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FINAL REPORT

PHASE 1 HERITAGE IMPACT ASSESSMENT

PROPOSED UPGRADE OF EXISTING, AND CONSTRUCTION OF NEW, ROADS IN BURGERSFORT, LIMPOPO PROVINCE

PREPARED FOR:

AGES ENVIRONMENTAL DIVISION

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13 February 2009

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SAHRA permit numbers	N/A		
Project code	ARC/2009/02/AGES/BRT		
1: 50 000 Map number	2430 CB		
Town	Burgersfort		
Farm name(s) or erf number(s)	Leeuwallei 297 KT, Mooifontein 313 KT, Witgatboom 316 KT		
Municipal district	Greater Tubatse Municipality		
Province	Limpopo		
Stakeholders	GREATER TUBATSE LOCAL MUNICIPALITY BURGERSFORT MUNICIPALITY RESIDENTS AND COMMUNITY MEMBERS OF BURGERSFORT		
Reviewed:	Name	Date	Comments

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EXECUTIVE SUMMARY

Purpose

Archaic HPM was appointed by Africa Geo-Environment Services' (AGES) Environmental Division to undertake a Phase 1 Heritage Impact Assessment on areas that will be affected by the proposed upgrade of, as well as construction of new, roads in Burgersfort, Limpopo Province. The proposed upgrades will total approximately 20 km. This report aims to present the results the survey conducted on 31 January 2009.

Limitations

- * Large sections of the survey area were located in built-up parts of Burgersfort.
- * Certain areas were extremely dense with vegetation. These areas may be divided into two types, namely (a) dense, weed and shrub cover resulting from disturbance due to building activities, illegal dumping of rubble, disused tracks; and (b) practically impenetrable, more natural, undisturbed areas characterised by *Aloe*, *Euphorbia*, *Acacia* and *Dichrostachys* species and tall grass. In general, these some of the areas, especially where Sisal was present indicated historic to possibly archaeological settlements.
- * Most heritage resources are usually found below ground.

Results

Only one definite site of significance was identified. The site included at least fifty graves. The land is also allegedly under a claim.

Two other areas were identified that had remnants of stone walling and obvious signs of occupation / settlement. However, due to the dense vegetation no material culture was found nor could detailed observations be made regarding the settlement layout to place the sites within a historical context.

Recommendations

Detailed recommendations were given for each site, and are discussed in detail in the body of the report. However, a number general recommendations are made that is relevant to the all sites in the survey area, including any site not identified *per se* during the Scoping Survey and Preliminary Assessment.

- * It is the Client's responsibility to notify all relevant parties, including SAHRA, the PHRA and an archaeologist of any heritage resource inadvertently found during any of the development phases.
- * Any burial, or suspected burial, must be reported to SAHRA's Burial Grounds and Graves unit based in Johannesburg (contact number 011 403-2460).
- * The Client should consult local communities prior to any development taking place to determine possible sites/area of intangible significance, such as sacred places, initiation sites and burial grounds.

Stakeholders

Identified stakeholders include:

- * Greater Tubatse Municipality;
- * Burgersfort Municipality;
- * Residents and local communities.

TABLE OF CONTENTS

LIST OF FIGURES	ii
COMPANY PROFILE	1
INTRODUCTION	2
Project background and scope of work	2
Relevant client and applicant information	2
Description of activity	2
Geographical background	3
Methodology	6
Legal requirements	6
Limitations	6
SITE DESCRIPTIONS	7
BRT/001	7
BRT/002	9
BRT/003	9
BRT/004	9
BRT/005	10
SITE MAPS	11
BIBLIOGRAPHY AND REFERENCES	13
ANNEXURE A: DESCRIPTION OF FIELD RATINGS	13

LIST OF FIGURES

Figure 1: Proposed road upgrade indicated in yellow, survey route followed indicated in red .	5
Figure 2: General view of landscape where proposed road upgrades will take place.	6
Figure 3: General view from cemetery to residence of Johan Matladi	7
Figure 4: Example of semi-formal stone cairn burial	8
Figure 5: Examples of semi-formal stone cairn burial	8
Figure 6: Example of more formal burial with granite headstone	8
Figure 7: Detail of granite headstone with date - 1958	8
Figure 8: General view of site BRT/004. Note the <i>Agave sisalana</i> and dense <i>Dichrostachys cinerea</i> cover.	10
Figure 9: Sites 001 to 003 indicated on 1:50 000 map 2430 CB in relation to proposed road upgrade.	11
Figure 10: Sites 004 and 005 indicated on 1:50 000 map 2430 CB in relation to proposed road upgrade.	12

COMPANY PROFILE

WHO WE ARE: Archaic HPM – a private company – manages the Archaeological Contracts Office for the Department of Anthropology and Archaeology, University of Pretoria. We specialise in management of heritage projects in southern Africa and beyond. Our expertise includes the generation of desktop surveys, scoping surveys, Heritage Impact Assessments and/or Specialist reports, Phase 2 Mitigation of archaeological and/or heritage sites, and Phase 3 Site Management Plans.

