves level, reflecting the fact that the roof was originally fully hipped. Above this level, the brickwork of the Granary’s Western Offices is recessed from that of the shed. Fletton brick piers built onto the wall of the offices support the hips of the 1938 half-hipped roof.

xxvii. The Western Transit Shed was originally roofed in a single symmetrically-pitched span east-west by exceptionally long-span (78 feet clear) composite timber and iron trusses. The main members were of timber, with wrought iron straps and tie-rods. The trusses also employed cast iron shoes and junction boxes, as widely used in such trusses of the time and as survive in the Granary. In 1936-8 these trusses were replaced by straightforward, mainly riveted but partly bolted, steel trusses of Polonceau configuration, fabricated from rolled steel angles joined by gusset plates. At the same time the original roof covering - of slate, with areas of glazing (Goad Sheet 12/400, 1921) - was replaced by corrugated asbestos sheeting. Part of the roof was removed and rebuilt as a result of the 2001 fire.

xix. The Western Transit Shed roof is drained by downpipes, which on the external west face drop down on pilarster lines between the blind arches.

xx. The Transit Shed was originally served by a canal basin entering the building from the south. This is inaccessible at present, and is probably filled in. Stables for railway horses were provided under the platform, and survive beneath the surviving section of platform. These stables probably occupied a space nearly 90 metres long by 9 metres wide beneath the platform, of which a length of about 57 metres (15 bays) is visible from the current access hatch.

xxi. In these stables, slim internal slim cast iron columns support east-west cast iron beams of inverted Y section. These in turn support the brick jack-arching of the ground floor level. This floor is further supported on 20th century 1 section steel columns, carrying north-south steel beams that are cut through the earlier structure. These beams support the west edge of the platform above, which was moved to the east of its original location in the later 20th century. Original timber pegs set into the curved wall in the stables (whose profile responds to one of the former turntables) were used to hang harnesses and horse furniture. 19th century plans show a U-shaped ramp down to the stables at their northern end. This may well remain beneath the platform and floor.

xxii. Beneath the eighth roof truss from the north end, there is an east-west partition. To the south of this, the original platform survives with an eastern extension. The original platform’s west edge has been truncated and refaced, although its original substructure probably survives behind the later work.

xxiii. The 1936-8 east-west roadway is 15m wide. The Shed wall above it is carried on a steel plate girder that is set into a pier on the north-west corner of the Granary.

xxiv. Among the surviving fixtures relating to the early use of the Transit Shed are some cast iron overhead runway beams from the original internal sliding doors behind the larger openings, and guard stones and some timber rubbing strakes that protected the brickwork from carts. A 20th century concrete platform was built at the south end of the building, onto which was built a steel staircase providing access to the first floor of the Granary’s Western Offices. This replaced an earlier staircase in the same location. The southern doors are all blocked, and an internal single-storey brick office has been inserted in the south-west corner.

Assembly Shed

xxv. The building was originally 155 m by 55 m on plan. The east-west roadway later brought through the south end of the Shed occupies a width of about 15 m.

xxvi. The east and west walls between the Train Assembly Shed and the flanking Transit Sheds are of brick, with arch openings all now blind. The width and spacing of these arches differs on either side of both walls. There were originally seven openings in each wall, five for the transverse railway tracks linking the sheds and two for foot traffic. These have since been infilled.

xxvii. Further descriptions of the east and west side walls are given in the reports on the Eastern and Western Transit Sheds.

xxviii. The north wall of the Shed is a gable with four equal bays reflecting the symmetrical symmetrically-pitched roofs behind. It was originally open, with three tracks passing through it in each of the bays. Three store-capped brick piers are present, continuing the lines of internal columns (formerly alternating with longer sections of brick walling) under the valleys between the four bays of pitched roofing.

xxix. Neither Humber nor an 1882 railway plan show intermediate columns between the piers, and so it would seem that - as now - the end roof trusses supported a lightweight fascia above the railway tracks. Originally this was probably timber valancing, now it is corrugated asbestos above the valley level.

xxx. The three easternmost north wall bays have roller shutter doors at platform level, topped by a profiled metal fascia up to valley level. The westernmost bay has a roller shutter door on its
eastern side, next to a single-storey, relatively recent, office also set at platform level.

xxxii. The south wall of the Shed, north of the roadway, includes steel stanchions supporting the roof trusses spanning north-south across the roadway. The wall infilling is non-loadbearing concrete blockwork and profiled metal sheeting supported on steel rails, all being stabilised by the stanchions. The edge of the raised platform can be seen here, faced with rail sections on dwarf brick walling.

xxxii. The original roof was of timber boarding on composite timber and wrought iron trusses. (Some of these were relocated to roof over the 1897-9 first floor offices, and survived until the recent fire.) The 1936-8 reconstruction of the Shed roof adopted a simple steel construction, with rolled I-section principal rafters spanning east-west, and tied together between their feet by circular tie-rods supported by two flat sag-bars. The joints are welded, a relatively early use of the technique in structures. The roof is sheathed with corrugated asbestos and bands of glazing. Valley gutters are also of asbestos.

xxxiii. The roof trusses are supported on rolled steel sections spanning north-south, with riveted compound girders being used for longer spans of up to about 12 m, particularly at the north end of the Shed. Stanchions are single British Standard Beams, or twin BS Bs battened together where longer roof spans, and hence heavier loads, have to be carried.

xxxiv. The 1897-9 first floor offices had a slated symmetrically-pitched slate roof on trusses as noted, with timber boarding on the soffits. Brick walls and timber floors were supported on riveted steel plate girders. These were carried on eight hollow circular cast iron columns placed along their eastern face. These columns have square head-plates with triangular stiffeners, and a cast-on plaque near ground level inscribed “W. RICHARDS & SON MAKERS LEICESTER”. (Fire damage rendered most of this area inaccessible during earlier inspections. Subsequent repairs have introduced a false ceiling under the area of the offices, preventing further inspection from ground level.)

xxxv. The roof over the roadway is a continuation of the roof construction to the north. The east-west trusses are carried on riveted compound steel girders spanning north-south. These girders are supported on steel stanchions to the north of the roadway, and on the north wall of the Granary to the south.

xxxvi. Inside the Shed, the platform construction is about 1 m above the adjacent ground level. At the present time, the Shed is being used for ‘The Raceway’, a go-kart track built up off the platform level to form an undulating and curved roadway. Spectator facilities are provided along the west side of the track.

xxxvii. The inserted roadway south of the Shed is surfaced with asphalt. Some granite sets remain.

History and Function of the Buildings

Eastern Transit Shed

i. The Eastern Transit Shed was built in 1850 as part of Lewis Cubitt’s Goods Station. It was built with the Western Transit Shed to handle all of the London merchandise traffic of the GNR. The Eastern Transit Shed handled incoming railway traffic, and the Western Transit Shed handled outward-bound traffic. The buildings were on an unprecedented scale, among the longest of their day.

ii. The Eastern Transit Shed included an internal roadway along its eastern side, a central platform, and a western track that provided turntable access to the Granary and Train Assembly Shed. The platform was set over an arm of the canal running north from the Granary Basin to the south, to allow for the loading of barges. There was also stabilising for horses beneath the platform, further north, that still survived in 1942, according to a Goad insurance plan of that date. The goods could be loaded from the platforms onto road carts. The roadway initially ran the length of the shed with east-west road access through arches in the building’s eastside. Wagon turntables diverted the wagons into the Granary for unloading or reloading, and into the Train Assembly Shed for marshalling or diverting into the Western Transit Shed or Granary.

iii. The current offices to administer the work in the Eastern Transit Shed were built between 1865 and 1871 with access from the south end of the platform, to both its ground and first floors (the latter via a staircase, now gone). The construction of the offices blocked the road vehicle doorway on the south wall of the Transit Shed, but preserved the railway track opening on the west part of the shed’s south wall, maintaining wagon access to the Granary basin.

iv. By 1873 the turntables providing railway access to the Granary had been removed; the railway track had been cut short of the opening in the south wall, and the gap between the south end of the track and the southern doorway had been covered by an extension of the platform. By 1882 the turntables that diverted wagons into the Granary had been reinstated.

v. In 1899, with the opening of the Western Goods Shed to handle outward-bound traffic, the two Transit Sheds, the Granary, and the Train Assembly Shed became the inward-bound goods station.

vi. In 1936-8 an east-west road was built through both Transit Sheds and the Train Assembly Shed, along the north side of the Granary. The Shed roof was rebuilt at the same time with light steel trusses and corrugated asbestos sheeting, with a half-hipped south end replacing the earlier fully-hipped arrangement. In 1938 the Transit Sheds, Granary and Train Assembly Shed became used solely for outward-bound goods traffic.

vii. Following abandonment for railway use, the building was further subdivided with lightweight steel-framed partitions for warehousing, with roller-shutter doors. The platform and track were removed.
The Eastern Transit Shed was built in 1850 as part of Lewis Cubitt’s Goods Station. It was built with the Western Transit Shed to handle all of the London merchandise traffic of the GNR. The Eastern Transit Shed handled incoming railway traffic and the Western Transit Shed handled outward-bound traffic. The buildings were on an unprecedented scale, among the longest of their day.

The Western Transit Shed included an internal roadway along its western side, a central platform, and an eastern track which served the platform and was connected by wagon turntables and cross-tracks to the Train Assembly Shed. This track also extended southwards to give rail access via turntables to the Granary and to the basin in front of the Granary. The platform was set over an arm of the canal running north from the Granary Basin to the south, to allow for unloading from barges. There was also a stabling for horses beneath the platform, further north. The goods could be loaded from road carts into rail vehicles across the platforms, with cranes assisting the loading of heavy items. The roadway initially ran the length of the shed, with east-west road access through arched doorways the building’s west side.

The current offices to administer the work in the Western Transit Shed were built between 1865 and 1871 with access from the south end of the platform, to both its ground and first floors (the latter via a staircase that has been replaced in the 20th century). The offices did not obstruct the access routes to the south, which were blocked in later.

An 1882 plan shows some remodelling since 1871. There were two additional tracks that entered the north end of the shed and extended into the shed as far south as the southern part of the fifth external bay from the north. Additional platforms were provided in the Train Assembly Shed; to serve these, an east-west cart road was made through the Western Transit Shed, just north of the Granary.

In 1899, with the opening of the Western Goods Shed to handle outward bound traffic, the two Transit Sheds, the Granary, and the Train Assembly Shed became the inward-bound goods station.

In 1936–8 the two Transit Sheds and the Train Assembly Shed were remodelled to convert them into an outward goods station, with new platforms concentrated in the former Train Assembly Shed. The former turntables and cross-tracks were done away with, and the east-west road was widened. Several of the vehicular doorways on the western side of the Transit Shed were enlarged. The roof was rebuilt at the same time with light steel trusses and corrugated asbestos sheeting, with a half-hipped south end replacing the earlier fully-hipped arrangement.

Following abandonment for railway use, the building was further subdivided with lightweight steel-framed partitions for warehousing, with roller-shutter doors. The southern and northern ends of the platform and track were removed, and the surviving platform extended.

At the time of this report, the northern part of the Eastern Transit Shed was occupied. The area to the north of the east-west road was severely damaged by fire in 2001. The north end was most recently used for storage, and the area south of the east-west road was in use by Pickfords removals.

The Train Assembly Shed was built in 1850 as an integral part of Lewis Cubitt’s design of the Granary group. Incoming wagons laden with general goods freight were unloaded in the Eastern Transit Shed. This had only one long platform face, but five sets of wagon turntables on transverse tracks allowed individual wagons to be manoeuvred into this shed for unloading. They could then be transferred to the long single platform in the Western Transit Shed for reloading, or - if to be returned empty - they could be assembled into a train on one of the twelve tracks within the Train Assembly Shed, three in each of its four bays.

At this time the interior of the Shed was spanned by four bays of east-west composite timber and wrought iron roof trusses, supported by an alternating sequence of cast iron columns and lengths of brick wall that provided longitudinal stability to the column lines.

The large number of tracks in this central shed facilitated the gradual assembly of trains for particular routes and destinations. This avoided the need for frequent shunting of wagons.

Two tracks continued southwards into the ground floor of the Granary for grain traffic. Here again, wagon turntables on transverse tracks assisted the efficient turn-round of wagons.

A plan of the Granary in 1873 (reproduced in Hunter and Thorne) shows this arrangement of tracks, with the Transit Sheds to west and east described respectively as the ‘Departure’ and ‘Arrival’ goods stations. The Train Assembly Shed itself is titled ‘The Arcade for preparing wagons for the country’.

Changes took place soon afterwards. A railway plan of 1882 shows two of the twelve tracks truncated and replaced by north-south platforms, with an east-west platform introduced on the north side of a transverse access road immediately to the north of the Granary. Formation of this road necessitated openings being formed through the east side walls of the Train Assembly Shed into the adjacent Transit Sheds.

Further changes resulted from works carried out in a major campaign in 1897–9. The newly-built Western Goods Shed, together with the adapted Western Coal Drops, now handled all outgoing goods traffic. The Granary group, including the Train Assembly Shed, now concentrated on incoming goods traffic. A single-storey range of offices was added at first floor level above the tracks, extending north from the Granary over slightly more than half of the westernmost bay. This necessitated the provision of new cast iron columns along the east
side of this bay to support the additional load, as well as the introduction of heavy riveted steel plate girders to span the offices across the roadway next to the Granary. The composite roof trusses of the Train Assembly Shed displaced by this new office floor were simply raised one storey and re-used to support the slated roof of the offices.

xxiv. Further major alterations were carried out in 1936-8, affecting all three sheds north of the Granary. Their roofs (except that over the first floor offices) were totally rebuilt. In the Train Assembly Shed the composite trusses were discarded, and replaced by rolled steel I-section principal rafters with steel tie-rods linking their feet. These were supported on steel beams, riveted compound girders, and stanchions. The interior of the Train Assembly Shed was replanned, with the removal of the transverse tracks and turntables, and the provision of a full set of longitudinal platforms. Its function reverted to the handling of outwards goods traffic. The east-west roadway was widened and extended through new openings formed in the outer walls of the Eastern and Western Transit Sheds.

xxv. Railborne goods traffic declined after World War II, but the Shed continued to handle rail parcel traffic until 1981, using the 1938 platforms. The tracks were subsequently removed inside the Shed. The remainder of the floor area north of the road was raised to platform level. The north wall and the adjacent part of the Shed was modified to accommodate roller shutter doors and offices. Separation between the south of the Shed and the east-west roadway was achieved with concrete blockwork and profiled metal sheeting braced by steel stanchions.

xxvi. In recent years the Shed has been adapted as 'The Raceway', a go-kart circuit raised above ground level.

xxvii. The first floor offices in the westernmost bay were severely damaged by fire in 2001, and were subsequently demolished. An adjacent section of the Western Transit Shed roof was also damaged and demolished. It was being rebuilt in late 2003.

Architectural Analysis

Eastern & Western Transit Sheds

i. The Transit Sheds are an integral part of Cubitt’s design of the Granary group of buildings. The Transit Sheds were exceptionally long and wide for their time. The arcing on the walls and the height of the sheds would have added to the monumentality of the Granary group. The timber trusses were of unusually long span. The fact that the two Transit Sheds were set back from the south front of the Granary, and were lower than it, emphasised the architectural primacy and sheer size of the Granary.
Assessment of Significance

The Heritage Importance of the Transit and Assembly Sheds

SUMMARY: THE HERITAGE IMPORTANCE OF THE EASTERN & WESTERN TRANSIT SHEDS

ARCHITECTURE AND FABRIC
The Transit Sheds are part of the original composition and operation of the Granary group, and therefore have high group value.

Their brickwork is original and the roof profile is preserved.

They are buildings of exceptional size for their time.

The present roofing is of less interest, except for its profile.

The internal layout arrangement has been altered considerably.

Many evocative early features survive, including guard stones, rubbing strakes, and beams spanning early doors.

SETTING
The brickwork type and form harmonise in character with that of the Eastern Coal Drops and the Granary.

The Transit Sheds are an integral part of the Granary group.

There is a harmony of materials and style in the Goods Yard.

The buildings make a positive contribution to the Conservation Area.

SIGNIFICANCE RELATED TO TYPE
The Sheds are a good example of the functional tradition in industrial buildings.

They are unusually large and distinctively proportioned buildings for their type and period.

SIGNIFICANCE RELATED TO INTANGIBLES
The large space and massing of the Sheds add to the monumentality of the Granary group.

SUMMARY: THE HERITAGE IMPORTANCE OF THE TRAIN ASSEMBLY SHED

ARCHITECTURE AND FABRIC
The Shed is flanked on either side by the original 1850 brick walls dividing it from the Eastern and Western Transit Sheds, although openings in these walls have been altered.

The original composite roof trusses and columns have been replaced by 1930s steelwork, although the roof profile has been preserved and the internal plan form of four wide equal bays has been retained.

SETTING
The building is an integral part of Cubitt’s original design of the Granary group.

SIGNIFICANCE RELATED TO TYPE
The arrangement of a train assembly shed with many tracks, flanked by two transit sheds separately dedicated to incoming and outgoing goods handling, is unusual but logical.

Despite recent fire damage and alterations including the replacement of its roof construction, the Shed remains a good exemplar of the functional tradition in industrial buildings.
Notable Features

The notable features of the Assembly and Transit Sheds and their history are:

Assembly Shed

1. The site of the original covered marshalling area for trains of wagons between the East and West Transit Sheds;
2. The Assembly Shed was essential to the original operation of the Transit Sheds, which it served by cross-tracks through side doorways, with lines of wagon turntables;
3. Some turntable pits of 1850 may remain, buried;
4. There are original stock brick piers of 1850 across the open north end, where railway tracks formerly entered;
5. The shed has a very large plan area, 150 m by 55 m;
6. The building was reconstructed in 1936-8 as new goods shed, with longitudinal platforms (now removed) and a roadway across south end; the roof was also later renewed; and
7. The current building is single storey, tsp-lit, in four wide aisles.

These features are annotated in various drawings and photographs.
Transit Sheds

8. The Transit Sheds were central components of the King’s Cross Goods Yard (Great Northern Railway Terminus) from its opening in 1850;
9. The Sheds are each 180 m long, 25 m wide, and 7.6 m high to the eaves;
10. Their layout reflects the function of transhipment of goods between road and rail: entrances at the northern end (now only in east shed) were for former rail track and parallel cartways; other openings in the inner Rank walls were used by rail wagons on cross-tracks from the Assembly Shed; road carts accessed the Sheds via openings in the outer Rank walls;
11. Portions of the longitudinal platform structures remain within 20th century remodelling;
12. Single-storey, previously top-lit with no windows in side walls;
13. Simple but bold architecture of giant segmental arches, forming blind arcades in bays 7.6 m (25 feet) wide; the outer flank walls have segmental-arched vehicular doorways in every fourth bay, and small pedestrian doorways midway between them (larger vehicular doorways inserted in the 20th century disturb this rhythm);
14. Wide-span, double-pitched roofs with eaves;
15. Internal spaces large in all dimensions, and uninterrupted;
16. Former timber roofs with hipped south ends were removed in 1936-8; the present trusses are steel, with a 24 m span;
17. Broad, tall gable ends to the north (visible from afar across the King’s Cross Central site) with a clock tower in the gable of the west (departure) shed;
18. There is evidence of two-storey offices that served the Goods Yard, attached to the gable end of the east shed;
19. Any surviving canal docks at the southern end probably remain buried beneath the floor;
20. Vaults for stables remain underneath the platforms; a former U-curved access ramp is probably buried;
21. Several cast iron overhead runway beams remain from the original sliding doors; there are also guard stones and some timber rubbing strakes to protect the wall masonry from wear by carts;
22. A roadway was cut through the southern end in 1936-8, which reflects modernisation of that time; and
23. The sheds are well maintained (excepting local fire damage) and currently in use as warehouse units.

These features are annotated in various drawings and photographs.
Summary of Building's Individual and Group Value

The built heritage value of the Transit and Assembly Sheds is considered to be high.

The overall group value of the Goods Yard Complex is considered to be very high. The Complex has an exceptionally well coordinated layout, largely intact, reflecting the interchange of goods between rail, road and canal. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current Use

The Transit sheds are currently used as warehousing and workshops. Both the buildings and the site in which they sit are on private land and are closed to the public.

Objectives and Aspirations

The objectives and aspirations for the Transit Sheds as part of the granary complex are:

- To secure the future of the buildings through viable uses;
- To open up the land around the Granary complex as public realm;
- To improve the current setting through the creation of a major piece of public realm directly in front of it, called Granary Square;
- To create a public route through the Granary complex at the back of the Granary building, through the Transit Sheds;
- To bring the Sheds back into active use, opening up the arches and adding a mezzanine floor;
- To create an active frontage to animate particularly the western side of the complex where the main north-south public transport route runs through King’s Cross Central; and
- To consider opportunities to link the uses within the Eastern Transit shed with the Handside Canopies.
Works to Facilitate Future Uses

The original function as railway sheds has created a long, low, open structure. In order to achieve our aspirations for the buildings and the Goods Yard as a whole, a number of alterations would be required to bring the buildings back into use, complying with modern standards.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

Assembly Shed

1. Demolish the Assembly Shed;
2. Develop new buildings and land uses within the footprint of the Assembly Shed;

The Transit Sheds

3. Demolish modern single storey extension on northern side of Western Transit Shed;
4. Replace the existing roof;
5. Insert new first floor levels within each Transit Shed, with adequate provision for natural light;
6. Create level access into and across the Transit Sheds from the east and west;
7. The installation of new services including fire sprinklers;
8. Open up the arch on the southern elevation of the western shed, as part of a pedestrian route from Granary Square, demolishing the modern single storey extension in front of the arch;
9. Establish additional pedestrian routes into the Transit Sheds from Granary Square, utilising the former railway carriage openings;
10. Create an arched east-west pedestrian route through the fourth bay of each Transit Sheds (where necessary, re-construction of the arch, for example to the Western Transit Shed);
11. Glazing within the arches on the external long elevations;
12. Glazing within the arches and openings on the north elevations; and
13. Reinstate and repair parts of the building fabric previously damaged by fire, using appropriate materials.

These works are shown in Figure i to xvi which show the existing buildings.
Defining the Objectives

5.17 Transit and Assembly Sheds

Fig. ix
Ground Floor Plan

Fig. x
Roof Plan
**Refurbishment Parameters**

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

**Demolition of the Assembly Shed**

1. The heritage assets and features of the Assembly Shed would be documented thoroughly, before and during its demolition;

**New Development within the Footprint of the Assembly Shed**

2. The development parameters set out in this Development Specification. For example, Parameter Plan KXC 014 sets a maximum building height of 50m AOD;

**Transit Sheds**

3. The existing buildings' form and fabric would be substantially retained, subject to the works described above and their structural integrity would be maintained;

4. Any 'missing' arch structures within the outer walls would be re-formed to reinforce the rhythm of the building;

5. The existing clock within the north gable of the western Transit Shed would be retained and brought back into use;

6. No new basements would be created beneath the Eastern Transit Shed; and

7. Any surviving elements of the loading docks and tunnels for canal barges beneath the southern end of the Transit Sheds would be preserved in situ.

