



Crystal Palace Revived

A new exhibition building in Sydenham, 2009/2010

The Crystal Palace was one of the largest buildings ever to have been built. It stood for 85 years before it was destroyed by fire in 1936.

Originally designed by Joseph Paxton for the Great Exhibition of 1851 in Hyde Park, the giant modular steel and glass structure was eventually relocated to Sydenham and transformed into a Winter Palace, re-opening in 1854.

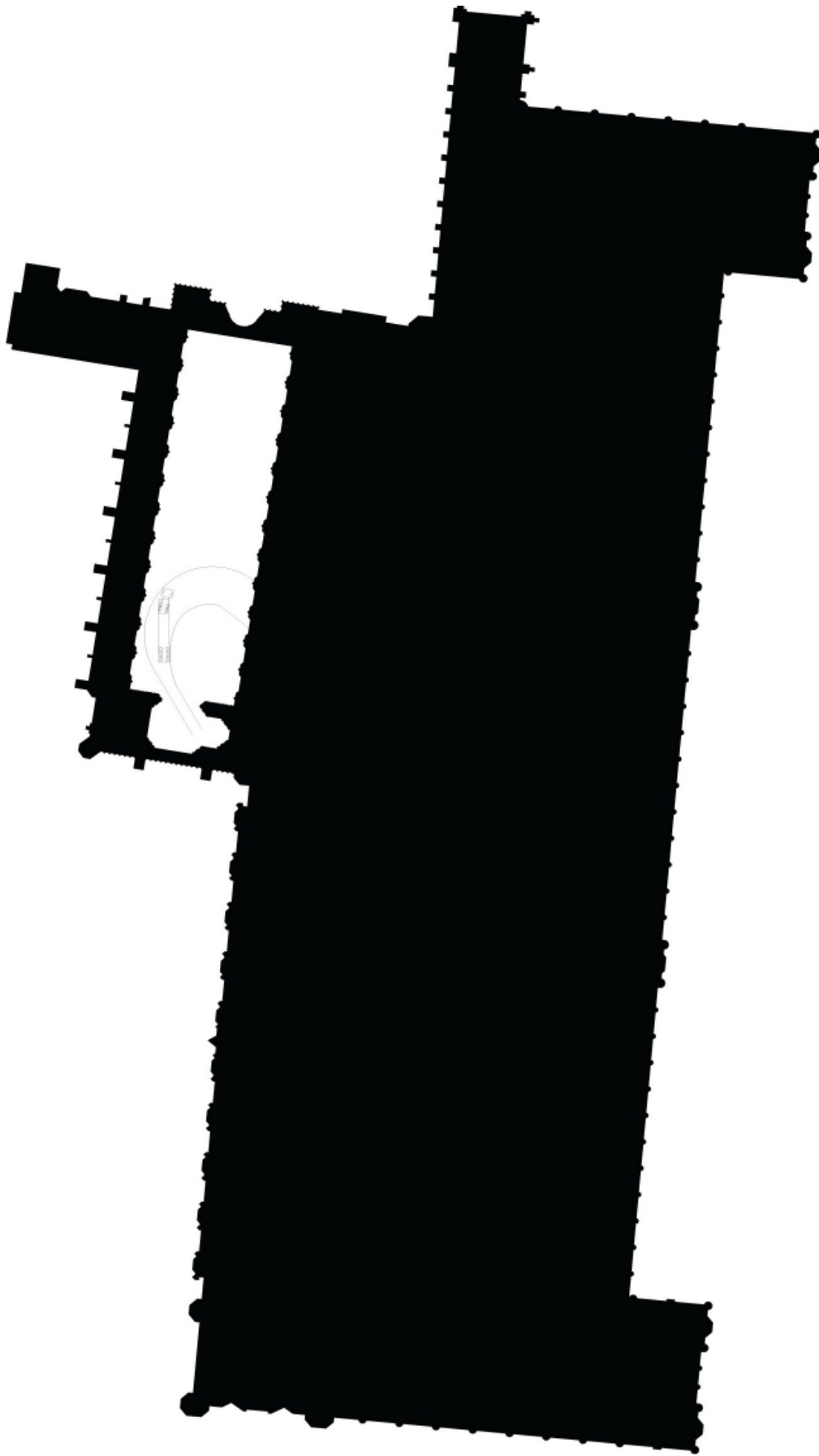
Today, the site in Sydenham is a blank rectangle on the A-Z Street Atlas, but hidden between blackberry canes one can still find remains of the former palace, such as column bases. Most of the original infrastructure is still in place, or could be repaired easily, which makes the site predestined to be re-used by a building of equal size.

The student's new proposals trace the original footprint of the Sydenham Palace. Transcribed into metric it measures 482.4 x 115.2m, comprised of 67 x 16 structural modules each 7.2m in edge length (Paxton's design was based on 24 x 24ft).

Used as an exhibition building, comparable to its predecessor in Hyde Park, the revived palace forms an equilateral triangle with London's other exhibition venues Earl's Court/Olympia and Excel.

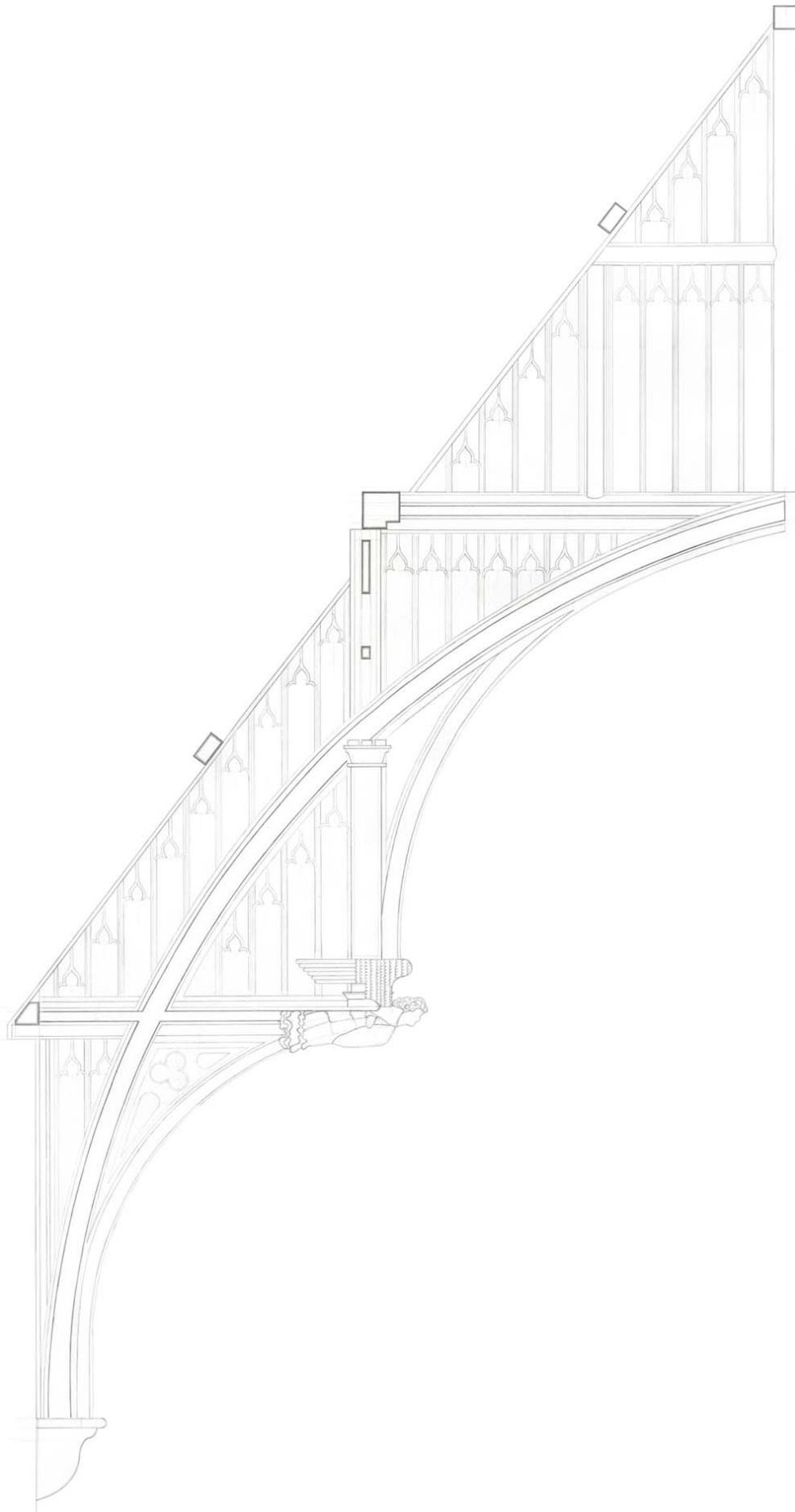
The remains of the original terrace walls and stairs are to be repaired and re-used as links to the park.

