

Archaeological Impact Assessment

**FOR A RESEDENTIAL DEVELOPMENT ON A
PORTION OF THE FARM DOORNHOEK 1000,
DISTRICT PARYS, FREE-STATE PROVINCE**

Prepared For

Vaalplan Town & Regional Planners

By



wits enterprise

Wits Commercial Enterprise (Pty) Limited
(Registration No: 2002/008461/07)
5th floor, Senate House, Jorissen Street, 2001 Braamfontein
Private Bag 3, 2050 Wits
South Africa

Service provider



UNIVERSITY OF THE WITWATERSRAND
SCHOOL OF GEOGRAPHY, ARCHAEOLOGY AND ENVIRONMENTAL STUDIES
PRIVATE BAG 3, P O WITS 2050
TEL: +27 82 373 8491. E –MAIL JACO.HERITAGE@GMAIL.COM

**VERSION 1.0
28 APRIL 2010**

KNOWLEDGEMENT OF RECEIPT

CLIENT:

Vaaplan Town & Regional Planners

CONTACT PERSON:

Antoinette Steyn

Tel: (016) 981 0507, Fax: (016) 931 1342

Vaalplan2@telkomsa.net

SIGNATURE:

LEADING CONSULTANT:

Wits Heritage Contracts Unit



CONTACT PERSON:

Jaco van der Walt

Wits Heritage Contracts Unit

Professional Member of the Association of Southern
African Professional Archaeologist (#159)

SIGNATURE:

Executive summary

Site name and location: Proposed residential development consisting of 12 units on the farm Doornhoek 1000, Vredefort, district Parys., Free State Province.

EIA Consultant: Vaalplan Town & Regional Planners

Heritage Consultant: Wits Heritage Contracts Unit. University of the Witwatersrand, School of Geography, Archaeology and Environmental Studies, Private Bag 3, P.O Wits 2050, Tel: +27 82 373 8491. E –mail jaco.heritage@gmail.com.

Date of field work: 22 April 2010

Date of Report: 28 April 2010

1:50 000 Map number: 2627 CD

Findings of the Assessment: No heritage significant sites were identified within the study area. However an informal cemetery was identified, located outside of the study area. No impact is foreseen on the site and no mitigation action is therefore necessary. A search on the archaeological Wits data base and a desktop study yielded no known sites within the study area.

From a Heritage point of view there is no reason why the development can not commence.

General

If during construction any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find. Although no heritage significant sites were identified during the survey, the possibility of the occurrence of informal or unmarked graves can not be excluded. It is important to note that the scope of service was to survey only the development area and not the entire property. Special attention was given to the waterfront, since this is the area that will be developed.

Disclaimer: *Although all possible care is taken to identify all sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites could be overlooked during the study. Wits Heritage Contracts Unit and its personnel will not be held liable for such oversights or for costs incurred as a result of such oversights.*

Copyright: Copyright in all documents, drawings and records whether manually or electronically produced, which form part of the submission and any subsequent report or project document shall vest in Wits Heritage Contracts Unit. None of the documents,

DOORNHOEK- AIA

drawings or records may be used or applied in any manner, nor may they be reproduced or transmitted in any form or by any means whatsoever for or to any other person, without the prior written consent of Wits Heritage Contracts Unit. The Client, on acceptance of any submission by Wits Heritage Contracts Unit and on condition that the Client pays to Wits Heritage Contracts Unit the full price for the work as agreed, shall be entitled to use for its own benefit and for the specified project only:

- The results of the project;
- The technology described in any report
- Recommendations delivered to the Client.

