SIM Landscaping

Heritage Impact Assessment
June 2024

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1.0

Introduction

1.0 Introduction

1.1 Background

This Heritage Assessment has been prepared to support the application for Planning and Listed Building Consent for proposed works to the Science and Industry Museum Site in Castlefield, Manchester. The following report provides an understanding of the heritage significance of the asset(s) affected and assess the potential impacts of the proposed work on that significance.

This Assessment has been prepared as acknowledgement of the multiple designations that apply to the assets across the site. This report considers each of the assets individually to ensure each is considered in isolation to the appropriate level. Consideration is also given to the group value of the assets, as well as the Castlefield Conservation Area.

1.2 Description of Development

Phased refurbishment of the Upper Yard and Station Approach public realm areas, including temporary landscaping in the Heart Space, and repairs and making good to the plant room deck and the former vehicle ramp area.

Phase 1 includes works to Upper Yard areas including: new accessible routes; new planters; new fixed furniture; re-surfacing including with new materials; repair and relaying of existing cobbles; works to underground services to accommodate the scheme, building repairs and associated works.

Phase 2 includes works to Station Approach areas including: new accessible routes; new planting areas; new fixed furniture; re-surfacing including with new materials; works to underground services to accommodate the scheme, building repairs and associated works.

Phase 3 includes temporary re-surfacing works in the Heart space. Phase 4 includes repairs and making good works to the hard landscaping beneath and the viaduct façade adjacent to the location of the former vehicle ramp.

1.3 Methodology

The following Heritage Assessment has been written in accordance to the requirements of Chapter 16 of the *National Planning Policy Framework (2023).*

The document surveys the heritage, providing an overview of important information to foster better understanding of the site and its context. This is done through an assessment of historical development and the surrounding area. This is followed by an assessment of significance, the detail of which is required to be *'proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.'*[1] Significance is assessed in relation to the heritage interests outlined by Historic England. A full explanation of the methodology used can be found in **4.1 Assessment of Significance Methodology**. An assessment of the potential impacts of the proposed development on the heritage is then provided in accordance with the methodology outlined in **4.2 Heritage Impact Assessment Methodology**, and in-line with the requirements of paragraphs 205-214 of the NPPF (2023).

The document follows best practice guidance, such as Historic England's *Statements of Heritage Significance (2019)*, *Historic Environment Good Practice Advice in Planning Note 3 - The Setting of Heritage Assets (2017)* and *Conservation Principles, Policies & Management for the Sustainable Management of the Historic Environment (2008)*, and *BS7913 - British Standards Guide to the Conservation of Historic Buildings.*

The Historic Environment Record (HER) has been consulted as standard and any findings have been used to inform the contents of the report.

1.4 Authorship & Acknowledgements

This document has been prepared by Freya Needham MA, Heritage Consultant at **Buttress**, and reviewed by Jenna Johnston MA (Hons) MSc IHBC, Associate Heritage Consultant at **Buttress.**

Acknowledgement is also given to Kathryn Sather & Associates for their 2007 Conservation Management Plan which has informed the contents of this report and has been a great aid in providing a robust understanding of the site.

1.5 Location & Description

The Science and Industry Museum is located in the western part of Manchester city centre, on the site of the former Liverpool Road railway station.

The wider museum site is bounded to the north by a number of large warehouses including the site of the new Aviva Studios, to the south by Liverpool Road, to the east by Lower Byrom Street, and to the west by the River Irwell as well as Stephenson's Viaduct.

The Museum is spread across several historic buildings that are connected by walkways and outdoor spaces. The museum is located on the site of the former Liverpool Road Railway Station, which was the terminus of the world's first intercity passenger railway. The buildings that house the museum are all listed and include the New Warehouse, the Power Hall, the 1830 Warehouse.

Throughout the museum complex, there are a number of outdoor spaces and walkways that allow visitors to explore the historic buildings and enjoy views of the surrounding area. The museum's layout is designed to be both educational and engaging, while retaining the industrial character and general spacial layout associated with its historic use.

Figure 1 Location Plan

- Approximate Site Boundary
- Wider Museum Complex



1.6 Designation

The museum site is located in the Castlefield Conservation Area, known for its canals, warehouses, and industrial architecture. The boundary of the conservation area can be viewed in section 14.0 Castlefield Conservation Area.

The wider museum site also contains 6 listed structures, as well as 2 curtilage listed structures. These are:

- 1830 Station - Grade I (Former Liverpool Road Railway Station Masters House, List Entry No. 1291477)
- 1830 Warehouse - Grade I (Old Warehouse to North of Former Liverpool Road Railway Station, List Entry No. 1282991)
- 1830 Viaduct - Curtilage to the Grade I listed 1830 Warehouse, see above.
- Water Street Bridge - Grade II (Railway Viaduct Linking Bridge Over Irwell to Liverpool Road Station, List Entry No. 1254726)
- 1867 Viaduct - Grade II (Colonnaded Railway Viaduct at Former Liverpool Road Goods Depot, List Entry No. 1200805)
- New Warehouse - Grade II (Manchester Museum of Science and Industry, Former Lower Byrom Street Warehouse, List Entry No. 1283016)
- Upper Yard - Curtilage to the Grade II listed New Warehouse, see above.
- Power Hall & Gantry - Grade II (Power Hall Of Museum of Science and Industry, List Entry No. 1291458)

These assets can bee seen marked on Figure 2 Designation Map, overleaf.

Water Street Bridge - Grade II Listed. The boundary of this listed structure includes the viaduct spanning the River Irwell with attached animal ramp at east end of south side, and extends to the east edge of the bridge spanning Water Street, as per the listing description (7.2.1 1830 Viaduct) and Manchester City Council Conservation Area Map shown in Figure 30. Full extent of the listed structure further west is not shown on this diagram.

Lower Yard - Considered Curtilage of:

- Grade I 1830 Warehouse - connected to the northern elevation of the warehouse and used concurrently.
- Grade II 1867 Viaduct (The Pineapple Line) - connected structures used concurrently.

Upper Yard - Considered Curtilage of:

- Grade II listed New Warehouse - Structures were built and used concurrently.
- Grade II listed Power Hall and Gantry - structures were used concurrently with tracks running beneath the Gantry.

The existing 1830 viaduct was extended following the construction of the New Warehouse between 1878-1880, with the addition of four new tracks located between the New Warehouse and the Power Hall.

- Not Listed
- Grade I Listed
- Grade I Curtilage
- Grade II Listed
- Grade II Curtilage
- Grade I & II Curtilage

1980s Office Block/Gate House - although visually inkeeping, the block is of no specific merit and is not listed. Any future works may have the potential to affect the setting of the Power Hall, Gantry & New Warehouse.



1830 Viaduct - Considered Curtilage of the Grade I listed 1830 Warehouse. Structures were built concurrently.

Historic mapping shows that the original viaduct structure and associated tracks ran east to meet the 'Shipping Shed' that was located just west of the current footprint of the Power Hall.

Continuation of the Upper Yard beneath the 1830 Viaduct - sits within the setting of the 1830 Viaduct & 1830 Station - any future works may have the potential to affect this setting.

1990s Ramp & 1940/50s Toilet Block - modern fabric and makes no specific contribution to the use, understanding, or character of the surrounding assets however does sit within their setting - any future works may have the potential to affect this setting. Structure is not listed.

Figure 2 Designation Map

1.7 Building Identification

For the purpose of this report, assets will be referred to by the names detailed in the 'Museum Name' column.

Listing Name / Historic Name	Grade	Approx. Age	Museum Name (used within this report)	Other Name(s)
Former Liverpool Road Railway Station, and Station Master's House	I	1830	1830 Station	Passenger Station or Departure Station
Old Warehouse to North of Former Liverpool Road Railway Station	I	1830	1830 Warehouse	The Old Warehouse
Curtilage to Old Warehouse to North of Former Liverpool Road Railway Station	Curtilage to Grade I	1830	1830 Viaduct	
Railway Viaduct Linking Bridge Over Irwell to Liverpool Road Station	II	1830	Water Street Bridge	
Colonnaded Railway Viaduct at Former Liverpool Road Goods Depot	II	1867	1867 Viaduct	The Pineapple Line
Manchester Museum of Science and Industry, Former Lower Byrom Street Warehouse	II	1878 - 1880	New Warehouse / Main Building	Great Western Railway Warehouse, Continental Warehouse, Lower Byrom Street Warehouse
Power Hall of Museum of Science and Industry	II	1855	Power Hall (including Gantry and Offices)	Shipping Shed, Transit Shed, Goods Shed, Freight Shed

2.0

History + Development

2.0 History + Development

The following section provides a concise history of the Science and Industry Museum (SIM) site. A comprehensive history and context of the site can be found in the site's *2007 Conservation Plan*.[2]

2.7.1 The First Passenger Station

Following the successful development of the Bridgewater Canal and the uninterrupted route from Hull to Liverpool, Castlefield had become a major transshipment hub.[3] Nonetheless, due to the widespread success of the textile industry in the North West, there was a need for further transport developments to better connect Manchester and Liverpool.

Proposals for the Manchester to Liverpool rail network began to develop in the 1820s. Castlefield was chosen for the Manchester terminus, and the parcel of land between Liverpool Road and Charles Street was chosen for the development.

The railway line was carried over the Irwell by a double-arch skew bridge and over Water Street by an iron girder bridge - both by George Stephenson.

Two structures were initially constructed in 1830: a railway viaduct and also a five-bay goods warehouse. Shortly thereafter, a station for passengers was erected opposite the warehouse. The immediate popularity and success of the station rendered its warehousing capacity inadequate and in 1831 two new cotton stores were added, along with a 'shipping shed'. A third warehouse was built in 1837 - resulting in a considerable complex, linked by numerous rail tracks.[4]

The already existing 1808 house (originally built for one John Rothwell) on the corner of Liverpool Road and Water Street, was used as accommodation for the Station Master following the construction of the Station.



Figure 4 Top: Railways, bridge and River Irwell in line of Manchester and Liverpool Rail Road Liverpool and Manchester Railway, 1820 © Manchester Libraries (M48136)

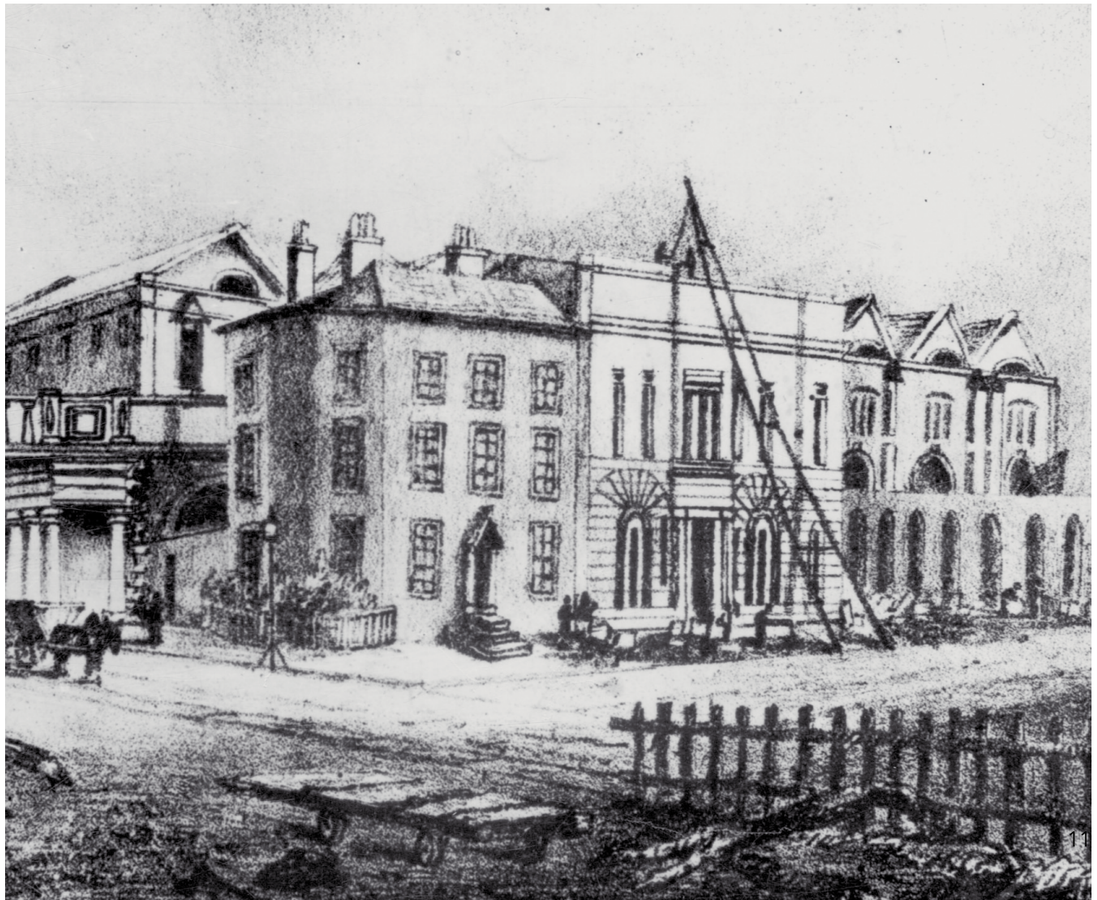
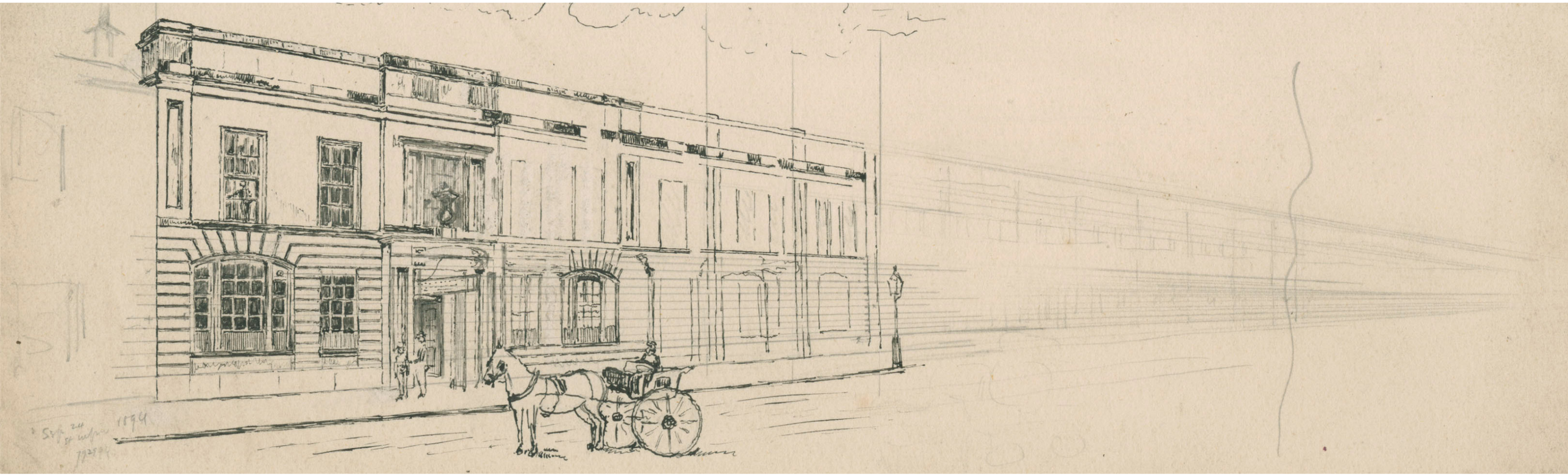


Figure 3 Bottom: Railways, bridge and River Irwell in line of Manchester and Liverpool Rail Road Liverpool and Manchester Railway, 1830 © Manchester Libraries (M62890)



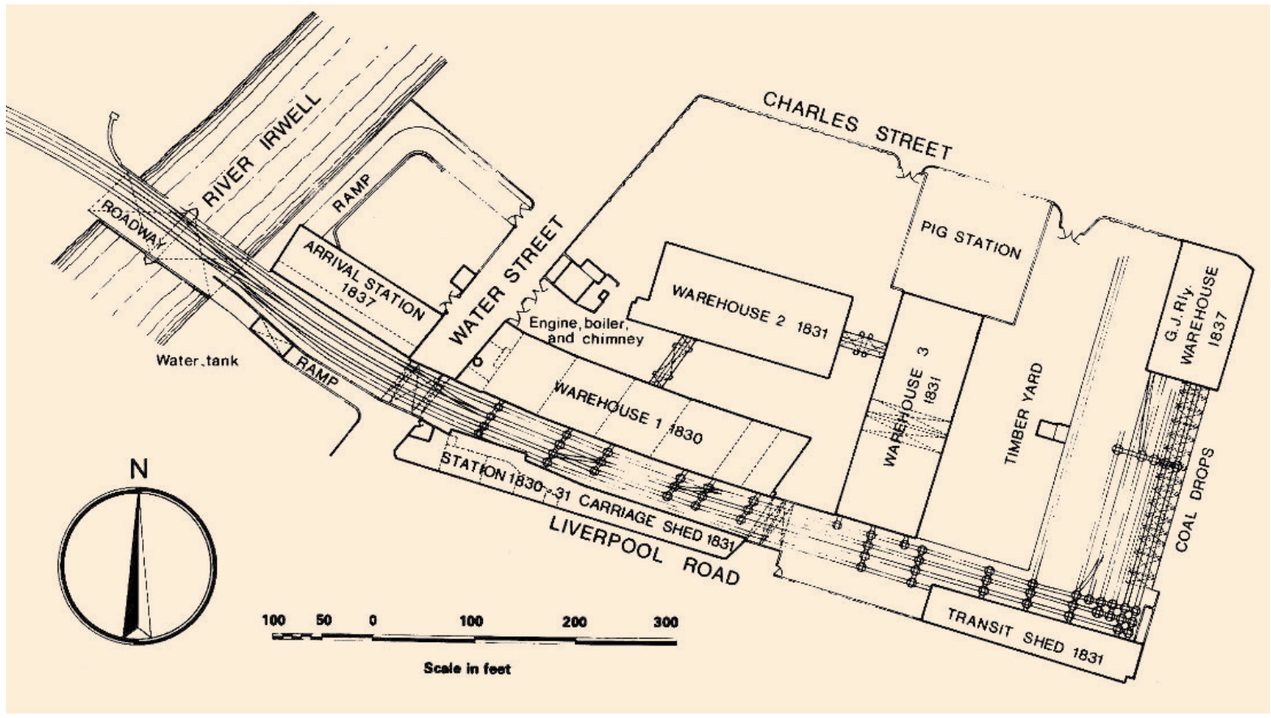


Figure 5 Top: Liverpool Road Station Drawing, 1894 © Manchester Libraries.

Figure 6 Bottom: Site Plan c.1837[10]

2.7.2 The End of Passenger Services

Following the success of the Liverpool Street station and the national success of passenger railways as a whole, it was concluded that the Liverpool Road Station was too far away from the city centre to be wholly convenient for passengers.

The Manchester & Leeds Railway Company therefore decided to extend its line to terminate at Hunt's Bank (now Victoria Station). Hunt's Bank Station opened on 4 May 1844 and thereafter Liverpool Road Station operated solely as a goods station.





2.7.3 Amalgamation & Expansion

In 1845 the Manchester and Liverpool Railway was taken over by the Grand Junction Railway, which in 1846 amalgamated with the London & Birmingham Railway and the Manchester and Birmingham Railway to create the London & North Western Railway in 1846.

The next development at the site occurred in 1855 with the construction of a new shipping shed on land acquired to the east of the site through a Memorandum of Agreement with Manchester Corporation. A new warehouse (now the Power Hall) was built on the site with the addition of new tracks, replacing the previous 1831 warehouse. The Gantry was added later around 1881, designed to move heavy goods from one wagon or cart to another.

2.7.4 The Fire of 1866

On May 23 1866, a large fire broke out at the site, destroying the two Cotton Stores, by then known as Warehouse 1 and 2[5]. Described in the next day's issue of the Manchester Guardian as

"a fire which for magnitude and destruction of property is one of the largest that has ever occurred in this city"

Both warehouses were gutted, however only one wall collapsed. The risk of further collapse led to the immediate demolition of both warehouses once the fire has been extinguished.

Figure 7 Top: Bonded Warehouse from Granada Side[11]

Figure 8 Bottom: 1867 Viaduct and Great Northern Warehouse (left) and 1830 Warehouse (right), 1980 © Manchester Libraries, (m62992).

2.7.5 Final Phase of Station Development

The fire of 1866 was the precursor to the final phase of development at the Station. The warehouses lost in the fire were replaced by the 1867-69 Grape Bond Warehouse as well as a cast-iron viaduct over the Irwell, abutting Stephenson's bridge and expanding across the site. The decision to replace two warehouses built for cotton storage with one large bonded goods warehouse is indicative of a shift in priorities.

While the south side of the viaduct formed an open undercroft, the north side formed a series of arches. Over time, these arches were used for workshops, stables and storing the Railway Company's own equipment and supplies[6].

2.7.6 The Great Western Warehouse

With the completion of the redevelopment of its existing land, the London and North Western Railway decided to acquire more land to enable expansion of its facilities. By 1878 the company has enquired enough land for the construction of the new Great Western Warehouse (the New Warehouse) and the warehouse was built between 1878 and 1880. The 1867 viaduct ran two tracks into the warehouse with loading platforms integrated into the structure.

To further connect the site, four new tracks were laid between the Great Western Warehouse and the Power Hall to connect the two viaducts (now the upper yard).

2.7.7 Decline & Fall

Liverpool Road Station continued to thrive into the twentieth century and continued to receive and handle an exceptional amount of goods.

Following the First World War and the 1921 Railway Act, The London & North Western Railway became part of the London, Midland & Scottish Railway. Physical evidence at the site suggests little investment was made in the station from with period onwards.

After the Second World War, the road network improvements and the commencement of motorway construction posed a new threat to the railway, making it less competitive.

Part of the site, including the Grape Street Warehouse was sold to Grenada Television in the 1950s, who redeveloped the building to form studios.

> *Liverpool Road Station survived the station closures that arose from the 1963 Beeching Report (which focused on underused rural passenger lines) and that reduced the size of the rail network by more than a fifth between 1965 and 1970*[7].

The rest of the site remained in use until 1975 after which point the station closed.



Figure 9 1830 Warehouse, 1979 © Manchester Libraries (m62976).w

2.7.8 Repair & Reuse

Following the closure of the station, the buildings largely fell into disrepair. There was growing local concern for the condition of the buildings, and in 1978 the Liverpool Road Station Society was formed with the aim of securing the restoration of the buildings.

In late 1978, British Rail made an improved offer to Greater Manchester Council: in addition to handing over both the Passenger Station and the Old Warehouse for the sum of £1, it would contribute £100,000 towards the restoration costs. This time the offer was accepted, although the actual formal transfer of property was not signed until June 1982.

As one of the largest funders of the North Western Museum of Science and Industry, the Liverpool Road Station presented an interesting opportunity as a potential permanent museum location.

Attention was also turned to the Shipping Shed (Power Hall) which was also acquired by the Council in 1979 on the promise of £30,000 worth of repairs.

The Council invested an additional £30,000 in relaying the tracks between the Station and the operational line, allowing the 1980 Great Railway Exposition to bring locomotives back to the station. Urgent repairs to the Old Warehouse were also completed at this time.

Following the Exposition, the restoration of the Shipping Shed, Station Master's House and Coach Offices began.

The obvious place for the Museum entrance was at the Lower Byrom Street end of the site because it was closest to the city centre. This meant that the conversion of the Shipping Shed needed to accommodate entrance facilities, which was effected by building a small extension at the north-east corner. In order to create an inviting façade along Liverpool Road, the large doorways were glazed. The interior transformation of the Shipping Shed into the Power Hall involved the careful co ordination of building work and exhibit installation, as the larger steam engines had to be securely set into the floor.

The Station Agent's House was renovated as offices for Museum staff and the booking halls and waiting rooms of the Passenger Station were to be exhibition space.

The New Warehouse was also acquired by Greater Manchester Council.





Figure 10 Top : 1830 Warehouse, 1986 © Manchester Libraries (m59048).

Figure 11 Bottom: 1830 Warehouse Roof Repairs , 1979 © Manchester Libraries (m62947).

2.7.9 The Greater Manchester Museum of Science and Industry

The first phase of restoration culminated in the opening of the Museum on 15 September 1983. The only buildings initially open to the public were the Power Hall and the Passenger Station, which contained a recreated First Class Booking Hall and an exhibition about the Liverpool & Manchester Railway in the adjacent second class booking hall.[8]

The buildings across the site were subsequently repaired in a phased period of restoration. The basement and ground floor of the New Warehouse were restored between 1987 and 1988 to create exhibition space, with the upper floors restored slightly later. A vehicle ramp was also constructed connecting the lower and upper yards.

The 1830 Warehouse was restored between 1985 and 1896 to house the National Electricity Gallery. The gallery opened in 1986.

Between 1986 and 1987, the parcel offices, shops and carriage shed, built as an extension to the Passenger Station, were rebuilt due to their unsound foundations.

The building was carefully dismantled, but there were inevitably some breakages of bricks and slates. Reclaimed like bricks and slates were used to replace original fabric lost in this way. [...] the building was modified internally by inserting doorways in the internal walls to allow an east-west visitor flow and reopening some of the viaduct arches to provide staircases between the basement and ground floor. At the western end of the former carriage shed, a glass-walled design studio was created. In 1988 the Museum was awarded the Heritage in Britain Award, given for the best project which secures the long-term preservation of a site or monument, for its restoration and conversion of the world's oldest railway station.[9]

2.7.10 Restoration & Expansion of the 1830 Warehouse & New Warehouse

Following the award of a £400,000 grant from English Heritage (now Historic England) and the completion of a full archaeological survey, the 1830 Warehouse was restored to the designs of BDA Architects between 1992 and 1996.

The New Warehouse was extended in 1992 by building a new frontage on Lower Byrom Street, flush with the entrance frontage, and in 1995 the Changing Exhibition Gallery was created.

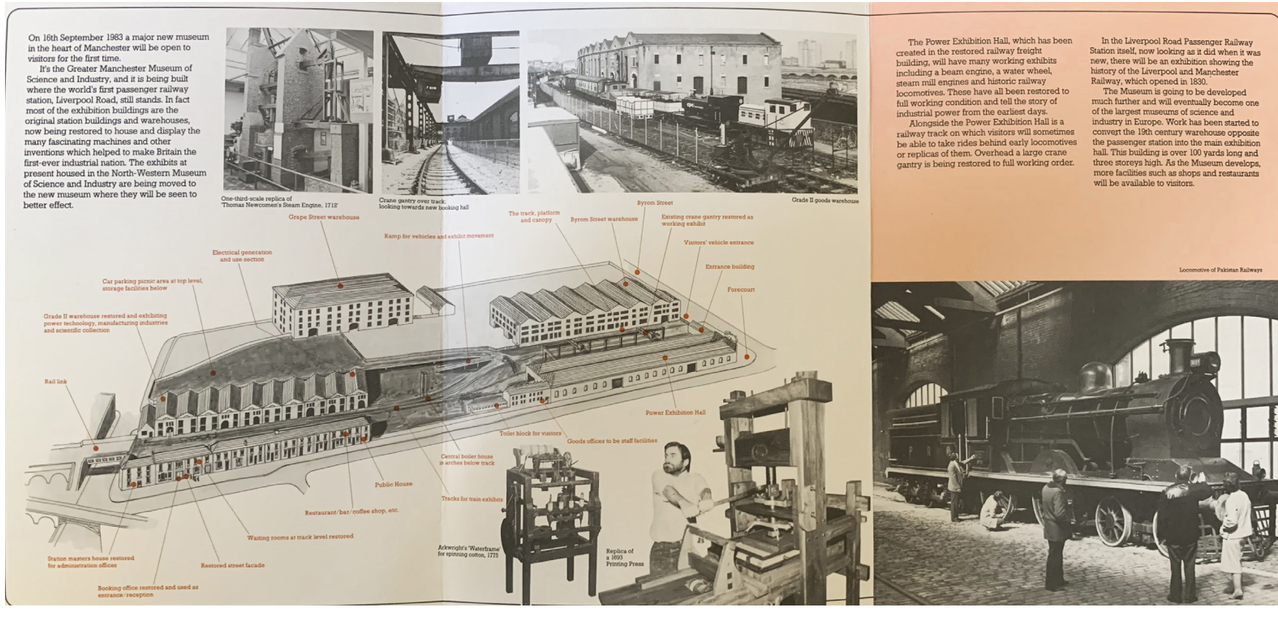
The Museum made a successful application in the first round of HLF grants (now National Lottery Heritage Fund), which netted 50% (£400,000) of the costs of further works.

