

# STRATEGIC ENVIRONMENTAL FOCUS

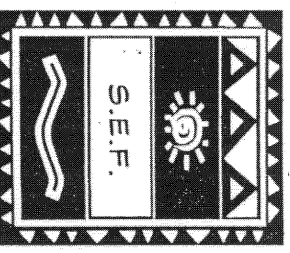
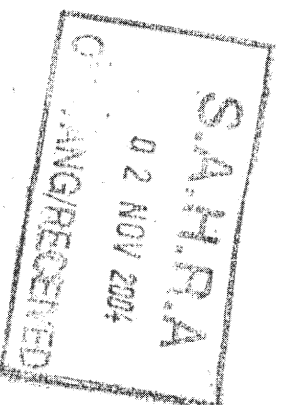
ENVIRONMENTAL CONSULTANTS & LANDSCAPE ARCHITECTS

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THE PROPOSED UPGRADING AND DEVELOPMENT  
OF ORLANDO DAM INTERSECTION,  
SOWETO, GAUTENG.

## SCOPING REPORT

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STRATEGIC  
ENVIRONMENTAL  
FOCUS

**HERITAGE SURVEY OF THE PROPOSED  
ORLANDO DAM PRECINCT DEVELOPMENT,  
SOWETO, GAUTENG PROVINCE**

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**SUMMARY**

**Heritage survey of the proposed Orlando Dam precinct development, Orlando, Gauteng**

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area surrounding the old Orlando Power Station, Soweto.

Based on what was found and its evaluation, it is recommended that the proposed development can continue in the area, on condition of acceptance of the following recommendations:

- It is our understanding that the development in some areas, such as on the hill, would have a very low to no impact. Therefore there should be no physical threat to the different activities taking place there. However, it is recommended that the local people should be consulted and informed on the proposed development and what it might mean to their use of the hill.
- It is recommended that somebody with a good background in researching oral traditions be appointed to follow up on the Enoch Sontonga story.
- It is recommended that the local community should be consulted with regard to their viewpoint on the so-called buffer zone concept - if they also view it negatively or if they would prefer the open spaces remain as such.
- The developer should be notified that if archaeological sites are exposed during construction work, 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.

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9/2/2007/0002/007

HERITAGE SURVEY OF THE PROPOSED  
ORLANDO DAM PRECINCT DEVELOPMENT,  
SOWETO, GAUTENG PROVINCE

## 1. THE SURVEY

The National Cultural History Museum was contracted by Strategic Environmental Focus to survey an area surrounding and including the old Orlando Power Station in Orlando, Soweto. The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area that is to be impacted by the proposed developed.

## 2. TERMS OF REFERENCE

The scope of work consisted of conducting a Phase 1 archaeological survey of the site in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

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.

## 3. DEFINITIONS AND ASSUMPTIONS

The following aspects have a direct bearing on the survey and the resulting report:

- X Cultural resources are all nonphysical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- X The significance of the sites and artefacts are determined by means of their historical, social, aesthetic, technological and scientific value in relation to their 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.

- X Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require further mitigation.
- X The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not be disclosed to members of the public.

#### 4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are mainly dealt within two acts. These are the South Africa Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

##### 4.1 South African Heritage Resources Act

###### Archaeology, palaeontology and meteorites

In terms of Section 35(4) of this act, no person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; bring onto, or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

###### Structures:

Section 34(1) of this act states that 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.

"Structure" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

"Alter" means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

###### Human remains:

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant 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 or 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, or any equipment which assists in the detection or recovery of metals.

##### 4.2 Environment Conservation Act

This act states that a survey and an evaluation of cultural resources should be undertaken in areas where development, which will change the face of the environment, is to be made. The impact of the development on the cultural resources should also be determined and proposals to mitigate these are to be formulated.

#### 5. METHODOLOGY

##### 5.1 Preliminary investigation

###### 5.1.1 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 - see the list of references below. Nothing pertaining to this particular area was found, although a number of references to sites in the larger area exist.

###### 5.1.2 Data bases

The **Archaeological Data Recording Centre (ADRC)**, housed at the National Cultural History Museum, Pretoria, was consulted. The **Environmental Potential Atlas** was also consulted.

###### 5.1.3 Other sources

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

##### 5.2 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 Strategic Environmental Focus during a site visit and by means of maps. For the purpose of the survey, the area was divided into different block using natural and manmade features. Each block was then systematically surveyed on foot. Special attention was given to topographical features such as hills, trenches, holes, outcrops and clusters of trees as well as man-made occurrences.

