



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**AN ARCHAEOLOGICAL IMPACT ASSESSMENT REPORT FOR THE PROPOSED
OPENCAST OPERATIONS WINTERVLED 293KT, HENDRIKPLAATS 281KT AND
ONVERWACHT 292KT IN THE FETAKGOMO TUBATSE LOCAL MUNICIPALITY
IN LIMPOPO PROVINCE**

For:

Segope Water & Environmental Services

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REPORT NO.: AE02418V

By:

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12 April 2024

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SUBMISSION OF REPORT

Please note that the South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report.

It is the client's responsibility to do the submission via the SAHRIS System on the SAHRA website. Arrangements can however be made if necessary.

Clients are advised not to proceed with any action before receiving the necessary comments from SAHRA.

DISCLAIMER

Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites is as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Access to certain areas is also sometimes limited. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof. Any additional sites identified can be visited and assessed afterwards and the report amended, but only upon receiving an additional appointment.

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EXECUTIVE SUMMARY

Archaetnos cc was requested by Segope Water & Environmental Services to conduct an Archaeological Impact Assessment (AIA) for the Modikwa Platinum Mine (MPM) proposed South 3 Project.

Modikwa Platinum Mines (MPM) intends to exploit Opencast Mining on Winterveld Farm. MPM located approximately 20 km north-west of Steelpoort adjacent to the Polokwane Road (R37) in the Fetakgomo Tubatse Local Municipality in the Limpopo Province. The Mine lies within the Moopetsi and Tubatsane River Catchment area in the B41J Quaternary Catchment Area. The client indicated the area to be surveyed. It was surveyed via foot and off-road vehicle.

A survey of literature was undertaken in order to obtain background information regarding the area. The field survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites, and features of cultural significance in the area of proposed development.

The following is recommended:

1. Site no. 1, 5 and 9 are grave sites and have a field rating of Local Grade IIIB. These sites must be mitigated and should be included in the heritage register. The grave sites are inside of the area of direct impact, and therefore Option 2 is recommended for all of these sites.

This option is the total exhumation of the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the development activities. For this, a specific procedure should be followed which includes social consultation. For graves younger than 60 years only, an undertaker is needed. For those older than 60 years and unknown graves, an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

2. Site no. 2 and 3 are Late Iron Age/Early historical homestead and received a field rating of Local Grade IIIB: The sites should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as the sites fall either within the mining road buffer zone (site no. 2), or the site is too close to the mining activities (site no. 3).

Mitigation for Site no. 2 and 3 would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

3. Site no. 4, 6 and 8 are Historical homesteads and received a field rating of Local Grade IIIC. The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. This is needed as the site will be destroyed during the construction of the road or the mining activities.
4. Site no. 7 and 10 are also Historical homestead and received a field rating of Local Grade IIIB: The sites should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as both sites lies within the proposed mining zone and will be affected by the development.

Mitigation would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

5. The proposed project may continue, but only after receiving comments from SAHRA and implementing the mitigation measures indicated above.
6. It should be noted that the subterranean presence of archaeological and/or historical sites, features or artefacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, work on site cease immediately and a qualified archaeologist be called in to investigate the occurrence.
7. In this regard the following 'Chance find Procedure' should be followed:
 - *Upon finding any archaeological or historical material all work at the affected area must cease.*
 - *The area should be demarcated to prevent any further work there until an investigation has been completed.*
 - *An archaeologist should be contacted immediately to provide advice on the matter.*
 - *Should it be a minor issue, the archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.*
 - *SAHRA's APM Unit may also be notified.*
 - *If needed the necessary, permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.*
 - *The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.*
 - *Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.*

It is also important to take cognizance that it is the client's responsibility to do the submission of this report via the SAHRIS System on the SAHRA website. No work on site may commence before receiving the necessary comments from SAHRA.

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CURRICULUM VITAE
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TERTIARY EDUCATION

- BA 1986, University of Pretoria
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria
- MA Archaeology 1992, University of Pretoria
- Post-Graduate Diploma in Museology 1993 (cum laude), University of Pretoria
- Diploma Tertiary Education 1993, University of Pretoria
- DPhil Archaeology 2001, University of Pretoria.
- MA Cultural History 1998 (cum laude), University of Stellenbosch
- Management Diploma 2007 (cum laude), Tshwane University of Technology
- DPhil History 2010, University of Stellenbosch

EMPLOYMENT HISTORY

Current:

- *August 2007* – present – Managing Director for Archaetnos Archaeologists.
- *Since 2012*: Archaeologist and heritage official, Department of Environment and Agriculture, City of Tshwane
- *Since 2015*: Extraordinary Professor of History at the North-West University

Previous:

- *1988-1991*: Fort Klapperkop Military Museum - Researcher
- *1991-1999*: National Cultural History Museum. Work as Archaeologist, as well as Curator/Manager of Pioneer Museum (1994-1997)
- *1999-2002*: City Council of Pretoria. Work as Curator: Fort Klapperkop Heritage Site and Acting Deputy Manager Museums and Heritage.
- *2002-2007*: City of Tshwane Metropolitan Municipality. Work as Deputy Manager Museums and Heritage.
- *August 2007* – present – Managing Director for Archaetnos Archaeologists.
- *1988-2003*: Part-time lecturer in Archaeology at the University of Pretoria and a part-time lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.
- *2014-2015*: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- *2020-2022*: Part-time lecturer in History at the North-West University

OTHER

- NRF C2 Research rating.
- Has published 42 peer-reviewed and 56 popular articles.
- Has written 13 books/book contributions/conference proceedings.
- Has been the author and co-author of over 1 118 unpublished reports on cultural resources surveys and archaeological work.
- Has delivered more than 84 papers and lectures at national and international conferences.
- Member of SAHRA Council for 2003 – 2006.
- Member of the South African Academy for Science and Art.
- Member of Association for South African Professional Archaeologists. (Council member since 2022).
- Member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014; 2018-2021).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Editorial member of various scientific journals.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.
- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2024).