This HLF [sic] success prompted the Museum to submit an application for a maximum grant towards the costs of a much bigger project, titled the Final Phase scheme, in 1996. An £8.8 million grant was approved by HLF [sic] in February 1997, but building work did not begin until March 1999.

The construction programme consisted of: the conversion of the vacant western halves of the first and second floors of the Lower Byrom Street Warehouse; the construction of a largely glass lift and stair tower and a fire escape tower abutting the west elevation; the expansion of shop extension; the conversion of much of the basement and rear half of the Colonnade to create a collections centre, plus a photographic studio and technical services workshop; the relaying of setts in the lower yard to produce a more even surface; and the completion of the network of smooth paths between buildings.

Figure 12 Promotional Brochure for the Opening of the Museum, 1983 © Manchester Archives





2.7.11 Recent Works

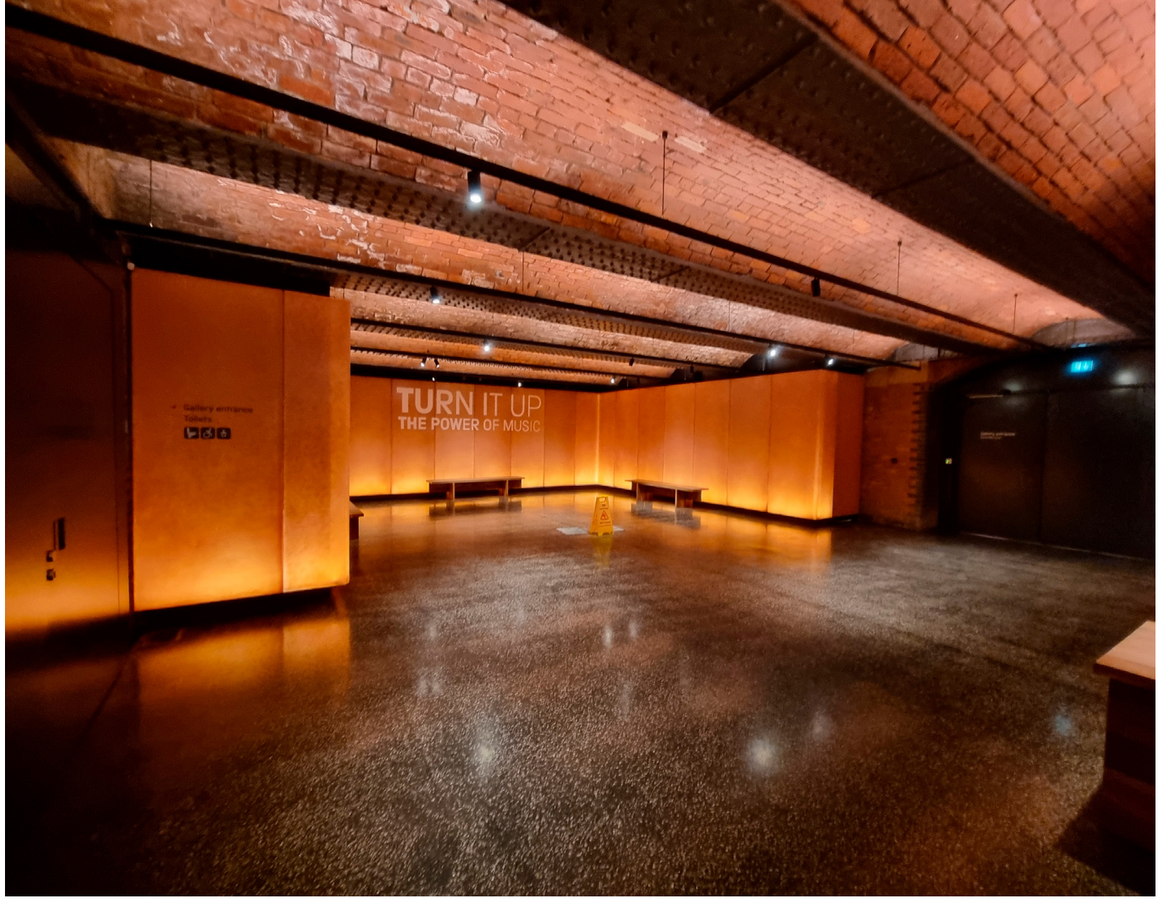
Between 2009 and 2010, Buttress Fuller Alsop Williams Architects (now Buttress Architects Ltd.) completed another round of restoration and expansion works to the New Warehouse.

The works included the removal of modern ramps, staircases and partitions, the introduction of a series of new partitions, the construction of a new entrance extension, the construction of glazed external stair cores and rooflights.

In 2021, the lower ground floor of the New Warehouse was converted into the Special Exhibitions Gallery (SEG). The SEG connects out to the lower yard with a secondary entrance leading to the undercroft of the 1867 Viaduct.

Figure 13 Top: Inside the SEG

Figure 14 Bottom: View from the SEG of the 1867 Viaduct undercroft.






MANCHESTER STUDIOS

3.0

Summary of Proposed Works

3.0 Summary of Proposed Works

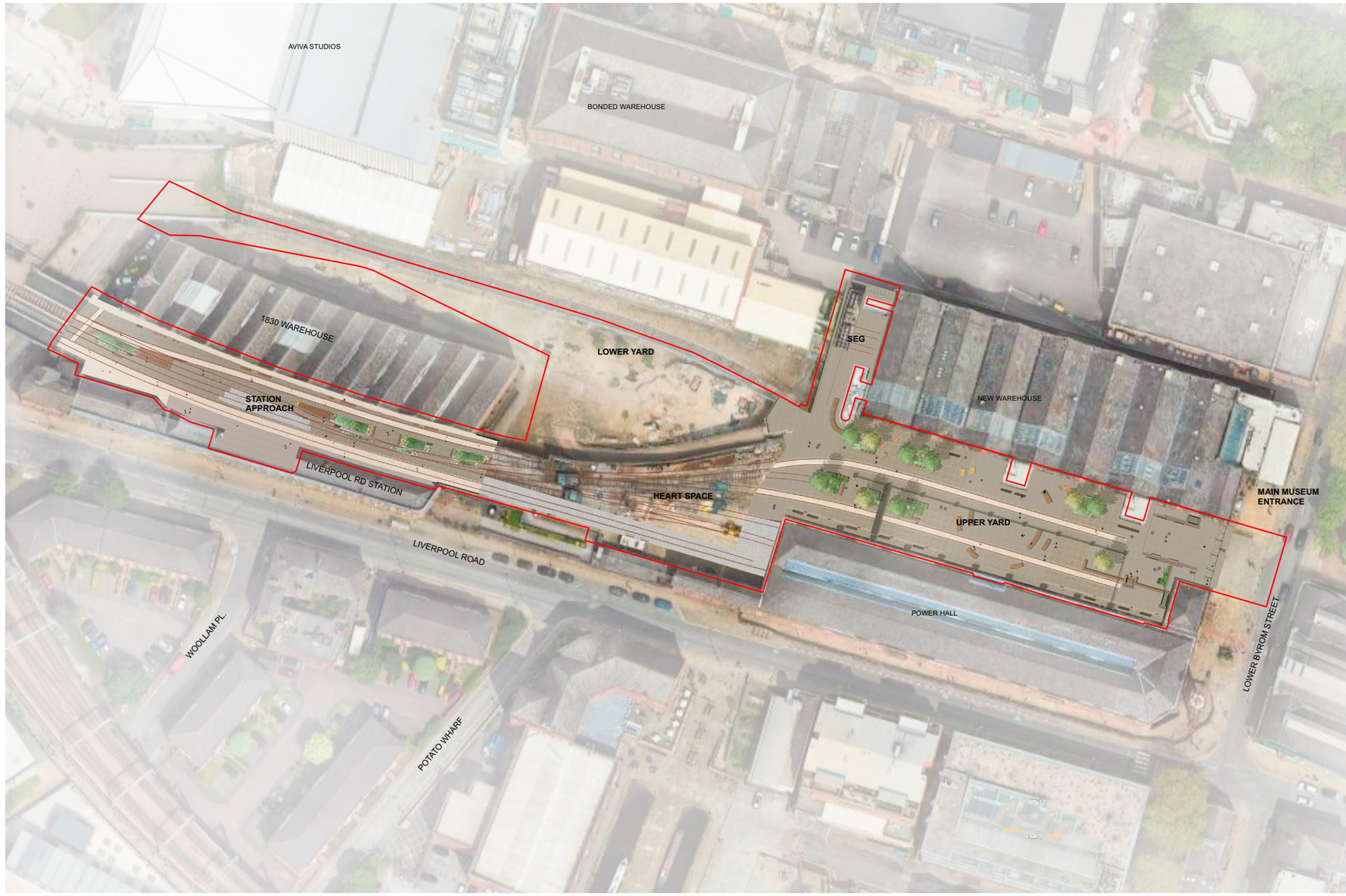
3.1 Overview

The proposed landscaping works will consolidate the approach to the appearance of the Upper Yard and Station Approach to create a welcoming and accessible space for visitors while also facilitating movement and improved wayfinding, as well as enhancing the setting of the heritage assets across the site. The works will incorporate both hard and soft landscaping works to achieve these aims.

The proposed works will also include the demolition of the modern vehicle ramp and a temporary resurfacing works that will link the Upper Yard and Station Approach.

For ease of understanding, the proposed development is broken down into Upper Yard and Station Approach for the purpose of this assessment.

Figure 15 Proposed Illustrative Arrangement - 2913-PLA-XX-XX-DR-L-0008 (Planit)



3.2 Upper Yard

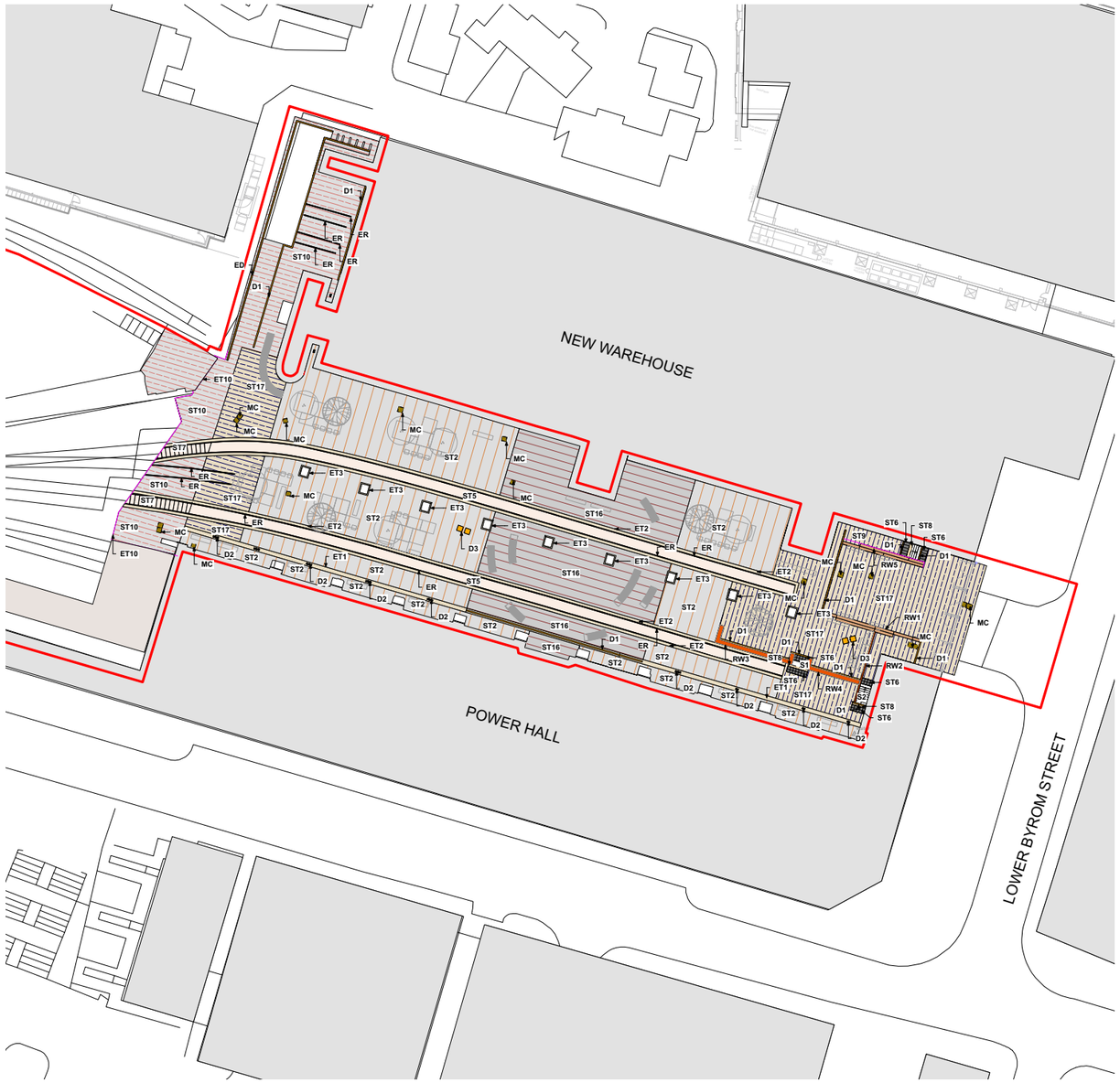
3.2.1 Hard Landscaping

The proposed hard land landscaping works for the Upper Yard will include the following works:

- Lifting of all existing surface finishes to allow for the levelling of the site.
- Relay existing loafed cobbles in areas less frequently used by the public.
- Introduction of new level granite setts in areas where improved accessibility is required including the eastern gateway to the site and north-south strips connecting the New Warehouse and Power Hall.
- Existing railway tracks to be lifted, stored and relaid to proposed levels
- In situ concrete to be laid between the railway tracks and new natural stone sett paving to the edge.
- New retaining walls to support new levels constructed of concrete and Corten steel.
- New natural stone steps and tactile paving where level change requires them.

Overall, the works will introduce a holistic approach to the surface finishing, providing level access across the site.

Figure 16 Proposed Hard Landscaping - cropped from drawing 2913-PLA-XX-XX-DR-L-1003 (Planit)



ST7 - Large Format Precast Concrete Slabs
over viaduct
Product: Large Format Slab.
Material: Reinforced precast concrete.
Size:
ST7A - Size: (L) 1400mm (W) 600mm (D)120mm.
ST7B - Size: (L) 2400mm (W) 600mm (D)120mm.
ST7C - Bespoke plan sizes. (D)120mm.
Colour: Creme.
Finish: Acid etched

ST11 New Natural Stone Setts
Material: Granite
Colour mix:(pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 8%, (dark grey) - 2%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 110mm.
Finish: Flamed and sawn and sandblasted top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

ST12 - New Natural Stone Setts
Material: Granite
Colour mix: (pink/red/grey) - 20%, (pink/red/grey) - 30% (buff/grey) - 15%, (grey/buff) - 27%, (grey) - 20%, (dark grey) - 8%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 110mm.
Finish: Flamed and sawn and sandblasted top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

ST14 - Reclaimed Ballast
Location: Under Stationary Locomotive Replica.
Material: Reclaimed from site.
Depth: Varies.

EDGING

ER - Existing Railway Tracks
lifted, securely stored and relaid to proposed levels.

RW1 - Retaining Wall
Material: below ground concrete and teared timber sleepers to top
Size: 1429mm length x 400-800mm width x 232-560mm height.

RW2 - Retaining Wall
Material: Concrete with Corten steel cladding
Size: varied height 1100-1577m, where steps wall tapers down to 175mm, 250mm wide
Colour: corten

RW3 & 4- Retaining Wall
Material: Concrete blocks with Corten steel cladding and timber top
Size: overall length 22m, varied height 300-550m, 600mm wide
Colour: corten

RW5 - Retaining Wall
Material: below ground concrete and teared timber sleepers to top
Size: 1429mm length x 400-800mm width x 232-560mm height.

ET10 - Flush Steel Edge
Material: Steel
Finish: Corten

ET11 - Steel Edge
Material: Steel
Finish: Corten

D1 -Proposed Drainage Channel
Material: Cast iron with heelsafe grating
Size: varie (L) mm x (W) 173mm (D)to engineeers's specification

E1 - Existing Drainage Channel
Existing drainage channel location to be retained and replaced with new channel.
Material: Cast iron with heelsafe grating
Size: varie (L) mm x (W) 173mm (D)to engineeers's specification

D2 - Proposed Gully
Material: Ductile iron grade
Size: (L) 462mm (W) 202mm (D)144mm

ET1 - Natural Stone Sett Paving
Location: to railway edge
Material: Granite
Colour: (pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 10%,
Size: overall width minimum 600mm (3 rows); 200mm gauge (200) Varied length (200-400mm), (tbc by engineer)
Colour: Red/Buff/Grey
Finish: Flamed and sawn and shotblasted finish to top, cropped sides, and sawn bottom.
Bond: Random stretcher with random gauge.

ET2 - Natural Stone Sett Paving
Location: to railway edge
Material: Granite
Colour: (pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 10%,
Size: overall width minimum 400mm (3 rows); Varied gauge (200) Varied length (200-400mm), (tbc by engineer)
Colour: Red/Buff/Grey
Finish: Flamed and sawn and shotblasted finish to top, cropped sides, and sawn bottom.
Bond: Random stretcher with random gauge.

ET3 - Natural Stone Sett Paving
Location: to Gantry base
Material: Granite
Colour: (pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 10%,
Size: 1 row - ;
200mm gauge, Varied length (200-400mm), (tbc by engineer)
Colour: Red/Buff/Grey
Finish: Flamed and sawn and shotblasted finish to top, cropped sides, and sawn bottom.
Bond: Random stretcher with random gauge.

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NOTES:
1. Do not scale from this drawing.
2. Always work to noted dimensions.
3. All dimensions are in millimetres unless otherwise stated.
4. All setting out, levels and dimensions to be agreed on site.
5. The dimensions of all materials must be checked on site before being laid out.
6. This drawing must be read with the relevant specification clauses and detail drawings.
7. Order of construction and setting out to be agreed on site.

BOUNDARIES

Planning Boundary

HARDWORKS

Existing to be retained

Existing Railway Tracks
lifted, securely stored and relaid to proposed levels.

ST15 - Existing Timber surface to station building, retained

Proposed

ST2 - Reclaimed Loafed Cobbles
Material: Existing Granite lifted and rigidly relayed
Size: (L) varied length 120-270 x (w) varied gauge 100-220 x (D) 100-120mm
Colour: Pink, buff, dark grey, mid grey, and yellow
Laying Pattern: Random gauge and random stretcher bond.

ST17 - New Granit Setts
Material: Granite
Colour mix:(pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 8%, (dark grey) - 2%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 110mm. Final depth TBC confirmed by engineer.
Finish: Sawn and sandblasted, flamed top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

ST16 - New Granit Setts
Material: Granite
Colour mix:(pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 8%, (dark grey) - 2%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 110mm. Final depth TBC confirmed by engineer.
Finish: Sawn and sandblasted, flamed top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

ST10 - New Granite Setts
over viaduct
Material: Granite
Colour mix:(pink/red/grey) - 34%, (pink/red/grey) - 34%, (buff/grey) - 15%, (grey/buff) - 7%, (grey) - 8%, (dark grey) - 2%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 80mm. Final depth TBC confirmed by engineer.
Finish: Sawn and sandblasted, flamed top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

ST8 - Granite Flag
to bottom of step
Size: (L) 1000 X (W) 400/330 X (D) 154/204mm.
Colour: buff with contrasting strips
Finish: Picked top, sawn on all sides
Laid: stack bond

Natural Stone Steps - S1, S2, S3
Material: Natural Stone
Size: (L) 1000 X (W) 400/330 X (D) 154/204mm.
Colour: buff with contrasting strips
Finish: Picked top, sawn on all sides
Laid: stack bond

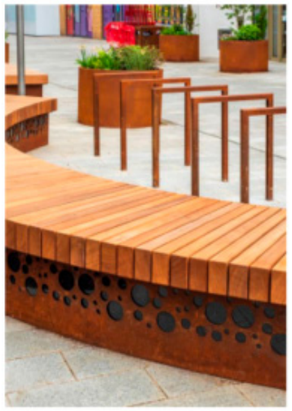
ST6 - Corduroy Tactile Paving
Material: Granite
Size: 400mm x 400mm
Colour: dark grey/black
Finish: sandblasted top, sawn sides and bottom
Laying Pattern: stack bond

ST5 - Insitu Concrete
Material: Reinforced Insitu Concrete
Colour: cream
Finish: acid etched.

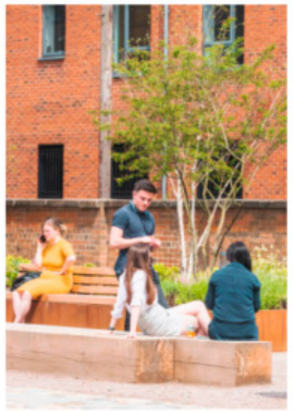
D2 - Proposed Gully
Material: Ductile iron grade
Size: (L) 462mm (W) 202mm (D)144mm

D3 - Borehole Recessed Cover
Material: Galvanised Steel
Recessed cover with paving infill.
Size: Frame: 800x 800mm

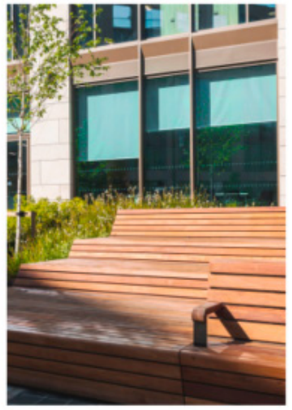
MC - Existing/Proposed Manhole Cover
retained, cover rotated in line with paving direction. Any new covers to be recessed with paving infill to engineers detail. Loading to be confirmed by engineer.



Curved free standing bench



Timber Seating



Seating and lounger



Timber topped planter seats



Bespoke bug hotel

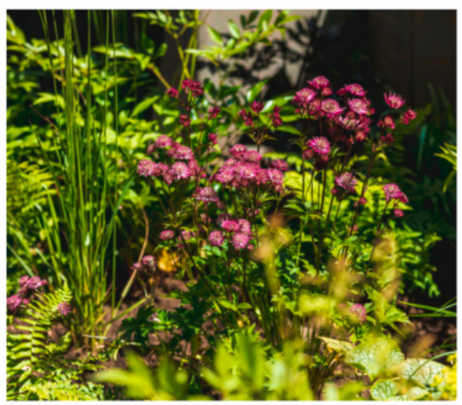


Recycling bins









3.2.2 Furniture + Soft Landscaping

The softworks proposals aim to keep main routes clear for easy pedestrian movement and legibility whilst providing green pocket spaces that compliment the historic setting of the museum.

Works will include:

- The introduction of tiered sleeper seating, individual timber seats, circular seating feature to link the entrances of the New Warehouse and the Power Hall together (varied heights to cater to different user groups).
- Existing timber picnic benches and deck chairs to be reused.
- New bins and Bug Hotels
- Ornamental raised planters, existing site planters, bulb planting, multi-stem feature tree, windflower turf (Inspired by historic photos of the tracks being rewilded) and ornamental in ground planting.

Figure 17 Precedent Images for the Soft Landscaping & Planting (Planit DAS)

3.3 Station Approach

3.3.1 Hard Landscaping

The proposed hard land landscaping works for the Station Approach will include the following works:

- Lifting of all existing ballast and tracks to be carefully lifted. Tracks to be relaid to proposed levels. Ballast to be reused in areas where planting is proposed in later phases.
- New levelled natural setts to be laid across the approach to allow safe public access.
- Pre-cast concrete slabs to be laid between the railway tracks.

3.3.2 Furniture + Soft Landscaping

The softworks proposals aim to keep main routes clear for easy pedestrian movement and legibility whilst providing green pocket spaces that compliment the historic setting of the museum.

- The introduction of tiered sleeper seating and individual timber seats.
- Existing timber picnic benches and deck chairs to be reused.
- New bins and Bug Hotels
- Ornamental raised planters, existing site planters, bulb planting, multi-stem feature tree, windflower turf (Inspired by historic photos of the tracks being rewilded) and ornamental in ground planting.

