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SIM Bollards

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Buttress

Manchester Studio + Registered Office

Buttress Architects Ltd.
41 Bengal St.
Manchester
M4 6AF

T: 0161 236 3303
www.buttress.net

Leeds Studio

Buttress Architects Ltd.
Clockwise, Yorkshire House, Greek St.
Leeds
LS1 5SH

T: 0113 539 7965
www.buttress.net



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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

Installation of bollards, planters and new surface treatments to aid accessibility and engagement around the southern entrance way of the Upper Yard relating to the Grade II listed New Warehouse, and Power Hall and Gantry within the Castlefield Conservation Area.

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.'* Significance is assessed in relation to the heritage interests outlined by Historic England. A full explanation of the methodology used can be found in **4.0 Assessment of Significance**. An assessment of the potential impacts of the proposed development on the heritage is then provided in accordance with the methodology outlined in **6.0 Heritage Impact Assessment**, 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 2.2.4 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.

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.

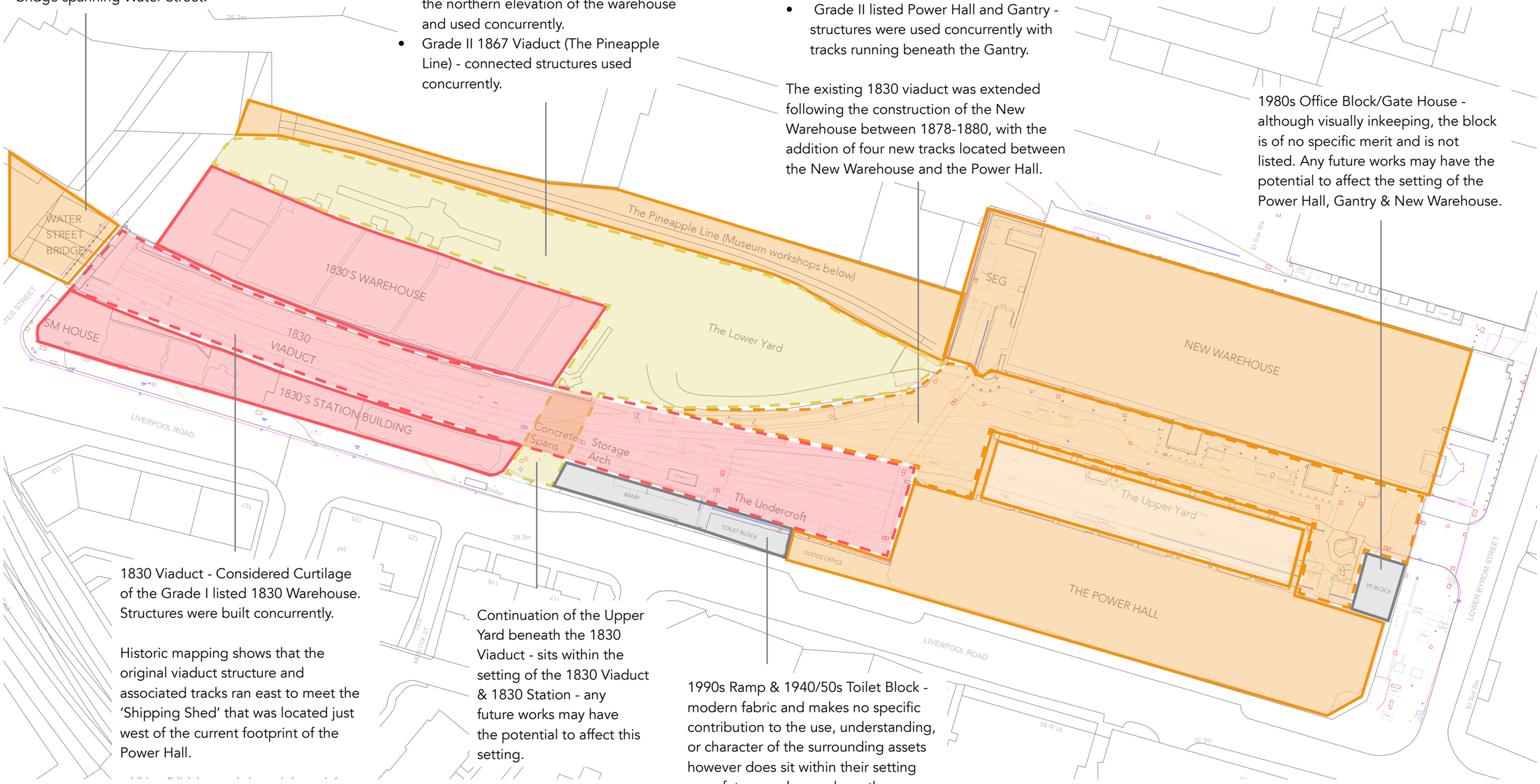
Upper Yard - Considered Curtilage of:

