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# HERITAGE RESOURCES ASSESSMENT REPORT

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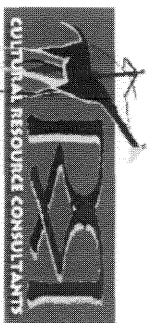
## MINING DEVELOPMENT ON THE FARM MAANDAGSHOEK 254 KT TUBATSE MUNICIPAL AREA SEKHUKHUNE DISTRICT

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# CONTENTS

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2	<b>1 Introduction</b>	
3	<b>2 Relevant legislation</b>	
4	2.1 National Heritage Resources Act	
	2.2 Human tissues Act & Ordinance 7 of 1925	
4	<b>3 Method</b>	
	3.1 Sources of information	
	3.2 Limitations	
	3.3 Categories of significance	
5	3.4 Terminology	
5	<b>4 Description of the proposed development and terrain</b>	
6	<b>5 Archaeological and Historical Remains</b>	
	5.1 Stone Age remains	
8	5.2 Iron Age Remains.	
10	5.3 Graves	
	5.4 Historical Remains	
11	<b>6 Evaluation</b>	
11	<b>7 Recommendations</b>	
12	<b>8 Bibliography</b>	
	<b>List of figures</b>	
9	Fig 1. MSA flakes in detected donga.	
9	Fig 2. Formal MSA tool on the terrain.	
10	Fig 3. Typical Early Iron Age <i>Doornkop</i> pottery decorations.	
10	Fig 4. Burnt floor remains at the <i>Doornkop</i> site 5.	
11	Fig 5. Typical Middle Iron Age <i>Eiland</i> pottery decoration.	
11	Fig 6. Graveyard – site 1.	
12	Fig 7. Detail of a formal grave – site 1.	
12	Fig 8. Grave – site 2.1	
	Fig 9. Grave site 3.	
	Fig 10. Grave - site 4.	
	Fig 11. Grave – site 9.	
	Fig 12. Ruin – site 9.	
	Fig 13. Stone wall – site 8.	
13	Locality Map	

## 1. INTRODUCTION

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The application 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 may 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.

The author was contracted to undertake a heritage scoping survey of the demarcated area which lies on the farm Maandagshoek 254 KTas indicated on the locality map (Refer to map, South Africa 1:50 000 2430 CA). The aim was to determine the presence or not of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance, and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at affected sites / features.

The report thus provides an overview of the heritage resources that may occur in the demarcated area where development is intended. The significance of the heritage resources was assessed in terms of criteria defined in the methodology section. The impact of the proposed development on these resources is indicated and the report recommends mitigation measures that should be implemented to minimize the adverse impact of the proposed development on these heritage resources.

## 2. RELEVANT LEGISLATION

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Two sets of legislation are relevant for this study with regard to protection of heritage resources and graves.

### 2.1 The National Heritage Resources Act (25 of 1999) (NHRA)

This Act established the South African Heritage Resources Agency (SAHRA) and makes provision for the establishment of Provincial Heritage Resources Authorities (PHRA). The Act makes provision for the undertaking of heritage resources impact assessments for various categories of development as determined by Section 38. It also provides for the grading of heritage resources and the implementation of a three-tier level of responsibilities and functions for heritage resources to be undertaken by the State, Provincial authorities and Local authorities, depending on the grade of the Heritage resources. The Act defines cultural significance, archaeological and palaeontological sites and material (Section 35), historical sites and structures (Section 34), graves and burial sites (Section 36), which falls under its jurisdiction. Archaeological sites and material are generally those resources older than a hundred years, while Section 34 also protects structures and cultural landscapes older than 60 years, including gravestones. Procedures for managing grave and burial grounds are clearly set out in Section 36 of the NHRA. Graves older than a 100 years are legislated as archaeological sites and must be dealt with accordingly

In terms of the National Heritage Resources Act (1999) the following is of relevance:

#### Historical remains

**Section 34(1)** No person may alter 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, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite

#### Burial grounds and graves

### Section 36 (3)

- (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-
- (c) 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
- (d) 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 natural forces, 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;

\*"place means a site, area or region, a building or other structure\* ..."

\*\*structure means any building, works, device or other facility made by people and which is fixed to the ground, ..."

## 2.2 The Human Tissues Act (65 of 1983) and Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925)

This Act and Ordinance protects graves younger than 60 years. These fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities.  
Graves 60 years or older fall under the jurisdiction of the National Heritage Resources Act as well as the Human Tissues Act, 1983.

