

Proposed Development Description

Project Name: Eksteenskuil : Upgrading of water purification system and distribution

Employer: Kai !Garib Local Municipality

District: ZF Mgcawu District Municipality

Province: Northern Cape

Water Supply System Characteristics of proposed new system at Eksteenskuil:

Proposed raw water source: River water from nearby Orange River

Design Demand: 20 m³/hour

Daily demand for 8hr pumping rate: 160 m³/day

Clean water storage in elevated steel tank: 160 m³

Distribution: via gravity to 22 households and 5 communal standpipes

Selected pipe materials: uPVC and GI pipes

Pipe Diameters: 160mm, 110mm and 75mm

Backwash water: approximately 5 m³/day – to be recycled and used to irrigate local soccer field

Scope of works:

- Supply and install raw water river pumps complete with control panel
- Construction of galvanized steel gantry structure to mount river pumps
- Construction of new raw water bulk line 160 m of Ø110 mm uPVC pipe
- Construct plant room for purification equipment.
- Supply and install Upflow Floating Media Clarification system with concrete footings.
- Supply and install purified water high lift pumps
- Supply and construct 7.32x7.32x2.44 galvanised bolted tank on 10 m galvanised steel stand
- Supply and install bulk water meters
- Distribution network comprising; 1,385m of Ø 110m uPVC pipes; 854m of Ø75 mm uPVC pipe complete with 22 house connections and prepaid water meters.
- Supply and construction of 5 metered communal standpipes
- Supply and construction of 60 m of galvanised Ø100 mm pipe mounted across two concrete bridge structures

Proposed plan drawing for the new Eksteenskuil water supply system is attached. The pipelines have been designed along Eskom power lines and an existing paved road to avoid having to apply for wayleaves/servitudes for municipal services.