- 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

Understanding the Heritage

2.0 Understanding the Heritage

2.1 Description of the Heritage

2.1.1 New Warehouse

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.

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 3 Top: New Warehouse East Elevation

Figure 4 Bottom: South and East Elevations of the New Warehouse







Figure 5 Power Hall North Elevation showing the Gantry Crane

2.1.2 Power Hall + Gantry

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.

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.

2.1.3 Upper Yard

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 6 The Upper Yard, looking west.

2.2.4 Castlefield Conservation Area

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.

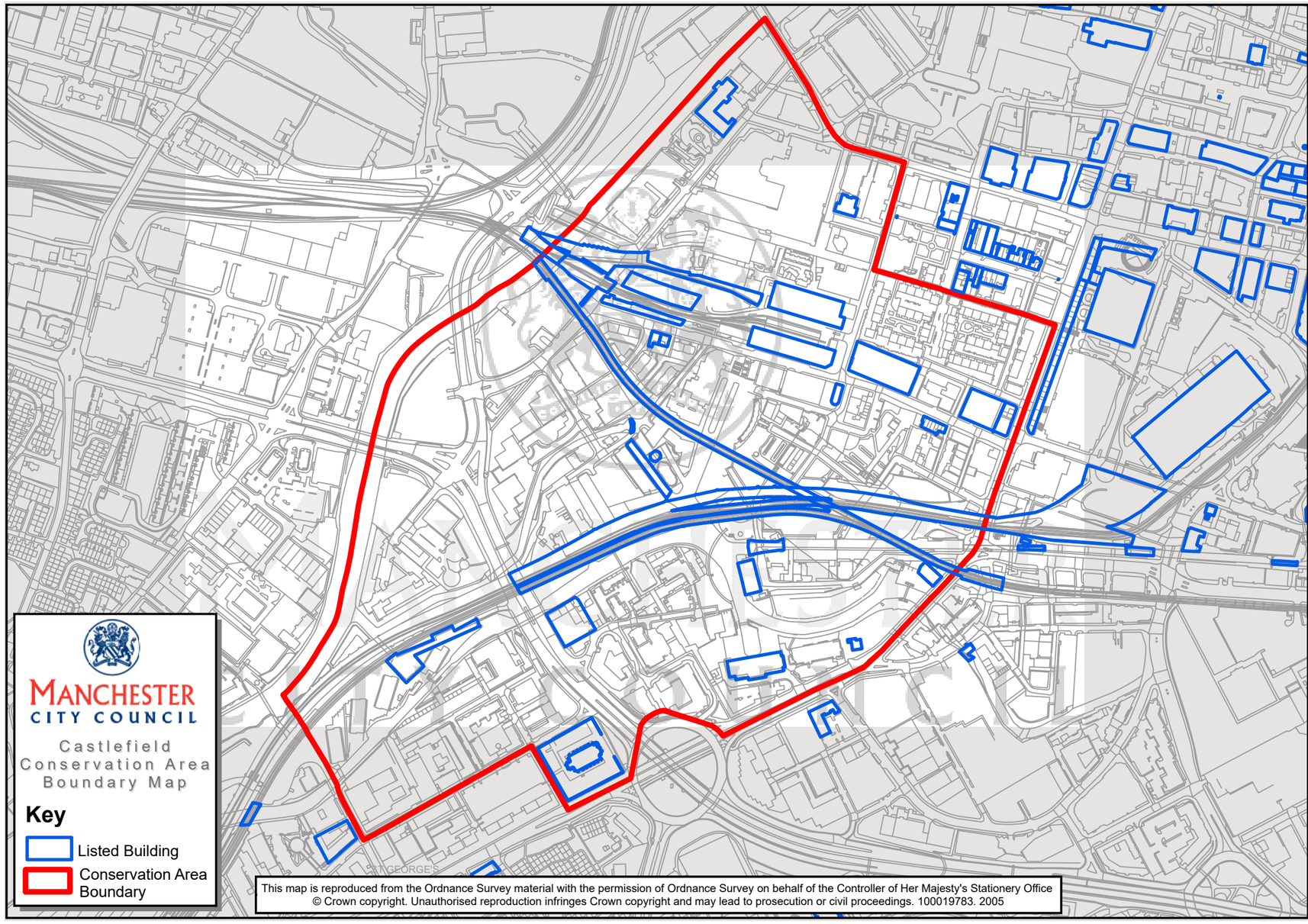


Figure 7 Map Showing Conservation Area Boundary © Manchester City Council

3.0

History + Development





3.0 History + Development

The following section provides a concise overview of the history relevant to the application. A comprehensive history and context of the site can be found in the site's *2007 Conservation Plan*.

- Following the successful development of the Bridgewater Canal and the uninterrupted route from Hull to Liverpool, Castlefield had become a major transshipment hub.
- Widespread success of the textile industry in the North West, meant there was a need for further transport developments to better connect Manchester and Liverpool. A station for passengers was erected opposite the warehouse.
- It was concluded that the Liverpool Road Station was too far away from the city centre to be convenient for passengers and therefore began operating solely as a good station.
- 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.
- In 1845 the Manchester and Liverpool Railway was taken over by the Grand Junction Railway.
- 1855 the construction of a new shipping shed, meant 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.
- 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. The fire of 1866 was the precursor to the final phase of development at the Station.
- By 1878 the company enquired enough land for the construction of the new Great Western Warehouse (the New Warehouse) and the warehouse built between 1878 and 1880.
- 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).

3.3.1 Decline & Fall

