Basic cultural heritage assessment for the PROPOSED DIEPSLOOT EAST POWER LINE AND NEW SUBSTATION, GAUTENG PROVINCE

# BASIC CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DIEPSLOOT EAST POWER LINE AND NEW SUBSTATION, GAUTENG PROVINCE

**Report No:** 2013/JvS/024

**Status:** Final Revision No: 0

Date: May 2013

### Prepared for:

**Envirolution Consulting** 

Representative: Mr. G Govender

Postal Address: Unit 25, Sunninghill Office Park, 4 Peltier Road, Sunninghill, 2157

Tel: 086 144 4499

E-mail: gesan@envirolution.co.za

# Prepared by:

J van Schalkwyk (D Litt et Phil), Heritage Consultant

ASAPA Registration No.: 168

Principal Investigator: Iron Age, Colonial Period, Industrial Heritage

Postal Address: 62 Coetzer Avenue, Monument Park, 0181

Mobile: 076 790 6777 Fax: 086 611 3902

E-mail: jvschalkwyk@mweb.co.za

#### **Declaration:**

I, J.A. van Schalkwyk, declare that I do not have any financial or personal interest in the proposed development, nor its developers or any of their subsidiaries, apart from the provision of heritage assessment and management services.

J A van Schalkwyk (D Litt et Phil)

Heritage Consultant

May 2013

#### **EXECUTIVE SUMMARY**

# BASIC CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DIEPSLOOT EAST POWER LINE AND NEW SUBSTATION, GAUTENG PROVINCE

Eskom propose to construct a power line from a new substation south of Centurion, to a new substation that is to be located a few kilometres to the west in the Midrand region of Gauteng Province.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **Envirolution Consulting** to conduct a basic cultural heritage assessment to determine if the proposed power line and substation would have an impact on any sites, features or objects of cultural heritage significance.

The whole region was subjected to urbanization and industrial activities, which would have destroyed any pre-colonial or early colonial heritage features that might have occurred here in the past. The only heritage sites known from the region are a number of small family cemeteries, all of these are located well outside the area of the proposed development.

• As no sites, features or objects of cultural heritage significance have been identified in the study area, there would be no impact as a result of the proposed development.

Therefore, from a heritage point of view we recommend that the proposed development can continue. We also recommend that if archaeological sites or graves are exposed during development activities, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

J A van Schalkwyk Heritage Consultant

May 2013

# **TECHNICAL SUMMARY**

Property details							
Province	Gauteng Province						
Magisterial district	Ran	Randburg & Pretoria					
District municipality	City	City of Johannesburg					
Topo-cadastral map	252	2528CC					
Closest town	Midrand						
Farm name & no.	Diepsloot 389JR & Blue Hills 397JR						
Portions/Holdings							
Coordinates	End points						
	No	Latitude	Longitude	No	Latitude	Longitude	
	1			2			

Development criteria in terms of Section 38(1) of the NHR Act	Yes/No
Construction of road, wall, power line, pipeline, canal or other linear	Yes
form of development or barrier exceeding 300m in length	
Construction of bridge or similar structure exceeding 50m in length	
Development exceeding 5000 sq m	Yes
Development involving three or more existing erven or subdivisions	
Development involving three or more erven or divisions that have been	
consolidated within past five years	
Rezoning of site exceeding 10 000 sq m	
Any other development category, public open space, squares, parks,	
recreation grounds	

Development	
Description	Development of an underground electricity cable
Project name	Crowthorne Underground Cable

Land use	
Previous land use	Vacant/urban
Current land use	Vacant/urban

# **TABLE OF CONTENTS**

	Page
EXECUTIVE SUMMARY	
TECHNICAL SUMMARY	
TABLE OF CONTENTS	IV
LIST OF FIGURES	IV
GLOSSARY OF TERMS AND ABBREVIATIONS	V
1. INTRODUCTION	1
2. TERMS OF REFERENCE	1
3. HERITAGE RESOURCES	2
4. STUDY APPROACH AND METHODOLOGY	3
5. DESCRIPTION OF THE AFFECTED ENVIRONMENT	5
6. SITE SIGNIFICANCE AND ASSESSMENT	10
7. RECOMMENDATIONS	10
8. REFERENCES	12
APPENDIX 1: CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECT HERITAGE RESOURCES	
APPENDIX 2. RELEVANT LEGISLATION	
LIST OF FIGURES	
	Page
Fig. 1. Map indicating the track log of the field survey	4
Fig. 2. Location of the study area (green line) in regional context	5
Fig. 3. Aerial view of the study area	6
Fig. 4. Views over the study area	6
Fig. 5. The 1939 version of the 1:50 000 cadastral map.	7
Fig. 6. Layout of the proposed development.	8
Fig. 7. Layout of the development site, showing known heritage sites	9

