

St John's College Library

Location: Cambridge, UK

Client: St John's College, University of Cambridge

Completed: 1993

Construction Cost: £3.5M

Size: 1,500sqm

Awards: RIBA Regional Award

"The test of a new library, however, lies in its utility - in its adoption by Library readers and in its responsiveness to changes imposed by fashion, habits and new technology... We watch new roles and services as they are introduced within the Library building, and we observe a nurturing of synergies with other College departments, reflected in services now on offer in the Working Library. We see, too, further structural adjustments, taking advantage of the flexibility so prudently built into the original Cullinan design." Mark Nicholls, Librarian (from St John's College Working Library 25th Anniversary Booklet)



St John's College Library

Our expertise in library projects began with a new library for St John's College, which **reuses an existing College building**.

The existing collection of books and manuscripts had long outgrown its 17th century library. The library we designed is located in the shell of the 1888 Penrose Building, adjacent to the existing library.

The original brief called for the southern part of the building to be replaced with a totally climatically controlled box, with sealed walls and air-conditioning. We advised that the Penrose building should be saved and adapted.

In order to provide a modern learning space, the interior was cleared and a new cross axis with entrance porch and apse was created. This provided space for well-lit corner reading bays that have delightful views over Chapel Court and the Master's Garden, as well as back towards the original building.

The library is characterised by its integration of a wide variety of comfortable reading spaces with the book collection.

Context

Since the completion of the Upper Library in 1628, the College Library had been gradually expanding into nearby residential accommodation. Book storage had become cramped and unsatisfactory and reader places were insufficient for the growing number of students in the College.

The confined spaces of the College's historic buildings also did not lend themselves to the installation of computer equipment on the scale required.

After various feasibility studies it was decided to build the new College Library on the site of the southern part of the 1888 Penrose building in Chapel Court, adjacent to the existing Library buildings.

We proposed to keep and transform the Penrose building by making a new crossing with wings extending into the Court and the Master's Garden.

In the Court, the crossing makes a gable and porch which address the Gilbert Scott Chapel across Chapel Court. In the Garden, it forms an apse, octagonal at its base, becoming semicircular as it rises upwards.

The southern section of the Court was dramatically remodelled to create a foreground to both the Chapel and the new Library.

Special bricks were made to match those of the Penrose building. Clipsham stone was used for repairs to the existing building and Ancaster Weatherbed for the new work.