Archaic HPM operates within parameters provided by the National Heritage Resources Act 25 of 1999 (NHRA) and associated minimum standards provided by the South African Heritage Resources Agency (SAHRA). Further, we comply with the code of ethics and standards of the Association of Southern African Professional Archaeologists (ASAPA). Complementary national and provincial legislation such as the National Environmental Management Act No. 107 of 1998 (NEMA), the Environment Conservation Act No. 73 of 1989 (ECA), and Environmental Management Plans (EMPs) form key components of every project we undertake.

Our management of the Archaeological Contracts Office creates a unique environment within which heritage resources management may be undertaken. We have access to professional staff who may assist with projects. In addition, as part of our commitment to the training of young heritage practitioners, a percentage of all project turnover is allocated to a Research and Development Fund that enables the Department of Anthropology and Archaeology to assist students and staff in their studies, research and professional growth.

OUR HISTORY: Archaic's ancestry dates back to 2003 when Johan Nel started using that name during contracts and research projects undertaken as an Archaeology undergraduate student. *Archaic* means that which is old, ancient and belonging to or characteristic of a much earlier period, and the name has stayed with Johan and the company ever since.

Archaic Heritage Project Management was officially founded in August 2005 by partners Johan Nel and Gerard de Kamper as a heritage resource management concern that caters to the wider needs of heritage professionals in South Africa. Since February 2007, Archaic HPM manages the Archaeological Contracts Office for the Department of Anthropology & Archaeology, University of Pretoria (UP).

OUR BUSINESS: The principle business interest of Archaic HPM is the assessment and management of projects that impact on or concern southern African heritage resources. Heritage, in all its various forms, constitutes a complex and vital part of the past, present and future. Thus the professional management, conservation and preservation thereof are of the utmost importance. Archaic HPM aims to promote South Africa's heritage (natural, cultural, and 'intangible') through undertaking heritage projects. These projects include: legally required actions such as environmental and heritage impact assessments (EIA's and HIA's), curation, collections management, identifying, recording and documenting intangible, historical and archaeological heritage and related field activities.

Further aims are to involve local and affected communities as far as possible, teaching and training them in the importance of heritage, as well as learning from them. This is achieved partly through the dissemination of knowledge via the commercial and academic media. Archaic HPM endeavours to publish our projects and research findings and provide access to information at little or no cost for *bona fide* researchers, students, and schools. Student training forms a large part of the Archaic HPM's focus and students from UP and beyond are regularly used in projects to expose them to available work opportunities and experience within the heritage and cultural resource management field. Through the Research and Development Fund, these students have further opportunities to further their studies, qualifications and professional growth.

Archaic provides competitive and professional service of the highest standards and quality. We aim to achieve service excellence through the punctual submission of comprehensive and comprehensible reports and by operating within allocated budgets. As project managers, we utilise the best consultants and resources available to ensure that our detailed and well-researched projects meet the expectations of our clients and relevant authorities.

FIELDS OF INTEREST

- ✓ Advice, consultation and implementation of heritage resources management;
- ✓ Professional research related to archaeological, historical, and socio-cultural ; heritage resources;
- ✓ Archaeological, Heritage and Social Impact Assessments (AIA, HIA, SIA);
- ✓ Cultural Resource Management (CRM);
- ✓ Grave relocation and Social Consultation ;
- ✓ Training and experience education;
- ✓ Liaison between specialist consultants;
- ✓ Local and international archaeological field schools.

INTRODUCTION

Project background and scope of work

Archaic HPM was appointed by Africa Geo-Environment Services' (AGES) Environmental Division to undertake a Phase 1 Heritage Impact Assessment on areas earmarked for proposed upgrades of existing and construction of new roads in Burgersfort, Limpopo Province. The working brief included:

- desktop research
- survey of the areas proposed for the upgrades and construction
- identification of possible archaeological, historical and socio-cultural heritage resources within the proposed development area
- evaluation of possible impacts, risks and/or threats on identified heritage resources
- recommendations in terms of possible mitigation in the event of any possible negative impacts of heritage resources in the area.

Relevant client and applicant information

Name of the company	Africa Geo-Environmental Services
Postal address	PO Box 2526 Polokwane 0700
Telephone	015 291 1577
Fax	086 610 4753
Applicant	Greater Tubatse Local Municipality
Contact person	Mr S Malepeng /Mr M Nekhavhambe
Postal address	PO Box 206 Burgersfort 1160
Telephone	013 231 7815
Cell	079 492 8198
E-mail	mnekhavhambe@tubatse.co.za
Fax	013 231 8618

Description of activity

The proposed activity is aimed at the upgrading and construction of roads in the Burgersfort CBD (figure 1). The total surface area that will be taken up by the proposed activity and associated infrastructure is 18 ha (180 000m²). In terms of the National Environmental Management Act No. 107 of 1998 (NEMA) and List of Activities and Regulation for Environmental Impact Assessments (EIA), Government Notice No. R386 this activity is considered to be a listed activity for basic assessment, specifically:

- Activity No. 15 The construction of a road that is wider than 4 metres or has a reserve wider than 6 metres.
- Activity 1(m)(iii) The construction of facilities or infrastructure including associated structures or infrastructure for any purpose in the 1:10 year flood line of any river or stream including bridges

