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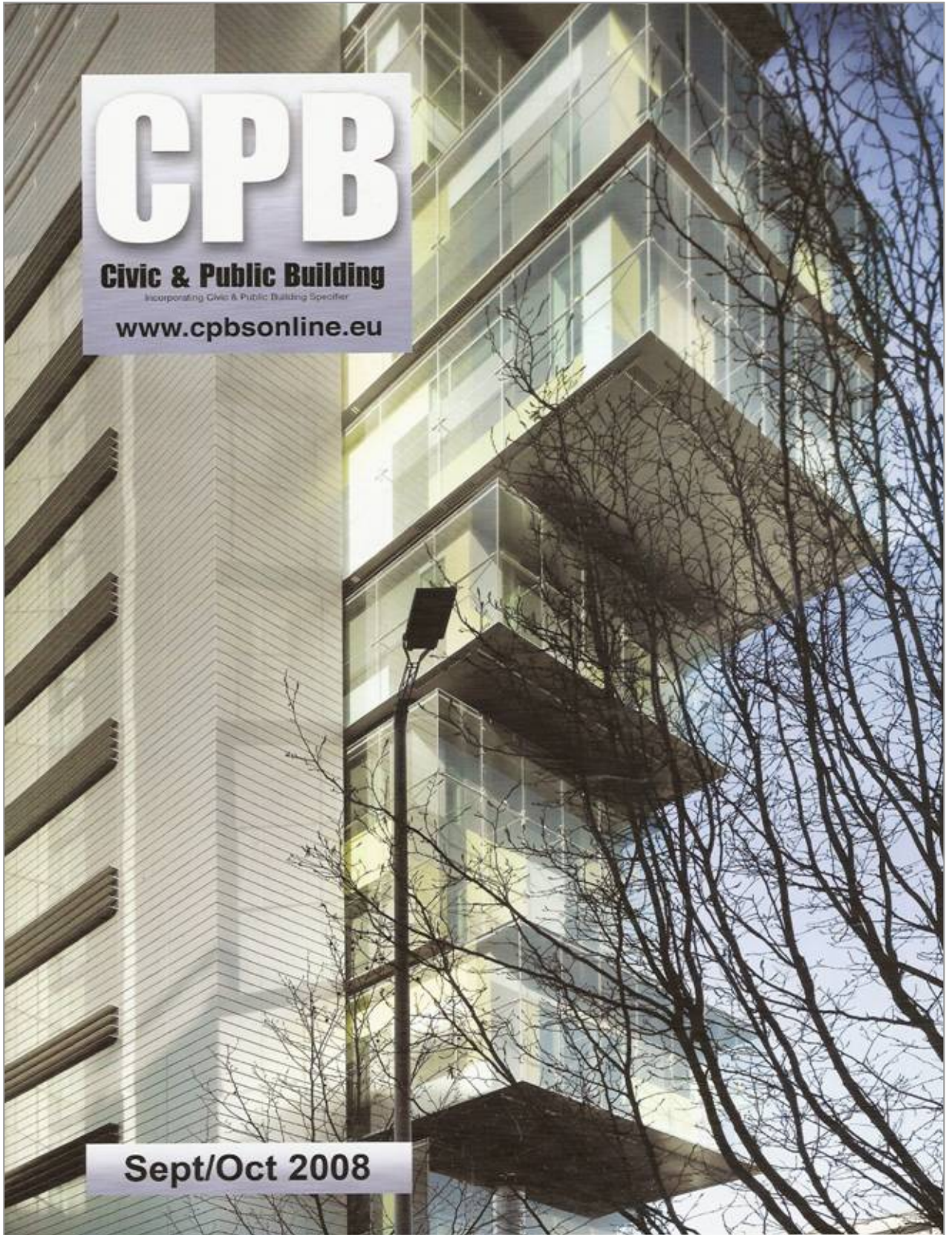
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Clerk of Works in the 'Fast' Lane

Here, Jane Verrall, Director responsible for Marketing at Hickton, one of the UK's leading Clerk of Works practices, takes a look at the recently completed Sunderland Aquatic Centre.

Sunderland Aquatic Centre looks set to become one of the UK's top sporting venues, providing state of the art health and swimming facilities for the local community, as well as national and international athletes. It comprises a ten-lane 50 metre main pool, a 25 metre diving tank and seating for 500 spectators, along with an adjoining wellness centre. The development will become a centre of attraction for what was, until recently, a disused colliery site.

On this project we worked closely with Balfour Beatty to ensure we delivered this project on time and to budget. The contractor was able to benefit because we provided them with independent feedback on all aspects of the build. Take the example of subcontractors, where we were able to give accurate and timely feedback on standards which gave the contractor advanced notice of any build quality issues before they arose. This 'right first time' approach was appreciated because it prevented costly and time consuming remedial activities, later in the build.

Sunderland City Council, the client on this project, commissioned the services of a clerk of works to ensure the project met the very highest

standards, as well as ensuring specifications were implemented on site. This was crucial in meeting build schedules, but also in building what is only one of a few 'fast' pools in the UK. A 'fast' pool is one that has been constructed to exact dimensions and, in the case of Sunderland Aquatic Centre, the length had to be 50m + 13mm - 0mm allowing it to be used for world record attempts where millimeters, measured in hundredths of seconds, make a crucial difference.

By working with the contractor we were able to ensure that the necessary build tolerances were met, which involved taking over 1400 concrete cubes to check strength and 500 slump samples to monitor its consistency. On this type of project Clerk of Works are closely involved in ensuring the concrete mix is accurately monitored, as a wet mix would have resulted in excessive shrinkage, which could affect the water tightness of the structure. The pool needed to meet FINA (Federation Internationale de Natation) standards for World Record attempts. The length of the pool at its longest point turned out to be 50.013m, which was well within the specified tolerances for a 50m pool.

The elliptical shape of the overall design also required detailed and accurate adherence to drawings and the size and scale of the build (38 tonnes of tiles were used on the swimming pool alone) made it a complex undertaking. The pool also has a floating floor that is raised nearer the surface to allow for supervised children's swimming and can then pulled to the bottom of the pool for competition swimming and diving.

One of the first tasks we were involved in was helping the contractor tackle the problem of five uncharted, underground air shafts that were discovered during site preparation. Although this caused an initial delay, we were instrumental in finding the most efficient method of solving the problem - backfilling with pulverized fuel ash and cement - as well as checking the job was carried out as planned. We also oversaw the creation of the foundations which, in areas, had to be excavated to a depth of 5m and backfilled with granular sub base because of the specific ground condition caused by previous mine workings.

Along with the Olympic Swimming pool there is a Wellness centre within the development that includes gym, dance and ballet facilities. The facility also incorporates many environmentally friendly features including a rainwater harvesting system on the roof that uses every drop of rain that falls on it.

Sunderland Sports and Wellness Centre looks set to become a showpiece sports facility for the city. Located opposite the Stadium of Light, the home of Sunderland AFC, the Aquatic Centre is now hoping to train athletes for the 2012 Olympics. Its popularity in the area has already been demonstrated when over 45,000 people used it during the first month of opening.

Sunderland City Council's new pool attracted over 45,000 visitors in its first month of opening. Hickton Clerk of Works services ensured Sunderland Aquatic Centre was completed exactly as planned.