# HERITAGE SURVEY REPORT OF VARIOUS PORTIONS OF THE FARMS MOOIPLAATS 355JR AND ERASMIA 350JR, PRETORIA DISTRICT, GAUTENG

# **THE PROJECT:**

Development of a housing estate.

# **THIS REPORT:**

Heritage Survey report of

VARIOUS PORTIONS OF THE FARMS MOOIPLAATS 355JR AND ERASMIA 350JR, PRETORIA DISTRICT, GAUTENG

**Report No:** 2007/JvS/025

Status: Final Revision No: 1

Date: 8 September 2007

# Prepared for:

Bokamoso Landscape Architects
Representative: Ms L Gregory
Tel: 012 346 3810

E-mail: Lizelleg@mweb.co.za

Postal Address: P O Box 11375, MAROELANA, 0161

# Prepared by:

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

Tel: 012 347 7270

E-mail: jvschalkwyk@mweb.co.za Postal Address: PO Box 26389, Monument Park, 0105

#### **EXECUTIVE SUMMARY**

# HERITAGE SURVEY REPORT OF VARIOUS PORTIONS OF THE FARMS MOOIPLAATS 355JR AND ERASMIA 350JR, PRETORIA DISTRICT, GAUTENG

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 housing estate. The area consists of Part of the Remainder of Portion 35, a part of Portion 49 and a Part of Portion 62 of the Farm Mooiplaats 355JR and a Part of Portion 3 of the Farm Erasmia 350JR in the Pretoria municipal district of Gauteng. This development is to be known as Erasmia Extension 8 and 9.

Past activities in the study area consisted of farming, settlement and the "mining" of dolomite that was burned to produce lime used for building purposes. On the basis of this, it is possible to group the various identified sites into different categories, although all of them could also be related in some manner:

- Sections A and D (see map in Fig. 4) are probably part of a large informal settlement, known to the then inhabitants as New Mooiplaats.
- Section B and F is probably related the quarrying of dolomite and the production of lime.
- Section E can possibly be related to any of these, but is most probably farming related.
- Section C is a cemetery that is probably related to all the above categories.

All the identified features (see Appendix 3) seem to be older than sixty years, or close to that. Consequently, they are protected by the National Heritage Resources Act, No. 25 of 1999.

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

- That, in accordance with the Heritage Act, No. 25 of 1999, Phase 2 mitigation action takes place prior to the start of the development. This would entail, inter alia:
  - The documentation (mapping and photographing) of all the heritage features in the proposed development area;
  - The test excavation of a select few features as representative examples;
  - That the large cemetery is retained and formalised by fencing it off, maintaining it and allowing access to descendants;
  - The various possible isolated graves are identified and, after following of the proper procedure, are relocated to the main cemetery;
  - It is recommended that some of the structures, e.g. the lime burner be retained in an open area (park), with some interpretive signage;
  - If construction takes place and archaeological sites are exposed, 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.

# **TABLE OF CONTENTS**

	Page
EXECUTIVE SUMMARY	ii
TABLE OF CONTENTS	iii
GLOSSARY OF TERMS AND ABBREVIATIONS	iv
1. INTRODUCTION	1
2. TERMS OF REFERENCE	1
3. DEFINITIONS AND ASSUMPTIONS	1
4. STUDY APPROACH AND METHODOLOGY	2
5. DESCRIPTION OF THE AFFECTED ENVIRONMENT	3
6. IDENTIFICATION OF RISK SOURCES	6
7. RECOMMENDATIONS	6
9. REFERENCES	8
APPENDIX 1: CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON	
HERITAGE RESOURCES	9
APPENDIX 2. RELEVANT LEGISLATION	11
APPENDIX 3: SURVEY RESULTS	12

# **GLOSSARY OF TERMS AND ABBREVIATIONS**

STONE AGE

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** 

Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830

HISTORIC PERIOD

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

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

ADRC Archaeological Data Recording Centre

EIA Early Iron Age
ESA Early Stone Age
LIA Late Iron Age
LSA Late Stone Age
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 SURVEY REPORT OF VARIOUS PORTIONS OF THE FARMS MOOIPLAATS 355JR AND ERASMIA 350JR, PRETORIA DISTRICT, GAUTENG

#### 1. INTRODUCTION

An independent heritage consultant was appointed to conduct a survey to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of an area in which it is proposed to develop a housing estate. This development is to be known as Erasmia Extension 8 and 9.

#### 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:

- Cultural resources are all non-physical 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.
- 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.
- 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.

• 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. 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.

#### 4.2 Methodology

### 4.1 Preliminary investigation

#### 4.1.1 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.

#### 4.1.2 Data bases

The Heritage Sites Database and Environmental Potential Atlas was consulted. The various databases in the National Archive of South Africa were also consulted.