The Transit Shed parameters and the features to which they relate are annotated in Figures xvii to xxvii, which show the existing buildings.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare detailed schemes for the refurbishment of the Transit Sheds and new development within the Assembly Shed footprint. The applicants would submit these detailed schemes for approval by the local planning authority and seek relevant Listed Building Consents at the same time. The detailed scheme for the Transit Sheds would be supported by a full Conservation Plan, which would address the refurbishment, management and maintenance of the buildings, as part of the Granary complex.

No works could or would take place, until the relevant detailed schemes had been approved and the relevant Listed Building Consents had been granted.
Regeneration House: Initial Conservation Plan

Understanding the Asset

Regeneration House was built in 1850 as the principal offices for the Goods Yard. It is strategically located at the main entrance from York Way and played an important role in the management of the freight operations on the site at the time.

It sits between the Granary Complex and the Midland shed, with its north façade meeting the West Handyside Canopy.

As part of the King’s Cross Central development, it will be visible from the Maiden Lane Bridge on York Way and also from the canal, particularly the south side, by Goods Way.

Description

i. Regeneration House is a plain but architecturally composed rectangular brick building of three storeys plus a semi-basement, some 30 m by 12 m on plan. Elevations are in pinkish-yellow multicoloured stock brick in English bond. The bricks generally have a pinkish-yellow surface and a silty structure. The south-eastern quadrant has smoother, yellower bricks, suggesting possibly a discrete repair after wartime bomb damage (as is also probable in the Eastern Goods Offices flanking the Granary, qv).

ii. The longer east and west elevations comprise five bays symmetrical about the centre. The central bay is narrower than the others, with ground floor entrance doorways front and back (east and west respectively) accessed up shallow flights of steps.

iii. The north and south elevations are of three bays width. They too are symmetrical about the centre, with the central bay (topped by a chimney stack) again being narrower, and also stepped forward of the bays on either side. These central bays have been pierced awkwardly by later inserted windows. Doors are located in both side bays of the north elevation, which faces into the area covered by the 1888 West Handyside Canopy between the Granary group and the Midland Goods Shed. The south end of this roof aligns with the north wall of Regeneration House.

iv. The timber-framed sash windows and their openings decrease in height up the building following Classical principles. Windows are tripartite, with twin mullions dividing the five lines of panes (of four rows) in a 1:3:1 pattern. Pane sizes vary according to window size, to maintain this pattern. Door and window openings are generally spanned by segmental brick arches.

v. Balustrading to external steps and handrails around basement areas are generally of wrought iron of simple but elegant design. Basement areas have flush grilles at ground level allowing natural light into the basement rooms, those nearest the main entrances being neatly curved on plan. An elegantly placed arch spans the basement window under the back door.

vi. The double-pile hipped roof is clad with corrugated asbestos sheeting. This is clearly not the original 1850 roofing, which was probably of slate. Six symmetrically-located brick chimney stacks indicate the location of
fireplaces originally provided to warm the principal rooms below. Downpipes drain the perimeter roof gutters. There is very plain corbelling along the eaves, which have a ‘bald’ appearance suggesting that the original (slated) roof slopes might well have projected beyond the walls. Re-roofing with asbestos sheeting failed to maintain this projection.

vii. The internal layout is essentially symmetrical, with lobby, stone staircase, and landings located in the centre of the building. From here, central north-south corridors originally served single rooms to either side, and led to larger rooms the full width of the building at the north and south ends. Later sub-division with partition walls has resulted in more, smaller rooms in some areas. Ceiling heights on the ground floor and upper floors are generous.

viii. The semi-basement has a lower ceiling height, and is also now more extensively sub-divided, with toilets at the southern end. The rooms here have natural lighting from windows lit via the basement areas beyond.

ix. The interior was substantially refurbished by the London Regeneration Consortium in the late 1980s, although its essential character has been retained. The basement flooring and the stairs from ground floor level are now generally pressed concrete paving slabs, although the original flagstones remain in basement services rooms. The upper levels of the ‘hanging’ stone staircase have been reinforced by light steelwork, although decorative cast iron balustrading has been retained. Cast iron beams supporting the staircase are visible in the basement.

x. Access to the roof space has not yet been obtained, and floor construction is concealed, so the roof and floor construction is not known. However, given the construction forms visible in other buildings of this period on the site it is quite probable that cast iron beams and wrought ironwork may be present, in addition to timber joists and rafters.

xi. The front and rear entrances to Regeneration House are served by short flights of steps, with treads and risers of pressed concrete slabs. The same material surfaces the shallow ramp giving mobility-impaired access to the front entrance.

xii. There are two storeys of temporary ‘Portacabin’-type buildings immediately to the east of Regeneration House, and a mid-20th century pink fletton brick, flat-roofed, security gatehouse south of the building.

xiii. Several items of street furniture are nearby. Of these, a small cast iron cover plate identified as "GNR Electric Light" clearly dates from before 1923 (when the GNR was absorbed into the London & North Eastern Railway). Near to the building stands one of the tall timber telegraph poles that survive on the Goods Yard site, although no longer in use.

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History and Function of the Buildings

i. The building was designed by Lewis Cubitt to serve as the principal offices for the Goods Yard when King’s Cross was being developed as the London terminus of the Great Northern Railway (GNR). It is strategically located north of Wharf Road, quite near the main entrance to the Goods Yard off York Way.

ii. The administration of rail freight required large numbers of clerical staff and generated much paperwork, so that each of the main sheds in the Goods Yard required its own integral offices. However, this building can be seen as the ‘nerve centre’ for freight operations.

iii. It came into use in 1850 and served as railway offices for well over a century.

iv. In 1888 the West Handyside Canopy was erected to cover the area to the north of Regeneration House, between the Eastern Transit Shed and the Midland Goods Shed. The south end of this roof aligns with the north wall of the building.

v. Regeneration House was refurbished in the late 1980s by the London Regeneration Consortium and given its present name. It is currently in multiple occupancy by Exel and others.
Assessment of Significance

The Heritage Importance of the Regeneration House

SUMMARY: THE HERITAGE IMPORTANCE OF REGENERATION HOUSE

ARCHITECTURE AND FABRIC
Regeneration House is a good example of neo-Classical 1850s design. Its architect, Lewis Cubitt, adopted the same style for King’s Cross Station.

Its plain but architecturally composed yellow-brown stock brick elevations were designed to be symmetrical. Window heights decrease up the building, as commonly found in Georgian elevations, with pane sizes adjusted proportionately to maintain the pattern of five lines and four rows.

SETTING
Regeneration House is a key element in the group of buildings around the Granary.

SIGNIFICANCE RELATED TO TYPE
The offices are a good example of the functional tradition (verging on the polite) in industrial buildings, with elements of conscious aesthetic treatment of the elevations.

SIGNIFICANCE RELATED TO INTANGIBLES
The offices when in railway use were the ‘nerve centre’ of the Goods Yard.
Notable Features

The Notable features of Regeneration House and its history are:

1. The building was constructed in 1850 as part of the Lewis Cubitt and Joseph Cubitt design of the Goods Yard complex;
2. The building was designed as the principal offices for the Goods Yard as part of the London terminus of the Great Northern Railway;
3. The building was situated at the 'nerve centre' of the Goods Yard for freight operations, and strategically located north of the main entrance road into the Goods Yard off York Way;
4. The building has been recently refurbished for continued use as offices for site management and regeneration, retaining its essential character;
5. Regeneration House is an austerely elegant rectangular brick building of four floors including a semi-basement;
6. The building is composed symmetrically about both axes, with the central bay narrower for architectural effect;
7. The doorways are approached by stone steps in the east and west sides, with two doorways at the north end, reflecting the original pattern of staff movements;
8. The door and window openings are of generous size; the window openings decrease in height up the building;
9. The building has a hipped roof, clad with corrugated asbestos sheeting (replacing the original slates); the eaves detail may also have been altered;
10. The symmetrically-located brick chimney stacks indicate the location of fireplaces;
11. The internal layout was (and is) essentially symmetrical, with a lobby, a stone staircase (with decorative cast iron balustrades), and landings located in the centre of the building; and
12. There are several items of street furniture nearby, including a small cast iron cover plate labelled "GNR Electric Light", which clearly dates from before the railway grouping in 1923.

These features are annotated in various drawings and photographs.
Summary of Building’s Individual and Group Value

The built heritage value of Regeneration House is considered to be high.

The overall group value of the Goods Yard Complex is considered to be very high. The Goods Yard Complex has an exceptionally well coordinated layout, reflecting the interchange of goods between rail, road and canal. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current Use

Regeneration House has been refurbished relatively recently and is currently used as offices. It is part of a private site and so is closed to the public.

Objectives and Aspirations

The objectives and aspirations for Regeneration House as part of the Granary Complex are:

- To secure the future of the building through viable uses;
- To open up the land around the Granary complex as public realm;
- To improve the current setting through the creation of a major piece of public realm directly in front of it, called Granary Square;
- To refurbish the building and bring it back into active use, possibly linked with activities in the Granary or Midland Shed.
Works to Facilitate Future Uses

The buildings original function as offices is clearly evident in its built form. The recent refurbishment has provided some modernisation, however in order to achieve our aspirations for the buildings and the Goods Yard as a whole, it is likely that further alterations would be required, particularly to provide adequate vertical circulation.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. The insertion of a new lift, disabled access and means of escape;
2. Removal of the modern portacabins to the north-east; and
3. Replacement of unsympathetic external fittings and services.

These works are shown in Figures i to vii which show the existing building in plans and photographs.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

These works of alteration would be undertaken in accordance with the following parameters:

1. The existing building form and fabric would be substantially retained, subject to the works described above and its structural integrity would be maintained.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for Regeneration House and its refurbishment. The applicants would submit this detailed scheme for approval by the local planning authority. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the building.

No works could or would take place, until the detailed scheme had been approved.
The Midland Goods Shed Initial Conservation Plan

Understanding the asset

The Midland Goods Shed has a complex history, being first used as a temporary passenger platform for the Midland Railway, with the existing Goods Shed being built a little later when it was converted into a goods platform.

It is connected to the Eastern Transit Shed (in the Granary complex) via the West Handside Canopy, a large covered space to the north of Regeneration House. The East Handside Canopy is a long, relatively narrow covered area to the east of the Midland Goods shed which curves gently to the northwest.

The shed and canopies sit on the far eastern side of the Goods Yard and will be the first heritage buildings that people see as they enter King’s Cross Central from Islington. They could play an important role associated with the uses within the Granary, or there are opportunities for independent use with the canopies used perhaps as public covered space or glazed winter gardens or exhibition space.

There are some features remaining from the time it was a functional Goods Yard within the hard landscaping, particularly rails under the West Handside Canopy.

Description

Midland Goods Shed

i. The Midland Goods Shed is rectangular on plan, with overall dimensions (including the attached offices and the hydraulic accumulator tower) of about 100 m north-south and 24 m east-west. The Shed itself is 300 feet (some 91 m) in length, of two storeys, while the attached offices (described further below) are of three storeys. The accumulator tower (also described further below, as is the Shed interior) is a single space, largely filled by the accumulator itself. There is no basement.

ii. During most of the building’s life, after its first conversion to a goods shed, there were twin railway tracks entering the Shed through openings in its north wall. Wagon turntables on both of these tracks fed a third, transverse, track. This passed through an opening in the east wall and connected with tracks in the Potato Market. Around these tracks within the Shed the ground floor comprised a raised platform, with openings and inset loading bays for road vehicles - originally horse-drawn carts - on both long side elevations. This arrangement allowed both railway wagons and vans, and road vehicles, to be loaded or unloaded on the level and under cover, with a consequent greater efficiency in working.

iii. The long east and west elevations are divided into 24 bays of brickwork of 12 feet 6 inches (3.8 m), with recessed panels at ground and first floor level (or openings at ground floor level) separated by brick pilasters and a horizontal ‘frieze’. The brickwork up to the top of the frieze is generally laid in Flemish bond, whereas above the frieze English bond is used, suggesting more than one phase of building. The upper panels are spanned by shallow segmental arches. Window openings are invariably quite small and spanned by segmental brick arches. Windows have cast iron frames and stone sills.

iv. The early (post-carriage-shed) pattern of brick panels and vehicular openings at ground floor level on the
The southemmost two bays formerly contained a vehicular opening, now infilled. Both have windows on two levels; these serve what are by then shown as offices on the 1894 1:1056 OS plan.

xii. The addition of the East Handside Canopy in 1888 made it necessary to provide support along this wall for the east-west spanning roof trusses. This was achieved by the insertion of stone corbels to pick up I-beams spanning between the pilasters across the now-blocked upper windows, but directly off the wall where there was no window. The upper part of this wall matches that of the west wall.

xiii. Two 20th century external steel stairs rise up on this elevation, passing through the East Handside Canopy roof, to give access to the first floor of the Shed.

xiv. The north elevation of the Shed has seen many alterations, including the recent closure with timber walling of the two openings that originally brought railway tracks into the Shed, and also the addition of the accumulator tower.

xv. The north elevation of the Shed is of brick in English bond throughout. The two central openings for railway tracks, now boarded-up, have been widened above platform level in the early 20th century, with engineering brick reveals corbelling to support mid 19th century cast iron I-beams of shorter span. There are cast iron corbel brackets to support the previous sliding doors. Several windows occur at ground floor and higher level.

The Later Accumulator Tower

xvi. The later brick accumulator tower abuts the Shed over the eastern quarter of its northern end. Access into the tower, via a door in the east side currently blocked by a storage tank, is hazardous, but it seems probable that much or all of the important accumulator machinery identified in the 1988 English Heritage survey still remains. Externally, the tower brickwork echoes the rhythm of the Shed brickwork, with upper and lower recessed panels divided by a plain brick string course, all in English bond. At its north-east corner is a cast iron column onto which bears the southemmost lattice spine girder carrying the East and West Handside Canopies.

xvii. The south elevation of the Shed abuts the office block, and therefore has no visible external face. The office block is described below.

The Interior of the Shed

xviii. The interior of the Shed, like the exterior, has been much altered.

xix. The roof was formerly of two spans. The present roof structure is of riveted steel clear-span symmetrically-pitched trusses by Colvilles, erected in 1957. Booms are of double angles back-to-back, other members are single angles. Eight angle purlins on each face support corrugated asbestos sheeting and wired glass, some panels of which can be opened by mechanical linkages.
xx. At first floor level the brick wall pilasters are, as on the exterior, typically at 3.8 m centres. The trusses are not always centred on these, indicating perhaps that the roof replacement was carried out bay by bay, installing one new clear-span truss before removing its predecessor (which was of two bays, spanning onto a central line of supports, see 4 below).

xxi. A timber stair in the south-west corner of the first floor has been removed. This was previously the only internal stair to serve the first floor, which is now accessed by two external steel stairways on the east side of the building, through doorways that were probably once loading doors. (Two more such doors are on the western side.)

xxii. The first floor is of timber boarding, spanning north-south onto east-west timber joists. These are carried on five rows of riveted plate girders which in turn span typically two bays (7.6 m) north-south onto deeper plate girders. These span east-west across half the width of the building, about 11 m, onto cast iron columns set against the east and west walls of the Shed, and onto a row of circular cast iron columns and brick piers down the centre of the building. The central columns have fancy corbelled heads to support the girders; the shallower girders sit on curved haunches.

xxiii. The spacing of the central row of columns is three bays (about 11.4 m) in two adjacent spans in the middle of the building and two bays (7.6 m) elsewhere. The longer-span girders are, naturally, deeper.

xxiv. The hollow cast iron columns against the side walls are of unusual profile, having a cross-section like a rectangular version of the Greek capital letter W rather than a closed hollow section.

xxv. This heavy construction stylistically appears to date from about the time of the Handside Canopies or a little earlier.

xxvi. On the centre-line of the Shed at the north end of the ground floor is a longitudinal brick wall two bays in length, with integral piers at one-bay spacing. This probably dates from the original building construction in 1850, and was intended to stabilise the previous central row of columns. A similar wall was formerly at the southern end of the Shed. These walls and their function may be compared with the north-south brick wall added at the north-east corner of the East Handside Canopy (qv).

xxvii. The present ground floor is generally the original loading platforms, raised above ground level. Local breaking-through has exposed rubble filling, but also shows timber boards on joists making up the original platform construction. Loading bay edges are dwarf brick walls with stone and concrete facing.

xxviii. Between the girders supporting the first floor, on the east side of the Shed, is a timber beam with a central mortice and horizontal bracing members, to hold the top of a swivelling platform crane.

xxix. Past water penetration is evident within the Shed in staining of first floor timbers, which may perhaps explain the replacement of the roof in the 1950s if its predecessor was past repair. Water penetration from the adjacent yard roofs has stained and weathered the external brickwork of the Shed, and led to the establishment of plant growth in mortar joints. Remedial action against damp, removal of later accretions, and cleaning of brickwork would render the elevations more intelligible.

The Office Block abutting the south end of the Shed

xxx. The office block abutting the south end of the Shed is of seven bays width and one bay depth, with three storeys. The third storey brickwork is of lighter hue than that on the lower floors, suggesting a later addition.

xxxi. This view is reinforced by the presence of two attached brick pilasters on the exposed south elevation, also of lighter hue and extending to about mid-height on the third storey. These are located asymmetrically, being one bay in from the west end and two bays in from the east end of the block. The 1871 OS 1:1056 plan shows these to be the only pier positions between windows that are not backed by cross walls, so it may be surmised that the pilasters were added to stiffen the south wall when it was raised a further storey.

xxi. The brickwork junctions between the office block and Shed are straight jointed, and the south end of the Shed brickwork is corbeled out as if to form a gable end. Plans indicate that the office block was rebuilt on the site of a smaller block, c.1870.

xxxii. The west elevation has a single window at second floor level, while the east elevation has stone sills at first and second floor levels.

xxxiii. Door and window openings are spanned by segmental brick arches with stone window sills.

xxxiv. The office block roof is symmetrically-pitched and slated, with the 1 in 2 roof slope, and the plain eaves and gable ends, that are characteristic of the Great Northern Railway’s smaller buildings, derived from an Italianate model.

xxxv. The office block is currently out of use and boarded up.

West Handside Canopy

xxxvii. The West Handside Canopy is a nine-bay symmetrically-pitched roof structure some 140 m in length, with trusses spanning north-south onto east-west lattice girders which are carried on cast iron columns abutting the Granary group and the Midlands Goods Shed. At its north end the roof continues past the Shed and abuts the East Handside Canopy, a similar roof of the same date, erected between the Shed and the buildings of the 1850 temporary passenger terminus to the east. Both roofs extend as far north as the north gable of the Eastern Transit Shed, so that the Midland Goods Shed is surrounded by an overall roof on three sides.

xxxviii. The south end of the West Handside Canopy roof is aligned with, and partly spans onto, the north wall of Regeneration House, which pre-dates the roof by nearly four decades.

xxxix. Both roofs were designed by the Great Northern Railway’s engineer Richard Johnson, and were fabricated by the well-known ironworking firm of Andrew Handside & Co. of Derby.
However, different structural solutions were chosen for the two roofs, in response to the different widths to be spanned and different support conditions along the sides of the roofs. Both roofs made use of triangular trusses, of the same design and similar spans, but differing in their orientation.

The East Handside Canopy roof spans a virtually constant width of some 16 m, and its structure is a series of closely-spaced clear-spanning east-west triangular trusses. Each truss delivers a smaller load into its supporting structure than do the girders of the wider-spanning West Handside Canopy roof. Consequently, each truss can be supported on the west side directly by the brickwork of the Midland Goods Shed, and on the east side by cast iron beams of the 1850 temporary passenger terminus.

In contrast, with its varying but significantly wider roof span, the West Handside Canopy comprises north-south triangular trusses spanning onto east-west lattice girders. These deliver quite substantial loads into their supports at either end, and so are carried on cast iron columns introduced for the purpose, standing against the walls of the Eastern Transit Shed and the Midland Goods Shed.

The nine roof bays are each of about 15 m span north-south. The roof is currently clad with mid-20th century corrugated asbestos sheeting, with strips of glazing partly in flat wired glass. Much of the glazing has been replaced with corrugated metal sheeting and smaller panels of translucent plastic sheeting. The cladding is supported on light purlins of timber and some relatively recent cold-formed steel sections, spanning between light and elegant wrought iron triangular multiple-panel king-rap trusses at about 2.7 m centres. The truss rafters are of T-section, and the bottom tie-bars are circular rods with forged eyes at connection points, as were commonly formed in such structures. These tie-bars have a slight upward camber from eaves to midspan, and are anchored in U-shaped shoes, loosely clamping the webs of the rafter feet and pinned to them by bolts. The internal elements of the truss follow a standard king-rap arrangement, with two pairs of T-section struts (compression members) and five vertical circular hanger rods including the central king-rap. The connections of these rods to the truss are clamped between paired gusset plates.

The trusses span north-south, parallel to the east wall of the Eastern Transit Shed, onto 10 deep riveted east-west lattice girders. These girders are built up from flange plates, angles, and vertical and diagonal web members of flat bars and T-sections. The trusses meet the lattice girders just above their bottom flange, so that the girders stand above the roof valleys. This reduces the overall depth of roof construction, but complicates the drainage of the valleys.

There are three variants of lattice girder design, adopted because the girder spans vary substantially. From north to south the girder types are in the sequence: A:B:C:C:B:B:B:C:C: A+A, as follows:

Type A: shortest spans of 12-15 m, at the north end of the roof and in the two spans of the south end either side of Regeneration House; web of quadruple-Warren diagonals stiffened by vertical posts at truss positions; truss bearing onto columns at each end stiffened by riveted open-spandrel wrought iron bracket
As already noted, the west wall of the Midland Goods Shed is not parallel to the east wall of the Eastern Transit Shed. Consequently the trusses along the eastern side of the roof, set out parallel to the Eastern Transit Shed wall, intersect the western wall of the Shed at an acute angle. Where this occurs, the trusses are either supported on corbel stones, or are directly built into the brickwork.

Near the south-east corner of the roof, an embayment was made in the roof cladding to provide for a former loading door into the upper floor of the Midland Goods Shed. To avoid this door, the adjoining pitched-roof truss is stopped short, and supported forward of the wall on a cast iron bracket.

At the south end of the roof, the common trusses span onto the north wall of Regeneration House and onto the lattice girders either side of this building. These girders in turn are supported by cast iron columns at either corner of the north wall of Regeneration House.

The roof is drained either side of the east-west lattice girders by box-gutters of galvanised steel sheet. Down-pipes are present, but the connections between these and the gutters are deficient in many cases. The lattice girders have been boxed around at some time in the 20th century with roofing felt and corrugated iron on timber framing as a short-term measure to waterproof the roof. However, much of this is in poor condition and clearly much water penetration has occurred, causing rotting of timber, corrosion of metalwork, and staining of surfaces.

Some corrosion of the trusses, in particular, can be seen from ground level, and defective roof drainage has also resulted in staining of brickwork in the walls flanking the roof.

Both north and south fascias of the roof have been clad with coloured corrugated metal sheeting.

The west wall of the Midland Goods Shed is described with the Shed (Form Reference H2), while the east wall of the Eastern Transit Shed of the Granary group is described with the shed (Form Reference G3). There are no other walls within this roofed area.

The ground surface here retains granite setts paving with embedded but disused railway tracks, and later asphalt.

