

09 April 2021

David Brettell  
Planning Department  
Manchester City Council  
Town Hall  
Manchester  
M60 2LA

Deloitte LLP  
The Hanover Building  
Corporation Street  
Manchester  
M4 4AH

Phone: +44 (0)161 832 3555  
Fax: +44 (0)161 829 3800  
[www.deloittereal estate.co.uk](http://www.deloittereal estate.co.uk)

Direct phone: +44 161 455 6512  
[johcooper@deloitte.co.uk](mailto:johcooper@deloitte.co.uk)

Dear David

## **Air and Space Hall, Science and Industry Museum: Listed Building Consent to enable the potential decant of objects within the Grade II Listed Air and Space Hall**

Please find enclosed an application for Listed Building Consent to enable the potential decant of objects within the Grade II listed Air and Space Hall.

### **1 Background**

The Air and Space Hall, formerly known as the Lower Campfield Market, is a Grade II Listed Building which forms part of the Science and Industry Museum located in the Castlefield area of Manchester City Centre, part of the Castlefield Conservation Area. The building is a significant example of cast iron and glass market hall design, designed by local architects Mangnall and Littlewood and built in 1876 to house an open-air market.

During the First World War, the building was occupied by the Ministry of Munitions as a Bond Inspection Depot, by the Ministry of Labour for training of disabled soldiers, training for the 18th Battalion, Manchester Regiment, and the 4th City Pals of the Manchester Regiment which later became the 19th Battalion.

The former Market Hall was converted into the Air and Space Museum in the early 1980's and opened to the public in 1983 as the Air and Space Museum run by Manchester City Council, however it was closed in September 1985. The then named Greater Manchester Museum of Science and Industry took over the Air and Space Museum on a long-term lease from Manchester City Council and re-opened it in December 1985.

The existing largest collection items were brought into the building in the 1980s, through the main central bay on the Liverpool Road elevation of the building. The central bay is split into three, segmented by the original iron lattice columns, which extend from the ground level up to the underside of the deep horizontal lattice beams and sits on top of cast iron columns with crocketed caps. At the time, this

Deloitte LLP is a limited liability partnership registered in England and Wales with registered number OC303675 and its registered office at 1 New Street Square, London, EC4A 3HQ, United Kingdom.

Deloitte LLP is the United Kingdom affiliate of Deloitte NSE LLP, a member firm of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"). DTTL and each of its member firms are legally separate and independent entities. DTTL and Deloitte NSE LLP do not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) to learn more about our global network of member firms. Real Estate Services regulated by RICS.

involved the deconstruction of the central bay, but excluded the external frame. The glazing and timber work within each of the bays were entirely removed along with part of the mezzanine level to allow for large vehicles to drive into the museum space.

Since the Science Museum Group took on the Science and Industry Museum in 2012 it has been working hard on an extensive and intensive programme of repair and conservation work to the buildings the museum inhabits including investigative work into the deteriorating building fabric of the Air & Space Hall. This has included a series of like-for-like repair works on the south elevation in 2016 and scaffolding to enable ongoing roof maintenance.

Listed Building Consent is sought for:

*“Listed Building Consent to enable the potential decant of objects within the Grade II Listed Air and Space Hall”*

## **2 Proposals and Methodology**

The existing collection items within the Air and Space Hall contains collections owned by the Science Museum Group, and others on loan, including large aircraft such as the Avro Shackleton AEW2 reconnaissance aircraft, the Bristol Belvedere helicopter and Trident 3B flight deck. In addition, there are several smaller aircraft and objects ranging from cars to aircraft engines. The proposed works will be required should these items need to be removed or relocated.

Without the necessary works to the building, the removal of the larger items would not be possible.

A detailed options exercise was conducted to calculate the most appropriate way of decanting the collection items. This concluded that due to the size of the larger collection items, parts of the elevation of the building are required to be temporarily removed to allow for the haulage vehicles to enter the building and carefully load-up the items and minimise the impact on traffic by reducing the need for temporary road closures.

It is proposed to follow a similar methodology for how the items were brought into the Air and Space Hall to allow for their removal.

- North Elevation: The north elevation has been discounted from usage due to access restrictions and the close proximity of neighbouring properties.
- East Elevation (Byrom Street): It is proposed that this entrance is used predominantly by the contractor with direct access to the contractor’s compound, though can be used by the removals specialist to remove and load smaller exhibit items through the existing entrance way.
- South Elevation (Liverpool Road): It is proposed that this entrance is opened up as a main access point for the removal of large exhibits and collections items. This entrance will also provide access to the internal space for general access, lifting equipment and haulage vehicles.
- West Elevation (Lower Byrom Street): This façade and current main public entrance is to be used for the safe removal of smaller collections items, including vehicles. Due to its level threshold.

## **2.1 Temporary Façade Alterations**

### **2.1.1 South Elevation:**

The south elevation central bay will be used as the primary access point for the removal of large exhibition items. The proposals would temporarily remove the right-hand side (east) bay only located within the central bay. The right bay would be removed from the ground to the underside of the lattice beam / girder. This will require the temporary removal of the following components of the elevation; scaffolding, upper timber frame, glazed panels, internal steel brace and, ground floor curtain walling, mezzanine deck level and floor.

