Heritage impact survey report for THE PROPOSED HOUSING DEVELOPMENT ON PORTIONS 212-215 OF THE FARM KAMEELDRIFT 298JR, GAUTENG PROVINCE

THE PROJECT:

Development of a housing estate.

THIS REPORT:

HERITAGE IMPACT SURVEY REPORT FOR THE PROPOSED HOUSING DEVELOPMENT ON PORTIONS 212-215 OF THE FARM KAMEELDRIFT 298JR, GAUTENG PROVINCE

Report No:	2008/JvS/100
Status:	Final
Revision No:	0
Date:	November 2008

Prepared for:

Environ-Namic Environmental Consultants Representative: Dr J Bothma

Postal Address:	PO Box 11788, Silver Lakes, 0054
Tel:	082 571 6920
E-mail:	jenine@environamic.co.za

Prepared by:

J van Schalkwyk (D Litt et Phil), Heritage Consultant ASAPA Registration No.: 168 Principal Investigator: Iron Age, Colonial Period, Industrial Heritage

Postal Address:	62 Coetzer Avenue, Monument Park, 0181
Mobile:	076 790 6777
Fax:	012 347 7270
E-mail:	jvschalkwyk@mweb.co.za

EXECUTIVE SUMMARY

HERITAGE IMPACT SURVEY REPORT FOR THE PROPOSED HOUSING DEVELOPMENT ON PORTIONS 212-215 OF THE FARM KAMEELDRIFT 298JR, GAUTENG PROVINCE

Rapid urban growth demands more and more space for housing and business expansion. The areas to the north of Pretoria are targeted due to its access to freeways, shopping complexes and a favourable climate. One such area undergoing tremendous growth is Kameeldrift, located to the east of the N1 highway.

This HIA report forms part of the Environmental Impact Assessment (EIA) as required by the EIA Regulations in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and was done in accordance with Section 38 of the National Heritage Resources Act, No. 25 of 1999 and is intended for submission to the South African Heritage Resources Agency (SAHRA).

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the borders of area where the development is to take place.

No sites, features or objects or cultural historic significance were identified in the study area. Based on this, it is therefore recommended that the proposed development can continue in the area, on condition of acceptance of the following recommendations:

• 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.

TECHNICAL SUMMARY

Property details						
Province	Gaute	eng				
Magisterial district	Wond	erboom				
Topo-cadastral map	25280	CB				
Farm name & no.	Kame	eldrift 298JR				
Portions/Holdings	212 -	212 - 215				
Altitude	1240	1240 m				
Coordinates	Polygon (approximate)					
	No	Latitude	Longitude	No	Latitude	Longitude
	1	S 25.63864	E 28.28794	2	25.63334	28.29139
	3	S 25.63586	E 28.29513	4	25.64030	28.29179

Development criteria in term 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	No
Development exceeding 5000 sq m	Yes
Development involving three or more existing erven or subdivisions	No
Development involving three or more erven or divisions that have been	No
consolidated within past five years	
Rezoning of site exceeding 10 000 sq m	Yes
Any other development category, public open space, squares, parks,	No
recreation grounds	

Development	
Description	Housing estate
Project name	Kameeldrift

	Land use
Previous land use	Agriculture
Current land use	Small holdings

Heritage sites assessment				
Site type		Site significance		Site grading (Section 7 of NHRA)
None				
Impact assessment				
Impact	Mit	igation		Permits required
None	No	ne		None

TABLE OF CONTENTS

	'age
EXECUTIVE SUMMARY	ii
TECHNICAL SUMMARY	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	iv
GLOSSARY OF TERMS AND ABBREVIATIONS	v
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. SITE SIGNIFICANCE AND ASSESSMENT	5
7. IDENTIFICATION OF RISK SOURCES	5
8. RECOMMENDED MANAGEMENT MEASURES	6
9. RECOMMENDATIONS	7
10. 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	13
APPENDIX 4: ILLUSTRATIONS	14

LIST OF FIGURES

Page

Fig. 1. Location of the study areas in regional context.	4
Fig. 2. The study area	13
Fig. 3. Aerial photograph of the site	14
Fig. 4. View across the outcrop occurring in the northern section of the site.	15
Fig. 5 View across the southern section of the site	15
Fig. 6. The oldest house on the site, built during the 1960s	16

GLOSSARY OF TERMS AND ABBREVIATIONS

STONE AGE

Early Stone Age	2 000 000 - 150 000 Before Present (BP)
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 900
Middle Iron Age	AD 900 - AD 1300
Late Iron Age	AD 1300 - AD 1830

HISTORIC PERIOD

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

ADRC	Archaeological Data Recording Centre
ASAPA	Association of Southern African Professional Archaeologists
EIA	Early Iron Age
ESA	Early Stone Age
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NHRA	National Heritage Resources Act
PHRA	Provincial Heritage Resources Agency
SAHRA	South African Heritage Resources Agency

HERITAGE IMPACT SURVEY REPORT FOR THE PROPOSED HOUSING DEVELOPMENT ON PORTIONS 212-215 OF THE FARM KAMEELDRIFT 298JR, GAUTENG PROVINCE

1. INTRODUCTION

Rapid urban growth demands more and more space for housing and business expansion. The areas to the north of Pretoria are targeted due to its access to freeways, shopping complexes and a favourable climate. One such area undergoing tremendous growth is Kameeldrift.

