



RETROSPECTIVE LISTED BUILDING APPLICATION

BRITISH MUSEUM SOUTH COLONNADE ESSENTIAL
INFRASTRUCTURE WORKS – CROSS VENTILATION OF NEW
COPPER ROOF OVER GALLERY 48



Figure 1: Eastern advancing wing



Issue	Details of revision	Compiled by	Reviewed by	Date
0	Issued to L.BM of Camden	Simon Douch	Lisa Clifton	14/08/2020

HOK JOB NUMBER	19.33048.00
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DESIGN, ACCESS AND HERITAGE STATEMENT

GALLERY 48 ROOFING WORKS AS PART OF THE SOUTH COLONNADE ESSENTIAL INFRASTRUCTURE WORKS

This design and access statement has been prepared to support a retrospective application for Planning (Listed Building and Conservation Areas) Act 1990. Consent to replace the existing copper roofs and lanterns was granted on 27 December 2019; your references 2019/5640 L and 2019/5569/P. This application has been required following discoveries on site during survey and investigations.

In late July 2020 the timber decay specialists EBS Consulting carried out a survey of the Gallery 48 roof voids. Until this point this design team and subject matter experts had not been able to access the roof voids over Gallery 48. During EBS Consulting inspection they discovered active wet rot and timber decay on the timber sarking boards. The decay cannot be left and the works required need to form part of the ongoing works to the South Colonnade.

One of the mitigation measures is to cross ventilate the roof to allow any dampness to properly dry out. As the existing copper roof is being replaced as part of the approved scheme the Museum are looking to introduce over-boarding the existing sarking boards with treated timber battens and then apply a 25 mm plywood. This new deck receives a vapour permeable roofing membrane and then the copper roof is applied. Because of the over-boarding the height of the roof raises nearly 100mm.

The detailing that will be adopted is based on the British Museum Gallery 36-37 works that were completed in 2008. These details introduced an amended ridge profile and a new wall plate beam inserted under the roof lanterns. The latter is to allow a new copper flashing to be dressed up and provide an effective seal against the elements. This will result in the lantern ridge being raised approximately 120mm. Where the lower slopes of the copper sheet meet the existing gutter the upstand is raised by 75-100mm. Refer to appendix B in this Design and Access statement to see photographs of the Gallery 36-37 as built conditions to allow you to assess the visual impacts this retrospective change will have.

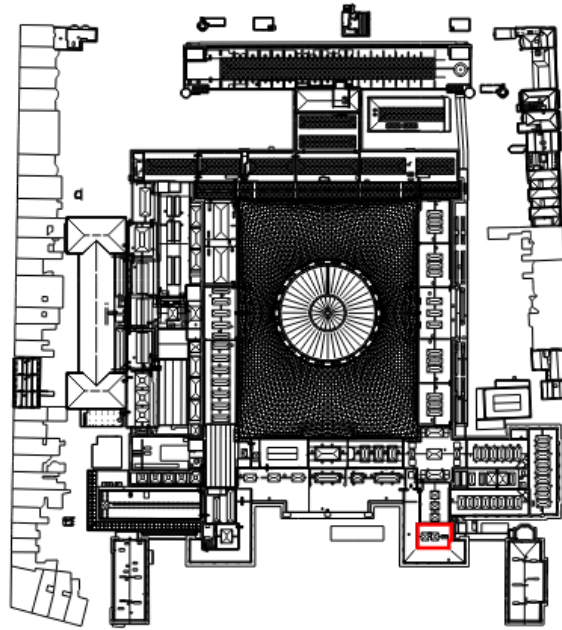


Figure 2: British Museum site plan with Gallery 48 identified by red outline

The works described in this retrospective application are urgent and required to address the rot and decay caused by the failing copper's accumulation of defects over time. Therefore, the application before you is a result of surveys by leading timber decay specialists EBS Consulting and seek to adopt best practice conservation repair methodologies to mitigate these failings. The replacement copper roof will also significantly improve the situation.