- Liverpool Road Station continued to thrive into the twentieth century, continuing to receive and handle large amounts 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. little investment was made in the station from with period onwards.
- The rest of the site remained in use until 1975 after which point the station was closed.
- 1978 the Liverpool Road Station Society was formed with the aim of securing the restoration of the buildings.
- The first phase of restoration culminated in the opening of the Museum on 15 September 1983.
- The site continues to operate as a museum under the direction of the Science Museum Group.

Figure 8 Top: North facing facade of the 1878 New Warehouse in 1987, Science Museum Group ©The Board of Trustees of the Science Museum

Figure 9 Bottom: 1889 Gantry (left) and the New Warehouse (right) in 1950,


MANCHESTER STUDIOS

4.0

Assessment of Significance

4.0 Assessment of Significance

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 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.

4.1 Significance of the Castlefield Conservation Area

In the absence of a full Conservation Area Appraisal and Management Plan, the following seeks to explore the special interest of the Castlefield Conservation Area based on a high-level understanding informed by desktop analysis.

4.2 Archaeological Interest

The Castlefield Conservation Area holds considerable archaeological interest as the site of Mamucium, a Roman fort established around AD 79. Surviving remains and below-ground deposits offer valuable evidence of Manchester's early military and civilian settlement, providing insight into Roman urban planning and occupation. The area's later industrial archaeology, including canal infrastructure and railway engineering, further contributes to its evidential value.

Overall, the archaeological interest of the Conservation Area is **high**.

4.2.1 Architectural & Artistic Interest

The area displays a wide range of architectural styles and building types, reflecting Manchester's growth over two millennia. Canal warehouses, railway viaducts, and industrial buildings are characterised by their robust, functional aesthetic, often constructed in brick and stone. Many structures retain a high degree of intactness, contributing to the architectural coherence and distinct character of the area.