CONTENTS

EXECUTIVE SUMMARY	3
1. INTRODUCTION	6
1.2 TERMS OF REFERENCE	7
1.3 NATURE OF THE DEVELOPMENT	8
1.4 DESCRIPTION OF STUDY AREA	8
2. APPROACH AND METHODOLOGY	8
2.1 PHYSICAL SURVEYING	8
3. ABBREVIATIONS AND DEFINITIONS	9
3.1 ABBREVIATIONS	9
3.2 DEFINITIONS	10
4. ARCHAEOLOGICAL LEGISLATION AND BEST PRACTICE	11
5. ASSESSMENT CRITERIA	14
5.1 EVALUATION OF HERITAGE SITES	14
5.1.1 HERITAGE SITE SIGNIFICANCE AND MITIGATION MEASURES	14
5. ARCHAEOLOGICAL CONTEXT OF STUDY AREA	16
5.2 PROBABILITY OF OCCURRENCE OF SITES	19
6. SITES OF SIGNIFICANCE	21
6.1 SITE 1	22
7. ASSUMPTIONS AND LIMITATIONS	24
8. ASSESSMENT AND RECOMMENDATIONS	24
9. LIST OF PREPARES	25
10. REFERENCES	25
10.1 ARCHAEOLOGICAL PAPERS	25

ANNEXURE

Annexure A – Locality Map

FIGURES

Figure 1: <i>Existing house on riverfront</i>	21
Figure 2: <i>General site conditions on river front</i>	22
Figure 3: <i>Grave of Joseph M Gumede</i>	23

1. INTRODUCTION

Wits Heritage Contracts Unit was contracted by Vaalplan Town & Regional Planners to conduct an Archaeological Impact Assessment for the proposed residential development consisting of 12 units on the farm Doornhoek 1000, Vredefort, district Parys., Free State Province. The report forms part of the EIA for the proposed project. The aim of the study is to identify all heritage sites, document, and assess their importance within Local, Provincial and national context. To assess the impact of the proposed project on non renewable heritage resources and to submit appropriate recommendations with regard to the responsible cultural resources management measures that might be required to assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

The report outlines the approach and methodology utilized before and during the survey, which includes in Phase 1: Information collection from various sources and consultations; Phase 2: Physical surveying of the area on foot and by vehicle; and Phase 3: Reporting the outcome of the study.

During the survey, apart from a informal cemetery outside of the development area no heritage significant sites were identified. General site conditions and features on sites were recorded by means of photos, GPS location, and description. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to SAHRA provincial office for peer review.

1.2 TERMS OF REFERENCE

Conduct brief desktop study to:

Review available literature, previous heritage studies and other relevant information sources. Gather data and compile a background history of the area. Identify all known and recorded archaeological and cultural sites; and determine whether the area is renowned for any cultural and heritage resources, such as Stone Age sites, Iron Age sites, informal graveyards or historical homesteads.

Conduct a field study to:

Systematically survey the proposed project area to locate, identify record, photograph and describe sites of archaeological, historical or cultural interest; and record GPS points of significant areas identified. Determine the levels of significance of the various types of heritage resources recorded in the project area;

Reporting

Identify the anticipated impacts, as well as cumulative impacts, of the operational units of the proposed project activity on the identified heritage resources for all 3 phases of the project, i.e. construction, operation and decommissioning phases. Consider alternatives should any significant sites be impacted adversely by the proposed project. Ensure that all requirements of the local South African Heritage Resources Agency (SAHRA) are met; and ensure that all studies and results are sufficient to comply with ALL the relevant requirements of the Equator Principles, World Bank Standards and IFC Principles and Performance Standards and National legislation. To assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

1.3 Nature of the development

The application is for the establishment of a residential development consisting of 12 units on waterfront stands, the total development area measures 26 hectares.

1.4 Description of study area

The area where the proposed holiday homes are to be located consist of river bush and old agricultural fields. Refer to main EIA report for geographical, environmental and demographic issues.

2. APPROACH AND METHODOLOGY

The aim of the study is to extensively cover all data available to compile a background history of the study area; this was accomplished by means of the following phases.

2.1 PHYSICAL SURVEYING

Due to the nature of cultural remains, the majority that occurs below surface, a physical walk through of the study area was conducted. Wits Heritage Contract Unit was appointed to conduct a survey of the proposed development. The study area of approximately 26 ha was surveyed over a period of one day, by means of vehicle and extensive surveys on foot.

Aerial photographs and 1:50 000 maps of the area were consulted and literature of the area were studied before undertaking the survey. The purpose of this was to identify topographical areas of possible historic and pre-historic activity. All sites discovered both inside and bordering the proposed development area was plotted on 1:50 000 maps and their GPS co-ordinates noted. 35mm photographs on digital film were taken at all the sites.