##### 5.3 Documentation

All sites, objects and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of the **Global Positioning System (GPS)**<sup>1</sup> and plotted on a map. This information was added to the description in order to facilitate the identification of each locality.

Map datum used: Hartebeeshoek 94 (WGS84).

<sup>1</sup> According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then correlate it with reference to the physical environment before plotting it on the map.

## 6. DESCRIPTION OF THE AREA

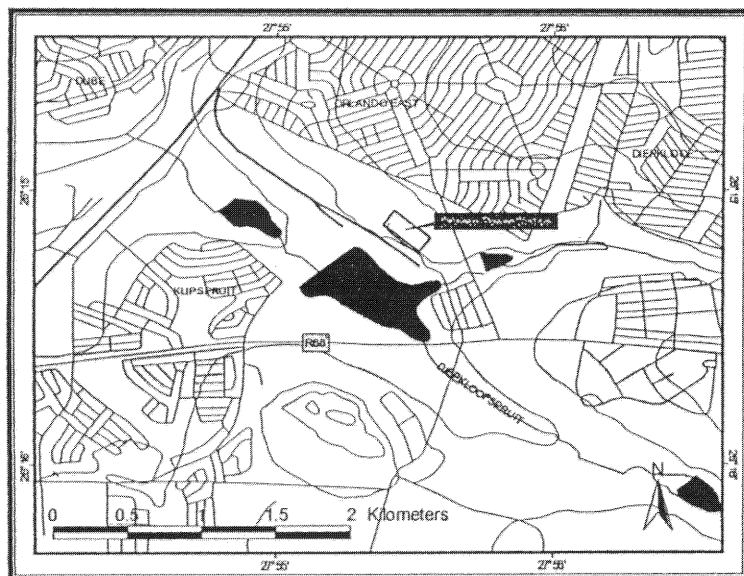


Figure 1. The study area.

The study area (Fig. 1) is an irregular shaped piece of land surrounding the Orlando dam and the remains of the old Orlando Power station, extending southwards over the R68 (Old Potchefstroom Road), to include a small rocky hill. In the northeastern section of the survey area, the geology is made up of quartzite, in contrast to the southwestern section, where it is made up of lava. The original vegetation can be classified as Rocky Highveld Grassland. The Diepkloofspruit crosses the area diagonally and serves as source for the Orlando Dam.

## 7. DISCUSSION

Although no archaeological sites per se were identified, there are a number of issues to be considered when development takes place at the Orlando Dam precinct.

### 7.1 Stone Age

A few stone tools dating to the Middle Stone Age were identified as surface material. These occur in the hill on the southern side of the study area. However, they are surface objects and

are not in primary context anymore. As a result, they are therefore judged to have no significance.

### 7.2 Iron Age

Some very rudimentary stone walling occur on the hill on the southern side of the study area. These invariably consist of irregularly spaced circles made of a single row of stones, approximately 2 to 3 metres in diameter. No other features or objects can be related to this. In some cases it seems as if the circles are used during contemporary times, making their interpretation even more difficult.

Iron Age settlement occurs to the south east of the study area in the Klipriviersberg Nature Reserve. This has been studied by Mason (1968) and others, and is a well-known attraction in the area.

### 7.3 Historic period

The history and development of the Orlando Power Station is addressed in a separate report (see Naude 2004). Here we will only address some issues not attended to in that report.

#### *Enoch Sontonga*

Unconfirmed oral tradition has it that the hill to the south of the power station, known as Vista Koppie, is the place where Enoch Sontonga sat when he composed the national anthem *Nkosi Sikelel' iAfrika*.

It is actually quite remarkable how little is known about Sontonga's life. One is usually presented with a few standard facts, such as that he was a schoolteacher and that he stayed in Johannesburg's Nancefield hostel. According to different sources he died at the age of 32 and estimates on this date range from 1897 (the year in which he supposedly composed the anthem) to 1904. However, recent research into the whereabouts of his grave has shown that he died on 18 April 1905 (Walker 1996).

During the short time allowed for this survey to be completed, no written or oral evidence could be found to either prove or disprove this oral tradition. Anthropologically speaking, proving or disproving a popular belief such as this is basically impossible. The proof of the tradition lies in its general acceptance. It can be disproved only by arguing in the negative, for example if it can be shown that he was not in the area during that time or that he was already dead by then. As already indicated, there is very little information available on his general life and activities.