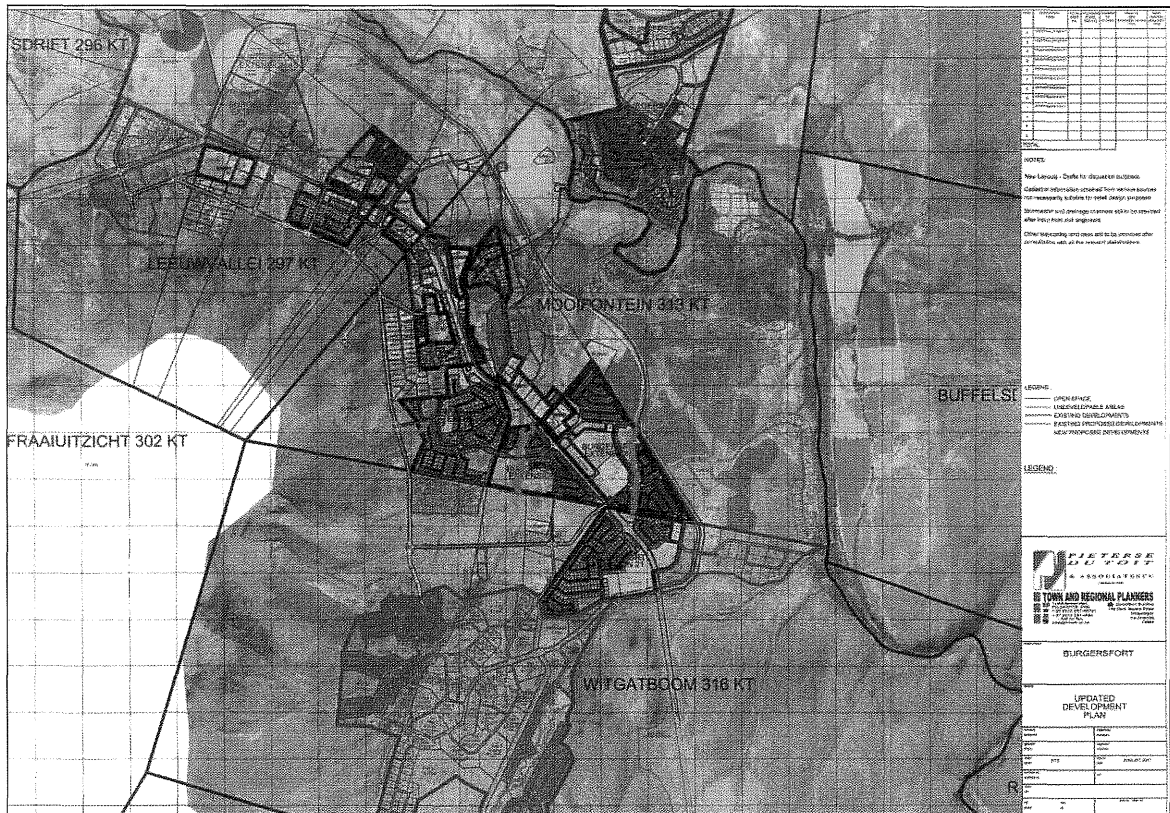


Figure 1: Site plan of proposed upgrade and construction of roads indicated in yellow (map courtesy of AGES)

Geographical background

The study area falls within the jurisdiction of the Greater Tubatse local municipality and the Burgersfort Municipality specifically in the Limpopo Province. The properties that will potentially be affected mainly include the Burgersfort CBD, with some areas located in more undeveloped parts of the farms Leeuwvallei 297 KT, Mooifontein 313 KT, and Witgatboom 316 KT. The physical landscape is characterised by large valleys and plains and mountains to the south separating the survey area from the Highveld.

The study area is rich in cultural heritage and archaeological resources as attested by a number of other surveys in the Steelpoort Valley (REFERENCE). The Olifants River has provided a natural migration route from the southern highveld down and into the northern lowveld for centuries. The history of the area includes the Early (c. 2.5 mya to 280 kyr), Middle (c. 280 to 20 kyr) and Late Stone (c. 20 kyr to Colonial/Historical – c. 19th century), Early (c. 200 CE to 1400 CE) and Later Farmer (c. 1400 CE to 1850 CE) periods, Historical (from early 1800s onwards).

Evidence of the Stone Age can be found in almost all landscapes, but especially close to water sources (both perennial and non-perennial). Later Stone Age artefacts are associated with the earliest anatomical modern humans – hunter-gatherer societies of which the San and Khoi are descendants – and often found in association with rock paintings and engravings. According to one report (REFERENCE) the entire Stone Age is considered to be of Grade III significance as no primary sites have been recorded. Most Stone Age sites are “classified as isolated surface occurrences”, although ‘sealed’ sites do occur in caves or rock shelters, some of which contain rock art (REFERENCE).

Farmer period occupation in the study area is evidenced on a large scale and at least three different phases of occupation have been identified (REFERENCE). The Farmer archaeology in the area starts from as early as mid-4th century CE, CE based on ceramic traditions (Mzonjani – c. 450-750 CE; Doornkop – c. 750-1000 CE) (Huffman 2007) and produced pottery similar to that associated with the Lydenburg Heads. This early phase of the Farmer period is characterised by the Central Cattle Pattern type of social organisation. The material remains of the early Farmer period is little visible due to the absence of stonewalling and prevalence of thatch beehive hut architecture, coupled with sites' predominant locations on river floodplains.