3. Abbreviations and definitions

3.1 Abbreviations

<i>ASAPA</i> : Association of South African Professional Archaeologists	<i>BPEO</i> : Best Practicable Environmental Option
<i>CRM</i> : Cultural Resource Management	<i>DEA&DP</i> : Department of Environmental Affairs and Development Planning
<i>DEAT</i> : Department of Environmental Affairs and Tourism	<i>DWAF</i> : Department of Water Affairs and Forestry
<i>EIA practitioner</i> : Environmental Impact Assessment Practitioner	<i>EIA</i> : Environmental Impact Assessment
<i>EIA</i> : Early Iron Age	<i>ESA</i> : Early Stone Age
<i>GPS</i> : Global Positioning System	<i>HIA</i> : Heritage Impact Assessment
<i>I&AP</i> : Interested & Affected Party	<i>IDP</i> : Integrated Development Plan
<i>LSA</i> : Late Stone Age	<i>LIA</i> : Late Iron Age
<i>MSA</i> : Middle Stone Age	<i>MIA</i> : Middle Iron Age
<i>NEMA</i> : National Environmental Management Act	<i>NHR Act</i> : National Heritage Resources Act
<i>PHRA</i> : Provincial Heritage Resources Agency	<i>PSSA</i> : Palaeontological Society of South Africa
<i>ROD</i> : Record of Decision	<i>SACLAP</i> : South African Council for the Landscape Architect Profession
<i>SAHRA</i> : South African Heritage Resources Agency	<i>SAIA</i> : South African Institute of Architects
<i>SAPI</i> : South African Planning Institute	<i>SDF</i> : Spatial Development Framework

3.2 Definitions

Archaeological resources:

This includes material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years including artefacts, human and hominid remains and artificial features and structures;

Rock art:

Being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;

Wrecks:

Being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act, and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;

Military:

Features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

Cultural significance:

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

Development:

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- construction, alteration, demolition, removal or change in use of a place or a structure at a place;

- carrying out any works on or over or under a place;
- subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- constructing or putting up for display signs or hoardings;
- any change to the natural or existing condition or topography of land;
- any removal or destruction of trees, or removal or vegetation or topsoil

Heritage resources:

This means any place or object of cultural significance

Stakeholders:

A subgroup of the public whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. The term includes the proponent, authorities and all interested and affected parties.

4. ARCHAEOLOGICAL LEGISLATION AND BEST PRACTICE

Phase 1 Archaeological Impact Assessments or Heritage Impact Assessments are a pre-requisite for development in South Africa as prescribed by SAHRA and stipulated by legislation. The overall purpose of a heritage specialist input is to:

- Identify any heritage resources, which may be affected;
- Assess the nature and degree of significance of such resources;
- Establish heritage informants/constraints to guide the development process through establishing thresholds of impact significance;
- Assess the negative and positive impact of the development on these resources;
- Make recommendations for the appropriate heritage management of these impacts.

DOORNHOEK- AIA

The AIA or HIA, as a specialist sub-section of the Environmental Impact Assessment [EIA] is required under the National Heritage Resources Act NHRA of 1999 (Act 25 of 1999), Section 38(1), Section 38(8) the National Environmental Management Act (NEMA) and the Mineral and Petroleum Resources Development Act (MPRDA).

The AIA should be submitted, as part of the EIA, BIA or Environmental Management Plan [EMP], to the PHRA if established in the province or to SAHRA. SAHRA will be ultimately responsible for the professional evaluation of Phase 1 AIA reports upon which review comments will be issued. 'Best practice' requires Phase 1 AIA reports and required additional development information, as per the EIA, BIA / EMP, to be submitted in duplicate to SAHRA after completion of the study. SAHRA accepts Phase 1 AIA reports authored by professional archaeologists, accredited with ASAPA. Minimum accreditation requirements include an Honours degree in archaeology or related discipline and 3 years post-university CRM experience (field supervisor level).