## 3. METHOD

### 3.1 Sources of information

The source of information was primarily the field reconnaissance.

A scoping survey of the demarcated development area was undertaken on foot. Standard archaeological practices for observation were followed. 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. Heritage material and the general conditions on the terrain were photographed with a CANON Digital camera.

### 3.2 Limitations

The scoping survey was thorough, but the vegetation, especially grass cover is dense with the result that archaeological visibility was limited in some areas.

### 3.3 Categories of significance

The significance of archaeological sites is ranked into the following categories.

• No significance: sites that do not require mitigation.
• Low significance: sites, which <i>may</i> require mitigation.
• Medium significance: sites, which <i>require</i> mitigation.
• High significance: sites, which must not be disturbed at all.

The significance of an archaeological site is based on the amount of deposit, the integrity of the context, the kind of deposit and the potential to help answer present research questions. Historical structures are defined by Section 34 of the National Heritage Resources Act, 1999, while other historical and cultural significant sites, places and features, are generally determined by community preferences.

A crucial aspect in determining the significance and protection status of a heritage resource is often whether or not the sustainable social and economic benefits of a proposed development outweigh the conservation issues at stake. There are many aspects that must be taken into consideration when determining significance, such as rarity, national significance, scientific importance, cultural and religious significance, and not least community preferences. When, for whatever reason the protection of a heritage site is not deemed necessary or practical, its research potential must be assessed and mitigated in order to gain data / information which would otherwise be lost. Such sites must be adequately recorded and sampled before being destroyed. These are generally sites graded as of low or medium significance.

### 3.4 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: 10<sup>th</sup> to 13<sup>th</sup> centuries AD

Late Iron Age: 14<sup>th</sup> century to colonial period. *The entire Iron Age represents the spread of Bantu speaking peoples.*

Historical: Mainly cultural remains of western influence and settlement from AD1652 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.

Sensitive: Often refers to graves and burial sites although not necessarily a heritage place, as well as ideologically significant sites such as ritual / religious places. *Sensitive* may also refer to an entire landscape / area known for its significant heritage remains.

## 4. DESCRIPTION OF THE PROPOSED DEVELOPMENT AND TERRAIN

The proposed activity is primarily the development of waste rock dumps and a tailings dam. The terrain is situated in a valley between Sekiti hill and the Lebalelo mountain range. The areas at the base of the hills are densely populated and most of the valley area is under cultivation. This human impact has lead to the degradation of the environment as a result of over-exploitation and overgrazing. This has manifested in the large-scale erosion in the area, both as donga and sheet erosion.

Refer to main Scoping Report for geographical, environmental and demographic issues.

## 5. ARCHAEOLOGICAL AND HISTORICAL REMAINS

The Maandagshoek area is very rich in archaeological sites, dating from the Early Iron Age (800AD) to the Pedi occupation of the area. This is most probably due to the safety the valley offered from outside attacks, but also as a result of the deep and rich sedimentary soils of the low-lying area. It is also of historical importance due to the activities of the Berlin Missionary Society who entered the area in the time of Chief Sekwati.

Stone age material of the Middle Stone Age (MSA) and Late Stone Age (LSA) are also generally present in the area. MSA remains were noted in the eroded dongas, but no LSA material was observed on this particular terrain.

### 5.1 STONE AGE REMAINS

Middle Stone Age flakes and cores occur abundantly in the eroded dongas (Fig 1). A number of formal stone tool were also found (Fig 2). Although the material is no longer *in situ*, it is regarded as significant from a scientific perspective. A systematic collection of the MSA material will enable the identification of the type of assemblage and place a relative date on the collection.

Significance: medium / moderate. Requires mitigation for collecting a representative collection.

OSL dating?

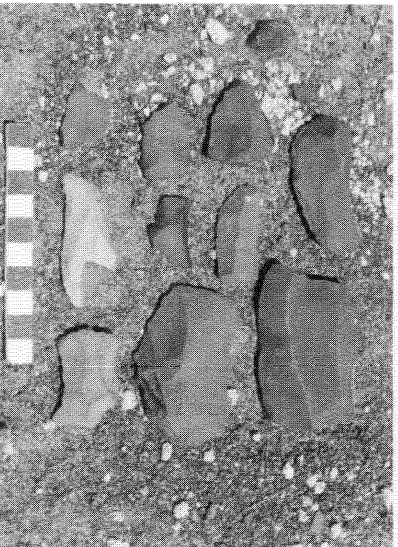


Fig 1. MSA flakes detected in donga.