A list of reports can be viewed on www.archaetnos.co.za.

DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management.



Signed:

Date: 12 April 2024

LIST OF ACRONYMS:

AIA – Archaeological Impact Assessment
CMP – Cultural Management Plan
EAP – Environmental Assessment Practitioner
EIA – Environmental Impact Assessment
HIA – Heritage Impact Assessment
PIA – Palaeontological Impact Assessment

1. INTRODUCTION

Archaetnos cc was requested by Segope Water & Environmental Services to conduct an Archaeological Impact Assessment (AIA) for the Modikwa Platinum Mine (MPM) proposed South 3 Project. MPM intends to exploit Opencast Mining on Winterveld Farm and is located approximately 20 km north-west of Steelpoort adjacent to the Polokwane Road (R37) in the Fetakgomo Tubatse Local Municipality in the Limpopo Province (Figure 1). The Mine lies within the Moopetsi and Tubatsane River Catchment area in the B41J Quaternary Catchment Area. The client indicated the area to be surveyed (Figure 2-3). It was surveyed via foot and off-road vehicle.

A survey of literature was undertaken in order to obtain background information regarding the area. The field survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites, and features of cultural significance in the area of proposed development.

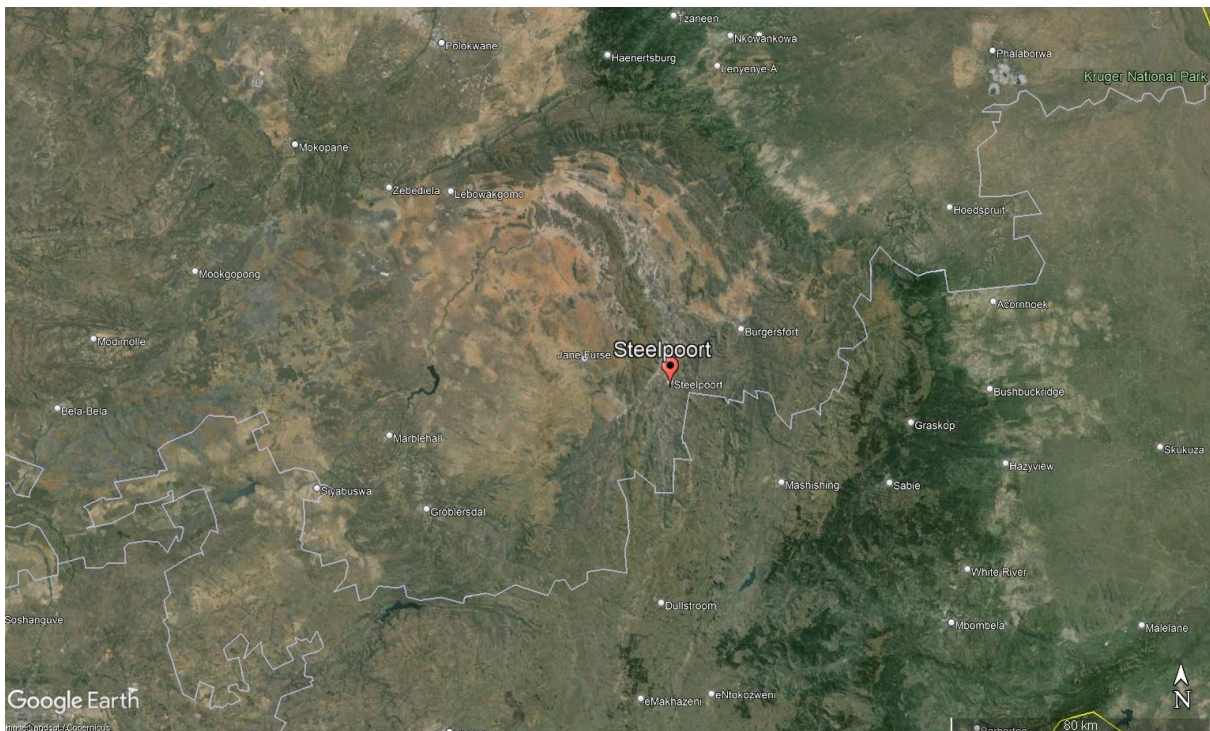


Figure 1: Location of Steelpoort in the Limpopo Province.



Figure 2: Location of the proposed development in relation to Steelpoort.



Figure 3: View of the proposed layout of the mining development.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located in the surveyed area (see Appendix A).
2. Study background information on the area to be developed.
3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, and aesthetic and tourism value (see Appendix B).
4. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
5. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
6. Review applicable legislative requirements.

3. CONDITIONS & ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
2. The significance of the sites, structures and artefacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural

significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).

4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
5. All recommendations are made with full cognizance of the relevant legislation.
6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that this report should make it clear how to handle any other finds that might occur.
7. The vegetation cover at the project area was medium in height and was dense in a lot of areas. The area had an open under footing. Therefore, both the horizontal and the vertical archaeological visibility were affected negatively where the vegetation was dense.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

4.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artefacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Graveyards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate (see Appendix D) includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. The different phases during the HIA process are described in Appendix E.

An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people, and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite;
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites, or
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of 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 or 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, or any equipment which assists in the detection or recovery of metals.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise. Human remains that are less than 60 years old are subject to provisions of the **National Health Act (Act 61 of 2003)** and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Exhumations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place. Human remains can only be handled by a registered undertaker, or an institution declared under the **National Health Act (Act 61 of 2003)**.