Later ceramic traditions include both the Urewe (Icon – c. 1300-1500 CE) and the Kalundu (Eiland – c. 1000-1300 CE; Letaba – c. 1600-1840 CE; Klingbeil – c. 1000-1200 CE) (Huffman 2007). From approximately 1600 CE onwards Sotho-Tswana ceramics (Moloko) are found in the area that has remained little changed, and is also associated with some of the first stonewalled sites. The last pre-colonial, Late Farmer occupation of the survey area is mainly associated with the influx of early Pedi-, Swazi- and Ndebele-speakers. These sites are characterised by stonewalled, terraced sites at the foot on the mountains. Many were occupied up to the first European settlement in the area. According to ***** these sites are classified as Grade III sites and “are viewed to have medium significance from a heritage perspective due to the evidence they provide regarding population movement, conflict and change” (REFERENCE).

The first recorded European settlements in the area are dated to the early to mid 19th century. The Colonial history of the survey area includes Pedi and Trekker history that resulted in the Steelpoort River becoming the border between the two groups. Later tension developed between the two groups, giving rise to armed conflict. One of the better known incidents is the so-called Sekhukhune wars (1876, 1879). Sites dating to the historic period can be related to early farming, mining and missionary activities. Included with these are also a number of sites of 'ethno-historical' significance such as the tribal capitals of the different groups of Sotho- and Ndebele speakers living in the area. The presence of such cultural and heritage sites within the study area accentuates the possibility of a strong sense of place, given the cultural landscape and the number of land claims. (<http://www.eskom.co.za/content/Steelpoort%20integration%20-%20final%20scoping%20report-3~1.pdf>).

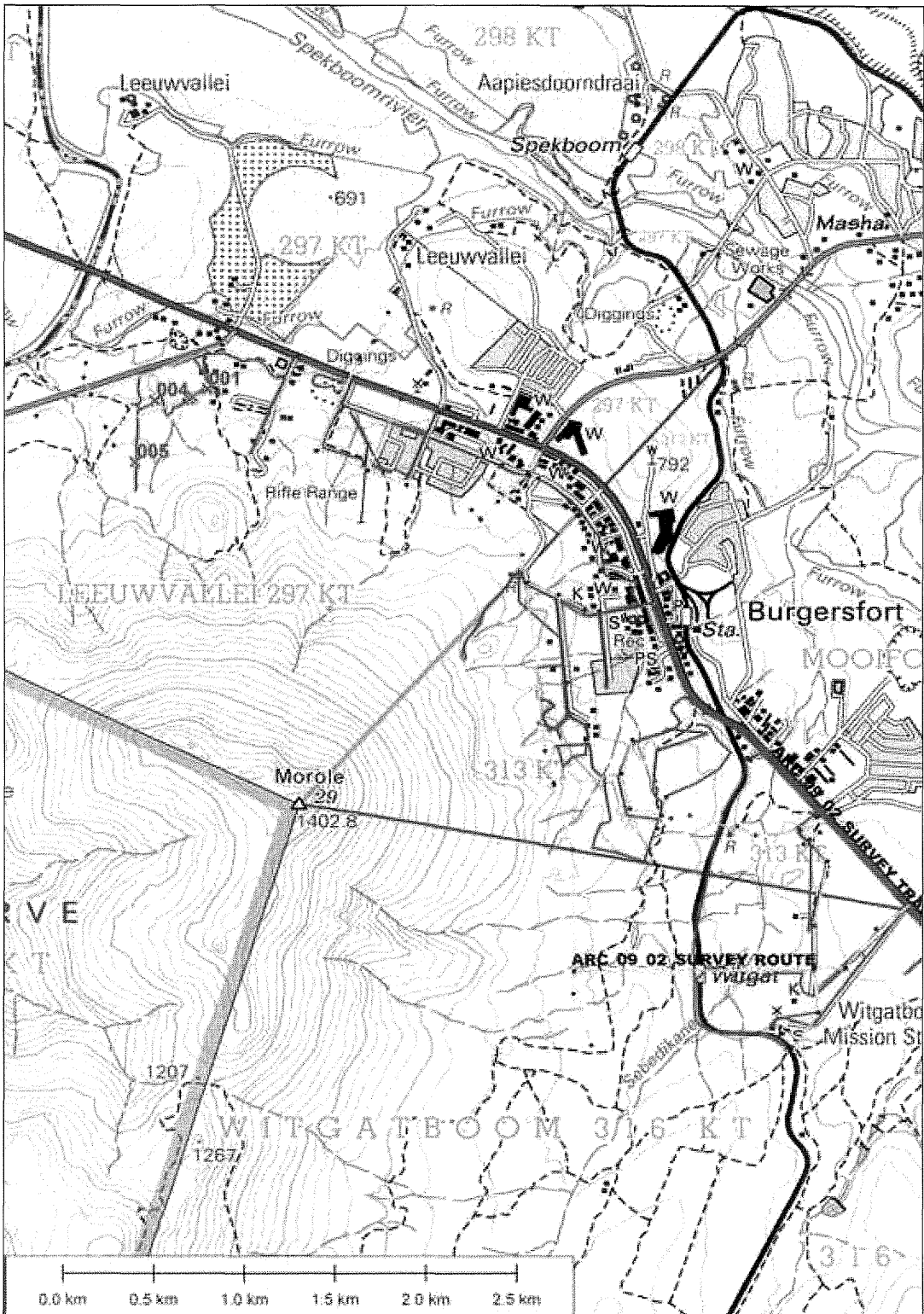


Figure 2: Proposed road upgrade indicated in yellow, survey route followed indicated in red (1: 50 000 maps (2430 CB).

