Heritage impact assessment for the PROPOSED MIXED-USE DEVELOPMENT IN THE SOUTH HILLS REGION OF JOHANNESBURG, GAUTENG PROVINCE



THE PROJECT:

Development of a mixed-use land development

THIS REPORT:

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED MIXED-USE DEVELOPMENT IN THE SOUTH HILLS REGION OF JOHANNESBURG, GAUTENG PROVINCE

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EXECUTIVE SUMMARY

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED MIXED-USE DEVELOPMENT IN THE SOUTH HILLS REGION OF JOHANNESBURG, GAUTENG PROVINCE

Mixed land-use development is planned for a vacant section of land situated in the South Hills region of Johannesburg. In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **Thibane, Strydom and Associates** to conduct a Heritage Impact Assessment (HIA) 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 mixed land-use.

Various sites of cultural significance were identified:

- Outcrops of the Mondeor conglomerates of the Witwatersrand Supergroup occurs on the site and as type-site it is used by geologists in the interpretation of the geology of the Witwatersrand goldfields.
- Two sites used by adherents of the Apostolic faith were identified. At least one of these is still actively being used.
- Two informal dump sites of unknown date were identified.

As the exact development proposals are not available, it is impossible to state what the impact of this would be on the identified sites. Therefore it is taken as a worst-case scenario and the impact is therefore seen to be high and permanent in nature. As a consequence, mitigation measures are proposed for each of these

- The geological site is viewed to have a high significance on a regional level and should be avoided at all costs.
- The two sites used by adherents of the Apostolic faith are viewed to have a high significance on a local level. The developer should communicate with the people using these sites prior to the development taking place
- The two informal dump sites are viewed to have a medium significance on a regional level and test excavations should be done on them by a suitably qualified archaeologist.

Therefore, from a heritage point of view we recommend that the proposed development can continue, on condition of acceptance of the proposed mitigation measures. We request that if archaeological sites or graves 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.

J A van Schalkwyk Heritage Consultant August 2009

TECHNICAL SUMMARY

Property details						
Province	Gau	teng				
Magisterial district	Joha	annesburg				
Topo-cadastral map	262	8AA, 2628AB				
Closest town	Sou	South Hills, Johannesburg				
Farm name	Klipi	Klipriviersberg 106IR				
Portions/Holdings	Erf '	Erf 1202 South Hills, Holding 88, Klipriviersberg Estate & Portion 65				
Coordinates	Polygon					
	No	Latitude	Longitude	No	Latitude	Longitude
	1	S 26.25707	E 28.06775	2	S 26.25177	E 28.07165
	3	S 26.24696	E 28.07160	4	S 26.24274	E 28.08022
	5	S 26.24319	E 28.08483	6	S 26.25671	E 28.08412

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	Yes
Any other development category, public open space, squares, parks,	
recreation grounds	

Development	
Description	Mixed-use land development
Project name	

Land use	
Previous land use	Vacant
Current land use	Vacant

Heritage sites assessment			
Site type	Site significance	Site grading (Section 7 of NHRA)	
Historic	High on local level	III	
Impact assessment			
Impact	Mitigation	Permits required	
Yes	Excavation	SAHRA	

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GLOSSARY OF TERMS AND ABBREVIATIONS

TERMS

Study area: Refers to the entire study area as indicated by the client in the accompanying Fig. 1 and 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 Late 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. These people, according to archaeological evidence, spoke early variations of the Bantu Language. Because 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

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED MIXED-USE DEVELOPMENT IN THE SOUTH HILLS REGION OF JOHANNESBURG, GAUTENG PROVINCE

1. INTRODUCTION

Mixed land-use development is planned for a vacant section of land situated in the South Hills region of Johannesburg.

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), Act 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 **Thibane**, **Strydom and Associates** to conduct a Heritage Impact Assessment (HIA) 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 mixed land-use.

2. TERMS OF REFERENCE

The scope of work for this study consisted of:

- Conducting of a desk-top investigation of the area, in which all available literature, reports, databases and maps were studied:
- · A visit to the proposed development area.

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development area;
- 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. 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
 - o 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
 - 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;
 - o military objects;
 - o objects of decorative or fine art;
 - 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.

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 Figures 1 and 2.

4.2 Methodology

4.2.1 Preliminary investigation

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.

 No publications exist on the history of the study area specifically. Some reference to the geological history of the region was found (Mendelsohn & Potgieter 1986) as well as to the person after which the park is named. Newspaper reports on recent events that took place in the region were also found (The Star 2007).

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 adjacent areas.
- The original Title Deed for the farm could not be found in the records of the Chief Surveyor General's records.

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 area that had to be investigated, was identified by **Thibane**, **Strydom and Associates** by means of maps. The site was surveyed by walking a number of parallel transects over it.

