APPENDIX D.1

SUMMARY

Phase 1 Heritage Resource Impact Assessment

R&R Cultural Resource Consultants were commissioned to undertake a specialist Phase 1 Heritage Resource Impact Assessment of the proposed Maruteng Waste Water Treatment Works, including the construction of three bulk sewerage lines, at Mokopane in the Mogalakwena Municipal Council area.

The proposed project constitutes an activity which is potentially harmful to heritage resources that may occur in the demarcated area.

The National Heritage Resources Act, Act No. 25 of 1999, protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36).

Standard methods of archaeological observation were applied during the cultural and heritage resource impact assessment. Special attention was given to disturbances, either natural or man-made, as well as changes in vegetation that may have resulted from previous human intervention.

No archaeological or other heritage remains of importance were noted on the terrain and no archaeologically induced ecologically disturbed area was observed. However, archaeological sites may be present as obscured subterranean deposits.

According to the archaeological report, the proposed Maruteng WWTW site-coordinates bisect a large community cemetery and it is, thus, not achievable to construct the WWTW on the proposed site.

The Archaeologist recommends that the proposed WWTW must be relocated to an alternative site further north to avoid the cemetery.

Management and Mitigation Measures

- i. The proposed Maruteng WWTW must be relocated to an alternative site to avoid the cemetery.
- ii. Regular monitoring by an archaeologist must take place during the excavation of the pipeline trenches.
- iii. The discovery of previously undetected subterranean heritage remains on the terrain must be reported to the Limpopo Heritage Authority or the Archaeologist and may require further mitigation measures.

Conclusion

No significant heritage resources were found in the project area.

From a heritage resources management point of view, there is no objection with regard to the proposed development, provided that the development site be relocated to avoid the cemetery.

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10 May 2012

Phase 1 Heritage Resource Impact Assessment (Scoping & Evaluation) MARUTENG WASTE WATER TREATMENT WORKS **MOKOPANE, LIMPOPO** STATEMENT WITH REGARD TO HERITAGE RESOURCES MANAGEMENT

Map reference:

South Africa 1:50000 2428 BB

General coordinates of

the Project location: Maruteng WWTW site: S24° 08' 22.2" E28° 55' 44.2"

Masodi Ponds:

S24° 07' 49.7" E28° 57' 23.1"

Sekgakgapeng Ponds: S24° 09' 48.2" E28° 58' 37.6"

Bulk Sewerage lines:

Line A 1:S24° 07' 57.2" E28° 57' 21.1" -from Masodi ponds to proposed treatment works

2:S24° 08' 01.4" E28° 56' 36.2"

3:S24° 08' 28.3" E28° 55' 51.6"

Line B 1:S24° 09' 49.6" E28° 58' 42.2" -from Sekgakgapeng ponds to proposed treatment works

2:S24° 09' 37.6" E28° 57' 07.0" 3:S24° 08' 28.3" E28° 55' 51.6"

Line C 1:S24° 11' 47.2" E28° 58' 49.2"- from Mokopaneoutskirts to proposed treatment works

2:S24° 09' 37.6" E28° 57' 50.6"

3:S24° 09' 37.6" E28° 57' 07.0"

Farm: Rem of the farm Turfspruit 241 KR

Rem of the farm Macalacaskop 243 KR

INTRODUCTION

The statement with regard to heritage resources management addresses the proposed Water Waste Treatment Works at Maruteng to the North of Mokopane, Limpopo Province.

The Project proposal constitutes an activity, which may potentially be harmful to heritage resources that may occur in the demarcated area. The National Heritage Resources Act (NHRA -Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that occur in the demarcated area. This will enable the Applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources. (For pertinent legislation see Appendix A and terminology see Appendix B).

DESCRIPTION OF THE PROJECT AND PROPOSED TERRAIN

The proposed project, located in the Mogalakwena Municipality of the Waterberg District consists of the development of a new Waste Water Treatment Works covering an area of about 15 hectare to the north-west of Mokopane and about 1,5km outside of Maruteng Village. The proposed WWTW will serve the Greater Mokopane area of the Municipality, including Mahwelereng, Madiba, Masodi, Masehlaneng, Maruteng, Moshate and Sekhakgapeng. Two existing oxidation ponds at Masodi and Sekgakgapeng will be decommissioned. The proposed WWTW at Marateng will include the construction of two new pump stations at the decommissioned pond and three bulk water sewer lines (see locality map for positions)

The alternative site for the WWTW.has been identified at general coordinatesS24° 06' 53.3" E28° 56' 00".