Methodology

A survey was undertaken on 20 February 2009 by Johan Nel (manager – Archaic), Gerhard Jordaan (archaeology student – University of Pretoria) and Bennie Pretorius (AGES). A vehicular survey was done along most of the proposed route where it passed through intense impacted areas such as settlements and roads. Where the potential for the occurrence of heritage resources was greater, pedestrian surveys were conducted. All sites were recorded using a Garmin Etrex Cx GPS, average accuracy of 5 m and a Canon EOS 20D camera.

Legal requirements

Archaic HPM bound itself to all relevant legislation and Minimum Standards for archaeological reports as set by the South African Heritage Resources Agency (SAHRA). Specific references are made to the following:

- National Heritage Resources Act No. 25 of 1999 (NHRA), with specific reference to Sections 32, 35, 36 and 38;
- National Environment Management Act No. 107 of 1998 (NEMA);
- List of Activities and Regulation for Environmental Impact Assessments (EIA), Government Notice Nos. R385, R386 and 387;
- SAHRA minimum standards for Impact Assessment Reports.

Limitations

Factors that limited the survey included the obvious fact that the majority of heritage resources are usually found below ground. Archaic cannot be held liable for any resources that may be found during excavations or other earthmoving activities.

Although every effort was made to conduct as detailed a survey as possible, dense grass cover and overgrowth limited visibility and in extreme instances, access. However, areas where *Dichrostachys* and *Agave* occur extensively, usually indicates fairly intensive disturbances such as overgrazing or settlement.

Large parts of the proposed road passed through or close to urban suburbs and security villages / estates. These areas are already heavily impacted on and disturbed. A part of the route (approximately 2000 m) was not surveyed as it passed through private property, fenced with razor wire.

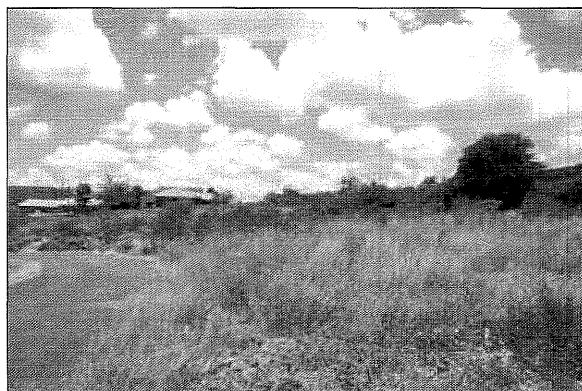


Figure 3: General view of landscape where proposed road upgrades will take place.

SITE DESCRIPTIONS

BRT/001

An informal cemetery situated west of a small residence and approximately 200 m south of the R555 road linking Burgersfort and Steelpoort. According to the resident, Mr John Matladi, the cemetery consists of at least 57 graves with three families represented. Mr Matladi also indicated that he has instituted a claim on the land through which the proposed new road will pass. The families represented in the cemetery are:

Matladi 43 graves ranging from 1829 to 2004 according to Mr Matladi
Mokhonto 3 graves
Mnisi 11 graves

The cemetery is located less than 20 m from the proposed new road and will definitely be affected by development activities.

FIELD RATING	Local: Grade III A – based on the cemetery's cultural significance in terms of local customs and practices where burials form a focal point in ancestral worship.
CONTEXT	Primary
RISKS, THREATS, IMPACT	Direct as well as indirect impact resulting from construction of the proposed road will threaten the site; risks include damage, destruction, vandalism, as well as possibly limiting access to the site.
RECOMMENDATION	The proposed road should be realigned to bypass the cemetery completely; A buffer zone of at least 50 m must be allowed around the perimeter of the cemetery; The cemetery should be fenced off during any construction activity; The families and descendants of the deceased must be contacted and notified that possible alterations may take place in and around the cemetery; Mitigation i.e. exhumation and relocation, is not advised as part of the development process.

