

resources & energy

Pretmax Building, 4 Sidney Street Kimberley 8301 PO Box 182, Kimberley 8300

Telephone: +27 (0)53 831 4199 Facsimile: +27 (0)53 832 2497 www.worleyparsons.com WorleyParsons RSA (Pty) Ltd REG NO: 1989/002048/07

Enquiries: E Deysel 09 October 2014 Other Ref:

Ref: 245460YNB File: 245460YNB

ATTENTION: MR. PHILLIP HINE

Heritage Officer 111 Harrington Street **CAPE TOWN** 8001

Dear Sir

BULK SUPPLY SCHEME UPGRADE: DETAIL OF VAAL **GAMAGARA** CONSTRUCTION METHOD WITHIN THE KATHU PAN AREA

Your inquiry regarding the construction method that we anticipate in the heritage sensitive Kathu pan has reference. To provide you with a brief background of the project the following.

The Vaal Gamagara Government Water Supply Scheme was completed in 1968 with the purpose to deliver Vaal River water primary to the Northern Cape Mining Corridor among others. The scheme consists of a purification works of capacity of 13.27 million m³/a water, pumps, 10 reservoirs and 430 km of pipes to deliver purified water to users in the area. The scheme is operated by Sedibeng Water which is a water board established as an organ of state in terms of the Water Service Act No. 108 of 1997.

The scheme is in the process of being upgraded since supply interruptions occurred due to the age of the pipeline and an increase demand mainly because of an escalation in mining activities in the area. The Department of Water and Sanitation (DWS) together with Sedibeng Water initiated the process in 2009 with implementation scheduled for early 2015.

The section between Kathu and Hotazel was identified as the most critical that has to be replaced as a matter of urgency due to its condition and capacity constraints. It is also this section's first kilometre that crosses the Kathu pan.

The section crossing the Kathu pan is a 324 mm diameter steel pipe constructed above ground by means of concrete plinths. Should SAHARA and the other regulatory authorities approve; the new 700mm diameter steel pipeline will be constructed in the same manner and where possible on the existing concrete plinth.

This construction method will have a minimal impact on the pan area since it entail the removing of the existing pipeline and replace it with the new pipeline. Should the new pipeline be realigned not to pass through the pan area, the existing pipeline will have to be removed together with the concrete plinth which will have a greater impact on the area.





WorleyParsons

resources & energy

Should you have any additional questions or require details regarding the construction please feel free to contact me.

Yours faithfully

E. Deysel Pr Eng

Professional Engineer, WorleyParsons RSA (Pty) Ltd

Copy to: Mr. Ian Hasenjager

Sedibeng Water Private Bag X 5 BOTHAVILLE

9660