HISTORY OF THE SOUTH COLONNADE

The British Museum is Listed Grade 1 and sits within the Bloomsbury Conservation Area. The Listed Building description from Historic England's register is included as an appendix.

Marjorie Caygill and Christopher Date in "Building the British Museum" record the South Front and Colonnade largely finished by 1846. This date is widely accepted as 25 years after Sir Robert Smirke produced his design. A lithograph prepared for the House of Commons Select Committee for the British Museum in 1835-36 shows a plan identifying the South Colonnade, known as the great colonnade, as not constructed.

"... the entrance portico [is] eight columns in width, and two intercolumniations in projection. On either side is an advancing wing, giving to the entire front an extent of three hundred and seventy feet [112.7m]; the whole surrounded by a colonnade of 44 columns, raised upon stylobate five and a half feet high [1.7m]. The columns are five feet [1.5 m] at their lower diameter, and forty five feet [13.7m] high; the height from the pavement of the front courtyard to the top of the entablature of the colonnade, sixty six feet and a half [20.3m]" .



Gallery 48 houses European collections 1900 to the present day. Room 48 examines changing ideas about how objects should look, and the desire to make well-designed objects available to a wider audience.

Many of the objects on display show how designers in the West have drawn inspiration from other cultures, past and present. Highlights include Continental Art Nouveau, Germany's Darmstadt artists' colony and the Bauhaus, Russian Revolutionary porcelain and American applied arts between the two World Wars. The Museum is actively collecting objects from the 20th century and the display continues to change as new acquisitions are made. Ref

<https://www.britishmuseum.org/collection/galleries/europe-1900-present>

During the works the gallery will be closed and will have a temporary protection scaffold installed.

The roof void over Gallery 48 has occupied heated space below it and therefore it is subject to great temperature fluctuations and vapour movement than the main South Colonnade roofs. The roofs of the central south colonnade along with the eastern and western advancing wings sit over unoccupied space and whilst these have suffered with decay from the failing copper roof defects there is not a requirement to cross ventilate. Furthermore, each cluster of coffers has a central coffer providing natural ventilation. This is due to the pendent lamps lighting the south colonnade walkways sitting above a wire mesh.

SIGNIFICANCE

Extract from the Conservation Plan 2007.

“Of the works completed during this period, the most significant is undoubtedly the colonnade and entrance portico which has come to exemplify in the public mind so much of what the British Museum is and stands for “.

The South Colonnade significance is both historical, cultural, architectural and artistic.

Historical and Cultural Value

- The historical and cultural significance is articulated in by the British Museum's then architectural historian J. Mordaunt Crook
- Known as “the old curiosity shop in Bloomsbury”.
- Visited by six million people annually

Architectural and Artistic Value

- An outstanding Classical Greek Revival design combines continuity with the past and a more formal, modern expression with Lord Fosters Great Court rehabilitation.

Contextual Value



- The British Museum South Colonnade is the monumental centrepiece of the British Museum site when entered from Great Russell Street. Framed by the railings to the site boundary with a swathe of flagstones that lead to the front door which is set on an axial entrance
- The British Museum is a defining element of London, and has been a major influence on the development Museums around the world from its first building in 1753
- It is an iconic national symbol

Our assessment has made reference to the 'Significance' in terms of heritage-related planning policy is defined in the Glossary of the National Planning Policy Framework as the value of a heritage asset to this and future generations because of its heritage interest.

We have evaluated the impact of the interventions outlined in this application by assessing the Heritage Impacts against the assets form, function and fabric. A matrix is adopted that rates the interventions as

- Green *positive, overall neutral/minor impact*
- Yellow *moderate impact*
- Red *major impact*
- White *unknown/TBD*

DESIGN

The works proposed in this retrospective application affect the Eastern Advancing Wing of the South Colonnade and in particular the area of roof over Gallery 48. The roof over contains three roof lights, two square of similar construction and the most easterly is of a different profile. It has a ridge running east – west which is punctuated by the roof lanterns.

Roofing - copper

Like the main Eastern Advancing Wing roof, it would appear that the Gallery 48 roof was redressed after the Second World War, possibly as late as the 1950's. It is showing considerable signs of distress as can be seen in the photos contained in the appendix and consent for its replacement was granted 27 December 2019.