4.2 The National Environmental Management Act

This act (Act 107 of 1998) states that a survey and evaluation of cultural resources must be done in areas where development projects that will change the face of the environment will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

5. THE INTERNATIONAL FINANCE CORPORATIONS' PERFORMANCE STANDARD FOR CULTURAL HERITAGE

This standard recognizes the importance of cultural heritage for current and future generations. It aims to ensure that clients protect the cultural heritage in the course of their project activities. This is done by clients abiding to the law and having heritage surveys done in order to identify and protect cultural heritage resources via field studies and the documentation of such resources. These need to be done by competent professionals (e.g. archaeologists and cultural historians). Possible chance finds, encountered during the project development, also needs to be managed by not disturbing it and by having it assessed by professionals.

Impacts on the cultural heritage should be minimized. This include the possible maintenance of such sites in situ, or when impossible, the restoration of the functionality of the cultural heritage in a different location. When cultural historical and archaeological artefacts and structures need to be removed it should be done by professionals and by abiding to the applicable legislation. The removal of cultural heritage resources may however only be considered if there are not technically or financially feasible alternatives. In considering the removal of cultural resources, it should be outweighed by the benefits of the overall project to the effected communities. Again, professionals should conduct the work and adhere to the best available techniques.

Consultation with affected communities should be engaged in. This means that access to such communities should be granted to their cultural heritage if this is applicable. Compensation for the loss of cultural heritage should only be given in extraordinary circumstances.

Critical cultural heritage may not be impacted on. Professionals should be used to advise on the assessment and protection thereof. Utilization of cultural heritage resources should always be done in consultation with the effected communities in order to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

6. METHODOLOGY

6.1 Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the area. This includes reports identified on the SAHRIS Database. Sources consulted in this regard are indicated in the bibliography. Three other studies in the

adjacent area was noted with various others having been done in the Steelpoort Valley (SAHRIS database; Archaetnos database).

6.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. One regularly looks a bit wider than the demarcated area, as the surrounding context needs to be taken into consideration.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS)¹, while photographs were also taken where needed. The survey was undertaken by doing a physical survey via off-road vehicle and on foot and covered as much as possible of the area to be studied (Figure 4).

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. In this instance the area with found to be reasonably disturbed. The vegetation cover was mostly medium in height and was dense in a lot of areas. The area had an open under footing. The horizontal and vertical archaeological visibility was influenced negatively by the vegetation. The Modikwa mining extension consisted of a 177 Ha development and 6.5km road, and the survey took 10 hours to complete.

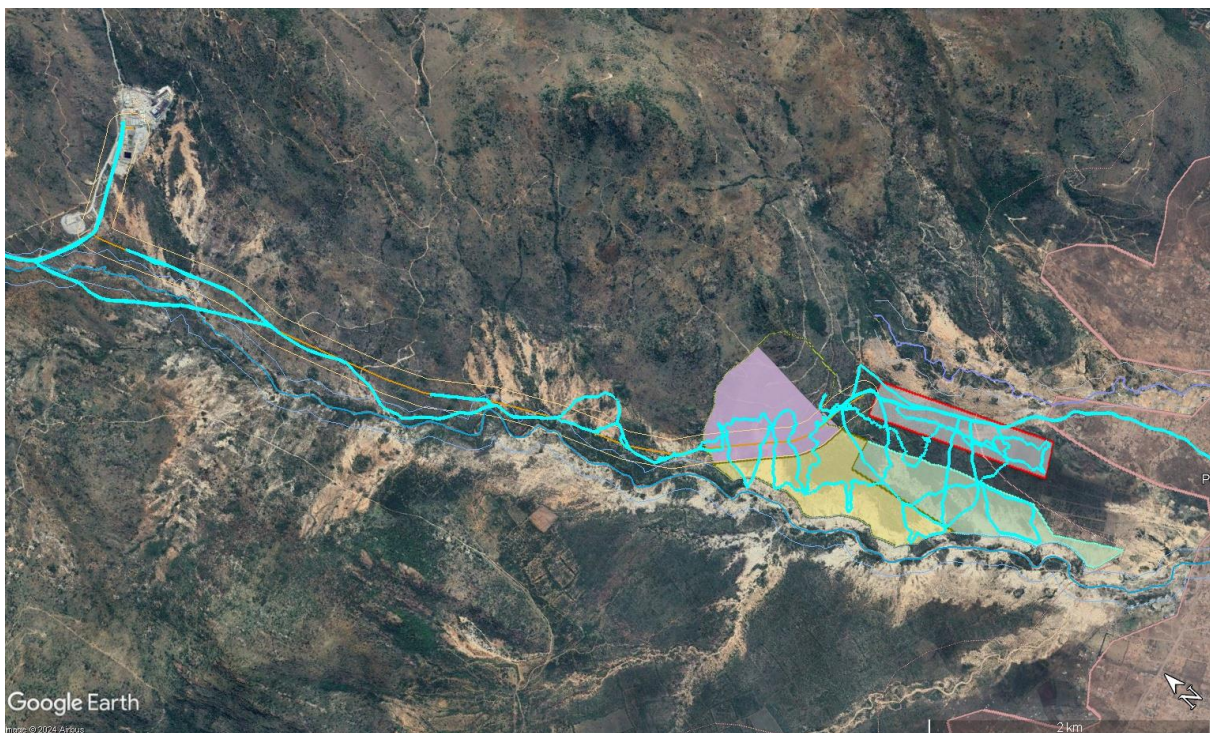


Figure 4: Track route of the survey in blue.

¹ A Garmin Oregon 550 with an accuracy factor of a few meters.

6.3 Oral histories and social consultation

People from local communities are interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

6.4 Documentation

All sites, objects, features, and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the Global Positioning System (GPS). The information was added to the description in order to facilitate the identification of each locality.

6.5 Evaluation of Heritage sites

The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) using the following criteria:

- 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.