The architectural and artistic interest of the Conservation Area is **high.**

4.2.2 Historic Interest

4.2.2.1 Illustrative Value

The area provides a clear and tangible record of Manchester's development from a Roman military site to prominent industrial city. It illustrates key stages in transport and commercial infrastructure, including the construction of the Bridgewater Canal (1761) and the opening of Liverpool Road Station (1830). These features collectively illustrate the transition from canal-based to rail-based freight and passenger movement.

4.2.2.2 Associative Interest

Castlefield is directly associated with pioneering figures of the Industrial Revolution, including James Brindley (canal engineer), George Stephenson (railway engineer), and the Duke of Bridgewater. It is also closely linked with the development of Manchester's reputation as a centre of innovation and progress during the 18th and 19th centuries.

4.2.2.3 Symbolic and Communal Value

The area has long-standing significance for local communities as a symbol of Manchester's industrial identity. Since the 1980s, its recognition as Britain's first Urban Heritage Park and the home of the Museum of Science and Industry has reinforced its role as a place of public memory, education, and civic pride. The adaptive reuse of the area and its continued role as a cultural and leisure destination further reflect its contemporary communal value.

The historic interest of the Conservation Area is **high.**

4.2.3 Summary of Significance

Castlefield's **high** heritage significance is captured by its designation as curtilage to Grade II.

4.3 Significance of the New Warehouse

4.3.1 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**.

4.3.2 Architectural & Artistic Interest

4.3.2.1 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.

4.3.2.2 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. 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**.

4.3.3 Historic Interest

4.3.3.1 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.

4.3.3.2 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.

4.3.3.3 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**.

4.3.4 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 10 Image Showing the New Warehouse and Gantry, 1978 © Manchester Libraries, M62941



4.4 Significance of the Power Hall + Gantry

4.4.1 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**.

4.4.2 Architectural & Artistic Interest

4.4.2.1 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.

4.4.2.2 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.

4.4.2.3 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**.

4.4.3 Historic Interest

4.4.3.1 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.

4.4.3.2 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.

4.4.3.3 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**.

4.4.4 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**.

2.2 Significance of the Upper Yard

2.2.1 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**.

2.2.2 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)**.

2.2.3 Historic Interest

2.2.3.1 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.

2.2.3.2 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)

4.4.5 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.

5.0

Summary of Proposed Works

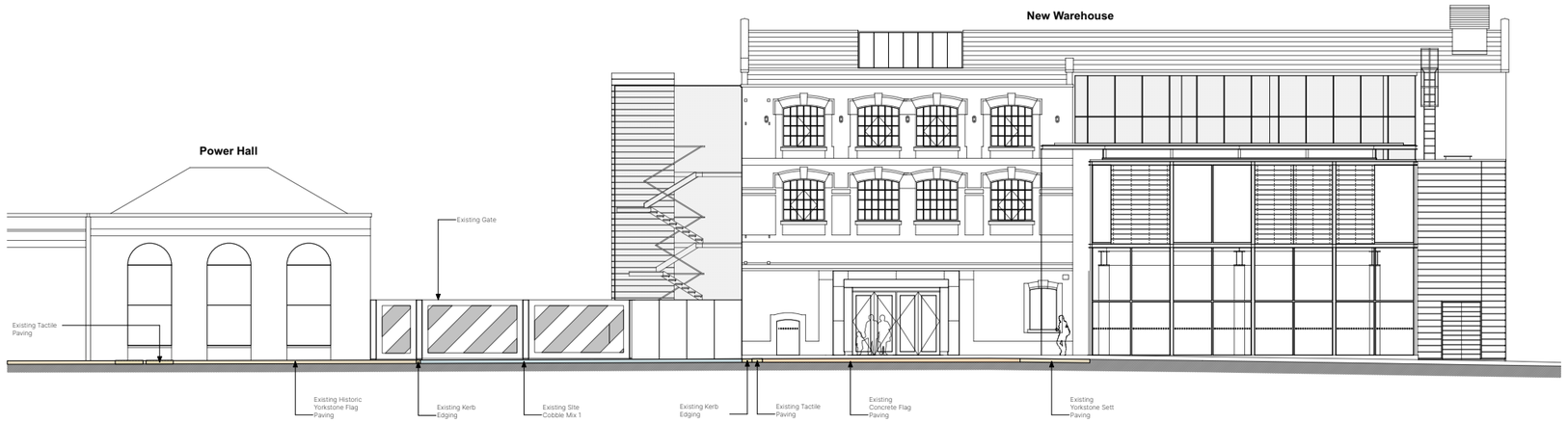
5.0 Summary of Proposed Works

The proposed works aim to create an active, accessible and high-quality entrance to the museum site through a number of landscape interventions including:

- The replacement of existing surface finishes with new sandstone flags. Some areas of existing Yorkstone flags to be retained.
- Replacement of existing cobbled setts with new level granite setts in areas where improved accessibility is required.
- New timber retaining wall to support new levels.
- New tactile paving where level change requires it.
- Introduction of new bollards
- Introduction of new steel planters
- Introduction of new fixed, automatic, and removable bollards.

The proposed general arrangement is shown in 2913.4-PLA-XX-XX_DR-L-0002 .

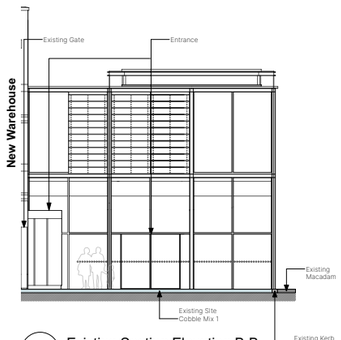




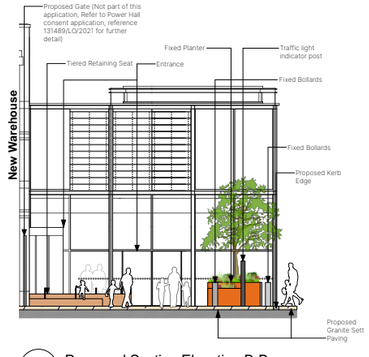
1 Existing Section Elevation A-A
Scale: 1:100



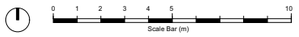
2 Proposed Section Elevation A-A
Scale: 1:100



3 Existing Section Elevation B-B
Scale: 1:100



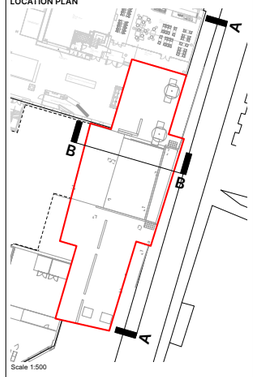
4 Proposed Section Elevation B-B
Scale: 1:100



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

LOCATION PLAN



Note: Colours shown are indicative only.

Revision	Date	Description	Drawn	Apprvd.
P02	04/07/25	Updated building elevation to architect information	LT	AM
P01	03/07/25	Planning Issue	LT	AM

PLANIT
Manchester | Gloucestershire | Leeds | Liverpool | London
Manchester
2 Back Grafton Street
Altrincham
Cheshire
WA14 1DY
W: planit-ie.com
E: info@planit-ie.com
T: 0161 928 9281

Client	Science Museum Group
Project	Science Industry Museum - Lower Byrom Street Gateway
Drg Title	General Arrangement Section Elevations

Created on	Created by	Approved by
20-05-25	LT	AM

Scale	Size	Workstage
1:100	A1	PLANNING

Drg No.	Suitability	Revision
2913.4-PLA-XX-XX-DR-L-3002	S4	P02

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Internal Source file:2913.4-PLA-XX-XX-M2-L-0002-P05-Lower-Byrom-Street-Gateway-Planning-Sheet-File.vwx

6.0

Heritage Impact Assessment

6.0 Heritage Impact Assessment

6.1 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 13. 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.

6.1.1 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 11 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 12 Definition of types of change

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

Figure 13 9-point scale of impact

2.3 Assessment of Impact on the Castlefield Conservation Area

2.3.1 Step 1: Determine the Asset's Significance

The significance of the Castlefield Conservation Area is **high**.

2.3.2 Step 2: Assess the Scale of Change

The proposed works involve **minor change** to both the character and appearance of the conservation area by upgrading existing hard landscaping in a sensitive and coherent manner. Interventions are small scale and designed to enhance accessibility and safety without detracting from historic character of the area.