The roof is currently clad with corrugated asbestos sheeting and wired glass on light timber purlins. These are supported on light and elegant wrought iron triangular trusses, of multiple-panel king-rod configuration, at 1.7–1.9 m spacings. The truss rafters are of T-section, and the bottom tie-bars are circular rods with forged eyes at connection points, as were commonly formed in such structures. These tie-bars have a slight upward camber from eaves to midspan, and are anchored in U-shaped shoes, loosely clasping the webs of the rafter feet and pinned to them by bolts. The internal elements of the truss follow a standard king-rod arrangement, with two pairs of T-section struts (compression members) and five vertical circular hanger rods including the central king-rod. The connections of these rods to the truss rafters are clamped between paired gusset plates.

Along their western edge the trusses are supported over the length of the Midland Goods Shed and the attached hydraulic accumulator tower to the north. The trusses either sit directly onto corbels built into the brickwork of the wall, or else are carried on rolled I-section beams resting on corbels where the wall face was interrupted by now-blocked window openings. Further north along this edge, the trusses span onto three bays of riveted lattice girders, which also support the trusses of the West Handyside Canopy north of the Shed. These girders span onto a D-section cast iron column immediately to the north of the accumulator tower and, further north, onto three riveted compound I-section stanchions. This construction is way on the west side of the Potato Market.

Both roofs were designed by the Great Northern Railway’s engineer Richard Johnson, and were fabricated by the well-known ironworking firm of Andrew Handyside & Co. of Derby.

However, different structural solutions were chosen for the two roofs, in response to the different widths to be spanned and different support conditions along the sides of the roofs. Both roofs made use of triangular trusses, of the same design and of similar spans, but differing in their orientation.

For the West Handyside Canopy, with varying but significantly longer spans, the roof structure comprises north-south triangular trusses spanning onto east-west lattice girders. These girders deliver quite substantial loads into their supports at either end, and are carried on cast iron columns introduced for the purpose, standing against the walls of the Eastern Transit Shed and the Midland Goods Shed.

The East Handyside Canopy, in contrast, spans a virtually constant width of some 16 m, and its structure is a series of closely-spaced clear-spanning east-west triangular trusses. Each truss delivers a smaller load into its supporting structure than do the girders of the wider-spanning West Handyside Canopy roof. Consequently, each truss can be supported on the west side directly by the brickwork of the Midland Goods Shed, and on the east side by the cast iron beams of the 1850 temporary passenger terminus.

The northern nine bays of these beams are chords to a gentle curve, reflecting the S-curved plan of the former passenger station. The nine straight bays span 7.6 m (25 feet), and the bays on the curve 7.2 m (about 24 feet). The roof trusses span 16 m (52 feet), with minor variations to fit the geometry.

The roof is currently clad with corrugated asbestos sheeting and wired glass on light timber purlins. These are supported on light and elegant wrought iron triangular trusses, of multiple-panel king-rod configuration, at 1.7–1.9 m spacings. The truss rafters are of T-section, and the bottom tie-bars are circular rods with forged eyes at connection points, as were commonly formed in such structures. These tie-bars have a slight upward camber from eaves to midspan, and are anchored in U-shaped shoes, loosely clasping the webs of the rafter feet and pinned to them by bolts. The internal elements of the truss follow a standard king-rod arrangement, with two pairs of T-section struts (compression members) and five vertical circular hanger rods including the central king-rod. The connections of these rods to the truss rafters are clamped between paired gusset plates.

Along their western edge the trusses are supported over the length of the Midland Goods Shed and the attached hydraulic accumulator tower to the north. The trusses either sit directly onto corbels built into the brickwork of the wall, or else are carried on rolled I-section beams resting on corbels where the wall face was interrupted by now-blocked window openings. Further north along this edge, the trusses span onto three bays of riveted lattice girders, which also support the trusses of the West Handyside Canopy north of the Shed. These girders span onto a D-section cast iron column immediately to the north of the accumulator tower and, further north, onto three riveted compound I-section stanchions. This construction is

The southern gable of the East Handyside Canopy is located four bays north of the southern end of the Midland Goods Shed. The roof covered approximately half the length of the access
described more fully under the West Handyside Canopy (qv).

lxxii. Along their eastern edge the trusses are supported on 18 bays of haunched cast iron beams with open spandrels, forming an arcade. These are the only elements to survive from the 1850 Maiden Lane temporary passenger terminus. Such cast iron beams were commonly used in roofs until c.1860, after which wrought iron trusses became the norm.

lxxiv. There are brackets on the east face of these beams at quarter-points, indicating where the 1850 roof to the east had spanned onto them until it was demolished c.1970.

lxxv. However, these cast iron beams are supported on rolled 390 by 154 mm steel I-section stanchions that have clearly been inserted under the beams. The columns supporting these beams were originally of cast iron. A perception of the increased risk of fracture of the slender and brittle cast iron columns from vehicle impact, and the advent of the motor lorry and reduction in rail use, is the most likely reason for their replacement. The steel stanchion dimensions indicate a Universal Beam section, first rolled in 1959. The Potato Market roof was demolished c.1970, and it is quite possible that the replacement steel columns were installed at that time.

lxxvi. The risk of progressive collapse of relatively flimsy trainshed roofs, as a result of trains colliding with their fragile cast iron columns, had been of concern earlier. The classic case occurred in 1850 at Bricklayers’ Arms Station in south London. This structure was an earlier design of 1844 by Lewis Cubitt, the architect also responsible for the GNR building works at King’s Cross. After Cubitt had expressed his concern to the GNR Board, the outcome was the provision of longitudinal buttress walls in each arcade, not shown on the original drawing. One of these remains at the north end of the present arcade, where the 19th bay was replaced by a stock brick wall of equivalent, 7 m length. The East Handyside Canopy is one bay shorter than the 1850 roof, so it is supported by the only the south end of this buttress wall (inside which may be embedded an original cast iron column).

lxxvii. Both end gables are in poor condition. The south gable has been reclad with sheets of painted plywood, while the north gable has lost its cladding, exposing the timbers that supported it. The gables retain the saw-tooth valancing that is a distinctive feature of railway station canopies.

lxxviii. The roof is drained along both edges by box-gutters of galvanised steel sheet. Down-pipes are present, but the connections between these and the gutters are deficient in many cases. There are remains of earlier cast iron guttering, of inadequate section for a valley, against the wall of the Midland Goods Shed.

lxxix. The external walls of the Midland Goods Shed are described in the report on that building (qv). There are no other walls within this roofed area.

lxxxi. The ground surface here is largely covered by concrete, with no obvious evidence of the railway tracks and wagon turntables that once served both the Potato Market and the Midland Goods Shed. Recent clearance and resurfacing in this area as part of the CTRL works will have reduced surviving evidence within the ground.

lxxxi. Four disused timber telegraph poles are located in the eastern slope of the roof. These were installed when telephone cables were normally run in the open - and particularly alongside railway lines - rather than underground as at present. They would have served the railway’s trunk telegraph and telephone systems, extending up the main line and here passing overhead above the Gasworks Tunnel.

History and function of the buildings

Midland Goods Shed

i. The Shed has a complex history of construction and alteration.

ii. In 1850, the Great Northern Railway (GNR) built a carriage shed on the site, serving the temporary passenger terminus sited to the east between the building and York Way (then known as Maiden Lane). This probably had several tracks entering at the north end.

iii. This shed continued in GNR use after the temporary terminus had ceased operations with the opening of King’s Cross Station in 1852, but in 1857 it was converted into a goods shed for the use of the Midland Railway. This company - before the construction of St Pancras Station and its facilities - ran trains for London over GNR tracks into King’s Cross. Five years later in 1862, when the Midland Railway had built its own first freight-handling depot at Agar Town, use of the building returned to the GNR. By this time, the layout of two tracks down the centre of the building had been established, with doorways for carts to enter through the side walls, as shown on an 1865 plan.

iv. Shortly after this, the building was apparently raised in height and a first floor was added for warehousing. The southern end was converted to a bottle warehouse. These works appear to have taken place c.1870.

v. The brick hydraulic accumulator tower was built c.1880 on the north-east corner of the Shed, to augment the hydraulic power supply in the Goods Yard, previously centred on a now-demolished site to the south-west of the Granary.

vi. In 1888 the open yards on either side of the Shed were roofed over with the East and West Handyside Canopies (qv), to provide improved handling facilities in all weathers for perishable traffic, especially potatoes. The East Canopy roof trusses were supported on the east wall of the Shed, whereas the heavier lattice girders of the West Canopy roof were supported on new cast iron columns tied into the Shed west wall.

vii. The front, southern end building was converted back to goods shed use probably c.1910. The building remained in goods shed use until the 1960s, and as a warehouse for some years longer.

viii. The two-span roof over the first floor of the Shed was replaced c.1957 by clear-span steel trusses.
ix. A brick-built range of offices was erected c.1870 attached to the south front of the Shed, replacing earlier offices. The third storey of these appears to be a later addition.

West Handyside Canopy

x. For nearly four decades after the Goods Yard came into use, the area between the Granary group and the Midland Goods Shed was open to the sky. One railway track ran southwards through this area, close to the Midland Goods Shed wall, towards the original canal basin (since infilled) in front of the Granary.

xi. In 1888 the area was roofed over to provide better operating conditions in all weathers. At the same time the East Handyside Canopy was erected similarly to cover the space between the Midland Goods Shed and the buildings of the 1850 temporary passenger terminus to the east. This eastern area was by then part of the Potato Market.

xii. While the covered area to the west also saw potato traffic, it became the centre for fish and other more perishable traffic brought in by rail. This could be unloaded directly and quickly into carts and other road vehicles. Thorne et al. note that fish was sold here on Sundays, when the fish market at Billingsgate in the City of London was shut. The original railway track in this area, together with a later, shorter, siding gave rise to the area’s nickname among railwaymen of ‘The Long and Short Fish Road’. The open area with its natural through ventilation was well-suited to the handling of fish.

xiii. Railway traffic in this area ceased c.1970s. However, the rail tracks remain embedded within granite setts paving. The area has since been used for vehicle deliveries and parking by occupants of adjacent buildings. It also serves as a through route for road traffic from the north end of the Goods Yard.

East Handyside Canopy

xiv. The area to the east was used as a potato market after the temporary Maiden Lane passenger terminus went out of use in 1852 when the King’s Cross terminus was opened. The 1850 terminus roof remained, with buildings being added beneath it in 1864.

xv. The space between the covered Potato Market and the Midland Goods Shed was formerly open to the sky. It comprised a roadway, and two lines of rails which were part of the access system to the Potato Market and the Midland Goods Shed.

xvi. In 1888 the space was roofed over by the East Handyside Canopy, to provide better operating conditions in all weathers. At the same time, the West Handyside Canopy was likewise erected to cover the space between the Midland Goods Shed and the Eastern Transit Shed.

xvii. The East Handyside Canopy was retained when the adjacent Potato Market, including the 1850 roof, was demolished c.1970, and it continued thereafter to provide cover for the vehicles and loading activities of later tenants of the Midland Goods Shed.

xviii. Railway sidings remained in use in this area for empty stock storage until they were lifted in the 1980s.

xix. The area below the roof is currently occupied by contractors for the Channel Tunnel Rail Link (CTRL) works.

xx. Four tall timber telegraph poles, taken through the eastern side of the roof, are disused and are relatively rare survivors of a once-common feature.
Assessment of Significance

The Heritage Importance of the Midland Goods Sheds and Handyside Canopies

SUMMARY: THE HERITAGE IMPORTANCE OF THE MIDLAND GOODS SHED

ARCHITECTURE AND FABRIC
The building has a complex history, which is reflected in the physical evidence of changes to be seen, particularly in the walls. It probably incorporates some fabric from its initial use as a GNR carriage shed, and certainly retains much of its early fabric.

The later, modified, and infilled openings in the side walls for the interchange of freight between rail and road, in particular, exhibit the changes made during various periods.

However, the roof structure has been replaced with conventional clear-span steel trusses c.1957.

The attached offices are stylistically similar to the offices flanking the Granary.

SETTING
The building is an important component of the Goods Yard group, particularly when seen from the south and east (including the canal towpath).

SIGNIFICANCE RELATED TO TYPE
The Midland Goods Shed is a substantial building typical of the expansive period of railway development.

It is functional, being built to serve its purpose as a rail and road interchange facility for freight.

The later hydraulic accumulator tower is a rare survivor of a once-common source of power widely used in railway yards, warehouses, docks, and other industrial sites.

SIGNIFICANCE RELATED TO INTANGIBLES
The evidence of numerous alterations as its function and the needs of its users changed is clear in the fabric, illustrating that change throughout the life of a building is inevitable.

The attached offices were a response to the increasing demand for clerical workspace as traffic in the Goods Yard expanded.

ARCHITECTURE AND FABRIC
The roof has simple and elegant wrought iron trusses very similar to those used in the adjoining East Handyside Canopy roof.

The D-shaped hollow cast iron columns used to support the roof are distinctive, as are the large-span lattice girders.

SETTING
The roof frames north-south views between the Eastern Transit Shed and the Midland Goods Shed, and the adjacent East Handyside Canopy.

SIGNIFICANCE RELATED TO TYPE
The roof provided all-weather cover to a busy working area in the Goods Yard. Such a roof standing in the open, and not part of a building, was not uncommon on the railways, but many have now been demolished.

The roof is supported on cast iron columns placed against the walls of the Eastern Transit Shed and the Midland Goods Shed. It was more common to carry such roofs directly on the masonry walls of adjacent buildings (as in the adjoining East Handyside Canopy), but in this instance the wide and hence heavier spans necessitated the use of new structural supports.

The roof trusses are a fine and relatively late example of the light and elegant king-rod design, originated 50 years earlier at Euston Station, that graced many Victorian station roofs of moderate span.

SIGNIFICANCE RELATED TO INTANGIBLES
The overall roof, flanked by large brick sheds but with open ends, evokes the atmosphere of a major freight handling area.
SUMMARY: THE HERITAGE IMPORTANCE OF THE EAST HANDYSIDE CANOPY

ARCHITECTURE AND FABRIC
The roof has simple but elegant wrought iron trusses on a pleasing curved plan form, which was dictated by the similar layout of the 1850 temporary passenger terminus immediately to the east. This therefore perpetuates the plan and form of the now-demolished passenger station roofs.

The distinctive haunched cast iron beams and the brick buttress wall supporting the eastern edge of the roof are the only surviving elements from the 1850 passenger terminus.

SETTING
The curved end to the plan of the roof adds a memorable termination to the vista of repeated trusses.

SIGNIFICANCE RELATED TO TYPE
The roof provided all-weather cover to a busy working area in the Goods Yard. Such a roof standing in the open, and not part of a building, was not uncommon on the railways, but many have now been demolished.

The cast iron beams, vestigial elements of the 1850 temporary passenger terminus, are also relatively uncommon.

The brick buttress wall, introduced to provide additional stability to the roof structure following the partial collapse of Cubitt’s earlier Bricklayers’ Arms station roof, was a major structural innovation here.

The roof trusses are a fine and relatively late example of the light and elegant king-rod design, originated 50 years earlier at Euston Station, that graced many Victorian station roofs of moderate span.

The disused trunk telegraph poles are now uncommon, especially as part of a railway system.

SIGNIFICANCE RELATED TO INTANGIBLES
The roof provides vestigial evidence of the 1850 temporary passenger terminus that remains a century and a half after this was superseded by the opening of King’s Cross Station on Euston Road.
Notable Features

The notable features of the Midland Goods Shed and Handyside canopies and their history are:

Midland Goods Shed

1. The Goods Shed preserves evidence for the early operational history and development of the Midland Railway in London and its relationship with the Great Northern Railway;
2. The shed preserves evidence of the 1850 carriage shed of the temporary Maiden Lane passenger station in its ground floor main walls;
3. Classic goods shed layout, with central opening for rail tracks in the north end and vehicular doorways for carts at the sides, giving onto embayments in loading platforms;
4. The surviving fabric preserves evidence of the building’s complex history as a c.1850 carriage shed, then as a mid/late 19th century goods shed with parallel use of part of the shed as a bottle warehouse;
5. The building has a robust internal structure of cast iron columns and heavy wrought iron plate girders supporting the upper floor;
6. Features in the exterior walls, which relate to the early operation of the building, such as the cast iron lintels across door openings and associated brackets for sliding doors;
7. The historic development of the building, resulting in an unusually proportioned long-span space in the building’s upper level;
8. The hydraulic accumulator tower of c.1880 - an important remnant of the once extensive hydraulic power system that served the Goods Yard; and
9. The southern offices built against the south gable end c.1870 on the site of earlier offices, with a third storey added later in the characteristic gable-ended style of the GNR’s smaller buildings.

These features are annotated on various drawings and photographs.
West Handyside Canopy

10. The roadway of varying width between the existing goods sheds, covered over in 1888 to shelter the direct transfer of perishable goods (e.g. fish) from rail to road vans;

11. The canopy has high headroom; open at the ends;

12. The partially glazed ridge-and-furrow roof has neatly detailed wrought-iron trusses, upon trussed girders of up to 38m span;

13. The canopy is representative of a form of covered roadway used in many late 19th century goods stations;

14. Granite sett paving with railway lines embedded; and

15. The accumulator tower (see notable features for the Midland Goods Shed).
East Handyside Canopy

16. The roadway of uniform width between the Midlands Goods Shed and the former Potato Market, covered over in 1888 as a shelter to Potato sidings;
17. The canopy has high headroom, open at both ends;
18. The canopy preserves the cast iron arcade of the 1850 temporary passenger station (in the original position, although the stanchions have been replaced);
19. The buttress wall at the north end of the arcade. This was a response to the concern over the risk of progressive collapse, following an accident in 1850 at another Lewis Cubitt designed station (Bricklayer's Arms);
20. The partly glazed double-pitched roof has neatly detailed, wrought iron trusses, its general form echoes the since-destroyed temporary passenger station roof;
21. Traditional timber gable end (in poor condition);
22. The vista of repeated roof trusses is accentuated by the gentle curve towards the north end; and
23. A line of telegraph poles stands above the roof.

These features are annotated in various drawings and photographs.
Summary of building's individual and group value

The built heritage value of the Midland Goods Shed and Handyside Canopies is considered to be high.

The overall group value of the Goods Yard Complex is considered to be very high. The Shed and Canopies are part of an exceptionally well coordinated layout, largely intact, reflecting the interchange of goods between rail, road and canal. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current use

The Midland Goods Shed and East Handyside Canopy are currently part of the site for the Channel Tunnel Rail Link and are used for numerous associated purposes including storage and testing. They are consequently closed to the general public.

The West Handyside Canopy is used predominantly as a covered through-route. It is part of a private site and as such is not accessible to the public.

Objectives and aspirations

The objectives and aspirations for the Midland Goods Sheds and Handyside Canopies as part of the Goods Yard are:

- To secure the future of the building through viable uses;
- To refurbish the building and canopies as part of the Goods Yard to form the cultural heart of the King’s Cross Central development;
- To introduce active uses into the Midland Goods Shed and encourage public access;
- Use the open nature of the Goods Shed, particularly the clear spans of the upper floor, to their best advantage;
- To consider the opportunities to use the Handyside Canopies as a special, covered part of the public realm, or internal space, complimentary to that within the Transit shed and Midland Goods Shed;
- To consider opportunities to link the uses within the Eastern Transit shed with the Handyside Canopies;
- To improve accessibility to and interpretation of the northern façade of the shed and canopies.

A fundamental guiding principle through the evolution of the King’s Cross Central Framework has been the development of a clear and legible public realm. Creating links to the existing urban network and local communities is central to this and the main east-west connection to Islington is via Copenhagen Street. In order to link into this important street and to maintain the urban grain of this area, it will be necessary to remove one bay of both canopies and the buttress wall of the Eastern Handyside Canopy.
Works to Facilitate Future Uses

The original function as a goods shed and linking canopies has created a long, relatively low, open structure. In order to achieve our aspirations for the buildings and the Goods Yard as a whole, a number of alterations would be required to bring the buildings back into use, complying with modern standards, particularly regarding daylighting. To achieve our overriding principle for a clear and legible public realm, one bay of both canopies would need to be removed, together with the buttress wall at the north end of the East Handyside Canopy.

These works will be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. Demolish one bay of the Eastern Handyside canopy (plus the adjoining buttress wall) and one bay of the Western Handyside canopy. This is the subject of an application for Listed Building Consent submitted alongside the planning application, as shown on Parameter Plan KXC 011;
2. Create level access into the ground floor of the Midlands Goods Shed, requiring the substantial or total removal of the existing longitudinal platform structures and removal of any existing door sills;
3. Glazing within the openings in the north elevations of the Midland Goods Shed;
4. The insertion of new windows and doors into the Midland Goods Shed;
5. The insertion of new stairs to provide access to the upper level of the Midland Goods Shed;
6. Reglazing of some or all of the West Handyside canopy;
7. The introduction of new curtain walling other structures to enclose the East Handyside canopy as a productive, indoor space; and
8. The installation of new services such as fire sprinklers and mechanical ventilation, within the Midland Goods Shed and canopies.

These works are shown in Figures i to xi.
Defining the Objectives
Fig. viii Midlands Goods Shed: North Elevation

Fig. ix Midlands Goods Shed and Handyside Canopies: East-West Section

Fig. x West Handyside Canopy: North-South Section

Fig. xi East Handyside Canopy: East Elevation
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

1. The existing form and fabric of the building and canopies would be substantially retained, subject to the works described above and their structural integrity would be maintained;
2. The existing platform levels and any heritage features preserved below would be documented thoroughly, before and during the refurbishment works; and
3. No new basements would be created beneath the building.
Implementation

Future applications

The applicants have submitted an application for Listed Building Consent to demolish one bay of the Eastern Handyside canopy (plus the adjoining buttress wall) and one bay of the Western Handyside canopy.

In relation to the other works:

- Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the Midlands Goods Shed and Handyside canopies. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the Midland Goods Shed building and canopies.
- No works could or would take place, until the detailed scheme had been approved and Listed Building Consent had been granted.
Fish & Coal Offices and Wharf Road Arches: Initial Conservation Plan

Understanding the Asset

The Fish & Coal offices were built over a series of years to provide office accommodation for the Goods Yard. They follow the bend of the canal as it curves towards the St Pancras Lock, rising directly from the towpath on the canal side, but the higher level on the other side facing the granary.

The Wharf Road arches continue along the canal from the Fish & Coal Offices, originally providing a range of accommodation at the lower (canal) level, with a road above.

As part of the King’s Cross Central development, The Fish & Coal Offices will be one of the most distinctive heritage buildings, with its important visual link with the shape of the canal. The Wharf Road arches will form and important link between Granary Square and the activities at the lower level of the Coal Docks and the canal.

