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## **FIRST PHASE ARCHAEOLOGICAL AND CULTURAL HERITAGE INVESTIGATION OF THE VANDERKLOOF DAM – PETRUSVILLE MAIN WATER SUPPLY SCHEME, NORTHERN CAPE**

### **EXECUTIVE SUMMARY**

The project is aimed to upgrade the main water supply between Vanderkloof Dam and Petrusville, Northern Cape.

The route will mostly follow the existing line through corridors along the road reserve and veld covered in changing natural vegetation.

Cultural material occurs in the form of heavily patinated Later Stone Age flakes collected on the surface in three specific areas. I consider the scatter of flakes as a general occurrence, which seems to be of minor significance.

No other archaeological and cultural remains occurred.

I recommend that further planning and development of the site could continue.

### **INTRODUCTION AND DESCRIPTION**

#### **INVESTIGATION**

The route for the upgrading of the water pipe line from the Vanderkloof Dam to Petrusville, Northern Cape, was visited on 16 November 2008 in the company of Dr Johan du Preez of MDA Environmental Consultants, Bloemfontein.

The area was examined for possible archaeological and historical material and to establish the potential impact on any cultural material that might be found. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

## LOCALITY

The existing route of the water supply runs from Vanderkloof to Petrusville in the Northern Cape (Fig.1). The water supply line will be upgraded and a new reservoir will be placed at Petrusville (Maps 2-5).

The line mostly follows existing corridors and along the R48 road reserve from Vanderkloof to Petrusville. The veld covered in changing natural vegetation.

The following GPS coordinates (Cape scale) were taken.

A Petrusville	30°04'47"S 024°39'31"E Altitude 1189m.
B	30°05'02"S 024°39'20"E Altitude 1197m (Figs.1&2).
C	30°04'27"S 024°39'23"E Altitude 1187m (Figs.3&4).
D	30°03'24"S 024°39'43"E Altitude 1154m (Figs.5&6).
E	30°02'04"S 024°39'46"E Altitude 1135m (Figs.7&8).
F	30°01'08"S 024°39'41"E Altitude 1123m (Figs.9-11).
G (Road Reserve)	30°00'52"S 024°40'14"E Altitude 1117m (Figs.12&13).
H (Road Reserve)	30°00'11"S 024°42'24"E Altitude 1124m (Figs.15&15).
J	29°59'57"S 024°43'32"E Altitude 1199m (Figs.16-18).
K	30°00'01"S 024°43'44"E Altitude 1226m (Figs.19-23).

## RESULTS

### FINDS

Scatters of relatively small collections of stone flakes were found near Points B (Figs.24&25) and C (Figs.26&27) near Petrusville and at Point E (Fig.28) along the route to Vanderkloof.

The flakes are heavily patinated. Points have convergent (Fig.25) and parallel edges (Fig.26) and single or multiple flaking on the dorsal side. Percussion bulbs are clearly recognisable in most cases. Prepared platforms are narrow and bent and are either faceted or plain. Through the application of standard tool typology

and basic characteristics, the material could arbitrarily be classified as Middle Stone Age.

No other archaeological or cultural remains could be found on any other site.

### **IMPACT ASSESSMENT**

The artefacts occur in the form of heavily patinated stone flakes and resemble material from the Later Stone Age.

The stone flakes appear to be a general scatter in specific areas and do not seem to be of great significance.

I judge that the further planning and development of the upgrading of the water main line from Vanderkloof Dam to Petrusville will have no major impact on the archaeological, cultural or historical heritage of the area.

### **RECOMMENDATIONS**

There are no obvious reasons to delay the commencement and further planning of the upgrading of the main water line to Petrusville and I recommend that the work may proceed.

It is stressed that every archaeological and historical site is unique and should be treated as a non-renewable commodity. It is important, also, that the field team should be attentive for the presence of human skeletal remains or other archaeological material of significance during the course of the work. In the case of the discovery of any burial or human relics, all excavation activities should temporarily be stopped in the specific area and the finds should be stabilised and protected and the archaeologist should be alerted immediately.

### **MITIGATION**

Concerning the areas for the proposed extensions, no mitigation measures will be required.

### **ACKNOWLEDGEMENTS**

I thank Dr Johan du Preez of MDA Environmental Consultants, Bloemfontein, for taking me to the site and Mr Eddie Schon and Johan Van den Berg for showing us around.