Minimum standards for reports, site documentation and descriptions are set by the Association of Southern African Professional Archaeologists [ASAPA] in collaboration with SAHRA. ASAPA is a legal body, based in South Africa, representing professional archaeology in the Southern African Development Community [SADC] region. ASAPA is primarily involved in the overseeing of archaeological ethical practice and standards. Membership is based on proposal and secondment by other professional members.

Phase 1 AIA's are primarily concerned with the location and identification of sites situated within a proposed development area. Identified sites should be assessed according to their significance. Relevant conservation or Phase 2 mitigation recommendations should be made. Recommendations are subject to evaluation by SAHRA.

Conservation or Phase 2 mitigation recommendations, as approved by SAHRA, are to be used as guidance in the developer's decision making process:

Phase 2 archaeological projects are primarily based on salvage / mitigation excavations preceding development destruction or impact on a site. Phase 2 excavations should be done under a permit issued by SAHRA to the appointed archaeologist. Permit conditions are prescribed by SAHRA and includes as minimum requirements reporting back strategies to SAHRA and deposition of excavated material at a accredited repository.

In the event of a site conservation option being preferred by the developer a site management plan, prepared by a professional archaeologist and approved by SAHRA, will suffice as minimum requirement.

DOORNHOEK- AIA

After mitigation is conducted on a site, a destruction permit must be applied for from SAHRA before development may proceed.

Human remains older than 60 years are protected by the National Heritage Resources Act, with reference to Section 36. Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation. If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.

Human remains that are less than 60 years old are protected under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

5. ASSESSMENT CRITERIA

5.1 Evaluation of Heritage sites

This chapter describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The following criteria were used to establish site significance:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Uniqueness of the site and
- potential to answer present research questions.

5.1.1 Heritage Site Significance and Mitigation Measures

Site significance classification standards prescribed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used for the purpose of this report.

<i>FIELD RATING</i>	<i>GRADE</i>	<i>SIGNIFICANCE</i>	<i>RECOMMENDED MITIGATION</i>
National Significance (NS)	Grade 1	-	Conservation; National Site nomination

DOORNHOEK- AIA

Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	-	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium Significance	Recording before destruction
Generally Protected C (GP.C)	-	Low Significance	Destruction

5. Archaeological Context of study area

The historical background and timeframe of the study area can be divided into the Stone Age, Iron Age and Historical timeframe. These can be divided as follows:

Stone Age

The Stone Age is divided in Early; Middle and Late Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

Early Stone Age: The period from ± 2.5 million yrs - $\pm 250\,000$ yrs ago. Acheulean stone tools are dominant.

Middle Stone Age: Various lithic industries in SA dating from $\pm 250\,000$ yrs – $25\,000$ yrs before present. This period is first associated with archaic *Homo sapiens* and later *Homo sapiens sapiens*. Material culture includes stone tools with prepared platforms and stone tools attached to handles.

Late Stone Age: The period from $\pm 25\,000$ -yrs before present to the period of contact with either Iron Age farmers or European colonists. This period is associated with *Homo sapiens sapiens*. Material culture from this period includes: microlithic stone tools; ostrich eggshell beads and rock art.

Iron Age

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. Similar to the Stone Age it can be divided into three periods:

The Early Iron Age: Most of the first millennium AD.

The Middle Iron Age: 10th to 13th centuries AD

The Late Iron Age: 14th century to colonial period.

Historic Timeframe

17th Century to present AD (1600 – 2000)

The historic timeframe intermingles with the later parts of the Stone and Iron Age, and can loosely be regarded as times when written and oral recounts of incidents became available

Social Consultation

The author consulted with two farm workers who is not aware of any graves or heritage sites within the study area. The consulted persons are Mr. David Apples and Mr. Johannes Tselo.

Previous research in the area

The Wits archaeological database has no sites on record within the study area. In addition to this the author consulted with A. Pelser who conducted his MA thesis in the Vredefort Dome about heritage sites. He is also not aware of any sites in close proximity to the study area.

From the sources consulted it became clear that most of the archaeological research was concentrated in the Vredefort Dome conservancy that has been declared a World Heritage Site.

A Pelser (2006) summarised the research done in Vredefort conservancy and found that a total of 60 heritage sites are on record ranging from Stone Age, Iron Age, historic and Anglo Boer War sites.