#### 4.1.3 Other sources

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

# 4.2 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 Bokamoso by means of maps. The area was investigated by walking across it in a number of transects. Special attention was given to topographical occurrences such as trenches, holes, outcrops and clusters of trees were investigated.

#### 4.3 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)<sup>1</sup> 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).

<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 to correlate it with reference to the physical environment before plotting it on the map.

#### 4.4 Limitations

None

#### 5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

#### 5.1 Site location

The study area is Part of the Remainder of Portion 35, a part of Portion 49 and a Part of Portion 62 of the Farm Mooiplaats 355JR and a Part of Portion 3 of the Farm Erasmia 350JR in the Pretoria municipal district of Gauteng (Fig. 1). It is located east of the suburb of Christoburg and west of the Zwartkop Nature Reserve, south of Laudium in Pretoria West. It centers on the following coordinates: S 25.80857, E 28.10337.

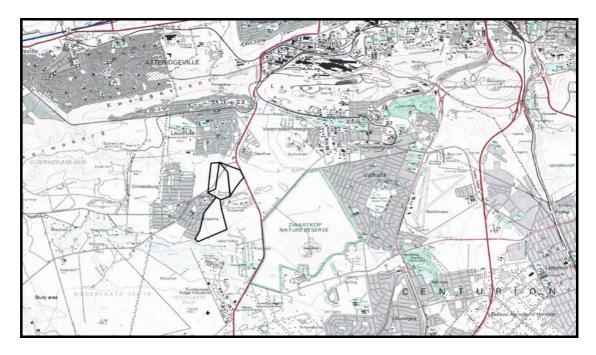


Figure 1. The study area in regional context (Map 2528CC: Government Printer).

#### 5.2 Site description

The geology is made up of dolomite and the original vegetation is classified as Rocky Highveld Grassland. The Sesmylspruit, also known as Hennops River, is located close to the southern boundary of the study area. The site is currently open grassland and is used as grazing for cattle.

#### 5.3 Identified sites

# 5.3.1 Stone Age

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

# 5.3.2 Iron Age

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

# 5.3.3 Historic period

Remains of lime extracting operations occur all over the study area. These manifest as shallow diggings excavated into dolomite outcrops, and the remains of an old lime burner (furnace) (Fig. 2).

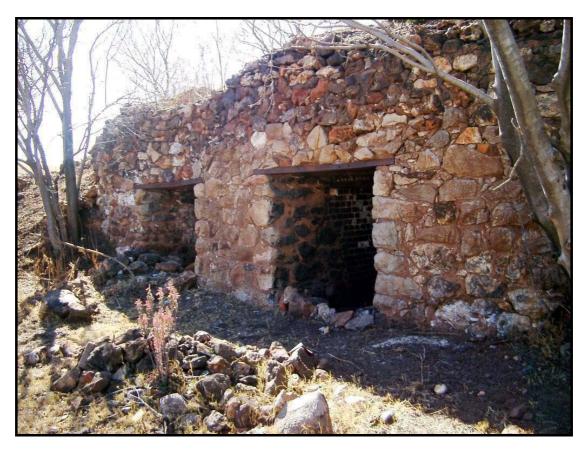


Figure 2. The lime burner on the farm Erasmia.

Limestone and dolomite, which has a wide use in the building industry, as flux in smelting operations, for water treatment, etc. is quarried on commercial scale in the Dolomite Series of Precambrian age, on, for example the farms Doornkloof and Skruveplaats to the south of Pretoria (Coetzee 1972). From archival sources it can be determined that it was used at an early stage of Pretoria's history, in the forts, jails, magistrate and other government offices of the ZAR. Unfortunately, all these sources refer to farms other than Mooiplaats and Erasmia, e.g. Schurveberg, Doornkloof, Witkoppies, Groenkloof and Olifantsfontein. Many of the archival documents also refer to the requests for permission to prospect for lime on farms and un-proclaimed land. The operations on the farms Mooiplaats and Erasmia are probably the remains of small-scale operations going back to the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

A second category of sites found in the study area is classified as housing features (Fig. 3). These vary from what probably was an old farmstead (based on its size) to a large number of farm labourer houses. If any of these are linked to the lime burning activities is uncertain at present. It is also possible that these features might relate to an informal settlement that existed for many years on the farm. According to De Jong (1995:74) the informal settlement on Mooiplaats developed in the mid-1930s and by 1948 a second one was started some distance away. This settlement was named New Mooiplaats and was probably located in part on the study area. By 1955 both settlements had a population of c. 14000. A year later, removal of these people was started by the City Council. Many families were relocated to Saulsville, whereas others, whom were citizens of Lesotho, were relocated to hostels. In all probability, most of the area occupied by these settlements has now disappeared under the suburbs of Erasmia and Christoburg.