An independent heritage consultant was appointed by Environ-Namic Environmental Consultants to conduct a survey to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area where it is planned to develop a housing estate.

This HIA report forms part of the Environmental Impact Assessment (EIA) as required by the EIA Regulations in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and was done in accordance with Section 38 of the National Heritage Resources Act, No. 25 of 1999 and is intended for submission to the South African Heritage Resources Agency (SAHRA).

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 6 and as illustrated in Figure 1.

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 - see the list of references below.

4.2.1.2 Data bases

The Heritage Sites Database and the Environmental Potential Atlas was consulted.

4.2.1.3 Other sources

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

4.2.2 Field survey

The field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The area that had to be investigated, was identified by Environamic 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.

4.2.3 Documentation

All sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are determined by means of the *Global Positioning System* (GPS)¹ 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).

4.3 Limitations

None at present.

5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

5.1 Site location

The study area is located in the south western corner of the junction of the N1 and N4 north of Pretoria, in the Wonderboom magisterial district of Gauteng (see Figure 1). It is made up of four rectangular shape Portions, 212 - 215 of the farm Kameeldrift 298JR. For more information, see the Technical Summary presented above.

5.2 Site description

The geology is made up of gabbro, with norite to the west and quartzite to the east of the study area. The original vegetation is classified as Clay Thorn Bushveld, but over most of the study area this has been replaced due to agricultural activities. Some outcrops occur in the northern section of the study area.

5.3 Regional overview

5.3.1 Stone Age

Habitation of the larger geographical area took place since Early Stone Age times. This is confirmed by the occurrence of stone tools dating to the Early, Middle and Late Stone Age found in a number of places. Of prime importance is the site at Wonderboom Poort that was inhabited during Early Stone Age times.

5.3.2 Iron Age

Similarly, sites dating to the Late Iron Age are found in the larger geographical area, especially n the low norite hills found to the west and north of the study area. Some of them can be related to the Tswana-speakers, whereas others are attributed to the Ndebele-speakers.

¹ 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.

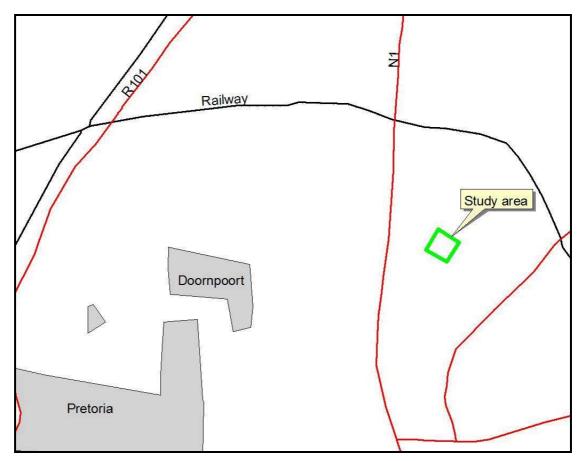


Fig. 1. Location of the study areas in regional context.

5.3.3 Historic period

The historic period started c. 1830s, with the arrival of the first white settlers. Pretoria was started in 1850 and proclaimed as town in 1855.

According to Mr. L Loubser, long time owner of the property and currently owner of Portions 212 and 214, there are no graves or stone walling in the study area. The current houses were built during 1967, 1972 and 1973.

5.4 Identified sites

5.4.1 Stone Age

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

5.4 2 Iron Age

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

5.4.3 Historic period

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

6. SITE SIGNIFICANCE AND ASSESSMENT

6.1 Statement of significance

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

According to the NHR Act, 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.

Sites regarded as having low significance are viewed as been recorded in full after identification and would require no further mitigation. Impact from the development would therefore be judged to be low. Sites with a medium to high significance would therefore require mitigation. Mitigation, in most cases the excavation of a site, is in essence destructive and therefore the impact can be viewed as high and as permanent.

No sites features or objects of cultural heritage significance were identified in study area.

6.2 Impact assessment

As there are no sites, features or objects of cultural significance in the study area, there would be no impact resulting from the proposed development.

7. 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	Curious 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

8. 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.

8.1 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 National Heritage Resources Act (Act No. 25 of 1999), should these be discovered during construction.

8.1.1 Construction phase

General management objectives and commitments:

- To avoid disturbing sites of heritage importance; and
- To avoid disturbing burial sites.

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).

9. RECOMMENDATIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within two areas in which it is proposed to develop a housing estate.