#### **GLOSSARY OF TERMS AND ABBREVIATIONS**

#### **TERMS**

**Study area:** Refers to the entire study area as indicated by the client in the accompanying Fig. 1 - 2.

**Stone Age:** The first and longest part of human history is the Stone Age, which began with the appearance of early humans between 3-2 million years ago. Stone Age people were hunters, gatherers and scavengers who did not live in permanently settled communities. Their stone tools preserve well and are found in most places in South Africa and elsewhere.

Early Stone Age 2 000 000 - 150 000 Before Present

Middle Stone Age 150 000 - 30 000 BP

Later Stone Age 30 000 - until c. AD 200

**Iron Age:** Period covering the last 1800 years, when new people brought a new way of life to southern Africa. They established settled villages, cultivated domestic crops such as sorghum, millet and beans, and they herded cattle as well as sheep and goats. As they produced their own iron tools, archaeologists call this the Iron Age.

Early Iron Age AD 200 - AD 900
Middle Iron Age AD 900 - AD 1300
Late Iron Age AD 1300 - AD 1830

**Historical Period**: Since the arrival of the white settlers - c. AD 1840 - in this part of the country.

#### **ABBREVIATIONS**

ADRC Archaeological Data Recording Centre

ASAPA Association of Southern African Professional Archaeologists

CS-G Chief Surveyor-General

EIA Early Iron Age
ESA Early Stone Age
LIA Late Iron Age
LSA Later Stone Age

HIA Heritage Impact Assessment

MSA Middle Stone Age

NASA National Archives of South Africa NHRA National Heritage Resources Act

PHRA Provincial Heritage Resources Agency

SAHRA South African Heritage Resources Agency

# BASIC CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DIEPSLOOT EAST POWER LINE AND NEW SUBSTATION, GAUTENG PROVINCE

#### 1. INTRODUCTION

Eskom propose to construct a power line from a new substation south of Centurion, to a new substation that is to be located a few kilometres to the west in the Midrand region of Gauteng Province.

South Africa's heritage resources, also described as the 'national estate', comprise a wide range of sites, features, objects and beliefs. However, according to Section 27(18) of the National Heritage Resources Act (NHRA), No. 25 of 1999, no person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **Envirolution Consulting** to conduct a basic cultural heritage assessment to determine if the proposed power line and substation would have an impact on any sites, features or objects of cultural heritage significance.

#### 2. TERMS OF REFERENCE

This report does not deal with development projects outside of or even adjacent to the study area as is presented in Section 5 of this report. The same holds true for heritage sites, except in a generalised sense where it is used to create an overview of the heritage potential in the larger region.

#### 2.1 Scope of work

The aim of this study is to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the underground power line and substation and if this would prevent the development from continuing to the next level of investigation.

# This include:

- Conducting a desk-top investigation of the area;
- A visit to the proposed development site,

# The objectives were to

• Identify possible archaeological, cultural and historic sites within the proposed development areas;

- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

#### 2.2 Limitations

The investigation has been influenced by the following factors:

- The unpredictability of archaeological remains occurring below the surface.
- During the site visit the vegetation was quite high and dense in some sections.

#### 2.3 Assumptions

- It is assumed that the Social Impact Assessment and Public Participation Process might also result in the identification of sites, features and objects, including sites of intangible heritage potential in the development area and that these then will also have to be considered in the selection of the preferred routes.
- It is assumed that a Visual Impact Assessment will be done by suitably qualified specialists to determine the impact of the development on any identified heritage sites.
- It is assumed that a Paleontological Review will be done by a suitably qualified specialist.

