

08 August 2023

Jack Naven
Planning Department
Manchester City Council
Town Hall
Manchester
M60 2LA

Dear Jack,

Science and Industry Museum: New Warehouse, Liverpool Road, Manchester, M3 4JP
Application for Listed Building Consent (PP-PP-12339401)

Please find enclosed an application for Listed Building Consent for fire compartmentalisation works at the Science and Industry Museum's New Warehouse building.

The Science and Industry Museum is located to the north west of central Manchester, to the east of the River Irwell, and is within the Castlefield Conservation Area.

The Applicant is the Science and Industry Museum ('the Museum').

1 Context

The New Warehouse is a Grade II listed building within the Science and Industry Museum complex. The 'New Warehouse' was built in 1880, specifically for use by the Great Western Railway and housed both goods and livestock that were transported on the railway. The four storey construction was unlike the earlier warehouses, designed with the use of cast iron columns with wrought iron beams internally. The station and its buildings handled a significant amount of goods during the latter part of the 1800s and into the first quarter of the twentieth century with traffic as diverse as cotton, grain timber and meat.

The decline of the railways for goods transportation, political and policy decisions, and new developments in road and shipping all contributed to the steady neglect of the site from the years after World War I. Therefore, following decades of investment shortages Liverpool Road was closed by British Rail in 1975.

Following negotiations and with pressure from the Liverpool Road Station Society, the New Warehouse was bought by the Greater Manchester Council in 1982 to house the new Greater Manchester Museum of

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Science and Industry which opened in 1983. This was originally limited to the Power Hall and Passenger Station. Shortly after however the ground and basement floors of the New Warehouse were brought into use as exhibition and storage space respectively. The upper floors were then renovated in the late 1980s for museum use by BDP, with alterations including insertion of a ramp and lift, fire escape stairs, restaurant, education and conference spaces, and a new main entrance to Lower Byrom Street. The library and records areas were added in the basement in 1990 and in 1992 the shop was extended with a new frontage and additional basement storage created. In 1995 additional funding allowed further works to be completed with the exhibition gallery undergoing renovations with a new partial floor being inserted. Between 1996 and 2000, the remainder of the first and second floors of the New Warehouse were converted, a new glass lift and stair tower added, the shop further extended, first floor partitioned and top floor restaurant formed, alongside a new interactive zone and meeting rooms. Finally, Work on the New Warehouse was undertaken again in 2009-10, incorporating a Learning Centre, Conference Centre, new shop facilities and new main entrance.

A programme is currently underway to renovate and refurbish the building with plans to undergo a series of urgent repairs and improvements over the next two years, including to the roof, gutters, windows, and masonry. These works are being introduced to ensure the space is suitable to accommodate both staff and visitors moving forward.

The below plan identifies where the New Warehouse is located within the Science and Industry Museum estate:

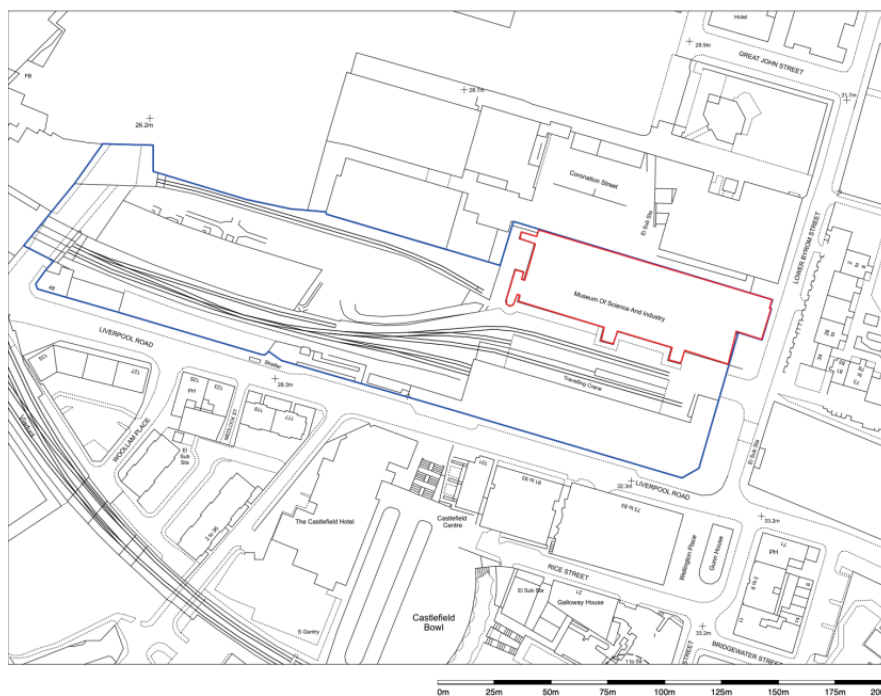


Figure 1 – Site Location Plan (Source: Atelier MB, Heritage Statement)

