



PROJECT SHOWCASE

Seven years of planning makes a 'dream come true'

London Swimming Pool Company completed an advanced hydrotherapy pool at this specialist school for cognition and learning in Wiltshire – and the facility has dramatically changed the lives of its 72 pupils.

Seven years of planning and fund raising initiatives generating £700,000 by the local Rotary Club and their dedicated charity SNAP (St Nicholas Appeal for a Pool) have turned a dream into reality.

This achievement won for the Chippenham Rotarians the organisation's Award for Best Vocational Project in Great Britain and Ireland, and this was even before the complex was finished. Construction professionals, led by building consultancy Bailey Partnership and London Swimming Pool Company, designed and put in place a facility which has exceeded

expectations. The pool allows for children and young people with special needs to enjoy the experience and benefits of water for the very first time and provides a unique learning environment.

The vision of building a hydrotherapy pool at St Nicholas school was initiated by the Rotary club, with President Eric Sambell, OBE in the lead. The club wanted to do something for the organisation's centenary in 2005 and managed the whole project until the final stage when they handed over to Bailey Partnership for the building phase. The fund raising efforts included activities in pubs, shops and businesses, at dog shows, village fetes and school fairs drumming up community support which lead to bigger grants and donations, including £100,000 from the Starfish Foundation, a charity supporting children

with special needs in the West Country and £150,000 from the county council. The target of £700,000 was eventually reached and the project was commissioned. The pool element of works was awarded to London Swimming Pool Company based on their track record and level of experience in designing and building specialist installations in schools, colleges and hospitals.

The long summer break came to an end and the official opening with a party atmosphere took place on 30 September. Pupils and their families and friends of the school and anyone else interested in the pool enjoyed a tour of the whole hydrotherapy complex and a demonstration of the different features the pool has to offer. A number of the school's children took to the water including a little girl called Jade who needs to



THIS: Black tile edging was included around the pool to aid the visually impaired

breathe with the assistance of an oxygen tank. Thanks to the highly developed ultraviolet water treatment system providing a superior crystal clear water quality, Jade, and others with respiratory difficulties, such as asthma, can enjoy the pool without irritation.

The design operating temperature of the hydrotherapy pool is 34°C. Rosie, who took some persuasion to come out of the pool after the recommended 30 minutes swim time and Jack has since commented about the water saying: "I didn't like swimming before, it was too cold, but I like our pool. It's like having a lovely warm bath!"

Hydrotherapy can open up a whole new world of physical and mental wellbeing and recuperative and healing benefits due to its thermal effects. The support of the water on the body, and in

THIS: The designed operating temperature of the pool for therapy is 34°C



PROJECT COMPANIES

CONSTRUCTION, DESIGN AND MANAGEMENT DESIGN AND BUILD

-  Bailey Partnership
-  0117 947 4380
-  www.baileypartnership.co.uk

POOL AND PLANT DESIGN AND BUILD

-  London Swimming Pool Co Ltd
-  020 8874 0414
-  www.londonswimmingpools.com

UV SYSTEM

- Uvalite SS90 UV water treatment
-  Triogen Ltd
-  01355 220598
-  www.triogen.co.uk

CHLORINE AND PH CONTROLLER

- BECSys3 free chlorine and pH controller
-  Aquatrol Ltd
-  01444 401955
-  www.aquatrol.co.uk

FILTER UNIT

- Europa deep bed filter units
-  Astral UK Ltd
-  0845 306 0903
-  www.astralpooluk.com

HEAT PUMP

- Phoenix 3000 SuperPlus air handling unit
-  Heatstar Ltd
-  01983 521465
-  www.heatstar.com

AUTOMATIC POOL COVER

-  Plastica Ltd
-  01424 857802
-  www.plasticapools.net

SENSORY SYSTEMS

-  OM Interactive
-  01442 215555
-  www.om-interactive.com

SOLAR ARRAY SYSTEM

-  Southern Solar Ltd
-  0117 953 9090
-  www.southernsolar.co.uk

HOIST SYSTEMS

-  Hill-Rom Ltd
-  01530 411000
-  www.hill-rom.co.uk

TILING

-  Waxman Tiles
-  01422 311331
-  www.waxmanceramics.co.uk

ANTI-SLIP STEP AND POOL EDGING TILES

-  Domus Ltd
-  020 8481 9500
-  www.domustiles.co.uk

POOL CONTROLS AND ELECTRICALS

-  PTE Ltd
-  01772 558358
-  www.pte.ltd.uk

TANKING OUT MATERIALS

-  Saint-Gobain Weber Ltd
-  02476 560700
-  www.saint-gobain.co.uk



ABOVE: The comprehensive plant installation 'turns the pool water over' in less than an hour



