

Residential / Restoration

Thompsons Lane, Cambridge

Restoration and refurbishment of listed 19th century houses for Magdalene College, Cambridge. The project consisted of the restoration of two houses previously containing fifteen study bedrooms which, by means of judicious re-planning and the addition of sixteen study bedrooms in the roof now accommodates thirty-eight study bedrooms.

The existing building was built partly on three metres of medieval fill and partly on a wine cellar. Consequently extensive works were required to support the additional loads for the new floor in the roof and study bedrooms within the existing structure. This was done by underpinning the fill area by using mini-piles and ground beams and strengthening the wine cellar masonry by resin-injecting damaged or weakened masonry and casting a concrete slab over the masonry to spread the load onto the vaults.

The new floor within the roof had to be constructed clear of the existing ceiling because of listed building consent. This was achieved by strengthening the existing king post trusses by bolting steel channels to the bottom chord, which permitted the floor joists to be suspended above the ceiling. Although the extension was constructed with traditional load bearing brick and block cavity walls the internal load bearing walls were constructed in timber, following the same construction as the existing internal walls.