Peter Karl Becher & Matthew Barnett-Howland



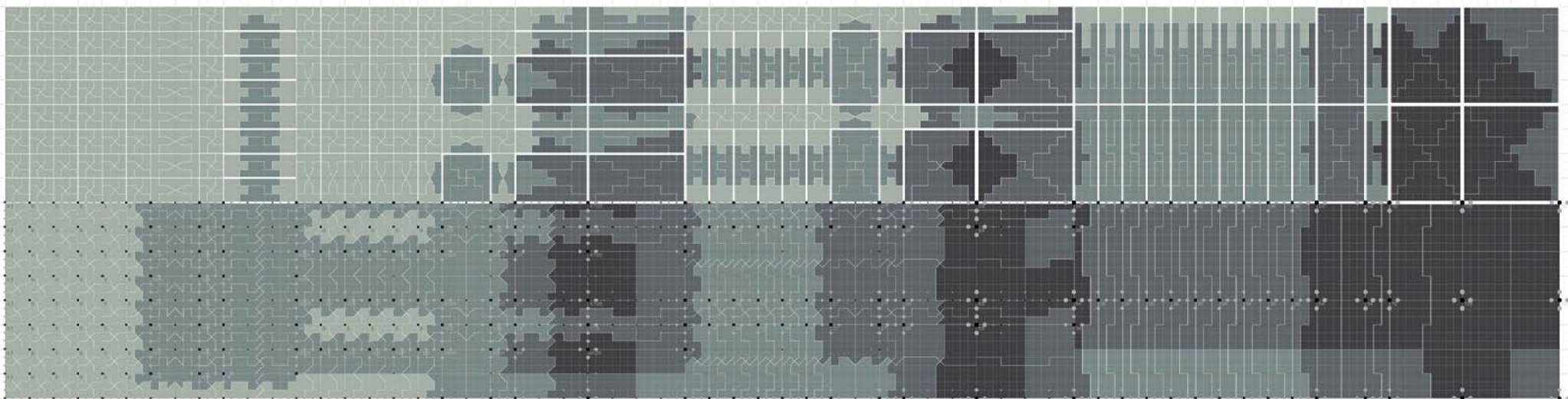
Jennifer Bull

Measuring Westminster Hall with a 16.5m lorry



Jennifer Bull and Hadas Even-Tzur

Study of hammerbeam construction at Westminster Hall



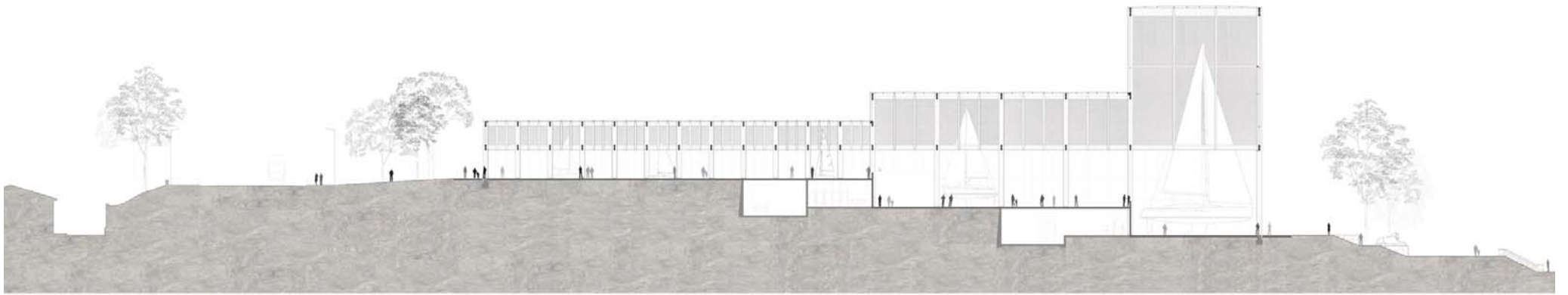
Jennifer Bull

Diagram of predicted load distribution in beams and columns



Jennifer Bull

Plaster cast of interior spaces, scale 1:500, 96.5x23cm



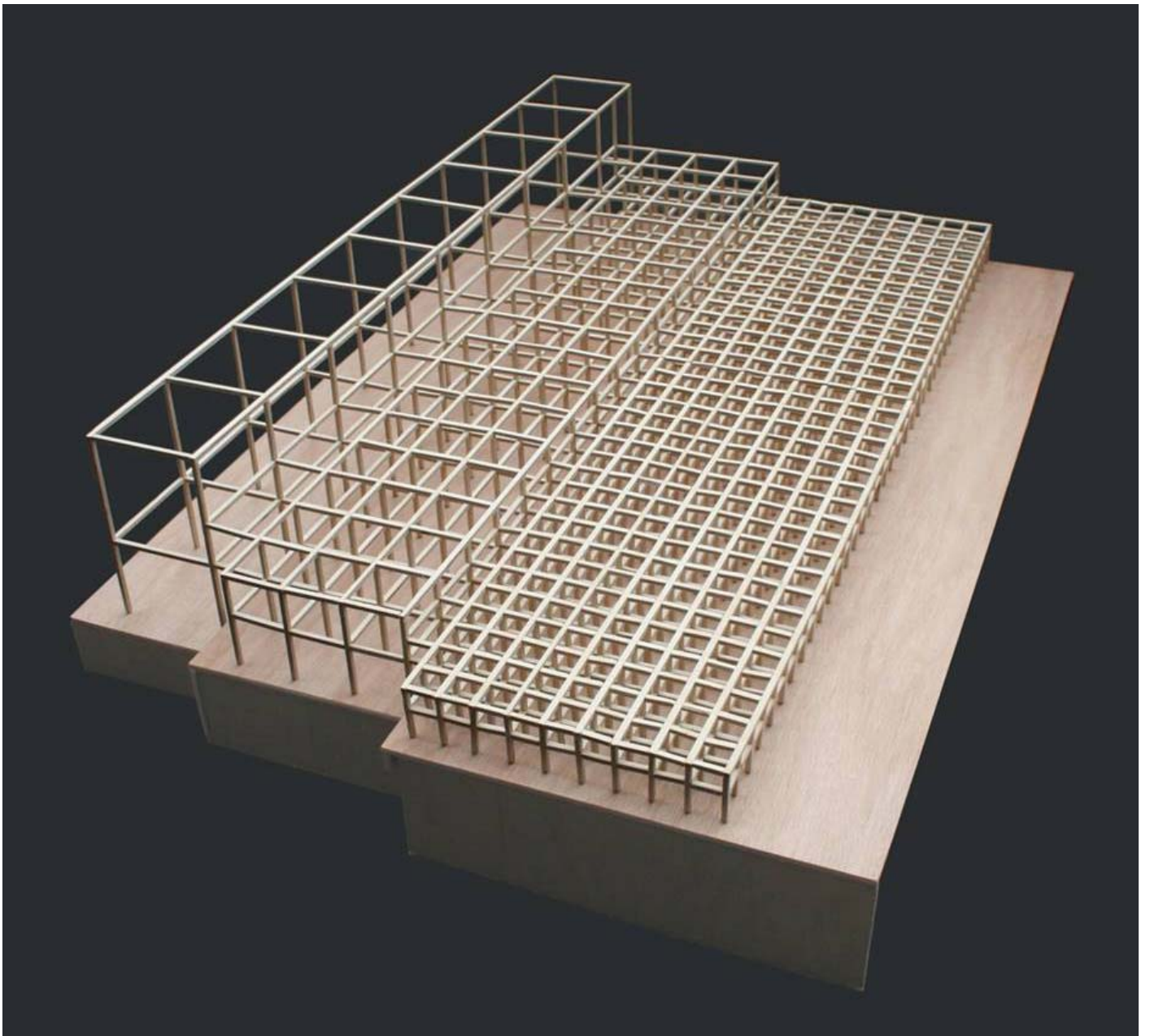
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Cross-section through new proposal on top of Sydenham Hill