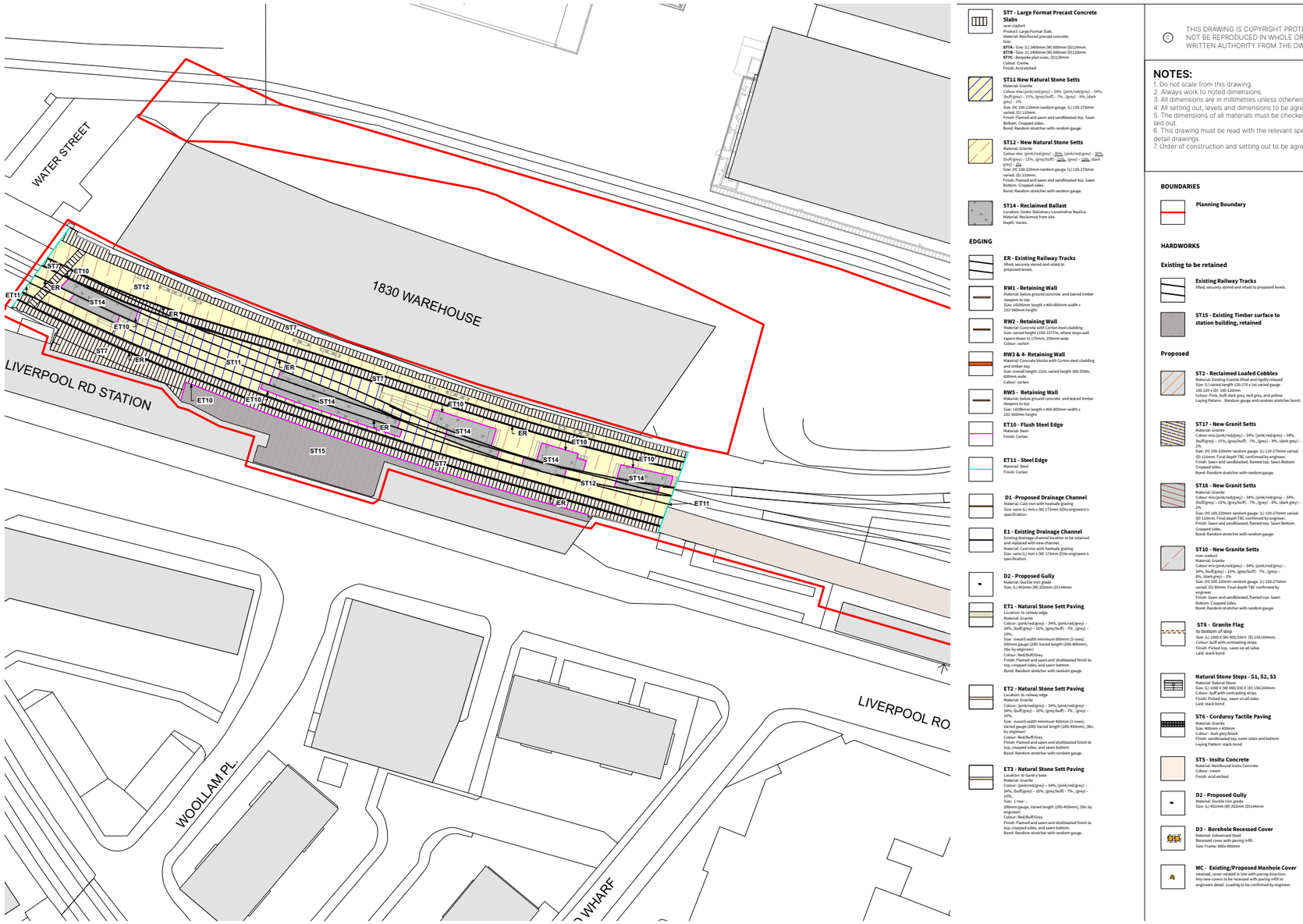


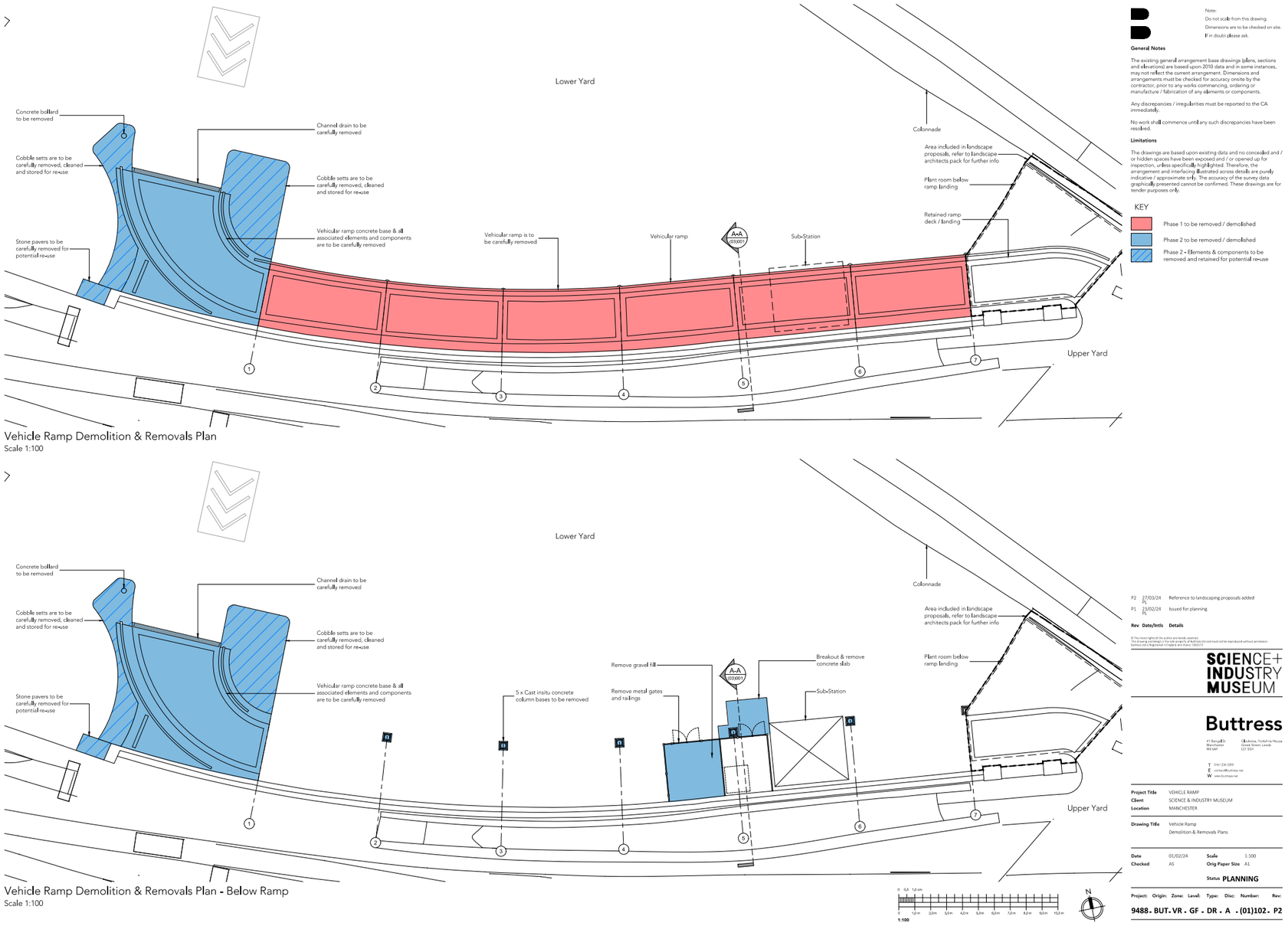
Figure 18 Proposed Hard Landscaping - cropped from drawing 2913-PLA-XX-XX-DR-L-1003 (Planit)

3.4 Vehicle Ramp Removal

Including within the proposed works is the removal of the vehicle ramp which currently connects the Lower Yard and 1830 Viaduct.

The ramp will be carefully deconstructed and any areas of disturbance to historic fabric will be made good in line with best practice for the care of historic assets and the specification outlined in 9488-BUT-CP-XX-SP-A-00004

Figure 19 Demolition & Removal Plans - 9488-BUT-VR-GF-DR-A-(01)102-P2



Note:
Do not scale from this drawing.
Dimensions are to be checked on site.
If in doubt please ask.

General Notes

The existing general arrangement base drawings (plans, sections and elevations) are based upon 2010 data and in some instances, may not reflect the current arrangement. Dimensions and arrangements must be checked for accuracy onsite by the contractor, prior to any works commencing, ordering or manufacture / fabrication of any elements or components.

Any discrepancies / irregularities must be reported to the CA immediately.

No work shall commence until any such discrepancies have been resolved.

Limitations

The drawings are based upon existing data and no concealed and / or hidden spaces have been exposed and / or opened up for inspection, unless specifically highlighted. Therefore, the arrangement and interfacing illustrated across details are purely indicative / approximate only. The accuracy of the survey data graphically presented cannot be confirmed. These drawings are for tender purposes only.

KEY

- Phase 1 to be removed / demolished
- Phase 2 to be removed / demolished
- Phase 2 - Elements & components to be removed and retained for potential re-use

Rev	Date/Initls	Details
P2	27/03/24 PL	Reference to landscaping proposals added
P1	23/02/24 PL	Issued for planning

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SCIENCE+ INDUSTRY MUSEUM

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Project Title	VEHICLE RAMP
Client	SCIENCE & INDUSTRY MUSEUM
Location	MANCHESTER
Drawing Title	Vehicle Ramp Demolition & Removals Plans
Date	01/02/24
Scale	1:100
Checked	AS
Orig Paper Size	A1
Status	**PLANNING**

Project:	Origin:	Zone:	Level:	Type:	Disc:	Number:	Rev:
9488	BUT	VR	GF	DR	A	(01)102	P2

4.0

Description, Significance + Impact Assessment

4.0 Description, Significance + Impact Assessment

For ease of reading and improved clarity, the following sections of the document will be split down asset by asset.

Each section will contain a Description of the Heritage, an Assessment of Significance, and a Heritage Impact Assessment for each of the assets respectively. This will be followed by a section addressing the impact on group value to ensure any potential cumulative impacts are captured.

The heritage assets described here are those that will potentially be impacted by the works proposed in this Application. The building descriptions have been extracted, either wholly or in part, from the site's 2007 *Conservation Plan*[12]

Full listing descriptions for the listed structures on the site are provided in **17.2 Appendix 2: Listing Descriptions.**

Those assets which are considered in the following sections includes:

Grade I
- **5.0 The 1830 Station**
- **6.0 1830 Warehouse**

Grade II
- 7.0 Water Street Bridge
- 8.0 New Warehouse
- 9.0 Power Hall + Gantry
- 10.0 1867 Viaduct (The Pineapple Line)

Curtilage
- 11.0 1830 Viaduct
- 12.0 Upper Yard
- 13.0 Lower Yard

CA
- **14.0 Castlefield Conservation Area**

These sections have been ordered based on a hierarchy of designation, with principal listed structures assessed first, followed by curtilage listed assets (irrespective of individual interest levels). It is acknowledged that the Castlefield Conservation Area is a designed asset, however it has been placed towards the end of the document to capture holistic impacts.

The methodologies used for the Assessments of Significance and Heritage Impact Assessments for each of the relevant assets are outlined on the following pages.

4.1 Assessment of Significance Methodology

Following guidance outlined in Historic England's *Conservation Principles, Policies and Guidance* (2008), along with the more recent *Historic England Advice Note 12 Statements of Heritage Significance*: Analysing Significance in Heritage Assets, the following section will aim to assess any heritage interest(s) that the site might hold.

The level of significance will be assessed based on the scale below:

Exceptional: Heritage interests having national or international importance, usually found where assets are designated at grade II*, grade I, scheduled monuments and UNESCO World Heritage sites.

High: Heritage interests having national importance, usually found where assets are designated at grade II*.

Medium: Heritage interests having regional importance, usually found where assets are designated grade II. Also, generally applies to Conservation Areas.

Low: Heritage interests that make a positive contribution to their area, group or setting. Usually, non-designated heritage assets and historic townscapes.

Neutral: Historically unimportant. These ratings are intended to address the heritage values outlined below, and do not relate to the significance of specific buildings, spaces, or areas of fabric.

Understanding of significance is broken down into the following categories:

Archaeological Interest

There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.

Architectural & Artistic Interest

These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skills, like sculpture.

Historic Interest

An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

The following breakdown of significance address each asset on the site individually. Those assets addressed are those which will be subjects to works included in the proposed development.

The significance of each asset has been written and understood in accordance with the Statement of Significance found in the 2007 MoSI (now SIM) Liverpool Road Station: Conservation Management Plan, for consistency. Sections of the following assessment of significance have been taken directly from the Conservation Management Plan, and the report should be referenced and credited accordingly.

4.2 Heritage Impact Assessment Methodology

Impacts will be assessed and scaled per British Standards BS7913 guidance for the scale of impacts, which correlates with the ICOMOS Guidance on Heritage Impact Assessments. ICOMOS suggest a 9-point scale spectrum for defining the impacts of proposed changes, which is included here in Figure 22. This scale is a useful tool within the context of the benefit and harm dichotomy of the NPPF. The scale provides the opportunity for beneficial outcomes to be quantified, balanced, and considered alongside the NPPF outcomes of: no harm, less than substantial harm, and substantial harm. Together they create a holistic approach to assessment.

4.2.1 Assessment of Scale of Specific Impact and Change

The scale of change is based on the level of proposed intervention and how much potential the intervention has to alter fundamental principles of significance of the asset. The scale of impact relates this to the significance of the asset in question. It is important to note that impacts can be both direct and indirect, and do not only relate to the physical fabric. Change and impact can also be primary or secondary; temporary or permanent; reversible or irreversible; and may arise as a consequence of construction or operation of the proposed development. For the purpose of this assessment, the following definitions have been applied:

Direct impacts are those that arise as a primary consequence of the Scheme. Direct impacts can result in the physical loss of part or all of an asset, and/or changes to its setting. Setting is, 'the surroundings in which a place is experienced, its local context, embracing present and past relationships to the adjacent landscape.'

Direct impacts resulting in physical loss are usually permanent and irreversible; normally occur as a consequence of construction; and are confined within the development footprint. The magnitude of these impacts will depend on the proportion of the asset affected, and whether its key characteristics would be affected.

Direct impacts that affect the setting of an asset can occur as a consequence of construction or operation of the scheme and can affect assets some distance from the development. Assessment of impacts on setting refers to perceptible visual and aural effects that can be appreciated at a given time. Such impacts may be temporary or permanent, reversible or irreversible depending on the extent to which the cause of the impact can be removed. Impacts may also be transient where occurrence is sporadic or of limited duration, for example related to hours of operation or the frequency of passage of vehicles.

Indirect impacts occur as a secondary consequence of construction or operation of the development, and can result in physical loss or changes to the setting of an asset beyond the development footprint.

Severity of impacts has been judged taking into account their direct and indirect effects and whether they are temporary or permanent, reversible or irreversible. The cumulative effect of separate impacts has also been considered. The magnitude of impact (summation of direct and indirect impacts) is assigned one of the descriptors; impacts may be adverse or beneficial.

VALUE OF HERITAGE ASSET	SCALE & SEVERITY OF CHANGE/IMPACT (EITHER ADVERSE OR BENEFICIAL)				
	No Change	Negligible Change	Minor Change	Moderate Change	Major Change
Exceptional (Grade I/Scheduled Monument)	Neutral	Slight	Moderate/ Large	Large/Very Large	Very Large
High (Grade II*)	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large/Very Large
Medium (Grade II/ Conservation Area)	Neutral	Neutral/Slight	Slight	Moderate	Moderate/ Large
Low (Locally Listed)	Neutral	Neutral/Slight	Neutral/Slight	Slight	Slight/ Moderate
Negligible (Non-Designated)	Neutral	Neutral	Neutral/Slight	Neutral/Slight	Slight

Figure 20 Significance/Scale of Impacts Table

No Change	Negligible Change	Minor Change	Moderate Change	Major Change
No material change to the heritage asset or its setting.	A small change or alteration, but unimportant. Having no visual or indirect impacts on the asset or its setting. Slight changes to use or access.	A small change to an element of fabric or setting that results in a noticeable difference. Limited indirect impacts or changes to character.	Changes to an element, including replacement, or insertion of a new element, where the asset or its setting has clearly been modified. Noticeable indirect impacts.	A change of great extent, including the complete removal of an element. Changes to most or all of the asset or its setting. Total alteration of the asset. Extreme indirect impacts.

Figure 21 Definition of types of change

Major beneficial	Moderate beneficial	Minor beneficial	Negligible beneficial	Neutral	Negligible adverse	Minor adverse	Moderate adverse	Major adverse

Figure 22 9-point scale of impact

5.0

1830 Station

5.0 The 1830 Station

5.1 Description of the Heritage

The Liverpool Road Station Complex is the oldest part of the site, and comprises the 1830 Station (including the Station Masters House), the 1830 Warehouse, and the 1830 Viaduct.

The 1830 Station itself comprises three buildings: The Station Master's House; the Passenger Station; the Carrier's Offices, Carriage Shed and Shops.

The Station Master's House is a late Georgian three-storey corner house (with basement) with the principal elevation on Liverpool Road. The symmetrical front façade has three bays while the Water Street façade has 2 bays. It is trapezoidal in plan with an oblique corner and a one-bay extension to the rear, where there is a service yard. It has a pitched and gable slate roof, with three chimney stacks. The main façade is dominated by the front door, positioned between stone Doric pilasters and the large sash windows.

The extension to the rear almost abuts the 1830 viaduct at first floor level. A modern fire escape access the rear of the house at second floor level. At ground floor level there are heavy timber double gates from Water Street into the service yard with the back door and access to the arches of the viaduct.[13]



Figure 23 View of the Liverpool Road Station Complex, with the 1830 Station in the foreground, and the 1830 Warehouse behind (obscured by scaffolding)





The Passenger Station is a two-storey (with basement) building with its main façade on Liverpool Road, forming a continuous façade with the Station Master's House on the west and the Carriers' Offices and Shops on the east.

The main façade is mainly of brick disguised by the application of stucco, which has a rusticated ashlar-effect finish on the ground floor and a smooth finish on the first floor, brickwork is exposed on the rear elevation. Door cases, ground floor sills, stringing, cornice and coping are sandstone. The gabled roof is of slate with three chimney stacks.

It is rectangular in plan and is almost symmetrical around the projecting entrance bay with double doors between double square stone pilasters below a stone headstone and moulded architrave. Above this is a grand four-by-three sash window set between stone mullions, with narrow lights at each side. The door to the second class hall is at the eastern end and is less imposing. The main ground floor windows echo the upper central window formation but have arched lintels. A wrought-iron light extends over the doorway and a stone sundial baluster, visible from the first class waiting room, was added in 1833. At platform level, to the rear of the building, door open on to the platform from each waiting room. Initially the space was left uncovered; a roof was added in 1834.

The Carrier's Offices, Carriage Shed & Shops comprise a long narrow, slightly irregular rectangle building of two storeys with basement. The Liverpool Road façade is brick. The eight two-bay shop units were separated by stone pilasters up to the moulded stone cornice. The first floor window lintels and the moulded coping of the parapet is also of stone. The gable roof is of slate with four chimney stacks. Most, but not all, shops had a door between two sash windows; others had a door to the west and a single window or a door with two windows to the side. The east end of the building is angled with a curve to the main facade and has no window at ground floor level in the last curved bay. The first floor carriage shed was open on the north side.[14]

Figure 24 Top: Coach Offices to the rear of the 1830 Station

Figure 25 Bottom: 1830 Station, facing the railway tracks

Figure 26 Overleaf: View down the tracks, 1830 Warehouse Left, 1830 Station Right

5.2 Assessment of Significance

5.2.1 Archaeological Interest

5.2.1.1 Prehistoric

The understanding of prehistoric settlement in Manchester is still poorly understood. Physical evidence for prehistoric settlements are fragmentary. An excavation carried out in 2007 at 73/83 Liverpool Road (Adjacent to the Power Hall) yielded 'slight evidence of prehistoric activity in the area… in the form of two Mesolithic flint, one Neolithic/Bronze Age waste flake and one fragment of Late Bronze Age/Iron Age pottery. All of these artefacts were recovered from either Roman or 1th century deposits'.[15]

The potential for buried archaeological remains deriving from prehistoric activity within the Site Area is considered to be **low**.

5.2.1.2 Roman

'The first [Roman] military occupation of Manchester was established during the governorship of Agricola (AD 77-84), and commenced with a five-acre wooden fort, known as Mamucium.[16] The site of this encampment is marked today by Camp Street in Castlefield, situated c 250m to the south-east of the Site

Excavations carried out 73/83 Liverpool Road uncovered truncated Roman remains providing evidence that the *Vicus* (or village) of the Castlefield Roman fort extended north-west, representing three distinct phases of activity. [17]The lack of cellars in some of the Georgian housing resulted in many of the remains being preserved in situ.

Additional excavations and finds in the area have revealed that the extent of the *Vicus* extended north of the fort, terminating at Quay Street. The western end of the museum site therefore sits within the possible settlement boundary.

There is little evidence within the site of Roman activity between the *Vicus* and the River Irwell, with the exception of the discovery of six unstratified Roman coins found 'in 1876 while foundations were being dug for a bridge over the Irwell, near Quay Street'.[18]

Due to the extensive development, and redevelopment of the 1830 Station, the potential for any subsurface remains within the footprint of the warehouse are **low.**

5.2.1.3 Medieval

There is very little archaeological evidence in the region as a whole that represents the period between the end of the Roman occupation and the Norman Conquest.

Given the location of the Site away from known medieval settlements and Manchester's medieval centre, the potential for buried archaeological remains is unlikely. The possibility of medieval finds should not be ruled out given the agricultural use of the area and practice of manuring arable fields, however it is unlikely that any in situ finds will be recovered.

The potential for buried archaeological remains deriving from Medieval activity within the Site Area is considered to be **low**.

5.2.1.4 Post-medieval

'During the 18th century, south-east Lancashire was predominantly agricultural with isolated settlements, market towns and Manchester at its heart. By the 1780s, Manchester became the centre of a factory-based cotton manufacturing industry of international repute. The industrialisation of Manchester was greatly facilitated by the expansion of the canal network and canalisation of the city's waterways during the 18th century, which provided the first efficient means of transporting bulk loads of goods'.[19]

The area remained largely rural until the construction of the house of the corner of Liverpool Road and Water Street, and the later construction of the Liverpool Road Station.

The potential for buried archaeological remains deriving from post-medieval activity within the Site Area is considered to be **low**.

5.2.1.5 Summary of Archaeological Interest

Due to the highly developed nature of the site, and the extensive disturbance that has resulted from the construction of the 1830 Station, the potential for archaeological remains from all periods is low.

Overall, the archaeological interest of the site is **low**.

5.2.2 Architectural & Artistic Interest

5.2.2.1 Most Complete Early Railway Station

Apart from the 1830 road bridge over Water Street, which was replaced in 1905, all of the original Liverpool Road Station structures survive – the river bridge, the passenger station, the warehouse and the viaduct. Hence, in addition to their individual merits, the original structures have group value rooted in their mutual context. Further cumulative value is provided by the later buildings, which enable architectural comparisons to be made, particularly in relation to the development of the railway warehouse as a building type. The half-Georgian, half-Victorian character of Liverpool Road Station makes it a fascinating microcosm of railway station evolution.

5.2.2.2 Prototype nineteenth century railway station

As the most ambitious of the pioneering railways, the Liverpool & Manchester Railway provided a blueprint for railway development. With no earlier examples of passenger stations off of which to base the designs, the Liverpool Station was of original and new design. The station later provided a blueprint for the design of other passenger stations.

5.2.2.3 Example of the technical expertise of nineteenth century Manchester building firms

The original Liverpool Road Station buildings are a testament to the competence and efficiency of their builders. Both the 1830 Warehouse and the Passenger Station had to be built within a five-month period to be ready for the opening of the Railway on 15 September 1830.

5.2.2.4 Dramatic contribution to the character of the streetscape

Liverpool Road Station occupies a prominent site, which is bounded by Liverpool Road, Water Street, Lower Byrom Street and the Granada site. It is the Liverpool Road façade that forms the frontage of the site. The long frontage gives the site an imposing presence and is a characteristic shared by many of the Victorian railway stations that followed.

The overall mass of the 1830 Station also makes an important contribution to the streetscape, particularly when viewed from one of the operational railway viaducts that cross Castlefield.

5.2.2.5 Inspiration to engineers, writers, and artists

The Liverpool & Manchester Railway was a remarkable achievement in terms of both civil and mechanical engineering. As such it inspired a young generation of engineers, including James Nasmyth (1808-1890).

The Station is seen depicted in many works of art and literacy. The Liverpool and Manchester Railway Company actively encouraged the glorification of their venture through artistic representation.

The architectural and artistic interest of The 1830 Station is **exceptional**.

5.2.3 Historic Interest

5.2.3.1 First Passenger Station

The Liverpool Road Passenger Station of 1830 is the only surviving original passenger station from the pioneering phase of railway development and is the oldest passenger station in the world. The station is representative of the growth and success of the railway industry and the desire of the population to travel by train during the 19th century.

5.2.3.2 Exemplifies several aspects of railway innovation

The Liverpool & Manchester Railway was the first railway to be approved at the outset as a passenger and goods railway, and to be built in accordance.

The Liverpool & Manchester Railway was also the first railway to use steam locomotives to haul both passenger and goods trains.

The Liverpool & Manchester Railway can also be regarded as the first mainline railway because the first step towards the creation of an interlinking railway network was taken when it joined up with the Grand Junction Railway in 1837.

5.2.3.3 Inspirational corporate prototype

The Liverpool & Manchester Railway Act was the most detailed Railway Act to date, and as such formed a model for future Acts.

5.2.3.4 The interconnection between the railway and industrial development and trade

The constructing and subsequent development of the station and the railway system as a whole was representative of the growth in industry and manufacturing and the need for improved transport connections. . Railways proved to be economically beneficial, not just by facilitating trade, but also by increasing demand for raw materials that they directly consumed, such as coal, iron and steel.

5.2.3.5 Association with the leading railway engineer, George Stephenson

It is widely accepted, even by those who question his engineering inventiveness, that George Stephenson did more than anyone else to establish steam-powered railways as a practical proposition.

5.2.3.6 Impact on passenger travel and mobility

The passenger station holds communal and social value. As a cheaper and faster form of transport than the stagecoach or mail coach, the railways made travel accessible to more people, allowing greater freedom of movement around the country.

5.2.3.7 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

The site also holds communal value relating to its operation as a museum. The site is an educational resource and tourist attraction, promoting learning, community engagement and inspiring innovation and creativity. The site is visited by an average of 500,000-600,000 visitors per year, and will hold memory and meaning for many of those visitors.

5.2.4 Summary of Significance

The **exceptional** heritage significance of the Liverpool Road Station and Station Master's House is captured by its Grade I designation.

The asset has international significance as the first, and best surviving, passenger railway in the world. The site is a fine example of Victorian railway design and engineering; the 1830 Station, as well as the surrounding associated buildings hold exceptional group value and make a positive contribution to the wider area and the Castlefield Conservation Area.

The site holds significant communal value relating to both its former use as a passenger station, and as its current use as part of the wider museum site.

The overall heritage significance of The 1830 Station is **exceptional**.


1830 STATION

5.3 Heritage Impact Assessment

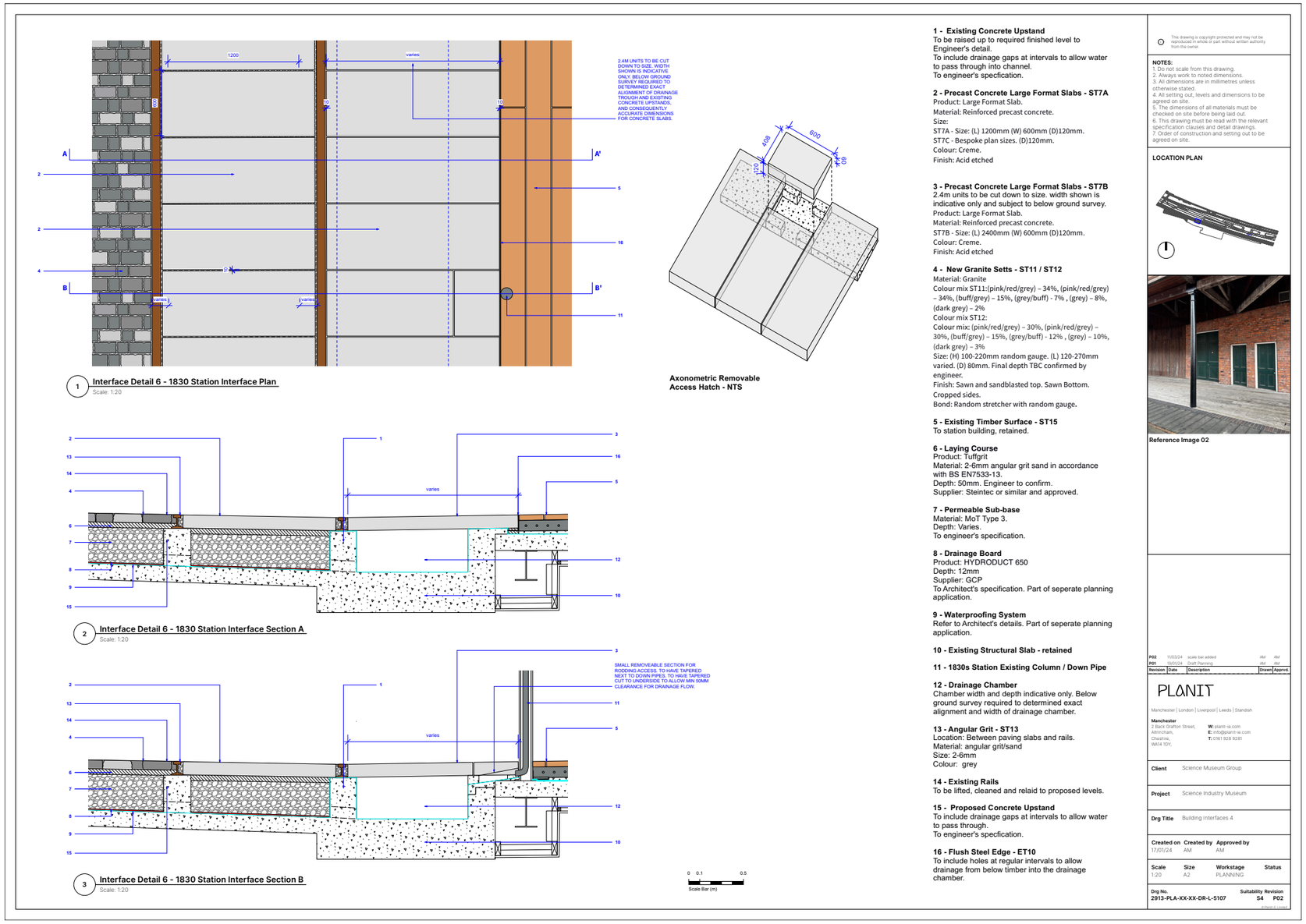
5.3.1 Impact on the Fabric

The only direct impact on the historic fabric of the 1830 Station will be the proposed interfaces between the surface finishes of the Station Approach and the north elevation of the building, the details of which can be seen in drawings 2913-PLA-XX-XX-DR-L-5107 and 2913-PLA-XX-XX-DR-L-5110, seen in Figure 27, adjacent, and Figure 28, overleaf.

