

DONHEAD PREPARATORY SCHOOL BY PHILLIPS TRACEY ARCHITECTS



Site plan

Phillips Tracey Architects has updated and extended Donhead Preparatory School in Wimbledon, south London, to incorporate new classrooms, an auditorium, art room and chapel. The scheme links separate elements of the existing school into a coherent building that juxtaposes old with new. The changes also improve accessibility, general circulation and facilities. For the first time in the school's history, all ground and first-floor areas are made fully accessible to all.

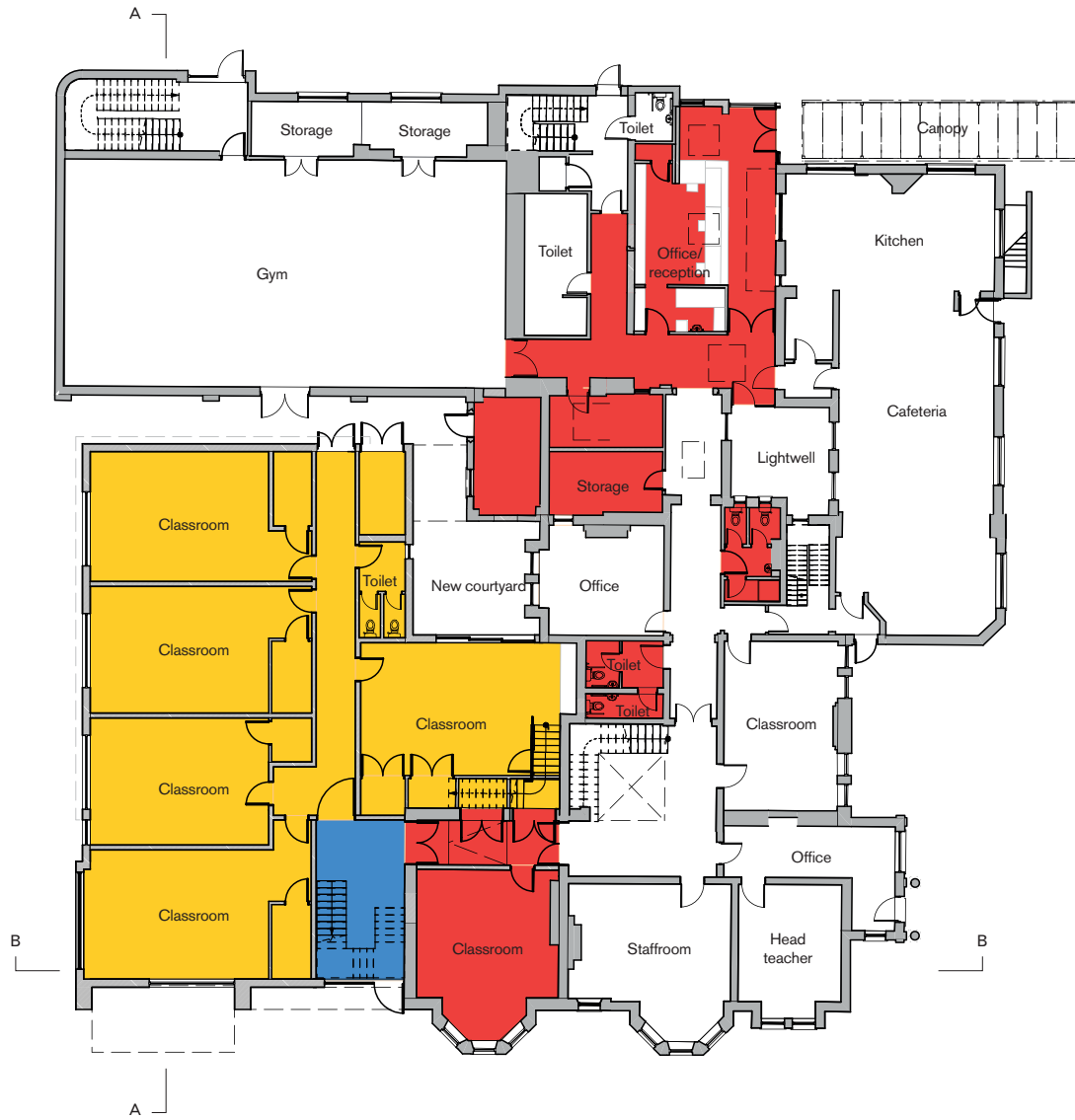
The alterations to the school respect the site's original 19th-century building. From a distance the school now reads as one entity. However, looking more closely, lightweight links separate old from new, enabling a clear reading of the school's chronological development.