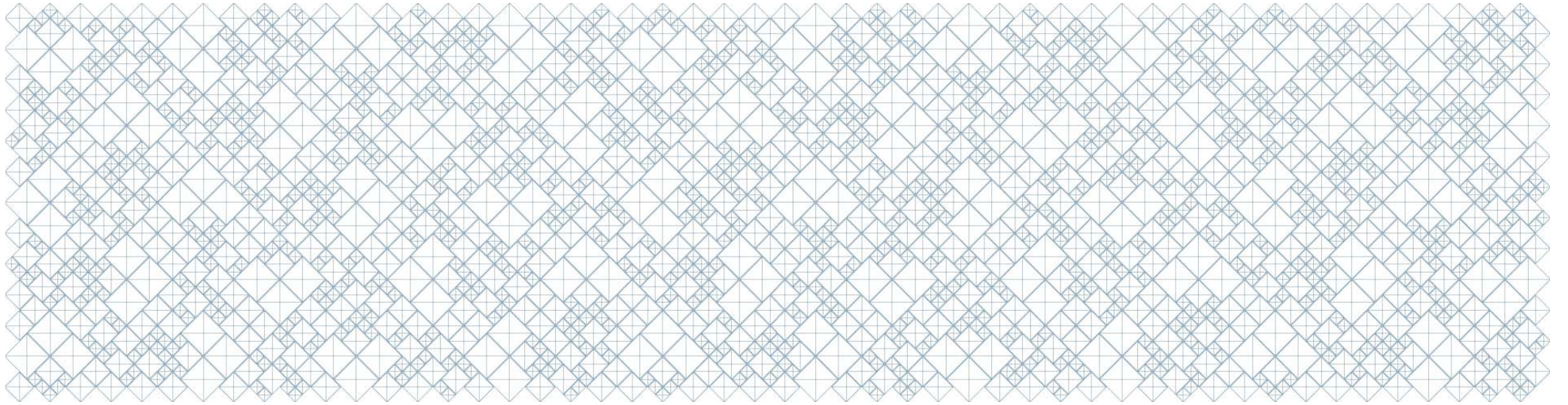
Jennifer Bull

North elevation and park context



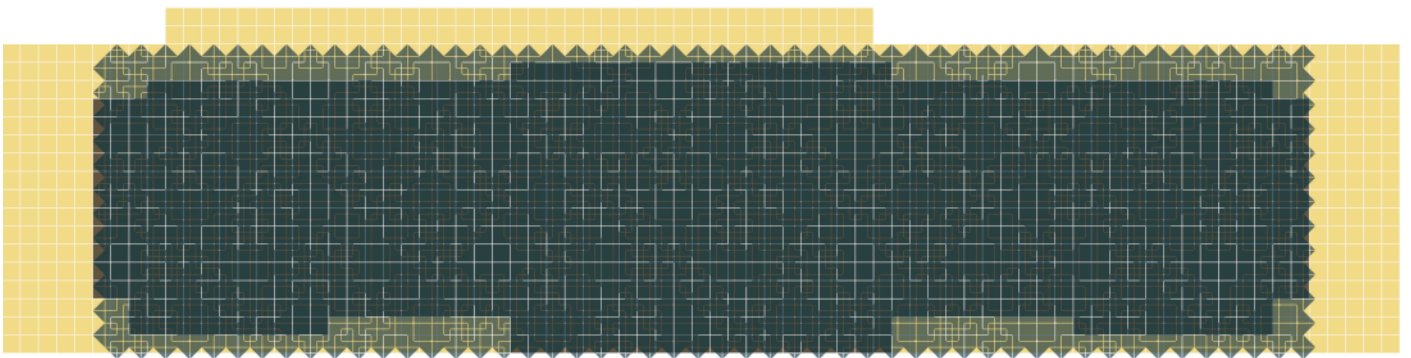
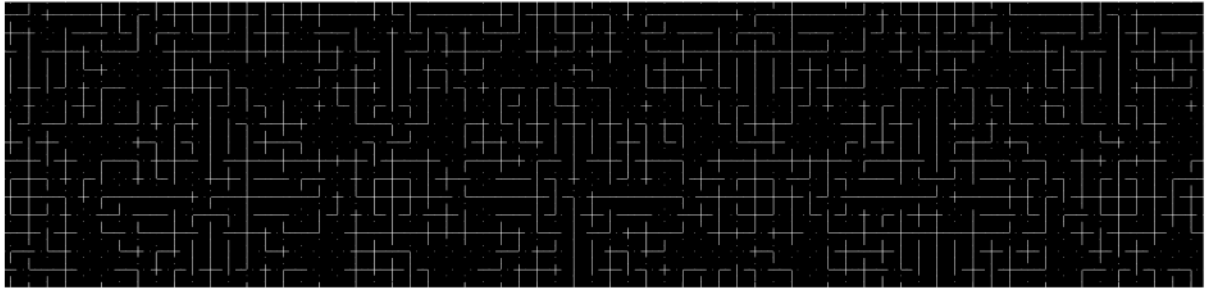
Jennifer Bull