All proposed alterations to the interfaces are in-line with the consented works included in the previous application for waterproofing works to the Viaduct (Application Ref. 138402/LO/2023), which were concluded to result in **no harm** to the fabric or significance of the asset.

The removal of the existing timbers and brick course which are situated between the 1830 Station and Viaduct is not considered to be harmful as the existing finish is non-original and will not result in the loss of any historic fabric. The use of new concrete caps will also allow for below ground access to the troughs and downpipe outlets for effective maintenance works.

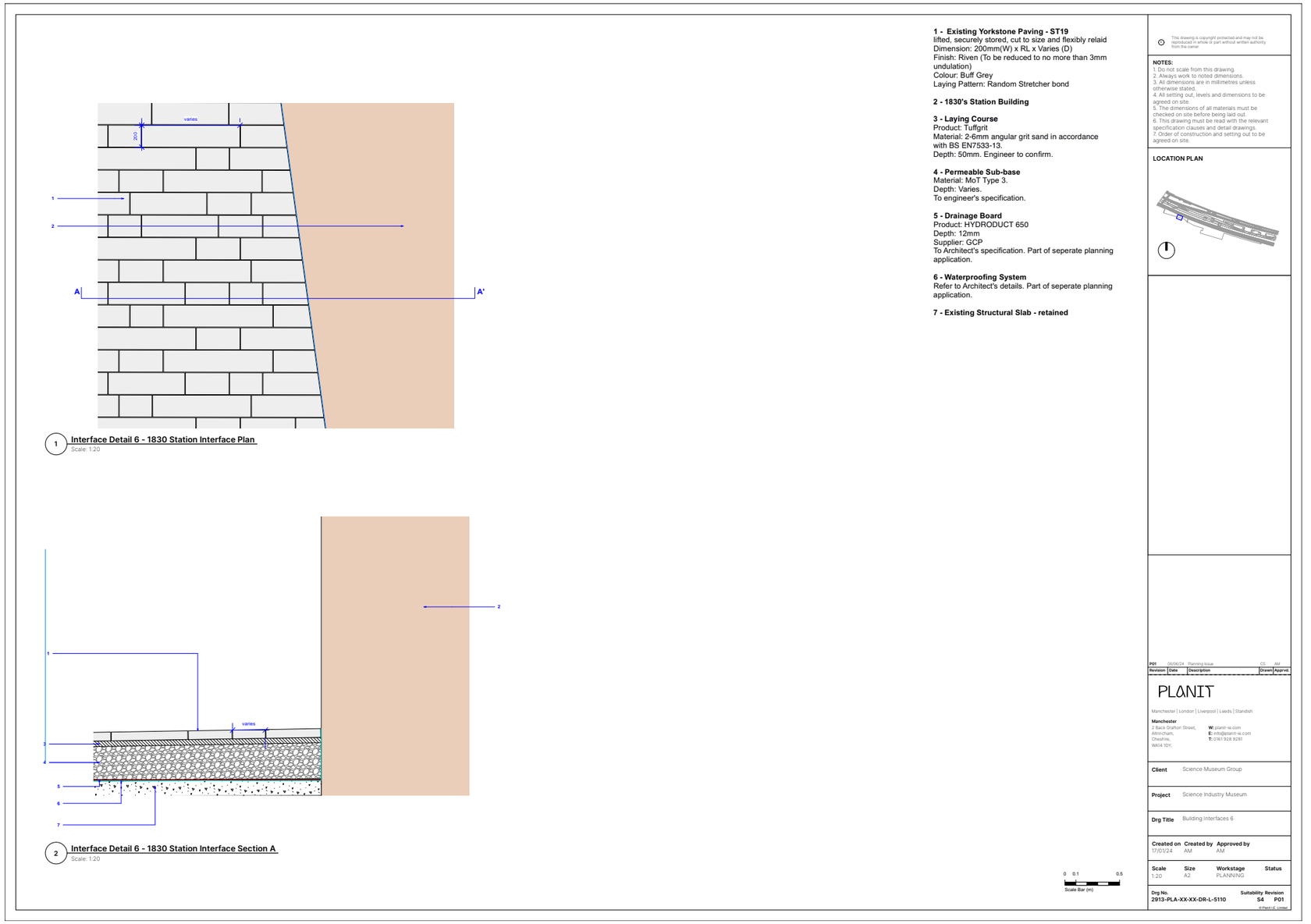
Figure 27 Interface detail for 1830 Station



The stone paving to the north of the Station Master's House is to be carefully lifted, cut to size and flexibly relaid where existing. Following a comparative study between the existing fabric, historic images and archival material, the team were unable to conclude the age or originality of existing paving slabs. It is clear that the slabs have been lifted, rearranged and potentially replaced since the late 1800s, however have remained a consistent feature in various forms in this location for over 150 years. Consequently, the retention of the paving slabs is considered to be important. The paving will be cut and rearranged where necessary to allow the surface to be made compliant with accessibility requirements, however the overall appearance and character of area will be retained.

Overall, the new interfaces will result in **no harm** to the fabric and will result in **no harm** to the significance of the asset.

Figure 28 Interface detail for stone paving - north elevation of 1830 Station Master's House



5.3.2 Impact on the Setting + Character

Overall, the proposed landscaping works seek to enhance visitor experience at the museum site. The implementation of new seating, planting and areas for general activities will increase visitors ability to appreciate the site, as well as the 1830 Station as an individual asset, promoting increased dwell time and creating a space in which the public can enjoy for sustained periods of time.

Planting and seating areas have been carefully concentrated along the central 'spine' of the viaduct to set them back from the 1830 Station as to not block or obscure views of its significant façade, and reduce the overall impact on its setting.

The retention and relaying of the existing rails will be beneficial to the setting and character of the 1830 Station buildings as they form an important contribution to its existing setting and understanding of its former use.

The introduction of new level setts to the Station Approach will help to restore some of the original historic character to the area; historic images show that the viaduct/track area would originally have been covered by loafed setts in-between the railway tracks, and following multiple phases of degradation and redevelopment, these setts have since been replaced by modern ballast. The reintroduction of setts to the Station Approach will in turn enhance the setting of the 1830 Station, and allow visitor access onto the tracks, creating a larger space in which visitors can enjoy and appreciate the site and its assets.

The proposed scheme will enhance the overall character and appearance of the Station Approach, introducing a consistent design language and material palette. A more coherent landscape will help the site to read as one, help to improve sense of place, and will compliment the uniformity, aesthetic quality and historic character of the 1830 Station. This will enhance the setting of the asset.

Overall, the work will result in **moderate change** to the setting of the 1830 Station which will have a **large/very large impact**, the nature of which will be **moderate beneficial** and will result in **no harm** to the asset overall.

5.3.3 Overall Impact

Overall, the proposed works will result in **no harm** to the fabric of the 1830 Station, and **no harm** to the setting of the asset.

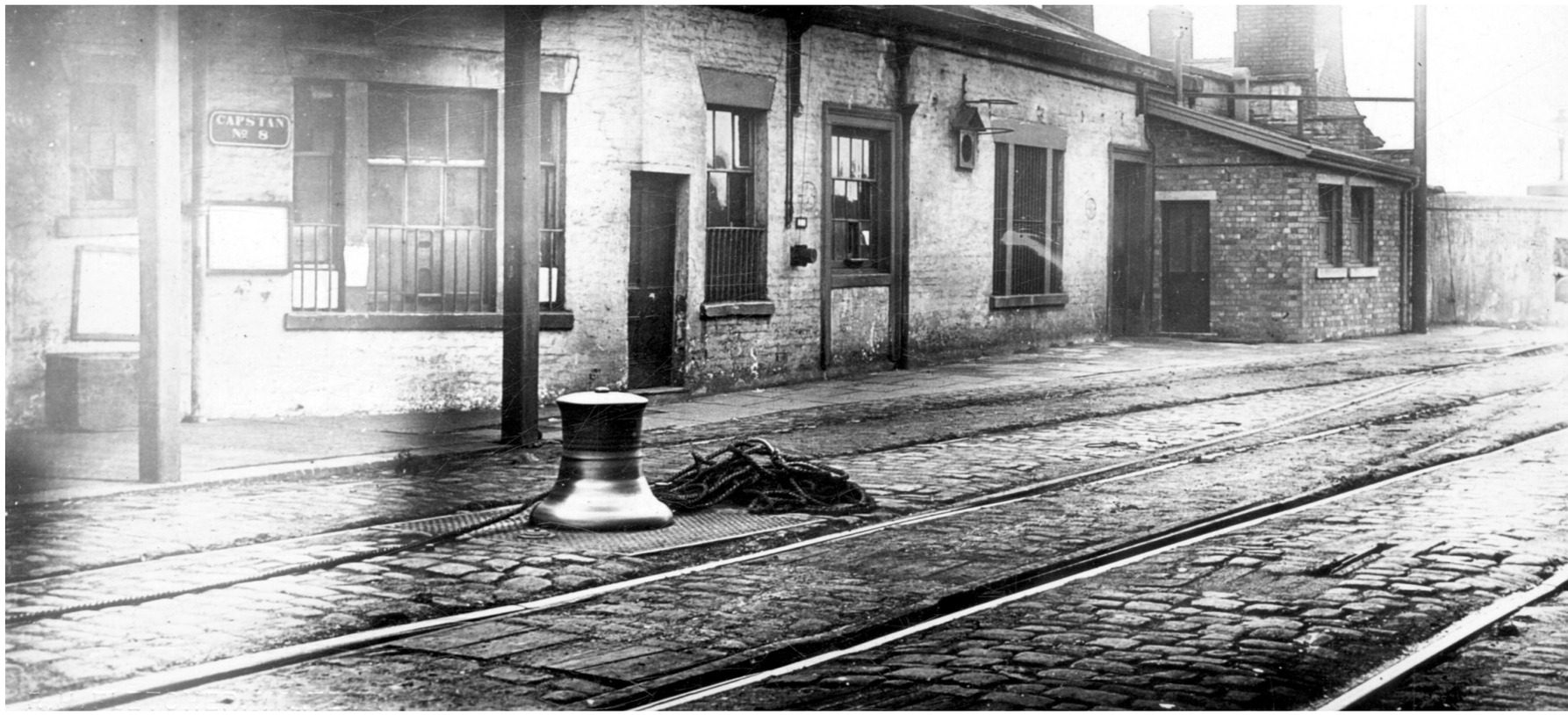


Figure 29 Liverpool Road Station, 1895 © Manchester Libraries (m62886)

6.0

1830 Warehouse

6.0 1830 Warehouse

6.1 Description of the Heritage

The warehouse was built to provide warehousing facilities for the railway. The company originally advertised for five separate warehouses, which was executed as a single warehouse with five double bays.

Each bay was designed to operate independently for vertical movement of goods and to accommodate goods being delivered both by rail (by turntable and transverse tracks entering the building) and by road, and the transhipment between.

The building is a parallelogram, 320 x 70 feet, with a slight curve to accommodate the line of the railway on the southern elevation. It is timber framed (with cast iron columns in the basement) with brick walls and a slate roof (with some glazing). Stone is used for the sills and lintels, cornice and coping blocks for the gable ends. It is of five storeys (including the basement), but presenting only two to the southern (rail) elevation. The main northern façade is characterised by the strong vertical lines of the brick pilasters and the vertical lines of the loading doors. The transverse gable roofs end in gables with stone copings, linked by short flats; the gables are accentuated by lunettes above the moulded cornice. The loading bays are surmounted by openings for the hoist jibs, which remain in varying degrees of repair.[20]





Figure 30 Top: North Elevation of the 1830 Warehouse

Figure 31 Bottom: Eastern end of the South Elevation, looking east across the site.



Figure 33 1830 Warehouse from lower yard



Figure 32 Southern and Eastern Elevations of the 1830 Warehouse with viaduct in the foreground

6.2 Assessment of Significance

6.2.1 Archaeological Interest

6.2.1.1 Prehistoric

The understanding of prehistoric settlement in Manchester is still poorly understood. Physical evidence for prehistoric settlements are fragmentary. An excavation carried out in 2007 at 73/83 Liverpool Road (Adjacent to the Power Hall) yielded 'slight evidence of prehistoric activity in the area… in the form of two Mesolithic flint, one Neolithic/Bronze Age waste flake and one fragment of Late Bronze Age/Iron Age pottery. All of these artefacts were recovered from either Roman or 1th century deposits'.[21]

The potential for buried archaeological remains deriving from prehistoric activity within the Site Area is considered to be **low**.

6.2.1.2 Roman

'The first [Roman] military occupation of Manchester was established during the governorship of Agricola (AD 77-84), and commenced with a five-acre wooden fort, known as Mamucium.[22] The site of this encampment is marked today by Camp Street in Castlefield, situated c 250m to the south-east of the Site

Excavations carried out 73/83 Liverpool Road uncovered truncated Roman remains providing evidence that the *Vicus* (or village) of the Castlefield Roman fort extended north-west, representing three distinct phases of activity.[23] The lack of cellars in some of the Georgian housing resulted in many of the remains being preserved in situ.

Additional excavations and finds in the area have revealed that the extent of the *Vicus* extended north of the fort, terminating at Quay Street. The western end of the museum site therefore sits within the possible settlement boundary.

There is little evidence within the site of Roman activity between the *Vicus* and the River Irwell, with the exception of the discovery of six unstratified Roman coins found 'in 1876 while foundations were being dug for a bridge over the Irwell, near Quay Street'.[24]

Due to the extensive development and ground destruction required to construct the 1830 Warehouse, the potential for any subsurface remains within the footprint of the warehouse are **low.**

6.2.1.3 Medieval

There is very little archaeological evidence in the region as a whole that represents the period between the end of the Roman occupation and the Norman Conquest.

Given the location of the Site away from known medieval settlements and Manchester's medieval centre, the potential for buried archaeological remains is unlikely. The possibility of medieval finds should not be ruled out given the agricultural use of the area and practice of manuring arable fields, however it is unlikely that any in situ finds will be recovered.

The potential for buried archaeological remains deriving from Medieval activity within the Site Area is considered to be **low**.

6.2.1.4 Post-medieval

'During the 18th century, south-east Lancashire was predominantly agricultural with isolated settlements, market towns and Manchester at its heart. By the 1780s, Manchester became the centre of a factory-based cotton manufacturing industry of international repute. The industrialisation of Manchester was greatly facilitated by the expansion of the canal network and canalisation of the city's waterways during the 18th century, which provided the first efficient means of transporting bulk loads of goods'.[25]

The area remained largely rural until the construction of the house of the corner of Liverpool Road and Water Street, and the later construction of the Liverpool Road Station.

The potential for buried archaeological remains deriving from post-medieval activity within the Site Area is considered to be **low**.

6.2.1.5 Summary of Archaeological Interest

Due to the highly developed nature of the site, and the extensive disturbance that has resulted from the construction of the 1830 Warehouse the potential for archaeological remains from all periods is low.

Overall, the archaeological interest of the site is **low**.

6.2.2 Architectural & Artistic Interest

6.2.2.1 Most Complete Early Railway Station

Apart from the 1830 road bridge over Water Street, which was replaced in 1905, all of the original Liverpool Road Station structures survive – the river bridge, the passenger station, the warehouse and the viaduct. Hence, in addition to their individual merits, the original structures have group value rooted in their mutual context. Further cumulative value is provided by the later buildings, which enable architectural comparisons to be made, particularly in relation to the development of the railway warehouse as a building type. The half-Georgian, half-Victorian character of Liverpool Road Station makes it a fascinating microcosm of railway station evolution.

6.2.2.2 Prototype nineteenth century railway station

As the most ambitious of the pioneering railways, the Liverpool & Manchester Railway provided a blueprint for railway development. With no earlier examples of passenger stations off of which to base the designs, the Liverpool Station was of original and new design. The station later provided a blueprint for the design of other passenger stations.

6.2.2.3 Example of the technical expertise of nineteenth century Manchester building firms

The original Liverpool Road Station buildings are a testament to the competence and efficiency of their builders. Both the 1830 Warehouse and the Passenger Station had to be built within a five-month period to be ready for the opening of the Railway on 15 September 1830.

The Warehouse was a particular challenge because it abuts the curving viaduct. This arrangement required a parallelogram cross-section, which presented a more onerous construction task than a standard rectangular cross-section would have done. It is likely that the structural design of the building was dictated by a combination of the cross-sectional form and the time constraints. In other circumstances, one might have expected the Liverpool & Manchester Railway Company to opt for a more technologically advanced fireproof building, rather than a building with an internal timber frame. In the actual circumstances, the traditional building type was the safer choice, because a fireproof building would have been dependent on a foundry producing customised ironwork on time and on a smaller pool of appropriately experienced construction workers.

6.2.2.4 Exemplifies several aspects of railway innovation

The Liverpool & Manchester Railway was the first railway to be approved at the outset as a passenger and goods railway, and to be built in accordance.

The Liverpool & Manchester Railway was also the first railway to use steam locomotives to haul both passenger and goods trains.

The Liverpool & Manchester Railway can also be regarded as the first mainline railway because the first step towards the creation of an interlinking railway network was taken when it joined up with the Grand Junction Railway in 1837.

6.2.2.5 Dramatic contribution to the character of the streetscape

Liverpool Road Station occupies a prominent site, which is bounded by Liverpool Road, Water Street, Lower Byrom Street and the Granada site.

The Warehouse can be seen from a number of public vantage points, as well as views across the city from a number of it's tower blocks, with its large form and architecturally interesting pointing making it recognisable within the city scape.

The architectural and artistic interest of the 1830 Warehouse is **exceptional**.

6.2.3 Historic Interest

6.2.3.1 The World's First Railway Warehouse

The 1830 Warehouse at Liverpool Road Station is the world's first railway warehouse because it was the first instance where a railway company needed to build its own warehouse. The Liverpool & Manchester Railway planned to carry a wide range of goods, including livestock, food, raw cotton and finished goods, all of which needed appropriate accommodation.

The Warehouse was constructed as part of the development of Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

6.2.3.2 Association with George Stephenson

George Stephenson, the 'Farther of Railways, was intrinsically linked with the development, design and construction of the Liverpool Road Station complex, appointed as Chief Engineer in 1824, and again in 1828.

Stephenson was responsible for the design and construction of a number of structures on the site including the Water Street Bridge, the 1830 Viaduct, and the Irwell Bridge.

6.2.3.3 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

The site also holds communal value relating to its operation as a museum. The site is an educational resource and tourist attraction, promoting learning, community engagement and inspiring innovation and creativity. The site is visited by an average of 500,000-600,000 visitors per year, and will hold memory and meaning for many of those visitors.

The historic interest of the 1830 Warehouse is **exceptional**.

6.2.4 Summary of Significance

The **exceptional** heritage significance of the 1830's Warehouse is captured by its Grade I designation.

The asset has international significance as part of the first, and best surviving, passenger railway in the world. The site is a fine example of Victorian railway design and engineering; the warehouse, as well as the surrounding associated building hold exceptional group value and make a positive contribution to the wider area and the Castlefield Conservation Area.

The site holds significant communal value relating to both its former use, and as its current use as part of the wider museum site.

The overall heritage significance of the 1830's Warehouse is **exceptional**.



6.3 Heritage Impact Assessment

6.3.1 Impact on the Fabric

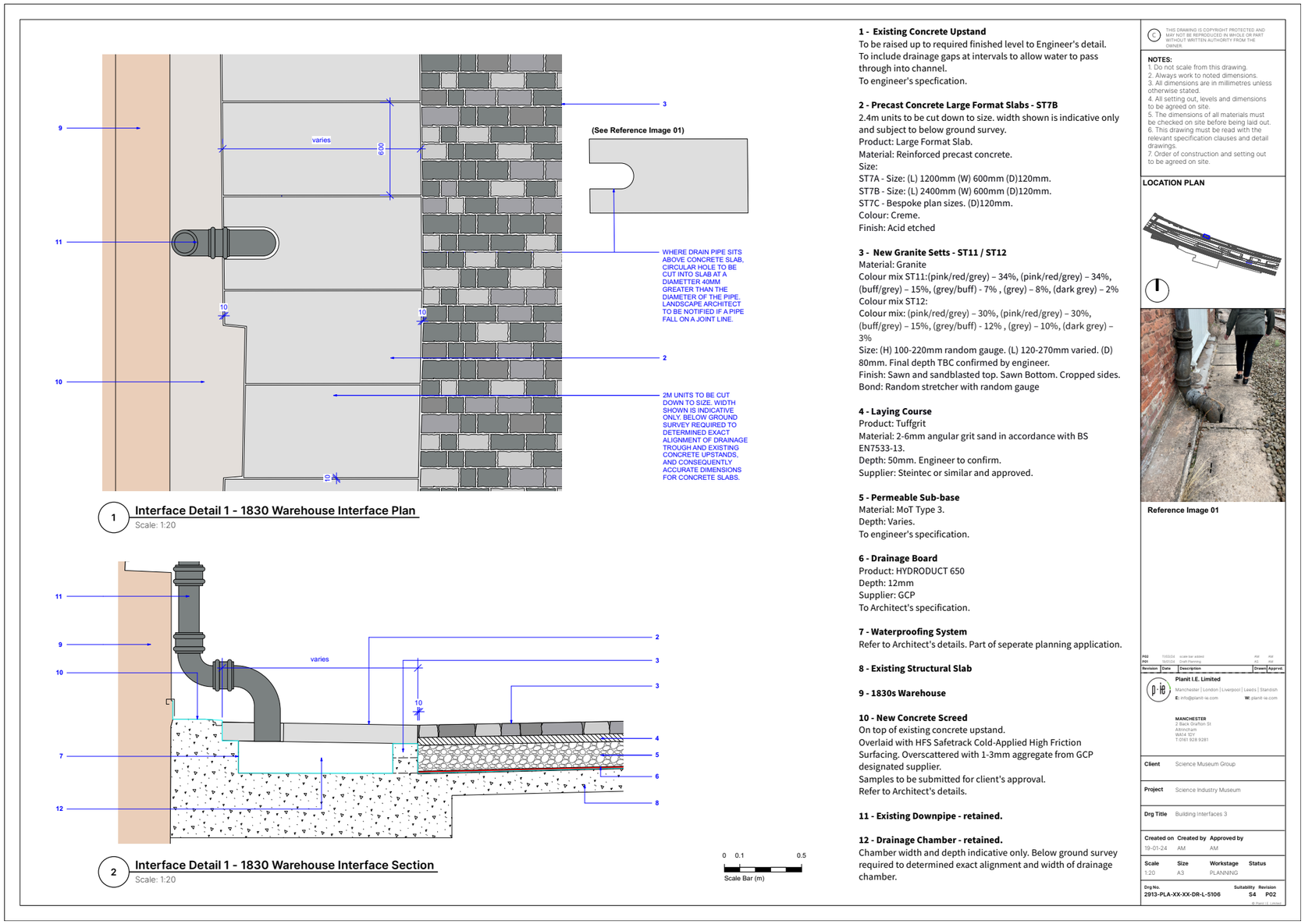
The only direct impact on the historic fabric of the 1830 Warehouse will be the proposed interfaces between the surface finishes of the Station Approach and the south elevation of the building, the details of which can be seen in drawings 2913-PLA-XX-XX-DR-L-5106, seen in Figure 51.

All proposed alterations to the interfaces are in-line with the consented works included in the previous application for waterproofing works to the Viaduct (Application Ref. 138402/LO/2023), which were concluded to result in **no harm** to the fabric or significance of the asset.

The proposed concrete screed covering an new lead flashings are necessary to support the consented waterproofing scheme and ensure further water ingress issues are prevented. Flashings will replace the existing inappropriate mastic covering at the interface and will be an enhancement to both the fabric and visual quality of the asset.

The new interface will result in **no harm** to the fabric and will result in **no harm** to the significance of the asset.

Figure 34 Interface detail for the 1830 Warehouse



6.3.2 Impact on the Setting + Character

Overall, the proposed landscaping works seek to enhance visitor experience at the museum site.

The implementation of new seating, planting and areas for general activities will increase visitors ability to appreciate the site, as well as the 1830 Warehouse as an individual asset, promoting increased dwell time and creating a space in which the public can enjoy for sustained periods of time. The proposals also allow visitors to get up close to and enjoy the south elevation of the building, which is not currently possible.

Planting and seating areas have been carefully concentrated along the central 'spine' of the viaduct to set them back from the 1830 Warehouse as to not block or obscure views of its significant façade, and reduce the overall impact on its setting.

The retention and replaying of the existing rails will be beneficial to the setting and character of the 1830 Station builsings as they form an important contribution to its existing setting and understanding of its former use.

The introduction of new level setts to the Station Approach will help to restore some of the original historic character to the area; historic images show that the viaduct/track area would originally have been covered by loafed setts in-between the railway tracks, and following multiple phases of degradation and redevelopment, these setts have since been replaced by ballast. The reintroduction of setts to the Station Approach will in turn enhance the character and setting of the 1830 Warehouse, allowing visitor access onto the tracks, creating a larger space in which visitors can enjoy and appreciate the site and its assets.

The proposed scheme will enhance the overall character and appearance of the Station Approach, introducing a consistent design language and material palette. A more coherent landscape will help the site to read as one, help to improve sense of place, and will compliment the uniformity, aesthetic quality and historic character of the 1830 Warehouse. This will enhance the setting of the asset.

Overall, the work will result in **moderate change** to the setting of the 1830 Warehouse which will have a **large/very large impact**, which will be **moderate beneficial** in nature and will result in **no harm** to the asset overall.

6.3.3 Overall Impact

Overall, the proposed works will result in **no harm** to the fabric of the 1830 Warehouse, and **no harm** to the setting of the asset.

7.0

Water Street Bridge

7.0 Water Street Bridge

7.1 Description of the Heritage

The Water Street Bridge and linking viaduct stretches west from the 1830 Viaduct, over Water Street, connection the museum site to the bridge over the river Irwell to the west.

The listed asset includes the iron bridge spanning Water Street which was replaced in 1905, as well as the brick viaduct which adjoins the bridge to the west, and the brick-built animal ramp which extends from the viaduct at a right-angle to the south.