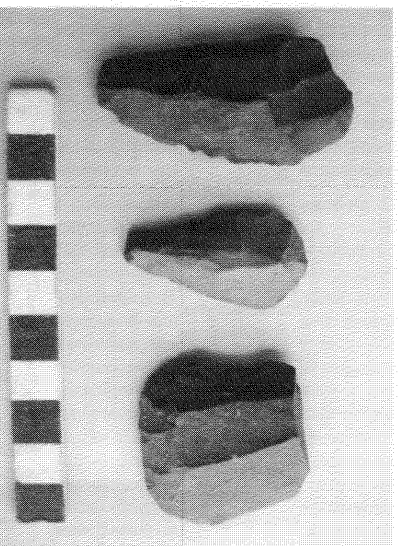


Fig 2. Formal MSA tool on the terrain.

### 5.2. IRON AGE REMAINS

Both Early and Middle Iron Age remains were recorded on the terrain. The Early Iron Age sites belong to the *Doomkop* cultural phase of the Western stream of the Iron Age. This dates to AD 800. A Middle Iron Age *Eiland* site dating to approximately AD 1000 is also present on the terrain. The *Doomkop* site is located in the valley area, but the *Eiland* site is located closer to Sekiti hill.

#### SITE 5

Co-ordinates: S24° 34' 02.6" E30° 06' 44.2"

This is an Early Iron Age *Doomkop* site (AD 800). It consists of pottery remains as well as a number of burnt floors. Local village activities have disturbed the site. The site is regarded as significant as the possibility exist to determine the original village size and layout from the preserved floors.

Significance: medium / moderate. Requires mitigation to extract information i.r.o. size and layout

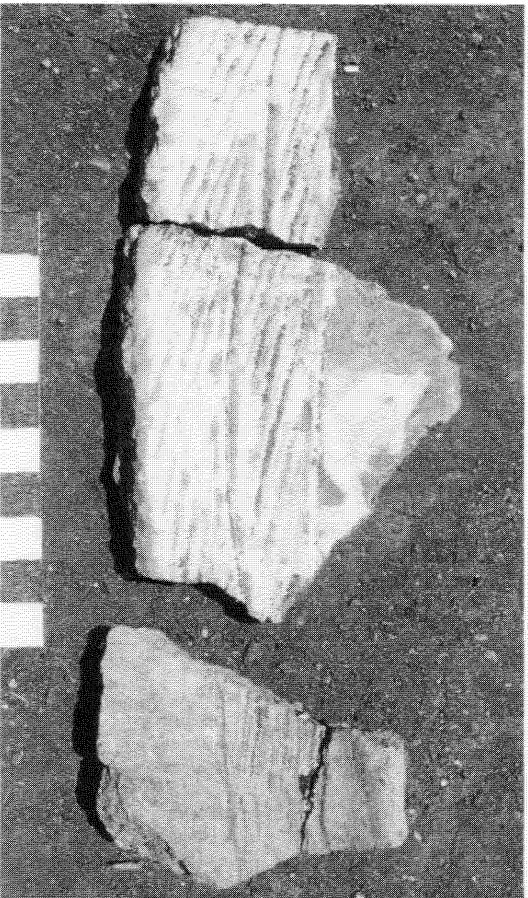


Fig 3. Typical Early Iron Age *Doomkop* pottery decorations.



Fig 4. Burnt floor remains at the *Doomkop* site 5.



**SITE 7**

Co-ordinates: S24° 34' 40.7" E30° 07' 10.1"

This is a Middle Iron Age Eiland site (AD 1000 – 1200). Very little of the site is visible and it was identified by means of pottery fragments. The remains of one burnt floor was noted. Most of the site was rendered invisible due to a recent historical homestead (Site 6) built on top of it.

Significance: Low – no mitigation required.