#### 3. HERITAGE RESOURCES

#### 3.1 The National Estate

The NHRA (No. 25 of 1999) defines the heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations that must be considered part of the national estate to include:

- places, buildings, structures and equipment of cultural significance;
- places to which oral traditions are attached or which are associated with living heritage;
- historical settlements and townscapes;
- landscapes and natural features of cultural significance;
- geological sites of scientific or cultural importance;
- · archaeological and palaeontological sites;
- graves and burial grounds, including
  - o ancestral graves;
  - o royal graves and graves of traditional leaders;
  - o graves of victims of conflict;
  - o graves of individuals designated by the Minister by notice in the Gazette;
  - o historical graves and cemeteries; and
  - other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- sites of significance relating to the history of slavery in South Africa;
- · movable objects, including
  - o objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens:
  - objects to which oral traditions are attached or which are associated with living heritage;
  - ethnographic art and objects;

- military objects;
- objects of decorative or fine art;
- o objects of scientific or technological interest; and
- books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

#### 3.2 Cultural significance

In the NHRA, Section 2 (vi), it is stated that "cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This is determined in relation to a site or feature's uniqueness, condition of preservation and research potential.

According to Section 3(3) of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of

- its importance in the community, or pattern of South Africa's history;
- its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- sites of significance relating to the history of slavery in South Africa.

A matrix was developed whereby the above criteria were applied for the determination of the significance of each identified site (see Appendix 1). This allowed some form of control over the application of similar values for similar identified sites.

#### 4. STUDY APPROACH AND METHODOLOGY

#### 4.1 Extent of the Study

This survey and impact assessment covers the area as presented in Section 5 and as illustrated in Figure 1 - 3.

#### 4.2 Methodology

#### 4.2.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological and historical sources were consulted – Mason 1962, 2012; Van Schalkwyk 2005, 2006, 2007a, 2007b, 2010, 2012; Van Schalkwyk & De Jong 1997.

 Information on events, sites and features in the larger region were obtained from these sources.

#### 4.2.1.2 Data bases

The Heritage Atlas Database, the Environmental Potential Atlas, the Chief Surveyor General and the National Archives of South Africa were consulted.

 Database surveys produced a number of sites located in the larger region of the proposed development.

#### 4.2.1.3 Other sources

Aerial photographs and topocadastral and other maps were also studied - see the list of references below.

Information of a very general nature were obtained from these sources

#### 4.2.2 Field survey

The field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The area that had to be investigated was identified by **Envirolution Consulting** by means of maps. The area was investigated by following the proposed route as far as possible and visiting each of the proposed substation alternatives.

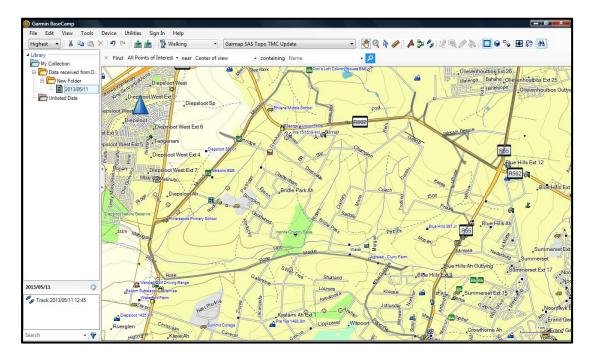


Fig. 1. Map indicating the track log of the field survey.

#### 4.2.3 Documentation

All sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are determined by means of the *Global Positioning System* (GPS) and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

Map datum used: Hartebeeshoek 94 (WGS84).

#### 5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

#### 5.1 Site location

Eskom propose to construct a power line from a new substation south of Centurion, to a new substation that is to be located a few kilometres to the west in the Midrand region of Gauteng Province (Fig. 1 & 2). For more information, please see the Technical Summary presented above (p. iii).



Fig. 2. Location of the study area (green line) in regional context. (Map 2528, 2628: Chief Surveyor-General)



Fig. 3. Aerial view of the study area. (Photo: Google Earth)



Fig. 4. Views over the study area.

The geology is made up of granite. The topography of the area is described as strongly undulating plains. The original vegetation is classified a Rocky Highveld Grassland. However, very little of this original vegetation has remained as it was replaced first by farming activities and later by the development of small holdings.

From the 1939 topocadastral map it can be seen that very little development existed in the region of the study area (Fig. 5). However, during the last couple of years large scale urban development took place (Fig. 3) which would have had a big impact on any sites, features or object of cultural significance that might have occurred here in the past.