Description

Fish & Coal Offices

i. The range, of total length about 100 m, follows a curved plan form on the south side of the Wharf Road Viaduct, with its south (rear) elevation rising sheer from the canal towpath on this site boundary wall. The viaduct here is necessarily some 3-4 metres above the level of the canal, in order to allow boats to gain access into the Granary Basin to the east and the Coal and Stone Basin to the west.

ii. The range is in five units, all in a similar austere sub-Classical style in multicoloured stock brick with door and window openings spanned by segmental brick arches. Brick chimney stacks mark the location of fireplaces, some of which remain within the range. Window openings are at present boarded up, sealed with timber panels, while doors are likewise of plain timber with modern locks. The windows were originally vertical sash windows in timber frames. Sills are of stone. The buildings are unoccupied.

iii. For descriptive purposes the units are here identified as A-E, with A being the easternmost and E the westernmost units. Units A and B are essentially rectangular on plan, although tapering in depth towards the west, while the distinctive curved plan form appears in Units C, D, and E. The taper on plan continues westward.

iv. On its north elevation facing onto Wharf Road, Unit A – set back from the main frontage line of the offices - has five bays and two storeys above road level. Its brickwork is laid in Flemish bond. Unit B, the largest, has six bays and three very tall storeys, and its brickwork too is in Flemish bond, as befits its imposing character.

v. A straight joint separates Unit B from the English bond brickwork of Units C and D, which are both of six somewhat broad bays and match each other in their details, although C is of three storeys while D is of only one. A further straight joint separates Unit D from Unit E, which has brickwork in Flemish bond, and is of eight unequal bays and one storey in height.

vi. Units A and B each have a basement, although that of Unit A is not now accessible. Units C, D, and E stand above a series of basement vaults, formerly used as stables, which extend also under the Wharf Road Viaduct
They are accessed from the roadway leading down westwards from Wharf Road towards the lower levels of the Western Goods Shed and Western Coal Drops. There is no connection between these basement vaults and Units C, D, and E. However, the window openings for these vaults are noted here, as they arguably form part of the south elevation of the offices. These window openings at basement level are set within relieving arches that express the profile of the vaults behind.

v. Unit A rises two storeys above the Wharf Road Viaduct. Its basement is not currently accessible. Storey heights are quite low. The north (front) elevation is of five bays with entrance doors in the first and third bays from the eastern end, the other bays having windows. The narrow sash windows formerly had small panes grouped three by four.

vi. There are two window openings at each floor level on the south (rear) elevation, which are not aligned consistently on the bay spacing of the front elevation. The eastern window at ground floor level here has been infilled with brick.

vii. The blank east gable wall of Unit A, at right angles to the front elevation, has been rebuilt, although representing a return to the original plan form. Humber’s plan of 1865 shows the end wall as it is now, whereas the 1871 Ordnance Survey 1:1056 plan shows an extension of the unit, triangular on plan, with a spayed gable end and the rear elevation now reaching the nearer abutment of Somers Bridge. This bridge carried a road entrance into the goods yard from Wharf Road (later renamed Goods Way). It was removed when the new reinforced concrete bridge to the east was built c.1920. The triangular extension to Unit A had been removed by 1970, and the new gable wall to Unit A was then rendered. This wall was subsequently rebuilt in the late 1980s, at the same time that the rest of the range was being repaired after fire damage. Straight jointing can be seen at the junction between the gable wall and the front elevation.

ix. Unit A was not directly affected by the 1980s fire, but it became semi-derelict and its symmetrical-pitched roof has since been renewed with thin slates on battens and gangnailed timber trusses. There is one chimney stack on the east gable wall. Roof drainage is by eaves gutters.

x. The replaced first floor is of chipboard on timber joists. Surviving skirting boards and mouldings are of plaster.

xi. Unit B rises three tall storeys above the Wharf Road Viaduct, and it has a basement at towpath level. The north elevation is of six bays with entrance doors in the two central bays, other bays having windows. Window openings are of uniform spacing and very generous height, although reduced on the second floor. The sash windows formerly had panes grouped three by five at ground and first floor levels, three by four at second floor level.

xii. The south elevation side has one ‘blind’ bay at ground floor level and above, the bay second in from the east end of the unit, although there is an arched window opening here for the basement.

xiii. The east gable wall projects forward from Unit A with an entrance door in it. There is a blue enamelled BR ‘Drive slowly’ sign above it, and the fading remains of the lettering ‘Coal Office’ painted onto the brickwork above this sign.

xiv. The modern replacement of the burnt-out gabled double-pitched roof of Unit B comprises thin slates on batters and gangnailed timber trusses. The north elevation has a parapet with recessed panels. This, and the upper section of the gable walls, has clearly been rebuilt as part of the repair work after the serious damage caused to this unit by the 1980s fire. The decorative brickwork in the north and south parapets was previously more boldy exposed, standing forward like a cornice on brick corbels. This is the only office building in the goods yard with a parapet rather than eaves guttering. The two chimney stacks, one on either gable wall, are broader than these walls and project beyond them.

xv. The replaced upper floors in Unit B are of chipboard on timber joists on steel beams flanking and supporting original cast iron beams that span parallel to the front elevation. One such beam has a conspicuous crack near its bearing onto a wall, possibly as a result of the fire. The replaced ground floor is of precast concrete joists and hollow concrete blocks. The basement floor generally retains stone flags, with the remains of some toilets. The central stone staircase has heavily worn treads. Cast iron beams span the stairwell. There were apparently supports for a large water tank, now removed.

xvii. Unit C rises three relatively lower storeys above the Wharf Road Viaduct. The north elevation has six bays, generally wider than those of Unit B except for the easternmost bay whose windows are closer against the party wall with Unit B, making this elevation asymmetrical. At road level are entrance doors in the second, fourth, and fifth bays from the east, the other bays having windows. The window openings are of lesser height than in Unit B, and decrease in height storey by storey upwards, in a Classical pattern. The windows in this unit were sash windows with larger panes grouped two by two. There are conspicuous string courses at three levels over the windows, which might suggest a phased raising of the building upwards.

xviii. The south elevation has six bays likewise; the differing window levels on the second and fifth bays from the east show that these light the two staircases in the building. There are string courses at four levels, and three wider arched window openings at towpath level. Some of the window openings on this elevation have been infilled with brick. The west elevation rising above Unit D appears to have been largely rebuilt.

xix. The interior structure of Unit C has been renewed similarly to Unit B.

xx. Unit D comprises only one storey. The north elevation has six bays with entrance doors in both end bays, the other bays having windows. The westernmost three bays here are narrower than the others. The brickwork at the western end of this unit has been locally rebuilt, presumably during the late 1990s repairs. There are three cast iron boot-scraper sets into the brickwork just above pavement level. Vestiges of white-painted numbers survive over several windows, of which “10” is most legible.
The south elevation has windows in five bays and one 'blind' bay at ground floor level, with two arched window openings at towpath level.

The door and window dimensions in Unit D match those of Unit C in both front and rear elevations.

The west gable wall has been rendered where it projects above the roof.

The replaced roof of Unit D is of similar construction to those in Units A, B, and C, with thin slate on gangnailled timber trusses. As part of the repair works after the fire, two 'flying' chimney stacks at about third points along the building have been supported by steel beams within the roof; the chimney breasts are missing. Roof drainage is by eaves gutters, with a pronounced slope on the rear gutter as the building tapers westwards.

The ground floor of Unit D has a screeded finish.

The westernmost Unit E, like Unit D, comprises only one storey plus a basement at towpath level. The north elevation has eight bays with entrance doors in the first, fourth, and sixth bays from the east, the lattermost door being of double width. Other bays have windows, also considerably wider than the windows in the other units. The bays accommodating the double-width door and the windows are wider than the bays housing the single-width doors. The windows here were very wide with two rows of four tall panes and two mouldings dividing the panes in a 1:2:1 pattern.

The south elevation is 'blind' at Wharf Road level, above three narrow arched window openings at towpath level.

The west wall of the range has been rebuilt in stock brick with a rounded corner at the front elevation.

Before the 1980s fire, the front parapet of Unit E aligned with the eaves of Unit D, and it may originally have had a pitched roof. The replacement roof is flat, on timber joists. The present parapet extends round the roof, with the coping lowered along the front elevation, but stepping up over the west wall to gain its original level along the rear elevation. Two chimney stacks rise from the rear wall.

The ground floor of Unit E has a screeded finish.

A series of regularly-spaced iron or steel semi-circular open brackets are to be seen above the ground floor window heads, along the frontage of Units A, B, C, and the part of D that has not been recently locally rebuilt. These presumably supported cables, now removed, carrying electric power and/or telephone lines into the offices.

Wharf Road Viaduct

Wharf Road Viaduct runs from south-east to north-west in a curve along the south-western edge of the Goods Yard. The viaduct is arched towards its south end, with solid brick retaining walls at its north end. The two sections are linked by a cast iron bridge spanning the now-blocked entrance to the Coal and Stone Basin, with brick abutments. The viaduct incorporates elements of the early phase of the Plimsoll Viaduct, as well as an abutment and track of the late 1890s or early 20th century surviving part of the Plimsoll Viaduct.

The plan form of the viaduct resembles a hockey stick, with the handle pointing north-west, and the blade pointing south-east. Its construction is described from north-west to south-east. For simplicity in description, the orientation of the viaduct will be taken here as north-south, with the canal-side wall taken as the west wall, and the wall facing onto the Goods Yard being taken as the east wall.

The northern end of the viaduct forms the canal towpath wall and the Western Goods Shed's internal south-west wall (previously the Coal and Stone Basin's south-west wall). The two faces are tied with wrought iron tie-rods anchored by circular cast iron wall-plates. The internal structure at this end is not known; it may be earth-filled.

There is a brick string course in the Western Goods Shed's inner wall that originally faced the Coal and Stone Basin, approximately at or above the road level of Wharf Road. Within the Western Goods Shed, the string course and some of the viaduct walling is truncated by the Goods Shed's windows. Vestiges of a 20th century flleton brick building survive against the towpath wall within the Goods Yard, just beyond the northern end of the viaduct, on the embanked ground to the north. Its west wall survives in the towpath wall, just above the level of its ground floor window sills.

Next southwards is the now-blocked canal access into the Coal and Stone Basin. The opening is spanned by a bridge of cast iron beams supported on brick abutments, which are skewed on plan relative to the axis of the viaduct. The abutments have rusticated stone dressings. The space beneath the bridge is now a room accessed from the Western Goods Shed's ground floor through a steel door. Either side of the door, the opening facing the Western Goods Shed is blocked with brickwork. This included a raised opening or 'window' (now blocked). The flooring of the room is of concrete, and includes a raised step along the west, canal, side of the room, preventing the ingress of water. On this step is a thick brick wall, which is recessed at its head inside the room.

The bridge carrying the roadway over this opening retains its original cast iron beams. Because the former canal entrance and its abutments are skewed on plan relative to the side walls of the viaduct, while the beams span at right-angles to the abutments, the support conditions for the beams consequently vary across the width of the bridge.

On the western side of the viaduct, the northern ends of the two beams nearest the canal are supported on the lower flange of a cast iron edge beam spanning parallel to the canal-side wall flanking the towpath. Their southern ends are supported on the abutment brickwork. Conversely, on the eastern side of the viaduct, the two beams here are supported at their northern end by the abutment brickwork, while their southern ends are supported on the lower flange of another cast iron beam spanning along the edge of the viaduct. Three further cast iron beams under the centre of the viaduct are supported on abutment brickwork at both ends.

There is some corrosion on these beams towards either side of the bridge, although this appears to be minor. The modern chipboard ceiling between the beams is sagging from the lower flanges of the beams. The bridge's road surface is supported on iron plates. The brickwork of the towpath wall is supported by a segmental brick arch spanning the canal opening.
xi. The angle between the skewed bridge abutment on the south side of the bridge, and the regular vaulting of the viaduct bays further south, houses a room spanned by a spine brick arch running along the line of Wharf Road, and a further arch towards its western side. The wall facing the Western Goods Shed has a blocked window opening near the north corner of the room, and a doorway providing access from the goods shed, sited south of the window. The walls and the spine arch support sandstone slabs set beneath the road surface. The western corner of the room has an arched recess formed in the southern abutment of the bridge. Although damp, the brickwork is generally in good condition.

xli. The bay immediately to the south of this consists of a single brick vault containing an office. It projects beyond the vaulting of the main part of the viaduct to the south-east. It has decorative external stone cornices above the external pilasters on its north and east corners. There is a pilaster with similar decorative treatment on the external wall of the bay described above, immediately to the north of the office. Between the two pilasters of the office, the wall has a segmental-headed door and a 24-light window. Between the stone pilaster cornices there is a brick string course with a laminated sandstone coping. Access to the interior was not possible. The office’s northern wall returns to the south, to meet the northern wall of the southern section of the viaduct. The c.1850 roadway would therefore have widened above and to the north of the office. The girders supporting the 1897-9 Western Coal Drops Viaduct are built into the roof of the office and the adjacent arches to the south. There are two external pairs of steel brackets. There is an external rainwater pipe on the south wall in the corner formed by that wall and the viaduct arch to the south. The office has a timber plank door.

xlii. Between the arches to the south of the office, there is an opening set centrally within each arch pier that provides access longitudinally between the bays. The arching along the west wall of the viaduct was never open to the canal, as the abutments of the arches are not visible in the lower part of the arch blockings. There were, however, probably small windows in these walls set high beneath the arch soffits. Only one of these windows survives on the west side of the office discussed above. (The bricks used in its window surround are identical to those in the towpath wall and arches; the brickwork has closers near to the opening and the arch above respects the window head, together forming evidence to suggest that it is original.) Elsewhere, the openings have been enlarged or rebuilt since the initial construction of the viaduct. Some of the openings have contrasting brickwork surrounds, indicating a later date, while others have no closers against their openings. Each arch has four rings set into timber fixings (two on either side of the arch’s soffit); these date from use as stabilising.

xliii. In the four bays of the viaduct immediately to the south of the office, the eastern wall face is set back from the line of the office and the bays to their south. These four bays retain their original width (the east sides of the bays to the south originally continued on the same alignment). Between each bay, on its east side, is a cast iron cantilever bracket of c.1860 that supported - and still supports - the pavement above. Although confined to these four bays, it is likely that this arrangement of brackets originally extended further south than these four bays. There is a timber door between the two southernmost bays.

xliv. To the south of the four bays discussed above, the viaduct was widened between 1897 and the early 20th century by the addition of ‘gault’ brick arches built alongside those of the original structure. This widening was contemporary with, or later than, the construction of the Western Goods Shed. As the bricks used are similar to those in the Goods Shed, and the brickwork of the viaduct respects the south-east edge of the 1897 viaduct to the south of the Western Coal Drops. The brickwork of this addition displays evidence of horizontal cracking and some damage, although the original brickwork of the c.1850 phase of the viaduct behind appears sound. In the bays to the south, the brickwork steps out again to the east and incorporates a later concrete support to the earlier staircase leading from the viaduct pavement to the lower stable yard level. At the top of the stairs are cast iron bollards embossed ‘GNR’.

xliv. Comparison between the 1882 and the 1906 plans of the Goods Yard indicates that the surviving staircase was rebuilt between those dates, when the viaduct was widened. It is likely to have taken place between 1897 and 1906 (see 2.5). It is not certain whether the earlier staircase was moved or entirely replaced.

xlvi. To the south of this is a timber doorway in the east side of the viaduct that leads beneath the east side of the lower, three-storied office building of the Coal & Fish Office group. Much of the brickwork along the east side of the viaduct in the southern four bays, including some of the structure beneath the staircase, represents a late addition and incorporates much concrete. Beyond the timber doorway, the road from the lower level yard rises to meet the raised part of Wharf Road. The substructure of Wharf Road is therefore concealed at this point.

xlvii. The two arches at the northern end of this part of the viaduct are strengthened internally (in the western corner of the northern arch and in the south corner of the adjacent bay) by curved brick walls. These would have provided extra support for the Pilimsol Viaduct that spanned the Regent’s Canal and crossed Wharf Road. These walls date to 1865-6. The northern two arches of the gault brick road widening act as the west abutment to the westernmost surviving span of the adjoining Pilimsol Viaduct (which elsewhere is built with blue brick piers), rebuilt between 1921 and 1942 (1921 Gaol sheet 12/400). The gault brickwork of the Wharf Road Viaduct merges into blue brick at this point. It is not certain whether the northern two arches of the Wharf Road widening were contemporary with the rebuilding of the Pilimsol Viaduct, and that blue brick was used to match that in the adjoining viaduct, or whether the blue brick elements of the Wharf Road Viaduct were built to support the earlier timber Pilimsol Viaduct. There were vertical recesses in the Wharf Road Viaduct widening that housed the posts supporting the level crossing gates where the Pilimsol Viaduct met Wharf Road.

xlvi. The current concrete pavement on the Goods Yard side of the viaduct is supported on I section steel joists that are carried on a line of circular tubular steel columns set into cylindrical concrete plinths. Evidence of an earlier pavement attached to the gault brick road widening consists of pairs of severed steel joists which - where they survive to a greater length than elsewhere - support longitudinal joists set beneath the current pavement. The steel handrailings along the eastern side of the pavement (consisting of two rails supported on I section steel posts) is bolted to longitudinal sections of steel joists at the edge of the viaduct.

xlix. The viaduct gradually widens towards the south-east. The internal openings between the bays align longitudinally. They are blocked in the first, eighth, ninth, and 10th bays to the south of
the Plimsoll Viaduct. The openings to the south of the 11th bay from the Plimsoll Viaduct do not align with those to the north. The viaduct widens to the extent that there are two openings between each arch to the south of the 14th bay south of the Plimsoll Viaduct. This arrangement of openings (some of which have doors, and most of which do not align exactly) extends as far south as the 19th bay to the south of the Plimsoll Viaduct. The bay beyond this is entered from the doors to the south-east of the pavement’s staircase, but it has not been accessible for inspection. The 1921 Goad insurance plan indicates that this bay was also vaulted.

i. No access was possible to the first, eighth, and 10th arches to the south of the Plimsoll Viaduct. The 10th arch was brick-blocked on the north side. The other arches were seen to have retained their soft-stabling rings. Their locations were covered in the 12th-15th and 18th bays (occupied by The Cross night-club), and some were obscured in the 16th, 17th and 19th bays south of the Plimsoll Viaduct. The longer southern bays probably originally had (and may still have) more than four rings per bay. The 16th bay to the south of the Plimsoll Viaduct housed toilets on its north side; the arch is blocked with brickwork on this side. The 11th bay also housed toilets, and is blocked on its north-east side. The 16th-19th bays are each divided into more than one room. The southern end of the 17th bay accommodates the kitchens of the night-club. The bays occupied by the night-club are well served with water, drainage, ventilation and air extraction ducts. Much of the night-club area has recent flat ceilings inserted beneath the arches.

ii. Cobbling survives locally beneath the viaduct in the two bays that align with the Plimsoll Viaduct, and in some of the bays to the south, including the southern side of 19th bay to the south of the Plimsoll Viaduct.

iii. On the wall facing the canal there are wrought iron ties with small plates visible beneath the arches of the first, second, 18th, and 19th bays to the south of the Plimsoll Viaduct (these latter two bays being in relatively poor condition).

iv. A single-storey 20th century brick toilet block has been built against the four recessed bays to the south of the office bay. There is a mid-to-late 20th century red-painted steel frame and wire mesh security gate on the canal towpath wall, attached to the brickwork of the arch to the north of the junction of the two single-storey buildings of the Coal & Fish Offices.

v. The viaduct’s roadway has an asphalt road surface with local evidence of cobbling surviving beneath it. The pavement along the west side of the viaduct consists of cobbling with granite kerb stones, while that on the east side is mostly asphalt covered. The viaduct’s surface is crossed by the two railway tracks of the Plimsoll Viaduct. These survive in good condition. The wall on the west side of the viaduct’s roadway is brick-built. At its northern end, the wall’s base is built using bricks of fabrics 3032 and 3034 (using the Greater London archaeological system of building material classification). The wall’s top is generally built using fabric 3035. The line of the Plimsoll Viaduct canal bridge is marked by a higher wall of fabric 3035, while the area of walling immediately to its south-west is built withalleton brick, as was the walling immediately to the north of the Coal & Fish Offices. The wall top is missing or damaged locally, and temporary mesh fencing has been erected to fill the gaps.

vi. Cobbling supported on steel brackets runs along the length of the towpath wall.

vii. The original brickwork of the viaduct is in fairly good condition. The 1897 to early 20th century brickwork has cracked locally, and suffered some damage. The steel rails and concrete elements are in good condition. Timber fixtures are in varying condition. The arch soft-stab rings are in good condition where they survive. The track of the Plimsoll Viaduct and the bollards on at the top of the south-east steps are in good condition. Where there are windows, the timber frames and glazing are generally in poor condition.

History and Function of the Buildings

Fish & Coal Offices

i. The offices were built in phases from c.1851 to the early 1860s to administer the growing trade in incoming Coal & Fish. The initial phase was part of Lewis Cubitt’s design for the Goods Yard complex.

ii. The Coal & Fish Offices provided accommodation for the clerical staff needed to handle the paperwork generated by the incoming traffic in Coal & Fish. Traffic in both commodities grew rapidly in the early years of the goods yard, and continued to expand throughout the second half of the 19th century and well into the 20th century.

iii. The offices were consequently extended in phases of consistent style but differing height and length, and varying window proportions, in the narrow space between the southern access road (now Wharf Road) and the Regent’s Canal towpath to the immediate south. A precise chronology for the phasing is unclear, as yet, but the range appears complete on the plan published in the 1865–6 paper by William Humber.

iv. A legal judgement in 1860 forced the Great Northern Railway to cease trading in coal on its own account, while other coal yards were subsequently developed by the company for the use of coal merchants elsewhere in London. Probably for these reasons, the original imposing Coal Offices - the second unit from the east end of the range - are shown as “The Horse Department” on a 1906 site plan.

v. The offices served throughout the working life of the railway goods yard. They were disused by the early 1980s, when they were gutted by fire. They were repaired structurally and made weatherproof in the late 1990s, but the internal finishes were stripped. The offices are currently disused.

Wharf Road Viaduct

vi. Wharf Road Viaduct was probably built c.1850, with a bridge section spanning over the canal access to the Coal and Stone Basin. The viaduct provided road access between the southern part of the Goods Yard and the sheds to the north. It also provided a barrier and boundary between the Goods Yard and the canal towpath. The north end retained the embanked ground between the canal towpath and the Coal and Stone Basin. The arches under the main southern part of the viaduct provided stabling for the horses that worked in the Goods Yard; there were also other stables elsewhere in the yard. The Goad insurance plan of 1921 shows that the viaduct arches remained
in use for stabling at that date. There was a storage room in the angle between the southern abutment to the bridge and the vaulted part of the structure to the south, and an office that related to the work of the Coal and Stone Basin and may at times have administered the stables beneath the arches. The viaduct also supported the western part of the Coal & Fish Offices (qv).

vii. The road was widened c.1860 to accommodate a pavement on the Goods Yard side of the roadway, with the pavement supported on cast iron brackets (as shown on Humber’s 1865 plan). The flight of stairs at the south-east end of the northern pavement may date from this period, although it may be earlier.

viii. In 1865-6 the Plimsoll Viaduct was built, abutting the Wharf Road Viaduct, with some internal strengthening being added within the Wharf Road Viaduct to support the railway tracks now provided. These tracks crossed the Wharf Road Viaduct heading south-west; a bridge spanned the canal, and led to the Plimsoll Coal Drops on the opposite bank, which were built to the revolutionary design of Samuel Plimsoll, more famous for the introduction of the Plimsoll line on shipping.

ix. In 1897-9 the Western Goods Shed was built onto the brickwork on the north-east side of the viaduct at its north end. The Western Coal Drops Viaduct was built at the same time, and was attached to the Wharf Road Viaduct that now became the main access route into the upper level of the outward-bound goods station.

x. At the end of the 19th century or the beginning of the 20th, most probably soon after the Western Goods Shed and Western Coal Drops were converted into the outward-bound goods station, the viaduct was widened in brick on the Goods Yard side. This happened before the Plimsoll Viaduct was rebuilt in blue brick. The 1906 plan shows that the Wharf Road Viaduct had already been widened by that date. The widened roadway had two phases of pavement.

xi. In the late 20th century, the arches under the south-east end of the viaduct were converted into a night-club. Some of the arches to the north of the night-club became small offices and garages, and some remained empty. The bay to the south-east of the night-club has a late 20th century garage opening.
Assessment of Significance

The Heritage Importance of the Fish & Coal Offices and Wharf Road arches

SUMMARY: THE HERITAGE IMPORTANCE OF THE COAL & FISH OFFICES

ARCHITECTURE AND FABRIC
The range comprises five units of varying height and size, built to a consistent overall sub-Classical, even Georgian, style, although apparently designed and built piecemeal in response to demand for increased office space. The range is well-composed if austere.