7. DESCRIPTION OF THE ENVIRONMENT

The surveyed area is largely disturbed due to past human activities, which took the form of animal husbandry and agriculture (Figure 5). Vegetation in the surveyed area varies in height, low in some areas and high in others (Figure 6-7) The areas where the vegetation growth was higher and denser, consist largely of pioneer plants. These are indications that these areas were disturbed in the recent past.

An existing dirt road is also present in the surveyed area (Figure 8). The proposed development will include a mining road that will connect this new mining area to an existing plant and infrastructure (Figure 9-11). There are also signs of illegal mining taking place on the mountain side of the surveyed area (Figure 12)

The topography of the area has slopes down from the northeast to the southwest towards a river catchment and is located at the foot of a mountain (Figure 13). There are also areas where the water erosion has degraded the area (Figure 14).



Figure 5: View of old agricultural field in the surveyed area.

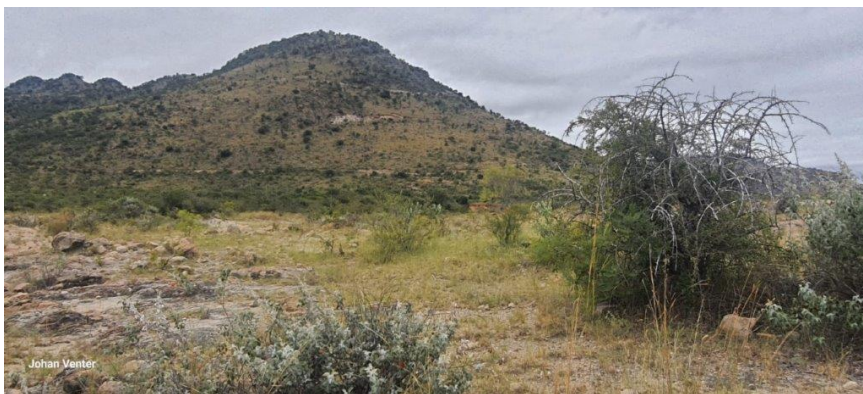


Figure 6: View of low vegetation growth in the surveyed area



Figure 7: View of overgrown vegetation growth in the surveyed area.



Figure 8: View of an existing dirt road along the planned mining road.



Figure 9: Start of the planned road at the existing plant area.



Figure 10: View of where the planned mining road will wear off the existing tar road.



Figure 11: View of vegetation growth along the planned mining road.



Figure 12: View of illegal mining activities on the side of the mountain close to the surveyed area.



Figure 13: General view of the surveyed area taken on top of the mountain towards the catchment area.



Figure 14: View of the water erosion within the surveyed area.

8. HISTORICAL CONTEXT

Ten sites of cultural heritage significance were located during the survey. Ten of these falls into the area of direct impact and four sites fall within the buffer zone of the proposed road development. Site no. 3 is located outside, but it falls within 40 m of the proposed development and may be impacted by the planned development. Some

background information is given in order to place the surveyed area in a broad historical and geographical context and to contextualize possible finds that could be unearthed during construction activities.

A large number of heritage reports were completed around the towns of Steelpoort and Burgersfort previously (SAHRA's SAHRIS database; Archaetnos database). The sites found in these reports fall far outside of the impacted area of this survey.

8.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa, the Stone Age can be divided in three periods. It is, however, important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago
Middle Stone Age (MSA) 150 000 – 30 000 years ago
Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

No Stone Age sites are indicated in a historical atlas of this area. However, one needs to take note that this may only indicate a lack of research in the area. The closest Stone Age sites indicated in the atlas is Middle and Late Stone Age sites close to Ohrigstad (Bergh 1999: 5).

Stone Age material was however found during various surveys in and around Burgersfort and Steelpoort. This includes rock paintings at the Two Rivers Mine (Archaetnos database). Higgitt et.al. (2015: 21-22) did identify MSA tools on the farm De Grootboom. These were however found in eroded areas, an indication that it likely were in a secondary context. It also was located towards the south of the current surveyed area.

The environment definitely would be supportive to Stone Age activities. The nearby mountains give natural shelter and material from which to make stone tools. The streams would lure animals to the area and these people would therefore have hunted here. The natural rock mostly includes shale, which is a soft stone, meaning that there are very limited resources from which to make stone tools. This would most likely be limited to the mountain tops. One should therefore be on the lookout for stone tools during construction work on the site.

In fact, some stone tools were found during this survey in the area (Figure 15-16). These date to the Middle and Late Stone Age but were found out of context along the river or in the eroded area.



Figure 15 MSA stone tools found along an eroded river catchment.



Figure 16: MSA and LSA stone tools found in an eroded spot next to the existing dirt road.

8.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.

Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however, indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.

Middle Iron Age (MIA) 900 – 1300 A.D.

Late Iron Age (LIA) 1300 – 1840 A.D.

The nearest known Early Iron Age site to the surveyed area is the sites at Lydenburg and Klingbeil to the south-east of the surveyed area. A large number of Late Iron Age sites have previously been identified in an area roughly stretching between Lydenburg, Nelspruit and Badplaas (Bergh 1999: 6-7).

Other sites have also been identified by Archaetnos during surveys in the larger area (Archaetnos database). During this survey two Iron Age sites (Site no. 2 and 3) were identified, and Iron Age pot shards were also found next to the dirt road (Figure 17).



Figure 17: Pot shards found next to existing dirt road.

The general broader environment around the surveyed area is suitable for Iron Age people. The mountains would give shelter and building material and the valleys good grazing and ample water sources. One would therefore expect that Iron Age people may have utilized the area. The white settlers moved into this environment later on for the same reason.

8.3 Historical Age

The historical age started with the first recorded oral history in the area. It includes the moving into the area of people that were able to read and write. This era is sometimes called the Colonial era or the recent past.