2 Background

The proposed works are a direct response to a Fire Strategy Report and Action Log by 'The Fire Surgery' conducted in May 2022, a Fire Compartmentalisation and Door Survey and reports conducted by fire protection specialists, 'Neo'. These reports concluded that alteration to doors and compartmentalisation are deemed necessary to reach the required fire protection standards. Furthermore, professional assessments concluded that additional compartmentalisation measures are also necessary to ensure suitable fire ratings are achieved to all required areas. Fire compartmentalisation works to the New Warehouse therefore fall within a programme of wider fire safety works occurring across the Museum.

3 Significance of the New Warehouse

The New Warehouse is a component of part of the oldest passenger/goods railway in the world. The Liverpool Road Site as a whole is of national and global significance as it is the first of its kind and a model for others that followed. Historically, the whole site, including the New Warehouse is of the highest value, for its broader associations with railway pioneers and for its wider global influence on the development of railway transport. The associated communal value, both at the time of their development and today, as an educational and historical resource, is very high. Liverpool Road remains the most complete surviving early railway station complex in the world and the historic buildings make a unique and highly positive contribution to the Castlefield Conservation Area and the wider city.

The New Warehouse is a significant component part of the station complex and is a good example of the evolving design of railway warehousing. Its importance is reflected by its Grade II listed status. Architecturally and aesthetically, the New Warehouse embraced fire-proofing technology and represents a distinct shift from the early warehousing form (for example, at the 1830s warehouse). The engineering and form displayed in the Liverpool Road buildings went on to influence railway development around the globe.

The original structure of the New Warehouse building has a high heritage significance. Numerous alterations have been made to the building, particularly in order to serve its museum function. These changes are, for the most part, neutral in their impact, though they have negligible heritage value in themselves. Evidential values remain high despite the numerous adaptations and alterations to facilitate museum use.

For further details see the Heritage Statement prepared by Atelier Heritage.

4 Pre-application Engagement

Manchester City Council (MCC) have been engaged throughout the pre-application process, having attended meetings on site on 08 March 2023. During this meeting, the need for the proposed works was

established and the approach with regard to fire compartmentalisation and door works as well as how listed fabric would be protected was presented.

Officers noted where former door openings need to be filled in as part of proposed fire door works, new doors should match the existing doors in similar locations. This feedback has been reflected within the fire door works as outlined within the Design and Access Statement and Method Statements.

Due to the significant number of instances where work was required the most appropriate approach to presenting methodologies for proposals was also discussed. Officers recommended more general repair works are put into categories within any Method Statements while more bespoke instances should be addressed individually. This approach is reflected within the Method Statements and Design and Access Statement produced by Atelier MB in support of this application.

5 Proposals

The description of development for the listed building consent is:

“Listed Building Consent for fire protection remediating works in the New Warehouse including works to introduce new fire enclosures, fire partitions, upgrade and replacement of doors and associated works.”

The proposed works which form this application can be separated into two workstreams, which while summarised below, are fully detailed in the accompanying Design and Access Statement prepared by Atelier MB as well as the drawings submitted with this application.

5.1 Fire Compartmentation Remediation

For works that will not affect the historic fabric of the New Warehouse, fire stopping will be introduced to the heads of walls and around pipes, cables and duct penetrations of these walls. This will involve both the installation of fire rated batts and sealants.

For some instances of works affecting or abutting the historic fabric, making good works will be required to the existing wall or partition prior to the fire stopping being installed. In other instances, the existing cabling will be bunched together to reduce the size of the wall penetration needed. Where making good of the existing masonry wall is required, this will be done in matching brickwork with a lime mortar. The fire stopping works will then follow on as required.

Where possible, openings within fire rated walls will be reduced in size by infilling the opening with matching brick/blockwork prior to installing the fire rated batts and sealant.