Fire damage and subsequent repair has removed most of the internal structure and finishes, but the stock brick elevations appear to be little altered since construction. Features such as the reduction in height of window openings up the building are visually pleasing.

SETTING
The massing of the five units in the range, their variations in height and size generally, changes in level along their frontage, and their raised elevation alongside the canal all combine to achieve a strong visual impact when seen from within the goods yard, from the canalside towpath, and from south of the canal.

The strong curve of the canalside elevation is also striking.

The offices are enhanced by the backdrop of the front elevation of Cubitt’s Granary building, particularly when seen from south of the canal.

SIGNIFICANCE RELATED TO TYPE
The offices as a group form a relatively scarce surviving example of the very necessary facilities provided for the clerical administration of freight traffic in railway goods depots.

Despite internal fire damage and subsequent repair, the offices externally are little-altered since being built a century and a half ago.

Stylistically, the offices elevations are an excellent example of the functional tradition in industrial buildings

SIGNIFICANCE RELATED TO INTANGIBLES
The dramatic siting, alongside the canal and backed by the Granary, conveys a very strong image of a ‘gritty’ mid-Victorian industrial scene.

SUMMARY: THE HERITAGE IMPORTANCE OF THE WHARF ROAD VIADUCT

ARCHITECTURE AND FABRIC
The Wharf Road Viaduct is a largely intact example of an integrated viaduct and horse stabling below.

It preserves evidence of the early use and subsequent development of the site. This includes the cast iron bridge spanning the canal basin entrance, stabling fixtures, offices serving either the canal traffic or the stabling, the later Plimsoll Viaduct and its railway track, and historic landscaping adjoining St Pancras Lock.

SETTING
The viaduct is an integral element of the area, combining with the canal towpath, the stable yard, and the Coal & Fish Offices.

Wharf Road Viaduct affords some of the best views of the site’s built and landscape heritage.

It provides a sense of enclosure to the lower yard level, and preserves the historic barrier between the canal and the Goods Yard.

As the traditional route along the western side of the site, the viaduct makes sense of the layout of many of the buildings, and has influenced the development of the site. The materials used in its construction and its arcading both harmonise with the Eastern Coal Drops and the Western Coal Drops that flank and enclose the lower level yard.

SIGNIFICANCE RELATED TO TYPE
The viaduct is a structure that has accommodated many and varied uses, in common with many railway viaducts whose arches provide economical space.

SIGNIFICANCE RELATED TO INTANGIBLES
The necessarily-raised level of the viaduct also created spaces for economical stabling accommodation in one of the major through routes of the Goods Yard.
Notable features

The notable features of the Fish & Coal Offices and the Wharf Road Arches and their history are:

Fish & Coal Offices

1. Built as a row on a curved site alongside the canal towpath, in several phases (c.1851-1860s);
2. Massed in five blocks of varying height and length;
3. General gradation of roof levels from east to west as building height drops from three storeys to one storey above Wharf Road (with basement storey of cellars below);
4. The building back wall rises sheer from the towpath, following its curve; a notable canal-side feature;
5. Extensive views from the building, particularly from windows looking south across the canal towards the railway termini with central London beyond;
6. The original Coal Office towards the eastern end is tallest, with a parapet and prominent chimney stacks, reflecting the importance of the coal trade to the railway;
7. Plain but elegant, dark stock brick elevations;
8. Pitched slated roofs (renewed after 1980s fire damage, except at the west end where the roof is now flat);
9. The window sizes and proportions are varied between and within the individual blocks (NB the windows and doors currently boarded up for security); and
10. The interiors are largely gutted following fire damage, with finishes stripped and roofs and floors functionally rebuilt in concrete and timber, but there are some surviving internal features such as cast iron beams formerly supporting water tanks, brick chimney breasts, and stone staircase.

These features are annotated in various drawings and photographs.
Wharf Road Arches

11. Historically a multi-functional structure (canal side retaining and parapet wall, with road at higher level, over brick vaults accommodating stables, a bridge over the canal and offices) dating from the earliest period of the Goods Yard, c.1850;

12. The canal access to the former Coal and Stone Basin on the site of the Western Goods Shed is infilled, but still spanned by original cast iron beams with the road surface above supported on iron plates (in use 1851-1897);

13. The bays immediately south of the bridge include a single brick vault, formerly housing an office;

14. The vaults to the south-east served as stables;

15. There are some 22 brick vaulted bays, widened c.1900 by the addition of generally "gault" brick, along the north-east side of the viaduct;

16. Further widening of the viaduct took place in the early 20th century, in concrete, on steel joists, on round steel columns set in concrete plinths;

17. Various fixtures and features relate to the viaduct's development and uses (cast iron brackets, stable ceiling rings);

18. There are structural survivals from the Plimsoll Viaduct (internal curved brickwork piers, railway track, scars of level crossing gates);

19. Archaeological survival of earlier road surfaces;

20. Historically, access was provided for canal-boats into the Goods Yard via the Coal and Stone Basin, but the viaduct otherwise served as a barrier; and

21. The historical development of the widening and expanded use of the viaduct is clearly displayed in the fabric.

These features are annotated in various drawings and photographs.
Summary of Building's Individual and Group Value

The built heritage value of the Fish & Coal Offices is considered to be high.

The group value of the Goods Yard Complex is considered to be very high. The Complex has an exceptionally well coordinated layout, reflecting the interchange of goods between rail, road and canal. The group value is enhanced by the quality and consistency of the architecture, though in townscape terms, the group is dominated by the Granary.
Defining the Objectives

Current Use

The upper levels of the Fish & Coal Offices are currently empty following a fire in which the previous roof was destroyed. Parts of the basement (canal level) is occupied by a night club. The Wharf Road Arches are used for a variety of purposes including workshops and storage.

Both are part of a private site and so are closed to the public.

Objectives and Aspirations

The objectives and aspirations for Fish & Coal Offices and Wharf Road Arches as part of the Yard are:

• To secure the future of the buildings through viable uses;
• To open up the space around the Fish & Coal Offices as a publicly accessible area;
• To improve the current setting through the creation of a major piece of public realm directly in front of it, called Granary Square;
• To create a new piece of public realm at the lower level between the Wharf Road Arches and the Western and Eastern Coal Drops
• To refurbish the building and structures and bring them back into active use;
• To take full advantage of the strong visual and physical links of the Fish & Coal Offices with the canal;
• To provide links between the lower Coal Drops level and the canal towpath through the Wharf Road Arches;
• To provide a visual connection between Granary square and the activities in the lower levels of the Coal Drops.
Works to Facilitate Future Uses

The buildings original function as offices is evident in its built form. Particularly following the recent fire, however, some works would be required in order to achieve our aspirations for the buildings and the Goods Yard as a whole. In addition, in order to create a pedestrian link between the Coal Drops Yard and the tow path, a number of the existing arches to the west of Fish & Coal would need to be opened up.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’

The works proposed are:

1. The insertion of new lifts and stairs within the Fish & Coal buildings, to provide for vertical circulation and means of escape;
2. Re-glazing the window openings within the Fish & Coal Offices;
3. To refurbish, and make safe, the existing stone staircases within the Fish & Coal Offices;
4. Removal and replacement of the existing Wharf Road viaduct road surface and water-proofing;
5. The opening up of up to three of the arches beneath the Wharf Road viaduct, to establish a new pedestrian route between the Coal Drop Yard and the canal towpath;
6. The installation of new services within the retained and refurbished arches, such as mechanical ventilation; and
7. The introduction of new glazing and entrance doors within the Wharf Road vaults/arches

These works are shown in Figures i to vii which show the existing buildings in plans, elevations and photographs.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the ‘Works to Facilitate Future Uses’ would be carried out. These will form part of the briefing documents for any works.

These works of alteration would be undertaken in accordance with the following parameters:

1. The existing form and fabric of the former offices and arches would be substantially retained, subject to the works described above and their structural integrity would be maintained;
2. The existing pattern and sizes of windows within the Fish & Coal Offices would be retained;
3. All 22 arch structures beneath the Wharf Road viaduct would be retained; and
4. The new pedestrian route would be located so as to avoid those arches with important internal features, such as those relating to the Plimsoll Viaduct.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the Fish & Coal offices and Wharf Road arches, and their refurbishment. The applicants would submit this detailed scheme for approval by the local planning authority and if necessary seek Conservation Area Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the Fish & Coal offices and arches.

No works could or would take place, until the detailed scheme had been approved and any necessary Conservation Area Consent had been granted.
Southern Stanley Building: Initial Conservation Plan

Understanding the Asset

The Grade II listed Southern Stanley Building is located in the south of the site, between King’s Cross and St Pancras stations. Built during 1864-65, it was located between Stanley Passage and Clarence Passage, with Cheney Road to the north-east. Much of the original context has been removed during the works for the Channel Tunnel Rail Link, though there may be some hard landscaping remaining between the Southern Stanley Building and German Gym. The building is currently within the CTRL site, and owned by the London Borough of Camden.

The Southern Stanley Building would sit between the German Gymnasium and the new development, with the realigned Pancras Road to the West.

Description

i. The Stanley Buildings site was originally rectangular with Pancras Road to the west. The street to the east at the time was then a narrow alley (Pancras Walk), renamed Cheney Street when King’s Cross Station was extended into the Milk Dock site in the late 19th century, and finally became Cheney Road. To the north was Red Lion Passage (later renamed Stanley Passage), and to the south Clarence Passage.

ii. On Pancras Road, the south-west corner was occupied by a three-storey brick building, originally a public house (demolished 2001), with a four-storey shop and dwelling next to it, while at the north-west corner was the westemmost of the five original blocks of Stanley Buildings. This block and the four-storey building were demolished for proposed road improvements c.1960.

iii. At right-angles to these buildings, fronting onto the two passages and with an enclosed yard (later garden) between them, were the remaining four blocks of Stanley Buildings, grouped as semi-detached pairs. These are now reduced to two blocks.

iv. The Southern Stanley Building is one of the two surviving blocks of five stores, built probably in “white” Gault brickwork (now heavily soot-stained) in Flemish bond, with a flat roof. Each floor now contains two flats (originally four) laid out on a plan reflected symmetrically about the central party wall. The living rooms and bedrooms are located in the body of the block, with a rear extension to each original flat, housing a scullery and w.c. This layout allows each room to have a window, careful thought being given in the design to natural lighting and through ventilation, particularly for the facilities in the rear extensions. The provision of separate toilet facilities to each flat was progressive at this time.

v. The front elevation of consists of central balconies recessed between solid end bays. The end bays each contain a single line of windows for the front rooms of the outermost two of the four original dwellings. The ground floor of these bays is faced with painted stucco, moulded with deep dummy joints to simulate ashlar masonry. Painted stucco is also used to frame the upper windows in these bays, plainly on the top floor but with triangular pedimented heads on the first to third floors. Windows, here as on the rear elevations, are timber-framed and of an uncommon arrangement, with twin opening casements each with two panes (some now replaced by single panes), above a lower fixed light with two panes. These lower lights were originally of ornamental ground glass, eliminating the need for blinds, and were fixed to prevent young children falling out. Sills are of cast stone, that
is selected-aggregate concrete carefully compacted and finished. At roof level is a corbelled brick cornice.

vi. From ground floor level, an enclosed spiral cast stone staircase centred on a party wall rises to serve the central balconies on each floor. These are supported by a central circular cast iron column and wrought iron beams, with light and elegant wrought iron lattice grilles providing the balustrades. The columns are restrained laterally by twin tie-rods just below each balcony soffit, anchored by bolting into a cast iron plate in the back of the central stairwell wall.

vii. A relatively recent addition has been the provision of a lockable door and grilles at ground floor level, to improve security.

viii. Painted stucco is extensively used to form pilasters and other features behind the balconies. The pilasters have decorated capitals with an oval emblem and inverted Ionic scrolls. A more practical feature is a vertical chute, originally provided for disposal of ash and dust, sited within the stairwell. This has small cast iron doors at each level.

ix. From either end of each balcony originally led a short passage which in turn led to the two entrance doors of the four dwellings on each floor. This passage now leads to the front door of the enlarged single dwelling formed from two original, smaller, flats.

x. Behind the balcony, one on either side the central staircase, single windows light the front rooms of the innermost two of the original four flats. These are of different design from the windows on the front wall elevation of the outermost two flats, being narrower but with eight panes and segmental-arched heads.

xi. The rear elevations are plainer, although the shallow-arched window lintels have twin recessed panels. Like the window sills, these are believed to be of cast stone (concrete). The window frames are similar to those on the front wall elevation, although in some the lower fixed lights have been replaced with timber infill.

xii. The original east end elevation has two windows at each floor, of similar style to those on the rear elevations.

xiii. The west elevations as seen today are in fact the exposed party walls between surviving and demolished blocks. Exposed during or after World War II, it has been refaced with render, retaining the projecting chimney breasts of the lost block. A steel cat ladder has been installed between these breasts from roof level to ground, providing an alternative means of escape in the event of fire.

xiv. Large chimney stacks rising above the flat roof are a distinctive feature of the building, with pairs of stacks being located on each end elevation and above the party wall. They have numerous chimney pots. Every room was originally provided with a fireplace for a coal fire. There was a cooking range in the living room, and the wash-houses at the rear had a ‘cooker’ for boiling clothes, both also being coal-fired.

xv. The staircase leads up to the asphalted flat roof, culminating in a brick stair housing, itself with a flat roof. The roof is enclosed by a parapet, mainly of brick with recessed panels each having a central ‘V’ opening, but repeating the latticed grille balustrading on the front elevation over the balconies.

xvi. The structure of the block is of some interest. Matthew Allen adopted an early form of reinforced concrete, motivated partly by cost but also it would seem by the wish to reduce the risk of fire which in multi-storey buildings could spread rapidly from one dwelling to its neighbours through combustible timber floors.

xvii. A saving of some twenty-five per cent over ‘ordinary’ materials was claimed from the use of concrete. It was described, accurately, as ‘light artificial stone’ in an account of the slightly earlier Langbourn Buildings, on which the design and construction of Stanley Buildings appears to be very closely based. Clinker, coke, or similar material was mixed with Portland cement in the proportions 1:4. Strips of wrought iron were placed between the front and back walls, with transverse iron rods. The concrete was typically 4 inches (102 mm) thick, with floorboards laid above it on battens. Such construction was indeed ‘fireproof’; it more effectively resisted the effects and spread of fire than did timber floors. It was certainly used for the staircase, balconies, entrance passages, and adjoining front rooms either side of these passages, which would safeguard the escape routes out of the block in the event of fire. It was also used for the rear wash-houses, although whether this was to guard against fire from the coal-fired washing-copper or against rotting of timber from spilled water is unclear. Other floors within each flat were of traditional timber boarding and joists.

xviii. A further advantage claimed for this material was its lightness, which led to savings in the size and cost of walls and foundations. Although not lighter than timber when used in floors, it was certainly lighter than, and cheaper than, the brick or orthodox lime concrete arches generally used in fireproof construction. It was also clearly cheaper than natural stone or brickwork when used for window sills and lintels.

xix. Internal inspection of several dwellings suggests that the interiors of the block have been relatively little altered since construction, although modern cookers and other fittings may be expected to have replaced the original ranges in some at least of the dwellings.

History and Function of the Buildings

i. The Improved Industrial Dwellings Company was founded in 1863 at the inspiration of Sydney Waterlow, a City printing magnate, later to receive a knighthood and to be Lord Mayor of London, and a future campaigner in Parliament on housing matters. The company’s foundation was a philanthropic response to the problems of the industrial artisans and their families, who were often living in squalid conditions in overcrowded and filthy tenements. Waterlow funded the construction in 1863 of Langbourn Buildings in Mark Street, Finsbury (now demolished), which served as the prototype for Stanley Buildings and other housing schemes built by the company. The design was developed by Matthew Allen, a builder, from that for model cottages designed by Henry Roberts and constructed for the Great Exhibition of 1851, or from earlier flats in Birkenhead. Allen was also responsible for construction.

ii. Stanley Buildings were named after Edward Henry Stanley (later 15th Earl of Derby, a politician and son of the Prime Minister of that name), who was a Director of the Improved Industrial Dwellings Company.
iii. Stanley Buildings, constructed in 1864-4, were among the earliest of the company’s projects, and its largest to date. They provided completely self-contained accommodation, unlike other philanthropic housing which often provided communal washing, toilet, and/or cooking facilities. They comprised five similar brick-built blocks housing a total of 104 families, with four self-contained dwellings on each floor comprising a living room, one or two bedrooms, a wash-house with sink and a copper for clothes-washing, and a wc. Access was via an external open staircase and balconies. The flat roof provided drying space for washing and secure play space for children.

iv. Subsequently, the four dwellings on each floor were merged into two, and ownership of the blocks passed to the local authority, the London Borough of Camden.

v. Of the five original blocks, the more westerly of the two blocks facing onto Clarence Passage was destroyed by bombing during World War II. The block facing onto Pancras Road was demolished for proposed road improvements c.1960. The more westerly of the two blocks facing onto Stanley Passage was demolished in 2001 to make way for the extended platforms and concourse being built at St Pancras Station as part of the CTRL works. The two surviving blocks (Nos. 11–20, facing onto Stanley Passage, and 21–30, facing onto Clarence Passage) are currently boarded up and standing within a CTRL construction site.
Assessment of Significance

The Heritage Importance of the Southern Stanley Building

SUMMARY: THE HERITAGE IMPORTANCE OF THE SOUTHERN STANLEY BUILDING

ARCHITECTURE AND FABRIC
The surviving two of the originally five blocks of Stanley Buildings are an early example of philanthropic workers' housing development by the Improved Industrial Dwellings Company. They exhibit economical but durable multi-storey construction and high density usage of the site.

The symmetry of the front elevation, in particular, is both logical and aesthetically satisfying. The mid-Victorian use of stucco to simulate ashlar masonry at ground floor level, in decorated pilasters, and around window frames complements the plain brickwork elsewhere.

The rear extension provides washing and toilet facilities for the exclusive use of each dwelling. The overall design of the dwelling plans gave particular attention to natural lighting and through ventilation, with each room having a window.

The early use of lightly-reinforced concrete in floors, balconies, and staircases is a notable innovation in such buildings as a means of providing ‘fireproof’ construction, but was also recognised at this early time as an economical and practical alternative to more traditional forms of construction.

The flat roof is relatively uncommon in buildings of this period, the 1860s, and afforded space for clothes-drying and children’s play on a compact urban site.

SETTING
At the time the Stanley Buildings were erected, the surrounding area was already a well-established industrial landscape with the gasworks to the north and King’s Cross Station to the east and south, soon to be joined by the substantial massing of St Pancras Station trainshed to the west. The immediately surrounding small streets and passages were paved with sets, now safeguarded in store.

The building provided much-needed ‘affordable housing’ in this densely-developed area, and in recent years have become a distinctive residential feature in a largely ‘gritty’ urban area. However, recent demolitions in preparation for the CTRL works have resulted in the loss of much of the cohesion of this area. Stanley Buildings and the new deck extension to St Pancras Station stand in awkward juxtaposition, exacerbated by the realignment of St Pancras Road.

SIGNIFICANCE RELATED TO TYPE
The Southern Stanley Building is among the earliest examples of purpose-built philanthropic workers’ housing, many of which have since been lost to wartime bombing, so-called ‘slum’ clearance, or general urban redevelopment.

Although pairs of the original dwellings have subsequently been merged to form larger flats, the building remains externally and internally very much as originally built.

SIGNIFICANCE RELATED TO INTANGIBLES
As the listing citation states, Stanley Buildings were an important part of a dramatic Victorian industrial landscape. This made it a particularly sought after location for filming and advertising photography.
Notable Features

The notable features of the Southern Stanley Building and its history are:

1. Early (1864-5) surviving philanthropic housing blocks in industrial area, requiring economical but durable multi-storey construction and compact dwelling units;
2. Symmetrical front and rear elevations, reflecting original layout of four dwellings per floor, later reduced to two;
3. Central spiral stone staircase on front elevation giving balcony access to flats, with elegant balustrades;
4. Early use of (lightly) reinforced concrete floor construction to balconies, stairs, and corridors providing ‘fireproof’ construction (as compared to traditional timber flooring used in bedrooms and living rooms);
5. Early use of precast concrete for window lintels and other elements; and
6. Flat roof, providing space for clothes-drying and children’s play.

These features are annotated in various drawings and photographs.
Assessment of Significance
Summary of Building’s Individual and Group Value

The built heritage value of the Southern Stanley Building is considered to be high, as an early example of purpose-built philanthropic workers’ housing.

The overall value of the group in which it sits, including the remaining German Gym, is considered to be moderate. Much of the context for the group was removed during the CTRL works leaving dispersed and isolated remnants of varying individual value.
Defining the Objectives

Current Use

The Southern Stanley Building is currently empty. It is part of the site for the Channel Tunnel Rail Links, and as such is not accessible to the public.

Objectives and Aspirations

The objectives and aspirations for the Southern Stanley Building as part of King’s Cross Central are:

- To facilitate pedestrian movement between St Pancras Station and King’s Cross, particularly the Underground access point across Pancras Square;
- To refurbish the building for productive new uses;
- To integrate the building within the new development.
Works to Facilitate Future Uses

The original function of the building as worker's housing is evident in its built form and internal layout, particularly the division of the space into small rooms. In order to achieve our aspirations for the building, some works would be required to bring the buildings up to a modern standard, particularly with regard to vertical circulation and space planning.

These works would be carried out within the parameters listed in 'Refurbishment Parameters'.

The works proposed are:

1. Addition of stairs (either internal or external) to provide access and means of escape;
2. Removal of the existing security grilles;
3. Replacement of existing windows; and
4. Installation of new services.

These works are shown in Figures 1 to v.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

These alteration works would be undertaken in accordance with the following parameters:

1. The existing building form and fabric would be substantially retained, subject to the works described above and its structural integrity would be maintained;
2. Additional/refurbished vertical circulation would be required both for access and means of escape; and
3. No new basements would be created beneath the building.

Figure vi shows the existing typical floor plan, to which Parameter 2 would apply.
Implementation

Future Applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the Stanley Building and its refurbishment. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the building.