Environmentally the terrain has been degraded through extensive ploughing of fields and general residential impacts.

TERMS OF REFERENCE

The author was contracted to undertake a Phase 1 Heritage Resources Impact Assessment for the proposed decommissioning and upgrading of sewage works, in Maruteng, in the Limpopo Province.

The aim of the assessment was to determine the **probability** of the presence of heritage resources such as archaeological or historical sites and features, graves and places of religious and cultural significance; to assess the impact of the proposed project on such heritage resources; and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at affected sites / features. This survey forms part of the EIA-scoping process and data regarding the environmental and socio-demographic conditions and issues should be read in the main report.

Consequently, a letter containing a qualified statement of the status quo with regard to heritage resources, instead of a full report, is deemed sufficient.

METHODOLOGY

A pedestrian survey of the demarcated area was undertaken, during which standard methods of observation were applied. As most archaeological material occur in single or multiple stratified layers beneath the soil surface, special attention was given to disturbances, both man-made such as roads and clearings, as well as those made by natural agents such as burrowing animals and erosion. Special attention was given to disturbances, either natural or man-made, as well as changes in vegetation that may have resulted from previous human intervention.

DISCUSSION

According to the most recent archaeological cultural distribution sequences by Huffman (2007), this area falls within the distribution area of various cultural groupings originating out of both the Urewe Tradition (eastern stream of migration) and the Kalundu Tradition (western stream of migration). The facies that may be present are:

Urewe Tradition: Kwale branch-

Mzonjani facies AD 450 – 750 (Early Iron Age) Icon facies AD 1300 - 1500 (Late Iron Age)

Kalundu Tradition: Happy Rest sub-branch - Doornkopfacies AD 750 - 1000 (Early Iron Age)

Moloko branch-

Eilandfacies AD 1000 – 1300 (Middle Iron Age)

Klingbeil facies AD 1000 – 1200 (Middle Iron Age)

Letaba facies AD 1600 – 1840 (Late Iron Age)

None of the above-mentioned archaeological remains or any other heritage remains of importance were noted on the terrain, apart from the cemetery mentioned below. However, the archaeological cultures referred to above may be present as obscured subterranean deposits.

RESULT OF THE SURVEY

The proposed Maruteng WWTW site-coordinates **bisect** a large community cemetery as show on the included Google image and locality map. It is thus not achievable to construct the development on the proposed site. The selected area must thus move either westwards or northwards to avoid the cemetery. It would therefore be advisable to relocate the proposed WWTW farther north to the alternative site adjacent to the R518 road to Marken. The pipe lines to the new site may then require an additional heritage survey, but probably only in respect of graves and burials..

MANAGEMENT AND MITIGATION MEASURES

The proposed Maruteng Waste Water Treatment works must be relocated to an alternative site or moved sufficiently away from the current demarcation so as not to impact on the existing community cemetery.

The discovery of previously undetected subterranean heritage remains on the terrain must be reported to the Limpopo Heritage Authority or the archaeologist, and may require further mitigation measures.