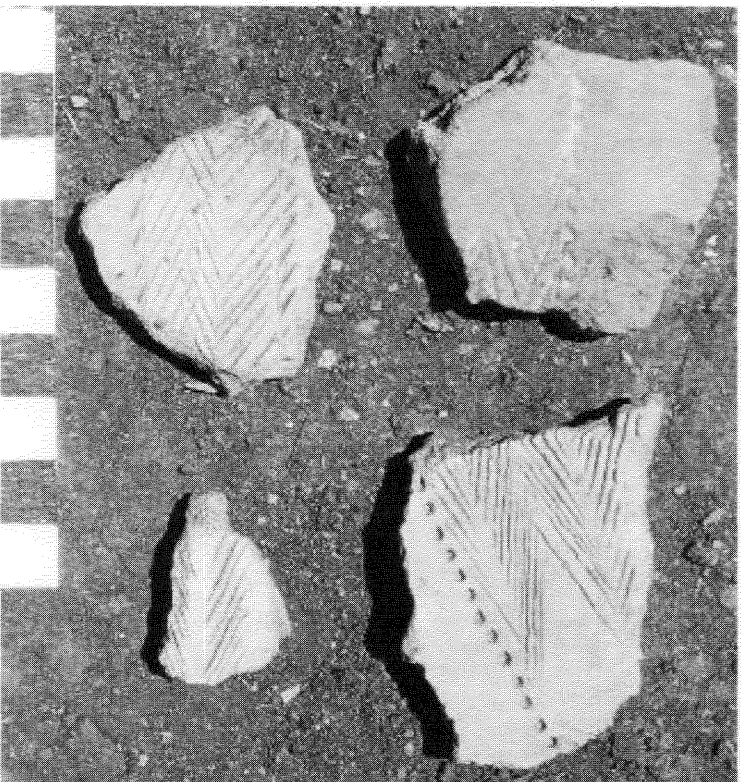


Fig 5. Typical Middle Iron Age Eiland pottery decoration.

**5.3 GRAVES**

One graveyard (Site 1) and 4 separate burial sites with graves (Sites 2, 3, 4 & 9) were recorded. All the graves are associated with recent historical homestead remains. The large graveyard probably served the larger community that occupied the area before being re-located to the present day villages.

**SITE 1 (Graveyard)**

Co-ordinates: S24° 34' 21.3" E30° 06' 47.4"

The graveyard contains in access of 20 graves. Most of the graves are only stone stacked, but some have gravestones. Some of the graves are regularly maintained.

**SITE 2**

Co-ordinates: S24° 34' 08.7" E30° 06' 47.6"

Consists of a single stone stacked grave.

**SITE 3**

Co-ordinates: S24° 34' 05.4" E30° 06' 49.7"

Consists of a single grave.

**SITE 4**

Co-ordinates: S24° 34' 00.6" E30° 06' 49.4"

Consists of a single grave.

**SITE 9**

Co-ordinates: S24° 34' 11.9" E30° 06' 54.4"

Consists of a single grave.

Significance: All graves are sensitive and will have to be exhumed with community consent if threatened. Note probable graves at the homestead ruins must be verified.

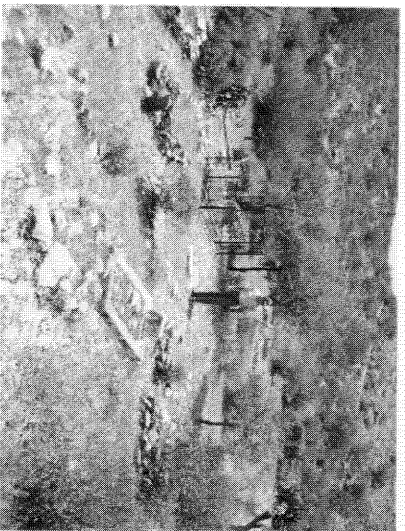


Fig 6. Graveyard – site 1.

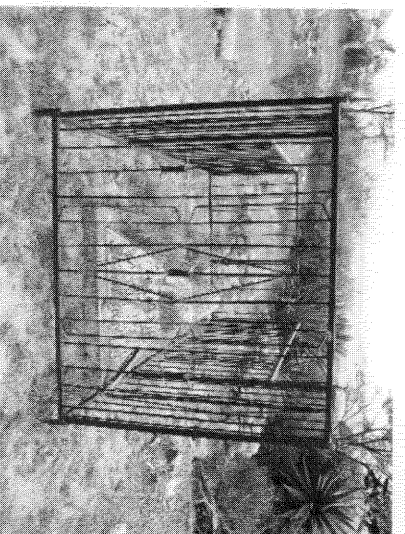


Fig 7. Detail of a formal grave – site 1.