Partial structural model, scale 1:200, 105.6x57.6cm



Hadas Even-Tzur

Module study



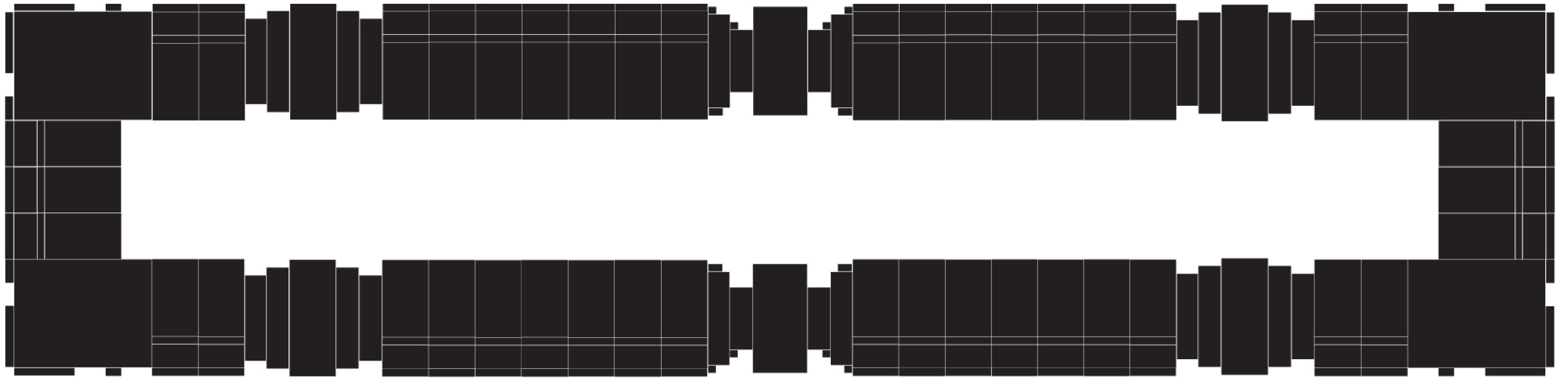
Hadas Even-Tzur

Size comparison Hyde Park, Sydenham I and Sydenham II palaces



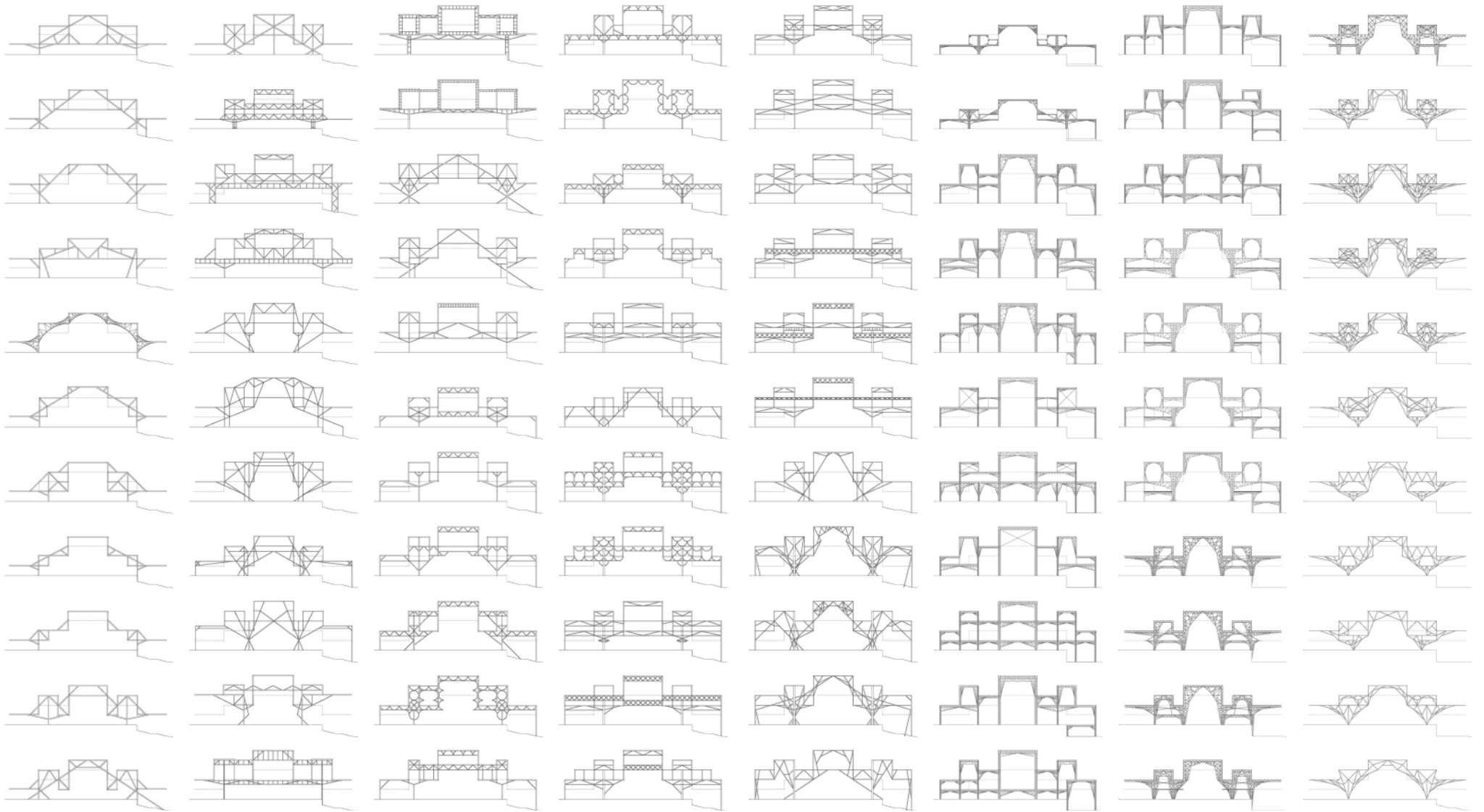
Michael Ha

A new palace proposal seen from Crystal Palace Park, composite image

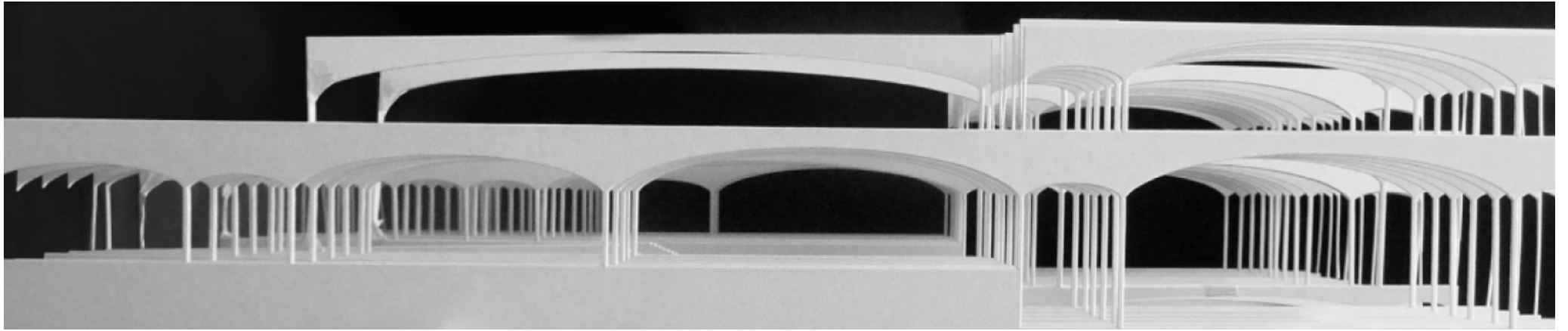


Hannah Shaw