ABOVE: A mechanical hoist offers easy access, suspended from rails over the pool



ABOVE: Chris Walker, London Swimming Pool's engineer who headed up the works

particular the joints, can be very liberating for those who are suffering from a chronic condition such as arthritis, osteoporosis or back problems or can make exercise even easier or even possible as well as increase the range of movement. The benefits of hydrotherapy can speed up recovery from illness, injuries and surgery. In fact young Rosie has been recovering from a hip operation a year ago and the rehabilitative properties of the pool have speeded up the process of her regaining movement confirms her mother who is overjoyed at the arrival of the pool at the school. Rosie is now able to enter the water almost on her own thanks to the ramp featuring raised hand rails and very wide steps with non-slip tiles. As well as offering easy access for those with limited mobility, these specialist design features, in particular the black tile edging, greatly assist those who are visually impaired. The pool's shallow constant depth of 1.2 metres makes it a safe place to swim for most abilities.

For those who cannot manage steps at all then there is a mechanical hoist for easy and secure access suspended from rails running between the high dependency shower/changing facilities and the pool. This equipment makes it possible for Danielle, Year 10, who has extremely limited independent mobility, to enter the water where she is then able to float on her own with the help of simple buoyancy aides. The 7x7 metre pool accommodates 15 users at any one time and assistance and interaction for those in the water can also be provided by teachers from the sunken walkway alongside one end of the pool. This useful feature enables support staff to communicate with those in the pool at eye level without the need to enter the water.

In addition to the recuperative benefits of the hydrotherapy pool, the pupils are benefitting from the calming and relaxing properties of water. Many parents and teachers said they are noticing the regular sessions in the pool are increasing self-confidence and motivation amongst the children and having a positive impact on behaviour. Jo Poole, who has worked at St Nicholas for 15 years, said: "It is such an uplifting experience to support our most profoundly disabled pupils in the water where their independence is maximised and they have the freedom of movement that we have every day and just take for granted. Their smiles speak a thousand words."

Head Teacher Jill Owen said: "We stuck to a dream for the kind of pool that we felt our children and young people deserved and the end result hasn't disappointed us! From the school's perspective our pool is a unique learning environment which we can use in a huge variety of ways. It is also a great place to be and we hope that it will be well used outside of the school day. We hope that it is a venture which will inspire other special needs schools to reflect on the comprehensive benefits that a hydrotherapy pool could bring on so many levels."

All parties involved in the 11 month long construction project are pleased with the end result and staff are especially grateful that the careful coordination and management ensured that the installation ran smoothly and there was minimal disruption to the everyday life of the school.

"Another very important requirement," said Chris Caselton of Bailey Partnership, "was the need for careful financial management as the funding for the project was the result of many years fundraising by the Rotary Club and the SNAP

charity and the budget was finite. By a combination of value engineering and design development, together with some successful grant applications, the scheme has been constructed with everything the school required and within their budget."

Chris Walker, Project Manager at London Swimming Pool Company added: "It really was a pleasure to supervise the installation development for this pool which will bring joy to so many children."

Hydrotherapy pools require a high capacity water treatment system due to the warmer temperature and this is effectively managed at St Nicholas with the help of two deep bed filter units, eight skimmers, four sumps and six returns in the pool walls and four inlets in the floor. The comprehensive plant installation results in the 45.5 m³ of water turning over in less than one hour with a filtration velocity of 25m³/hour/m³. The Triogen ultraviolet plant and the Aquatrol high precision chlorine and pH controller ensure that the water is always clear and safe to use. To assist with overall running costs, the building and plant design has taken advantage of the latest developments in sustainable energy resources by incorporating solar heating panels located on the roof of the pool building, also greatly reducing the carbon footprint.

Not only will every child at St Nicholas now be able to swim regularly, the school wants their pool to be a resource for the local community, particularly for people who have disabilities who cannot access local pools. The school has received enquiries from over 20 potential user groups covering a wide range of ages and needs from Water Babies to the MS Society. **spn**