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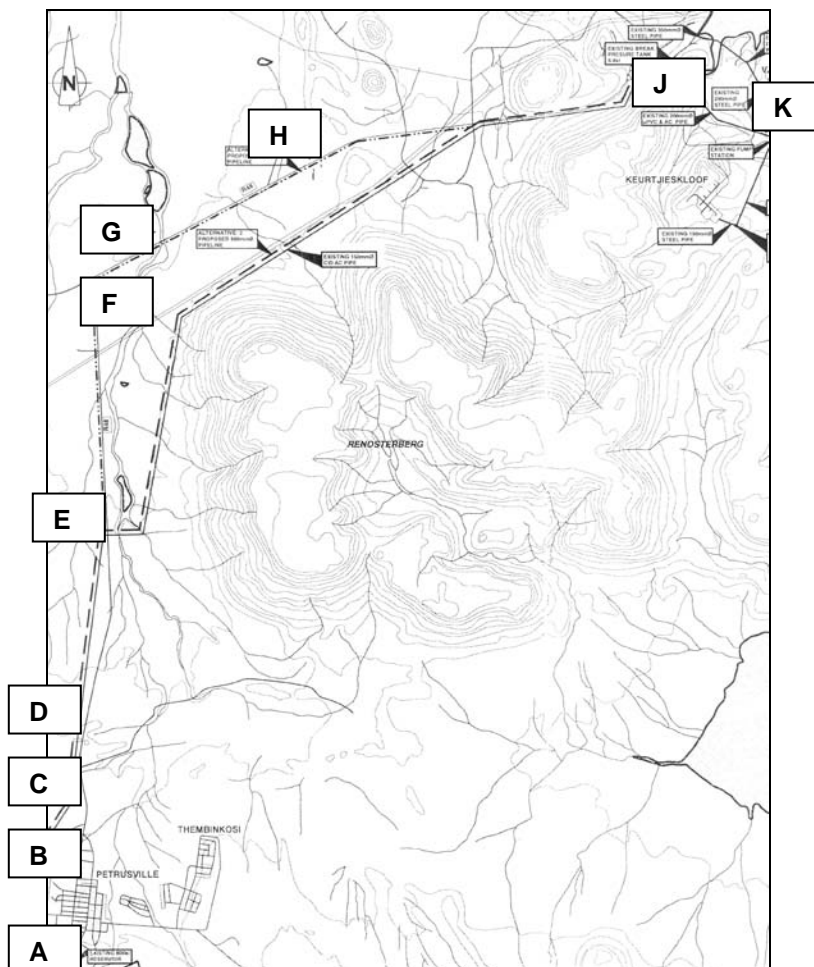
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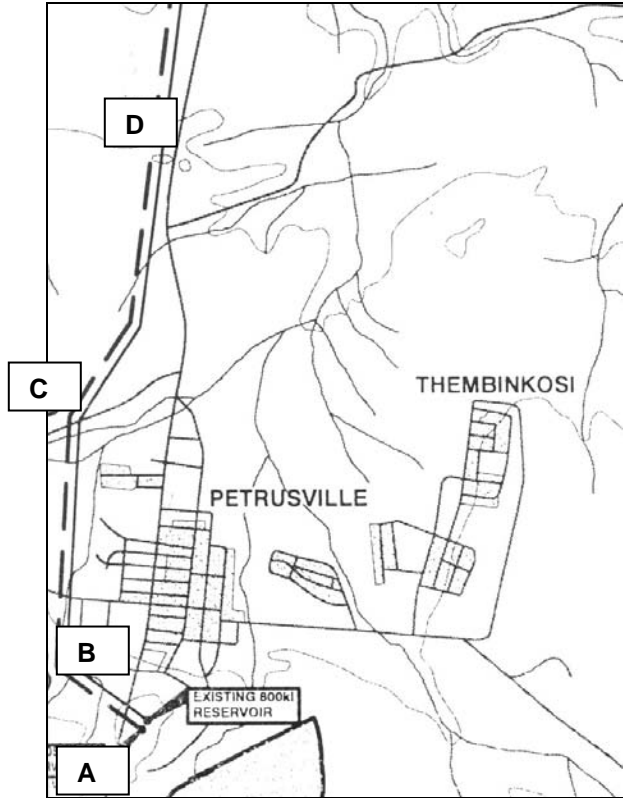
## LIST OF ILLUSTRATIONS:



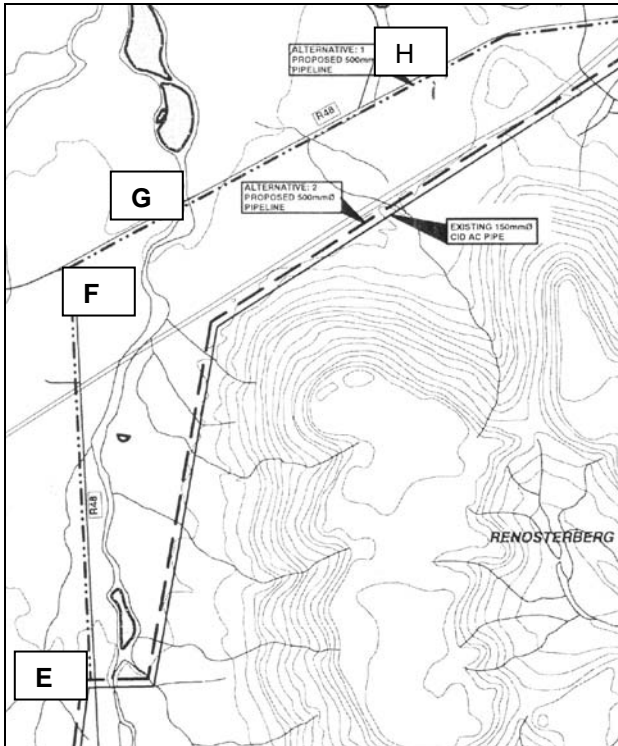
Map 1 Locality of the Vanderkloof Dam and Petrusville.