Figure-ground plan of new palace proposal

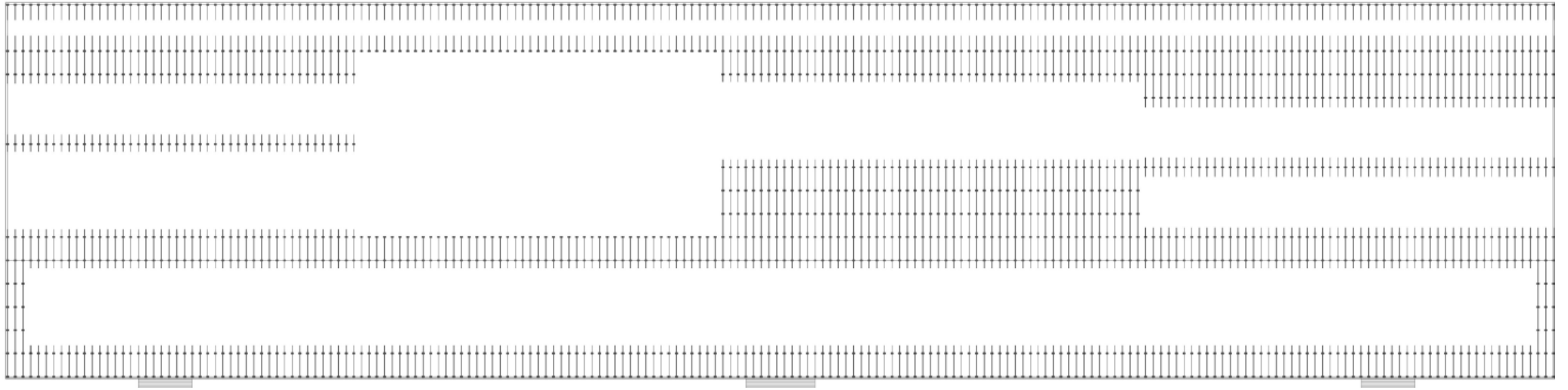


Matthew Kwok
88 typological studies



Cara Beveridge

Spatial study with arched steel structure, model, scale 1:200



Cara Beveridge

Floor plan

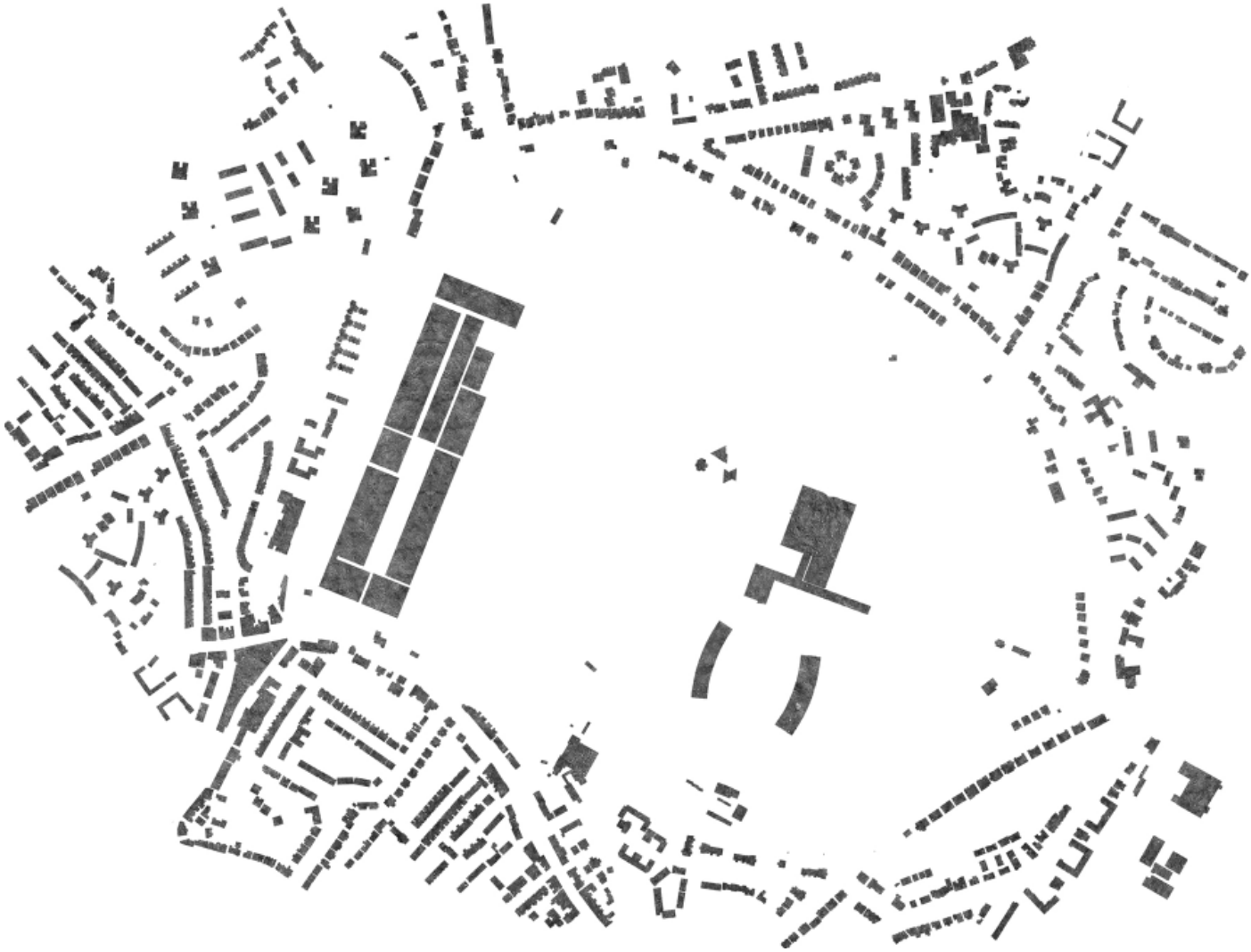


Cara Beveridge
Scale study, model



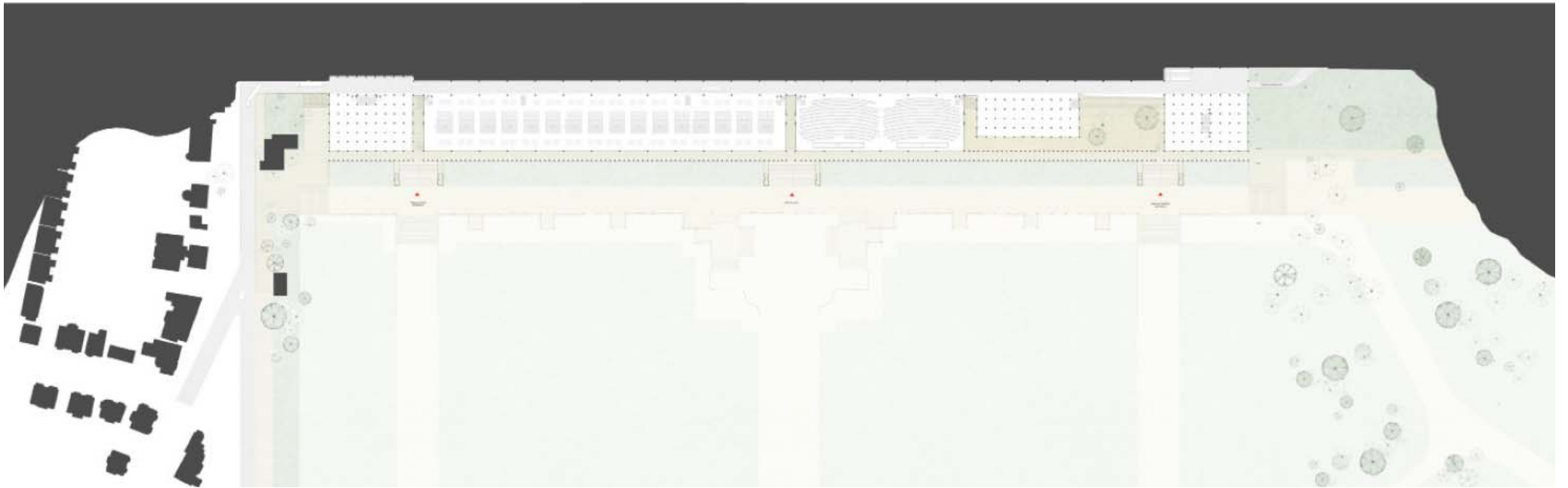
Cara Beveridge