4.2 Limitations

In some sections, the survey was affected by tall grass that limited archaeological visibility to some extent.

5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

5.1 Site location and description

The site is located in the South Hills area of southern Johannesburg (Fig. 1). Currently it is known as Moffat Park, named after John Abraham Moffat, an architect who lived and worked

in Johannesburg since 1895 up until the 1930s. He also had an interest in town planning and, probably as a result of this, donated some land to the Johannesburg City Council that was named after him, i.e. Moffat Park. For more detail on its location, please see the Technical Summary presented above.

The site is an irregular shaped piece of land, approximately 200 hectares in extent. It is largely vacant, except for some sporting facilities and a mini refuse dump. The site is bisected by a gully formed by storm water and an Eskom power line.

At present sections of the site is inhabited by homeless people, whereas rubble is informally dumped all over the area.



Fig. 1. Location of the study area (red circle) in regional context.

5.2 Regional overview

5.2.1 Stone Age

Occupation of the larger region has taken place since the Early Stone Age time. Various sites dating to the Stone Age occur in the larger region, for example the Primrose Ridge sites.

5.2.2 Iron Age

Iron Age people started to settle in southern Africa c. AD 300, with one of the oldest known sites at Broederstroom south of Hartebeespoort Dam dating to AD 470. Having only had cereals (sorghum, millet) that need summer rainfall, Early Iron Age people did not move outside this rainfall zone, and neither did they occupy the central interior highveld area. Because of their specific technology and economy, Iron Age people preferred to settle on the alluvial soils near rivers for agricultural purposes, but also for firewood and water.

The occupation of the larger geographical area (including the study area) did not start much before the 1500s. By the 16th century things changed, with the climate becoming warmer and wetter, creating condition that allowed Late Iron Age (LIA) farmers to occupy areas previously unsuitable, for example the Witwatersrand and the treeless plains of the Free State.

Stonewalled settlements occur to the south and southeast of the study area in what is known as the Klipriviersberg Nature Reserve. These belong to the Uitkomst facies of the Late Iron Age and date to the period AD 1700 and later.

5.2.3 Historic period

White settlers moved into the area during the first half of the 19th century. They were largely self-sufficient, basing their survival on cattle/sheep farming and hunting. Pretoria was started in 1850, but Johannesburg only dates to the 1880s, after the discovery of gold.

Gold mining took place in the larger region, with the most important mining house, City Deep, consisting of South City, Wolhuter Deep, South Wolhuter and Klipriviersberg, located just to the north of the study area.

The study area is currently known as Moffat Park, and was named after John Abraham Moffat, a Manchester-born architect who donated land to the City Council for use as a public park.

In recent times, Mofat Park became notorious for a series of murders that took place there in 2006/2007, leading to fears of a serial killer operating in the area (The Star, Feb. 2, 2007).

5.3 Identified sites

The following sites of cultural heritage significance were identified in the study area. For more detail, please see Appendix 3.

5.3.1 Geological history

 The site is well known for its geological history. Outcrops of the Mondeor conglomerates of the Witwatersrand Supergroup occurs on the site and as type site it is used by geologists in the interpretation of the geology of the Witwatersrand goldfields (see Mendelsohn & Potgieter 1986).

5.3.2 Stone Age

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

5.3 3 Iron Age

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

5.3.4 Historic period

Various sites dating to the historic period were identified in the study area:

- Two sites used by adherents of the Apostolic faith were identified. At least one of these is still actively being used.
- Two informal dump sites of unknown date were identified.

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 a

Grade III significance with

- o The geological site is viewed to have a high significance on a regional level.
- The two sites used by adherents of the Apostolic faith are viewed to have a high significance on a local level.
- The two informal dump sites are viewed to have a medium significance on a regional level.

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 the exact development proposals are not available, it is impossible to state what
the impact of this would be on the identified sites. Therefore it is taken as a worstcase scenario and the impact is therefore seen to be high and permanent in nature.

7. RECOMMENDED MANAGEMENT MEASURES

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on can be written into the management plan, whence they can be avoided or cared for in the future.

7.1 Objectives

- Protection of archaeological, historical and any other site or land considered being of cultural value within the project boundary against vandalism, destruction and theft.
- The preservation and appropriate management of new discoveries in accordance with the NHRA, should these be discovered during construction.

The following shall apply:

- Known sites should be clearly marked in order that they can be avoided during construction activities.
- The contractors and workers should be notified that archaeological sites might be exposed during the construction work.
- Should any heritage artefacts be exposed during excavation, work on the area where the
 artefacts were discovered, shall cease immediately and the Environmental Control Officer
 shall be notified as soon as possible;
- All discoveries shall be reported immediately to a museum, preferably one at which an
 archaeologist is available, so that an investigation and evaluation of the finds can be
 made. Acting upon advice from these specialists, the Environmental Control Officer will
 advise the necessary actions to be taken;
- Under no circumstances shall any artefacts be removed, destroyed or interfered with by anyone on the site; and
- Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51. (1).