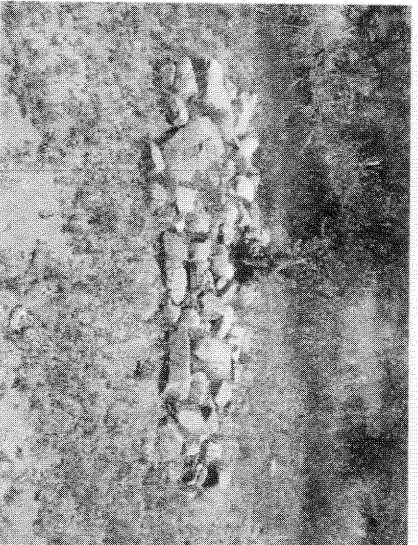


Fig 8. Grave – site 2.



Fig 9. Grave site 3.

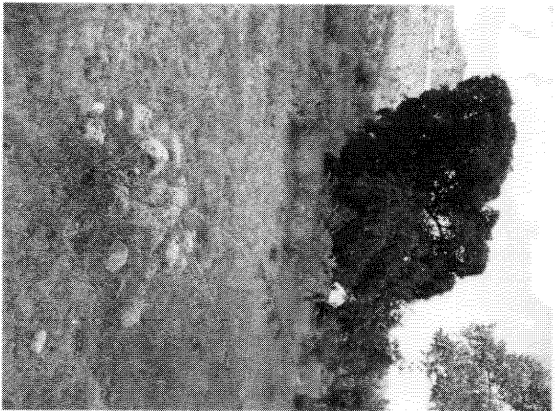


Fig 10. Grave - site 4.

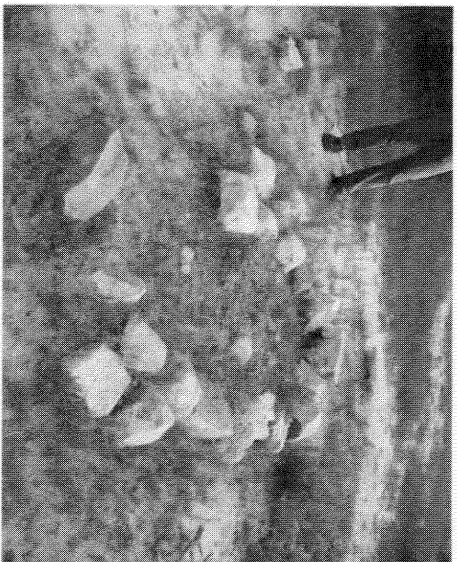


Fig 11. Grave – site 9.

#### 5.4 RECENT HISTORICAL PERIOD

As mentioned above the graves are associated with recent homestead ruins. Site 6 at coordinates S24° 34' 38.3" E30° 07' 08.0" had been disturbed by the prospecting road. Site 8 at coordinates S24° 34' 14.3" E30° 06' 55.7" requires mentioning as it represents an excellent example of traditional building techniques and layout pattern, including stone walling, of the recent historical period before the community was re-located to the established villages. Should it be disturbed during mining, a further assessment of the homestead must be mitigated.

It must be noted that the probability of graves of infants being present at all of the homestead ruins are very high, >80%.

Significance: Site 8 – medium / moderate. Mitigation to record the traditional layout pattern and building techniques is required.



Fig 12. Ruin – site 9.



Fig 13. Stone wall – site 8.

## 6. EVALUATION

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The terrain contains archaeological remains in the form of Middle Stone Age flakes and Iron Age sites.

The concentration of MSA material is adequate to allow for the mitigation of the systematic collection of a representative sample.

The Early Iron Age *Doornkop* site (5) is regarded as scientifically significant as it presents the opportunity to record site layout and size of this first millennium village. Mitigation would be required should development impact on this sites. The *Eiland* site (7) requires no further mitigation unless significant deposits or skeletal material is exposed. The recent historical site 8 requires mitigation as it represents an excellent example of traditional building techniques and layout pattern of the recent historical period.

Sites 5 & 8, as well as the eroded Middle Stone Age material requires phase 2 assessments before being impacted on by the development.

A process of community consultation must be engaged to determine the future of the recorded graves, their exhumation and re-interment, as well as the probable burials of infants at the homestead ruins.

We are of the opinion that the sustainable social and economic benefits of the proposed development outweigh the conservation issues at stake. The condition of the recorded archaeological sites does not warrant them protection status. Phase 2 assessment will ensure that the recorded information is placed on a database for future reference.

It must be note that undetected archaeological sites may be present on the property and that such sites may be exposed during development. The discovery of such heritage remains must be reported to the heritage resources authority or an archaeologist and may result in mitigation measures being enforced.