Inflated ETFE cushion facade and roof with existing terraces, composite image



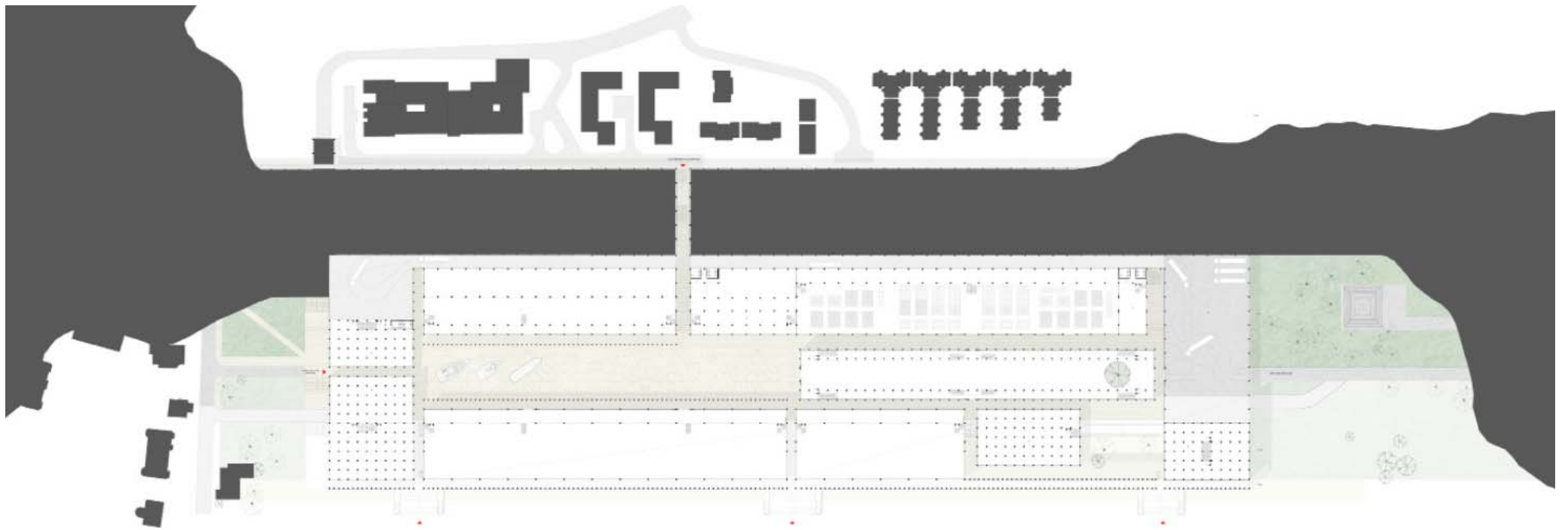
Robyn Jones

Figure-ground map of Crystal Palace Park with new proposal



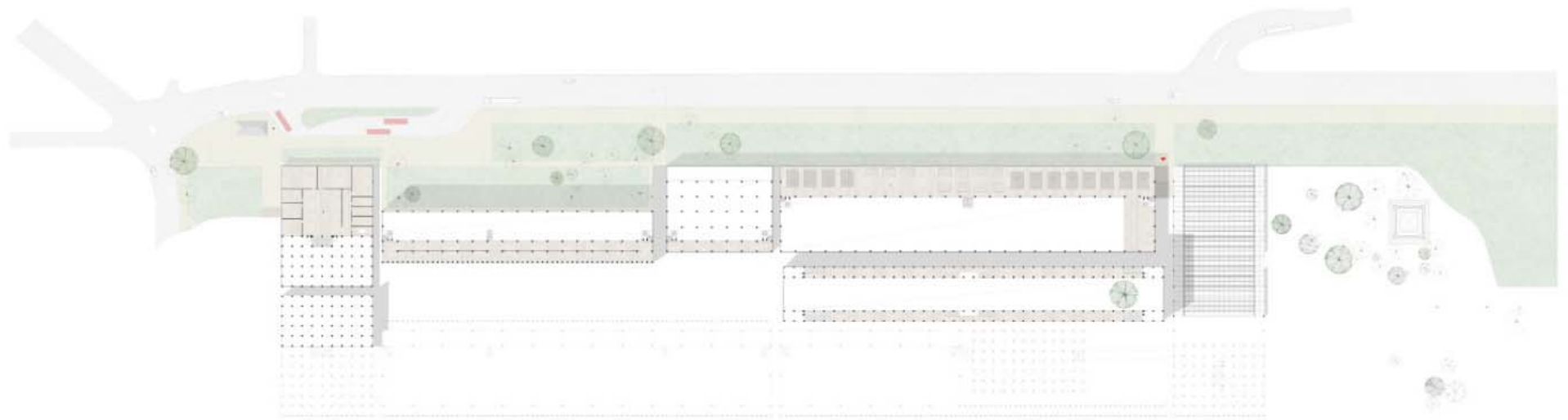
Robyn Jones

Basement plan, Crystal Palace Park level



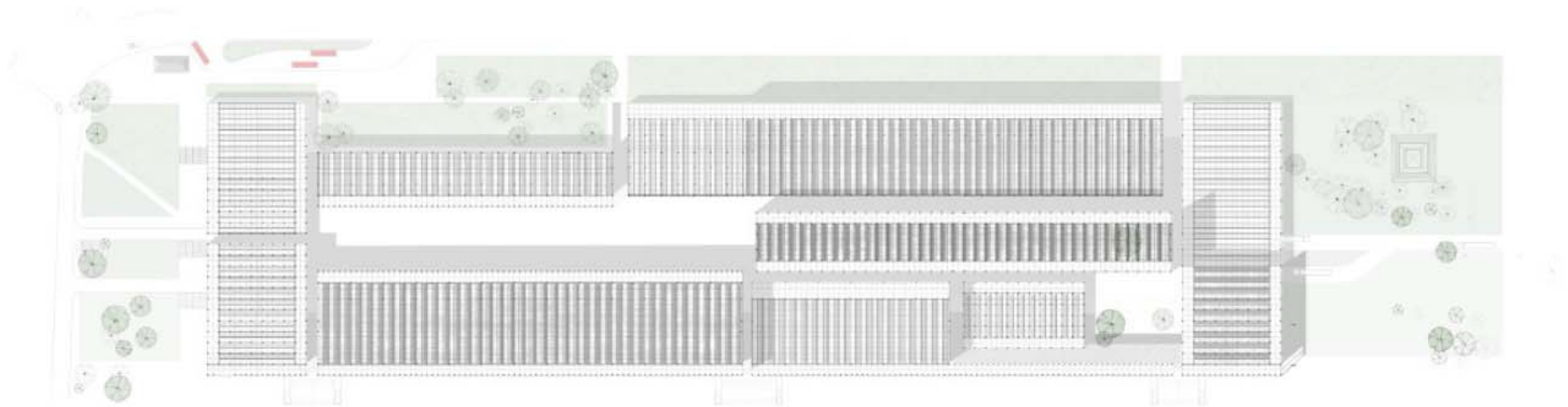
Robyn Jones

Lower ground floor plan



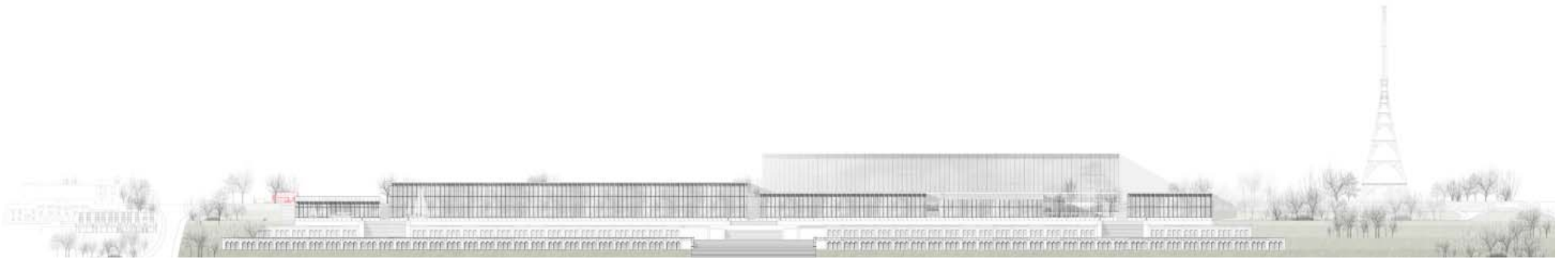