Due to factors such as population growth and a decrease in mortality rates, more people inhabited the country during the recent historical past. Therefore, and because less time has passed, much more cultural heritage resources from this era have been left on the landscape. It is important to note that all cultural resources older than 60 years are potentially regarded as part of the heritage and that detailed studies are needed in order to determine whether these indeed have cultural significance. Factors to be considered include aesthetic, scientific, cultural and religious value of such resources.

It is known that one of the early trade routes passed along the Steelpoort River (Bergh 1999: 9). At the beginning of the 19th century the area was inhabited by the Koni, Tau, Pedi and Roka who are all of Sotho origin. During the Difaquane, in ca.1822, the Ndebele of Mzilikazi entered this area from the south. In 1825 a Zulu group under Zwide attacked the Ndebele here. As a result, these other groups fled to the north. They returned later on (Bergh 1999: 10-11).

None of the early travellers who visited the old Transvaal visited this area. In 1836 the Voortrekker groups of Tregardt and Van Rensburg passed to the west of the Steelpoort River (Bergh 1999: 13-14). The land around Lydenburg, including the Steelpoort River Valley was traded from the Swazi in 1846 and the first white settlers then started farming here (Bergh 1999: 16, 130-132).

Historical structures, such as farmhouses and infrastructure may therefore be found in the area. Such buildings and stone structures have been identified during past surveys in the area (Archaetnos database; Mathoho 2012: 31-33). Signs of the earliest historical mining activities were also identified on adjacent farms (Archaetnos database; Stegmann & Roodt 2012). Many graves from this period are also known from other nearby farms (Archaetnos database; Mathoho 2012: 34). During this survey six of the sites identified are historical in nature but may have been settled earlier.

One Provincial Heritage site is known from the area. The study area is located about 21 km towards the south-southeast of the Tšate Valley site (Figure 18-19). It commemorates the rise of the Pedi Kingdom.

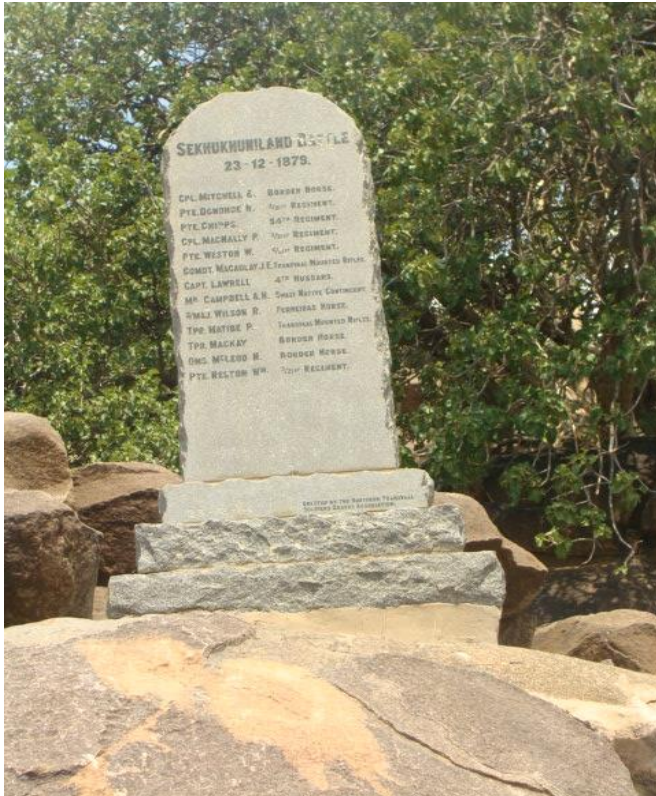


Figure 18: Commemorative stone for British soldiers who died in the war against the Pedi State.



Figure 19: Statue of Chief Sekhukhune.

9. PUBLIC PARTICIPATION

Various stakeholder engagement sessions were conducted as part of the project's inception, including meetings with tribal councils, community leaders, and public participation events. These sessions aimed to address concerns, gather feedback, and involve stakeholders in the decision-making process. All comments received during the PPP and Scoping Phase will be documented and addressed in the Modikwa Platinum Mine (MPM) Scoping report, ensuring transparency and inclusion of stakeholder perspectives in the project's development (Segope Water & Environmental Services 2024:8).

During the Public Participation Process (PPP) notification period done by the mine, several comments were received regarding the proposed mining project. The Mojalefa family raised concerns about graves on the site and requested engagement, leading to a meeting on February 24, 2024, to address the issue. Mr. Amos Mamagase expressed interest in business opportunities within the project, while the Steelpoort Business Forum sought engagement from the mine. Additionally, individuals including Abraham Maroga, Maria Simelane, Flora Maroga, and Christina Makola claimed to have graves on the site, prompting further engagement. Multiple land claimants also came forward seeking involvement (Segope Water & Environmental Services 2024:7-8).



Figure 20: Location of the community church and cemetery mentioned below.

During the site visit the archaeologists met with the community who pointed out the cemetery where their graves are located. In addition, the community also indicated a church that is important to their heritage. These two sites are far from any direct impact of the development (Figure 20-22).



Figure 21: Local community Church, originally build in 1929 and recently rebuild.



Figure 22: Local community Cemetery.

10.DISCUSSION OF HERITAGE RESOURCES IDENTIFIED DURING THE SURVEY

During the current survey, ten sites of cultural heritage significance were identified.

10.1 Site 1 – Cemetery.

This site is about 30 x 14 m in size. The cemetery consists of at least twenty-one graves (Figure 23). The graves are orientated east to west. The cemetery is located 40 m from an existing road and close to Site 2. The site is located within the mining road's buffer zone. The cemetery will be impacted by the proposed development.