7.2 Control

In order to achieve this, the following should be in place:

- A person or entity, e.g. the Environmental Control Officer, should be tasked to take responsibility for the heritage sites and should be held accountable for any damage.
- Known sites should be located and isolated, e.g. by fencing them off. All residents and their visitors should be informed that these are no-go areas, unless accompanied by the individual or persons representing the Environmental Control Officer as identified above.
- In areas where the vegetation is threatening the heritage sites, e.g. growing trees pushing
 walls over, it should be removed, but only after permission for the methods proposed has
 been granted by SAHRA. A heritage official should be part of the team executing these
 measures.

8. CONCLUSIONS

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 a mixed land-use development is proposed.

Various sites of cultural significance were identified:

- Outcrops of the Mondeor conglomerates of the Witwatersrand Supergroup occurs on the site and as type-site it is used by geologists in the interpretation of the geology of the Witwatersrand goldfields.
- Two sites used by adherents of the Apostolic faith were identified. At least one of these is still actively being used.
- Two informal dump sites of unknown date were identified.

As the exact development proposals are not available, it is impossible to state what the impact of this would be on the identified sites. Therefore it is taken as a worst-case scenario and the impact is therefore seen to be high and permanent in nature. As a consequence, mitigation measures are proposed for each of these

- The geological site is viewed to have a high significance on a regional level and should be avoided at all costs.
- The two sites used by adherents of the Apostolic faith are viewed to have a high significance on a local level. The developer should communicate with the people using these sites prior to the development taking place
- The two informal dump sites are viewed to have a medium significance on a regional level and test excavations should be done on them by a suitably qualified archaeologist.

Therefore, from a heritage point of view we recommend that the proposed development can continue, on condition of acceptance of the proposed mitigation measures. We request that if archaeological sites or graves 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.

9. REFERENCES

9.1 Data bases

Chief Surveyor General

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

Heritage Atlas Database, Pretoria.

National Archives of South Africa

9.2 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.

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

Mason, R. 1968. Prehistory of the Transvaal. Johannesburg: Witwatersrand University Press.

Mason, R.J. 1986. *Origins of the Black People of Johannesburg and the southern western central Transvaal AD 350-1880*. Occasional Paper No. 16. Johannesburg: Archaeological Research Unit, University of the Witwatersrand.

Mendelsohn, F. & Potgieter, C.T. (reds.). 1986. Guidebook to Sites of Geological and Mining Interest on the Central Witwatersrand. Johannesburg: The Geological Society of South Africa.

Shorten, J.R. 1970. The Johannesburg Saga. Johannesburg: John R Shorten (Pty) Ltd.

9.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2628AA, 2628AB

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 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

4 Historia valva			
1. Historic value			
Is it important in the community, or pattern of history			
Does it have strong or special association with the life or w	ork of a pe	erson,	
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 characterist	ics valued	by a	
community or cultural group			
3. Scientific value			
Does it have potential to yield information that will contain the potential to yield information that will contain the potential to yield information that will be a second to yield the yield information that will be a second to yield the yield the yield to yield the yield to yield the yield the yield to yield the yield	ontribute t	o an	
understanding of natural or cultural heritage			
Is it important in demonstrating a high degree of creati	ve or tech	nnical	
achievement at a particular period			
4. Social value			
Does it have strong or special association with a particular	ır commun	ity or	
cultural group for social, cultural or spiritual reasons			
5. Rarity			
Does it possess uncommon, rare or endangered aspects of n	atural or cu	ıltural	
heritage			
6. Representivity			
Is it important in demonstrating the principal characteristics	s of a part	icular	
class of natural or cultural places or objects			
Importance in demonstrating the principal characteristics			
landscapes or environments, the attributes of which iden	itiry it as	being	
characteristic of its class	L		
Importance in demonstrating the principal characteristics of			
(including way of life, philosophy, custom, process, land-use,			
or technique) in the environment of the nation, province, regio 7. Sphere of Significance		Medium	Low
7. Sphere of Significance International	High	iviedium	Low
National			
Provincial			
Regional			
Local Specific community			
Specific community			
8. Significance rating of feature			1
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
- 5 = retain graves

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.