Fig. 3. Old house structure, with a kitchen midden in the foreground.

A third category of identified sites is graves. At least one informal cemetery was identified, containing more than 60 graves. Some other features that might be unmarked graves occur sporadically all over the area. Unfortunately, it is impossible to determine if they are graves without excavating them. It is proposed that the graves might also be linked to the lime burning operations and the informal settlement on the site.

#### 6. IDENTIFICATION OF RISK SOURCES

A Heritage Impact Assessment is focused on two phases of a proposed development: **the construction** and **operation phases**. However, from a cultural heritage perspective, this distinction does not apply. 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, can be written into the management plan, whence they can be avoided or cared for in the future.

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

**Construction phase:** 

Possible Risks	Source of the risk	
Actually identified risks		
- damage to sites	Construction work	
Anticipated risks		
- looting of sites	Curios workers	

**Operation phase:** 

Possible Risks	Source of the risk
Actually identified risks	
- damage to sites	Not keeping to management plans
Anticipated risks	
- damage to sites	Unscheduled construction/developments
- looting of sites	Visitors removing objects as keepsakes

#### 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 housing estate. The area consists of Part of the Remainder of Portion 35, a part of Portion 49 and a Part of Portion 62 of the Farm Mooiplaats 355JR and a Part of Portion 3 of the Farm Erasmia 350JR in the Pretoria municipal district of Gauteng. This development is to be known as Erasmia Extension 8 and 9.

Past activities in the study area consisted of farming, settlement and the "mining" of dolomite that was burned to produce lime used for building purposes. On the basis of this, it is possible

to group the various identified sites into different categories, although all of them could also be related in some manner:

- Sections A and D (see map in Fig. 4) are probably part of a large informal settlement, known to the then inhabitants as New Mooiplaats.
- Section B and F is probably related the quarrying of dolomite and the production of lime.
- Section E can possibly be related to any of these, but is most probably farming related.
- Section C is a cemetery that is probably related to all the above categories.

All the identified features (see Appendix 3) seem to be older than sixty years, or close to that. Consequently, they are protected by the National Heritage Resources Act, No. 25 of 1999.

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

- That, in accordance with the Heritage Act, No. 25 of 1999, Phase 2 mitigation action takes place prior to the start of the development. This would entail, inter alia:
  - The documentation (mapping and photographing) of all the heritage features in the proposed development area;
  - The test excavation of a select few features as representative examples;
  - That the large cemetery is retained and formalised by fencing it off, maintaining it and allowing access to descendants;
  - The various possible isolated graves are identified and, after following of the proper procedure, are relocated to the main cemetery;
  - It is recommended that some of the structures, e.g. the lime burner be retained in an open area (park), with some interpretive signage;
  - If construction takes place and archaeological sites are exposed, 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

Heritage Sites Database, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

#### 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.

Coetzee, C.B. (ed.) 1976. *Mineral resources of the Republic of South Africa*. Handbook 7, Geological Survey. Pretoria: Government Printer.

De Jong, R.C. 1995. "The need for a total removal". An exploratory survey of the urbanisation of Africans in Pretoria, with particular emphasis on the townships that disappeared during the process. Research by the National Cultural History Museum 4:17-80.

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

Horn, A.C. 1998. *Tshwane, Pretoria, Phelindaba: Structure-agency interaction and the transformation of a South African Region up to 1994, with prospects for the immediate future.* Unpublished D.Phil. Pretoria: University of Pretoria.

#### 9.3 Archival sources

SAB, Source LDE, Type Leer, Volume No 651, System 01, Reference 10871, Part 1, Starting 1910.

TAB, Source SS, Type Leer, Volume No 0, System 01, Reference R12347/96, Starting 18960907

TAB, Source SS, Type Leer, Volume No 0, System 01, Reference R1774/98, Part 1, Starting 18980215

TAB, Source SS, Type Leer, Volume No 0,System 01, Reference R12347/96, Part 1, Starting 18960907

TAB, Source SS, Type Leer, Volume No 0, System 01, Reference R1774/98, Part 1, Starting 18980215

TAB Source LD, Type Leer, Volume No 1194, System 01, Reference Ag6284/05, Part 1, Starting 1906

TAB, Source MCK, Type Leer, Volume No 1/71, System 01, Reference Mcc256/14, Part 1, Starting 1914

#### 9.4 **Maps**

1: 50 000 Topocadastral maps - 2528CC

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

# **Significance**

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.

