

Swindon keeps library promise

Swindon Borough Council has made 50 promises to its residents. Promise No 16 was: 'We will have a new Central Library by 2008 and an effective local library service with flexible working hours.' Neil Ashman of Swindon Borough Council Building Control describes how building control helped the council keep its word



The new Swindon Central Library is a four-storey building, located in the centre of Swindon adjacent to the Town Hall and the focal point for the regeneration of the town centre. The new building replaces a single storey pre-fabricated temporary library that previously existed on the site.

The fact that the new building is attached to the existing Town Hall presented the council's architects with a difficult challenge – to create a modern looking, energy efficient building which

complemented the traditional Grade 2 listed Victorian Town Hall without overshadowing it, or being a pastiche, and with each retaining their own individual, independent characteristics.

This has been achieved in a number of ways, including the use of traditional, high-quality materials for the exterior and a tiled roof, which continues the roofline of the Town Hall. The design incorporates a calm central courtyard between the two buildings, which on dry days can be used to sit, read and relax.

The new library completes a job that should have been

“THE DESIGN INCORPORATES A CALM CENTRAL COURTYARD BETWEEN THE TWO BUILDINGS, WHICH ON DRY DAYS CAN BE USED TO SIT, READ AND RELAX”

finished back in the 1880s – the Victorians always intended to have a building attached to the Town Hall, but never quite got round to it!

The new Central Library features three public floors; the roof height being virtually the same as the existing Town Hall, which has been achieved by placing the staff offices and storage rooms in the roof space.

The windows have similar proportions and style to the Town Hall. Access is through a cylindrical 'feature' entrance on Regent Circus. This structure stretches the full height of the building and has





a high-ceilinged circular reading room built into the top, with views of Regent Circus and surrounding streets.

Other features include:

- Ground Floor – double height entrance lobby, express zone, children’s library, leisure zone, toilets and doors to the landscaped inner courtyard
- First Floor – leisure zone, teen zone, learning zone, doors to roof terrace
- Second floor – quiet zone, local studies area and

circular reading room within the entrance tower

- Third floor – office accommodation within the roof space, including staff room and book storage rooms.

With the building being a fairly complex one, the particular issues that needed addressing under the Building Regulations were:

- Means of escape during normal hours as the building is attached to the existing Town Hall. Also

“THE SUSPENDED GROUND FLOOR SLAB AND BEAMS SPANNED BETWEEN PILE CAPS WHILE THE UPPER FLOORS WERE OF FLAT SLAB CONSTRUCTION”

the new library is to have a new night hours service where a screen is placed across the ground floor, therefore restricting escape routes

- The number and position of dry risers, in accordance with the Fire Service
- Structure – The suspended ground floor slab and beams spanned between pile caps while the upper floors were of flat slab construction. Due to the varying geometry and the spans of the



column layout, a finite element computer analysis was adopted for design purposes. The large service ducts around the outer curved perimeter to accommodate natural ventilation also provided lateral restraint to wind and notional forces in tandem with the lift and stair walls. A flat concrete inner roof slab supports the main curved tiled roof structure of timber trusses.

- The smoke dispersal

system to aid the Fire Service

- Access and egress under Approved Document M
- Escape routes used by different users within the new library and existing Town Hall.

The appointed contractor, Willmot Dixon, has a long track record of successfully completing major building projects for both public and private sectors in the South West.

In 2007, the design for the new Swindon Central Library won the national BREEAM

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award, organised by the Building Research Establishment, for the best bespoke building. These awards are based on the world's leading environmental assessment system.

This development also benefits from the following environmental features:

- Natural ventilation via passive stack ventilation
- Under floor heating system
- Condensing boilers
- Solar water heating
- Sophisticated lighting control system
- Building Management System
- No refrigerants used in cooling strategy
- Rainwater harvesting and recycling
- Use of A-Rated Green Guide products
- FSC certified timber
- Insulation materials with zero ozone depleting potential and global warming potential of less than 5
- Good public transport links
- No risk of water course pollution
- Recycling storage space
- The site was of low ecological value

Finally, the development has achieved a BREEAM Excellent rating, scoring 72.51%. Being a library, this building fell outside the standard BREEAM versions and a bespoke BREEAM assessment was necessary – this is where the criteria are specifically tailored to suit the building type.