No sites, features or objects or cultural historic significance were identified in the study area. Based on this, it is therefore recommended that the proposed development can continue in the area, on condition of acceptance of the following recommendations:

• 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.

10. REFERENCES

10.1 Data bases

Central State Archive, Pretoria

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

Heritage Atlas Database, Pretoria.

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.

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.

Van Schalkwyk, J.A. 2006. *Heritage scoping assessment for the proposed Doornpoort Hills Township, on a portion of the farm Doornpoort 295JR, Wonderboom district, Gauteng.* Unpublished report 2006KH069. Pretoria: National Cultural History Museum.

10.3 Maps

1: 50 000 Topocadastral maps - 2528CB

10.4 Interviews

Mr. L Loubser, owner of Portions 212 & 214

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

Significance

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

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

1. Historic value			
Is it important in the community, or pattern of history			
Does it have strong or special association with the life 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 c	ontribute t	o an	
understanding of natural or cultural heritage			
Is it important in demonstrating a high degree of creati	ive or tech	nnical	
achievement at a			
particular period			
4. Social value			
Does it have strong or special association with a particula	ar 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 ider	ntify it as	being	
1 · · · · · ·			
characteristic of its class			
Importance in demonstrating the principal characteristics of	human act	vities	
Importance in demonstrating the principal characteristics of (including way of life, philosophy, custom, process, land-use,	function, d	esign	
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	function, d n or locality	esign	
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	function, d	esign	Low
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 International	function, d n or locality	esign	Low
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 International National	function, d n or locality	esign	Low
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 International National Provincial	function, d n or locality	esign	Low
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 International National Provincial Regional	function, d n or locality	esign	Low
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 International National Provincial Regional Local	function, d n or locality	esign	Low
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 International National Provincial Regional Local Specific community	function, d n or locality	esign	Low
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 International National Provincial Regional Local Specific community 8. Significance rating of feature	function, d n or locality	esign	Low
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 International National Provincial Regional Local Specific community 8. Significance rating of feature 1. Low	function, d n or locality	esign	Low
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 International National Provincial Regional Local Specific community 8. Significance rating of feature	function, d n or locality	esign	Low

Significance of impact:

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a "no-go" implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Recommended management action:

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

1 = no further investigation/action necessary

2 = controlled sampling and/or mapping of the site necessary

3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary

4 = preserve site at all costs

Legal requirements:

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

APPENDIX 2. RELEVANT LEGISLATION

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

(1) Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.

(2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.

(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

(4) No person may, without a permit issued by the responsible heritage resources authority-

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;

(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

(c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or

(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

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

(1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

(3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and reinterment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority. The National Heritage Resources Act (Act no 25 of 1999) stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act:

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

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

(1) Heritage resources authorities and local authorities must, wherever appropriate, coordinate and promote the presentation and use of places of cultural significance and heritage resources which form part of the national estate and for which they are responsible in terms of section 5 for public enjoyment, education. research and tourism, including-

- (a) the erection of explanatory plaques and interpretive facilities, including interpretive centres and visitor facilities;
- (b) the training and provision of guides;
- (c) the mounting of exhibitions;
- (d) the erection of memorials; and
- (e) any other means necessary for the effective presentation of the national estate.

(2) Where a heritage resource which is formally protected in terms of Part I of this Chapter is to be presented, the person wishing to undertake such presentation must, at least 60 days prior to the institution of interpretive measures or manufacture of associated material, consult with the heritage resources authority which is responsible for the protection of such heritage resource regarding the contents of interpretive material or programmes.

(3) A person may only erect a plaque or other permanent display or structure associated with such presentation in the vicinity of a place protected in terms of this Act in consultation with the heritage resources authority responsible for the protection of the place.

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).

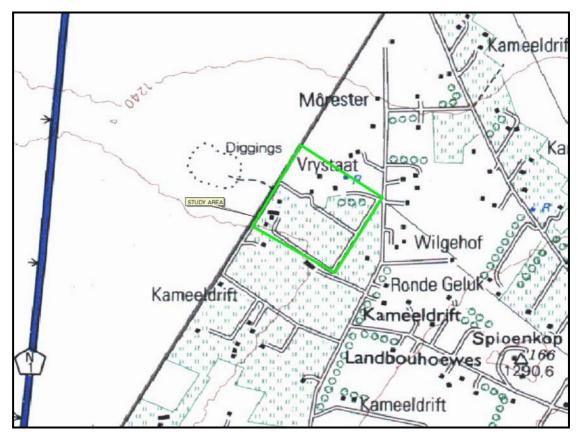


Fig. 2. The study area. (Map 2528CB: Chief Directorate Survey and Mapping.)

Sites identified: Nil

APPENDIX 4: ILLUSTRATIONS



Fig. 3. Aerial photograph of the site. (Photo: Google Earth.)



Fig. 4. View across the outcrop occurring in the northern section of the site.



Fig. 5 View across the southern section of the site.



Fig. 6. The oldest house on the site, built during the 1960s.