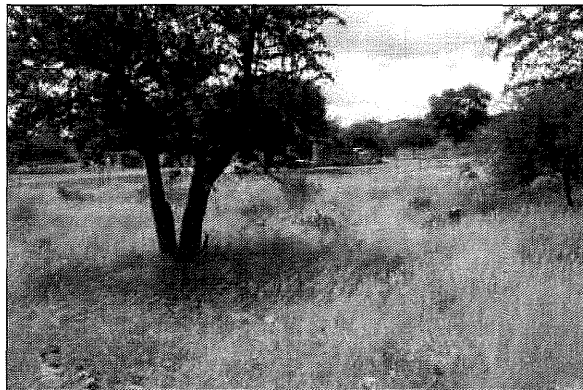


Figure 4: General view from cemetery to residence of John Matladi

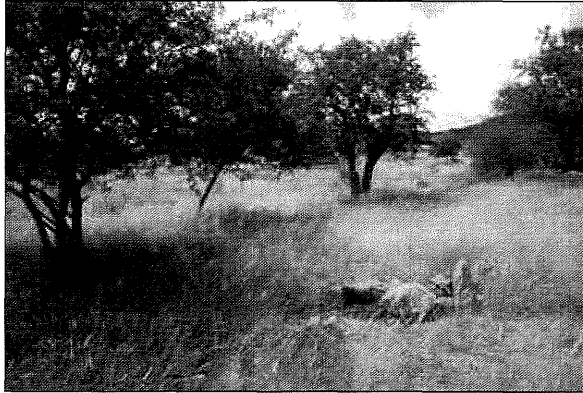


Figure 5: Example of semi-formal stone cairn burial

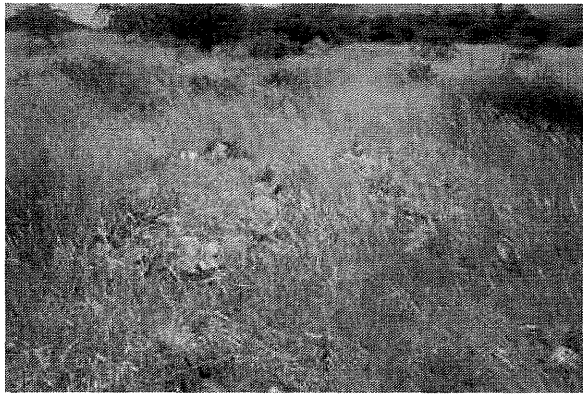


Figure 6: Examples of semi-formal stone cairn burial

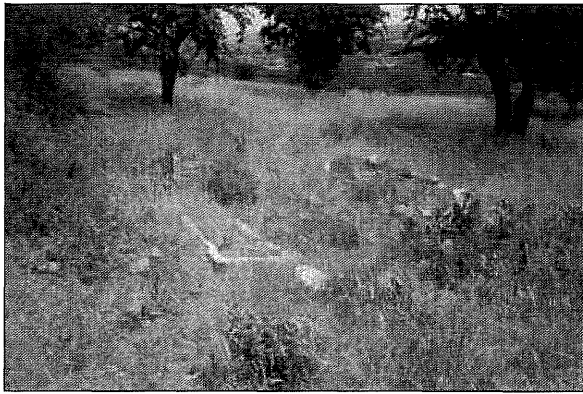


Figure 7: Example of more formal burial with granite headstone

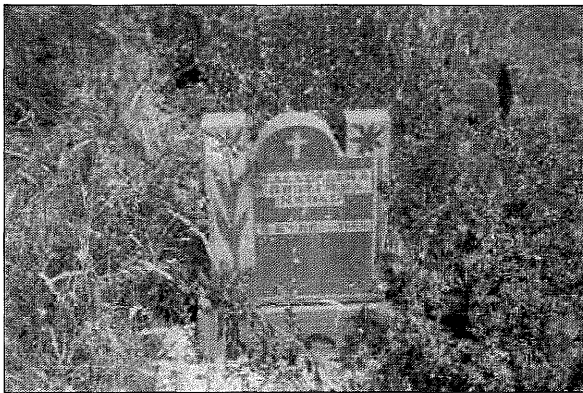


Figure 8: Detail of granite headstone with date - 1958

BRT/002

Possible stone walling located immediately in the proposed new road alignment. Due to dense vegetation and tall grass cover the exact layout and organisation of the features could not be determined. No material culture was found to place the site into context. The stone features may also be remains of stone cairns built during clearing of fields for agriculture. The site seems disturbed by more recent farming activities in the area.

FIELD RATING	Generally protected B: Field rating IV C
CONTEXT	Unknown
RISKS, THREATS, IMPACT	The site falls within the immediate footprint of the proposed new road and will be directly impacted on. Risks include the accidental discovery of burials and other subsurface heritage resources.
RECOMMENDATION	A watching brief during the initial earthmoving and/or excavations should take place.

BRT/003

A cluster of at least 10 stone cairns associated with site BRT/002, possibly indicating old graves. The features are situated in the proposed new road alignment. Due to dense vegetation and tall grass cover the exact layout and organisation of the features could not be determined. No material culture was found to place the site into context. The stone features may also be remains of stone cairns built during clearing of fields for agriculture. The site seems disturbed by more recent farming activities in the area.

FIELD RATING	Generally protected B: Field rating IV C – however if the features are graves the field rating must be Local: Grade III based on cultural significance in terms of local customs and practices where burials form a focal point in ancestral worship.
CONTEXT	Unknown
RISKS, THREATS, IMPACT	The site falls within the immediate footprint of the proposed new road and will be directly impacted on. Risks include the accidental discovery of burials and other subsurface heritage resources.
RECOMMENDATION	A watching brief during the initial earthmoving and/or excavations should take place.

BRT/004

The site is situated on top of a low hill approximately 50 m north of the proposed new road. It is characterised by very dense nearly impenetrable vegetation. Stonewalling is present and includes foundation walls, outer perimeter walls and activity areas. The occurrence of *Agave sisalana* tentatively dates this site to 1970 onwards, when sisal was introduced on a massive scale as a cash crop in former homelands (pers. com. Prof. J Kriel). Due to dense vegetation and tall grass cover the exact layout and organisation of the features could not be determined. There is a very high probability of graves occurring in and around the site. No material culture was found that places the site into context.

