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Health, safety and the environment are priorities at

THE CONTRACT FOR the Municipal Infrastructure Development Zone 1, Phase 1 for the Coega IDZ was started in January 2005 and is due for completion in October 2006, four months ahead of the anticipated completion date.

Rumdel Construction, in joint venture with BEE company Zingisa Construction, secured the contract in November 2004.

An important facet of the contract are aspects such as health, safety and the environment. Work was allowed to start only after the contractor's health and

safety plan, as well as his environmental plans, had been approved by the relevant authorities.

Health, safety and environmental (SHE) audits are being conducted on site weekly during the construction phase to ensure the compliance of contractors with all the specifications and requirements.

Construction work for Phase 1 entails the establishment of two large sewer pump stations with depths exceeding 10 m, 4 500 m of internal water reticulation, two pumped sewer lines totalling 2 km, 2,5 km

of gravity sewer lines in excess of 6 m deep, and 3,9 km of storm water pipes and portal culverts. Additional work includes the establishment of two large stormwater retention ponds and channels with a total capacity of 196 500 m³ and the construction of 38 500 m² of internal roads, 31 km of ducting and an electrical substation building.

Zone 1, situated between the new deep-water port on the east, the N2 freeway on the west and the freshwater Coega River on the north, covers an area of 535 ha and

PROJECT INFO

Client
Coega Development Corporation (Pty) Ltd

Consultants
Africon/Izizwe/Nzuza JV

Contractor
Bambanani 3 Joint Venture (Rumdel Construction (lead partner), Zingisa Construction cc and Koelro79 cc

Contract value
R99,2 million

Contract duration
19 months





► Top left: Deep excavation for sewer pump station
 Above: Steel fixing for sewer pump station
 Bottom left: Earthworks with pond B1 in background

zone are estimated at R420 million.

Some 215 people are employed on the contract and about 48 construction plant items are required on site daily. The JV employs seven small, medium and micro enterprise contractors for various aspects of the contract and also oversees six learner-ship contractors from the expanded public works programme.

CHALLENGES

One of the main challenges experienced by the main contractor was the difficulty of

coordinating 13 different work disciplines on one site simultaneously.

The consulting engineers also encountered challenges including conflict of services and topographical problems. The undulations and localised depressions of Zone 1's topography influenced stormwater and sewer designs, necessitating deep gravity sewer lines, with special design parameters and material use. This design had to take potential floods into consideration with a pipe system for one-in-two-year floods, while one-in-50-year floods are catered for by means of canalised roads, retention ponds and channels.

As a multidisciplinary, privately owned civil engineering and construction company, Rumdel Construction focuses predominantly on earthworks, roadworks, infrastructural development projects, concrete structures and bridges. The company's activities include projects as far afield as northern Mozambique, Lesotho, Swaziland and Namibia.

The consulting engineers supervising the contract is Africon (Port Elizabeth), in joint venture with Izizwe Consulting and Richard Nzuzo & Associates. This JV was appointed in May 2004 to undertake the design, contract administration and site monitoring.

The contract for the next phase of the Municipal Infrastructure Development Zone 1, Phase 2, was recently awarded to the Bambanani 3 Joint Venture. Rumdel Construction is the lead partner and Zingisa Construction cc and Koelro79 cc the other BEE JV partners. The new phase will also incorporate various SMME contractors.

The new contract was started in July 2006 and is due for completion in 19 months' time. ■

Coega

is zoned for corporate and light industrial development.

Phase 1 of the municipal infrastructure project for Zone 1 is valued at R80 million, while the full development costs for the

Source:

http://www.saice.org.za/downloads/monthly_publications/2006/CivilEngOct2006web/#/0