The original brief was for the conversion of existing roof volumes into teaching spaces but, following detailed discussions with the school, an alternative, radical and more extensive approach was embraced, linking the existing buildings with new accommodation.

Brendan Tracey, director, Phillips Tracey Architects

Photography by Jack Hobhouse

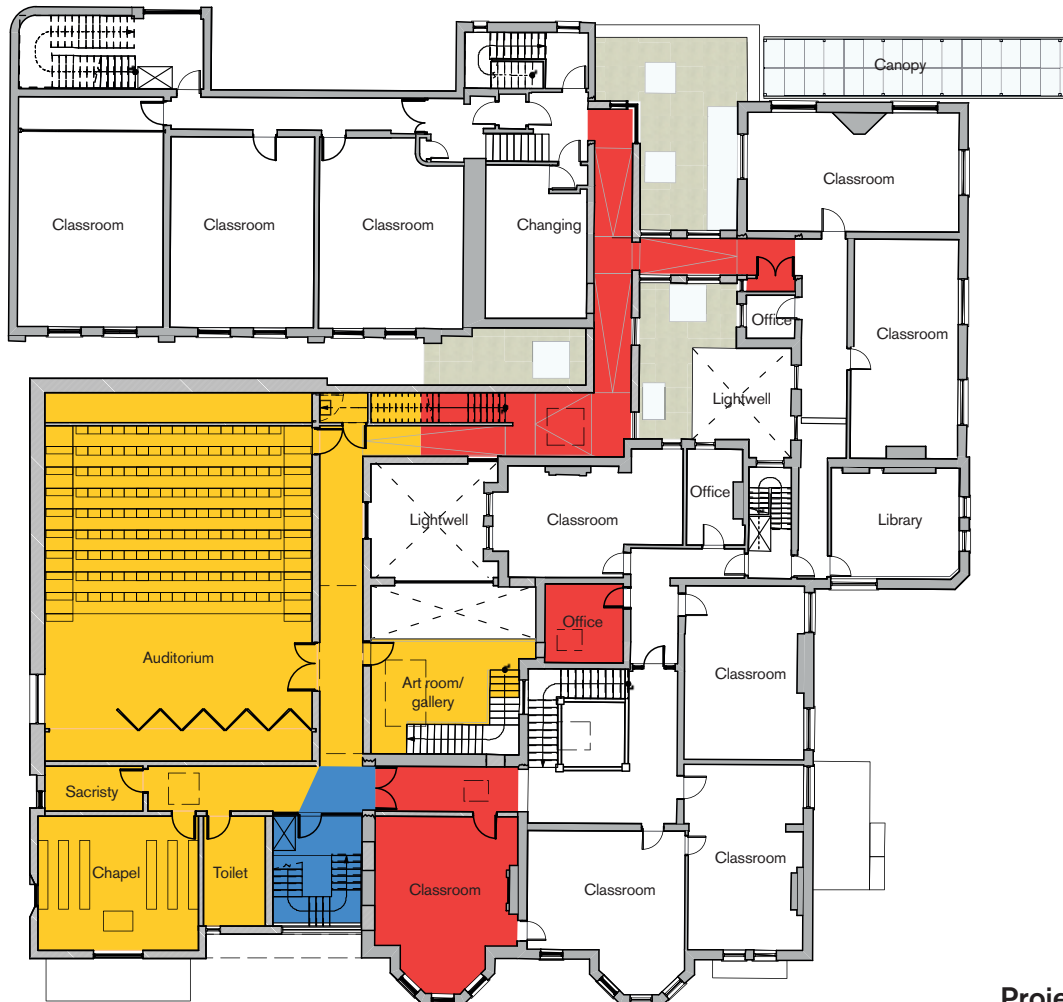




- Main contract – phase 1
- Main contract – phase 2
- Main contract – phase 1 & phase 3

Ground floor plan





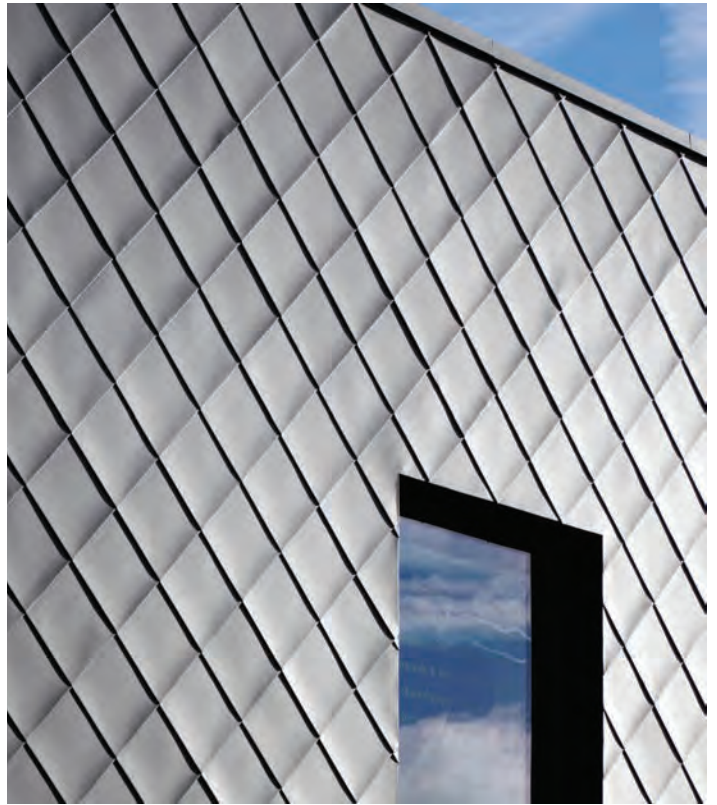
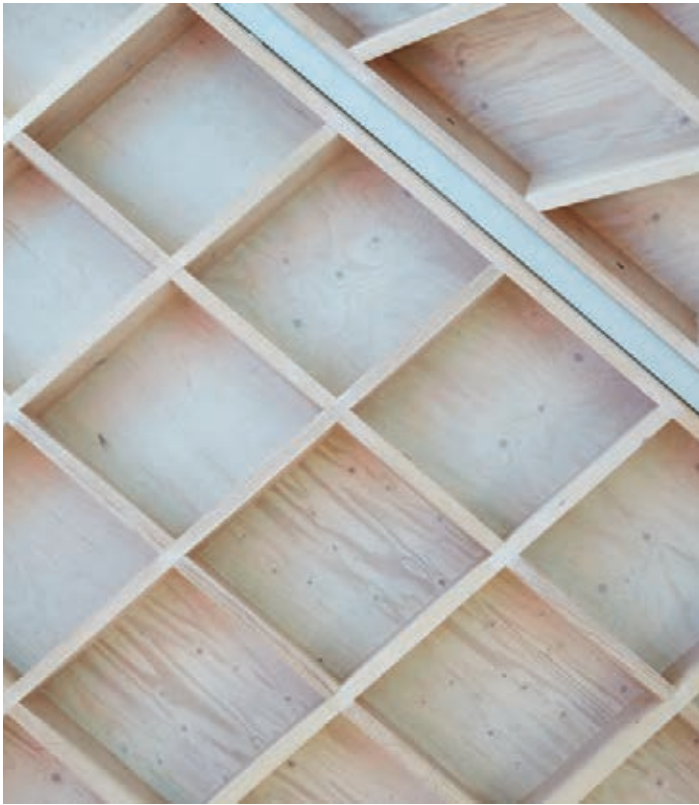
- Main contract – phase 1
- Main contract – phase 2
- Main contract – phase 1 & phase 3