2.3.3 Step 3: Evaluate the Impact Using the Matrix

High Significance + Minor Change = **Moderate/Slight Impact.**

2.3.4 Step 4: Interpretation

Impact

The proposed landscaping works will result in a minor change to the Castlefield Conservation Area. The interventions are limited in scale and relate to surface finishes, boundary treatments, and landscape elements such as planters and bollards. The works are located within a part of the site that is already heavily engineered and characterised by historic and modern surface treatments. The new materials and detailing will match those previously approved within the wider site, ensuring continuity.

Benefits

- Enhanced accessibility across the site through the replacement of uneven and inaccessible surface materials with level granite setts and tactile paving.
- Improved public legibility and wayfinding through the introduction of a coherent and high-quality landscape design.
- Preservation and enhancement of key views that contribute to the understanding of the conservation area's layout and architectural hierarchy.

Mitigation

Design development has been carefully informed by previous approvals and heritage considerations. The materials, finishes, and interface detailing replicate those consented in earlier phases, ensuring consistency across the site.

Conclusion

The proposed works result **no harm** to the significance of the conservation area overall and will have a minor beneficial impact.

6.2 Assessment of Impacts on the New Warehouse

The following assessment will considered the impact of the proposed development on both the fabric and setting of the asset in order to assess the overall impact on the asset's significance.

6.2.1 Step 1: Determine the Asset's Significance

The New Warehouse is Grade II listed, and is considered of **medium significance.**

6.2.2 Step 2: Assess the Scale of Change

The proposed works involve **minor change** to both the setting and fabric of the asset by upgrading existing hard landscaping in a sensitive and coherent manner. Interventions are small scale and designed to enhance accessibility and safety without detracting from historic character of the area. Direct intervention with the fabric of the asset will only take place where new surface treatments will interface with the building.

6.2.3 Step 3: Evaluate the Impact Using the Matrix

Medium Significance + Minor Change = **Slight Impact.**

6.2.4 Step 4: Interpretation

Impact on Setting

The impact of the proposed works on the setting of the asset will be slight. By using materials and approaches already approved through a previous consent, the scheme ensures visual consistency across the site. Views west into the site - taking in the southern elevation of the New Warehouse - will be maintained, with new planters carefully sited to avoid obstructing key sightlines.

The loss of some of the existing loafed setts from the entrance area will have a minor impact the setting of the New Warehouse. As existing, the small area of loafed setts makes an positive 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 will match those previously consented, carefully selected to replicate and compliment the existing mix of colours and finishes of the existing setts.

Impact on the Fabric

There will be minimal impact on the historic fabric of the heritage asset itself. Works are largely confined to the surrounding public realm and involve replacement or upgrading of surface treatments already in use on site.

Where new surface finishes interface with the asset, details previously consented will be used to insure appropriate and minimal intervention with the fabric.

Benefits

- Enhances accessibility through level surfaces and tactile paving.
- Provides a high-quality, consistent public realm using previously approved materials and detailing.
- Supports the industrial character of the site through appropriate material choices.
- Maintains key views into the site, preserving its visual and historical legibility.
- Improves functionality and safety with clear circulation, new bollards, and defined boundaries.
- Supports the delivery of a coherent landscape strategy.

Mitigation

Design development has been carefully informed by previous approvals and heritage considerations. The materials, finishes, and interface detailing replicate those consented in earlier phases, ensuring consistency across the site.

Conclusion

The proposed works result **no harm** to the significance of the asset overall and will have a minor beneficial impact.

6.3 Assessment of Impacts on the Power Hall and Gantry

The following assessment will considered the impact of the proposed development on both the fabric and setting of the asset in order to assess the overall impact on the asset's significance.

6.3.1 Step 1: Determine the Asset's Significance

The Power Hall and Gantry is Grade II listed, and is considered of **medium significance.**

6.3.2 Step 2: Assess the Scale of Change

The proposed works involve **minor change** to both the setting and fabric of the asset by upgrading existing hard landscaping in a sensitive and coherent manner. Interventions are small scale and designed to enhance accessibility and safety without detracting from historic character of the area. Direct intervention with the fabric of the asset will only take place where new surface treatments will interface with the building.

