

— Design Note

Client:	The British Museum
Project:	Health and Safety Lighting - External
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Author:	Joe Dent

Revision	Description	Date	Issued by	Checked by
00	Design note to accompany planning application for new health and safety lighting at the British Museum	24.04.24	JD	AD

This design note has been produced to support the planning and listed building applications for new health and safety lighting at the British Museum.

The design note is in addition to the Design and Access Statement prepared by Nex and the Heritage Impact Assessment prepared by Dannatt Johnson, and has been prepared to comment on three items raised by Camden Planning Department following pre-application discussions. The three items raised were as follows:

- 1. Concerns have been raised about the need for the spotlights to improve lighting/ illumination of the front steps as they appear to present a substantial and visual intrusive intervention at high level to achieve a modest improvement for a limited period of time over the course of the year. It would be necessary to justify the need for the improved lighting by providing evidence in the form of any data of reported falls / trips that have been received by the Museum by visitors using the main steps. We can then take this into consideration as part of our assessment of any new lighting proposal.*
- 2. On site we talked about the possibility of reducing the height of the spotlights and moving them back from the parapet. Is it possible to submit the presentation that we received on 14th December as well as sketches showing the revised height and possible revised location of the spotlights for our consideration so that we can look at the proposal comprehensively. Some initial marked up floor plans and elevations would be enough.*
- 3. It would also be good to be able to understand if any of the existing equipment on the roofs can be removed to try to ensure limited clutter on the roofs.*

Responses to the items are provided across the following pages.

1. Need for Illumination of the front steps and section of south forecourt

The need for illumination of the front steps and south forecourt arise from two factors:

1. The area is currently inadequately lit – with readings between 1.0 - 5.6 lux on the steps and forecourt – below the minimum mean illuminance of 5 lux for pedestrians cited in BS EN 12464-2 and the SLL Lighting Handbook.
2. This area is currently partially lit by two floodlights mounted to the gatehouses on the south fence. These lights are both low quality design and are very bright, causing glare to visitors leaving the museum. Their removal, allowed by the new floodlights, would provide benefit to the existing building both by day and night.



Figure 1: View of visitors departing via the colonnade steps and south forecourt, glare from 2no.existing floodlights

The concern raised by Camden notes a concern about a 'modest improvement for a limited period of time'. We note that the improvement, whilst subtle so as to not cause glare or an uncomfortable environment per the HSE guidelines, raises the lux levels in the area to an average of between 5-10 lux on the forecourt and 20-30 lux on the stairs, improving the existing situation from one that is considered unsafe, to one which is in line with contemporary guidelines and practice.

Regarding the period of time that the lights provide benefit, whilst the lights are not required by the general public across the whole year, the sun does set prior to the Museum closing time (5pm) for 5 months out of the year - from October to February and so the need for adequate lighting is important for public visitors, especially in the high quantity received by the Museum (around 6 million per year). Outside of the general daily visitor, the steps are also used during dark hours every day by museum staff, and frequently after dark throughout the year by members of the public attending evening events; and so their safe illumination has significant benefit year round.

The British Museum's Environment, Health and Safety team provided the following statement in support of increasing light levels to the south colonnade steps and south forecourt:

"The number of slips, trips and falls we have around the Colonnade and forecourt areas are thankfully low, but when they do occur, they do often result in quite serious injuries. For example, in the 2022 – 2023 incident reporting period, half of our Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) reportable incidents were due to slips, trips and falls on the Colonnade stairs specifically.

As such, I would support the installation of additional lighting on the Colonnade stairs and the general forecourt area to help further minimise not just the frequency of any slips, trips and falls but also, by extension, the severity of any related injuries. This would be especially useful in the autumn and winter months when the Colonnade stairs and forecourt area are quite dark during early morning ingress of visitors and particularly busy egress of visitors when the Museum closes."

It is worth noting that the south colonnade steps do not have any nosings or demarcation strips, and so are not compliant with the current Approved Documents of the Building Regulations. Of course, the steps heritage value provides good reason for them not to be harmed with additional nosings or demarcation, but we believe that taking the opportunity to improve their lighting in a sympathetic and reversible manner, provides benefit to users of the building within little to no harm to the building.