The headstones are made of granite, cement, and packed stone. The grave dressings are made of granite, packed stones, and gravel. Only one grave have legible information indicating it is 60 years old. The grave belongs to Ndiyane Linah Simelani who died on 07-02-1964. The remaining twenty graves are unknown.

GPS: 24°42'48.74"S 30° 9'38.18"E



Figure 23: View of the graves located at site 1.

Cultural significance Table: Site 1

<p>A place is considered to be part of the national estate if it has cultural significance because of -</p>	<p>Applicable or not</p>	<p>Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High</p>
<p>Its importance in the community or pattern of South Africa's history</p>	<p>Y</p>	<p>High</p>
<p>Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history</p>	<p>N</p>	<p>-</p>
<p>Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage</p>	<p>Y</p>	<p>High</p>
<p>Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects</p>	<p>N</p>	<p>-</p>
<p>Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group</p>	<p>N</p>	<p>-</p>
<p>Its importance in demonstrating a high degree of creative or technical achievement at a particular period</p>	<p>N</p>	<p>-</p>
<p>Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons</p>	<p>Y</p>	<p>High</p>
<p>Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa</p>	<p>N</p>	<p>-</p>

Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		6-High

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 6 (High) x 4
= 24

The field rating therefore is Local Grade IIIB. It may be mitigated and should be included in the heritage register. Two possibilities exist. The first being to manage the graves *in situ* and the second having it exhumed:

- The first option entails demarcating the graves, implementing a buffer and compiling a management for the sustainable preservation thereof. This should be written by a heritage expert. This usually is done when the graves are in no danger of being damaged, but where there will be a secondary impact due to the activities of the development.
- The second option is to exhume the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the development activities. For this, a specific procedure should be followed which includes social consultation. For graves younger than 60 years only, an undertaker is needed. For those older than 60 years and unknown graves, an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The cemetery is within the mining road’s buffer zone and will be impacted. Therefore, Option 2 is recommended.

10.2 Site 2 – Late Iron Age/Early Historical Structures

Site 2 is the remains of a Late Iron Age/Early historical homestead of about 51 m x 21 m in size. The remains of a low stone wall were found as well as upper grinding stones, and undecorated pot shards (Figure 24-26).

This site is located on the proposed mining road area and will be affected by the development.

GPS: 24°42'47.85"S 30° 9'38.61"E



Figure 24: View of remains of stone walling at site 2.



Figure 25: Upper grinder found at site 2.



Figure 26: Undecorated pot shards found at site 2.

Cultural significance Table: Site 2

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4= Medium/ 5=Medium- High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low-Medium
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Medium

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low-Medium
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low-Medium
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		3-Low-Medium

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 3 (Low-Medium) x 3

= 9

The field rating therefore is Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as the site will be destroyed during the construction of the road. Mitigation would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

10.3 Site 3 – Late Iron Age/Early Historical Structures

Site 3 is the remains of a Late Iron Age/Early historical homestead of about 83 m x 22 m in size and is located on the northeastern foot of a hill. The remains of low stone walling of three structures and a single undecorated pot shard were found (Figure 27 - 29). This site is located 40 m west form the proposed Wast-rock Dump and may be indirectly affected by the mining activities (e.g. dust and movement of heavy vehicles).

GPS: 24°42'57.84"S 30° 9'41.83"E



Figure 27: Low stone walling found at site 3.



Figure 28: View of another stone structures at site 3.



Figure 29: Single undecorated pot shard found at site 3.

Cultural significance Table: Site 3

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4= Medium/ 5=Medium- High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low-Medium
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Medium

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low-Medium
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low-Medium
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		3-Low-Medium

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 3 (Low-Medium) x 2

= 6

The field rating therefore is Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as the site might be impacted by the mining activities. Mitigation would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

10.4 Site 4 – Historical Structures

Site 4 is the remains of a historical homestead of about 25 m x 21 m in size. The remains of a low stone wall, the remains of three mud brick structures were found (Figure 30-31).

This site is located within the buffer zone of the proposed mining road and will be affected by the development.

GPS: 24°42'46.30"S 30° 9'36.23"E



Figure 30: Stone walling at site 4.



Figure 31: Remains of mud brick structure at site 4.

Cultural significance Table: Site 4

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4=Medium/ 5=Medium-High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low-Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Low-Medium
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-

Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		2-Low

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 2 (Low) x 2

= 4

The field rating therefore is Local Grade IIIC: The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. This is needed as the site will be destroyed during the construction of the road.

10.5 Site 5 – Grave

Site 5 is a single grave located about 15 m west from site 4, underneath a tree. The grave lies within the mining road buffer zone. No headstone was visible, but the grave was demarcated by a packed stone border with a single enamel bowl on top of it (Figure 32-33). No markings were visible to identify the owner of the grave.

GPS: 24°42'46.27"S 30° 9'35.69"E



Figure 32: View of the graves located at site 5.



Figure 33: Another view of the grave at site 5.

Cultural significance Table: Site 5

<p>A place is considered to be part of the national estate if it has cultural significance because of -</p>	<p>Applicable or not</p>	<p>Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High</p>
<p>Its importance in the community or pattern of South Africa's history</p>	<p>Y</p>	<p>High</p>

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	High
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	N	-
Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		6-High

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information

- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 6 (High) x 4

= 24

The field rating therefore is Local Grade IIIB. It may be mitigated and should be included in the heritage register. Two possibilities exist. The first being to manage the graves *in situ* and the second having it exhumed:

- The first option entails demarcating the graves, implementing a buffer and compiling a management for the sustainable preservation thereof. This should be written by a heritage expert. This usually is done when the graves are in no danger of being damaged, but where there will be a secondary impact due to the activities of the development.
- The second option is to exhume the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the development activities. For this, a specific procedure should be followed which includes social consultation. For graves younger than 60 years only, an undertaker is needed. For those older than 60 years and unknown graves, an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The grave is within the mining road's buffer zone and will be impacted. Therefore, Option 2 is recommended.