## 7. RECOMMENDATION

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In view of the above it is recommended that:

1. A phase 2 assessment be mitigated for the Middle Stone Age material;
2. A phase 2 assessment be mitigated for the Early Iron Age Doornkop Site 5;
3. A phase 2 assessment be mitigated for the recent historical site 8.

From a heritage resources management perspective, we have no objection with regard to the development on condition that the recommendation above is implemented.

## 8. BIBLIOGRAPHY

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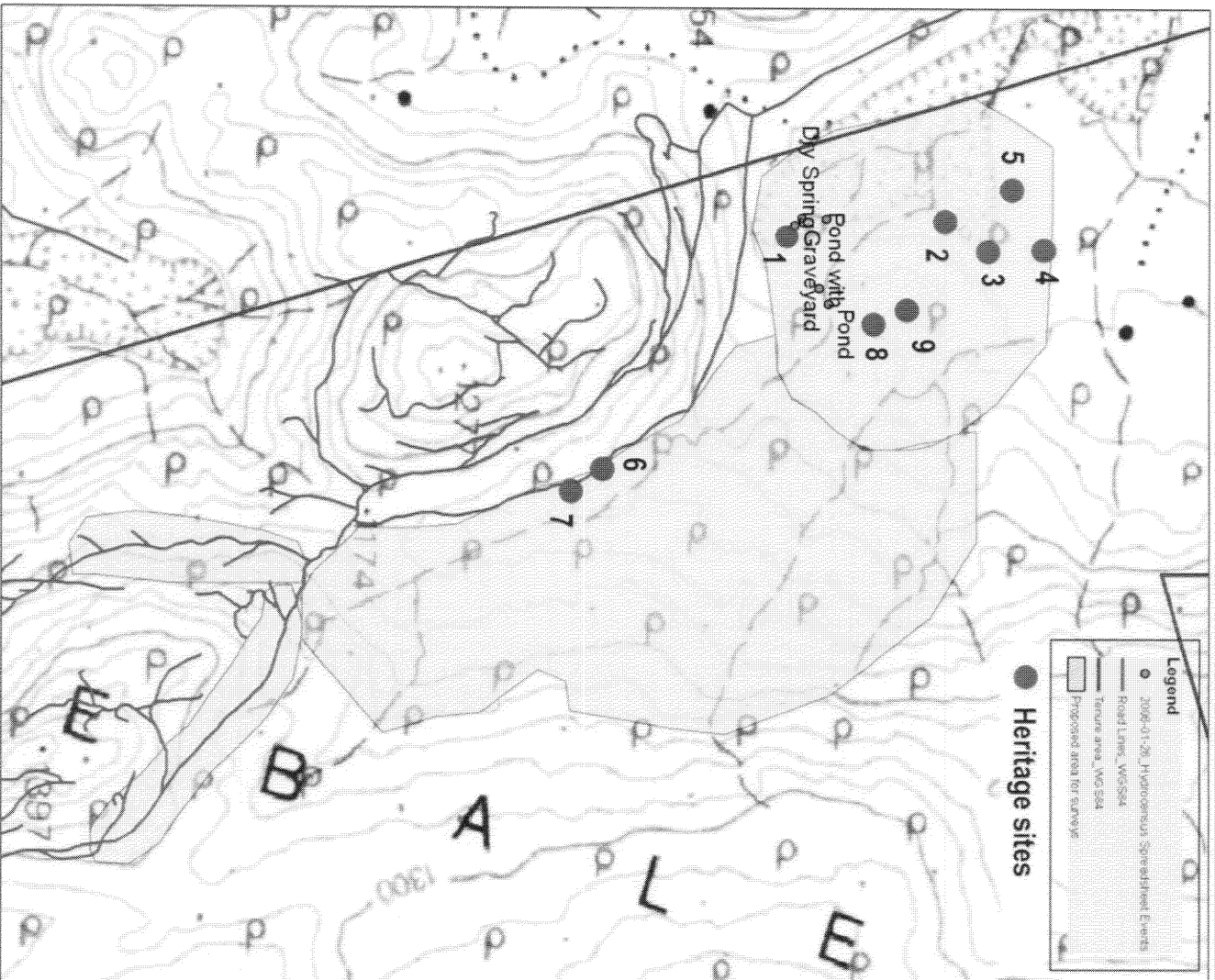
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# Map - Smokey Hills - Proposed Survey Areas



Site Map