5.1.2 New Fire Rated Enclosures

In two locations within the basement, the proposal is to form a new fire rated store enclosure within an existing store which has not been separated from the adjacent spaces. These are established store areas

within the museum. However, they have not been adequately separated from plant equipment, which therefore has the potential to be a fire risk.

In response to the heritage significance of the building, each enclosure will have a cap ceiling. These are located well below the existing exposed brick and iron arched ceilings. The stores are also pulled away from any historic fabric e.g. brick walls.

A third enclosure is required at ground floor, behind the exhibition area. In this instance, it will separate the plant equipment from the public exhibition area.

5.1.3 Fire Separation Adjacent to Beam

The main back house corridor to the basement area shares a wall with 'location GW_LG16' highlighted within the accompanying methodologies submitted in support of this application. This wall is identified in the Neo Compartment Survey report as not being adequately fire sealed to the soffit. Due to the close proximity of the beam to the wall head, this cannot be fire stopped. Neo propose that the adjacent cast iron beam is clad in a fire rated board and sealed to the wall itself to rectify this situation.

Discussions with the conservation officer led to the following options being explored that did not involve a cladding solution:

1. Fire stop from the other side of the wall
2. Overboard the corridor face of the wall
3. Installation of a secondary fire separated corridor within the main corridor

For full details of the above options please see section 5.1 of the Design and Access Statement submitted in support of this application.

It was concluded however that it was not appropriate to progress these options as the disruption associated would negatively impact the running and accessibility of the museum. These risks and implications are therefore considered to outweigh the impact of the reversible covering over a single cast iron beam in a back house location.

Consequently, having explored other options, cladding of the beam is the solution that is deemed to be the most acceptable. The cladding is limited to one beam, whilst all others remain exposed. It is also a fully reversible solution.

5.1.4 New Partitions and Fire Doors

At the second floor, the Fire Surgery Fire Strategy report identified a need to separate the fire escape routes used by the education area and associated rooms, and the conference facilities. In response to this

requirement, it is proposed that a new door is inserted along this corridor. This door will be glazed and will be connected to an electromagnetic hold open device so that the doors can remain open unless the fire alarm is triggered.

The fire strategy report also required that a 60 minute fire rated compartment line be installed at the second floor. As a result, it is proposed that a door is installed to enclose the WC lobby. This will be located behind the existing roof timbers and will therefore only abut the existing false ceiling. The existing partition that runs across the full floorplate width will also be upgraded to achieve 60 minutes fire separation.

5.2 Fire Door Remediation

Door works will range from replacement hinges, signage and lipping of door leaves to replacement of wholly non-compliant doors and the insertion of new doors where they are currently missing. Any new doors will be designed to match the existing or where none currently exist new doors will match similar doors elsewhere in the vicinity.

6 Methodology and Impact on the Listed Building

Method Statements for all works to be carried out as part of this application have been prepared by Atelier MB which fully detail how the works will be carried out, as well as how historic fabric will be protected, prior to works beginning and throughout works taking place.

The Method Statements have been split into two workstreams related to the compartmentalisation remediation and door remediation. Both Method Statements have been submitted in support of this application.

The accompanying Heritage Impact Assessment prepared by Atelier Heritage assesses the works in terms of impact on the listed building and concludes that no harm to the heritage asset has been identified within the proposals.

Further to this, the methodologies prepared by Atelier MB set out the process of recording the protection of historic fabric and monitoring works which would ensure elements of the listed building are preserved.

7 Accordance with Planning Policy

The key material planning consideration for this application is the impact on the designated heritage asset, the New Warehouse, and therefore adherence to planning policy regarding the historic environment is required.

Paragraph 190 of the National Planning Policy Framework ('NPPF') (2021) states that *"in determining applications, local planning authorities should take account of:*

- *the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
- *the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
- *the desirability of new development making a positive contribution to local character and distinctiveness.”*

Paragraphs 201-203 place great weight on the conservation of designated heritage assets, emphasising the need to avoid “substantial harm” in terms of demolition, significant alteration, or compromise the setting unless that harm is clearly justified (via four specific tests) or there are substantial public benefits that outweigh that harm. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits.

Overall, the building would be conserved in a manner that is appropriate to its significance. The Heritage Assessment concludes that the effects on the heritage value of the New Warehouse sustain and preserve its special interest and significance. The proposals are considered a positive enhancement as safeguarding measures have been designed to lower potential risk to the asset and thus cause no harm within the terms of the NPPF. The full assessment of harm is set out in the accompanying Heritage Impact Assessment prepared by Atelier Heritage.