10.6 Site 6 – Historical Structures

Site 6 is the remains of a historical homestead of about 40 m x 20 m in size. The remains of a low stone wall, the remains of one mud brick structure were found (Figure 34-35). The existing dirt road has partially demolished the stone walling.

This site is located within the buffer zone of the proposed mining road and will be affected by the development.

GPS: 24°42'46.25"S 30° 9'32.77"E



Figure 34: Stone walling at site 6.



Figure 35: Remains of mud brick structure at site 6.

Cultural significance Table: Site 6

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4=Medium/ 5=Medium-High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-

Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low-Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Low-Medium
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		2-Low

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity
= 2 (Low) x 2
= 4

The field rating therefore is Local Grade IIIC: The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. This is needed as the site will be destroyed during the mining process.

10.7 Site 7 – Historical Structures

Site 7 is the remains of a historical homestead of about 34 m x 28 m in size. The remains of a low stone wall, the remains of two mud brick structures and stoneware ceramics shard were found (Figure 36-38).

This site is located within the proposed mining area and will be affected by the development.

GPS: 24°42'45.67"S 30° 9'30.50"E



Figure 36: Stone walling at site 7.



Figure 37: Remains of mud brick structure at site 7.



Figure 38: Stoneware ceramic found at site 7.

Cultural significance Table: Site 7

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4= Medium/ 5=Medium- High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low-Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Low-Medium
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		2-Low

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information

- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 2 (Low) x 4

= 8

The field rating therefore is Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as the site might be impacted by the mining activities. Mitigation would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

10.8 Site 8 – Historical Structures

Site 8 is the remains of a historical homestead of about 12 m x 11 m in size. The remains of a mud brick structure (Figure 39).

This site is located within the proposed mining area and will be affected by the development.

GPS: 24°42'42.67"S 30° 9'26.10"E



Figure 39: Remains of mud brick structure at site 8.

Cultural significance Table: Site 8

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4=Medium/ 5=Medium-High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low-Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Low-Medium
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-

Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		2-Low

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 2 (Low) x 2

= 4

The field rating therefore is Local Grade IIIC: The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. This is needed as the site will be destroyed during the mining process.

10.9 Site 9 – Grave

Site 9 is a single grave located about 27 m southwest from site 8. The grave lies within the proposed mining zone. The headstones are made of granite and the grave dressing is made of granite and gravel (Figure 40). The grave is older than 60 years of age and belongs to Matekemishi Sekwala Mabelane who died on 1933-05-11.

GPS: 24°42'43.41"S 30° 9'25.51"E



Figure 40: View of the grave located at site 9.

Cultural significance Table: Site 9

<p>A place is considered to be part of the national estate if it has cultural significance because of -</p>	<p>Applicable or not</p>	<p>Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High</p>
<p>Its importance in the community or pattern of South Africa's history</p>	<p>Y</p>	<p>High</p>
<p>Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history</p>	<p>N</p>	<p>-</p>
<p>Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage</p>	<p>Y</p>	<p>High</p>
<p>Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects</p>	<p>N</p>	<p>-</p>
<p>Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group</p>	<p>N</p>	<p>-</p>
<p>Its importance in demonstrating a high degree of creative or technical achievement at a particular period</p>	<p>N</p>	<p>-</p>
<p>Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons</p>	<p>Y</p>	<p>High</p>
<p>Its strong or special association with the life or work of a person, group or organization of</p>	<p>N</p>	<p>-</p>

importance in the history of South Africa		
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		6-High

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 6 (High) x 4

= 24

The field rating therefore is Local Grade IIIB. It may be mitigated and should be included in the heritage register. Two possibilities exist. The first being to manage the graves *in situ* and the second having it exhumed:

- The first option entails demarcating the graves, implementing a buffer and compiling a management for the sustainable preservation thereof. This should be written by a heritage expert. This usually is done when the graves are in no danger of being damaged, but where there will be a secondary impact due to the activities of the development.
- The second option is to exhume the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the development activities. For this, a specific procedure should be followed which includes social consultation. For graves younger than 60 years only, an undertaker is needed. For those older than 60 years and unknown graves, an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The grave is within the proposed mining zone and will be impacted. Therefore, Option 2 is recommended.

10.10 Site 10 – Historical Structures

Site 10 is the remains of a historical homestead of about 100 m x 30 m in size. The remains of three low stone walls, the remains of a mud brick structure and pot shards (decorated and undecorated) were found (Figure 41-43).

This site lies within the proposed mining zone and will be affected by the development.

GPS: 24°42'32.29"S 30° 9'9.46"E



Figure 41: View of remains of stone walling at site 10.



Figure 42: The remains of a mud brick structure at site 10.



Figure 43: Pot shards (decorated and undecorated) found at site 2.

Cultural significance Table: Site 10

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1=Negligible/ 2=Low/ 3=Low-Medium/ 4=Medium/ 5=Medium-High/ 6=High/ 7=Very High
Its importance in the community or pattern of South Africa's history	Y	Low
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low-Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Low-Medium

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Low
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Low
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		2-Low

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

$$= 2 \text{ (Low)} \times 4$$

$$= 8$$

The field rating therefore is Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as the site might be impacted by the mining activities. Mitigation would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations

11. CONCLUSION AND RECOMMENDATIONS

The heritage survey in the indicated area was completed successfully. Ten sites were identified during the survey (Figure 44-45).



Figure 44: The 10 sites identified during the survey.