The detailing required to cross-ventilate has been successfully used on the adjacent copper roof over galleries 36-37 which was completed in 2008.



ACCESSIBILITY





The nature of these works contained in this application do not have a Universal accessibility component. The areas affected by the works are not accessible to the public and maintenance workers can only access through a Museum's permit to work. Safe access for operational staff however must be addressed

CONSERVATION APPROACH













The Conservation Approach for this application is shaped by an understanding of the British Museum which arrives from desk top studies of archival material from the British Museum archives and the Conservation Management Plan. Additionally, surveys have been carried out by structural engineers, architects, environmental scientists, historic paint and render specialists as the works proceed. All consultants have worked at the British Museum for many years during which they have gained extensive practical knowledge of the British Museum and with working within Grade One Listed Building.









Works that required Town Planning consent include replacing the roof three new roof lanterns on the eastern advancing wing. Your approval notices reference 2019/5569/P and 2019/5640/L.

SUMMARY OF LEVEL OF HERITAGE IMPACT

-  Green *positive, overall neutral/minor impact*
-  Yellow *moderate impact*
-  Red *major impact*
-  White *unknown/TBD*

For a comparative analysis of various options, these are presented as follows:

	Overall Impact	Function	Form	Fabric
Removal of existing copper roof to gallery 48				
Replacement with new copper roofs				
Removal of existing roof access hatches and replacement with new				

Installation of treated softwood battens and plywood to cross-ventilate the roof				
Installation of new wall plate below roof lanterns to allow copper flashing to be installed				

SUMMARY

In discussions with the Town Planning case officer it is agreed that in Town and Country Planning terms the changes are in effect *de minimus*. However, in speaking with the conservation officer, no objections were raised in principle but to regularise the Listed Consent it was felt that a fresh listed building application should be submitted.

APPENDIX A - IMAGES



Figure 3 – Eastern advancing wing roof lantern and copper roof



Figure 4: roof lanterns and access hatch over Gallery 48 , Eastern Advancing Wing



Figure 5: - area of deflected copper roofing



Figure 6: - Typical stone defect to column base



Figure 7: – 2008 ridge detail over G36-37 to be adopted



Figure 8:: detail at gutter showing visual impact of raising roof for cross ventilation

APPENDIX B

Location

Statutory Address: THE BRITISH MUSEUM, GREAT RUSSELL STREET

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

County: Greater London Authority

District: Camden (London Borough)

National Grid Reference: TQ 30054 81721

Details

CAMDEN

TQ3081NW GREAT RUSSELL STREET 798-1/100/697 (North side) 24/10/51 The British Museum

GVI

Museum. 1823-47. By Sir Robert Smirke with later additions. Portland stone. Planned as a big quadrangle with open courtyard extending north from Montague House (the original museum, demolished c1840). 2 main storeys in Greek Revival style. Built in stages. East Wing 1823-26: built to house George IV's library and Angerstein pictures (later basis of National Gallery). An early use of iron beams clad in concrete by engineer John Rastrick. Fine Grecian detail to interior with scagliola walls. West Wing 1831-4: built to house antiquities. Redecorated to Smirke's original colour scheme 1980. North Wing 1833-8: built to house antiquities. South Range 1842-7: built as the principal facade following the demolition of Montague House. 7-bay centre linked to projecting wings. Ionic octastyle portico with sculptured pediment projecting from a massive colonnade running around the wings. Ionic order from the temple of Athene Polias, Priene. Pediment sculpture depicts the "Progress of Civilisation" by Westmacott. Fine interior with grand central staircase. Round Reading Room 1852-7: by Sydney Smirke. Erected to fill the open quadrangle, with domed cast-iron roof. HISTORICAL NOTE: the museum expanded north during the C19, the last main addition being the King Edward VII Gallery (qv), 1914, facing Montague Place. Some of the galleries were damaged during World War II and have been remodelled for display purposes.

Listing NGR: TQ3005981712

Figure 9:: British Museum Listing description