FIELD RATING	Generally protected B: Field rating IV C
CONTEXT	Primary
RISKS, THREATS, IMPACT	No direct impact could be identified; however, the site may be threatened by indirect impact resulting from activities associated with the proposed new road.
RECOMMENDATION	A watching brief should be implemented if earthmoving and/or excavations take place close to this site.



Figure 9: General view of site BRT/004. Note the *Agave sisalana* and dense *Dichrostachys cinerea* cover.

BRT/005

The site is similar to site BRT/004 and also characterised by very dense nearly impenetrable vegetation. It is situated approximately 150 m southeast of the proposed new road. Stonewalling is present but has been damaged and/or destroyed in places where a jeep track cuts through. Unlike site BRT/004 little *Agave sisalana* is present, but the site is dense with *Dichrostachys cinerea*, indicating possible overgrazing and utilisation. No material culture was found to place the site in an historical context. Due to dense vegetation and tall grass cover the exact layout and organisation of the features could not be determined. There is a very high probability of graves occurring in and around the site. No material culture was found to place the site into context.

FIELD RATING	Generally protected B: Field rating IV C
CONTEXT	Primary
RISKS, THREATS, IMPACT	No immediate, direct impact could be identified; however, the site may be threatened by indirect impact resulting from activities associated with the proposed new road.
RECOMMENDATION	A watching brief should be implemented if earthmoving and/or excavations take place close to this site.

SITE MAPS

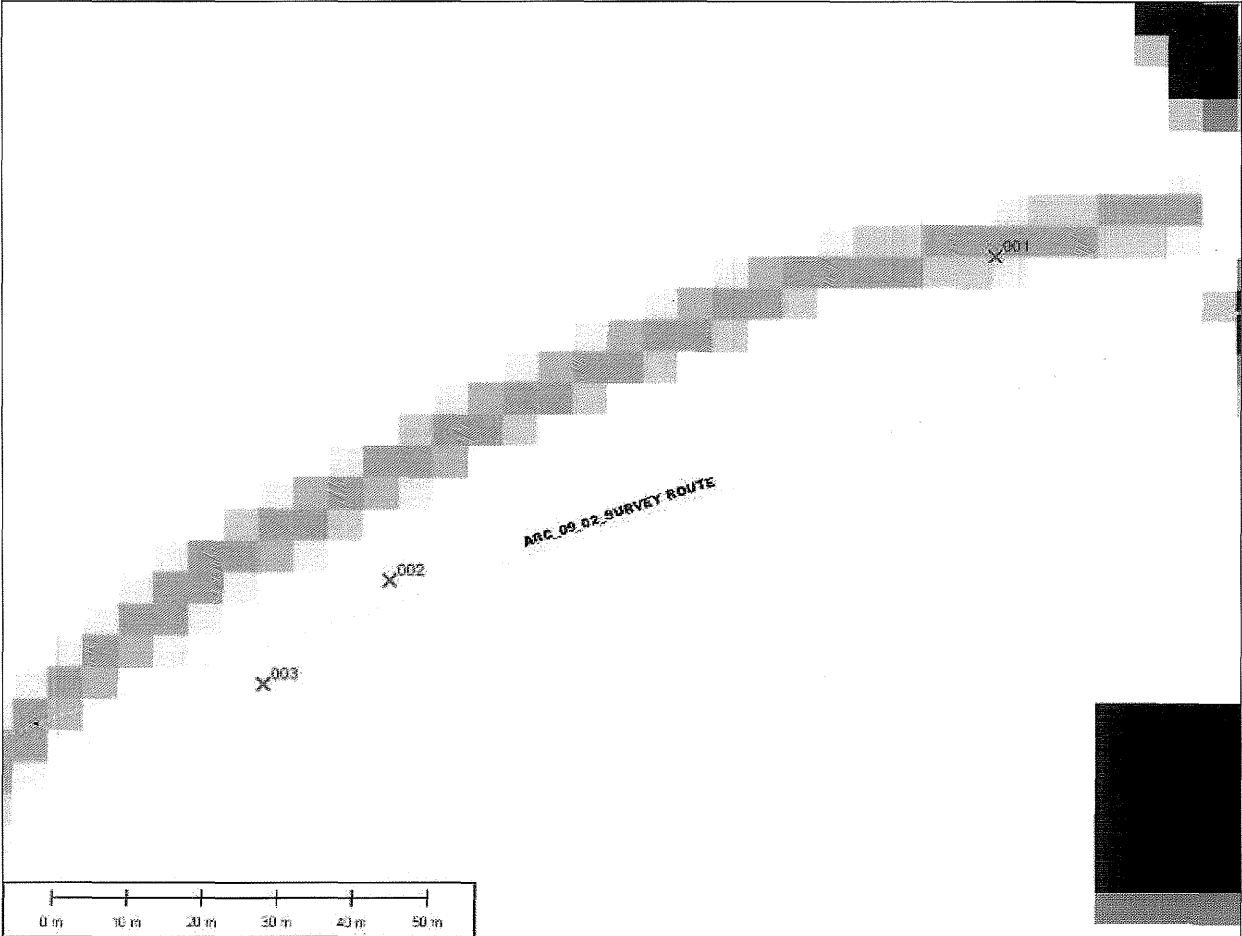


Figure 10: Sites 001 to 003 indicated on 1:50 000 map 2430 CB in relation to proposed road upgrade.