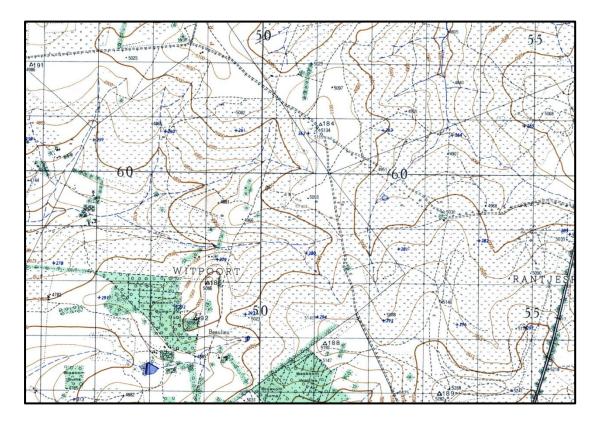


Fig. 5. The 1939 version of the 1:50 000 cadastral map.

# 5.2 Development proposal

Eskom propose to construct a power line from a new substation south of Centurion, to a new substation that is to be located a few kilometres to the west in the Midrand region of Gauteng Province (Fig. 6). For this purpose three alternative locations have been identified for the development of the substation. In addition, three alternative routes have been identified for the power line.

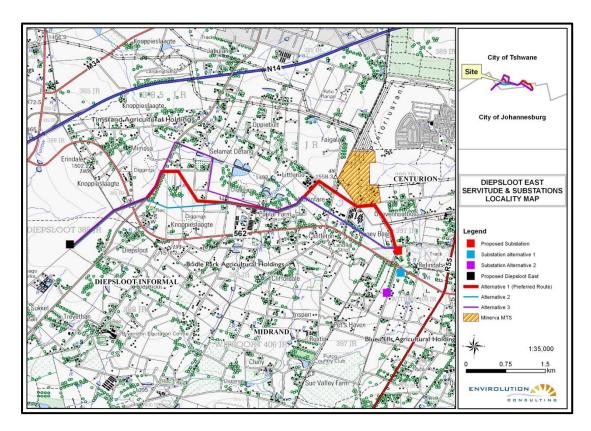


Fig. 6. Layout of the proposed development. (Map supplied by Envirolution Consulting)

# 5.3 Overview of the region

The aim of this section is to present an overview of the history of the larger region in order to eventually determine the significance of heritage sites identified in the study area, within the context of their historic, aesthetic, scientific and social value, rarity and representivity – see Section 3.2 and Appendix 1 for more information.

The cultural landscape qualities of the region is made up of a pre-colonial element consisting of limited Stone Age and Iron Age occupation, as well as a much later colonial (farmer) component, which gave rise to an urban component.

A number of sites are known to occur in the region. These range from MSA sites on the farm Waterval, to Later Stone Age sites, located in small rock shelters near the Jukskei River (Glenferness shelter). Late Iron Age sites also occur, e.g. at Lone Hill and the Boulders Shopping Centre.

During the late 1990s Prof. Revil Mason excavated a Later Stone Age camp site to the north of the study area. The material obtained from this site is now stored at the Cultural History Museum in Pretoria (Mason 2012). The site was excavated as part of a mitigation project for the Midrand municipal authority. It also included work on Late Iron Age site at the Boulders Shopping Centre.

The study area falls within that zone usually located on the front edge of (city) urban-sprawl where the land previously used for agricultural use (only) have become subdivided into small holdings. What used to be a large single agricultural unit or farm now consists of tens of small properties. These units do not have their economic base in traditional agriculture but are sustained by a variety of land uses and economic activities with strong urban associations. This phenomenon happened in the past forty years. Therefore most of the built fabric, date from this period. The result was that any historic farmsteads older than 60 years that may have existed have either disappeared or have been 'upgraded'.

The only real heritage sites known from the region are a number of smaller family cemeteries. Fortunately, all of these are located well outside the area of the proposed development (Fig. 7).