Most of the research focused on the Iron Age and included work done by Tim Maggs (1976) Mike Taylor and Jannie Loubser (1985). Who excavated the numerous Stone Walled Sites in the area.

Most of what is known about the Stone Age prehistory of the area is based on scattered finds of stone tools. Individual tool and flake scatters have been identified at different locations, with most of the tools typical of the Middle and Late Stone Age (MSA/LSA). These artefacts were mainly found on the gravel roads and farm tracks in the area, which are exposed by erosion.

According to Pelser 2006 no in depth research into the rock art of the Dome has been undertaken at that time, although a single rock engraving site, the so-called Daspoort Petroglyph site, is known. Rock painting sites in the core Dome area is relatively unknown, although one site was found on the farm Nauwpoort 257

A number of historical-archaeological sites have been identified and recorded during initial cultural resources surveys in the area. No detailed archaeological or historical research has been undertaken yet. These sites include quite a number of early Pioneer dwellings, late 19th to early 20th century farmsteads and labourer dwellings, so-called "Bywoner" houses, as well as sites related to the Anglo-Boer War (1899-1902) such as the site of the Battle of Tygerfontein and various British blockhouses and fortifications. The remnants of late 19th to

DOORNHOEK- AIA

early 20th century gold mining sites, such as those at Rooderand near Venterskroon can also be included here, as well as the few historic graveyard sites identified so far.

.

5.2 Probability of occurrence of sites

From the above information it is clear that a medium possibility of the occurrence of cultural heritage sites could be expected in the study area.

A. PALAEOONTOLOGICAL LANDSCAPE

CONTEXT

Fossil remains. Such resources are typically found in specific geographical areas, e.g. the Karoo and are embedded in ancient rock and limestone/calcrete formations. Exposed by road cuttings and quarry excavation: *Unknown*

B. ARCHAEOLOGICAL LANDSCAPE

CONTEXT

NOTE: *Archaeology is the study of human material and remains (by definition) and is not restricted in any formal way as being below the ground surface.*

Archaeological remains dating to the following periods can be expected with in the study area:

Stone Age finds

- ESA: *Medium Probability*
- MSA: *Medium Probability*
- LSA: *Low - Medium Probability*
- LSA –Herder: *Medium Probability*

Iron Age Finds

- EIA: *Low Probability*
- MIA: *Low Probability*
- LIA: *Medium Probability*

Historical finds

- Historical period: *Medium Probability*
- *Historical dumps: Medium Probability*
- *Structural remains: Medium Probability*

Military Finds

- *Battle and military sites: Medium Probability*

Burial/Cemeteries

- *Burials over 100 years: Medium Probability*
- *Burials younger than 60 years: Medium Probability*

Subsurface excavations including ground levelling, landscaping, and foundation preparation can expose any number of these.

6. SITES OF SIGNIFICANCE

No heritage significant sites are located within the development area. The study area is extensively disturbed by old agricultural fields that would have destroyed any significant heritage sites. However these ground moving activities did not expose any archaeological material. Five modern holiday homes and a farm homestead with associated labourer dwellings occur on the property. A single grave site of high significance was found outside of the study area but still on the farm Doornhoek.

The modern dwellings are located at the following coordinates:

- Farm house. S26 51 45.7 E27 18 13.4
- Modern house 1. S26 51 32.6 E27 18 09.1
- Modern house 2. S26 51 23.7 E27 18 09.3
- Modern house 3. S26 51 19.6 E27 18 11.6
- Modern house 4. S26 51 17.7 E27 18 15.4
- Modern house 5. S26 51 17.3 E27 18 17.7



Figure 1: Existing house on riverfront



Figure 2: General site conditions on river front

6.1 Site 1

Co ordinates S26 51 48.8 E27 18 06.8

This is the location of an informal cemetery consisting of three graves. The graves are aligned east – west and two graves consist of stone grave dressings and one with a cement headstone. The headstones bear the following inscription identifying the grave of Joseph M Gumede who passed away in July 1998.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
Generally Protected A (GP.A)	-	High - Medium	Mitigation before Destruction.