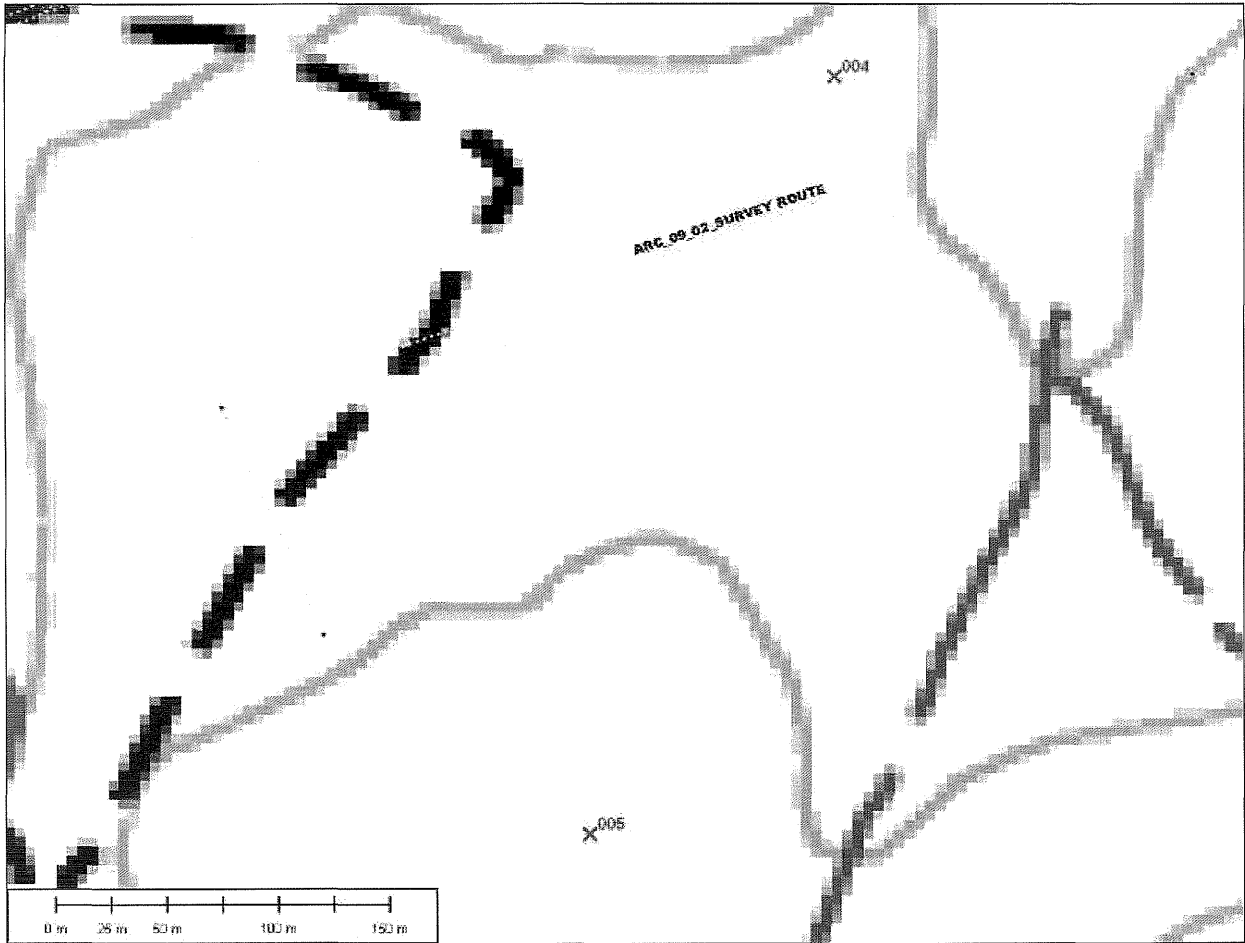


Figure 11: Sites 004 and 005 indicated on 1:50 000 map 2430 CB in relation to proposed road upgrade.

BIBLIOGRAPHY AND REFERENCES

ANNEXURE A: DESCRIPTION OF FIELD RATINGS

The following is taken from Section 7 (K) of the 2006 SAHRA Minimum Standards: Archaeological and Palaeontological Components for Impact Assessment Reports.

While grading of sites remains the responsibility of SAHRA, recommended Field Ratings of sites are given in order to comply with section 38 of the NHRA. The Field Ratings used in this report is based on the following:

- a. National: This site is considered to be of Field Rating/Grade I significance and should be nominated as such (mention should be made of any relevant international ranking);
- b. Provincial: This site is considered to be of Field Rating/Grade II significance and should be nominated as such;
- c. Local: this site is of Field Rating/Grade IIIA significance. The site should be retained as a heritage register site (High significance) and so mitigation as part of the development process is not advised;
- d. Local: this site is of Field Rating/Grade IIIB significance. It could be mitigated and (part) retained as a heritage register site (High significance);
- e. Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);
- f. Generally Protected B (Field Rating IV B): this site should be recorded before destruction (generally Medium significance);
- g. Generally Protected C (Field Rating IV C): this site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (generally Low significance).