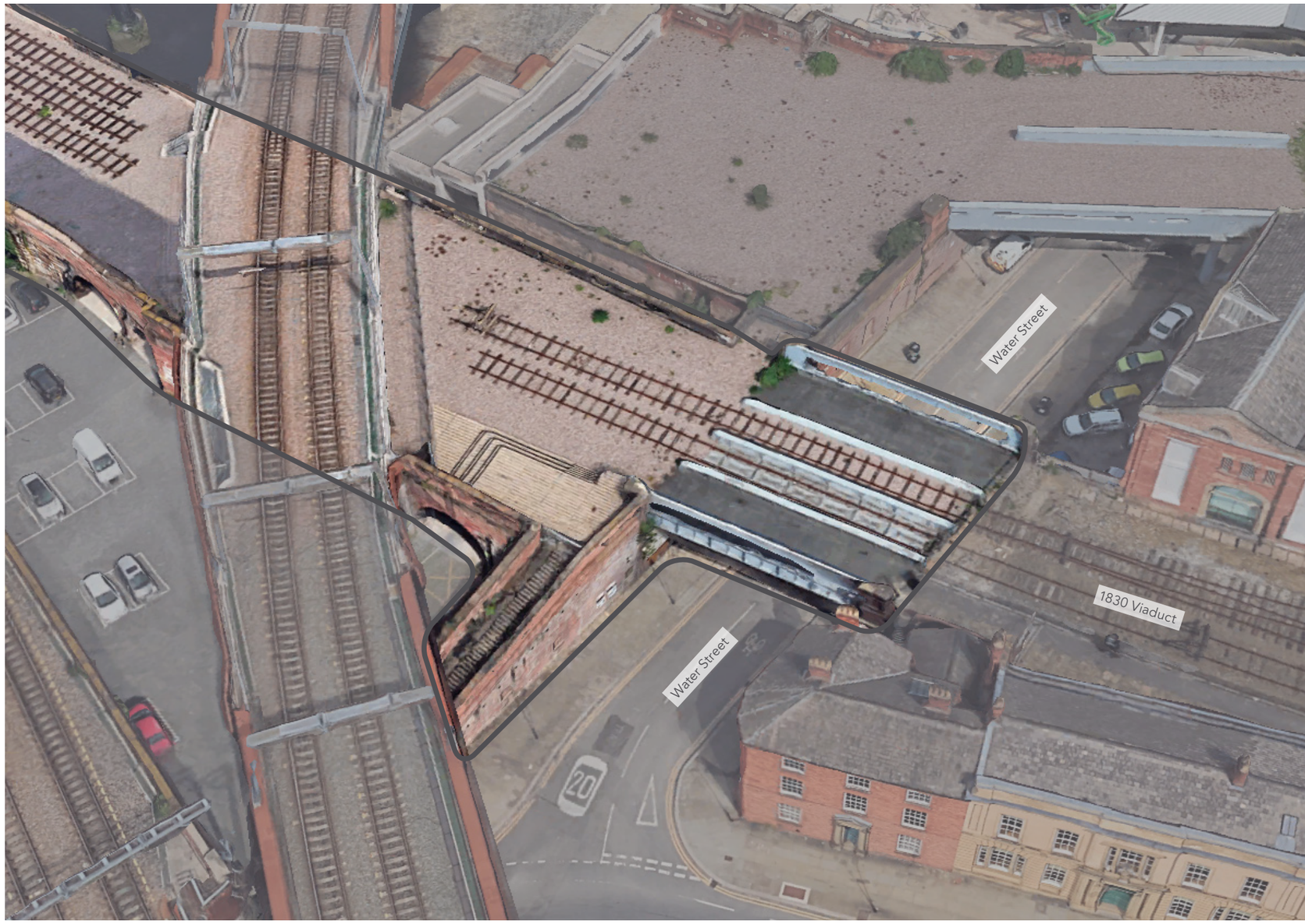


Figure 35 View of the Water Street Bridge & linking viaduct looking north-west.

7.2 Assessment of Significance

7.2.1 Archaeological Interest

The archaeological potential of the bridge and viaduct is limited due to its built nature and raised form.

The land beneath the bridge and viaduct may have potential to yield remains relating to multiple phases of previous human activity, however the full extent of this potential is unknown.

The archaeological interest of the Water Street Bridge is **Neutral.**

7.2.2 .Architectural & Artistic Interest

7.2.2.1 Most Complete Early Railway Station

Apart from the bridge over Water Street, which was replaced in 1905, all of the original Liverpool Road Station structures survive – the river bridge, the passenger station, the warehouse and the viaduct. Hence, in addition to their individual merits, the original structures have group value rooted in their mutual context. Further cumulative value is provided by the later buildings, which enable architectural comparisons to be made, particularly in relation to the development of the railway warehouse as a building type. The half-Georgian, half-Victorian character of Liverpool Road Station makes it a fascinating microcosm of railway station evolution.

7.2.2.2 Prototype nineteenth century railway station

As the most ambitious of the pioneering railways, the Liverpool & Manchester Railway provided a blueprint for railway development. With no earlier examples of passenger stations off of which to base the designs, the Liverpool Station was of original and new design. The station later provided a blueprint for the design of other passenger stations.

7.2.2.3 Exemplifies several aspects of railway innovation

The Liverpool & Manchester Railway was the first railway to be approved at the outset as a passenger and goods railway, and to be built in accordance.

The Liverpool & Manchester Railway was also the first railway to use steam locomotives to haul both passenger and goods trains.

The Liverpool & Manchester Railway can also be regarded as the first mainline railway because the first step towards the creation of an interlinking railway network was taken when it joined up with the Grand Junction Railway in 1837.

7.2.2.4 Dramatic contribution to the character of the streetscape

The bridge and viaduct occupies a prominent site, which is bounded by Liverpool Road and Water Street and stretched over the River Irwell. Collectively, alongside the museum site buildings, and the additional bridges and viaduct structures which span the river, they contribute greatly to the industrial and historic character of the area.

The architectural and artistic interest of the Water Street Bridge is **medium.**

7.2.3 Historic Interest

7.2.3.1 Illustrative of the Development of the Liverpool Road Station

The Water Street Bridge and linking viaduct was originally constructed in the early 19th century as part of the development of Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

7.2.3.2 Association with George Stephenson

George Stephenson, the 'Farther of Railways, was intrinsically linked with the development, design and construction of the Liverpool Road Station complex, appointed as Chief Engineer in 1824, and again in 1828.

Stephenson was responsible for the design and construction of a number of structures on the site including the Water Street Bridge, the 1830 Viaduct, and the Irwell Bridge.

The historic interest of the Water Street Bridge is **medium.**

7.2.4 Summary of Significance

The **medium** heritage significance of the 1830's Viaduct related both to its historic and architectural interest as an individual asset, as well as it's relationship with the Grade I listed 1830 Warehouse and subsequent curtilage listing.

7.3 Heritage Impact Assessment

7.3.1 Impact on the Fabric

The only direct impact on the historic fabric of the Water Street Bridge will be the proposed interfaces between the surface finishes of the Station Approach and the eastern boundary of the structure.

All proposed alterations to the interfaces are in-line with the consented works included in the previous application for waterproofing works to the Viaduct (Application Ref. 138402/LO/2023), which were concluded to result in **no harm** to the fabric or significance of the asset.

The proposed new surface finishes will meet the eastern boundary of the bridge with a new flush steel edge, as show in drawings 2913-PLA-XX-XX-DR-L-5103 and 2913-PLA-XX-XX-DR-L-5100.

The new interface will result in **no harm** to the fabric and will result in **no harm** to the significance of the asset.

8.0

New Warehouse

8.0 New Warehouse

8.1 Description of the Heritage

The three-storey warehouse (with basement) is a large seven-bay rectangular building on a east-west axis with entrances for railway lines through the west end from the 1876 viaduct. The original Lower Byrom Street façade was L-shaped; this has been filled in and extended to the street edge with a modern glass structure, which opened in 2000, housing a café/shop on the ground floor and offices above. The building is of red brick with detail in blue brick and sandstone, with a pitched slate and glass roof over each bay. The southern elevation overlooks the Upper Yard and each bay has two pairs of segmentally headed windows of diminishing height. The blue brick is used for the plinth, the keystones, the bands between the floors and vertical strips extending to the windows and doors.[26]

A large four-storey glazed external staircore abuts the western elevation of the building proving access to the Special Exhibitions Gallery (SEG) which occupies the western basement area of the New Warehouse.

Figure 36 Top: New Warehouse East Elevation

Figure 37 Bottom: South and East Elevations of the New Warehouse







Figure 38 New Warehouse South Elevation and Upper Yard



Figure 39 New Warehouse South and West Elevations

8.2 Assessment of Significance

8.2.1 Archaeological Interest

8.2.1.1 Prehistoric

The understanding of prehistoric settlement in Manchester is still poorly understood. Physical evidence for prehistoric settlements are fragmentary. An excavation carried out in 2007 at 73/83 Liverpool Road (Adjacent to the Power Hall) yielded 'slight evidence of prehistoric activity in the area… in the form of two Mesolithic flint, one Neolithic/Bronze Age waste flake and one fragment of Late Bronze Age/Iron Age pottery. All of these artefacts were recovered from either Roman or 1th century deposits'.[27]

The potential for buried archaeological remains deriving from prehistoric activity within the Site Area is considered to be **low**. Some isolated finds may be possible however, due to the former agricultural use of the area, and the significant disturbance as a result of the industrial development and construction of the warehouse, this is unlikely.

8.2.1.2 Roman

'The first [Roman] military occupation of Manchester was established during the governorship of Agricola (AD 77-84), and commenced with a five-acre wooden fort, known as Mamucium.[28] The site of this encampment is marked today by Camp Street in Castlefield, situated c 250m to the south-east of the Site

Excavations carried out 73/83 Liverpool Road uncovered truncated Roman remains providing evidence that the *Vicus* (or village) of the Castlefield Roman fort extended north-west, representing three distinct phases of activity. [29]The lack of cellars in some of the Georgian housing resulted in many of the remains being preserved in situ.

Additional excavations and finds in the area have revealed that the extent of the *Vicus* extended north of the fort, terminating at Quay Street. The western end of the museum site therefore sits within the possible settlement boundary.

There is little evidence within the site of Roman activity between the *Vicus* and the River Irwell, with the exception of the discovery of six unstratified Roman coins found 'in 1876 while foundations were being dug for a bridge over the Irwell, near Quay Street'.[30]

Due to the extensive development and redevelopment of the site, along with the construction of the basement and foundations of the Warehouse, the potential for any subsurface remains within the footprint of the warehouse are negligible. Trial pit excavations carried out in 2009 'revealed that the solid geology lay immediately beneath the floor, and that any archaeological remains within the footprint of the building had been entirely destroyed'.[31]

A watching brief carried out in 2012, maintained during a construction programme, confirmed that no archaeological remains of Roman date survive in situ in the area immediately to the south the Lower Byrom Street Warehouse.

The potential for buried archaeological remains deriving from Roman activity within the Site Area is considered to be **low,** with any potential remains being located within the upper yard, rather than the warehouse itself.

8.2.1.3 Medieval

There is very little archaeological evidence in the region as a whole that represents the period between the end of the Roman occupation and the Norman Conquest.

Given the location of the Site Area away from known medieval settlements and Manchester's medieval centre, the potential for buried archaeological remains is unlikely. The possibility of medieval finds should not be ruled out given the agricultural use of the area and practice of manuring arable fields, however it is unlikely that any in situ finds will be recovered.

The potential for buried archaeological remains deriving from Medieval activity within the Site Area is considered to be **low**, with any potential remains being located within the upper yard, rather than the warehouse itself.

8.2.1.4 Post-medieval

'During the 18th century, south-east Lancashire was predominantly agricultural with isolated settlements, market towns and Manchester at its heart. By the 1780s, Manchester became the centre of a factory-based cotton manufacturing industry of international repute. The industrialisation of Manchester was greatly facilitated by the expansion of the canal network and canalisation of the city's waterways during the 18th century, which provided the first efficient means of transporting bulk loads of goods'.[32]

The area remained largely rural until the construction of terraced worker cottages in the 19th century, just prior to the construction of Liverpool Road Station. Figure 40 shows the approximate location of the New Warehouse in relation to the former cottages.

Trial pits excavated in 2010 revealed fragmentary remains of the cottages in the upper yard. The same excavation revealed that any archaeological remains within the footprint of the warehouse has been entirely destroyed.

The potential for buried archaeological remains deriving from post-medieval activity within the Site Area is considered to be **low/medium**, with any potential remains being located within the upper yard, rather than the warehouse itself.

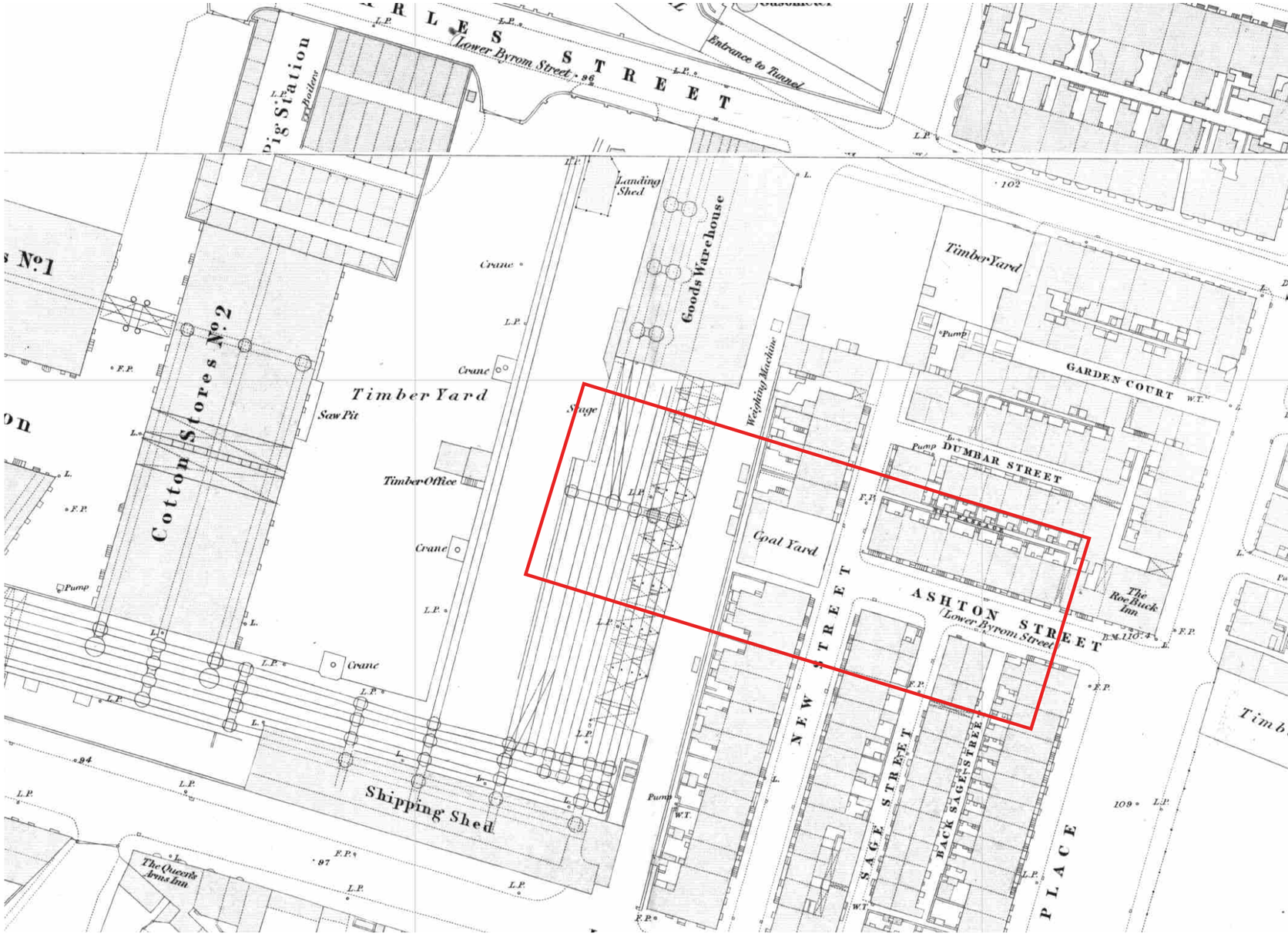


Figure 40 1851 Map Showing Approximate Existing Location of the New Warehouse - the site of the New Warehouse was situated over a former area of terraced housing.

- Approximate Location of the New Warehouse

8.2.1.5 Summary of Archaeological Interest

Due to the highly developed nature of the site, and the extensive disturbance that has resulted from the construction of the New Warehouse, the potential for archaeological remains from all periods is **low.**

Previous excavations carried out in 2010 confirm that any potential remains within the footprint of the building have been destroyed.

Areas immediately surrounding the New Warehouse, including the Upper Yard have potential to yield remains due to a lower level of disturbance from development. This potential is however low and considered unlikely, with the exception of the known remains relating to the former 19th century workers cottages.

Overall, the archaeological interest of the site is **low**.

8.2.2 Architectural & Artistic Interest

8.2.2.1 Aesthetic Value

The New Warehouse has high aesthetic value as a handsome late-19th century bonded warehouse with a decorative and functional use of blue engineering brick. Its grand scale, industrial aesthetic, and functional design all contribute to its architectural interest.

The building takes a prominent position within the streetscape and contributes to the character of Lower Byrom Street. The overall mass of the warehouse also makes an important contribution to the wider townscape, particularly when viewed from one of the operational railway viaducts that cross Castlefield.

8.2.2.2 Form and Function

The building's original internal structure, form and layout is demonstrative of the building's original use and cutting edge fireproof construction.[33] The entrances for railway lines through the western elevation from the 1867 Viaduct also contribute to its significance as they demonstrate the building's original use.

As the last of the Liverpool Road Station buildings, it illustrates the evolution of construction techniques and goods handling technology, and provides a striking contrast to the original 1830 Warehouse.

The architectural and artistic interest of the New Warehouse is **medium**.



Figure 41 Image Showing the New Warehouse and Gantry, 1978 © Manchester Libraries, M62941

8.2.3 Historic Interest

8.2.3.1 Illustrative of the Development of the Liverpool Road Station

The New Warehouse was originally constructed in the late 19th century as part of the development of Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

The New Warehouse was built following the end of passenger services at Liverpool Road Station and is representative in the shift to goods handling and processing.

8.2.3.2 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

The New Warehouse holds communal and social value as one of the museum buildings. The site is an educational resource and tourist attraction, promoting learning, community engagement and inspiring innovation and creativity. The site is visited by an average of 500,000-600,000 visitors per year, and will hold memory and meaning for many of those visitors.

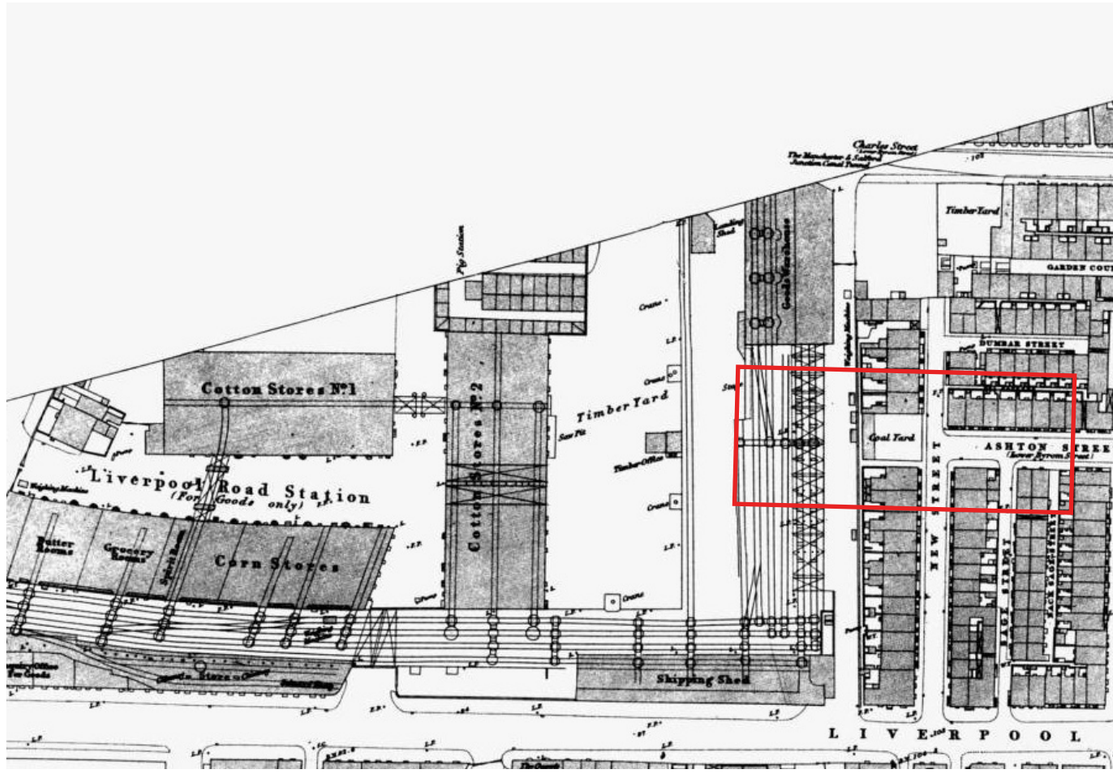
8.2.3.3 The interconnection between the railway and industrial development and trade

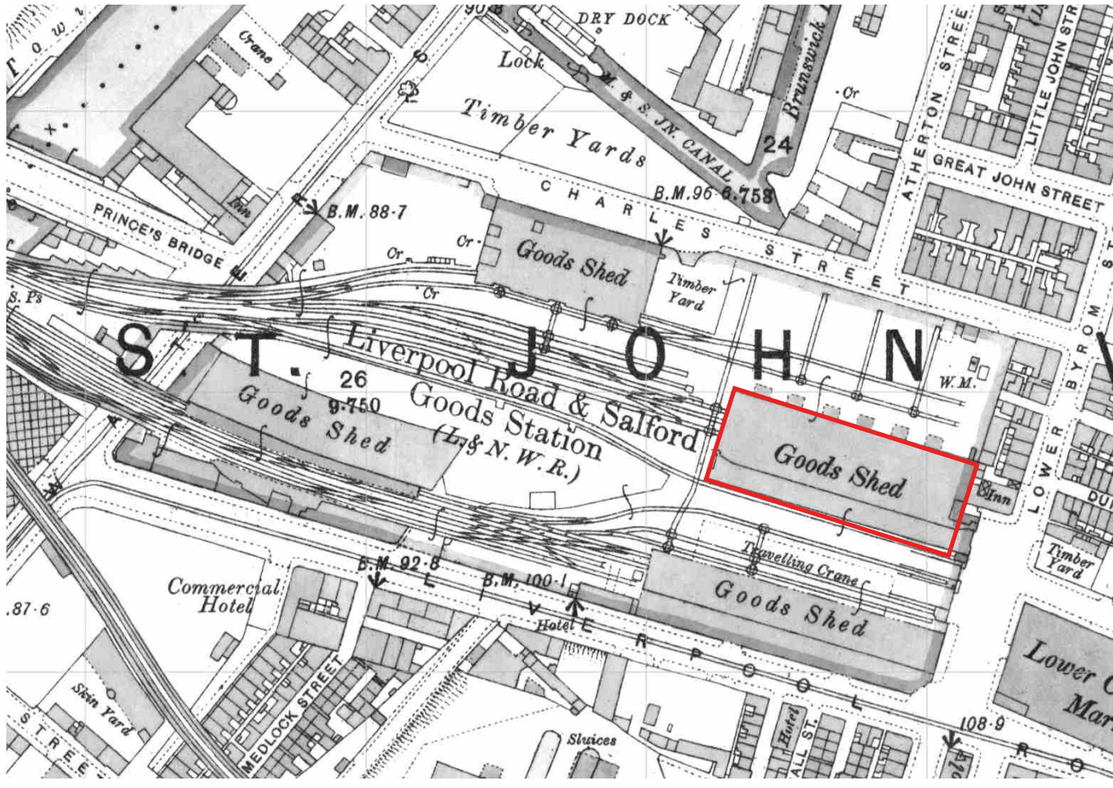
Railways proved to be economically beneficial, not just by facilitating trade, but also by increasing demand for raw materials that they directly consumed, such as coal, iron and steel.

The construction of the New Warehouse, in response to increasing demand for the storage and handling of industrial goods, is illustrative of the relationship between the railway system and the industrial growth and development of the time.

The Great Western Warehouse is symbolic of the last phase of Victorian railway expansion, when traffic was still expanding. By this period, there was little opportunity for the creation of new independent railways, but there was potential for existing railways to extend their networks and thus increase their traffic.

The historic interest of the New Warehouse is **high**.





- Approximate Location of the New Warehouse

Figure 42 Top: 1850 Map showing earlier site layout, before the fire of 1866 and the subsequent construction of the New Warehouse.

Figure 43 Top: 1893 OS County Series Map showing later site layout, following the expansion of the site and the construction of the New Warehouse.

8.2.4 Summary of Significance

The New Warehouse's **medium** heritage significance is captured by its Grade II designation.

The building is representative of the growth, expansion and change in use of the Liverpool Road Station site. The building is of high architectural quality and its form and layout is indicative of its former industrial use.

Along with surrounding buildings, the New Warehouse contributes to the group value held by the assets on the museum site. The warehouse contributes to the surrounding townscape and takes a landmark streetscape position on approach to the museum.

The overall heritage significance of the New Warehouse is **medium**.

Figure 44 Overleaf: The New Warehouse from Lower Byrom Street


NEW WAREHOUSE

8.3 Impact on the New Warehouse

8.3.1 Impact on the Fabric

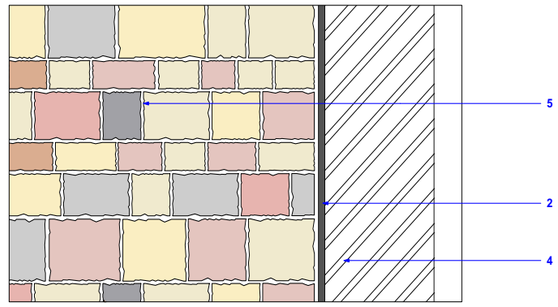
The only direct impact on the historic fabric of the New Warehouse will be the proposed interfaces between the surface finishes of the Upper Yard and the south elevation of the building, the details of which can be seen in drawing 2913-PLA-XX-XX-DR-L-5010, seen in Figure 45.

Where the new fabric or reused cobble setts will meet the face of the building, a Polysulphide sealant will be used to seal the joint, in line with the supporting specification and best practice for historic buildings.

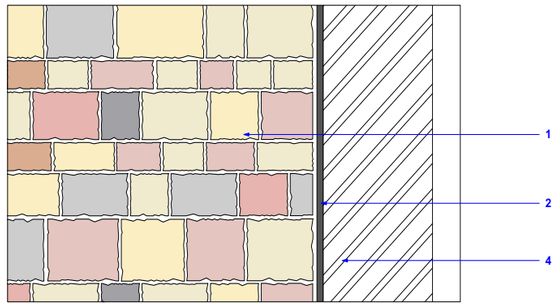
Additionally, a bitumen impregnated woodfiber board will be added below ground as a buffer between the concrete base and sub-base of the Upper Yard and the New Warehouse to ensure the fabric of the building is protected from any disturbance or damage.

The new interface will result in **no harm** to the fabric and will result in **no harm** to the significance of the asset.