#### 5.4 Identified sites

The following sites, features and objects of cultural significance were identified in the study area:

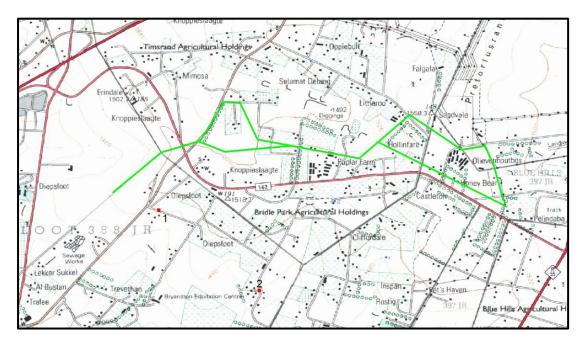


Fig. 7. Layout of the development site, showing known heritage sites. (Map 2528CC: Chief Surveyor-General)

#### 5.4.1 Stone Age

• No sites, features or objects dating to the Stone Age were identified in the study area.

# 5.4 2 Iron Age

• No sites, features or objects dating to the Iron Age were identified in the study area.

#### 5.4 2 Historic period

No sites, features or objects dating to the historic period were identified in the study area.

#### 6. SITE SIGNIFICANCE AND ASSESSMENT

#### 6.1 Heritage assessment criteria and grading

The NHRA stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act:

- Grade I: Heritage resources with qualities so exceptional that they are of special national significance:
- **Grade II**: Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- Grade III: Other heritage resources worthy of conservation, on a local authority level.

The occurrence of sites with a Grade I significance will demand that the development activities be drastically altered in order to retain these sites in their original state. For Grade II and Grade III sites, the applicable of mitigation measures would allow the development activities to continue.

# 6.2 Statement of significance

In terms of Section 7 of the NHRA, all the sites currently known or which are expected to occur in the study area are evaluated to have Grade III significance.

#### 6.3 Impact assessment

Impact analysis of cultural heritage resources under threat of the proposed development, are based on the present understanding of the development:

• As no sites, features or objects of cultural heritage significance have been identified in the study area, there would be no impact as a result of the proposed development.

### 7. RECOMMENDATIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area in which it is proposed to develop a substation and a power line.

The whole region was subjected to urbanization and industrial activities, which would have destroyed any pre-colonial or early colonial heritage features that might have occurred here in the past. The only heritage sites known from the region are a number of small family cemeteries, all of these are located well outside the area of the proposed development.

 As no sites, features or objects of cultural heritage significance have been identified in the study area, there would be no impact as a result of the proposed development.

Therefore, from a heritage point of view we recommend that the proposed development can continue. We also recommend that if archaeological sites or graves are exposed during development activities, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

#### 8. REFERENCES

#### 8.1 Data bases

Chief Surveyor General Environmental Potential Atlas, Department of Environmental Affairs and Tourism. Heritage Atlas Database, Pretoria. National Archives of South Africa

#### 8.2 Literature

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

#### **Behrens**

Hall

Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.

Mason, R.J. 1969. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press

Mason, R.J. 2012. A built stone alignment associated with an LSA artefact assemblage on Mia Farm, Midrand, South Africa. South African Archaeological Bulletin 67(196):214-230.

Van Schalkwyk, J.A. 2005. Scoping study for the development of a new landfill site for the northern areas of the Metropolitan Municipality of Johannesburg. Unpublished report 2005KH09. Pretoria: National Cultural History Museum.

Van Schalkwyk, J.A. 2006. Heritage impact assessment: Summerset Extension 24. Unpublished report 2006KH099.

Van Schalkwyk, J.A. 2007a. Heritage survey report for the proposed development on a Portion of the farm Witbos 409JR, in the Randburg magisterial district, Gauteng Province. Unpublished report 2007KH052.

Van Schalkwyk, J.A. 2007b. Heritage scoping report for the proposed expansion to the Northern Waste Water Treatment Works, Diepsloot 338JR, Randburg magisterial district, Gauteng Province. Unpublished report 2007/JvS/077. Pretoria.

Van Schalkwyk, J.A. 2010. Heritage impact assessment for the proposed Diepsloot pedestrian bridge development, Randburg magisterial district, Gauteng Province. Unpublished report 2010/JvS/018. Pretoria.

Van Schalkwyk, J.A. 2012. Heritage impact assessment for the proposed Diepsloot reservoir development, Pretoria magisterial district, Gauteng Province. Unpublished report 2012/JvS/007.

Van Schalkwyk, J.A. & De Jong, R. 1997. *A survey of cultural resources in the Midrand municipal area, Gauteng Province*. Unpublished report 1997KH021. Pretoria: National Cultural History Museum.