No works could or would take place, until the detailed scheme had been approved and Listed Building Consent had been granted.
10.1 Triplet Gas Holder Guide Frames
The Triplet Gas Holders: Initial Conservation Plan

Understanding the Asset

The Gas Holder Triplet is currently dismantled and is stored south of the canal in the area of the old Gasworks. It was part of a group, including Gas Holder No.8, which is still standing.

As part of the King’s Cross Central development, it is proposed to re-erect the guide frames on the north side of the canal, together with the Guide Frame of gas holder No. 8 opposite Camley Street Natural Park.

The Triplet would form a focal point on the west side of the development, highly visible from many directions. It would be re-erected around residential development, thus securing its future and creating a landmark building.

Description

(This description concentrates on the dismantled guide frames as currently in store, and does not detail those parts of the gasholders now demolished. The corresponding section in the assessment of Gasholder No. 8 should be referred to for a description of this gasholder as it still stands (qv); it is of very similar construction to Nos. 10-12, although differing in height and proportions. A notable difference between that gasholder and the triplet group, of course, is that the triplet guide frames had structural linkages between them where they abutted, as described below).

i. The storage capacities of the three enlarged gasholders Nos. 10, 11, and 12 were respectively 1.4, 1.7, and 0.9 million ft³ (approximately 40000, 48000, and 25000 m³). Although modest for the time, being restricted by the available site, such capacity was a far cry from the 1000 ft³ (28 m³) of the earliest holders. However it would be dwarfed only a few years later by the enormous No. 2 holder at East Greenwich gasworks, with a capacity of 12 million ft³ (about 340000 m³).

ii. The three circular guide frames of Gasholders Nos. 10, 11, and 12 contained respectively 15, 16, and 13 equally spaced hollow cast iron columns, and three tiers of wrought iron riveted lattice girders linking the columns. Each column was divided into three superimposed tiers of “orders”, each made up of a shaft surmounted by an entablature block at the girder connection.

iii. Uniquely, three columns again each served as part of two guide frames where the gasholders were closest to one another. A further three pairs of columns, and one central group of three, although serving as part of only one guide frame each, were tied together by additional short lattice girders. This shared and interconnected structure has given rise to the modern description ‘Siamese triplet’.

iv. The classically-modelled circular column shafts have capitals and other details based on the Tuscan, Doric, and (formerly) Corinthian orders at first, second, and top levels respectively. The lowest column shafts have bases in the Tuscan style, of a torus seated on a rectangular plinth with holding-down bolts at the corners. Each base stood directly on a padstone in the top of the tank wall. There was no raised pedestal, unlike the columns of Gasholder No. 8 or earlier holders in this style. In the uppermost column shafts, the acanthus leaves which characterised the Corinthian capitals have since been removed and lost.

v. The individual column shafts are stored horizontally in purpose-designed steel cradles. Each shaft represents
approximately one-third of the full-height column. The lowest shaft is about 14 m high, the two upper shafts about 10 m high. The 14 m shafts are made up from three shorter castings and the 10 m shafts from two shorter castings, these being butted and joined by ‘secret’ wrought iron bolts through internal flanges.

vi. An oval cast iron cover plate is or was present near the base of the lowest shaft on all columns, over an opening giving access to the column interior. Presumably this was for small apprentice boys to fasten the internal bolts connecting column sections during the original erection. Some of these plates carry inscriptions of the dates of erection and rebuilding. A typical plate, from Gasholder No. 10, reads “ERECTED 1864 TELESCOPED 1880” (although the 1864 frames were in fact scrapped when the gasholders were enlarged in 1880).

vii. The shafts were bolted above their capitals to the entablature blocks, which are separate hollow castings of rectangular form, with heavily-modelled cornices around their tops. These also are in store.

viii. The sides of the entablature blocks are faceted to receive the riveted wrought iron lattice girders butted against them. The girders are bolted both to the hollow blocks, and to each other by connections passing through the blocks.

ix. These connections are made up of two bolts, on one from either girder end, secured by nuts against the end members of a small open rectangular wrought iron frame. This is cranked at mid-length to allow the girders (which form a polygon on plan) to be secured against the block faces with bolts at 90° to the joint, while at the same time providing a tie connection between the girder ends. This detail provides a robust connection at the column-beam intersections, and appears to be a special feature of these frames and that of Gasholder No. 8.

x. The lattice webs of the girders are of relatively-steeply inclined diagonal flat bars, closely-spaced in a triple-Warren configuration which is special to the triplet group and Gasholder No. 8. The girder flanges are of built-up iron plate, riveted together and connected to the lattice web by riveted angles. The intersection points of some web bars (mostly on No. 10 gasholder) have decorative four-pointed rosettes in cast iron.

xi. The girders have fabricated endplates with bolt-holes for securing the girders to the abutting columns, and also for bolts to the cranked ties passing through the column to link adjacent girders. The tolerance at these joints was taken up by timber packing, still largely present but in poor condition.

xii. Flat wrought iron plates also tied the flanges of adjacent girders at column positions, passing inside the column. This was a late design change to add stiffness to these very tall frames. Many if not all of the plates were salvaged during dismantling.

xiii. The lattice girders are stored upright, closely stacked together, so that only a few around the outside of the stack are accessible for inspection.

xiv. The carriages are latticied wrought iron cantilever brackets that were formerly attached to the tops of each lift of the bell. Each has a captive double-flanged or “runner” wheel that rolled up and down the guide rail - a rolled T-section secured to its adjacent column by cast iron brackets. The carriages, guide rails, and brackets are all in store.

xv. Condition of the cast iron columns and capitals generally appeared good during inspections in 2002 and 2003, although some rust flaking was visible inside the sections. The numerous paint coatings on the columns were in variable condition, some areas remaining intact while others are flaking off to expose the cast iron surface.

xvi. Superficially the wrought ironwork of the lattice girders appeared in poor condition with much flaking paint and patches of bare rust. However, probing with a spike and wire brush revealed that flaking paint - of many layers, up to 3-4 mm thick - had detached from the iron substrate because water had caused surface rusting that had loosened the paint layer. Once the paint was removed, the ironwork beneath was usually sound and apparently of only slightly reduced thickness. The girder flanges appeared generally sound where they could be seen. Some top flanges had ‘bulged’ locally with loss of rivet heads, indicating corrosion expansion between the fabricated iron elements. Some bottom flanges had also lost occasional rivet heads, presumably where rainwater had ponded. Where they remain, the cast iron rosettes at lattice junctions appeared in good condition, apart from where expansive rusting from the wrought iron surface behind had snapped the brittle casting.

xvii. A brief inspection of the few guide rails and runners readily accessible suggested that they are in reasonable condition.

xviii. The frame columns have been painted black, with some details including the Doric triglyphs picked out in red. The lattice girders are painted red, with the cast iron rosettes at intersections picked out in white.

xix. A study of the paintwork was commissioned during 2003 by Argent St George, and carried out by architectural paint research specialist Crick Smith Conservation. This identified 31 paint schemes. The majority of these employed a stone colour, initially applied overall but with evidence that later schemes used dark red to pick out elements of column pilaster capitals and base mouldings, and rosettes on the lattice girders. In the three penultimate schemes, the base colour was respectively yellow-green, pale creamy yellow, and warm grey. Only in the final scheme, to be seen today, was black used as the base colour for the columns.

xx. Dismantled components are stored in the open air. They are tagged, with identifying numbers stamped on wired-on metal plates.

History and Function of the Buildings

i. The triplet group was originally built in the 1860s to expand storage capacity after the gasworks had acquired additional land to the west of its original site. A single holer of a very large capacity had been considered, but was rejected because of various difficulties. Work started in 1864, and No. 11 was completed in 1861. Subsequent construction was phased, and the last of the three gasholders was not completed until six years later.

ii. No. 11 was the northernmost of the three, and the largest. Its brick tank was 145 feet (44.2 m) in diameter and 55 feet (16.8 m) deep - an exceptional depth. This holer entered service in 1861. No. 10, south of No. 11, had a tank of 134 feet (40.8 m) in diameter and of the same very substantial depth, built at the same time, while its ironwork was constructed in 1864. It came into service in
1864. No. 12, located very close to and on the east side of the first two, was the smallest of the three, with a tank of the same depth but 106 feet (32.3 m) in diameter. It entered service in 1867.

iii. All three gas holders as originally built had single-lift bells, as their designer, David Methven, distrusted the telescoping principle for its potential unreliability. This explained their very deep tanks. Whereas, with telescoping bells, the tank depth could be reduced, as the bell lifts fitted inside one another when the bell was empty, in a single-lift bell the tank had to be as deep as the overall height of the bell.

iv. These original holders had “stretched” Tuscan columns supporting a single tier of hog-backed cast iron girders with open-work webs. As in the later structure, described below, the three guide frames coincided at three points, at which they shared a column. (This is shown clearly in a Midland Railway photograph of c. 1867 (NRM: 104/98), contradicting the first edition 1:2500 Ordnance Survey plan made in 1871, which shows separate columns.)

v. The late 1870s’ continuing demand for increased gas storage capacity, on a gasworks site that could not be expanded, led John Clark (Methven’s successor as the engineer at Pancras Gasworks) to design new guide frames for the three gas holders, of double the previous height to accommodate telescopic bells of two lifts.

vi. Work on the enlargement of the gas holders began in 1879. The existing frames and bells were dismantled and sold for scrap. The new frames were built in turn, on the previous column positions, on top of the existing brick tanks. These and the new two-lift bells were completed by the contractors Westwood and Wrights during 1880.

vii. Pancras Gasworks ceased to make gas in 1904, but the gas holders continued in use, storing town gas piped from other gasworks. Nos. 10-12 were decommissioned in 2000, and were dismantled in 2001-2 to make way for the extension to St Pancras Station, the new Channel Tunnel Rail Link terminal. The bells were scrapped but the frames, guide rails, and guides were carefully dismantled, and are in store adjoining Gasholder No. 8, awaiting possible re-erection.

Architectural and Historical Analysis

i. John Clark’s father, Joseph Clark, was the engineer at the Imperial Company’s other principal works at Shoreditch. He appears to have been the first to design a large guide frame with more than one tier of girders, in 1856, for a gas holder of the then record-breaking height of 80 feet (24 m) at Bethnal Green. For this, he developed the style of superimposed classical peristyles - the form to be seen in the triplet group and in Gasholder No. 8. This gas holder, which was 200 feet (61 m) in diameter and completed in 1858, has been replaced, but a smaller 1866 example at Bethnal Green and several from 1872 onwards at Bromley-by-Bow remain to Joseph Clark’s designs. (Clark designed the Bromley holders in collaboration with the Imperial Company’s chief engineer, Thomas Kirkham. The set of nine gas holders there was completed well after the retirement of both men.) Their architectural detailing was exceptionally good, and provided the model for the present guide frames at St Pancras.

ii. John Clark was responsible for building a very early three-tier guide frame at St Pancras in 1871-3, when he enlarged a 120 feet (37 m) diameter gas holder to two lifts. This had the then exceptional height of 90 feet (27 m). Later called No. 9, it was demolished c.1950. Its precise architectural details are uncertain, but aerial photographs show that it was of the same general form as Nos. 10, 11, and 12 individually.

iii. Perhaps using No. 9 as a basis, John Clark took the architecture of his father’s holders and adopted and updated them for the circumstances of St Pancras Gasholders Nos. 10, 11, and 12 in 1879 and, soon after, No. 8 of 1883. Modifications were made in the overall proportions, the design of girders, and the connection details.

iv. The manufacture and erection of all this “Clark” series of gas holders was entrusted to one firm, Messrs Westwood and Wrights of Dudley. They are known to have sub-contracted the column castings of the earlier holders to the well-respected Derbyshire firm, the Staveley Company. Their expertise in pattern-making and perhaps in the actual detailing doubtless contributed to the acclaimed success of the design.

v. Nos. 10, 11, and 12 appear to have been the tallest constructed in Britain with cast iron columns. Their overall height of 108 feet (33 m) established the need for three tiers of girders, while the columns were spaced at the maximum conventional spacing of approximately 30 feet (9.1 m), in the plan arrangement already laid down by David Methven in 1860. (No. 12 appears to have slightly closer-spaced columns, to fit its circumference.) This produced the visually satisfactory average proportions for the panels of 1.2:1 in height to width. The overall proportions of the guide frames were tall for their period, but in keeping with the very tall holders of wrought iron construction then starting to appear elsewhere. For example, for No. 10 the diameter was 1.3 times the height, and for No. 12 it was barely 1.0.

vi. The conjunction of the three holders into an irregular ‘Siamese triplet’ produced a complex and unique visual experience, analogous to a grove of tall trees, of uniform height but variegated position.

vii. These holders may be contrasted with those of the 1872 Joseph Clark design (also listed Grade II) at Bromley-by-Bow. There, the column spacing was deliberately narrowed to 23 feet (7 m), in two tiers totalling approximately 75 feet (23 m) high, giving average panel proportions of more than 1.6 to 1. But the Bromley guide frames have diameters of 208 feet (63 m) diameter, or 2.8 times the height, i.e. very wide. So the overall effect is quite different, of a long colonnade.

viii. The structural strength of cast iron encouraged much slender columns than the masonry precedents from which their architectural styling was derived. Indeed, the single-tier, single-order style of guide fame such as Methven had used in 1860 had columns of a height more than 20 times their base diameter. Dividing his columns into two orders to accommodate additional girders, Joseph Clark was able to be more respectful of classical proportions. He set his lower girders slightly above mid-height, to avoid a top-heavy appearance, while raising the shaft off the lower order upon a pedestal to keep it the same length as the upper shaft. The Doric shaft was made slightly broader in base diameter than the more refined, Corinthian, shaft above it, replicating the best classical proportions, and the shafts were wide to taper in a convex curve (entasis), starting from vertical at the bottom, in the essential classical manner.

ix. John Clark’s columns for the triplet group at St Pancras appear slimmer than his father’s work, and the lowest shaft is lengthened to eliminate the pedestal. But they seem if anything more suited to an
iron frame, while the entasis appears impeccable, in contrast to the straight-tapered or parallel-sided shafts of most of the competing designers who adopted this style of guide frame.

x. In the finer architectural detailing, the cast ironwork is superb, except for the loss of the acanthus leaves on the topmost capitals. The bases and capitals of the Doric and Corinthian are finely moulded, including a cavetto moulding below the top edge of the abacus, while the Tuscan order, introduced for the lower tier at St Pancras, is deliberately coarse. Above the capitals are the entablature blocks. The Doric ones have the obligatory triglyphs and guttae hanging below, and the Corinthian ones have a particularly bold cornice. The three triglyphs have been picked out in a light colour paint, which echoes the daylight that shines through five drainage holes between the dentils of the topmost cornice.

xi. The entablature block (ressaut), in which the frieze and cornice are carried around three sides of a column, was not uncommon in Roman architecture and the Renaissance. Here it provides the structural means of attaching the girders to the sides of the columns, and avoids the architectural obligation to carry a full entablature along the girders between the columns.

xii. The girders used at Bethnal Green, and later at Bromley-by-Bow, have cast iron filigree webs and angle-iron flanges. But by 1880 structural robustness was seen as a first requirement in gasholders. At St Pancras, this resulted, with particular emphasis, in the triple-Warren lattice webs and fully plated flanges of the girders. At the column bases, the comfort of knowing that the holding-down bolts were fully tightened, from exposing them externally, replaced the concern for classical propriety that had concealed them inside at Bethnal Green.

xiii. The special bolts that connect the girders together through the columns are a part of this concern for robustness, arising both from experience of past failures of connections and the awareness that Nos. 10, 11, and 12 were stretching the height limit of this type of frame. The cross-connections between the three guide frames were an opportune means of gaining extra stiffness, and the additional ties between girder ends across the columns were perhaps a wise reaction after the fully-erected frames were found to be more lively than expected. What is significantly not present at St Pancras is diagonal bracing of the panels, which had become widely adopted elsewhere in the 1870s but was avoided by the Gas Light and Coke Company until the 1890s. This perhaps underlines the confident conservatism of the world’s largest gas company.

xiv. St Pancras has not suffered to the extent of other sites in the zealous removal of decorative trim, which came to be regarded in the mid-20th century as unwanted rust traps and potential aerial debris. The entablature blocks appear to be monolithic, unlike parts that have been lost at Bethnal Green and Bromley-by-Bow. No. 10 holder may have been spared the removal of its decorative rosettes by its disuse since World War II.

xv. The triplet gasholders of 1880 were the climax of a series of gasholders stretching back over a quarter of a century, and representing the best of “High-Victorian” practice in the design of guide frames. Beyond the erection of St Pancras No. 8 in 1883, cast iron columns would continue to be used for a few more years on some sites outside London, but with decorative exuberance replaced by attention to practical matters. By 1880, the Gas Light and Coke Company’s rivals, particularly south of the Thames, were already developing new approaches to guide frame design based on the use of wrought iron for the standards and diagonal bracing for greater stiffness, while new mathematical analysis would allow guide frames to be built much more economically, and larger - but quite differently in style. The Gas Light and Coke Company itself moved in that direction with the lattice-framed gasholders it first built at St Pancras in 1886, recently demolished.
Assessment of Significance

The Heritage Importance of the Triplet Gasholder Guide Frames

SUMMARY: THE HERITAGE IMPORTANCE OF THE ‘SIAMESE TRIPLET’ GASHOLDER GUIDE FRAMES

ARCHITECTURE AND FABRIC
The guide frames and ancillary equipment of the triplet group, currently in store next to Gasholder No. 8, are from the 1880 reconstruction of Gasholders Nos. 10-12, which were originally erected in 1860-7.

The triplet group is unique in that three columns each served as part of two guide frames where the three gasholders were closest to one another. Further columns, although serving as part of only one guide frame each, were tied together by additional short lattice girders. This shared and interconnected structure has given rise to the term ‘Siamese triplet’.

The guide frames of the triplet group, like that of the surviving Gasholder No. 8, illustrate the mature development of the “High-Victorian” manner of gasholder construction. The guide frames employ substantial hollow circular cast iron columns, bolted together in sections. These are coupled with functional but elegant wrought iron lattice girders tying the columns together.

The exceptionally competent integration of Classical form and details in the “Clark” series of gasholders has created a memorable and decorative piece of architecture which remained functionally effective with minimal alteration for over a century.

SETTING
The historic setting of this structure adjacent to the former gasworks was inextricably linked to the Regent’s Canal and the nearby railways, from which it was highly visible.

Reflected in the waters of the canal and seen from other directions in conjunction with the great trainsheds and the towers of St Pancras Chambers, or softened by the preenery of Camley Street Natural Park (on the site of a coal yard), the gasholders provided, a large and unique resource of urban views.

SIGNIFICANCE RELATED TO TYPE
The guide frames of the triplet group are unique amongst gasholders for the three-way structural linkages, where the three frames abut.

They are the tallest to have been built with cast iron columns.

SIGNIFICANCE RELATED TO INTANGIBLES
The triplet group was recognised and appreciated as an iconic landmark identifying the St Pancras area, a dramatic skyline feature, and a distinctive silhouette.
Notable Features

The notable features of the Triplet Gas Holders and their history are:

1. Guide frames of three telescopic gas holders, built in 1880 on the site of three less tall holders of the 1860s;
2. Unique structure resulting from three linked guide frames sharing columns rather than being each freestanding, hence known popularly as the 'Siamese triplets' - a consequence of having to accommodate three large gas holders on cramped and fixed site;
3. Erected to a design by John Clark, works engineer of the St Pancras Gas Works (see also Gasholder No. 8);
4. Guide frames of 16, 15, and 13 hollow cylindrical cast iron columns with three levels of wrought iron riveted lattice girders and cast iron capitals based on Tuscan and (at top) Corinthian orders;
5. Erected above re-used brick tanks, of exceptional depth (55 feet, now destroyed);
6. Dismantled to provide site for extension of St Pancras Station; columns and girders are currently in storage around Gasholder No. 8, pending re-erection on a site to be chosen;
7. Various ancillary features were also dismantled and are in storage, including the guide rails and runners, and later access ladders and platforms (the bells were scrapped); and
8. The structural integrity of the guide frame, particularly given the level of decay to some of the components, cannot be justified to modern standards of safety and design. The structure will need to gain structural support from additional possibly external structure.

These features are annotated in various drawings and photographs.
Summary of Building’s Individual and Group Value

The Gasholders are currently dismantled, however their built heritage is very high as a landmark feature close to the canal. The group value, with Gas Holder No. 8 Guide Frame, is clearly diminished, however this would be addressed by re-erection of both Number 8 and the Triplet Guide Frames, north of the canal.
Defining the Objectives

Current Use

The triplet is currently dismantled and stored on the construction site for the Channel Tunnel Rail Link.

Objectives and aspirations

The objectives and aspirations for the Gasholder Triplet Guide Frames are:

- To secure the future of the Guide Frames through a long-term viable use;
- To re-erect the Guide Frame north of the canal;
- To create a new grouping, with Gas Holder No. 8 Guide Frame, next to the canal;
- To create a landmark residential building within the Guide Frames;
- To be part of a new public space, opening up the canal and forming a positive relationship between it and the new development;
- To act as a marker to encourage and facilitate the flow of pedestrians between Camden and Islington towards and via the canal towpath.
Works to Facilitate Future Uses

The guide frames would be refurbished and re-erected on the north side of the canal, around new residential development. To carry out this refurbishment and satisfy modern design codes of its structural integrity, a number of works would be required.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The principal works are:

1. Transportation of the dismantled guide frame components to a workshop for refurbishment;
2. Re-erection of the guide frames around new development;
3. Refurbishment and re-painting of the guide frames, fabricating or procuring replacement pieces as necessary.

These works are shown in figure i to ii which show the former structure in drawings and photographs.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the ‘Works to Facilitate Future Uses’ would be carried out. These will form part of the briefing documents for any works.

These refurbishment works would be undertaken in accordance with the following parameters:

1. The guide frames would be re-erected, in the same basic layout as when they were dismantled, around the new built development.
2. A method statement for re-erection would be presented as part of a listed building consent application before any works are carried out.
3. Where original components are missing or degraded beyond repair, replacement components would be fabricated;
4. The guide frames would be connected to the new development within, from which they would derive structural stability;
5. New built development would fit entirely within the plan external envelope of the guide frames.

The features to which these parameters relate are shown in Figures iii. to v.
Implementation

Future Applications

The outline application provides for the re-erection of the guideframes of the Triplet Gasholders north of the canal. Following the grant of outline planning permission for the comprehensive development of the site, the applicants would prepare a detailed scheme for the guideframes and the development within their footprint. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the re-erection, management and maintenance of the guideframes.

No works could or would take place, until Listed Building Consent had been granted.
German Gymnasium: Initial Conservation Plan

Understanding the Asset

The German Gymnasium is located in the south of the site, between King’s Cross and St Pancras stations. Built during 1864-65, it was located with Cheney Road to the north-east and Clarence Passage to the north. Much of the original context has been removed during the works for the Channel Tunnel Rail Link, though there may be some hard landscaping remaining between the German Gymnasium and one of the two remaining Stanley Buildings. The building is currently within the CTRL site.

The German Gymnasium would be at the southern gateway to King’s Cross Central and as such, would play a very important role in creating the entrance for many of the visitors (local, domestic and international) to the area. It would play a part in the enclosure of three major new public spaces, Station Square, Pancras Square and the Boulevard.

There is a great opportunity for the building to be opened up to the public either as a permeable ground floor or through a public use such as a gallery, information point or cafe.