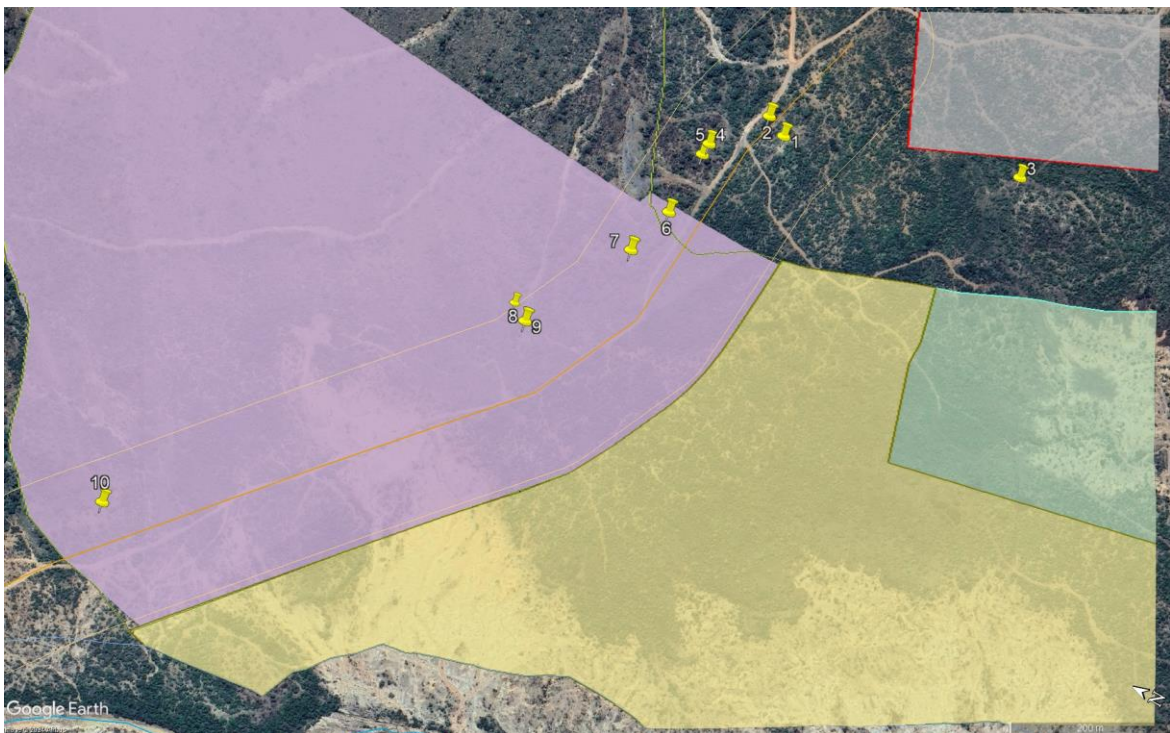


Figure 45: Zoomed in view of identified heritage sites found during the survey.

The following is recommended:

1. Site no. 1, 5 and 9 are grave sites and have a field rating of Local Grade IIIB. These sites must be mitigated and should be included in the heritage register. The grave sites are inside of the area of direct impact, and therefore Option 2 is recommended for all of these sites.

This option is the total exhumation of the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the development activities. For this, a specific procedure should be followed which includes social consultation. For graves younger than 60 years only, an undertaker is needed. For those older than 60 years and unknown graves, an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

2. Site no. 2 and 3 are Late Iron Age/Early historical homestead and received a field rating of Local Grade IIIB: The sites should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as the sites fall either within the mining road buffer zone (site no. 2), or the site is too close to the mining activities (site no. 3).

Mitigation for Site no. 2 and 3 would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

3. Site no. 4, 6 and 8 are Historical homesteads and received a field rating of Local Grade IIIC. The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. This is needed as the site will be destroyed during the construction of the road or the mining activities.
4. Site no. 7 and 10 are also Historical homestead and received a field rating of Local Grade IIIB: The sites should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is required as both sites lies within the proposed mining zone and will be affected by the development.

Mitigation would involve a phase 2 heritages assessment, which would include mapping, collecting of artefacts surface finds and excavations.

5. The proposed project may continue, but only after receiving comments from SAHRA and implementing the mitigation measures indicated above.

6. It should be noted that the subterranean presence of archaeological and/or historical sites, features or artefacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, work on site cease immediately and a qualified archaeologist be called in to investigate the occurrence.
7. In this regard the following 'Chance find Procedure' should be followed:
- *Upon finding any archaeological or historical material all work at the affected area must cease.*
 - *The area should be demarcated to prevent any further work there until an investigation has been completed.*
 - *An archaeologist should be contacted immediately to provide advice on the matter.*
 - *Should it be a minor issue, the archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.*
 - *SAHRA's APM Unit may also be notified.*
 - *If needed the necessary, permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.*
 - *The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.*
 - *Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.*

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APPENDIX A

DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artefacts, found in a single location.

Structure: A permanent building found in isolation, or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artefact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

- Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.
- Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period
- Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.
- Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also, any important object found out of context.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of high importance. Also, any important object found within a specific context.

Heritage significance:

- Grade I Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

National Grade I significance	should be managed as part of the national estate
Provincial Grade II significance	should be managed as part of the provincial estate
Local Grade IIIA	should be included in the heritage register and not be mitigated (high significance)
General protection A (IV A)	site should be mitigated before destruction (high/medium significance)
General protection B (IV B)	site should be recorded before destruction (medium significance)
General protection C (IV C)	phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D

PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – grade I and II

Protected areas - an area surrounding a heritage site

Provisional protection – for a maximum period of two years

Heritage registers – listing grades II and III

Heritage areas – areas with more than one heritage site included

Heritage objects – e.g. archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E

HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or scoping phase – establishment of the scope of the project and terms of reference.
2. Baseline assessment – establishment of a broad framework of the potential heritage of an area.
3. Phase I impact assessment – identifying sites, assessing their significance, making comments on the impact of the development and making recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – if there is no likelihood that any sites will be impacted.
5. Phase II mitigation or rescue – planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III management plan – for rare cases where sites are so important that development cannot be allowed.