

College Case Study Proforma

Project name: Usworth Sixth Form College			
Project name and address: Usworth Sixth Form College, Stephenson Road, Washington, Tyne and Wear, NE37 2NH.			
Project location: Washington, Tyne and Wear.			
Design team (contact details)			
Architect : Dewjo'c Architects, Milburn House, Dean Street, Newcastle upon Tyne, NE1 2ES			
Quantity surveyor : Turner & Townsend, Bede House, All Saints Business Centre, Newcastle upon Tyne, NE1 2ES			
Structural engineer : Parsons Brinckerhoff Limited, Amber Court, William Armstrong Drive, Newcastle upon Tyne, NE4 7YQ			
Mechanical engineer : Parsons Brinckerhoff Limited, Amber Court, William Armstrong Drive, Newcastle upon Tyne, NE4 7YQ			
Planning supervisor : Turner & Townsend, Christine House, Sorbonne Close, Thornaby, Stockton-on-Tees, TS17 6DA			
Project manager : Turner & Townsend, Bede House, All Saints Business Centre, Newcastle upon Tyne, NE1 2ES			
Surveyor : Not Applicable			
Contractor : Balfour Beatty Construction Ltd, Unit 1A, Wesley Drive, Benton Square Industrial Estate, Newcastle upon Tyne, NE12 9UN			
Other			
Landscape Architect : Insite Environments Ltd, Sailors Bethel, Horatio Street, Newcastle upon Tyne, NE1 2PE			
Acoustician : EMAT Ltd, Unit 3, Saltmeadows Road, Gateshead, Tyne and Wear, NE8 3AH			
Key College personnel			
1. Martin Powner		Head of Division Facilities Manager	
2. Dave Geddis		Site Services Manager	
3. Ian Todd		Principal	
Programme (Time spent designing and on site)			
Start Date	Month November	Year 2004 (Design)	
Completion date/handover	Month June	Year 2006	
Financial close	Month August	Year 2006 (Final Account Agreed)	
Commencement of design	Month November	Year 2004	
Commencement on site	Month July	Year 2005	
Original programme	Month August	Year 2006	Weeks 52
Actual programme	Month June	Year 2006	Weeks 46
Reason for any over run:	Not Applicable		

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Capital value of the project/square meterage

Gross floor space:	6,000 m ²
Budget cost	£7,631,382.00
Final construction cost	£7,511,175.00 (Contract Sum)
	£7,498,861.90 (Final Account)
Cost per m ²	£1,250

Key Reason for any overspend:
Not Applicable

Procurement route:

What form of procurement route was adopted and what form of contract was used?

Procurement route : Single Stage Design & Build

Form of Contract : JCT Standard Form of Building Contract With Contractor's Design 1998 Edition incorporating Amendment No. 1 (June 1999), Amendment No. 2 (January 2000), Amendment No. 3 (January 2001), Amendment No. 4 (January 2002) and Amendment No. 5 (July 2003)

To what extent, if any, did the project involve partnering?

Not Applicable

Project Overview

Please provide a brief description of the project.

Surrounded by mature trees and large grassed areas the three storey Usworth Sixth Form College caters for 1,000 students and provides a two-storey Learning Resource Centre, 100 person lecture theatre, dedicated IT and Science Labs, general teaching rooms together with associated office, staff, student amenity, refectory, WC and shower ancillary accommodation. External works comprise the creation of a surface car parking facility for 100 number spaces.

Number of sites affected by the project

One

Specialist Curriculum Provision i.e. sports, music, IT, performing arts, motor vehicle

IT Laboratories,
2 no. Science Laboratories and associated Prep room
Lecture Theatre (100 seat capacity)
Teaching room for Art
Teaching room for Media Studies
Teaching room for Child Welfare Studies

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Innovation

What was innovative about the project - key design features, what added value?

Where possible, natural construction materials were used to create an environmentally friendly building and add a softer edge to the high tech appearance of silver aluminium cladding. Although generally rectangular in shape, the large use of curves in the overall design provides a softer feel to the building through the curve of the roof gently leading into the main entrance canopy, the curved structural steel bowstrings in the Learning Resource Centre and the round porthole windows in the south elevation cedar cladding.

One of the main structural features of the college is a full length, curved roof light along the central axis of the building. This maximises the amount of natural light that enters communal and circulation spaces and gives the building its characteristic feeling of space and freshness.