Description

i. The building as it stands today is a single rectangular block with a symmetrical pitched roof rising to a full-length clerestorey running east-west. It is within a CTRL construction site, and all external door and window openings are currently boarded up.

ii. The walls are of yellow-brown stock brickwork, weathered to brown or black by dirt in this location between two major railway stations where much soot and other grime was abundant. Red brickwork is used decoratively in heavy corbelling on the upper part of the north and south side walls and the east gable wall, in flush bands at plinth level and at first floor level, in dentils under the east gable coping, in arches over openings, and elsewhere.

iii. The heavy corbelling, of a saw-tooth pattern in elevation and carried up the slopes of the gable end, is characteristic of Prussian vernacular building that can be seen widely in western Poland and Germany. However, the architecture is an eclectic mix of motifs including segmental two-centred pointed arches (quasi-Gothic), all in brick.

iv. The north and south side walls each comprise seven basically similar bays having recessed panels at ground and first floors. Plain red-brick bands run along the panel bases. The wall heads incorporate horizontal saw-tooth bands of heavy corbelling, also in red brick.

v. It seems probable that each panel originally contained one or more windows, although it is clear that most windows and their openings have been altered during the building’s life. The original fenestration on the side walls would appear to be pairs of small windows having cast iron window frames and brick-on-edge sills, with their openings spanned by semi-circular red brick arches. Three such pairs of windows are still present, one at each level in the north wall and one at ground floor level in the south wall. A fourth pair, at ground floor level in the south wall, has been infilled with brick.
vi. Later use of the building as offices inevitably led to window openings being enlarged to provide more natural light, and this has been achieved by forming rectangular openings spanned by rolled steel I-sections or by concrete, or concrete-cased steel, lintels. One infilled doorway near the west end of the north wall is spanned by a triangular red brick arch, below which a later steel lintel has been inserted. The westernmost panel in the south wall is occupied by a double-leaf loading door, with windows above divided by a central mullion, and spanned by a steel lintel.

vii. Windows in the north and south walls variously have timber, cast iron, and steel frames. Some are vertical sashes, others are fixed or casements. Steel security grilles have been added outside ground floor windows.

viii. The east gable wall, some 16 m high, is dominated by the saw-tooth band of heavy corbelling following the slope of the gable. Immediately under the substantial coping of the parapet is a course of small red brick dentils. Below the corbelling, the external wall is plane, apart from a step on plan which sets back the northern edge of the wall, and a projecting stair tower at the south-east corner of the building.

ix. At ground floor level this wall has no windows, but near the southern corner is a small brick porch with a double-leaf door. This originally served a staircase up to the gallery, but later (after this stair had been removed) instead gave access to the northern part of the ground floor of the main hall. A small brick ‘dress’ abuts the porch on the north side. Its purpose is unclear. Double doors south of the porch give access to the southern part of the ground floor.

x. At the south-east corner of the building is a cylindrical brick tower enclosing a spiral stair that links the gallery level to the ground floor, with no direct external access. This has six lancet windows following the rise of the stair, although two of these have been bricked up. The brickwork here terminates in a corbelled parapet.

xi. At first floor level in the east gable wall are five equally spaced windows, symmetrical about the centre-line of the hall and opposite five door openings in the west gable wall. These have brick-on-edge sills and are spanned by triangular red brick arches. Frames are of cast iron. Secondary glazing has been fitted to these windows, probably when the building was being used in recent years for filming and recording. Above these windows, and central in the gable, is a circular window framed by rings of red brick. Its fixed cast iron frame has a central hexagonal pane surrounded by six quadrilateral panes.

xii. Until the demolitions of 2001, the main entrance to the building was from the west, through a classically pedimented doorway in the centre of a contemporaneous row of shops on Pancras Road. A corridor and stairs led to both levels of the main hall through a cross-wing, hidden from the street frontage, that had contained the reading room and ancillary accommodation.

xiii. The Gymnasium’s west gable wall was examined in some detail while the building was intact, and its construction can therefore be described here.

xiv. Internal faces of this wall were painted, but it can be surmised that it is built throughout in plain stock brickwork without use of the red brick seen elsewhere. Evidence of this comes from the ‘porthole’ window high up in the gable, matching that on the east gable wall, which is here ringed in stock brick rather than red brick. Also, after demolition of the building to the west, it was possible to see the horizontal saw-tooth band of heavy corbelling, which continued across this wall inside the building at the level of the corbelling on the adjacent side walls. Removal of the roof covering during demolition had exposed the corbels, which were of pale red or brown stock bricks.

xv. Like the east gable wall, this wall varies in thickness, reducing up the height of the building by step-backs of half-brick thickness on the internal face.

xvi. At the ground floor level of the west gable wall there are five equally-spaced openings, spanned by semi-circular brick arches. Above these is a string course of regular rectangular dentil band.

xvii. At first floor level there is evidence of six openings, five corresponding to the five symmetrical windows in the east gable wall, and a further one asymmetrically located to the north. All are spanned by pointed brick arches which are slightly corbelled forward from the jambs. Of these original openings, two have been infilled by brick, two have been partially infilled to leave smaller door openings, and two are of original width. The ‘extra’ opening to the north has a smaller door opening spanned by a pointed brick arch. The other five have fanlights inserted within the profile of the corbelled arches. At the southern corner of the wall at this level, two further small doorways led into a staircase in the now-demolished part of the building to the west of the hall.

xviii. The circular window near the top of the gable is generally similar to its counterpart in the east gable wall, except for the absence of red brick, as noted.

xix. There is a simple corbelled course of brickwork along the eaves of this west gable wall, in contrast to the more decorative treatment on the east gable wall.

xx. Following the demolitions, the west gable wall has recently been re-faced in yellow and red brickwork to resemble the east gable wall. This was carried out as a mitigation measure under the heritage provisions of the Channel Tunnel Rail Link Act 1996. Red brickwork is used to pick out the five round-headed central openings at ground floor level, the five pointed-arch window openings at first floor level, and the circular window above these. Red brickwork is also used to continue the plain band at first floor level, for a saw-tooth band of heavy corbelling following the slope of the gable, and for the substantial coping of the parapet and its course of small red brick dentils. The new coping on this wall is necessarily wider than that on the east gable wall, resulting from the presence of the additional facing brickwork.

xxi. The pitched roof was originally of no doubt clad in slate, but at present is covered, as are the pitched roofs over the central clerestory and the five dormer windows, with a silver-painted (solar-reflective) flexible membrane which bears numerous patches. There are three equally-spaced dormer windows on the south slope, with two on the north slope. (The third window on the north slope has been removed, and its opening in the roof slope has been infilled.) The dormers are glazed on three sides, and their pitched roofs are carried on twin brick piers that also support the pointed arch over the window and the small triangle of gable brickwork.

xxii. The central clerestory is glazed along the full length of both sides.
Internally, the hall has been divided both by the insertion of the full first floor and by added walls and partitioning, particularly at ground floor level. Other alterations include the relocation of staircases.

However, at first floor level it is still possible to experience the original church-like spatial division into a wide central ‘nave’ flanked by two narrower ‘aisles’. The most distinctive original structural features are still clearly visible - the arched timber roof and its supporting cast iron columns, with arched brick walls spanning between the column heads at high level.

The pitched roof is carried on six bolt-laminated timber arches that span north-south about 18 m, and carried on six pairs of cast iron columns at 3.6 m spacings. These columns carry loads down to the foundations, picking up load from the original gallery en route. The external walls acting as a ‘box’ provide overall stability.

The horizontally-laminated timber arches comprise 12 thin timber slats on their sides, bent to shape and secured together at intervals by bolts. Some of these bolts also connect the arches to two separate iron castings that fill the space between each arch, the side wall, and the roof slope. The lower castings, with open webs, are also bolted into the side walls. These castings and the laminated timber arches echo the original structure of the King’s Cross Station trainshed roofs. The lower ends of some of the bolts on the arches are formed into hook ends, from which climbing ropes could be hung or gymnastic use.

The roof comprises diagonal timber boarding carried on a mixture of closely spaced purlins or rafters (indicating ad hoc repairs, possibly due to rot damage). The purlins span onto principal rafters that are then carried on the arches. These rafters continue upwards to meet in a cast iron shoe at their apex. The ridge above is supported on small four-way crown posts springing from the rafter intersections. Two raking timbers spring upwards and outwards from near the centre-point of each arch to support the rafters, while a central tie-rod dropping from the shoe is tied into the arch at midspan. Two further, lighter tie-rods flank this central rod.

Pairs of long diagonal tie-rods on either slope brace the end bays of the roof to provide stability against racking.

A timber walkway reached by a steel cat ladder on the west gable wall gives access to the clerestorey level. This has a timber walkway on all four sides, with a timber handrail supported at midspan by twin raking timbers.

Some scaffolding has been installed at clerestorey level, presumably following concern over the strength of the construction - possibly affected by rot.

The timber arches spring from padstones corbelled from the base of the high-level brick side walls of the nave, and both are carried on hollow circular cast iron columns with decorative Composite heads. The wall sections between columns are carried on pointed arches, as are sections of high-level wall spanning north-south between the column heads and the outer side walls, balancing some of the thrust of the arches.

Investigations prior to adding the partial second floor on the south side in 1974 revealed that there is a horizontal cast iron truss in either aisle at eaves level, concealed above plaster ceilings. These trusses help to resist the arch thrusts (and wind loads) and carry these back to the end gable walls. This is an unusual example of such a structural feature in a building of the 1860s.

There is a part second floor on the west and south sides of the hall. The timber west side floor is also the ceiling over a room formed when the gymnasium was converted to clerical use. In the section of floor on the south side, added in 1974, timber boarding and joists span onto pairs of steel channels that are tied together. On the south side of the floor, these channels bear onto a ledge on either side of a squared stone that sits onto the cast iron column head. On the north side they are carried on a line of steel stanchions.

The later walls and partitions at first floor level are variously of masonry or partitioning.

The first floor cast iron columns bear down onto similar columns below the former gallery construction.

The original ground floor was of course open, serving as the gymnasium floor. Internal vertical structure was limited to six pairs of cast iron columns located below the columns on the level above, again circular and with decorative Composite heads. There are no east-west high-level walls corresponding to those at roof level, only north-south walls spanning onto the external walls. These north-south aisle wall sections are carried on semi-circular arches, in contrast to the corresponding walls above which are carried on pointed arches. Corbel stones projecting from these wall sections either side of the columns indicate what were probably seatings for east-west beams supporting the gallery.

The original gallery floor structure has not yet been recorded. It seems probable that stone slabs or timber joists and boarding spanned between the external walls and beams located along the column lines. The part of the gallery projecting inwards beyond the column lines was probably of timber, with edge beams supported by raking timber struts from corbel stones still visible in the brick walls that sit on the ground floor level columns. These corbels and struts are shown in an engraving in The Builder in 1866.

The saw-tooth bands of heavy corrubbing to be seen on the external wall elevations are also present on the internal elevations.

Conversion of the hall for railway clerical use involved the division of the ground floor into offices, and the infilling of the first floor void. Structural work involved the use of timber floor boarding and joists, steel beams, steel stanchions, brick walls, and pad footings. A drawing makes reference to a “gallery girder” running north-south on the west side of the hall, which appears to be a later insertion, needed to carry a one-brick-thick wall at first floor level that remains and supports the part second floor here. This girder is still to be seen, a deep haunched steel truss spanning between the north and south walls.

In its most recent use the ground floor was divided into two occupancies by an east-west brick wall. Much of the ground floor has timber boarding over what is presumably a concrete slab.

Original and later foundations are indicated on railway company drawings to be strip footings under walls, with pad footings under columns. There is no basement in this part of the building (although there was a small brick-vaulted cellar immediately to the west, under the southern half of the recently-demolished adjacent block).
History and Function of the Buildings

i. The German Gymnastic Society was established in London in 1861 following a rise of interest in gymnastics in Germany, seen as a healthy activity promoting physical fitness with both social and military benefits. Money was raised for the building from the 1100 members of the society, many of whom were in fact English or of other non-Germanic nationalities. The building was designed by Edward A Grünig, architect, and constructed in 1864-5 by Piper and Wheeler at a cost of about £6,000. It was inaugurated on 29 January 1865. Arguably the first purpose-built gymnasium building in Britain, it was also the only example outside Germany of a gymnasium provided for the German form of gymnastics. The name Turnhalle was inscribed over the entrance at 26 Pancras Road, being the German for a gymnastics hall.

ii. A contemporary account in The Builder notes that a club-room and reading-room were provided, in addition to the gymnasium hall itself. It therefore clearly served a social role as well as proving facilities for physical exercise.

iii. The building found wider use as a sports centre, and was influential in the development of British athletics and other sports. Here were founded both the Amateur Gymnastic Association and the Amateur Swimming Association. The Society’s then President, Ernest Ravenstein, was instrumental in The National Olympian Association’s holding of its first Games here in 1866, shortly after the German Gymnasium was opened. These continued annually until the first modern Olympic Games were held at the White City in west London in 1908.

iv. It may not be coincidence that, in that same year of 1908, a long lease of the building was bought by the Great Northern Railway to provide additional accommodation for its operations centred on King’s Cross Station. Spaces were partitioned to provide offices and other facilities, and after some years the main gymnasium hall, originally full-height, was altered by the insertion of a new floor at gallery level to provide further office space.

v. Some damage was caused during a Zeppelin bombing raid in 1917, although this is believed to have been confined to the now-demolished parts of the building nearer Pancras Road.

vi. The building remained in use by the railways until 1974 at least, when Circle 33 Housing Trust took a lease on the upper floor within the main hall. A partial second floor was added on the south side of this hall to complement an existing partial floor on the west side (architect Anthony Richardson & Partners). Subsequent tenants of various parts of the building included W H Smith, a repairer and supplier of spare parts for audio equipment, and arts depot. This latter organisation adapted the upper part of the hall and adjacent rooms to provide an arts space for multiple uses such as music, dance, and art exhibitions.

vii. The original entrance on Pancras Road, and the ancillary accommodation between this and the main hall, were demolished in 2001 to make way for the extended platforms and concourse being built at St Pancras Station as part of the CTRL works. Under the provisions of the CTRL Act the newly-exposed areas of the hall’s west wall has been re-faced with new brickwork to match the existing brickwork of the building, pending future use when the CTRL works are complete. Windows and doors are currently boarded up, and the building stands within a construction site.
Assessment of Significance

The Heritage Importance of the German Gymnasium

SUMMARY: THE HERITAGE IMPORTANCE OF THE GERMAN GYMNASIUM

ARCHITECTURE AND FABRIC
The surviving part of the German Gymnasium is the original sports hall, opened in 1865. Ancillary spaces and buildings west of this have been demolished to accommodate the extension of St Pancras Station for the Channel Tunnel Rail Link.

The external brickwork design of this building is in a ‘Prussian vernacular’ style, still to be seen widely in western Poland and Germany, but understandably rare in this country. The use of saw-tooth bands of heavy corbonelling on elevations results in a highly distinctive treatment of the main walls at eaves level and elsewhere. A very similar treatment was later adopted by the Great Northern Railway for the wall to the Milk Dock site on the opposite side of Cheney Road, which has now been demolished.

Internally, the hall originally had a gallery level. This was subsequently extended when the building was taken over by the Great Northern Railway, so that the building now has an overall first floor although the original gallery structure may survive.

The most notable features internally are the six bolt-laminated timber arches each spanning about 18 m to carry the double-pitched roof with its raised clerestorey. These, predecessors of the modern glue-laminated structural member, were relatively uncommon when built, and survivors are scarce today. The earlier twin barrel-vaulted trainshed roofs of King’s Cross Station were originally carried on similar timber arches, but these were replaced with the present wrought iron arches later in the 19th century after concern over their condition.

The arches are carried on elegant circular cast iron columns with decorative Composite heads. The bolts linking the timber slats in the arches project downwards and are bent into hooks to support climbing ropes for gymnastic use.

SETTING
The clearance of most of the surrounding buildings for the CTRL works has significantly altered the setting and context of the surviving part of the German Gymnasium, although the stations and hotels of King’s Cross and St Pancras will remain as major townscape features along side it.

SIGNIFICANCE RELATED TO TYPE
The German Gymnasium was probably the first purpose-built gymnasium in the United Kingdom for public use, i.e. other than in military and educational institutions. It was also one of very few purpose-designed gymnasia built for the German gymnastic approach outside Germany.

SIGNIFICANCE RELATED TO INTANGIBLES
The building has early and unique associations with the development of British athletics and swimming, and the modern Olympic movement. The National Olympian Association held annual Games here from 1866, shortly after the German Gymnasium was opened, until the first modern Olympic Games were held at the White City in west London in 1908.
Notable features

The notable features of the German Gymnasium and its history are:

1. Probably the first purpose-built public gymnasium in the United Kingdom (1864-5);
2. The only gymnasium built for the German gymnastic approach outside Germany;
3. Early and unique associations with the development of British athletics and swimming, and the modern Olympic movement;
4. Rare survival of an original bolt-laminated timber arch roof (of about 18 m span) carried on decorative cast iron columns;
5. Arch bolt-heads formed into hooks to support climbing ropes;
6. Original viewing gallery (now subsumed into overall first floor, but believed to survive); and
7. External brickwork detailing in distinctly ‘Prussian vernacular’ style to design of architect E A Grüning, also echoed in later railway brickwork on east side of Cherey Road (mostly now demolished).

These features are annotated in various drawings and photographs.
Summary of Building’s Individual and Group Value

The built heritage value of the German Gym is considered to be very high, due to its architectural link to the roof of King’s Cross Station and its role in the development of public sport and fitness during the Victorian era.

The overall value of the group in which it sits, including the remaining Stanley Buildings, is considered to be moderate. Much of the context for the group was removed during the CTRL works leaving dispersed and isolated remnants of varying individual value.
Defining the Objectives

Current Use

The German Gymnasium is currently empty. It is part of the site for the Channel Tunnel Rail Links, and as such is not accessible to the public.

Objectives and Aspirations

The objectives and aspirations for the German Gymnasium as part of King’s Cross Central are:

- To secure the future of the building through viable long-term uses;
- To create and contribute positively to a new piece of public realm between the stations. The German Gymnasium could play a role in both enclosing a smaller area, but also as an object building within the larger space;
- To activate the space between Station Square, Pancras Square and the Boulevard through activities which could spill out of the building;
- To refurbish the building and secure its future through (all viable use(s));
- To provide public access around the outside of the building and internally, allowing appreciation of the roof structure;
- To consider the opportunity to reveal the original viewing Gallery at first floor;
- To improve the interpretation of the original functions of the building.
Works to Facilitate Future Uses

The building has undergone some alteration during the CTRL works, including the removal of the staircase on the south-west wall. In order to achieve our aspirations for the building, some works would be required to promote pedestrian and public accessibility and to bring the buildings up to a modern standard, particularly with regard to vertical circulation.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. Repair and refurbish roof timbers (currently braced) and dormer windows;
2. Recover roof;
3. Installation of stairs (either internal or external) to provide access and means of escape;
4. Remove modern first floor; and
5. Remove modern partitions and mezzanine structures.

These works are shown in Figures i to v which show the existing building.
**Refurbishment Parameters**

The parameters set out below provide a series of rules within which the ‘Works to Facilitate Future Uses’ would be carried out. These will form part of the briefing documents for any works.

1. The existing building form and fabric would be substantially retained, subject to the works described above and its structural integrity would be maintained;
2. The arch bolt heads formed into hooks would be retained;
3. Subject to structural surveys, the existing columns supporting the gallery floor would be retained; and
4. No new basements would be created beneath the building.

Features to which these parameters relate are annotated in Figures vi to vii.
Implementation

Future applications

Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the German Gymnasium building and its refurbishment. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the building.

No works could or would take place, until the detailed scheme had been approved and Listed Building Consent had been granted.
Great Northern Hotel: Initial Conservation Plan

Understanding the Asset

The Great Northern Hotel is the southernmost building of King’s Cross Central, located between King’s Cross and St Pancras stations. Built during 1853-54, it was designed by Lewis Cubitt for the Great Northern Railways terminus at King’s Cross.

The setting of the building, including the Old St Pancras Road that defined its curved shape and the Garden that sat between the entrance to the hotel and the Western Range of King’s Cross Station, has now been lost and the hotel is the last remnant of the urban structure of this time.

As part of the King’s Cross Central development, the Grade II listed hotel would form a significant part of the southern gateway to the area. It would play a substantial part in the way pedestrians in particular would move through the site and offers the opportunity to provide ground floor uses that could be associated with the two stations.

