

GLASS ROOF CLEANING AND MAINTENANCE STRATEGY – LONDON COLISEUM

The Problem/Challenge

The design team for the London Coliseum refurbishment project needed to establish a how new glass barrel vaulted roof could be cleaned. It was built above the refurbished foyers and was designed to follow the original form. The geometry of the new glass barrel vaulted roof meant that there were difficulties in gaining safe access for cleaning and maintenance.

The Risks

Work at height would be required over fragile glass above high internal and external voids.

The Solution

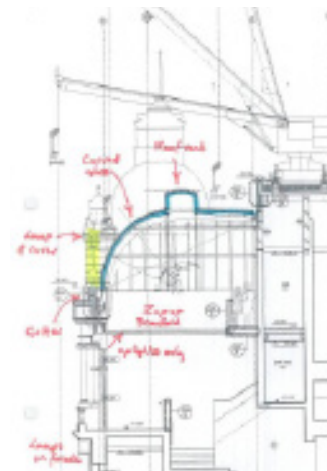
After consultation with specialist access contractors, a Building Maintenance Unit (BMU) with an 11 metre jib and one man cradle was selected. Planning constraints influenced the rejection of other options, eliminating the initial proposed use of a travelling curved gantry that would have been visible from street level. Increased structural works were required to support and conceal the BMU behind the tower at roof level.

The Benefits

The visual, aesthetic and planning requirements were satisfied whilst ensuring that safety priorities for working at height were met. The client received the benefit of the increased flexibility and accessibility provided by a purpose built system.

Key Points

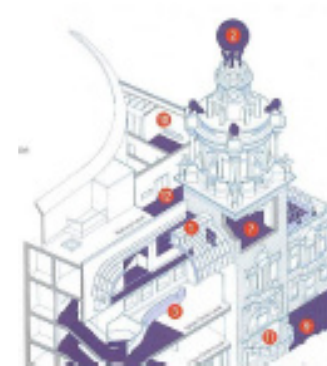
- The client, facilities managers, contractors and specialist suppliers of cleaning systems were consulted early in the project.
- The final solution for the project took account of safety, historic constraints and aesthetic considerations.



Final BMU Design



BMU Solution



Cut away view of roof



Proposed gantry solution

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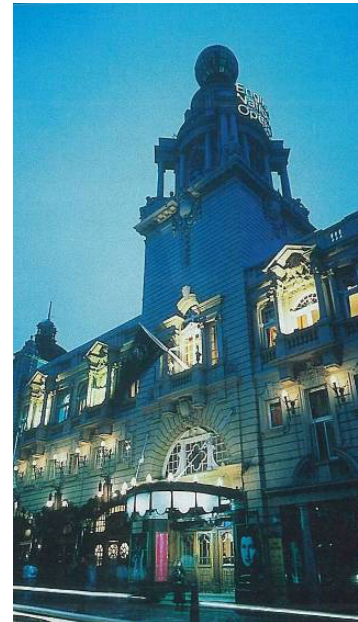
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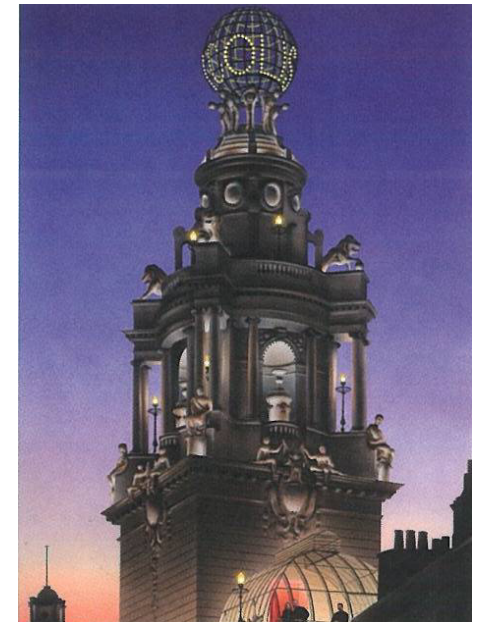
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Existing "dark" tower



Proposed "lit" tower