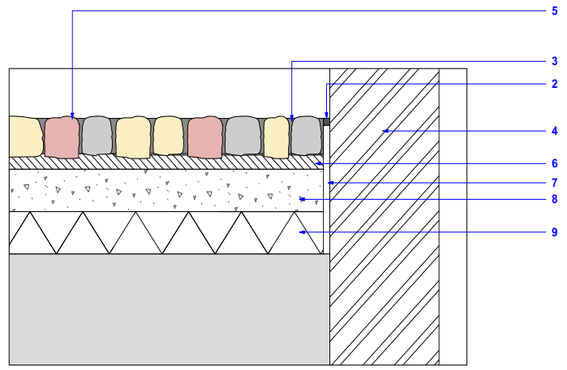
Figure 45 Proposed Interface with the New Warehouse



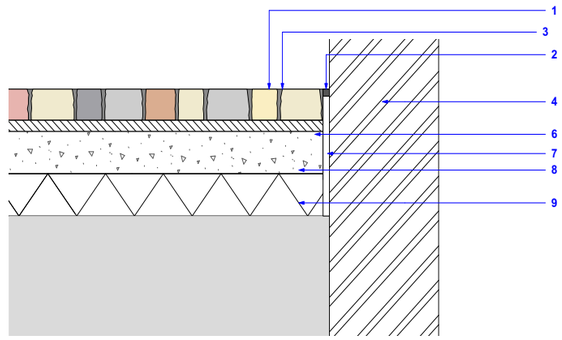
1 Interface 1 To Building Edge - Plan
Scale: 1:20



3 Interface 2 To Building Edge - Plan
Scale: 1:20



2 Interface 1 To Building Edge - Section
Scale: 1:20



4 Interface 2 To Building Edge - Section
Scale: 1:20

KEY

1 - New Granite Setts ST16/ST17
Material: Granite
Colour mix:(pink/red/grey) – 34%, (pink/red/grey) – 34%, (buff/grey) – 15%, (grey/buff) - 7% , (grey) – 8%, (dark grey) – 2%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 110mm. Final depth TBC confirmed by engineer.
Finish: Sawn and sandblasted, flamed top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

2 - Polysulphide Sealer
To engineer's specification

3 - Jointing
Width: 10mm (8 to 12mm)
Product: Tufftop jointing mortar.
Colour: dark grey.
Prior to installation the cobbles are to be gauged at +/- 5mm in
rows to achieve a 10mm (8-12mm) nominal joint.
Supplier: Steintec or equal and approved.
Bond: Random stretcher

4 - Building outline

5- Reclaimed Loafed Cobbles ST2
Material: Existing Granite lifted and rigidly relayed
Size: (L) varied length 120-270 x (w) varied gauge 100-220 x (D) 100-120mm
Colour: Pink, buff, dark grey, mid grey, and yellow
Laying Pattern: Random gauge and random stretcher bond.

6- Bedding Mortar / Priming Mortar
Depth: TBC by engineer.
Product: Tuffbed - 2pack
Supplier: Steintec or equal and approved.

7- Betumen Impregnated Woodfiber Board
To engineer's specification

8- Concrete Base
To engineer's specification.

9- Sub-base
To engineer's specification.

8.3.2 Impact on the Setting + Character

Overall, the proposed landscaping works seek to enhance visitor experience at the museum site.

The implementation of new seating, picnic spaces, and areas for general activities will increase visitors ability to appreciate the site, as well as the New Warehouse as an individual asset, promoting increased dwell time and creating a space in which the public can enjoy for sustained periods of time.

The loss of some of the existing loafed setts from the Upper Yard will impact the setting of the New Warehouse. As existing, the loafed setts make an important contribution to the historic industrial character of the site as a whole, which in turn contributes to the understanding and overall character of the New Warehouse as an industrial building.

Where existing loafed setts are to be replaced with new level setts, these are of high-quality and have been carefully selected to replicate and compliment the existing mix of colours and finishes of the existing setts, and retain the overall industrial character. Consequently, the overall visual impact of the new setts will be moderate. The use of level setts is necessary to provide level access across the site, allowing all visitors to access the site.

The introduction of new complimentary features and furniture which take influence from the industrial nature of the site, will also help to retain the existing character of the asset's setting.

The proposed new planters will be no taller than 700mm to ensure they do not obscure views of the New Warehouse which may detract from its setting and ability to be fully appreciated.

The retention and relaying of the existing rails will be beneficial to the setting and character of the New Warehouse as they form an important contribution to its existing setting and understanding of its former use.

The proposed scheme will be beneficial to the setting of New Warehouse by providing a consistent design language and material palette to the Upper Yard. This is something which does not currently exist due to areas of disrepair, patchwork tarmac, and mismatching setts, which compromises the quality of the setting of the New Warehouse. A more coherent setting will help the site to read as one, help to improve sense of place, and will compliment the uniformity, aesthetic quality and historic character of the New Warehouse within the landscape.

The reduction in the percentage of loafed setts across the site will also account for the removal of a large quantum of split or damages setts; these sets are damaged beyond repair and would not be re-usable regardless. This will help to enhance the setting of the asset through the removal of unsightly damaged fabric.

Overall, while the loss of some of the existing loafed cobbles will result in l**ow less than substantial harm** to the setting of the New Warehouse, other elements of the proposal will be **moderate beneficial** and seek to enhance the quality of the setting of the building. Overall, the proposals will result in **no harm** to the significance of the asset.

8.3.3 Overall Impact

The proposed works will result in **no harm** to the fabric of the New Warehouse, and **low less than substantial harm** to the setting of the asset. Overall, the proposals will result in **no harm** to the significance of the asset.

Public benefit in relation to this low less than substantial harm to the setting is outlined in **15.3 Harm and Public Benefit.**

9.0

Power Hall + Gantry



Figure 46 Power Hall North Elevation showing the Gantry Crane

9.0 Power Hall + Gantry

9.1 Description of the Heritage

The Power Hall is a very high single-storey building, rectangular in plan with six bays. The walls are of brick, with stone facings and quoins at the western end. The hipped M-roof is of slate, with some glazing. The Lower Byrom Street elevation has blind windows and brick dentillation detail. The corner between this and the Liverpool façade is splayed with a wide wagon entrance (now glazed). The Liverpool Road façade has alternating round-headed blind windows with stepped surrounds and large square-headed wagon doorways with stone fenders. The original sliding doors have been replaced with glazing. The west elevation has a large metal concertina door for locomotives and a smaller inserted door for pedestrians. The south elevation has inserted glass and metal door and window frames in the original wagon entrances.[34]

A large gantry crane extends from the northern elevation of the Power Hall into the upper yard. The crane retains the historic bases, however the carts themselves have since been removed.

Abutting the southern elevation of the New Warehouse is the Upper Yard. This is a largely cobbled area currently used as outdoor dwell and circulation space for the museums visitors. The yard features historic railway tracks set into the cobbles, free-standing planters, and a series of concrete and metal bollards. The Upper Yard connects the New Warehouse to the Power Hall and is enclosed to the east by a large gate.



Figure 47 View of Power Hall from junction of Liverpool Road and Lower Byrom Street



Figure 48 Gantry (view from east)

9.2 Assessment of Significance

9.2.1 Archaeological Interest

9.2.1.1 Prehistoric

The understanding of prehistoric settlement in Manchester is still poorly understood. Physical evidence for prehistoric settlements are fragmentary. An excavation carried out in 2007 at 73/83 Liverpool Road (Adjacent to the Power Hall) yielded 'slight evidence of prehistoric activity in the area… in the form of two Mesolithic flint, one Neolithic/Bronze Age waste flake and one fragment of Late Bronze Age/Iron Age pottery. All of these artefacts were recovered from either Roman or 1th century deposits'.[35]

The potential for buried archaeological remains deriving from prehistoric activity within the Site Area is considered to be **low**. Some isolated finds may be possible within the Upper Yard however, due to the former agricultural use of the area, and the significant disturbance as a result of the industrial development and construction of the Power Hall, this is unlikely.

9.2.1.2 Roman

'The first [Roman] military occupation of Manchester was established during the governorship of Agricola (AD 77-84), and commenced with a five-acre wooden fort, known as Mamucium.[36] The site of this encampment is marked today by Camp Street in Castlefield, situated c 250m to the south-east of the Site

Excavations carried out 73/83 Liverpool Road uncovered truncated Roman remains providing evidence that the *Vicus* (or village) of the Castlefield Roman fort extended north-west, representing three distinct phases of activity. [37]The lack of cellars in some of the Georgian housing resulted in many of the remains being preserved in situ.

Additional excavations and finds in the area have revealed that the extent of the *Vicus* extended north of the fort, terminating at Quay Street. The eastern end of the museum site therefore sits within the possible settlement boundary.

There is little evidence within the site of Roman activity between the *Vicus* and the River Irwell, with the exception of the discovery of six unstratified Roman coins found 'in 1876 while foundations were being dug for a bridge over the Irwell, near Quay Street'.[38]

Due to the extensive development, along with the construction of the initial Shipping Shed, its demolition, and the subsequent construction of the Power Hall, the potential for any subsurface remains within the footprint of the warehouse are low.

The potential for buried archaeological remains deriving from Roman activity within the Site Area is considered to be **low,** with the likelihood of any potential remains being located within the upper yard.

9.2.1.3 Medieval

There is very little archaeological evidence in the region as a whole that represents the period between the end of the Roman occupation and the Norman Conquest.

Given the location of the Site away from known medieval settlements and Manchester's medieval centre, the potential for buried archaeological remains is unlikely. The possibility of medieval finds should not be ruled out given the agricultural use of the area and practice of manuring arable fields, however it is unlikely that any in situ finds will be recovered.

The potential for buried archaeological remains deriving from Medieval activity within the Site Area is considered to be **low**.

9.2.1.4 Post-medieval

'During the 18th century, south-east Lancashire was predominantly agricultural with isolated settlements, market towns and Manchester at its heart. By the 1780s, Manchester became the centre of a factory-based cotton manufacturing industry of international repute. The industrialisation of Manchester was greatly facilitated by the expansion of the canal network and canalisation of the city's waterways during the 18th century, which provided the first efficient means of transporting bulk loads of goods'.[39]

The area remained largely rural until the construction of terraced worker cottages in the 19th century, just prior to the construction of Liverpool Road Station. Figure 66 shows the approximate location of the Power Hall and Gantry in relation to the former cottages.

Trial pits excavated in 2010 revealed fragmentary remains of the cottages in the upper yard.

The potential for buried archaeological remains deriving from post-medieval activity within the Site Area is considered to be **low/medium**, with any potential remains being located within the Upper Yard, beneath, and to the north of the Gantry.



Figure 49 1851 Map Showing Approximate Existing Location of the Power Hall and Gantry.

- Approximate Location of the Power Hall and Gantry

9.2.1.5 Summary of Archaeological Interest

Due to the highly developed nature of the site, and the extensive disturbance that has resulted from the construction of the Power Hall and Gantry, the potential for archaeological remains from all periods is **low.**

The area beneath the Gantry including the Upper Yard have potential to yield remains due to a lower level of disturbance from development. This potential is however low and considered unlikely, with the exception of the known remains relating to the former 19th century workers cottages.

Overall, the archaeological interest of the site is **low**.

9.2.2 Architectural & Artistic Interest

9.2.2.1 Dramatic contribution to the character of the streetscape

The Power Hall occupies a prominent site, which is bounded by Liverpool Road and Lower Byrom Street. More Georgian than Victorian in character, the Power Hall complements the Passenger Station complex and gives balance to the Liverpool Road frontage, both buildings being of similar length.

The overall mass of the buildings on the site makes an important contribution to the streetscape, particularly when viewed from one of the operational railway viaducts that cross Castlefield.

9.2.2.2 Form and Design

The Power Hall is a fine example of Victorian architectural design as well as industrial and railway design and engineering. Railway architecture during that time typically emphasized large open spaces and high ceilings to accommodate the scale of trains and engines, and the Power Hall is an example of this. It's interior, exterior and connectivity to the Liverpool Road Station tracks are all representative of the building's original use.

With its composite frame, the Power Hall symbolises the increasingly sophisticated use of materials by Victorian structural engineers, rooted in their improved understanding of the structural properties of iron. Its robust construction demonstrates the emphasis on durability and practicality required for industrial structures built to meet the increasing needs of the goods transportation and handling industry.

9.2.2.3 Construction of the Gantry

The addition of the Gantry around 1880 is representative of the increased need for the movement of heavy goods being handled at the site. The gantry crane is a testament to the engineering prowess of its time. It was designed and constructed to handle substantial loads, showcasing the ingenuity and innovation that characterized the industrial era. The gantry crane remains in situ and is an example of a largely unchanged model.

The architectural and artistic interest of the Power Hall and Gantry is **medium**.

9.2.3 Historic Interest

9.2.3.1 Development of the Liverpool Road Station

The Power Hall was originally constructed in the late 19th century as part of the Liverpool Road Station, which was the world's first passenger railway station. The Power Hall was integral to the later operational life of world's oldest station; the adjacent travelling cranes and gantry illustrate operational life.

The Power Hall was built following the end of passenger services at Liverpool Road Station and is representative in the shift to goods handling and processing and the expansion of trade and industry in Manchester.

Exhibition and Collections

The Power Hall is one of the key attractions of the museum and houses an impressive collection of steam engines, locomotives, and other industrial machinery. The steam engines and locomotives on display are representative of the technological advancements that transformed industries, transportation, and society during that time.

9.2.3.2 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

The Power Hall and Gantry holds communal and social value as one of the museum buildings. The site is an educational resource and tourist attraction, promoting learning, community engagement and inspiring innovation and creativity. The site is visited by an average of 500,000-600,000 visitors per year, and will hold memory and meaning for many of those visitors.

9.2.3.3 The interconnection between the railway and industrial development and trade

The constructing and subsequent development of the station and the railway system as a whole was representative of the growth in industry and manufacturing and the need for improved transport connections. . Railways proved to be economically beneficial, not just by facilitating trade, but also by increasing demand for raw materials that they directly consumed, such as coal, iron and steel.

The historic interest of the Power Hall and Gantry is **high**.

9.2.4 Summary of Significance

The Power Hall's **medium** heritage significance is captured by its Grade II designation.

The building is representative of the growth, expansion and change in use of the Liverpool Road Station site. The building is of high architectural quality and its form and layout is indicative of its former industrial use.

Along with surrounding buildings, the Power Hall and Gantry contributes to the group value held by the assets on the museum site. The Power Hall contributes to the surrounding townscape and takes a landmark streetscape position on approach to the museum.

The overall heritage significance of the Power Hall and Gantry is **medium**.

Figure 50 Overleaf: The Gantry Crane



9.3 Impact on the Power Hall + Gantry

9.3.1 Impact on the Fabric

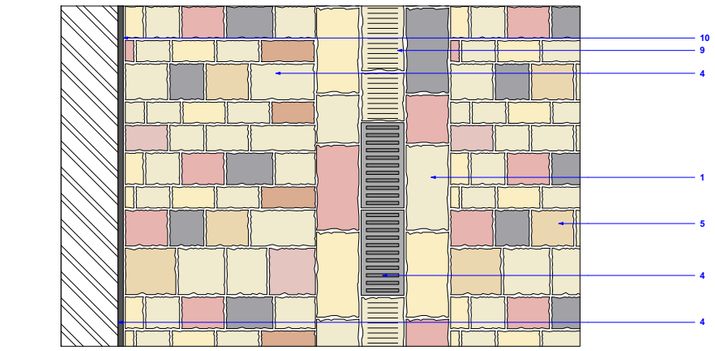
The only direct impact on the historic fabric of the Power Hall will be the proposed interfaces between the surface finishes of the Upper Yard and the north elevation of the building, the details of which can be seen in drawing 2913-PLA-XX-XX-DR-L-5010, seen in Figure 51.

Where the new fabric or reused cobble setts will meet the face of the building, a Polysulphide sealant will be used to seal the joint, in line with the supporting specification and best practice for historic buildings.

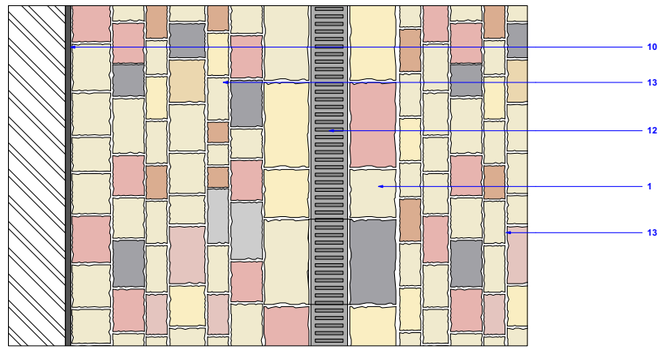
Additionally, a bitumen impregnated woodfiber board will be added below ground as a buffer between the concrete base and sub-base of the Upper Yard and the Power Hall to ensure the fabric of the building is protected from any disturbance or damage.

The new interface will result in **no harm** to the fabric and will result in **no harm** to the significance of the asset.

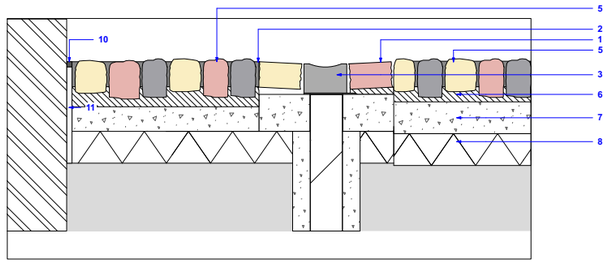
Figure 51 Proposed Interface with the Power Hall



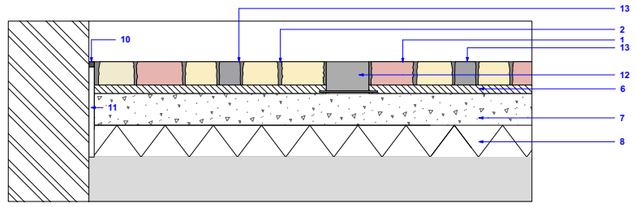
1 Interface 3 to Power Hall - Plan
Scale: 1:20



3 Interface 4 to Power Hall - Plan
Scale: 1:20



2 Interface 3 to Power Hall - Section
Scale: 1:20



4 Interface 4 to Power Hall - Section
Scale: 1:20

KEY

1 - Granite Edge to Gully ET1
Location: to gully
Material: Granite
Dimensions: ET1B - 202mm width x Varied length (200-400mm), (tbc by engineer)
ET1A - 216mm width x Varied length (200-400mm), (tbc by engineer)
Colour: Buff/Grey
Finish: Flamed and Shotblasted finish to top, cropped sides, and sawn bottom.
Bond: Random stretcher .

2 - Jointing
Width: 10mm (8 to 12mm)
Product: Tufftop jointing mortar.
Colour: Dark grey.
Prior to installation the cobbles are to be gauged at +/- 5mm in
rows to achieve a 10mm (8-12mm) nominal joint.
Supplier: Steintec or equal and approved.
Bond: Random stretcher

3- Propsoed Gully
Material: Ductile Iron grade

5- Reclaimed Loafed Cobbles - ST2
Material: Existing Granite lifted and rigidly relayed
Size: (L) varied length 120-270 x (w) varied gauge 100-220 x (D) 100-120mm
Colour: Pink, buff, dark grey, mid grey, and yellow
Laying Pattern: Random gauge and random stretcher bond.

6- Specialist. Bedding Mortar / Priming Mortar
Depth: TBC by engineer.
Product: Tuffbed - 2pack
Supplier: Steintec or equal and approved.

7- Concrete Base
To engineer's specification.

8- Sub-base
To engineer's specification.

9- Special Unit
202mm wide yorkstone varied length with Dish profile. Stone unit to match gully profile. (15mm)

10 - Polysulphide Sealer
To engineer's specification

11- Betumen Impregnated Woodfiber Board
To engineer's specification

12- Propsoed Drainage Channel
Material: Ductile Iron grade

13- New Sett Paving - ST16
Material: Granite
Colour mix:(pink/red/grey) – 34%, (pink/red/grey) – 34%, (buff/grey) – 15%, (grey/buff) - 7% , (grey) – 8%, (dark grey) – 2%
Size: (H) 100-220mm random gauge. (L) 120-270mm varied. (D) 110mm. Final depth TBC confirmed by engineer.
Finish: Sawn and sandblasted, flamed top. Sawn Bottom. Cropped sides.
Bond: Random stretcher with random gauge.

0 0.1 0.5
Scale Bar (m)

9.3.2 Impact on the Setting + Character

Overall, the proposed landscaping works seek to enhance visitor experience at the museum site.

The implementation of new seating, picnic spaces, and areas for general activities will increase visitors ability to appreciate the site, as well as the Power Hall & Gantry as individual assets, promoting increased dwell time and creating a space in which the public can enjoy for sustained periods of time.

The loss of some of the existing setts from the Upper Yard will impact the setting of the asset. As existing, the loafed cobbles make an important contribution to the industrial character of the site as a whole, which in turn contributes to the understanding and overall character of the Power Hall & Gantry as an industrial structure.

Where existing loafed setts are to be replaced with new level setts, these are of high-quality and have been carefully selected to replicate and compliment the existing mix of colours and finishes of the existing setts. Consequently, the overall visual impact of the new setts will be moderate. The use of level setts is necessary to provide level access across the site, allowing all visitors to access the site.

The introduction of new complimentary features and furniture which take influence from the industrial nature of the site, will also help to retain the existing character of the asset's setting.

The proposed new planters will be no taller than 700mm to ensure they do not obscure views of the Power Hall & Gantry which may detract from its setting and ability to be fully appreciated.

The retention and relaying of the existing rails will be beneficial to the setting and character of the Power Hall & Gantry as they form an important contribution to its existing setting and understanding of its former use.

The proposed scheme will be beneficial to the setting of the Power Hall & Gantry by providing a consistent design language and material palette to the Upper Yard. This is something which does not currently exist due to areas of disrepair, patchwork tarmac, and mismatching setts, which compromises the quality of the setting of the New Warehouse. A more coherent setting will help the site to read as one, help to improve sense of place, and will compliment the uniformity, aesthetic quality and historic character of the Power Hall within the landscape.

The reduction in the percentage of loafed setts across the site will also account for the removal of a large quantum of split or damages setts; these sets are damaged boyond repair and would not be re-usable regaardless. This will help to enhance the setting of the asset through the removal of unsightly damaged fabric.

Overall, while the loss of some of the existing loafed cobbles will result in l**ow less than substantial harm** to the setting of the Power Hall and Gantry, other elements of the proposal will be **moderate beneficial** and seek to enhance the quality of the setting of the building. Overall, the proposals will result in **no harm** to the significance of the asset.

9.3.3 Overall Impact

The proposed works will result in **no harm** to the fabric of the Power hall & Gantry, and **low less than substantial harm** to the setting of the asset. Overall, the proposals will result in **no harm** to the significance of the asset.

Public benefit in relation to this low less than substantial harm to the setting is outlined in **15.3 Harm and Public Benefit.**

10.0

1867 Viaduct (The Pineapple Line)

10.0 1867 Viaduct (The Pineapple Line)

10.1 Description of the Heritage

The Pineapple Line, or 1867 Viaduct is a Cast-iron and brick viaduct, constructed of a series of cast-iron columns on stone bases supports the viaduct which has cast-iron beams showing at the sides. The viaduct extends from a linking bridge over Water Street to the west (originally connected to Stephenson's Bridge) to the New Warehouse to the east.

The SEG can be accessed from undercroft of the viaduct, where there are also a number of small workshop spaces. The undercroft also opens out into the Lower Yard.

Figure 52 Top: View of the 1867 Viaduct from the Lower Yard

Figure 53 Bottom: 1867 Viaduct Undercroft





10.2 Assessment of Significance

10.2.1 Archaeological Significance

The archaeological potential of the viaduct is limited due to its built nature and, raised form.

The Lower Yard, which sits beneath the Viaduct, may have potential to yield remains relating to multiple phases of previous human activity, however the full extent of this potential is unknown.

The archaeological interest of the Viaduct is **Neutral.**

10.2.2 Architectural & Artistic Interest

10.2.2.1 Form and Function

The Viaduct is a fine example of Victorian railway architecture. Its sturdy brickwork and arches showcase the engineering techniques of the time. The arches not only served functional purposes but also added an aesthetic quality to the structure.

10.2.2.2 Aesthetic Value

The Viaduct has high aesthetic value specifically the attractive brick arches of the undercroft. Its grand scale overlooking the Lower Yard, industrial aesthetic, and functional design all contribute to its architectural interest.

The structure takes a prominent position within the wider museum site and contributes to its overall character. The overall mass of the Viaduct in relation to the Lower Yard also makes an important contribution to the wider townscape, particularly when viewed from one of the operational railway viaducts that cross Castlefield.

The architectural interest of the Viaduct is **Medium.**

10.2.3 Historic Interest

10.2.3.1 Development of the Liverpool Road Station

The 1867 Viaduct was originally constructed in the late 19th century as part of the Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

The Viaduct was built following the end of passenger services at Liverpool Road Station and is representative in the shift to goods handling and processing and the expansion of trade and industry in Manchester.

10.2.3.2 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

10.2.3.3 The interconnection between the railway and industrial development and trade

The constructing and subsequent development of the station and the railway system as a whole was representative of the growth in industry and manufacturing and the need for improved transport connections. Railways proved to be economically beneficial, not just by facilitating trade, but also by increasing demand for raw materials that they directly consumed, such as coal, iron and steel.

The historic interest of the Viaduct is **Medium.**

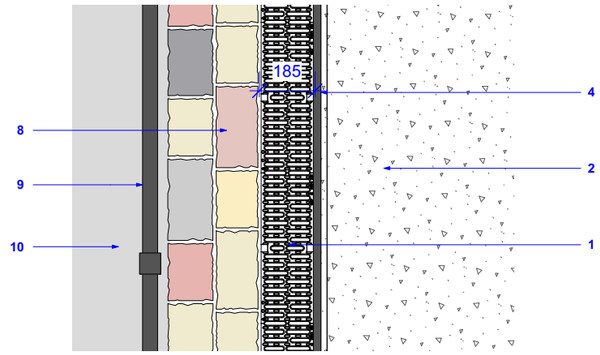
10.3 Heritage Impact Assessment

The only potential impact of the proposed scheme on the 1867 Viaduct is to the historic fabric where the proposed surface finishes of the Upper Yard interface with the western boundary of the asset; the details of which can be seen in drawing 2913-PLA-XX-XX-DR-L-5109, seen in Figure 54.

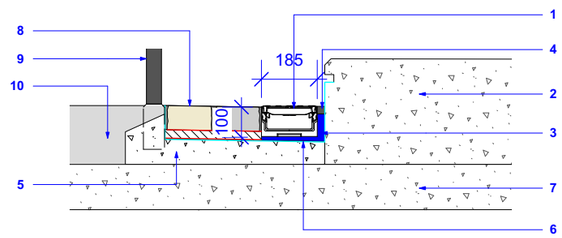
Where the new fabric or reused cobble setts will meet the face of the western boundary of the viaduct, the setts will be laid on a new concrete screed used to level the site, and set with new Tufftop non-permeable BS 7533 Type 40 jointing mortar. The boundary of the viaduct will be met by the western mortar joint of the setts, resulting in no harm or direct intervention with the fabric.

The new interface will result in **no harm** to the fabric and will result in **no harm** to the significance of the asset.

Figure 54 Proposed Interface with the 1867 Viaduct.



1 **Western Boundary Interface 1- Plan**
Scale: 1:20



2 **Western Boundary Interface 1 - Section**
Scale: 1:20

1 - Drainage Channel - D1
Refer to Detail D1 on this sheet.

2 - Existing Concrete Raft for Plant

3 - Epoxy Mortar
To Engineer's specification.

4 - Polysulphide Sealer
To engineer's specification

5 - Concrete Screed
To include haunch to perimeter to keep paving in place.
To Engineer's specification.

6 - Waterproofing Layer
To Architect's specification.

7 - Existing Concrete Slab

8 - New Granite Setts - ST10
Material: Granite
Colour: mix of pink/red/grey – 34%, pink/red/grey – 34%, buff/grey – 15%, grey/buff - 7%, dark grey – 2%
Finish: flamed, sawn and sandblasted top. Sawn Bottom. Cropped sides.
Size: (H) 100-140mm random gauge. (L) 120-270mm varied. (D) 80mm.
Cut units not less than 100mm in width.