#### 8.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2528CC Google Earth

# APPENDIX 1: CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON HERITAGE RESOURCES

# **Significance**

According to the NHRA, Section 2(vi) the **significance** of a heritage sites and artefacts is determined by it aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technical value in relation to the uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

Matrix used for assessing the significance of each identified site/feature

1. Historic value					
Is it important in the community, or pattern of history					
Does it have strong or special association with the life	of a person,				
group or organisation of importance in history		'			
Does it have significance relating to the history of slavery					
2. Aesthetic value					
It is important in exhibiting particular aesthetic chara	cteristics v	alued by a			
community or cultural group		,			
3. Scientific value					
Does it have potential to yield information that	oute to an				
understanding of natural or cultural heritage					
Is it important in demonstrating a high degree of	creative of	or technical			
achievement at a particular period					
4. Social value					
Does it have strong or special association with a particular community or					
cultural group for social, cultural or spiritual reasons					
5. Rarity					
Does it possess uncommon, rare or endangered aspects of natural or cultural					
heritage					
6. Representivity					
Is it important in demonstrating the principal characteristics of a particular class					
of natural or cultural places or objects					
Importance in demonstrating the principal characteristics of a range of					
landscapes or environments, the attributes of which identify it as being					
characteristic of its class					
Importance in demonstrating the principal characteristi					
(including way of life, philosophy, custom, process, land					
or technique) in the environment of the nation, province,					
7. Sphere of Significance	High	Medium	Low		
International					
National					
Provincial					
Regional					
Local					
Specific community					
8. Significance rating of feature			T		
1. Low					
2. Medium					
3. High					

#### Significance of impact:

- low where the impact will not have an influence on or require to be significantly

accommodated in the project design

- medium where the impact could have an influence which will require modification of

the project design or alternative mitigation

- high where it would have a "no-go" implication on the project regardless of any

mitigation

### **Certainty of prediction:**

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment

- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

# Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

#### Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

#### **APPENDIX 2. RELEVANT LEGISLATION**

All archaeological and palaeontological sites, and meteorites are protected by the National Heritage Resources Act (Act no 25 of 1999) as stated in Section 35:

- (1) Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.
- (2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.
- (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 offices or museum, which must immediately notify such heritage resources authority.
- (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;
  - (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
  - (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
  - (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

In terms of cemeteries and graves the following (Section 36):

- (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.
- (3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-
  - (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
  - (b) 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
  - (c) 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 the detection or recovery of metals.
- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and reinterment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.

The National Heritage Resources Act (Act no 25 of 1999) stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act:

- **Grade I**: Heritage resources with qualities so exceptional that they are of special national significance:
- **Grade II**: Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- **Grade III**: Other heritage resources worthy of conservation, and which prescribes heritage resources assessment criteria, consistent with the criteria set out in section 3(3), which must be used by a heritage resources authority or a local authority to assess the intrinsic, comparative and contextual significance of a heritage resource and the relative benefits and costs of its protection, so that the appropriate level of grading of the resource and the consequent responsibility for its management may be allocated in terms of section 8.

Presenting archaeological sites as part of tourism attraction requires, in terms 44 of the Act, a Conservation Management Plan as well as a permit from SAHRA.

- (1) Heritage resources authorities and local authorities must, wherever appropriate, coordinate and promote the presentation and use of places of cultural significance and heritage resources which form part of the national estate and for which they are responsible in terms of section 5 for public enjoyment, education. research and tourism, including-
  - (a) the erection of explanatory plaques and interpretive facilities, including interpretive centres and visitor facilities;
  - (b) the training and provision of guides;
  - (c) the mounting of exhibitions;
  - (d) the erection of memorials; and
  - (e) any other means necessary for the effective presentation of the national estate.
- (2) Where a heritage resource which is formally protected in terms of Part I of this Chapter is to be presented, the person wishing to undertake such presentation must, at least 60 days prior to the institution of interpretive measures or manufacture of associated material, consult with the heritage resources authority which is responsible for the protection of such heritage resource regarding the contents of interpretive material or programmes.
- (3) A person may only erect a plaque or other permanent display or structure associated with such presentation in the vicinity of a place protected in terms of this Act in consultation with the heritage resources authority responsible for the protection of the place.