Figure 3: *Grave of Joseph M Gumede*

7. ASSUMPTIONS AND LIMITATIONS

Due to the nature of cultural remains that occur, in most cases, below surface, the possibility remains that some cultural remains may not have been discovered during the survey. Low - Medium ground visibility is present on parts of the site and the possibility of the occurrence of informal and unmarked graves can not be excluded. Although Wits Heritage Contracts unit surveyed the area as thorough as possible, it is incumbent upon the developer to inform the relevant heritage agency should further cultural remains be unearthed or laid open during the process of development. It is important to note that the scope of service was to survey only the development area and not the entire property. As per the scope of work the survey was focused on the waterfront area since this is the area that will be developed.

8. ASSESSMENT AND RECOMMENDATIONS

*A locality map is provided in **Annexure A***

Findings of the Assessment. No heritage significant sites were identified within the study area. However an informal cemetery was identified located outside of the study area (Refer to Locality Map). No impact is foreseen on the site and no mitigation action is therefore necessary. A search on the archaeological Wits data base and a desktop study yielded no known sites within the study area.

From a Heritage point of view there is no reason why the development can not commence.

General

If during construction any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find. Although no heritage significant sites were identified during the survey, the possibility of the occurrence of informal or unmarked graves can not be excluded.

9. LIST OF PREPARES

Jaco van der Walt, BA (Hon) Archaeology (Wits)

10. REFERENCES

10.1 ARCHAEOLOGICAL PAPERS

- Bergh, J.S. 1998. *Geskiedenis Atlas van Suid Afrika. Die vier Noordelike Provinsies*. Van Schaik.
- Huffman, T.N. 1980. *Ceramics, classification and Iron Age entities*. African studies 39 (2): 123-174. Johannesburg.
- Huffman, T.N. 1982. *Archaeology and Ethnohistory of the African Iron Age*. Annual Review of Anthropology 11:133-150
- Huffman, T.N. 1989. *Ceramics, settlements and Late Iron Age migrations*. The African Archaeological Review (7):155-182.
- Huffman, T.N. 2007. *A Handbook to the Iron Age: The Archaeology of Precolonial Farming Societies in Southern Africa*. Pietermaritzburg: Kwazulu-Natal University Press
- Huffman T.N, Herbert. 1994. *A new perspectives on Eastern Bantu*. .Asania XXIX-XXX, 1994-1995:27-36.
- Loubser, J.H. 1985. Buffelshoek: an ethnoarchaeological consideration of a Late Iron Age settlement in the southern Transvaal. South African Archaeological Bulletin. 40:70-80.
- Maggs, T.M.O'C. 1976. Iron Age communities of the southern highveld. Pietermaritzburg: Occasional Publications of the Natal Museum, No.2.
- Pelser, A.J. 2000. A Report on the first phase of a Cultural Resource Survey on the Vredefort Dome. Unpublished Report: NCHM
- Pelser, A.J. 2002. A Survey of Cultural Resources in the Vredefort Dome. Unpublished Report 2002KH10: NCHM (Funded by the NRF).
- Pelser, A.J. 2003. A Survey of Cultural Resources on the farm Parsons Rus 465, Vredefort Dome. Done for Habula Lodge by Archaeos cc. AE301.
- Pelser, A.J. 2003. Askoppies: Late Iron Age Sotho-Tswana Settlement on the Vredefort Dome. Unpublished M.A. dissertation. Johannesburg: University of the Witwatersrand.

DOORNHOEK- AIA

Pelser, A.J. 2006. An Assessment Of Archaeological Sites on The Vredefort Dome World Heritage Site.

South African Heritage Resources Agency. November 2004. Vredefort Dome Cultural Heritage Survey and Conservation Management Plan. With contributions by Prof. Karel Bakker, M.Naude, N.Clarke, Dr. J.van Schalkwyk, Dr. Chris van Vuuren and Mr. C.van Zyl.