9 - Existing Boundary Fence
To be reinstated.

10 - Neighbouring Land
Land beyond site boundary.

11.0

1830 Viaduct

11.0 1830 Viaduct

11.1 Description of the Heritage

The 1830 Viaduct was built by George Stephenson in his capacity as Chief Engineer of the Liverpool & Manchester Railway Company. The skewed River Irwell and Water Street bridges dictate the shallow curve of the viaduct on the Station site, which, together with the massive brick arches, characterises the structure.

The large red brick built structure extends from the Water Street Bridge east towards the Power Hall, where it converges with the later Upper Yard. Eastern arches provide access under the viaduct from the lower yard through to the ground floor eastern entrance of the 1830 Station, and to a pedestrian ramp adjoining the viaduct to the south, providing access to platform level. The western arches currently provide a connection between the 1830 Warehouse and the 1830 Station.

On top of the viaduct lays the former station tracks comprised of two tracks surrounded by stone ballast. The tracks run east towards the Power Hall and Upper Yard but are no longer functional as the line is intersected and blocked by the Salford Central to Deansgate line.

Adjoining the northern elevation of the viaduct to the east of the 1830 Warehouse is a modern car ram, added to the site in 1992, seen in **Figure 56**.





Figure 55 Top: The Viaduct running between the 1830 Warehouse and the 1830 Stations, looking east.

Figure 56 View of the Viaduct, looking south-west, showing the adjoining car ramp.

11.2 Assessment of Significance

11.2.1 Archaeological Interest

The archaeological potential of the viaduct is limited due to its built nature and raised form.

The Lower Yard, which sits beneath the Viaduct, may have potential to yield remains relating to multiple phases of previous human activity, however the full extent of this potential is unknown.

The archaeological interest of the 1830 Viaduct is **Neutral (in its own right, and as curtilage to the Grade I listed 1830 Warehouse)**.

11.2.2 .Architectural & Artistic Interest

11.2.2.1 Most Complete Early Railway Station

Apart from the 1830 road bridge over Water Street, which was replaced in 1905, all of the original Liverpool Road Station structures survive – the river bridge, the passenger station, the warehouse and the viaduct. Hence, in addition to their individual merits, the original structures have group value rooted in their mutual context. Further cumulative value is provided by the later buildings, which enable architectural comparisons to be made, particularly in relation to the development of the railway warehouse as a building type. The half-Georgian, half-Victorian character of Liverpool Road Station makes it a fascinating microcosm of railway station evolution.

11.2.2.2 Prototype nineteenth century railway station

As the most ambitious of the pioneering railways, the Liverpool & Manchester Railway provided a blueprint for railway development. With no earlier examples of passenger stations off of which to base the designs, the Liverpool Station was of original and new design. The station later provided a blueprint for the design of other passenger stations.

11.2.2.3 Example of the technical expertise of nineteenth century Manchester building firms

The original Liverpool Road Station buildings are a testament to the competence and efficiency of their builders. Both the 1830 Warehouse and the Passenger Station had to be built within a five-month period to be ready for the opening of the Railway on 15 September 1830.

The Warehouse was a particular challenge because it abuts the curving viaduct. This arrangement required a parallelogram cross-section, which presented a more onerous construction task than a standard rectangular cross-section would have done.

11.2.2.4 Exemplifies several aspects of railway innovation

The Liverpool & Manchester Railway was the first railway to be approved at the outset as a passenger and goods railway, and to be built in accordance.

The Liverpool & Manchester Railway was also the first railway to use steam locomotives to haul both passenger and goods trains.

The Liverpool & Manchester Railway can also be regarded as the first mainline railway because the first step towards the creation of an interlinking railway network was taken when it joined up with the Grand Junction Railway in 1837.

11.2.2.5 Dramatic contribution to the character of the streetscape

Liverpool Road Station occupies a prominent site, which is bounded by Liverpool Road, Water Street, Lower Byrom Street and the Granada site.

The architectural and artistic interest of the 1830 Viaduct is **high (in its own right, and as curtilage to the Grade I listed 1830 Warehouse)**.

11.2.3 Historic Interest

11.2.3.1 Illustrative of the Development of the Liverpool Road Station

The 1830 Viaduct was originally constructed in the early 19th century as part of the development of Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

11.2.3.2 Association with George Stephenson

George Stephenson, the 'Farther of Railways, was intrinsically linked with the development, design and construction of the Liverpool Road Station complex, appointed as Chief Engineer in 1824, and again in 1828.

Stephenson was responsible for the design and construction of a number of structures on the site including the Water Street Bridge, the 1830 Viaduct, and the Irwell Bridge.

11.2.3.3 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

The site also holds communal value relating to its operation as a museum. The site is an educational resource and tourist attraction, promoting learning, community engagement and inspiring innovation and creativity. The site is visited by an average of 500,000-600,000 visitors per year, and will hold memory and meaning for many of those visitors.

The historic interest of the 1830 Viaduct is **high (in its own right, and as curtilage to the Grade I listed 1830 Warehouse)**.

11.2.4 Summary of Significance

The **high** heritage significance of the 1830's Viaduct related both to its historic and architectural interest as an individual asset, as well as it's relationship with the Grade I listed 1830 Warehouse and subsequent curtilage listing.

11.3 Heritage Impact Assessment

11.3.1 Hard Landscaping Works

The introduction of new level setts to the Viaduct will help to restore some of the original historic character to the area; historic images show that the viaduct/track area would originally have been covered by loafed setts in-between the railway tracks, and following multiple phases of degradation and redevelopment, these setts have since been replaced by ballast. The reintroduction of setts to the Station Approach will in turn enhance the character and authenticity of the 1830 Viaduct, allowing visitor access onto the tracks, creating a larger space in which visitors can enjoy and appreciate the site and its assets.

The new setts will be set using an appropriately agreed durable mortar and will be laid with jointing widths which would be expected from a historic yard, to produce a high-quality visual impact.

The setts will be laid onto a new surface build-up which will be implemented following the completion of waterproofing works consented as part of Application.138402/LO/2023. This new build-up will result in no harm to the significance of the fabric and will ensure the asset is watertight, improving it's longevity and structural quality for the future.

The new setts will be a mix of buff/pink/yellow/grey cobbles which reflect those already existing in the Upper Yard. This is to provide visual consistency across the wider site while also seeking to compliment and represent the existing historic mix.

The relaying of the existing railway tracks and the introduction of pre-cast concrete will help retain to prominence of the tracks within the yard while also allowing for an accessible surface to be created; an important part of the character of the Approach and forming a tangible link to its former use, the rails are an important feature within the landscape, and the landscaping works will ensure they are clearly legible. The colouring of the new setts and pre-cast concrete finishes have been selected to contrast with the tracks to ensure they are still legible and noticeable within the landscape. The tracks will be set within either Angular grit and an agreed appropriate mortar mix to ensure minimal damage is caused to the fabric.

The proposed scheme will enhance the overall character and appearance of the Station Approach, introducing a consistent design language and high-quality material palette. A more coherent landscape will help the site to read as one, help to improve sense of place, and will compliment the uniformity, aesthetic quality and historic character of the area.

Overall, the hard landscaping proposals will result in a **moderate change** to the asset which will have a **moderate/large impact** overall. This impact is considered to be **moderate beneficial** overall. This impact is considered to be **moderate beneficial** and will result in **no harm** to the significance of the asset, enhancing visitor experience and allowing for greater appreciation of the site's heritage value.

11.3.2 Furniture + Soft Planting

Planting and seating areas have been carefully concentrated along the central 'spine' of the viaduct to set them back from the surrounding assets as to not block or obscure views of their significant façades, and reduce the overall impact on their setting.

The new planting and seating areas will create new dwell space on the viaduct which will allow visitors to access an areas of site which has long been restricted. This will enhance sense of place and allow new perspectives of the surrounding assets and wider site.

Alongside the planters, proposed bug hotels will help to improve biodiversity and promote visitor enjoyment and engagement with the site as a whole.

A small increase in planting and greening may detract minimally from the hard industrial character of the area, however will be beneficial in improving biodiversity and ecology and providing important areas of shade and dwell space for visitors, improving their overall experience of the area.

The proposed planters for the Upper Yard have been kept low in height to maintain long ranging views across the site; to and from the Upper Yard.

11.3.3 Removal of the Vehicle Ramp

The removal of the vehicle ramp itself, constructed in 1992, will not result in the direct loss of any historic fabric due to the modern nature of the structure.

Where the removal of the ramp may result in any minor disturbance or harm to the viaduct and associated historic fabric, this will be made good in line with best practice for the care of historic assets and the specification outlined in 9488-BUT-CP-XX-SP-A-00004, submitted as part of this application. This will ensure there is no lasting impact on the heritage asset.

It is anticipated that the removal of the existing concrete columns and pads that support the ramp will result in some disturbance to the cobbled setts and finished located within the Lower Yard. All disturbances will be made good and there will be no lasting physical or visual impact on the historic fabric.

The removal of the ramp will be beneficial to the site overall, as well as to the 1830 Viaduct, by revealing the currently concealed historic brick elevation against which the ramp currently sits. This will enhance the museum site overall, helping to restore its historic appearance, character, and layout.

The existing ramp is considered dangerous, and it's removal is necessary to ensure the safety of the public, and members of the museum site staff.

Overall, the removal of the vehicle ramp will result in **moderate change** to the 1830 Viaduct, which will have a **moderate/large impact** in accordance with its heritage value. This impact will be **major beneficial** in nature.

The works will result in **no harm** to the asset.

12.0

Upper Yard

12.0 Upper Yard

12.1 Description of the Heritage

Abutting the southern elevation of the New Warehouse and the northern elevation of the Power Hall & Gantry is the Upper Yard. This is a largely cobbled area currently used as outdoor dwell and circulation space for the museums visitors. The yard features historic railway tracks set into the cobbles, freestanding planters, and a series of concrete and metal bollards. The Upper Yard connects the New Warehouse to the Power Hall and is enclosed to the east by a large gate.



Figure 57 The Upper Yard, looking west.

12.2 Assessment of Significance

12.2.1 Archaeological Interest

12.2.1.1 Prehistoric

The understanding of prehistoric settlement in Manchester is still poorly understood. Physical evidence for prehistoric settlements are fragmentary. An excavation carried out in 2007 at 73/83 Liverpool Road (Adjacent to the Power Hall) yielded 'slight evidence of prehistoric activity in the area… in the form of two Mesolithic flint, one Neolithic/Bronze Age waste flake and one fragment of Late Bronze Age/Iron Age pottery. All of these artefacts were recovered from either Roman or 1th century deposits'.[40]

The potential for buried archaeological remains deriving from prehistoric activity within the Site Area is considered to be **low**. Some isolated finds may be possible within the Upper Yard however, due to the former agricultural use of the area, and the significant disturbance as a result of the industrial development and construction of the Power Hall, this is unlikely.

12.2.1.2 Roman

'The first [Roman] military occupation of Manchester was established during the governorship of Agricola (AD 77-84), and commenced with a five-acre wooden fort, known as Mamucium.[41] The site of this encampment is marked today by Camp Street in Castlefield, situated c 250m to the south-east of the Site

Excavations carried out 73/83 Liverpool Road uncovered truncated Roman remains providing evidence that the *Vicus* (or village) of the Castlefield Roman fort extended north-west, representing three distinct phases of activity. [42]The lack of cellars in some of the Georgian housing resulted in many of the remains being preserved in situ.

Additional excavations and finds in the area have revealed that the extent of the *Vicus* extended north of the fort, terminating at Quay Street. The western end of the museum site therefore sits within the possible settlement boundary.

There is little evidence within the site of Roman activity between the *Vicus* and the River Irwell, with the exception of the discovery of six unstratified Roman coins found 'in 1876 while foundations were being dug for a bridge over the Irwell, near Quay Street'.[43]

The potential for buried archaeological remains deriving from Roman activity within the Site Area is considered to be **low.**

12.2.1.3 Medieval

There is very little archaeological evidence in the region as a whole that represents the period between the end of the Roman occupation and the Norman Conquest.

Given the location of the Site away from known medieval settlements and Manchester's medieval centre, the potential for buried archaeological remains is unlikely. The possibility of medieval finds should not be ruled out given the agricultural use of the area and practice of manuring arable fields, however it is unlikely that any in situ finds will be recovered.

The potential for buried archaeological remains deriving from Medieval activity within the Site Area is considered to be **low**.

12.2.1.4 Post-medieval

'During the 18th century, south-east Lancashire was predominantly agricultural with isolated settlements, market towns and Manchester at its heart. By the 1780s, Manchester became the centre of a factory-based cotton manufacturing industry of international repute. The industrialisation of Manchester was greatly facilitated by the expansion of the canal network and canalisation of the city's waterways during the 18th century, which provided the first efficient means of transporting bulk loads of goods'.[44]

The area remained largely rural until the construction of terraced worker cottages in the 19th century, just prior to the construction of Liverpool Road Station. Figure 66 shows the approximate location of the Power Hall and Gantry in relation to the former cottages.

Trial pits excavated in 2010 revealed fragmentary remains of the cottages in the upper yard.

The potential for buried archaeological remains deriving from post-medieval activity within the Site Area is considered to be **low/medium**.

12.2.1.5 Summary of Archaeological Interest

Due to the highly developed nature of the site, and the extensive disturbance that has resulted from the construction of the Power Hall and Gantry, the potential for archaeological remains from all periods is **low.**

The area beneath the Gantry including the Upper Yard have potential to yield remains due to a lower level of disturbance from development. This potential is however low and considered unlikely, with the exception of the known remains relating to the former 19th century workers cottages.

Overall, the archaeological interest of the site is **low**.

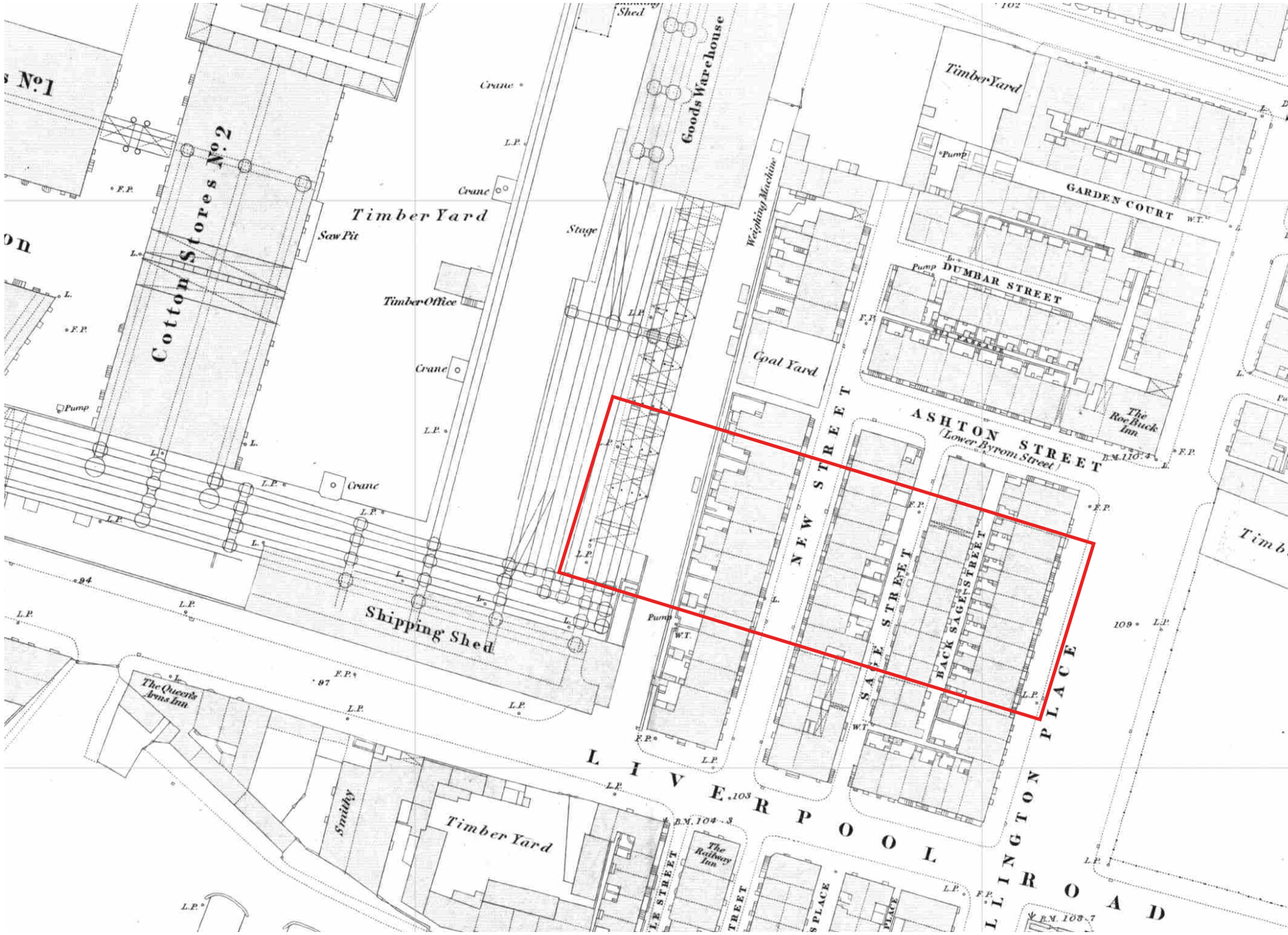


Figure 58 1851 Map Showing Approximate Existing Location of the Upper Yard.

- Approximate Location of the Upper Yard

12.2.2 Architectural & Artistic Interest

The architectural and artistic interest of the Upper Yard relates primarily to it's function alongside the New Warehouse and Power Hall & Gantry, as a connecting railway yard use to service both of the buildings.

Forming part of the last of the Liverpool Road Station buildings group, it illustrates the evolution of construction techniques and goods handling technology.

The cobbled setts contribute to it's aesthetic value, as well as to the setting of the listed assets on the site, and the site's overall industrial character.

The architectural and artistic interest of the Upper Yard is **low/medium (in its own right, and as curtilage to the New Warehouse & Power Hall)**.

12.2.3 Historic Interest

12.2.3.1 Illustrative of the Development of the Liverpool Road Station

The Upper Yard, in conjunction with the New Warehouse and Power Hall in the late 19th century as part of the development of Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

The Upper Yard, as it is seen now, was built following the end of passenger services at Liverpool Road Station and is representative in the shift to goods handling and processing.

12.2.3.2 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

The historic interest of the Upper Yard is **medium (in its own right, and as curtilage to the New Warehouse & Power Hall)**.

12.2.4 Summary of Significance

The Upper Yard's **low/medium** heritage significance is captured by its designation as curtilage to Grade II.

The yard, in relation to the surrounding buildings is representative of the growth, expansion and change in use of the Liverpool Road Station site. The yard's form and layout is indicative of its former industrial use.

Along with surrounding buildings, the Upper Yard contributes to the group value held by the assets on the museum site. The Upper Yard contributes to the surrounding townscape.

12.3 Heritage Impact Assessment

12.3.1 Hard Landscaping

80% of the existing loafed setts are to be retained and relaid within the new scheme overall, to ensure that the existing industrial character of the site and existing fabric is retained as much as possible.

The proposed introduction of new level setts will however result in the loss of some of the loafed setts from the Upper Yard. This will result in the loss of historic fabric and will have a slight/moderate impact on the character of the Upper Yard as the existing loafed cobbles contribute specifically to the industrial character and appearance of the site, reflecting its history and former use. The removal of these setts, and the subsequent replacement with new level setts, will however have significant public benefits, providing level access across the site for all members of the public.

Currently, the existing loafed setts are laid in a patchwork manner across the Upper Yard, with patches of dark grey granite setts, and areas of lighter buff/pink/yellow setts, set apart from each other, as can be seen in **Figure 59**. This is as a result of multiple phases of repairs and redevelopment over many years. For the same reason, there are also substantial areas of tarmac scars and areas of missing setts within the Upper Yard. This has resulted in an incomplete appearance to the yard which detracts from the setting and character of the site overall.

When the proposed works are carried out, the loafed cobble mix will be relaid so that the dark grey setts and buff/pink setts are integrated and mixed together to create a more consistent and cohesive appearance across the site. This will result in a even spread of setts representing numerous periods of development and redevelopment on the site.

The proposed scheme will enhance the overall character and appearance of the Upper Yard, introducing a consistent design language and material palette. A more coherent landscape will help the site to read as one, help to improve sense of place, and will compliment the uniformity, aesthetic quality and historic character of the assets across the site. This will address the current issues relating to the patchwork and incomplete character of the yard.

The reduction in the percentage of loafed setts across the site will allow for the excess setts to be used to fill gaps currently occupied my tarmac or gravel and will also account for the removal of a large quantum of split or damages setts; these sets are damaged beyond repair and would not be re-usable regardless. The excess loafed setts which are to be removed from the yard will be carefully stored by the museum for any potential future use on the site.

This also means that their removal will be largely reversible, as the untouched loafed cobbles will remain fully intact in storage, should they need to be placed back in the Upper Yard in the future.





Figure 59 Top: Image showing patchwork nature of the existing loafed setts.

Figure 60 Bottom: Image showing areas of tarmac scaring and missing setts.



The introduction of the new level setts in areas that are proposed to be accessible will have a minor impact on the character of the Upper Yard. The new setts have been carefully sourced and chosen to match and compliment the existing loafed setts to ensure the area retains a consistent appearance, while replicating the historic appearance of the yard. The new proposed mix incorporates a range of tones and textures, as can be seen in Figure 61 and will be laid with jointing widths which would be expected from a historic yard, to further compliment the remaining loafed setts and reduce any visual impact.

The resulting improved accessibility of the Upper Yard will have significant public benefits, allowing all visitors to travel across the yard on a level surface, with ease. This in turn, will allow these visitors to experience the site fully, improving both sense of place and appreciation for the heritage assets that enclose it.

Figure 61 Sample of proposed new level sett mix - NOTE: Sample setts are reduced in scale, those proposed will be full size to compliment existing.

The relaying of the existing railway tracks and the introduction of in-situ concrete will help to highlight the tracks within the yard; an important part of the yard's character and forming a tangible link to its former use, the rails are an important feature within the landscape, and the landscaping works will ensure they are clearly legible. The concrete will be further beneficial, providing a main accessible route across the site, connecting the new areas of accessible setts.

Where the surface of the Upper Yard extends east to meet the Lower Byrom Street entrance, the new level setts will be introduced to facilitate level access to the site from this entrance in the future. Options have been appraised by the design team to investigate the possibility of retaining some areas of the existing loafed setts in this area due to their small contribution to the streetscape setting of the site, however full level access was deemed the most appropriate to achieve maximum public benefit while also maintaining visual consistency and quality.

Overall, the hard landscaping works will result in **moderate change** to the asset, which will have a **slight/moderate impact**. This change is considered to be **moderate beneficial** in nature, despite the **low less than substantial harm** resulting from the loss of some of the existing fabric on the site. This will not compromise the overall significance of the asset, and the harm to the fabric is considered to be **offset and outweighed by the public benefits of the scheme**, as well as the overall visual and physical enhancements provided to the site overall. This is discussed further in 15.3 Harm and Public Benefit.

12.3.2 Furniture & Soft Planting

Furniture and planting locations have been carefully considered to ensure that key views east-west through the site towards the 1830 Warehouse and Station Approach are maintained.

Planters have been designed to mimic the industrial feel of the site, taking inspiration from freight train carriages and using Corten steel. The main body of the planters will be no taller than 700mm to ensure they do not obscure any views across the site. Planters will also non-static, preventing unnecessary intervention with the fabric of the yard and allowing them to be moved and relocated as required.

Alongside the planters, proposed bug hotels will help to improve biodiversity and promote visitor enjoyment and engagement with the site as a whole.

A small increase in planting and greening may detract minimally from the hard industrial character of the area, however will be beneficial in improving biodiversity and ecology and providing important areas of shade and dwell space for visitors, improving their overall experience of the area.

The proposed new seating will not only increase visitor dwell time, but also increase the number of rest places for those who are unable to be on their feet for long periods of time. This will enhance visitor experience by allowing individuals and groups to spend longer periods of time in the Upper Yard, promoting a more holistic experience of the site, and encouraging the appreciation of the heritage value of the surrounding buildings.

Overall, the softworks will result in **moderate change** to the asset which will have a **moderate impact**. This impact is considered to be **major beneficial** and will result in **no harm** to the significance of the asset, enhancing visitor experience and allowing for greater appreciation of the site's heritage value.

12.3.3 Overall Impact

Overall, the proposed works will result in **low less than substantial harm** to the Upper Yard.

Public benefit in relation to this low less than substantial harm is outlined in **15.3 Harm and Public Benefit.**





Figure 62 View west along the site from eye level, taken from the eastern gateway to the site.

Figure 63 Illustrative Artist Impression of the Upper Yard Landscape Proposals (Planit)

13.0

Lower Yard

13.0 Lower Yard

13.1 Description of the Heritage

The Lower Yard is a large cobbled area that connects the northern elevation of the 1830 Warehouse to access at the west of the site, as wells as the undercroft of the 1867 viaduct. The yard also provides pedestrian access to the 1830 Station, via a tunnel running underneath the 1830 viaduct.

Historically, the Lower Yard came into use in 1830, its western end providing accommodation for carts delivering goods to and collecting them from the 1830 Warehouse and its eastern end serving as a timber and coal yard.

Following the restoration of the 1830 Warehouse and its conversion to museum usage, a large metal ramp was added, taking up much of the lower end of the Yard, which is now used for parking.

Figure 64 Top: View of the Lower Yard from the New Warehouse.

Figure 65 Bottom: Lower Yard looking west.





13.2 Assessment of Significance

13.2.1 Archaeological Significance

The Lower Yard may have potential to yield remains relating to multiple phases of previous human activity, however the full extent of this potential is unknown.

Excavations and finds in the area have revealed that the extent of the Roman *Vicus* extended north of the fort in Castlefield, terminating at Quay Street. The western end of the museum site therefore sits within the possible settlement boundary.

There is little known evidence within the site of Roman activity between the *Vicus* and the River Irwell, with the exception of the discovery of six unstratified Roman coins found 'in 1876 while foundations were being dug for a bridge over the Irwell, near Quay Street'.[45]

The archaeological interest of the Lower Yard is **low (curtilage to the 1830 Warehouse & New Warehouse)**.

13.2.2 Architectural & Artistic Interest

The architectural and artistic interest of the Lower Yard relates primarily to it's function alongside the 1830 Warehouse and New Warehouse as a connecting goods yard used to service both of the buildings as well as the wider site.

Forming part of the last of the Liverpool Road Station buildings group, it illustrates the evolution of construction techniques and goods handling technology.

The cobbled setts contribute to it's aesthetic value, as well as to the setting of the listed assets on the site, and the site's overall industrial character.

The architectural and artistic interest of the Lower Yard is **medium (curtilage to the 1830 Warehouse & New Warehouse)**.

13.2.3 Historic Interest

13.2.3.1 Development of the Liverpool Road Station

The 1867 Viaduct was originally constructed in the late 19th century as part of the Liverpool Road Station, which was the world's first passenger railway station. The station played a pivotal role in the development of railways and transport in the Industrial Revolution era and is illustrative of success and development of the site.

The Viaduct was built following the end of passenger services at Liverpool Road Station and is representative in the shift to goods handling and processing and the expansion of trade and industry in Manchester.

13.2.3.2 Communal Interest

The site is greatly valued by local and national communities as well as a significant proportion of international visitors. The closure of the working station in the 70s was protested by many. The formation of the Liverpool Road Station Society in early 1978 serves as a reminder of the local interest and care for the site and its buildings. Society members were active in both campaigning for the Station's preservation and assisting with preparations for the 1980 Great Railway Exposition. When the Museum opened in 1983, the Liverpool Road Station Society was disbanded, but the museum continues to be served and supported by an interested group of stakeholders, volunteers and advisors with a range of interests including heritage to this day.