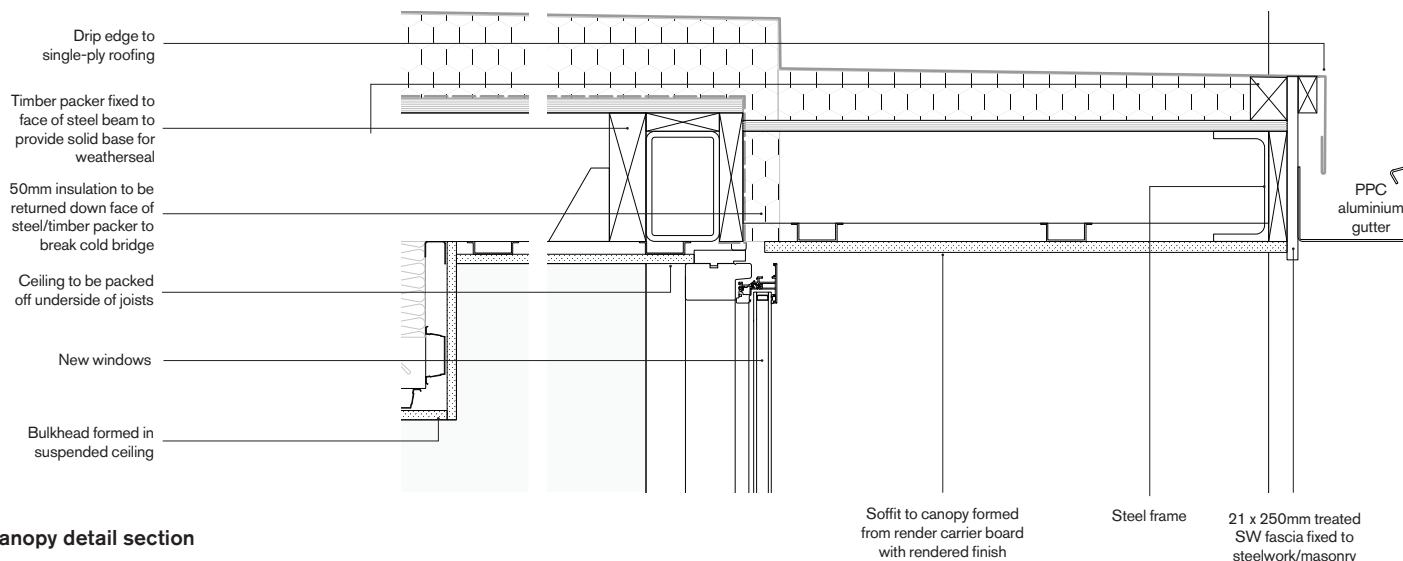
First floor plan

Project data

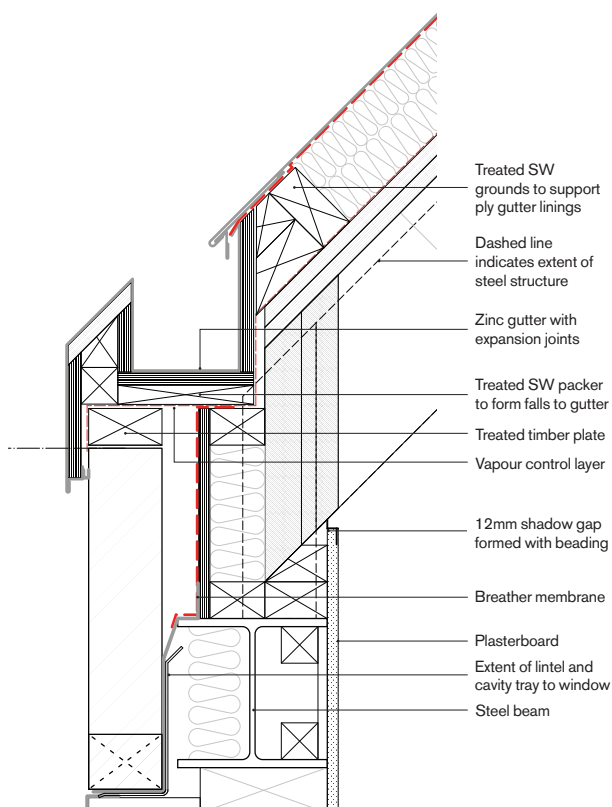
Gross internal floor area 1,126m²
Construction cost £2.36 million
Form of contract Standard
 Building Contract without quantities
Architect Phillips Tracey Architects
Acoustic engineer
 Sandy Brown Associates
CDM co-ordinator
 Goddard Consulting
Client Donhead Preparatory School
Contractor
 Blackwater Building Services
M&E engineer
 Environmental Design Associates
Quantity surveyor
 Castle Hayes Pursey
Structural engineer Morgan Tucker
Theatre consultant
 Multistage International







Canopy detail section



Eaves detail section

0 0.5m

Specification

A limited palette of materials has been used to reflect the simplicity of the overall design concept. It includes complementary red stock brickwork and light-reflecting render. The new auditorium is faced with an anthracite-coloured zinc shingle cladding to create a simple but striking backdrop.

Internally, brickwork and infilled windows have been left exposed. White ash has been used extensively to visually link the new elements while providing a rich and robust finish to the auditorium, new staircase, altar and reception desk. Bespoke seating was also designed and commissioned for the reception and chapel.