Robyn Jones

Ground floor plan, Crystal Palace Parade level



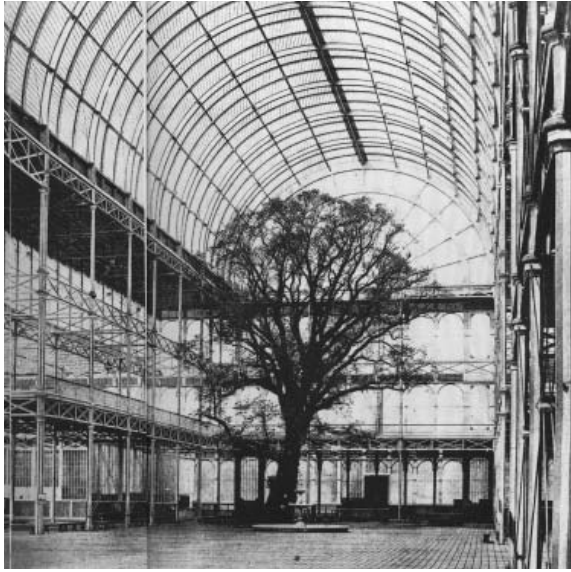
Robyn Jones

Roof plan



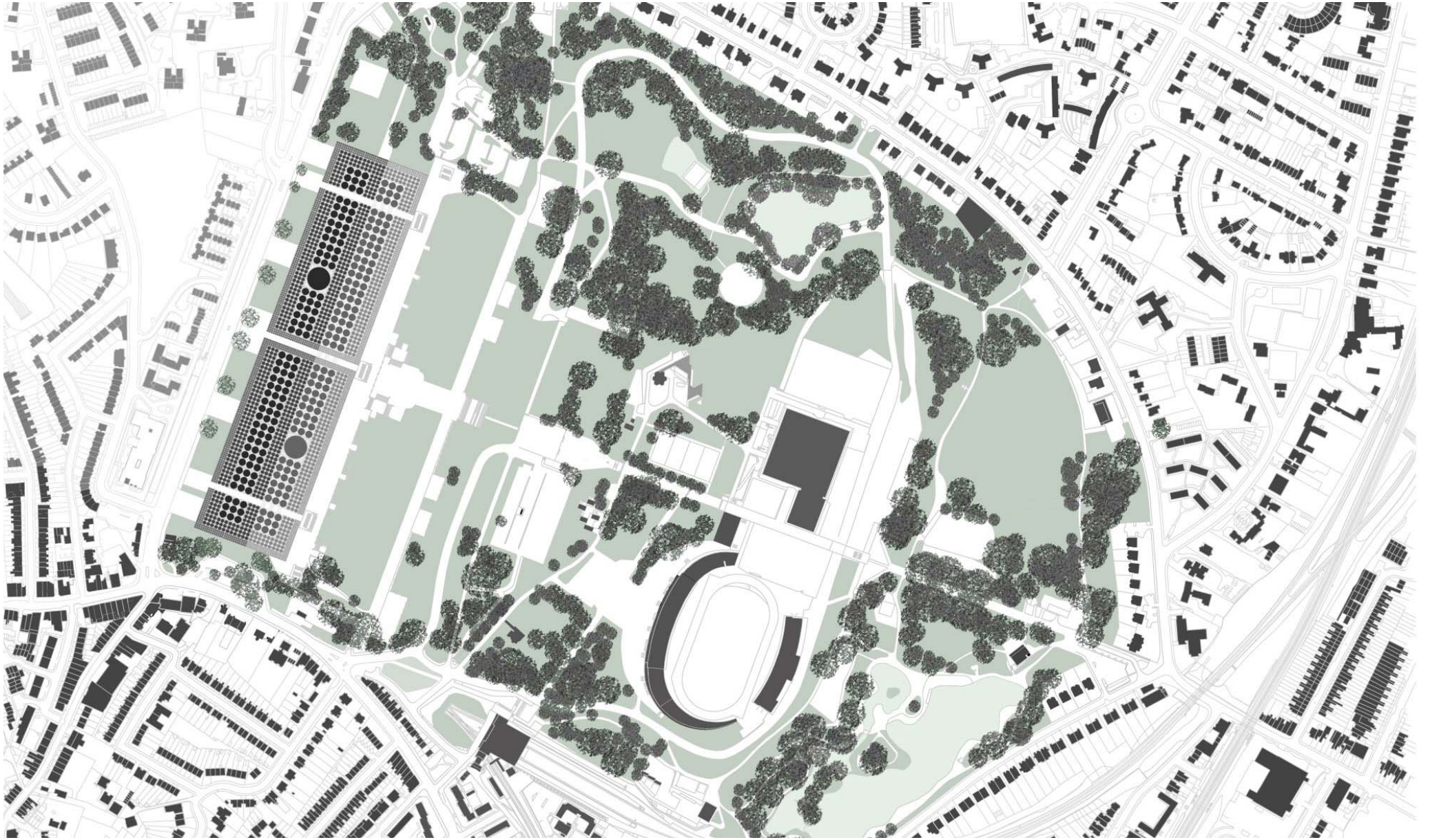
Robyn Jones

Elevation seen from Crystal Palace Park



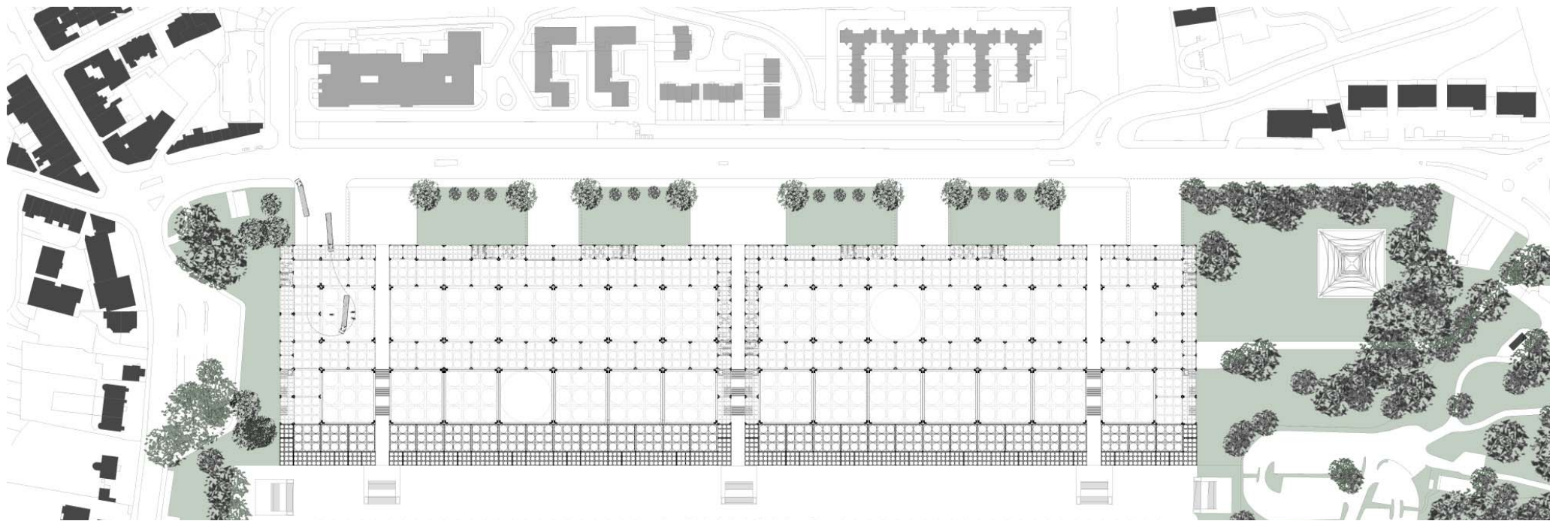
Robyn Jones

Paxton's Hyde Park transept and new nave proposal in comparison, photograph/model