Description

i. The hotel is curved on plan, and is approximately 55 m long on its central curved axis by some 15 m wide. The longer, convex, south-west elevation reflects the original curving alignment of Old St Pancras Road immediately to the west. A range of houses across the road, called Weston Place, was demolished when Pancras Road was realigned in the early 1870s. As a result, the Great Northern Hotel could appear, mistakenly, to have been designed arbitrarily in both siting and plan form, as if to shield the station’s Booking Office from the adjacent Pancras Road and the competing Midland Railway.

ii. In fact, the building footprint responded to the existing street plan - now lost - but was clearly related to its role as an adjunct to the station itself. The shorter, concave, north-east elevation faces directly towards the original station Booking Office in the Western Range Buildings. Indeed, the now-blocked central doorway of the Booking Office would appear from plans to be the very geometric focus of the curved hotel elevation, although this has not been verified by survey.

iii. The hotel and station entrance were originally enclosed from the surrounding streets within a gated precinct that incorporated ornamental gardens.

iv. The hotel has seven floors, including a basement and an attic floor within the double-pile hipped slated roof of moderate pitch.

v. The internal plan form is reflected in the external elevations. Public rooms at ground floor level and bedrooms on upper floors are naturally lit by windows on the long elevations. These rooms open off a central longitudinal corridor at each floor level, lit at its ends by windows on the north-west and south-east elevations.

vi. Elevations are of yellow stock brick, decorated with stucco in the form of string courses, pilasters, window mouldings, and a large cornice at eaves level with dentils. The elevational treatment echoes the tall residential terrace style adopted by Cubitt in his design for the south side of Lowndes Square in Knightsbridge. His
use of Italianate style in both the hotel and the station also drew on his previous experience in designing the passenger station at Bricklayers’ Arms in south-east London, opened in 1844.

vii. The concave north-east elevation is virtually symmetrical, with six bays of windows centrally. These are flanked by wider stuccoed bays, marking the location of the two staircases on the opposite elevation, beyond which are six further bays of windows. Only in the central section of this elevation between the stuccoed bays is the brickwork actually curved on plan. The main entrance to the hotel is within the southern ‘staircase’ bay, on the left as seen from the station. This has a short flight of encaustic-tiled steps up to the reception area, sheltered by a small glazed canopy and enclosed porch of cast and wrought iron and timber. The canopy and porch have been partially dismantled to enable work on the Underground Station Redevelopment; the dismantled components are in store pending reinstallation. The doorway here is spanned by a round-headed stuccoed arch, as is the window in the other staircase bay symmetrical with it. The other ground floor windows have rounded arches in plain brickwork, with stucco keystones. All upper floor windows are framed by rectangular openings.

viii. The staircase bays project slightly forward of the general line of the elevation. Their first and second floor windows have three lights framed with pilasters and pedimented heads, while the third and fourth floor windows are similar but with plainer heads. Other windows have stucco surrounds on first, second, and third floor levels, and the elevation corners are formed in stucco as pilaster strips decorated with rustication. The stucco treatment around windows and of the string courses at intermediate floors has been simplified since the hotel was built.

ix. The hotel’s name is displayed prominently on this elevation between the third floor window head and the fourth floor window sills, in crisp sans-serif lettering (which already appears in an early 20th century photograph).

x. The convex south-west elevation is longer than the concave north-east elevation, but resembles it. There are seven bays of windows in the central section. These are flanked by the staircase bays, which project beyond the general line of the elevation with their corners formed in stucco as pilaster strips decorated with rustication. The projections incorporate the three-light stair windows similar to those on the north-east elevation, but include also a single bay of windows from adjacent rooms on either side. Five further bays of windows extend to the ends of the elevation, whose corners are again formed with stucco pilaster strips.

xi. The later supplementary toilet facilities have been added to this elevation at basement and ground floor levels, centred on the southern staircase bay. Their external walls are of brick with plain rectangular window openings and stucco mouldings, topped by a flat roof. An external steel fire escape stair is located in this bay.

xii. The north-west end elevation is pierced by only the single line of central corridor windows which, at first floor level, enlarges into a small glazed and louvred ‘conservatory’. A small two-storey block along its eastern half was added to provide supplementary ladies’ facilities. Like the larger extension on the south-west elevation, this block is walled in brick with plain rectangular window openings and stucco mouldings, topped by a flat roof. A later short steel stair case leads out of the ground floor central corridor here, and currently forms the only means of access into the building, as the main entrance is temporarily closed off by the hoardings of a work site for the Underground Station Redevelopment.

xiii. The south-east end elevation has two bays of windows either side of the central corridor windows, which are themselves contained within a projecting bay formed and flanked by large pilasters containing chimney flues. These windows are treated at ground, first, and second floor levels similarly to the windows of the staircase bays on the north-east elevation, as described above. Here again, a later steel fire escape stair leads out of the ground floor; which at this end of the hotel comprises the full-width dining room (originally the coffee room).

xiv. Some vertical cracking is visible in the pilasters of the projecting bay of this elevation. This is surmised to be a result of cyclic thermal movements across changes in thickness of the brickwork, which here encloses chimney flues. The cracking is made more conspicuous by mortar pointing that follows the lines of the cracks.

xv. Within the roof space, the attic (fifth) floor has fewer windows than the lower floors, in the form of dormers with plain rectangular openings beneath shallow gables.

xvi. The hipped slated roof resembles a double-pile construction in that it has twin ridges, with a central valley section now covered by duckboards. A substantial number of large brick chimney stacks remain, reflecting the many fireplaces burning coal that were originally provided to heat every bedroom, sitting room, and public room, as well as the kitchens. Some stacks have been modified, impairing the symmetry of the roofline which has been further marred by the addition of items of plant.

xvii. Numerous rainwater, soil, and vent pipes are present on the external elevations. They detract from the appearance of the building.

xviii. Door and window joinery is generally of timber, in need of some local repair or replacement. Windows are generally vertical sliding sashes.

xix. The internal layout of the hotel essentially comprises a single long, curved, corridor at each floor level, serving rooms on either side. The upper floors, comprising mainly bedrooms, sitting rooms, and toilets, have crosswalls at fairly close and regular spacings. The cellular pattern of this structural layout is largely continued down through ground floor and basement level except where larger rooms here have required the use of beams to pick up walls from the upper floors.

xx. The main entrance into the hotel is up a short flight of steps in the southern staircase bay. This leads into a small lobby from where the hotel reception desk and the southern staircase can be reached. Public rooms on this ground floor level originally included a smoking room and reading room, as well as lounges and the coffee room (later known as the dining room). This latter room was the largest in the hotel, occupying four bays and the full width of the southern end of the building – a space of some 9 m by 14 m. It reportedly “rivalled that of the Great Western Royal Hotel as the finest in London” (quoted in Hunter and Thorne). It has a higher ceiling than other ground floor rooms, which resulted in the first floor rooms above having reduced ceiling heights and being approached up a short flight of steps in the central corridor.

xxi. Two staircases were originally provided within the building. A hydraulic lift was inserted in the well of the northern staircase in the 1880s.
xxii. Bedroons on upper floors were originally not provided with integral private toilets but, as this became expected of superior hotel accommodation, en suite facilities were introduced in some bedrooms by adding private facilities inside an enclosing partition. This has inevitably impaired the original simple room proportions.

xxiii. The north-west, convex, elevation of the hotel is longer than the south-west elevation, and advantage was taken of this in the original design to provide toilets in the additional space available.

xxiv. Services for the hotel were concentrated in the basement. The main kitchen was sited under the coffee (dining) room with a dumb waiter linking the two. The basement rooms to the north of this included a servants’ hall, staff rooms, storage for groceries, wine, linen, and plate, and a large linen drying room. Further storage was provided in cellars entered off the basement level area around the hotel.

xxv. The internal construction was noted at the time by the Great Northern Railway as being ‘fireproof’, with stair landings and treads of stone (rather than timber), and masonry walls between rooms, rather than timber studding. These masonry walls also offered superior sound insulation and privacy.

xxvi. Floors have been reported to be of brick arching below timber boarding, supported on iron girders, although it is unclear whether this construction was applied throughout (including in bedrooms), or only in the corridors, so that these and the staircases provided incombustible escape routes in the event of fire. The latter approach was commonly adopted: it is, for example, to be found in the nearby Stanley Buildings, where the kitchens and bedrooms within the dwellings have conventional, ‘non-fireproof’, timber floors. The use of iron girders is to be expected in a building of this period, particularly for the longer span beams over the public rooms at ground floor level and elsewhere, which were obliged to support the weight of walls and floors above. The girders could be either cast iron beams or, possibly, early riveted wrought iron plate girders. In the absence of any original drawings or investigation records, the floor construction cannot be described with confidence, but it appears to include timber joists and floorboarding, brick vaulting at least in the corridors, and iron beams or girders.

xxvii. No original or investigatory information on foundation construction is to hand, but it is probable that the building was founded on spread brick strip footings, similar to those adopted for the main line station.

xxviii. Internal finishes today are typically of plaster and wallpaper with painted joinery. It seems evident that original finishes have been removed or affected in the course of later works, such as the installation of private bathrooms within bedrooms. Accounts suggest that the original decoration of the public rooms was more ostentatious than can be seen today.

xxix. The later extensions at basement and ground floor levels on the south-west and north-west elevations provided additional baths, dressing rooms, toilets, a barber’s salon, and storage. As noted, these extensions were provided for the benefit of passengers arriving at King’s Cross on sleeping-car services.

xxx. The hotel is enclosed by a basement area, with external brick vaults serving as cellars. These were extensively used for storage of coal, beer, foodstuffs, and other essential supplies. Some of these vaults have recently been removed or infilled with concrete as part of the Underground works for the construction of the new Northern Ticket Hall.

xxx. An underground ice-house to the north of the hotel, known from plans of the hotel, was linked by a short alley into the hotel cellars. The ice-house and part of the alley, and the in-complete remains of a previously-unknown second ice-house (described below), have now been removed during excavations for the new Underground Station Northern Ticket Hall. Previously, there was speculation that the known ice-house had been originally associated with the Smallpox Hospital or Fever Hospital that had previously occupied the site. However, observations and recording by the Museum of London Archaeology Service (MoLAS) during its removal indicate that the ice-house was built with, or shortly after, the hotel. At this time, before refrigeration was developed, ice would be brought in bulk during the winter from Scandinavia, Canada, or elsewhere, and stored for use in the kitchens over the next months in underground structures, such as this ice-house.

xxxi. The ice-house comprised a circular, roughly cylindrical, brick structure about 8 m deep and 4 m in diameter, with a hemispherical roof. The crown of this roof was just below ground level, and had a covered opening (later sealed) through which ice could be delivered.

xxxi. At a later period in its life, presumably when the availability of refrigeration eliminated the need to store ice, the ice-house was filled with rubble up to the floor level of the alley that linked to the hotel cellars, and apparently used for storage. Subsequently, the ice-house was abandoned completely, and the hotel end of the alley was sealed off by a concrete blockwork wall.

xxxiv. The incomplete remains of a second ice-house, not previously known to exist, were discovered during excavations for the Northern Ticket Hall. It also was built of brick with a circular plan. It lay closer to the hotel, and immediately above the Hotel Curve Tunnel. It is dated at about the time of the hotel’s construction or shortly after, but almost certainly pre-dates the ice-house described above, as the alley leading to the latter was curved on plan to pass around the second ice-house. It is unclear whether this incomplete ice-house was built before the tunnel (which opened in 1867), nine years after the hotel was opened, or was abandoned to allow construction of the tunnel.

xxxv. A MoLAS report on the two ice-houses was issued in September 2003.

xxxvi. The edge of the area around the hotel is protected by cast iron railings of simple pattern. On the north-east elevation the railings are in the form of rectangular open panels similar to those at the southern end of the Western Range of the station buildings. Some of these have recently been temporarily dismantled, together with part of the hotel entrance porch, and taken into storage to protect them during the execution of the Underground works. On the west side of the hotel, along Pancras Road, the railings are of the ‘ spear’ type, with heraldic emblems (three lions passant and a larger lion rampant) moulded onto the bosses of the principal uprights.

xxxvii. A distinctive adjunct to the hotel that has been totally lost is the gardens that were laid out to the north of the hotel. These were grubbed out in the late 1930s and replaced by the parcels (later Red Star) depot, itself recently demolished for the construction of the Underground Northern Ticket Hall. The eastern edge of the gardens flanked the porte-cochère sheltering those arriving
in front of the original Booking Office. The gardens formed an integral part of the design of the space to the west of the Booking Office. This was a triangular area defined on its south side by the line of Old St Pancras Road and the curved hotel, on its east side by the station, and on its west side by Upper Edmund Street (later Cheney Road). This space was enclosed by walls and railings - it all being railway property, and therefore private land - as is shown on the 1871 Ordnance Survey 1:1056 plan. Gates provided vehicle access immediately to the north and immediately to the south-east of the hotel, with a third access further north beyond the gardens. One brick gate pier remains beside the footpath at the northern end of the north-east elevation.

xxxviii. A further railway-related feature here in the early days of the station and hotel was the Great Northern Railway stables building shown on the north side of Upper Edmund Street, opposite the hotel gardens, in Stanford’s plan of 1862. The stables had gone by 1871, when the OS plan shows a “cartridge and percussion cap manufactory” occupying the site.

xxxix. The destruction of the gardens, and the removal of the railway precinct boundaries north and east of the hotel, has unfortunately removed evidence of what was originally a carefully-integrated urban design on a very tightly-defined site.

History and Function of the Buildings

i. The construction of the major London rail termini in the mid-19th century was accompanied by the development of hotels for use by the railway companies’ patrons. These were built on a larger scale than existing hotels, and indeed were the forerunners of the many large and often luxurious hotels built in London later in the century. The first two purpose-built railway hotels were at Euston (1839). They were designed by the company’s architect Philip Hardwick, and stood either side of his Doric Propylaean, commonly known as the Euston Arch. One, the Euston, catered for the first-class trade, while the Victoria was rather more of a superior lodging-house. These hotel buildings, the Arch, and the original Euston station were all demolished in the 1960s.

ii. Two railway hotels were opened in 1854, heralding the second generation of railway termini in London: the Great Northern Hotel at King’s Cross, and the Great Western Royal at Paddington. The latter was designed by P C Hardwick, a son of Philip, in an extravagant French chateau style, and stood in front of the train shed (as did Scott’s later Midland Grand Hotel at St Pancras). In contrast, the Great Northern Hotel was sited separately from its terminus as a consequence of existing road alignments. The concave north-east hotel elevation focussed on the station’s Booking Office, which was clearly visible from the hotel’s main entrance. This arguably emphasised the importance of the station more dramatically to the traveller, while better preserving the hotel’s distinct function. The hotel and station entrance were originally enclosed from the surrounding streets within a gated precinct that incorporated ornamental gardens.

iii. The Great Northern Hotel offered superior facilities for guests. Its 160 rooms included about 100 bedrooms and attached sitting rooms and 20 public rooms including a large coffee room. A hydraulic lift was introduced in the 1880s. Pressure on toilet and washing facilities, as a result of growing sleeping-car traffic at the station, resulted in the hotel’s footprint being expanded rather uncomfortably at the beginning of the 20th century. The road alignment west of the hotel had been altered with the completion of St Pancras Station in the early 1870s, and this allowed the construction of a two-storey extension of the basement and ground floors over part of the south-west elevation. This was a polygonal block, superimposed on the area and vaults here, containing baths, toilets, dressing rooms, and a barber’s shop (but all since converted to use as toilets, kitchens and offices). A smaller two-storey extension, at the north-west corner of the hotel, provided additional ladies’ toilets at ground floor level and storage space in the basement below.

iv. Of these two earliest surviving London railway hotels, the Great Western Royal at Paddington has been altered, both externally and internally, more drastically than has the Great Northern Hotel.

Architectural Analysis

i. 23 bays long on its outer, north-west, elevation (18 bays on its inner elevation), with five-and-a-half storey high façades rising above street level, this building was on a new scale for a hotel, and larger than the first purpose-built office blocks of the period. The architect Lewis Cubitt deployed his skills, developed among the imposing residential terraces designed for his developer brother Thomas in Belgravia, so as to articulate what could otherwise have been repetitive and bland façades. The result is more ornate than his adjacent passenger station, as befitting the more personal function of a hotel, but far from the fussiness of much subsequent Victorian work.

ii. The main façades are broken into three by expressing the two bays of wider, three-light windows that mark the internal staircase locations, picked out in stucco. These, and stucco pilaster strips at the corners – plus additional pilaster strips in the longer convex north-west elevation – support a bold classical cornice beneath the roof line. Across the heads of the ground floor windows, a stucco string course marks a classical division into plinth and piano nobile, the former in sober brickwork, the latter with the newly fashionable stucco architraves to the necessarily closely-packed window openings, graduated through several storeys. The cornice crowns these tiers of windows. With its bold dentils, the cornice simulates an eaves line for the roof. This roof, terminated laterally by hips, has a relatively shallow pitch in sympathy with the neighbouring station building, but tall chimney stacks provide a vertical termination proportionate to the building’s height. In keeping with the functional Italianate styling of King’s Cross Station, the architecture shuns the classical “orders”, except in the pilasters of the three-light windows (where, incidentally, the usual progression from Doric upwards to Corinthian is deliberately inverted to avoid pomposity).

iii. Some details of the stucco architraves and the graded depths of successive string courses have been emasculated in twentieth-century renovation works, and soil and rainwater stacks have proliferated unattractively, but the general principles of this composition have remained unscathed.

iv. The asymmetry of the north-east elevation, with the main hotel entrance placed ‘off-centre’ in the southern of the two staircase bays, can be seen, in part at least, as a response to the asymmetry of the Western Range of the station. This in turn is weighted towards the Euston Road - the principal road serving the station - and reflects the concentration of passenger facilities towards the southern end of the range, while the more mundane facilities such as the Parcel Office were sited further north in the range.

v. More practically, the siting of the hotel entrance made it immediately visible from the Booking Office...
Assessment of Significance

The Heritage Importance of the Great Northern Hotel

SUMMARY: THE HERITAGE IMPORTANCE OF THE GREAT NORTHERN HOTEL

ARCHITECTURE AND FABRIC

The Great Northern Hotel is an early surviving example of a purpose-built railway hotel. Italianate in its design in yellow stock brick and stucco, and only slightly altered, it resonates with other designs by its architect, Lewis Cubitt - the nearby King's Cross terminus, and his large-scale residential elevations in Belgravia.

The building was on a new scale for a hotel in both length and height, but Cubitt successfully articulated what could otherwise have been repetitive and bland façades, through the restrained but considered use of stucco for string courses, pilaster strips, and as moldings around door and window openings.

The result, although more ornate than his adjacent station, has none of the fussiness of much subsequent Victorian work. As such, it is a well-balanced and original composition.

The pronounced asymmetry of the building, with its off-centre main entrance, is a response to the asymmetry of the Western Range Buildings, both weighted towards the Euston Road and the passenger facilities at the southern end of the station. It also provides a direct line of sight between the hotel entrance and the Booking Office entrance, which would have been obscured by the gardens had the hotel entrance been sited centrally.

Pressure on toilet and washing facilities in the station resulted in the hotel’s footprint being expanded rather uncomfortably at the beginning of the 20th century by the construction of two-storey extensions on both the south west and north west elevations. The prominent steel fire escape on the south west elevation is a further uncomfortable addition.

SETTING

The curved plan form and the orientation of the building offer the sole remaining evidence of the street pattern at the time of construction, before Pancras Road was realigned as a straight thoroughfare down the east side of St Pancras Station.

The north-east elevation of the hotel focuses onto the entrance of the former Station Booking Office - possibly a unique feature.

The enclosure of the triangular space to the west of the station, including the hotel together with gardens to the north (now lost), was originally a clearly integrated whole. It offered an efficient layout for road vehicles, and also a sense of privacy.

The setting of Cubitt’s relatively plain Italianate terminus and hotel, immediately alongside the exuberant neo-Gothic St Pancras Station and its hotel by Scott and Barlow, is a juxtaposition possibly without comparison in early railway architecture.

The hotel makes an important contribution to the Kings’s Cross Conservation Area, particularly in its association with the main line stations, both evoking 19th century railway development.

SIGNIFICANCE RELATED TO TYPE

The Great Northern Hotel is among the earliest surviving purpose-built railway hotels, contemporary with the Great Western Royal Hotel at Paddington but retaining more of its original character both externally and internally.

SIGNIFICANCE RELATED TO INTANGIBLES

The hotel retains a close relationship with King’s Cross terminus, particularly the former Station Booking Office, and effectively enrolls the space between this and the hotel.
Notable Features

The notable features of the Great Northern Hotel and its history are:

1. The Great Northern Hotel is an early (1854) surviving example of a purpose-built railway hotel;
2. The hotel was of a new scale for such a building of this period;
3. The hotel is competently articulated in Italianate neo-Classical style, as adopted for the adjacent mainline terminus, by the architect of both buildings, Lewis Cubitt, but is more domestic in feeling;
4. The hotel’s position is relatively unusual for a terminus station hotel in not being sited across the head of the railway tracks (as for example St Pancras);
5. The building is symmetrical and its form is made up of three parts; a central radial section and two orthogonal sections at either end;
6. The actual siting and partly curved plan form is dictated by the existing street pattern (now vanished);
7. The original layout of hotel, gardens to north (now lost), and carriage roads serving the station and hotel was an integrated whole contained within the railway company’s available triangular site, immediately west of the station;
8. The station’s former Booking Office was used as the focus of the curved hotel layout;
9. The asymmetry of the station’s Western Range Buildings is echoed by the off-centre main entrance to hotel, in part ensuring a clear line of sight between the Hotel entrance and the Western Range, unimpeded by trees and shrubbery of the gardens;
10. The hotel is a tall, relatively slender block topped by numerous tall chimney stacks (some later modified);
11. The building’s structure is primarily load bearing masonry external walls and internal long and cross walls;
12. Floors would appear to be constructed from iron girders supporting brick arches, with timber boards over;
13. Elevational treatment is of yellow stock brick relieved by restrained but considered use of stucco string courses, pilaster strips and architraves (some later modified);
14. Two original stone staircases provide vertical circulation. These make a significant contribution to the building’s internal character; and
15. The juxtaposition of Cubitt’s soberly dressed hotel and station (in plain style) with the neo-Gothic exuberance of St Pancras Station and its Midland Grand Hotel, provides an unrivalled contrast in Victorian railway architectural styles.

These features are annotated on various drawings and photographs. The green shading shows the small extensions to the hotel that are the subject of an application for Listed Building Consent. See Parameter Plan KXC011.
Hotel extensions as shown on Parameter Plan KXC011

North-East Elevation

South-East Elevation

South-West Elevation

North-West Elevation

Transverse Section

Assessment of Significance

12.9 Great Northern Hotel
Summary of Building’s Individual and Group Value

The built heritage value of the Great Northern Hotel is considered to be very high.

The overall value of the group in which it sits, including King’s Cross and St Pancras stations, is considered to be very high.
Defining the Objectives

Current Use

The Great Northern Hotel is currently empty. It is part of the site for the Channel Tunnel Rail Links, and as such is not accessible to the public.

Objectives and Aspirations

The objectives and aspirations for the Great Northern Hotel as part of King’s Cross Central are:

- To secure the future of the building through viable long-term uses;
- To give enclosure to a major new public space, Station Square, to the north of the hotel;
- To facilitate pedestrian movement between the stations, Euston Road and King’s Cross Central;
- To be a gateway to King’s Cross Central;
- To be refurbished to allow an active use, particularly at the ground floor;
- To be part of the link between King’s Cross Central and any King’s Cross Station Enhancement.
Works to Facilitate Future Uses

In order to achieve our aspirations for the building’s role within the public realm, some alterations around the perimeter of the building would be required. Additionally, some works would be required to bring the buildings up to a modern standard, particularly with regard to vertical circulation and servicing.

These works would be carried out within the parameters listed in ‘Refurbishment Parameters’.

The works proposed are:

1. Demolish the basement (3 offices) and ground floor extension (kitchens, toilet and office) on the south-western facade and the fire escape which crosses the extension;
2. Demolish the basement (storage) and ground floor extension (ladies toilets) on the northern facade;
3. Remove the railings along the south-western and northern sides of the Hotel;
4. Cover the lightwell around the south-western and northern sides of the Hotel;
5. Works to provide disabled access to the building;
6. Insertion of new lift cores to provide vertical circulation through the building;
7. Remove existing lifts and making good the north internal stair;
8. Local alterations to the elevations and internal fabric to facilitate vehicular servicing and means of escape;
9. Alterations to accommodate a central plant room within the fifth floor, with adequate ventilation via the central section of the roof; and
10. Insertion of vertical risers and horizontal ducts to provide for mechanical, electrical and communications services.

These works are shown in Figures i to xi which show the existing building in plans, cross-section and elevations. Works 1-4 above are the subject of an application for Listed Building Consent submitted alongside the planning application.
Refurbishment Parameters

The parameters set out below provide a series of rules within which the 'Works to Facilitate Future Uses' would be carried out. These will form part of the briefing documents for any works.

These alterations would be undertaken in accordance with the following parameters:

1. The existing building form and external fabric would be substantially retained, subject to the works described above;
2. The South-West and North facades would be made good, in sympathetic form and materials to match as closely as possible the existing fabric of the Hotel and the new paving surfaces around it; and
3. The two existing internal staircases would be retained.

These parameters are annotated in Figures xii to xiii which show the existing buildings in plan.
Implementation

Future Applications

The applicants have submitted an application for Listed Building Consent to carry out the works numbered 1-4 on page 12.12.

In relation to other works:

- Following the grant of outline planning permission, for comprehensive development of the site, the applicants would prepare a detailed scheme for the Great Northern Hotel and its refurbishment. The applicants would submit this detailed scheme for approval by the local planning authority and seek Listed Building Consent at the same time. The detailed scheme would be supported by a Conservation Plan, which would address the refurbishment, management and maintenance of the building.

- No works could or would take place, until the detailed scheme had been approved and Listed Building Consent had been granted.