#### *"Buffer zone"*

The reason for the "open spaces" around the power station and staff village in Orlando has an interesting origin. The flow of poor and landless blacks from rural areas into urban areas gave rise to uncontrolled settlement and the establishment of squatter communities since the 1920s, but especially during the late 1930s and 1940s. In fact, this is exactly how Orlando Township originated. In an effort to control this, the government of the day introduced all kinds of

legislation. The Native (Urban) Areas Act of 1923<sup>2</sup> marked the beginning of the central government's intervention in the process of black urbanisation by empowering local authorities (municipalities) to set aside segregated areas for black occupation outside of white urban and industrial areas. This later became more formalised in the Natives (Urban Areas) Consolidation Act, No. 25 of 1945, by the prohibition of the residence or congregation of "Natives – other than certain privileged classes – within five miles of an urban boundary" (Rogers 1949; Maylam 1986).

This principle was to become an integral feature of urban development in South Africa, creating buffer zones, as they were called, between white and black inhabitants and can still be seen in many places, especially the smaller towns in the countryside.

Currently, these buffer zones has become a very sensitive issue for local councils, as some see it as the remnants of a hated system and that it should be erased by using the areas for urban development. The irony, however, is that in many instances these buffer zones have become some of the only open spaces still to be found in urban areas and in a number of cases they have even become nature reserves.

#### *Contemporary cultural activities*

It seems as if the small hill (Vista Koppie) in the south of the study area serves as the locale for a range of contemporary cultural activities. In contrast, no such activities were identified in the flat area surrounding the dam and the power station, with the possible exception of the removal of medicinal plants.

People go to Vista Koppie, possibly as it is one of the last vestiges of 'unspoilt' nature in the area. As such it is subject to different religious practices, where they pray to the ancestors; there is a large Rasta 'church' located amongst some trees; and other, more esoteric activities that relate to bio-medicine and indigenous healing, based on African ideas of sickness and misfortune, takes place here. This is all in line with what have personally been seen in other areas such as at Tembisa and HaMakau (Medunsa), etc.

As far as could be determined, there is no known significance specifically attached to this hill as, for example, is the case with Modimolle (Kranskop) east of Warmbaths (De Beer 1996). According to De Beer (1995, 1996), the names given to mountains, rivers and other geographical phenomena is not only a "verbal map" of an area, but it also mirrors peoples habits and beliefs as well as the symbolism they attach to such features. As such it reflect their worldview and cosmology and forms a framework that gives substance to their ideas on other people and their environment.

## 8. IDENTIFICATION OF RISK SOURCES

The following project actions may impact negatively on archaeological sites and other sites of cultural importance. The actions are most likely to occur during the construction phase of the proposed project.

<sup>2</sup> It is important to note that the original Act of 1923, introduced by the South African Party under leadership of J C Smuts, in fact predates the coming to power of the National Party in 1948, which in common practice is accepted of the formal establishment of Apartheid. Acceptance of this Act in 1923 played into the hands of the fledgling (opposition) National Party under D F Malan. Even the consolidated Act, predates 1948.

- Road construction may expose at yet unidentified sites, e.g. graves.
- Development might impact on contemporary cultural activities in the area, such as collecting of medicinal plants and religious activities.

## 9. RECOMMENDATIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area surrounding the old Orlando Power Station, Soweto.

Based on what was found and its evaluation, it is recommended that the proposed development can continue in the area, on condition of acceptance of the following recommendations:

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## 10. REFERENCES

### 10.1 Data bases

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

### 10.2 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.

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### 9.3 Maps

1: 50 000 Topocadastral maps – 2627BB, 2627BD

## 11. PROJECT TEAM

J van Schalkwyk  
S Moifatswane

## APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES

### 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 that would result in a measurable reduction of the impact must be identified. This is expressed according to the following:

- no further investigation/action necessary
- controlled sampling and/or mapping of the site necessary
- preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- preserve site if possible, as well as extensive salvage excavation and/or mapping necessary
- 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: SURVEY RESULTS<sup>3</sup>

[Previous site numbers relate to other known sites on a particular ¼ degree sheet already documented in the ADRC, and does not necessarily refer to sites occurring on or close to the specific area of development.]

Map datum used: Hartebeeshoek 94 (WGS84).

Nil

<sup>32</sup> See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

## APPENDIX 3: GLOSSARY AND ABBREVIATIONS

This section is included to give the reader some necessary background. It must be kept in mind, however, that these dates are all relative and serve only to give a very broad framework for interpretation.

## STONE AGE

Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200

## IRON AGE

Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830

## HISTORICAL PERIOD

Since the arrival of the white settlers - c. AD 1840 in this part of the country

ADRC - Archaeological Data Recording Centre

core - a piece of stone from which flakes were removed to be used or made into tools

PHRA - Provincial Heritage Resources Agency

SAHRA - South African Heritage Resources Agency