In addition to posing no harm to the heritage value of the New Warehouse, there are public benefits associated with the proposed works which ensure the long term protection of the heritage asset to ensure the beneficial long-term and optimum viable use of the listed building. Ultimately, improving fire safety standards through the proposed fire compartmentalisation and door remediation works will help to safeguard the asset to ensure its long-term conservation and appreciation of this protected asset, to facilitate the experience for those visiting the Science and Industry Museum.

Policy CC9 Design and Heritage within the adopted Manchester Core Strategy (2012) sets out that development in Manchester City Centre should protect or enhance the heritage assets that have been identified, including listed buildings, conservation areas and scheduled ancient monuments. The policy also supports the need to ensure buildings are of the highest standard in terms of appearance and function and all replacement and repair works seek to preserve the special interest and significance of the listed asset.

Saved UDP Policy DC18.1 states that MCC give particularly careful consideration to development within Conservation Areas and will seek to preserve and enhance the character of these designated areas. Saved UDP Policy DC19.1 also states that applications for listed building consent, involving or having an impact on buildings of Special Architectural or Historic Interest, will have regard to securing the retention, restoration, maintenance and continued use of such buildings and to protecting their general setting.

It is concluded within the heritage statement prepared by Atelier Heritage that proposed works are not considered to constitute harm and seek to ensure the long-term protection of the heritage asset through minimal intervention. As a result it is considered that proposals are in accordance with Policy CC9 Design and Heritage of the Manchester Core Strategy (2012) as well saved UDP Policies DC18.1 and DC19.1.

Furthermore, although the Science and Industry Museum is located within the Castlefield Conservation Area the proposed works are wholly internal there is no impact on the character or significance of the Conservation Area is not affected.

8 Application Documents

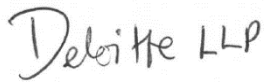
The following information is provided in support of this application:

- Application Form and Ownership Certificate prepared by Deloitte;
- Application Site Boundary and Site Location Plan prepared by Atelier MB;
- Design and Access Statement prepared by Atelier MB;
- Heritage Statement prepared by Atelier MB;
- Method Statements prepared by Atelier MB;
 - Door Methodologies, New Warehouse – March 2023 (Rev B)
 - Compartmentation Methodologies, Great Western Building Proposed Basement
 - Compartmentation Methodologies, New Warehouse, March 2023 (Rev C)
 - Site Wide Methodologies (Supplementary Details related to Historic Fabric)
- Specifications prepared by Atelier MB
 - Historic Fabric Repair Specification
 - Fire Protection Works Specification
- Full drawing list prepared by Atelier MB (provided in Appendix A)
- Fire Survey Reports prepared by NEO
 - Proposed Basement, Fire Compartmentation Survey Report
 - Great Western Warehouse, Fire Door Survey Report

- o Great Western Warehouse, Fire Compartmentation Survey Report

The Planning Portal Reference PP-12339401 and the required planning application fee has been paid online. We look forward to receiving your confirmation that the application has been formally registered. In the meantime, if you have any queries or require further information, please do not hesitate to contact Joe McElhone (0161 455 6994 / joemcelhone@deloitte.co.uk) or Josh Wyatt-Smith (0161 455 8451 / jwyattsmith@deloitte.co.uk).

Kind regards

A handwritten signature in black ink that reads "Deloitte LLP". The signature is written in a cursive, slightly stylized font.

Deloitte LLP

Appendix A – Drawing List

Description	Drawing Reference
Location Plan Main Museum	E(002)
Great Western Warehouse - LG	E(100)
Great Western Warehouse - G	E(101)
Great Western Warehouse - 1	E(102)
Great Western Warehouse - 2	E(103)
NW – LG Proposed Plan 1	P(100)
NW – LG Proposed Plan 2	P(101)
NW – LG Proposed Plan 3	P(102)
NW – LG Proposed Plan 4	P(103)
NW – G Proposed Plan 1	P(104)
NW – G Proposed Plan 2	P(105)
NW – 2 nd Proposed Plan 1	P(108)
NW – 2 nd Proposed Plan 2	P(109)
NW – G Strip-out Plan 1	P(804)
NW – 2 nd Strip-out Plan 1	P(808)