6.3.3 Step 3: Evaluate the Impact Using the Matrix

Medium Significance + Minor Change = **Slight Impact.**

6.3.4 Step 4: Interpretation

Impact on Setting

The impact of the proposed works on the setting of the asset will be slight. By using materials and approaches already approved through a previous consent, the scheme ensures visual consistency across the site. Views west into the site - taking in the southern elevation of the Power Hall and Gantry - will be maintained, with new planters carefully sited to avoid obstructing key sightlines.

The loss of some of the existing loafed setts from the entrance area will have a minor impact the setting of the Power Hall and Gantry. As existing, the small area of loafed setts makes an positive 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 will match those previously consented, carefully selected to replicate and compliment the existing mix of colours and finishes of the existing setts.

Impact on the Fabric

There will be minimal impact on the historic fabric of the heritage asset itself. Works are largely confined to the surrounding public realm and involve replacement or upgrading of surface treatments already in use on site.

Where new surface finishes interface with the asset, details previously consented will be used to insure appropriate and minimal intervention with the fabric.

Benefits

- Enhances accessibility through level surfaces and tactile paving.
- Provides a high-quality, consistent public realm using previously approved materials and detailing.
- Supports the industrial character of the site through appropriate material choices.
- Maintains key views into the site, preserving its visual and historical legibility.
- Improves functionality and safety with clear circulation, new bollards, and defined boundaries.
- Supports the delivery of a coherent landscape strategy.

Mitigation

Design development has been carefully informed by previous approvals and heritage considerations. The materials, finishes, and interface detailing replicate those consented in earlier phases, ensuring consistency across the site.

Conclusion

The proposed works result **no harm** to the significance of the asset overall and will have a minor beneficial impact.

6.4 Assessment of Impacts on the Upper Yard

The following assessment will considered the impact of the proposed development on the Upper Yard as curtilage to the Grade II New Warehouse and Power Hall and Gantry

6.4.1 Step 1: Determine the Asset's Significance

The Upper Yard is considered curtilage to the Grade II listed New Warehouse, and Power Hall and Gantry, and is considered of **low/ medium significance.**

6.4.2 Step 2: Assess the Scale of Change

The proposed works involve **minor change** to both the setting and fabric of the asset by upgrading existing hard landscaping in a sensitive and coherent manner. Interventions are small scale and designed to enhance accessibility and safety without detracting from historic character of the area. Direct intervention with the fabric of the asset will only take place where new surface treatments will interface with the building.

6.4.3 Step 3: Evaluate the Impact Using the Matrix

Low/Medium Significance + Minor Change = **Neutral/Slight Impact.**

6.4.4 Step 4: Interpretation

Impact on Setting

The current proposals have been designed to align visually and materially with the ongoing works to the Upper Yard, ensuring continuity across the threshold. The proposed changes will improve the visual coherence and connectivity through to the Upper Yard from the streetscape.

The loss of some of the existing loafed setts from the entrance area will have a minor impact on the character and appearance of the Upper Yard. As existing, the small area of loafed setts makes an positive contribution to the historic industrial character of the site as a whole. Where existing loafed setts are to be replaced with new level setts, these will match those previously consented, carefully selected to replicate and compliment the existing mix of colours and finishes of the existing setts.

Benefits

The proposed scheme will enhance the overall character and appearance of the Upper Yard, introducing a consistent design language and material palette. Other benefits include:

- Enhances accessibility through level surfaces and tactile paving.
- Maintains key views into the site, preserving its visual and historical legibility.
- Improves functionality and safety with clear circulation, new bollards, and defined boundaries.
- Supports the delivery of a coherent landscape strategy.

Mitigation

Design development has been carefully informed by previous approvals and heritage considerations. The materials, finishes, and interface detailing replicate those consented in earlier phases, ensuring consistency across the site.

Conclusion

The proposed works result **no harm** to the significance of the asset overall and will have a minor beneficial impact.

7.0

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7.0 Bibliography & Sources

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Buttress

Architects | Masterplanners | Heritage Consultants