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

Is it important in the community, or pattern of history  Does it have strong or special association with the life or work 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 characteristics valued by a community or cultural group  3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
Does it have significance relating to the history of slavery  2. Aesthetic value  It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group  3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
2. Aesthetic value  It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group  3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group  3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group  3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
3. Scientific value  Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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
understanding of natural or cultural heritage  Is it important in demonstrating a high degree of creative 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 a high degree of creative 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
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
A. 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
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
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
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
5. Rarity  Does it possess uncommon, rare or endangered aspects of natural or cultural heritage  6. Representivity
Does it possess uncommon, rare or endangered aspects of natural or cultural heritage  6. Representivity
heritage  6. Representivity
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 characteristics of human activities
(including way of life, philosophy, custom, process, land-use, function, design
or technique) in the environment of the nation, province, region or locality.
7. Sphere of Significance High Medium Low
International
National
Provincial
Regional
Local
Specific community
8. Significance rating of feature
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.

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.

# **APPENDIX 3: SURVEY RESULTS**

See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

Map datum used: Hartebeeshoek 94 (WGS84).

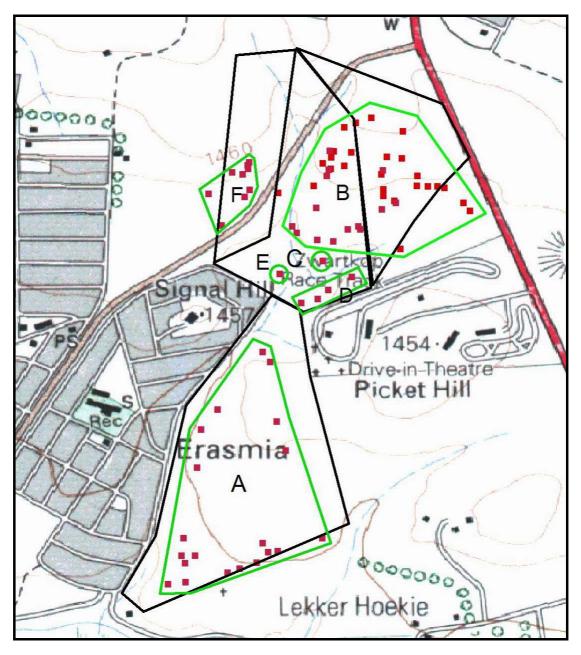


Figure 4. Map showing the distribution of the identified sites (Map 2528CC: Government Printer)

Site description				
No	Latitude	Longitude	Description	
A001	S25.82136	E28.09878	This area contains a large number of sites, mostly	
A002	S25.82019	E28.09933	consisting of what seems to be houses of farm labourers	
A003	S25.82050	E28.09947	or informal setttlers. Only the foundations remain and a	
A004	S25.82128	E28.09950	few features that might be classified as kitchen middens.  Most structures were built from local stone, although in	
A005	S25.82019	E28.09989	some cases bricks were also used. It is possible that	
A006	S25.82089	E28.10122	some informal graves are located here.	
A007	S25.82072	E28.10172		
800A	S25.80400	E28.10211		
A009	S25.82047	E28.10242		
A010	S25.82017	E28.16167		
A011	S25.81967	E28.10267		
A012	S25.82003	E28.10289		
A013	S25.82000	E28.10328		
A014	S25.81947	E28.10511		
A015	S25.81586	E28.10361		
A016	S25.81467	E28.10325		
A017	S25.81222	E28.10297		
A018	S25.81181	E28.10267		
A019	S25.81417	E28.10081		
A020	S25.81500	E28.10014		
A021	S25.81656	E28.09997		
A022	S25.81947	E28.09942		
B001	S25.80719	E28.10492	The lime burner and diggings for lime are located in this	
B002	S25.80725	E28.10558	area. It seems as if most of the buildings can be related to	
B003	S25.80675	E28.10617	this activitiy and are houses and what might have been a	
B004	S25.80675	E28.10669	compound. Most structures are built from local stone.	
B005	S25.80664	E28.10661		
B006	S25.80594	E28.10756		
B007	S25.80567	E28.10814		
B008	S25.80433	E28.10761		
B009	S25.80353	E28.10542		
B010	S25.80431	E28.10539		
B011	S25.80456	E28.10531		
B012	S25.80586	E28.10486		
B013	S25.80664	E28.10389		
B014	S25.80689	E28.10406		
B015	S25.80496	E28.10476		
B016	S25.80456	E28.10531		
B017	S25.80413	E28.10602		
B018	S25.80359	E28.10632		
B019	S25.80217	E28.10714		
B020	S25.80236	E28.10649		
B021	S25.80256	E28.10603		
B022	S25.80380	E28.10549		
B023	S25.80403	E28.10513		
B024	S25.80525	E28.10331		
B025	S25.80599	E28.11120		
B026	S25.80567	E28.11092		

ne
3
•
s s