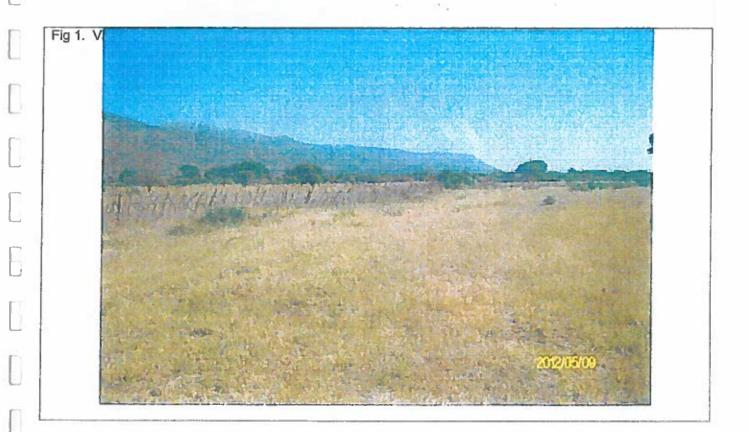
REFERENCE

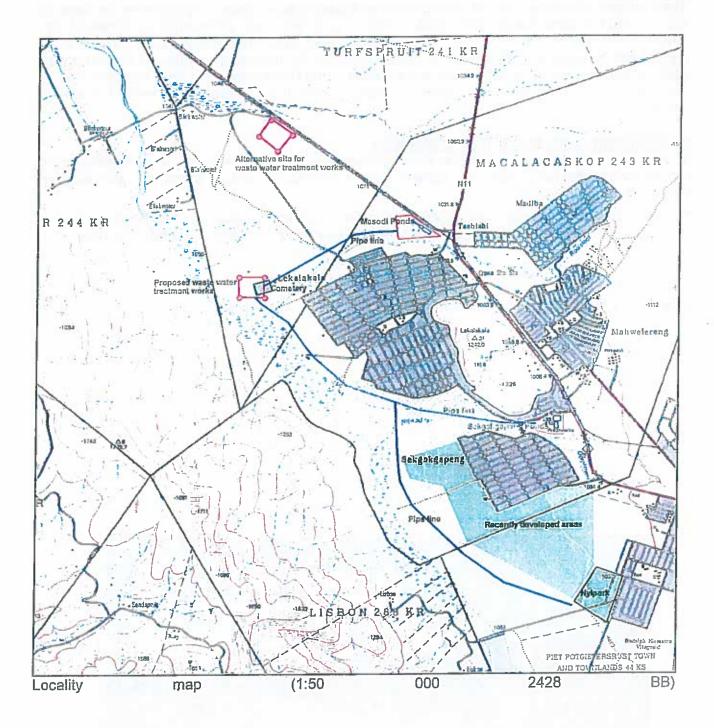
Huffman, T.N. 2007. Handbook to the Iron Age. The archaeology of Pre-colonial Farming Societies in Southern Africa. University of KwaZulu-Natal Press.

Yours faithfully.

Soult

FRANS ROODT (BA Hons, MA Archaeology, Post Grad. Dip. Museology; UP)
Principal Investigator for R & R Cultural Resource Consultants





APPENDIX A

in terms of the National Heritage Resources Act 25 of 1999 the following is of relevance:

Historical remains

Section 34(1) No person may after or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

Archaeological remains

Section 35.(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority or museum, which must immediately notify such heritage resources authority.

Section 35(4) No person may, without a permit issued by the responsible heritage resources authority-

 (a) destroy, damage, excavate, after, deface or otherwise disturb any archaeological or palaeontological site or any meteorite.

Burial grounds and graves

Section 36 (3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

- (a) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (b) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in detection or recovery of metals.

Section 36 (6) Subject to the provision of any law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority-

- (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms
 of this Act or is of significance to any community; and
- (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the content of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

Culture resource management

Section 38(1) Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development ...must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

"'development' means any physical intervention, excavation, or action, other than those caused by <u>natural forces</u>, which may in the opinion of the heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including-

- (a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (b) carry out any works on or over or under a place*;
- (e) any change to the natural or existing condition or topography of land, and
- (f) any removal or destruction of trees, or removal of vegetation or topsoil;

[&]quot;'place' means a site, area or region, a building or other structure"

^{*&#}x27;structure' means any building, works, device or other facility made by people and which is fixed to the ground, ...

Terminology:

Early Stone Age: Predominantly the Acheulean hand axe industry complex dating

to + 1Myr yrs - 250 000 yrs before present.

Middle Stone Age: Various lithic industries in SA dating from ± 250 000 yr - 30 000

yrs before present.

Late Stone Age: The period from ± 30 000-yr to contact period with either Iron

Age farmers or European colonists.

Early Iron Age: Most of the first millennium AD.

Middle Iron Age: 10th to 13th centuries AD.

Late Iron Age: 14th century to colonial period. The entire Iron Age represents

the spread of Bantu speaking peoples.

<u>Historical</u>: Mainly cultural remains of western influence and settlement from

AD 1652 onwards - mostly structures older than 60 years in

terms of Section 34 of the NHRA.

Phase 1 assessments: Scoping surveys to establish the presence of and to evaluate

heritage resources in a given area.

Phase 2 assessments: In depth culture resources management studies which could

include major archaeological excavations, detailed site surveys and mapping / plans of sites, including historical / architectural structures and features. Alternatively, the sampling of sites by collecting material, small test pit

excavations or auger sampling is required.