

## **CARMEL RC TECHNOLOGY COLLEGE, DARLINGTON**

### **Redevelopment of Buildings and Creation of Modern Learning Facilities**

#### **Design Concept/Philosophy**

##### **➤ Phase 1 works**

The new Technology Building constructed as part of the Phase 1 Works and completed in February 2004 comprises a two storey 'pavilion' style building with pitched roof and central glazed lantern feature with upstand louvres. The teaching areas are arranged around the central glazed 'atrium' feature and benefit from natural ventilation via the passive stack effect of the atrium. The philosophy of the design was to create a building with a strong departmental image, short circulation routes around an 'atrium' space with natural daylight and ventilation and interaction of spaces at ground and first floor levels. The College are well satisfied with the image and function of the building and are keen to develop this format in future building works.

##### **➤ Phase 2 proposal**

As previously noted, based on current BB98 standards the gross internal floor area of a school with Carmel's projected role numbers should be in the region of 11,350m<sup>2</sup> (using net to gross at 145% based on retention of parts of the school). In demolishing areas of inappropriate accommodation the remaining gross internal floor area of existing would be approximately 6,090m<sup>2</sup>, providing a maximum new build area of 5,260m<sup>2</sup>. Attached as Appendix G are A3 copies of the proposed design solution plans and elevations/perspectives. The gross new build internal floor area for this scheme is 5,505m<sup>2</sup> of which 200m<sup>2</sup> is for family/community use.

Gross internal teaching floor area is therefore 5,305m<sup>2</sup> which is within acceptable tolerance of the area requirements set out in BB98.

The proposals consist of the following key elements :-

- Departments and core facilities are arranged in four pavilion style buildings linked by an external 'square' and 'street'.
- A new and defined entrance and reception area for pupils to link directly into the curriculum and core areas. The existing college entrance/reception will be for use of staff and visitors only.
- A family centre located in Pavilion 1 adjacent to the new pupil entrance and is linked to the existing recently completed Assembly/Performance Hall. This has a separate and secure entrance and can be used independently from the main college facilities and out of hours.
- The new buildings are linked to the existing College buildings and facilities at both ground and first floor levels. New lifts have been located at key positions within the development to provide an accessible environment for all users of the existing and proposed College site.
- Staff accommodation (Staff Room and Work Rooms) are located centrally on the site at first floor level in Pavilion 1 with direct access to the new build accommodation and the existing College facilities. The accommodation overlooks the external circulation and play areas enabling maximum supervision and security of the site.
- Core ICT facilities are located centrally in the new development in Pavilion 1 at first floor level and provide ease of access from both new and existing buildings.

- Individual Departments are located at ground and first floor levels in the four pavilions. The individual teaching/practical spaces are grouped around a central full height 'atrium' space which provides natural daylight and ventilation into the core of the building. Integral staff facilities are provided in each of the departmental areas. The faculty bases will also be used as registration bases and will house locker accommodation for the pupils within the atrium space.

The atrium space at both ground and first floor levels provides break-out areas to be used as departmental resource/display space, hence maximising the use of the space available.

- The pavilions are interlinked at ground level by a covered 'square' and 'street' providing all weather circulation between the new build areas and the existing retained college buildings.
- The new pavilions have been carefully positioned on the existing site to create direct circulation routes between the college's facilities, maximised views over the playing fields/landscaping and new external and secured play areas. The play areas are partly covered by a tensile structure to provide protection against adverse weather conditions and to create the opportunity to hold external performances and activities.
- The pavilions comprise steel frame construction with brick/blockwork external cavity walls of architectural masonry plinth and facing brickwork, pitched roofs of man made slate and polyester powder coated aluminium windows and glazed roof lanterns.
- All of the construction works have been contained within the existing footprint of the main teaching area. There is no loss of existing playing surface and grounds which ensures that there will be no Sport England issues.