13.2.3.3 The interconnection between the railway and industrial development and trade

The constructing and subsequent development of the station and the railway system as a whole was representative of the growth in industry and manufacturing and the need for improved transport connections. Railways proved to be economically beneficial, not just by facilitating trade, but also by increasing demand for raw materials that they directly consumed, such as coal, iron and steel.

The historic interest of the Lower Yard is **low/ medium (curtilage to the 1830 Warehouse & New Warehouse)**.

13.3 Heritage Impact Assessment

13.3.1 Removal of the Vehicle Ramp

It is anticipated that the removal of the existing concrete columns and pads that support the ramp will result in some disturbance to the cobbled setts and finished located within the Lower Yard. Where the removal of the vehicle ramp may result in any minor disturbance this will be made good in line with best practice for the care of historic assets and the specification outlined in 9488-BUT-CP-XX-SP-A-00004, submitted as part of this application. All disturbances will be made good and there will be no lasting physical or visual impact on the historic fabric.

The removal of the ramp will be beneficial to the site overall, as well as to the Lower Yard, by revealing the currently concealed historic brick elevation of the Viaduct, which will enhance the character of the Yard. This will enhance the museum site overall, helping to restore its historic appearance, character, and layout.

The existing ramp is considered dangerous, and it's removal is necessary to ensure the safety of the public, and members of the museum site staff.

Overall, the removal of the vehicle ramp will result in **moderate change** to the 1830 Viaduct, which will have a **moderate/large impact** in accordance with its heritage value. This impact will be **major beneficial** in nature.

The works will result in **no harm** to the asset.

14.0

Castlefield Conservation Area

14.0 Castlefield Conservation Area

14.1 Description of the Heritage

The Castlefield Conservation Area is one of the largest conservation areas in Manchester, and is situated on the south-west side of the city centre. Its focus is the Roman fort from which it derived its name - i.e. 'castle in the field'..

The conservation area is characterised by Manchester's Roman origins and industrial past, including the Mamucium Roman fort dating back to AD 79 and historic canals, warehouses, and viaducts relating to the city's industrial past. The area's historic and modern buildings showcase diverse architectural styles, representing the city's development and growth over time.

The site contributes significantly to the character and interest of the conservation area, in terms of both historic interest and architectural and aesthetic value. The density and highly preserved nature of the railway buildings also contributes to the significance of the conservation area. The site contributes to the understanding of the development of the area and the invaluable role the Liverpool Station and wider museum site has taken in the development of the Castlefield Area.

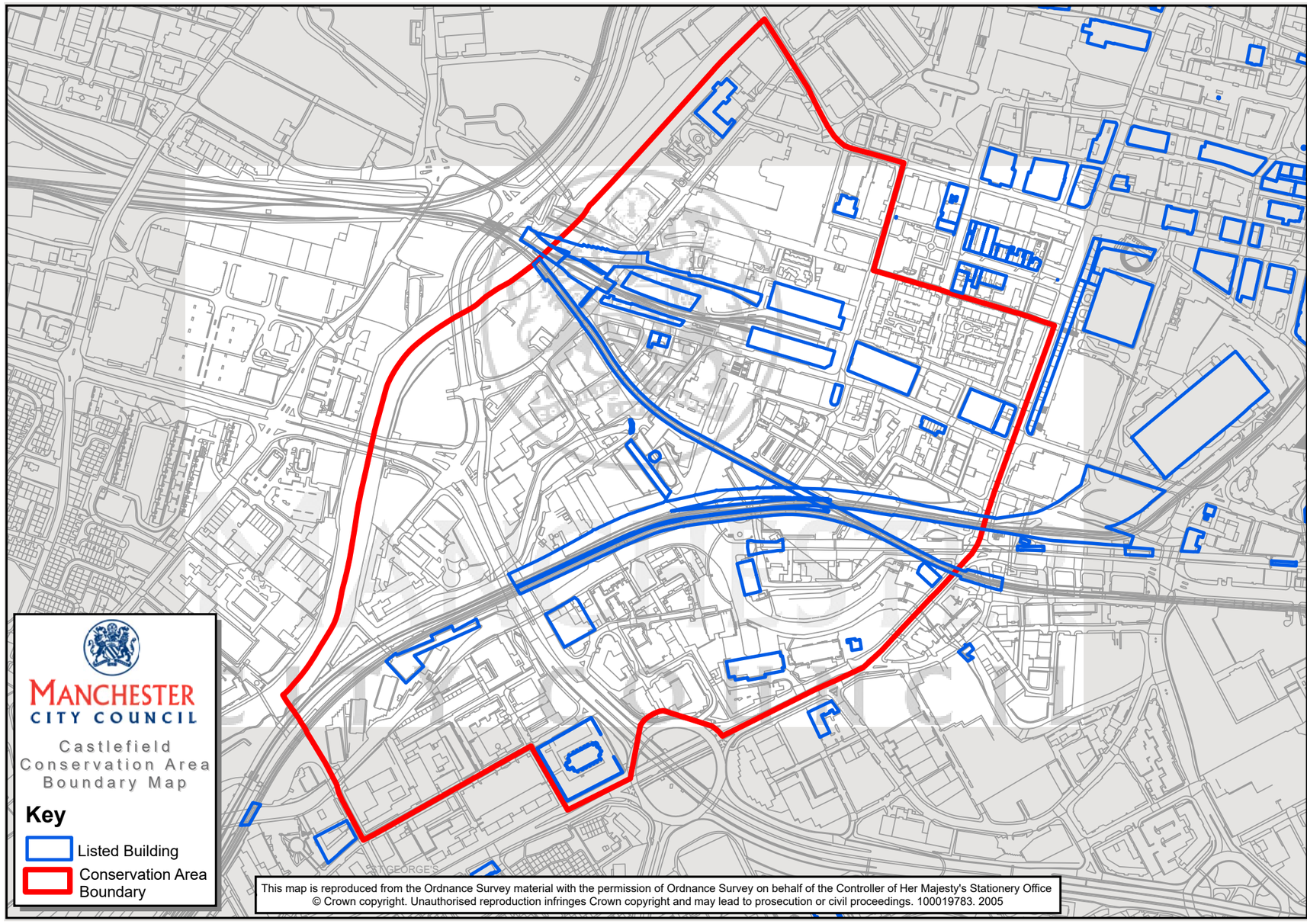


Figure 66 Map Showing Conservation Area Boundary © Manchester City Council

14.2 Heritage Impact Assessment

The proposed landscaping works will result in significant benefits for the Castlefield Conservation Area by means of improving the accessibility of, and to, the Museum; a site which contributes significantly to the character and historic understanding of the Castlefield area.

Not only do the proposals allow level access for all across the site, they will also facilitate public access onto the Station Approach and allow visitors access to an area which is currently restricted. Both of these factors benefit the conservation area by enhancing sense of place and visitor experience, and promote increased appreciation of, and time spent within, the conservation area and its key assets.

The planting and above-ground works have been carefully designed to maintain and channel views across the site, specifically those from the museums eastern gateway across the Upper Yard towards the 1830 Warehouse. These views contribute to the understanding, character, and appearance of the conservation area and their preservation and enhancement is highly beneficial.

Where the surface of the Upper Yard extends east to meet Lower Byrom Street, and becomes visible within the wider Conservation Area, the new level setts will be introduced to facilitate level access to the site from this entrance in the future. Options have been appraised by the design team to investigate the possibility of retaining some areas of the existing loafed setts in this area due to their small contribution to the streetscape setting of the site, however full level access was deemed the most appropriate to achieve maximum public benefit while also maintaining visual consistency and quality. Within the context of the numerous modern of materials and surface finishes that are present along Lower Byrom Street, the new level setts will sit comfortably within their context while still retaining an overall historic character and will not have an overall visual impact on the quality or character of the wider public realm.

Overall, the proposed development will result in **moderate change** to the Castlefield Conservation Area which will have a **moderate impact**. This impact will be **major beneficial** in nature and result in **no harm** to the asset.

15.0

Group Value + Cumulative Impact

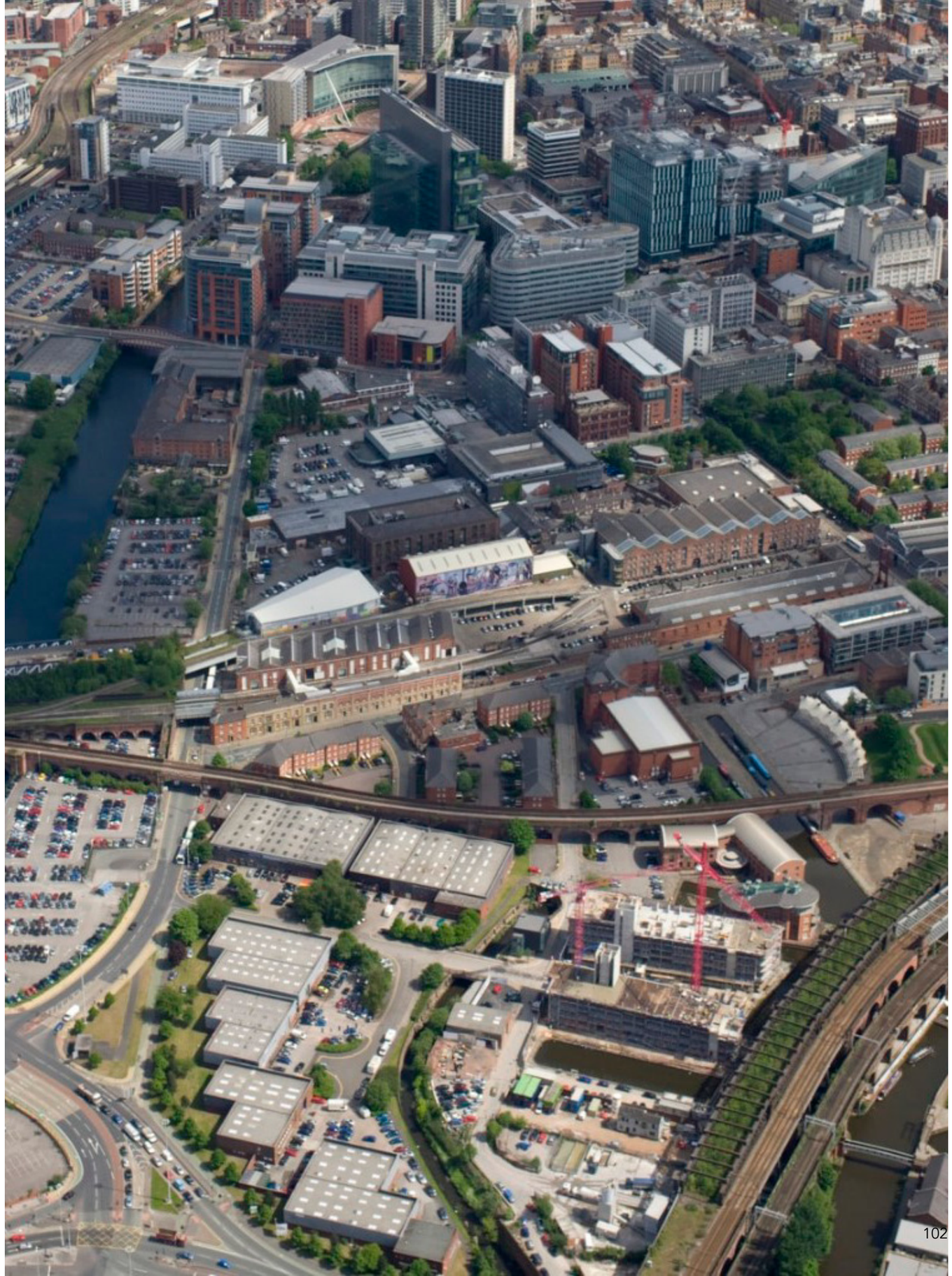
15.0 Group Value + Cumulative Impact

15.1 Understanding Group Value

As well has having individual heritage significance, the assets on the site have exceptional group value. Understanding the assets within their context, and within their group setting, will ensure a comprehensive understanding of their full significance. The collective presence of related elements can enhance the overall value of each individual component, creating a more cohesive and meaningful cultural and historic landscape.

When considering the future development and management of the assets on the site, their group value should be given due consideration to ensure that any potential change or enhancement to one element does not negatively impact upon the integrity and authenticity of the others, or of the group as a whole.

Figure 67 Aerial Image of Manchester, 2008, Showing the SIM Site © Historic England Photograph: 20792_006 flown 20/05/2008



15.2 Impact on Group Value

The visual cohesion and enhancements to the quality of the landscape provided to the site by the proposed development will be an great benefit to the group value of the assets overall.

As existing, the Upper Yard and Station Approach do no share the same visual language and lack cohesion. Both suffer as a result of scarring from patch repairs and overall condition issues, which compromise the overall visual quality of the spaces and the site as a whole. The landscaping proposals will effectively address these issues while respecting and responding to the setting of the assets.

The loss of a percentage of the existing loafed setts within the Upper Yard will result in some loss of historic character to the assets as a group, however the high-quality and careful selection of the new setts will reduce the overall visual impact. Furthermore, the reintroduction of setts, all be them 'new' to the Station Approach will help to reinstate some of the original character to the area, while also visually marrying the western end of the site to the Upper Yard. This is beneficial to group value both visually, and in terms of wayfinding and visitor experience.

The removal of the existing modern vehicle ramp from the 1830 Viaduct/Lower Yard will be beneficial to the over character and setting of the assets on the site, helping to restore its historic appearance, character, and layout.

Overall, the proposed development will result in **minor change** to the Group Value of the assets on the site which will have a **minor impact**. This impact will be **moderate beneficial** in nature and result in **no harm** to the Group Value.

15.3 Harm and Public Benefit

Overall, as discussed in sections 5.0 The 1830 Station, 6.0 1830 Warehouse, 7.0 Water Street Bridge, 11.0 1830 Viaduct, 14.0 Castlefield Conservation Area, 13.0 Lower Yard, and where assessing the impact on the fabric of the New Warehouse and Power Hall & Gantry, the majority of proposed interventions result in **no harm** to the significance of the heritage assets.

Section 12.0 Upper Yard, when discussing Hard Landscaping proposals, and sections 8.0 New Warehouse and 9.0 Power Hall + Gantry, when discussing impact on setting, conclude some areas of limited low less than substantial harm relating to the relevant proposed interventions. This limited less than substantial harm is offset and outweighed by the following public benefits and enhancements to the site overall:

- Improved, coherent design language and material palette across the site.
- Improved quality of materials within the setting of all assets.
- Removal of existing 'clutter' from the landscape.
- Greening and improved biodiversity.
- Improved visitor experience - heightened sense of place and ability to appreciate the site as a whole.
- Provision of rest areas and shaded seating.
- Improved accessibility allowing all visitors to enjoy and appreciate the site and its assets.
- Potential economic benefits to the Castlefield area and any associated positive multiplier effect.

Overall, the scale of harm is limited and the scale of public benefit is substantial.

16.0

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16.0 Bibliography & Sources

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17.0

Appendices

17.0 Appendices

17.1 Appendix 1: Endnotes

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17.2 Appendix 2: Listing Descriptions

17.2.1 1830 Viaduct

Official list entry

Heritage Category: Listed Building

Grade: II

List Entry Number: 1254726

Date first listed: 20-Jun-1988

Date of most recent amendment: 06-Jun-1994

List Entry Name: RAILWAY VIADUCT LINKING BRIDGE OVER IRWELL TO LIVERPOOL ROAD STATION

Statutory Address 1: RAILWAY VIADUCT LINKING BRIDGE OVER IRWELL TO LIVERPOOL ROAD STATION, WATER STREET

Location

Statutory Address: RAILWAY VIADUCT LINKING BRIDGE OVER IRWELL TO LIVERPOOL ROAD STATION, WATER STREET

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 82918 97896

Details

MANCHESTER

SJ8297 WATER STREET 698-1/18/428 (West side) 20/06/88 Railway viaduct linking bridge over Irwell to Liverpool Road Station (Formerly Listed as: WATER STREET (West side) Railway bridge (etc), attached viaduct, animal ramp, north of Liverpool Road)

GV II

Railway viaduct, with attached animal ramp at east end of south side, including bridge carrying railway line over Water Street to former Liverpool Road Station. 1830 with bridge rebuilt 1905. Brick viaduct, iron bridge. Viaduct has arcade of segmental arches (that at the west end with springing built into stone abutment of bridge over river); animal ramp attached at right-angles, also of brick with parapets and cobbled deck. Iron-girder bridge over street. Retaining wall to Water Street with monumental banding. Although re-built, forms integral element of railway structures associated with Liverpool Road Station, the first passenger railway station in the world, linking it to the bridge over the river Irwell.

Listing NGR: SJ8291897896

17.2.2 1830 Station

Official list entry

Heritage Category: Listed Building

Grade: I

List Entry Number: 1291477

Date first listed: 18-Dec-1963

List Entry Name: FORMER LIVERPOOL ROAD RAILWAY STATION STATION MASTERS HOUSE

Statutory Address 1: FORMER LIVERPOOL ROAD RAILWAY STATION, LIVERPOOL ROAD

Statutory Address 2: STATION MASTERS HOUSE, LIVERPOOL ROAD

Location

Statutory Address:

FORMER LIVERPOOL ROAD RAILWAY STATION, LIVERPOOL ROAD

Statutory Address:

STATION MASTERS HOUSE, LIVERPOOL ROAD

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 82952 97867

Details

MANCHESTER

SJ8297 LIVERPOOL ROAD 698-1/18/213 (North side) 18/12/63 Former Liverpool Road Railway Station, and Station Master's House

GV I

Also known as: Museum of Science and Industry, Liverpool Road Station LOWER BYROM STREET. Passenger railway station at terminus of Liverpool and Manchester Railway, now part of museum complex. 1830, by George Stephenson for the Liverpool and Manchester Railway Company, with attached house of 1808, formerly occupied by station agent; altered. Red brick, the booking offices faced with sandstone ashlar and stucco; hipped slate roofs. Rectangular plan parallel to street, with house to left and added range of former shops to right. Classical style. The BOOKING OFFICES, which back onto an embankment carrying the railway line at 1st floor level to the rear, have a 2-storey 4-bay facade (2:1:2:1 windows), symmetrical except for the 4th bay, with channelled rustication to the ground floor, panelled pilasters to the upper floor, a moulded cornice and high parapet with cornice and blocking course. The 2nd bay (the centre of the symmetrical portion, containing the entrance to the 1st Class booking hall) breaks forward slightly, has a large square-headed doorway with an architrave of coupled pilasters, moulded cornice and blocking course surmounted by a vase-pedestal sundial, and a recessed panelled door with rectangular overlight; and at 1st floor a tripartite sashed window with a cornice. The flanking bays have 15-pane sashed windows at ground floor flanked by wide segmental-headed tripartite sashed windows with glazing bars, and 12-pane sashes at 1st floor with moulded architraves. The 4th bay, containing the entrance to the 2nd Class booking hall, has a doorway at ground floor similar to the other but with single pilasters, and a 12-pane sash above like the others. Interior: separate booking halls and staircases leading to platform. Rear: 2 doorways to the platform with moulded stone surrounds, a tripartite sashed window to the left of the 1st Class doorway and a one-light sash to the left of the other. To the east, an added hipped-roof platform canopy on slender iron columns (C20 offices with glazed screen wall inserted under this roof). The former HOUSE to the left of the booking offices, 3 storeys and 3 bays to the same height, symmetrical, has a doorway with pedimented stone architrave, sashed windows of 16 panes at ground and 1st floors and 12 panes at 2nd floor, all with raised sills and flat-arched heads, and modillioned eaves; and a double-splayed left corner to the return wall, with sashed and blind windows. To the right of the booking offices is a long 9-bay range, recently rebuilt or restored, formerly with shops at ground floor and a train shed above, which is stuccoed at ground floor, has coupled pilasters, 1st-floor sill-band, moulded cornice and high brick parapet (carried across from the booking offices), and most bays with symmetrical openings including a round-headed doorway at ground floor flanked by windows in segmental-headed blank arches, and 2 windows above. HISTORY: oldest surviving passenger railway station in the world; ceased to handle passenger traffic in 1844 (when Hunt's Bank station was opened, now Victoria Station, q.v.), but continued in use as goods station until 1975. Forms group with Old Warehouse on opposite side of railway track (q.v.).

Listing NGR: SJ8295297867

17.2.3 1830 Warehouse

Official list entry

Heritage Category: Listed Building

Grade: I

List Entry Number: 1282991

Date first listed: 08-May-1973

List Entry Name: OLD WAREHOUSE TO NORTH OF FORMER LIVERPOOL ROAD RAILWAY STATION

Statutory Address 1: OLD WAREHOUSE TO NORTH OF FORMER LIVERPOOL ROAD RAILWAY STATION, LIVERPOOL ROAD

Location

Statutory Address: OLD WAREHOUSE TO NORTH OF FORMER LIVERPOOL ROAD RAILWAY STATION, LIVERPOOL ROAD

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 82990 97886

Details

MANCHESTER

SJ8297 LIVERPOOL ROAD 698-1/18/208 (North side) 08/05/73 Old Warehouse to north of former Liverpool Road Railway Station

GV I

Railway warehouse. c.1830, together with Liverpool Road Railway Station (q.v.), by George Stephenson and his son Robert; altered. Red brick in Flemish bond, with sandstone dressings and slate roofs. Long slightly curved plan, convex to the railway line and concave to the rear. Three storeys but presenting only 2 storeys to the raised level of the track, 10 individually gabled bays arranged in pairs, with slotted pilasters between each pair and at both ends, a moulded stone cornice (carried round the whole), a small lunette on the cornice in the centre of each bay, and stone gable copings linked by short flats. In each pair of bays (except the 5th pair, at the right-hand end), one bay has a segmental-headed wagon archway with stone surround, 3 small segmental-headed barred windows above the archway with linked sills and wedge lintels (except the 4th bay where the wagon entrance has been raised so as to leave only the heads of the windows) and one 2-stage loading slot to left or right, and the other bay has 2 loading slots. The last pair of bays both have the wagon-archway form. The right-hand loading slot in the 3rd bay has a hoist pulley over the lintel, and apparently altered brickwork over the other loading slots suggests that all were formerly equipped with similar hoists. The left hand return wall has (inter alia) a small pediment to the centre, with an oculus; the 3-storey 6-window right-hand return wall has a doorway with stone surround at the left end of the ground floor, 2 segmental-headed doorways at 1st floor level, and narrow rectangular windows diminishing in the height. The 3-storey rear, with cornice and lunettes like the front, and pilasters which have small windows, has 3-stage loading slots arranged singly or in pairs corresponding to those at the front, with hoists over all except one at the west end and 2 at the east end, doorways with stone surrounds next to the single slots, and small rectangular barred windows with wedge lintels. Interior: timber construction visible.

Listing NGR: SJ8299097886

17.2.4 1867 Viaduct

Official list entry

Heritage Category: Listed Building

Grade: II

List Entry Number: 1200805

Date first listed: 06-Jun-1994

List Entry Name: COLONNADED RAILWAY VIADUCT AT FORMER LIVERPOOL ROAD GOODS DEPOT

Statutory Address 1: COLONNADED RAILWAY VIADUCT AT FORMER LIVERPOOL ROAD GOODS DEPOT, LIVERPOOL ROAD

Location

Statutory Address: COLONNADED RAILWAY VIADUCT AT FORMER LIVERPOOL ROAD GOODS DEPOT, LIVERPOOL ROAD

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 83013 97907

Details

MANCHESTER

SJ 8397 NW, LIVERPOOL ROAD, 698-1/30/212, (North side)

Colonnaded railway viaduct at former Liverpool Road Goods Depot

GV II

Railway viaduct. Probably c.1870. Cast-iron. A series of cast-iron columns on stone bases supports the viaduct which has cast-iron beams showing at the sides.

Listing NGR: SJ8301397907

17.2.5 New Warehouse

Official list entry

Heritage Category: Listed Building

Grade: II

List Entry Number: 1283016

Date first listed: 06-Jun-1994

List Entry Name: MANCHESTER MUSEUM OF SCIENCE AND INDUSTRY, FORMER LOWER BYROM STREET WAREHOUSE

Statutory Address 1: MANCHESTER MUSEUM OF SCIENCE AND INDUSTRY, FORMER LOWER BYROM STREET WAREHOUSE, LOWER BYROM STREET

Location

Statutory Address: MANCHESTER MUSEUM OF SCIENCE AND INDUSTRY, FORMER LOWER BYROM STREET WAREHOUSE, LOWER BYROM STREET

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 83172 97868

Details

MANCHESTER

SJ8397NW LOWER BYROM STREET 698-1/30/230 (West side) Manchester Museum of Science and Industry, former Lower Byrom Street warehouse

GV II

Formerly known as: Lower Byrom Street Warehouse of Liverpool Road Station LOWER BYROM STREET. Railway goods warehouse, now part of museum complex. 1880, altered. Red brick with dressings of red brick and some sandstone, slate and glass roof. Large rectangular plan on east-west axis with entrances for railway lines through west end. Three storeys and basement, with south facade of 7 gabled bays, each bay having 2 pairs of windows; blue brick plinth and bands between floors with vertical strips extended to the windows; segmental-headed windows diminishing in the height, with stone imposts and blue brick keystones and arch-bands, iron-framed small-pane glazing; large segmental-headed wagon archways to the 2nd, 3rd and 5th bays, 2-stage loading slot to the upper floors of the 3rd bay. Eight-window west end, with 2 large square train entrances at ground floor; staggered east end with 4-window main facade, altered entrance at ground floor.

Listing NGR: SJ8317297868

17.2.6 Power Hall

Official list entry

Heritage Category: Listed Building

Grade: II

List Entry Number: 1291458

Date first listed: 06-Jun-1994

List Entry Name: POWER HALL OF MUSEUM OF SCIENCE AND INDUSTRY

Statutory Address 1: POWER HALL OF MUSEUM OF SCIENCE AND INDUSTRY, LIVERPOOL ROAD

Location

Statutory Address: POWER HALL OF MUSEUM OF SCIENCE AND INDUSTRY, LIVERPOOL ROAD

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 83155 97820

Details

This list entry was subject to a Minor Amendment on 15/11/2016

SJ8397NW 698-1/30/218

MANCHESTER LIVERPOOL ROAD (North side)
Power Hall of Museum of Science and Industry

GV II Railway goods transfer shed, now museum exhibition hall. 1855, for London and North Western Railway. Red brick with some sandstone dressings, hipped slate roof. Very long rectangular plan parallel to street, with wide splayed corner and short return to Lower Byrom Street. Single storey, 6:7:4 blind windows with wagon entrances between these groups and another in the splayed corner; round-headed blind windows with stepped surrounds and raised stone sills, large square-headed wagon doorways with flat-arched heads and stone fenders at the bases of the jambs (formerly furnished with sliding wooden doors but now glazed); continuous brick frieze with simplified corbel table and white brick band, brick parapet with stone coping. Three-bay return side similar.

Includes offices at the W end with four pairs of arched windows with keystones and shared stone sills to each of the two storeys, which are separated by a dentillated string course (formerly eaves, prior to the addition of the first floor). Rubbed-brick arched doorway on Liverpool Road with stone open pediment above retains timber double doors and later fanlight. Four-pane timber sash windows to front and rear elevation (some to rear altered during conversion to museum). Modillioned timber box gutter, central four-pot chimney stack and two-pot end stack. Rear (N) wall has carriage stones at each corner. Office interior said to retain fireplaces and cornices.

Listing NGR: SJ8315597820

Buttress

Architects | Masterplanners | Heritage Consultants