The existing timber frame is found to be rotting in some places, and therefore after its proposed removal, it will need to be replaced. A portion of the existing internal mezzanine deck will need to be temporarily removed to allow for the vehicular access. The previous 1980's joint and cut lines will be re-used to limit alterations to the existing fabric.

The void formed will provide a width of 5m and height of 7.2 to the underside of the lattice beam to allow for haulage vehicles to access. All building elements and components which will be left exposed during the works will be appropriately braced and made watertight throughout the duration of the project.

### **2.1.1 East Elevation:**

The east elevation is proposed to be used as the predominant contractor entrance into the building as well as for the removal of some of the smaller collection items. The site compound is proposed to be located on an unused parcel of land on Byrom Street opposite the east elevation.

To allow for the removal of some of the smaller collection items, this will require the temporary removal of the following components from the east elevation; ground floor external entrance doors; ground floor internal doors and screen; and, temporary partitions.

### **2.1.3 West Elevation**

The ground floor lobby doors on the western elevation are proposed to be removed to allow for further removal of some of the smaller collection items.

## **2.2 Protection of Listed Fabric**

Before any works start on site, all protective measures will be installed into the building to minimise any damage to listed fabric. This will include along key routes into and out of the building.

## **2.3 Reinstatement and Restoration of Listed Fabric**

All listed fabric removed is proposed to be reinstated after the decant of the collection items has been completed. Due to the condition of some of the listed fabric, it is proposed that like-for-like repair work is conducted where appropriate. This includes:

- Timber elements – Mullions and cornicing;

- Metal works – Cast iron decorative external floral elements, internal cast iron columns, reinstatement of internal steel bracing and external main lattice grinder where surfaces are disturbed;
- Window panes – Proposed replacement of 2 window panes to match existing toughened glass (south elevation);
- Reinstatement of mezzanine floor level where temporarily removed;
- Reinstatement of joinery – Doors, windows, staircases and other components;
- Making good works following project completion

## **2.4 Temporary Road Closures**

As the proposed main opening into the building to allow for the decant is located on the southern elevation of the building which fronts onto Liverpool Road, there will need to be a series of temporary road closures. All road closures and proposed vehicular tracking will be agreed with Manchester City Council Highways Department ahead of their implementation.

## **2.5 Existing Scaffolding**

The existing external scaffolding on the building will need to be redesigned to allow for the new opening by structural engineers. However, the scaffolding arrangement has been designed to allow for the Liverpool Road south façade (central bay) to be removed and modified to allow for the decant of collection items through the right side of the central bay.

## **3 Key Planning Considerations**

### **3.1 Heritage Impact**

Paragraphs 193-196 place great weight on the conservation of designated heritage assets, emphasising the need to avoid “substantial harm” in terms of demolition, significant alteration, or the compromise of 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.

A Heritage Statement has been prepared by Buttress Architects to assess the impact the proposals will have on the Grade II Listed Air and Space Hall.

#### **3.1.1 Impact of proposed works on historic fabric**

The section of the Liverpool Road facade proposed to be temporarily removed is a mix of structure and glazing. The structure is rated as high significance, and the glazing is rated as low significance. The existing mezzanine floor is also low significance.

The removal of fabric is considered a major change. In areas of low significance, the impact would be slight/moderate, and in areas of high significance, the impact would be large/very large. However, the areas of proposed removal are also proposed for reinstatement.

Therefore, the act of removal itself may be considered major adverse, but the works also have a major beneficial impact after completion.

The works facilitate a necessary piece of work, and some required repair and re-decoration works to enhance the significance of the existing building. This assessment recognises that the removal of historic fabric is wholly exceptional, however, the clear reinstatement methodology, led by contemporary conservation philosophy, negates the harmful impacts.

The proposed works therefore culminate in less than substantial harm.

The works are temporary, thorough, and in line with best conservation practice. The overall and long-term significance of the heritage asset will not be negatively affected, and the final completion of the work will have a negligible-minor beneficial impact due to the delivery of the required work and successful reinstatement of historic fabric.

### **3.2 Additional Technical Details**

Prior to submission of this application, consultation has taken place with Officers at Manchester City Council (MCC) to clarify the scope of information required for the application. In response to the points raised during this consultation, the below information is provided in addition to the application documentation.

#### **3.2.1 Requirement of appointment of an experience contractor**

Although the Contractor has not yet been appointed, the Applicant will compile a list of potential contractors with appropriate experience, and with a known track record for delivering projects of this nature in advance of the tender going live.

A robust selection process will be endorsed, with the contractor required to provide case studies illustrating similar experience across a number of case studies. A series of project specific questions can also be included within the invitation to tender. The Detailed Schedule of Works and Decant Specification (prepared by Buttress Architects, and submitted to MCC alongside this application) state the requirement for the Main Contractor and Sub-contractors to be part of accredited heritage bodies with the specific need for experienced contractors.