APPENDIX 3: SURVEY RESULTS

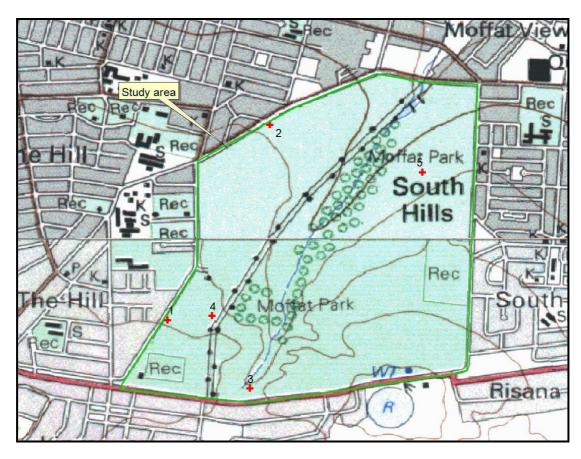


Fig. 2. The study area showing the location of known sites of heritage significance. (Map 2628AA, 2628AB: Chief Surveyor-General)

Five different features were identified:

1. Location: S 26.25438, E 28.07023

<u>Description</u>: Place of prayer, called *Isiguqo*, where adherents of the Apostolic faith gather to pray, mostly on Sundays. Similar features are used by the adherents of the Shembe and Zionist churches. Such sites are usually sanctified by treating it with water that has been blessed by the priest (*meetse a thapela* or *sewasho*).

<u>Discussion</u>: Such sites are usually found all over in vacant areas. It is not old nor does it show any significant features. However, in terms of the Heritage Act, it can be classified as a place which is associated with living heritage (intangible).

Evaluation of significance: High on a local level

<u>Significance of impact</u>: High <u>Certainty of prediction</u>: Probable

<u>Recommended management action</u>: It is recommended that the developer contact the people using this features and inform them of the pending development.

Legal requirements: None



Fig. 3. The first of the prayer places.

2. Location: S 26.24527, E 28.07500

<u>Description</u>: Place of prayer, called *Isiguqo*, where adherents of the Apostolic faith gather to pray, mostly on Sundays. Similar features are used by the adherents of the Shembe and Zionist churches. Such sites are usually sanctified by treating it with water that has been blessed by the priest (*meetse a thapela* or *sewasho*).

<u>Discussion</u>: Such sites are usually found all over in vacant areas. It is not old nor does it show any significant features. However, in terms of the Heritage Act, it can be classified as a place which are associated with living heritage (intangible).

Evaluation of significance: High on a local level

<u>Significance of impact</u>: High <u>Certainty of prediction</u>: Probable

Recommended management action: It is recommended that the developer contact the people using this features and inform them of the pending development.

Legal requirements: None



Fig. 4. The second prayer place.

3. Location: S 26.25758, E 28.07408

<u>Description</u>: Outcrop of the Mondeor conglomerates of the Witwatersrand Supergroup <u>Discussion</u>: Although this site is not formally declared as heritage site, it forms part of the larger geological interpretation of the Witwatersrand and is used by geologists as type-site (see Mendelsohn & Potgieter 1986).

Evaluation of significance: High on a regional level

<u>Significance of impact</u>: High <u>Certainty of prediction</u>: Probable

Recommended management action: 4 = preserve site at all costs

Legal requirements:



Fig. 5. The outcrop of Mondeor conglomerate.

4. Location: S 26.25419, E 28.07232

<u>Description</u>: Old dump site, with pieces of porcelain, metal, bottles and glass. Most significant is the number of medicinal bottles that were identified.

<u>Discussion</u>: As yet, no information could be found on the age and origin of this site. However, it is recommended that a small test excavation is done here to determine the nature of the site and the material.

Evaluation of significance: Medium on a regional level

Significance of impact: High Certainty of prediction: Probable

Recommended management action: 2 = controlled sampling and/or mapping of the site

necessary

Legal requirements: SAHRA permit



Fig. 6. Some of the medicine bottle found on the site.

5. Location: S 26.24748, E 28.08211

<u>Description</u>: Old dump site of unknown date and origin.

<u>Discussion</u>: Based on the material identified, it is probably not very old. It seems as if the 'bottle collectors' have been busy on the site, making its dating difficult as it might have been mined selectively.

Evaluation of significance: Medium on a regional level

<u>Significance of impact</u>: High <u>Certainty of prediction</u>: Probable

Recommended management action: 2 = controlled sampling and/or mapping of the site

necessary

Legal requirements: SAHRA permit



Fig. 7. Informal excavation showing where the bottles were excavated.

APPENDIX 4: ILLUSTRATIONS



Fig. 8. Aerial view of the site. (Photo: Courtesy of Google Earth)



Fig. 9. Looking west across the northern section of the site.



Fig. 10. Looking south across the eastern section of the site.



Fig. 11. The stream bed below the Eskom power line.



Fig. 12. Looking north over the western, top section, of the site.



Fig. 13. Looking south over the western section of the site.