

demonstration project



Redlands Primary School

Contractor:	Willmott Dixon
Client:	Nottinghamshire County Council
Case Study Ref:	287
Project Number:	1196
Publication Date:	July 2007
Region:	East Midlands
Sector:	Local Government, Education
Contract value:	£3.1m
Project timescales:	September 2003 to March 2005
Themes:	Collaborative working, sustainability

The project, completed in March 2005, involved the construction of a Keystage 2 extension to a primary school with a value of £1.7m and a New Opportunities Funded (NOF) Table Tennis Centre with a value of £300k.

Phase 2 was a \pm 1.1 m conversion of a c1915 infant school building and external landscaping and playing fields. The project's innovations focused on partnering and sustainable construction.

Background

The primary school is a Victorian/Edwardian red-brick primary school typical of many schools constructed at the turn of the century. As well as the main infant and junior block, the site also contained a 1970s CLASP block used as a nursery. The site is situated on the west of Worksop by the side of a disused sand quarry which is now partially filled with water. The quarry now provides an important wildlife haven and an attractive local beauty spot. However, the junior block situated close to the edge of the site was not in a stable condition and had begun to subside into the quarry.

The brief

The school was designed to BB82 and other design bulletins produced by the DfES. The brief was to:

- Construct a new 7 class junior teaching block attached to the existing infant building
- Incorporate the NOF Table Tennis Centre into the phase 1 junior block
- Investigate a wood burning boiler to promote the County Council's sustainability objectives

- Refurbish the existing infant block to contain 5 class bases plus library and resources space
- Demolish redundant buildings on the site
- Complete the landscaping of the whole site within the available budget.

Integrated working

The procurement process started in February 2003 which culminated with the formation of a partnership between Willmott Dixon and Nottinghamshire County Council in May 2003. Selection was carried out through a 70/30 price/quality tendering exercise.

At the time of the partnership formation, funding was in place for phase 1 only. The team agreed to work together at risk to obtain funding for phase 2 in addition to the NOF funded table tennis centre.

The project involved a collaborative working relationship between the Client, the school (Head, staff and governors), Nottinghamshire County Council design services, Willmott Dixon and the external funding organisation (NOF). It was used to develop the NCC best value objectives and develop strategic partnering relationships and improved methods of working for use on future projects. There has been transferability from this project to other Nottinghamshire County Council school build projects. The project was delivered more quickly and with better control of the design and on-site construction than procuring the three phases separately using traditional methods. It was also the intention to test this method of procurement against other models on six new primary schools where there would be two traditionally procured projects, two developed and constructed by an in-house team and two via a strategic partner.

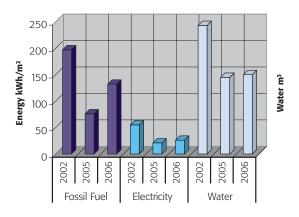
The project was used to drive forward the NCC strategy for sustainable development.

Features include:

- Use of materials that minimise the embodied energy of the buildings
- Use of rainwater harvestings
- Power generated from wind turbine
- Use of passive ventilation to enhance the teaching environments
- Minimisation of site waste and improve recycling.

Redlands School – Energy and Water Use

The impact that the redevelopment work has had on fossil fuel consumption and energy and water use are shown in the graph below:







Students at the school are able to use a digital monitoring system to track the amount of water being used, educating them on resource efficiency. In addition, the energy generating and water saving features in the building are designed to have a positive impact on the buildings' whole life costs.

Challenges

The project suffered a setback when a fire at a local school led to pupils being temporarily relocated to Redlands, halting construction. This could have had a negative impact on the programme. However, due to the teamworking approach utilised on the project, the school was still brought in on time and on budget.

Benefits

The NOF Table Tennis Centre has had a huge impact on the school. Both the boys' and girls' school teams reached the finals of the English Schools Table Tennis Championships in 2007; and one of the students has been selected for England and is in the 2012 Olympic training squad. The school has now achieved the Healthy Schools Gold Standard; this is partly due to excellent sports facilities to encourage children to take exercise, and our own children's kitchen where we can cook healthily. The school is currently considering applying to be an Eco-School to recognise the steps taken to incorporate water harvesting, wind turbine usage and other sustainable technologies.

The school's OFSTED report from December 2006 described Redlands as "an outstanding school in every aspect."

"As a result of the redevelopment of our school we are now providing very high quality opportunities to all of our children in a warm, spacious building that meets the needs of the 21st century."

Chris Honey, Headteacher, Redlands Primary School.



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