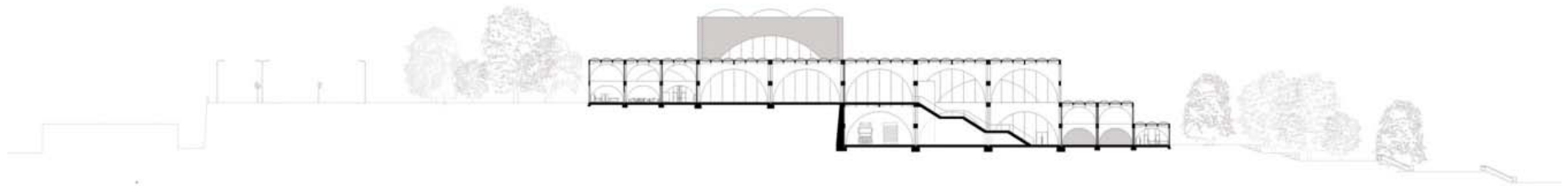
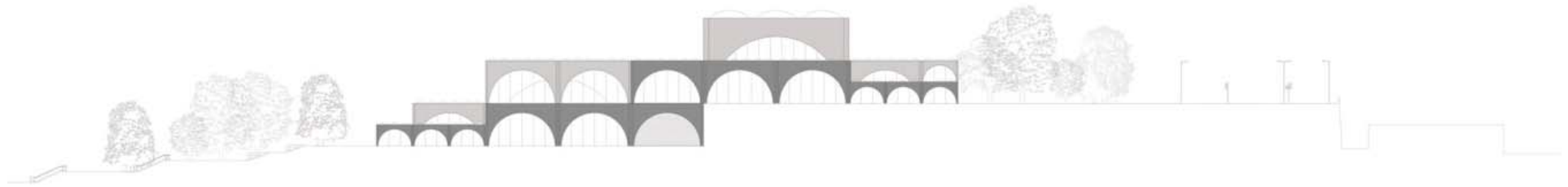
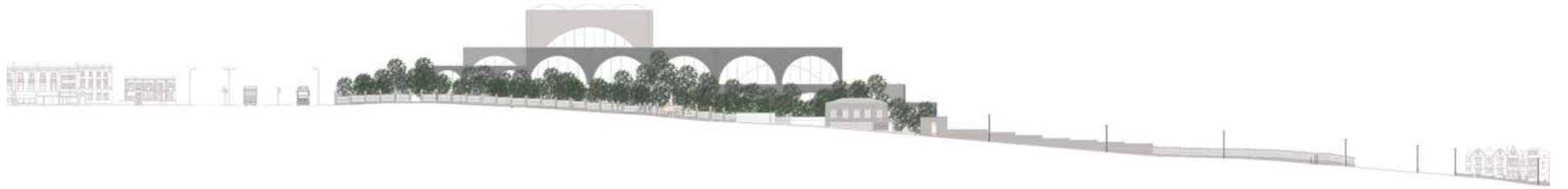
Matthew Mure

Site plan with new palace proposal

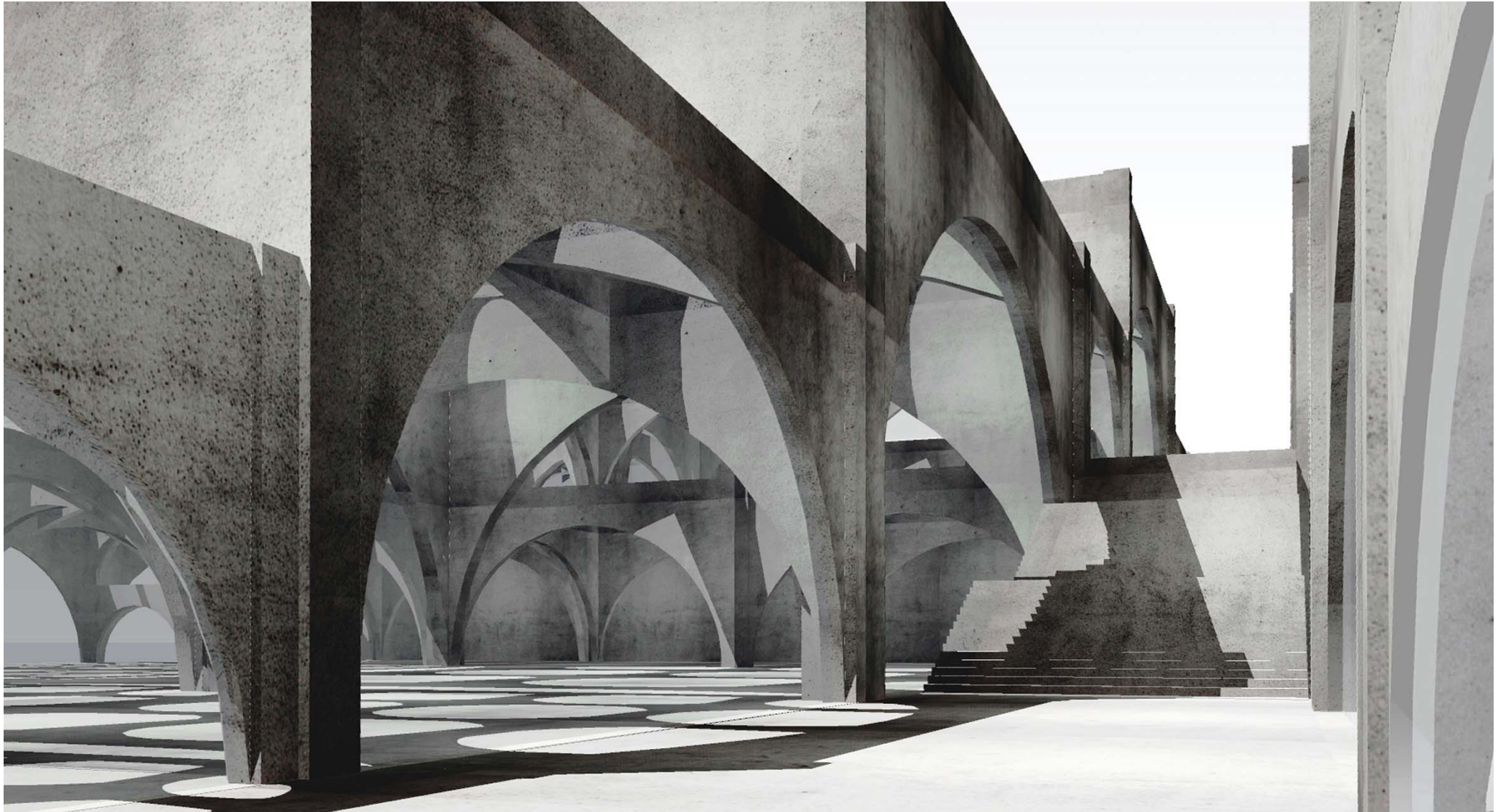


Matthew Mure

Ground floor plan in context



Matthew Mure
Short elevations and cross-section



Matthew Mure

Exterior perspective, digital model



Matthew Mure

Interior perspective, digital model

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