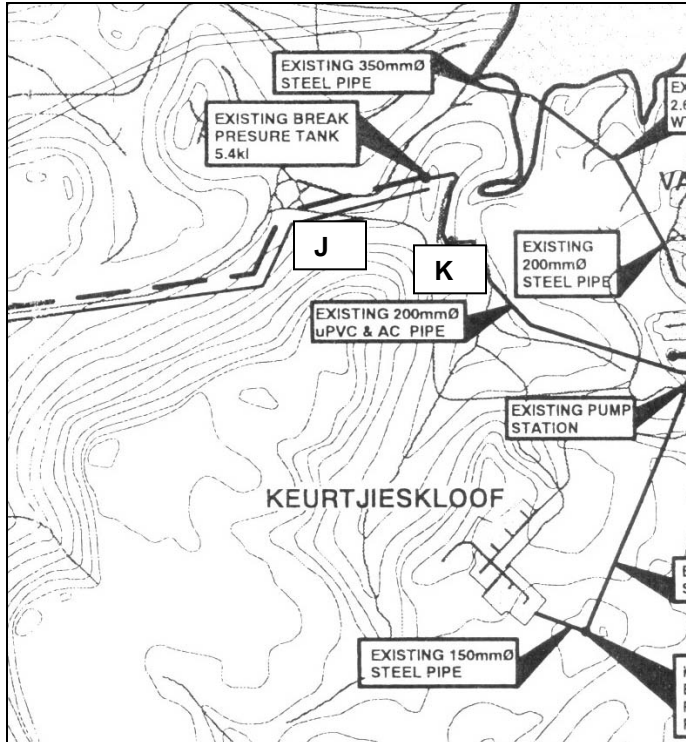
Map 2 Locality of GPS coordinate points along the pipeline route from Vanderkloof Dam to Petrusville.



Map 3 Detail of the GPS coordinate points along the pipeline route from Vanderkkloof to Petrusville, Northern Cape.



Map 4 Detail of the GPS coordinate points along the pipeline route from Vanderkloof to Petrusville, Northern Cape.



Map 5 Detail of the GPS coordinate points along the pipeline route from Vanderkloof to Petrusville, Northern Cape.



Fig.1 Point B on the outskirts of Petrusville.



Fig.2 Position of new reservoir at Point B in Petrusville.



Fig.3 Point C at Petrusville.





Fig.4 Point C at Petrusville.



Fig.5 Point D along the pipe line route from Vanderkloof to Petrusville.



Fig.6 Point D along the pipe line route from Vanderkloof to Petrusville.



Fig.7 Point E along the pipe line route from Vanderkloof to Petrusville.



Fig.8 Point E along the pipe line route from Vanderkloof to Petrusville.



Fig.9 Point F along the pipe line route from Vanderkloof to Petrusville..



Fig.10 Point F along the pipe line route from Vanderkloof to Petrusville.



Fig.11 Point F along the pipe line route from Vanderkloof to Petrusville.



Fig.12 Point G along the pipe line route from Vanderkloof to Petrusville.



Fig.13 Point G along the pipe line route from Vanderkloof to Petrusville.



Fig.14 Point H along the pipe line route from Vanderkloof to Petrusville..



Fig.15 Point H along the pipe line route from Vanderkloof to Petrusville.



Fig.16 Point J in the cutting along the pipe line route outside Vanderkloof.



Fig.17 Point J in the cutting along the pipe line route from Vanderkloof.



Fig.18 Point J in the cutting along the pipe line route outside Vanderkloof.



Fig.19 Point K outside Vanderkloof.





Fig.20 Point K outside Vanderkloof.



Fig.21 Point K outside Vanderkloof.



Fig.22 Point K outside Vanderkloof.



Fig.23 Point K outside Vanderkloof.



Fig.24 Heavily patinated flakes from near Point B at Petrusville. (Pocket knife = 83mm).



Fig.25 Patinated flakes from near Point B at Petrusville. (Pocket knife = 83mm).



Fig.26 Patinated flake points from near Point C at Petrusville. (Pocket knife = 83mm).



Fig.27 Patinated flakes from near Point C at Petrusville. (Pocket knife = 83mm).



Fig.28 Patinated core and flake from near Point E between Vanderkloof and Petrusville.