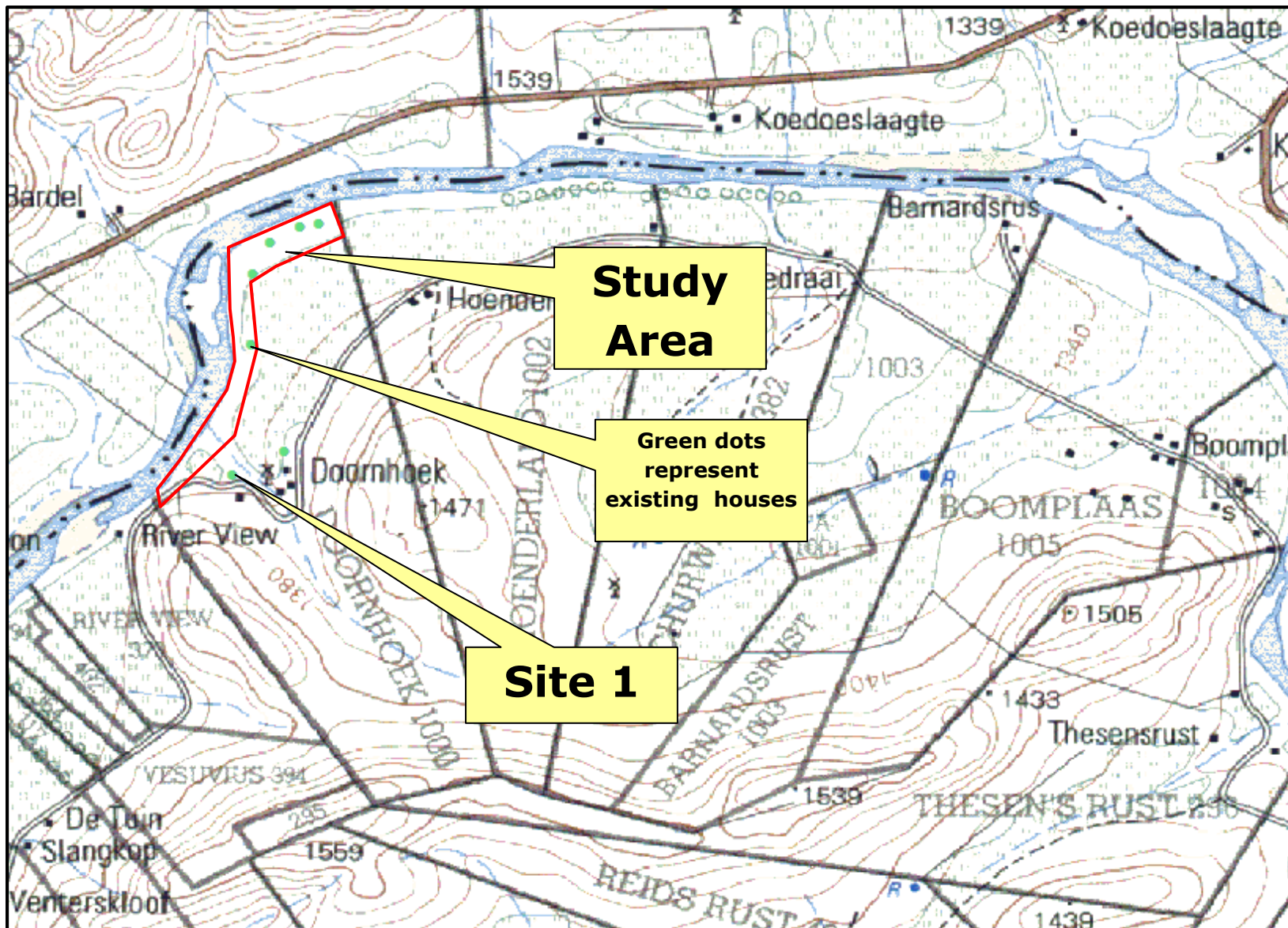
Taylor, M.O.V. 1979. Late Iron Age settlements on the northern edge of the Vredefort Dome. Unpublished M.A.dissertation. Johannesburg: University of the Witwatersrand.

Van den Bergh, G. 1994. 24 Battles and Battlefields of the Northwest Province. Northwest Province Tourism Association.

ANNEXURE A:

Locality Map

DOORNHOEK- AIA



Locality Map

Establishment of
holiday homes
on the farm
Doornhoek 1000

Property Description

The farm
Doornhoek
1000.

1: 50 000 Map

2627 CD