Sub-contractor lists are also vetted and reviewed by the Science and Industry Museum.

A full programme of the decant timeline, with timescales for each activity, will be confirmed in writing with MCC once the contractor is onboard.

#### **3.2.2 Specific task-based method statements**

Buttress Architects have provided a detailed package of works included in this submission, which specifies a number of methodologies on the decant process, covering the decant works; and the reinstatement and restoration of materials following this. However, these are not exhaustive, and the appointed Contractor will need to provide detailed Method Statements relating to these, which will propose the sequence of events in the decant process in advance of any site works commencing. This will include detailing how the dismantling will take place during decant, including careful removal of fixings.

These methodologies, and the contractor briefing, will require notification immediately to Buttress should any discoveries be made during works, and appropriate liaison will then take place with MCC to determine how to proceed.

These methodologies will be discussed with and approved by the Conservation Accredited professional prior to works starting, with agreement that the methodology for the works will not affect the special interest of the Air and Space Hall. In addition, these task-based method statements can be issued to MCC prior to works starting if required.

### **3.2.3 Component Storage**

A safe and secure identified area for storing the removed components will be provided internally within the building itself, likely under one of the galleries. The exact location of this is unknown until the sequencing of the decant is known. The storage location can be confirmed to MCC prior to decant starting.

### **3.2.4 Scaffolding**

The current perimeter scaffold has been erected prior to Buttress' involvement. The proposed scaffolding drawings will be issued to MCC once they have been finalised and reviewed by Buttress, however this will be finalised after the tender is completed.

Please note, the set of scaffolding detail drawings submitted with this application suggest a 'Design Intent' for the creation of the access portal only, and as noted above, the finalised design will be confirmed after tender.

### **3.2.5 Decant Specification Document**

A Decant Specification Document has been prepared by prepared by Buttress Architects. This document, alongside the Detailed Schedule of Works and methodology, details all methodologies and expresses the need for approval and inspection at key stages and important milestones in the decant.

It is considered that this covers the need for a quality control statement, and explains the quality standards and expectations across the project, including how the works will be supervised and controlled on site by the contractor and heritage architect.

The requirement by MCC for full records and a comprehensive set of photographs to be compiled before, during, and after the decant takes place is largely dealt with by paragraphs 1.1.3 and 1.1.5 of the Decant Specification. On reflection of comments from MCC's Conservation Officer, this has been updated to make specific reference to a photographic record after works complete, and notes that the full records can be submitted to the Conservation Officer at this stage.

A full dilapidation survey is to be undertaken by the contractor prior to any works progressing on-site, as part of the PC process, and a full review would be undertaken by the Conservation Accredited Professional at completion. Site visits will be undertaken throughout the project with site visit reports produced, including a photographic 'snap-shot' of ongoing works at each stage.

In relation to the above, reference should be made to the Restoration Specification (RS2) in the Decant Specification document which details the requirements expected from the Contractor with regards to onsite recording, prior and during the works.

### 3.3 Accordance with Planning Policy

The major consideration for the proposals is their adherence to planning policy in regard to the historic environment.

Paragraph 192 of the NPPF (2019) 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.”*

The proposals will enable the museum to remove collections, should this be required to facilitate a change of use. The proposals also include repair work to the listed fabric to improve the listed fabric's longevity.

Full plans and elevations have been provided as part of this application to accurately present the proposals to illustrate any impact. Several options were considered for how the decanting operation could be achieved, and the proposed option was considered the least intrusive.

Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss.

This approach is in line with Policy CC9 Design and Heritage within the adopted Manchester Core Strategy (2012). This policy 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 reinstatement works will repair the listed fabric to match the original like-for-like.

Overall, the proposal will have a negligible impact on the special interest of the building, as it is temporary in nature, and will culminate in the repair of existing listed fabric.

## 4 Application Documents

The following information is provided in support of this application:

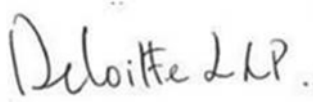
- Covering Letter, prepared by Deloitte Real Estate;
- Design and Access Statement, prepared by Buttress Architects;
- Supporting Plans, prepared by Buttress Architects;
- Scaffold Details, prepared by Buttress Architects;

- Detailed Schedule of Works and Methodology, prepared by Buttress Architects;
- Heritage Assessment, prepared by Buttress Architects; and,
- Specification of Decant works, prepared by Buttress Architects.

Please note, there is no formal structural engineers report submitted with this application as all structural engineer comments and recommendations have been integrated into the Buttress documentation. The appointed Structural Engineer is Jane Entwistle who is a Conservation Accredited Structural Engineer.

We look forward to receiving your confirmation that the application has been formally registered. In the meantime, if you have any queries or require any further information, please do not hesitate to contact me or my colleague Katie Wray (+44 161 455 6350/ [kawray@deloitte.co.uk](mailto:kawray@deloitte.co.uk)).

Yours sincerely

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

Deloitte LLP

Encs.