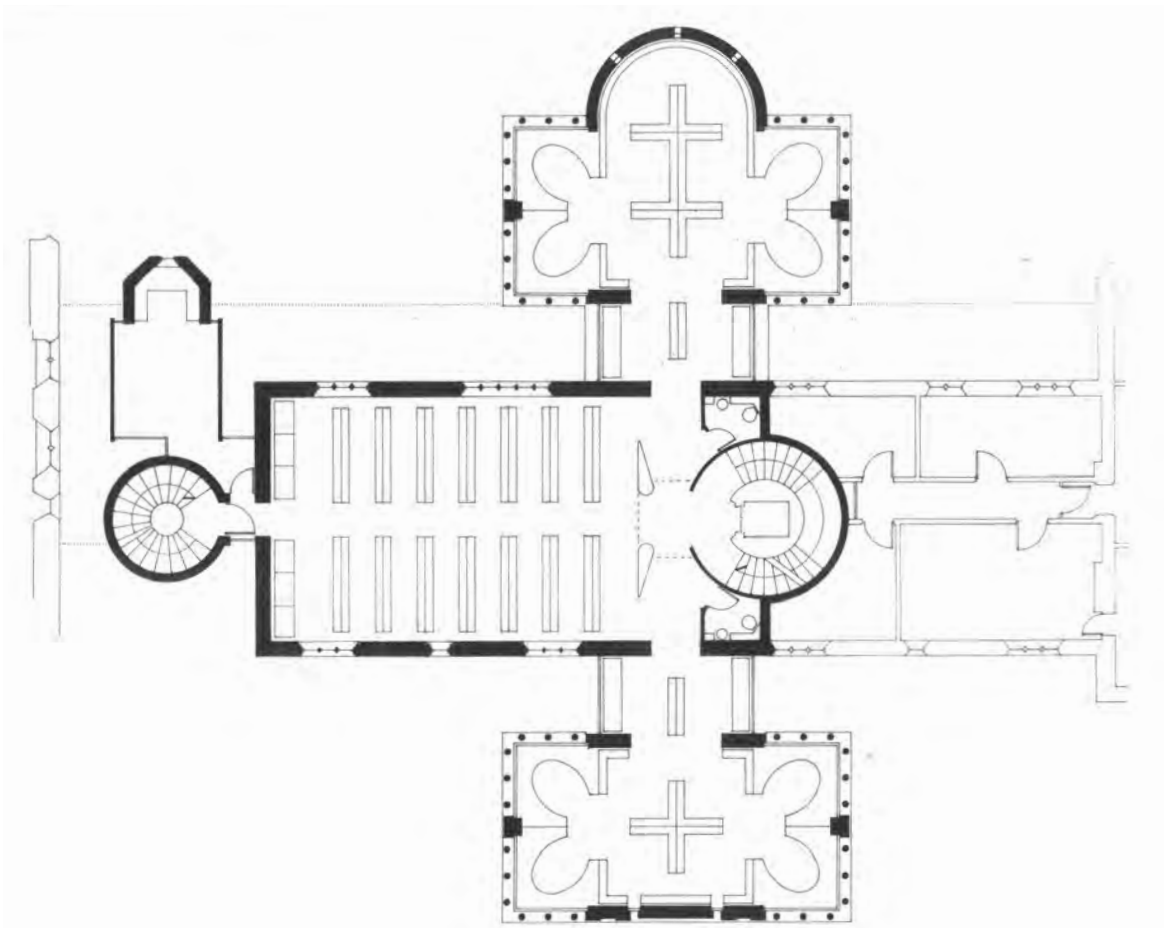
Climate

Conventional air-conditioning was avoided, with natural ventilation throughout the open book-stack areas.

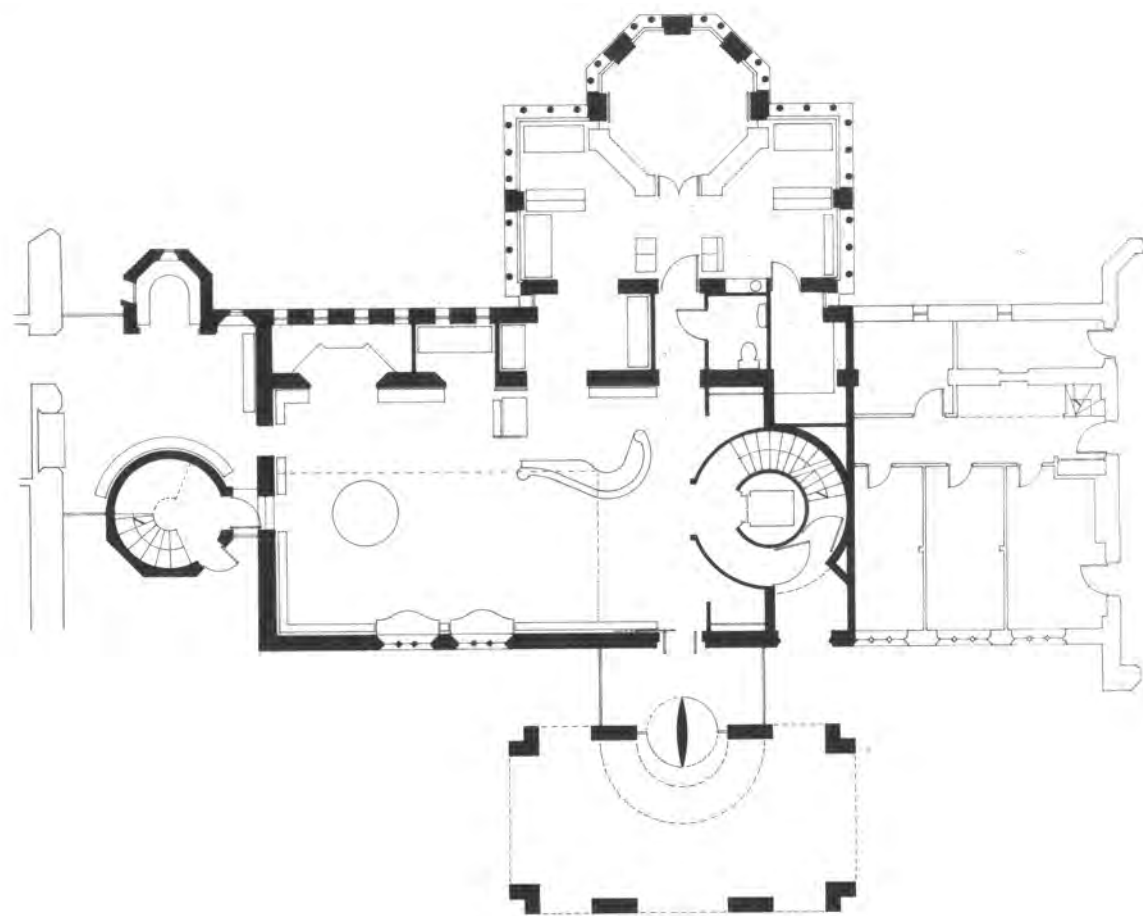
This was achieved by using the thermal mass of the existing masonry structure and a system of external columns supporting a grid of sunshades, and opening windows that enable comfortable temperatures to be maintained throughout the year.

The main circular staircase tower is topped by a dramatic glass and steel lantern containing a simple rotating fan and ventilation louvres. On hot days these are triggered automatically to help expel waste heat through the lantern, whilst drawing fresh air in from the windows.





Above: First floor plan



Above: Ground floor plan