Cantilevered balconies around the atrium facilitate efficient movement of students during busy class changes in an unhindered and relaxed manner. The 'street' is landscaped with trees and also houses an 'open air' café where staff and students can meet and socialise.

A prominent feature of the design is the double height Learning Resource Centre. External clad with structural glazing and vertical brise soleil fins the space provides a dramatic and imposing visual entrance to visitors accessing the College from the site's Main Entrance. During the hours of darkness the glazing is externally illuminated with feature lighting.

Challenges

Were there any challenges during the project? How were these solved?

The College was constructed on a former School all weather pitch. Following extensive discussions with Sport England it was agreed to replace the pitch within a prescribed period following construction on a site to be vacated following the demolition of the adjacent secondary School.

Funding Elements

Were any public funds made available to the project other than those provided by the LSC?

No

Town Planning

Were there any planning difficulties?

No

Where there any additional works undertaken or Section 106 requirements part of the planning approval?

A Section 106 was imposed on the College for works to modify the site entrance to reconfigure the vehicular entrance junction.

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Decant and Migration

Was the project delivered on an existing working campus? How was this managed?

Not Applicable

What extent of temporary accommodation, if any, was required?

Not Applicable

Sustainability

Did the design provide any sustainable solutions?

One of the key Client requirements identified during the briefing process was for a vibrant and sustainable building. The design of the building was therefore driven by the desire to provide natural daylight and ventilation to internal areas unable to have windows to the outside, thus aiming to provide a healthier and more stimulating environment for students. This gave rise to a glass fronted and glass roofed street that lies in the heart of the building.

The building was modelled using sophisticated computer programs to orientate the building and make the maximum use of solar gain. Careful consideration was given to building a college that uses minimal energy and expends low levels of CO₂.

The mechanical cooling within the building has been limited to server rooms only. Together with the external opening windows and automatic roof vents, a series of 'windcatchers' at roof level provide natural ventilation to the classrooms and the Learning Resource Centre. During the summer of 2006 when external temperatures reached 31 degrees Celsius, the interior of the building was comfortably cool and attracted positive comments from building users and visitors alike.

Continuous Improvement

What were the lessons learnt?

A factor in the success of the project was due to the close working relationship of the design team and their ability to respond to incorporate design adjustments and modifications in response to the College's curriculum agenda during the design development. This allowed a set of fixed floor plans to be developed pre-construction and minimized the number of post contract variations issued to the Contractor.

Quality and Customer Satisfaction

Were the user client groups particularly pleased with any element of the project? What was their feedback? Please give any client quotes.

"The building has exceeded my expectations. It is very striking in appearance and has already received many compliments from students, staff and visitors" – Martin Powner (Head of Division Facilities Manager).

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“The Centre has functioned incredibly effectively as an educational institution over the last 12 months, due in my belief to its ‘open’ design around the central atrium. As all the learning spaces open into the central void, it creates an atmosphere of openness and community. The collective social areas in the street café being used by students and staff add to this sense of community. There is a purposeful working feel to the centre which I believe to be attributable to two things, firstly the students who we have in the college, and secondly the design of the building which encourages and supports a positive learning ethos” – John Anderson (Head of Usworth Sixth Form College)..

“The running of the building requires little effort due to its many natural systems which has also resulted in a substantial decrease in running costs” – Dave Geddis (Site Services Manager).

The College was officially opened in July 2007 by Lord David Putnam who afterwards commented: *“I opened Usworth Sixth Form College in Washington on this trip and it was beyond my wildest dreams of what I thought possible 10 years ago. It was a great vision of what a sixth form college should be like”.*

Can this Project be used for a reference site? Yes No

If yes, please give contact name and contact details:

Karen Wade, City of Sunderland College, Bede Centre

Are Photographs available? Yes No

Can the photographs be used on the LSC Design Guidance web site?
 Yes No

Can you provide any conceptual images for use in a case study?
 Yes No

Awards/Nominations

The College was awarded the regional 2006 Public Sector Award by The Journal newspaper. In presenting the award the judges commented that *“given the financial constraints of the higher education sector, the building was considered to be an impressive use of financial resources”.*

The building has also been recognised by Constructing Excellence in the North East receiving an award for ‘sustainability’ in 2007.

Completed by: Paul Humble
Turner & Townsend
Date: 15 November 2007