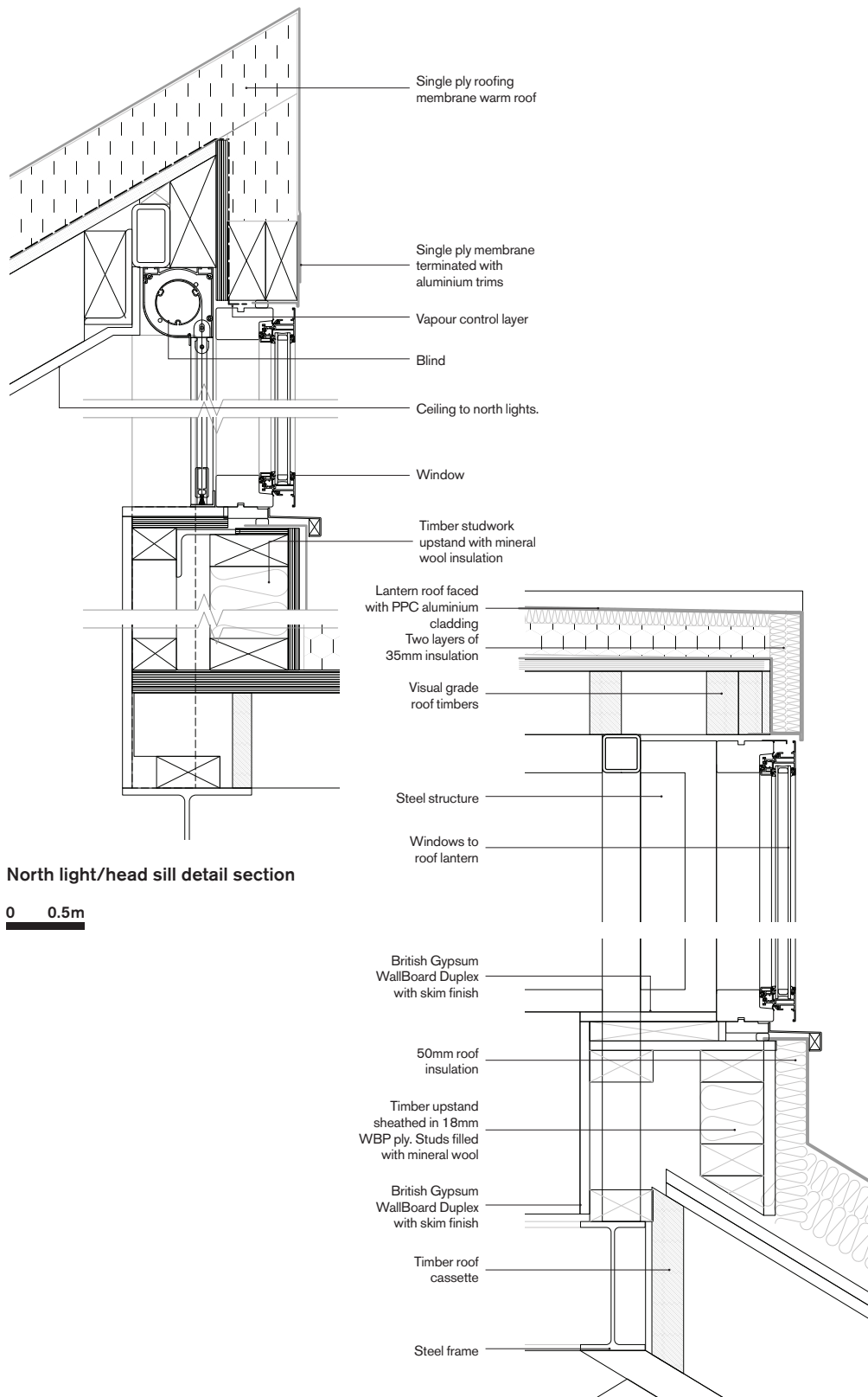
Great care was taken to implement a passive ventilation strategy within

the new auditorium, mitigating the requirement for active cooling systems. An automated Passivent louvre system has been installed, which is linked with CO₂ sensors to maintain air quality within acceptable parameters.

Existing roofs within the historic building have been insulated and roof lights and additional glazing introduced where possible to provide natural lighting and ventilation.

The use of polished concrete floors throughout most of the new extension provides exposed thermal mass, assisting with the heating and cooling strategies.

*Brendan Tracey, director,
Phillips Tracey Architects*



North light/head sill detail section

0 0.5m

Lantern/zinc roof junction detail section



Roofing and drainage

The building forms are expressed to reflect their uses, which resulted in differing roofing solutions. To ensure the various volumes were expressed in a simple clear manner, internal cast-iron rainwater goods were used generally to reduce clutter on the main elevations.

The chapel is positioned on the main south elevation and is vaulted internally with an exposed timber roof structure. Externally the warm roof is finished with standing-seam zinc, which complements the use of zinc elsewhere on the site and allows for crisp, clean, contemporary detailing which includes hidden box gutters.

The auditorium is expressed as a simple box with a flat roof hidden behind a metal parapet. The structure is exposed internally and is finished externally with cut-to-falls insulation and a single-ply membrane finish. All other high-level roofs are finished in a similar cost-effective manner with the exception of the new art room, which is housed under a vaulted slate roof, an extension of an existing gable.

The new slate roof and high-level single-ply roofs drain to polyester powder-coated aluminium rainwater goods with socketed joints, matching the colour of the new window frames.

Flat-roof perimeters are protected with collapsible balustrades and a mansafe system used on the auditorium to provide safe access.

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