

Building with precast

A modular systems approach proves optimal at a new municipal sports complex.

Sports facility construction projects have become a common sight in Limpopo in recent years and play an important role in uplifting affected communities. In addition to creating much-needed recreational space, these developments are an important source of work for the country's emerging contracting sector.

A prime example is a new sports complex now under construction for the Collins Chabane Local Municipality, which is due for completion by mid-June 2017. The facility features a grandstand that will be able to seat up to 2 500 spectators as well as two tennis courts and an Olympic-size swimming pool.

The construction works are being led by main contractor A & P Civil & Trading, which has a solid track record in public sector-related civil engineering and building projects; the consultant is EVN Consulting Engineers; and the sub-contractor is Corestruc, who is responsible for developing the bulk of the grandstand. Corestruc is a specialist precast concrete system designer and manufacturer

Clifford Ramashia, site manager, A & P Civil & Trading, and his team have been working alongside Corestruc since the latter arrived on-site to start installing the columns and raking beams.

One of the key benefits of Corestruc's modular system is speed of construction. The company's teams have completed similar projects in as little as eight working days, including the pavilions for the Sekgopa and Lebaka sport complexes.

All items are manufactured in controlled conditions at Corestruc's precast yard and transported to site. Here, they are installed by an experienced team that guarantees the accurate placement of every item.

Heavy lifting

Each project is unique and Corestruc's Russell Hobbs says this one certainly presented its share of challenges. "On this project, we had to deploy a 160 tonne mobile crane to lift and place the 20-odd back columns (each weighing in at 12 tonnes) that make up the 18-bench stadium," he explains. "Apart from the complexities of accessing the sites, we also had to place the crane strategically to lift each precast concrete segment while work was forging ahead at the other construction faces."

Up to four back columns were installed in as little as two days: the columns and rafters form the basis of the structure and were designed and manufactured specifically for this project. All items used on this site are 60 MPa, contributing towards a robust end product. Gradually working its way to the back and below the

Most of the concrete items are standard issue, providing an additional cost-reduction benefit to the municipality

structure, A & P Civil & Trading had completed more than 90% of the brick work by March, with Corestruc only having to place the roof slabs over the VIP and changing rooms to complete its component of the build. **35**

CORESTRUC
Construction of Concrete Pre-Cast Structures



Corestruc is a leader in the design, manufacture and construction of Precast Concrete Structures.

Our solutions have been deployed on a host of successful projects, including reservoirs, water-treatment works, stadia and bridges, as well as commercial, retail and industrial property developments.

Tel: +27 87 232 2462 • Cell: +27 82 565 1427 • Fax: +27 87 232 2463
Email: info@corestruc.co.za • Web: www.corestruc.co.za