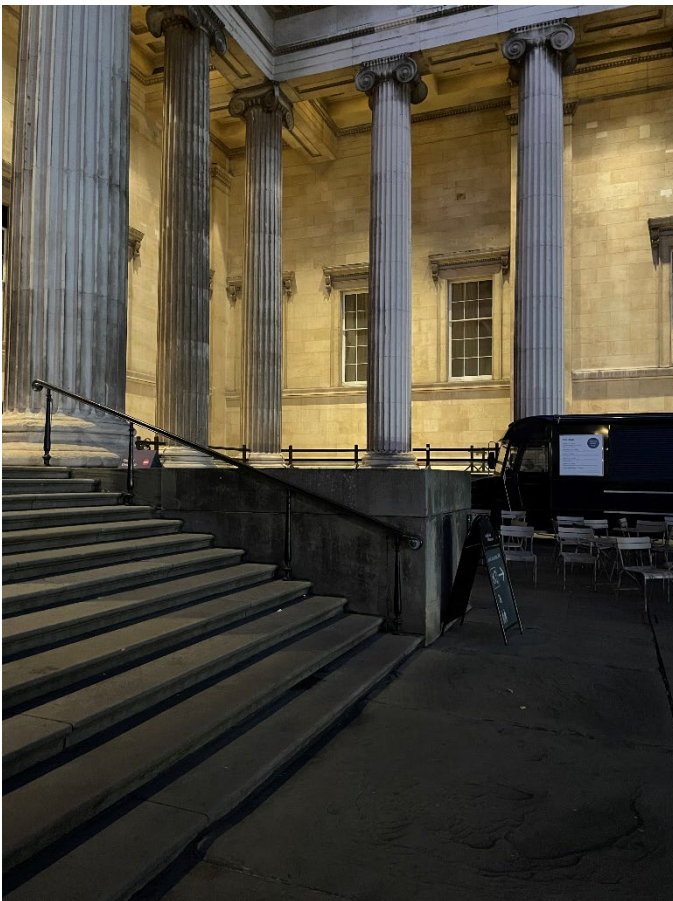


Figure 2: View of existing colonnade steps

2. Mounting height of floodlights

The new floodlights are proposed to be fitted closer to the coping line than the location that one was installed in for the mock up shown to officers, per the sketch below. The two lights on each roof will also be supported of a single pole on each side, rather than hanging from the temporary 'T' bar which the lights were fixed onto for the mockup. This, and the light grey tone of the fixtures and mounting pole will give the lights a subtle profile during the day.

At night, the lights will be directed across the south elevation, with deep honeycomb louvres shading the bulbs, meaning there will be very limited glare, especially when the elevation is viewed from the street and the southern areas of the south forecourt.

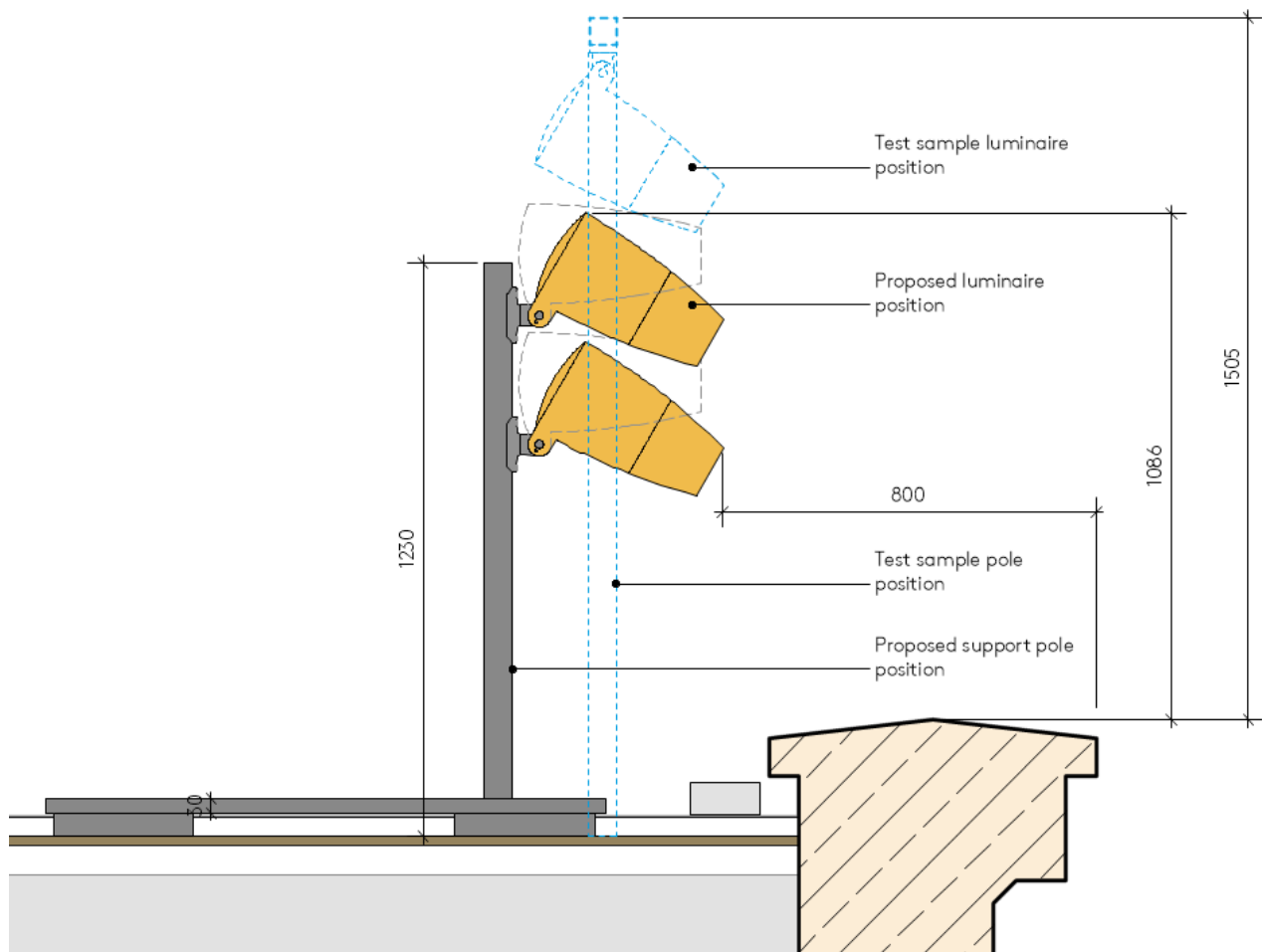


Figure 3: Diagram showing height of mock up flood light position and proposed flood light positions

3. Removal of existing equipment from roofs

The roofs to the east and west of the south colonnade currently host 2no. CCTV cameras each side, and a floodlight which is no longer in use. As part of the works, the existing flood light is proposed to be removed.