

## **Appendix D**

**Prepared for:  
Ethical Exchange**

**A BASIC HERITAGE ASSESSMENT FOR VARIOUS PORTIONS  
OF THE FARM BOSCHPOORT IN THE RUSTENBURG  
DISTRICT, NORTH WEST PROVINCE**

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## **ACRONYMS AND ABBREVIATIONS**

AIA Archaeological Impact Assessment  
ASAPA Association of South African Professional Archaeologists  
CRM Cultural Resource Management  
EAP Environmental Assessment Practitioner  
ECO Environmental Control Officer  
EIA Environmental Impact Assessment  
EMP Environmental Management Plan  
EPS Environmental Performance Standards  
EIA Early Iron Age  
ESA Early Stone Age  
GPS Global Positioning System  
HIA Heritage Impact Assessment  
IEM Integrated Environmental Management  
I & Aps Interested and Affected Parties  
LIA Late Iron Age  
LSA Late Stone Age  
MIA Middle Iron Age  
MPRDA Mineral and Petroleum Resources Development Act, 28 of 2002  
MSA Middle Stone Age  
NEMA National Environmental Management Act, 107 of 1998  
NEMBA National Environmental Management: Biodiversity Act, 10 of 2004  
NEMAQA National Environmental Management: Air Quality Act, 39 of 2004  
NEMWA National Environmental Management: Waste Act, 59 of 2008  
NHRA National Heritage Resources Act, 25 of 1999  
NWA National Water Act, 36 of 1998  
OSHA Occupational Health and Safety Act, 85 of 1993  
PHRA Provincial Heritage Resource Agency  
RSA Republic of South Africa  
SAHRA South African Heritage Resources Agency  
SAHRIS  
ToR Terms of Reference

## **TERMINOLOGY**

Terms that may be used in this report are briefly outlined below:

- **Conservation:** The act of maintaining all or part of a resource (whether renewable or non-renewable) in its present condition in order to provide for its continued or future use. Conservation includes sustainable use, protection, maintenance, rehabilitation, restoration and enhancement of the natural and cultural environment.
- **Cultural resource management:** A process that consists of a range of interventions and provides a framework for informed and value-based decision-making. It integrates professional, technical and administrative functions and interventions that impact on cultural resources. Activities include planning, policy development, monitoring and assessment, auditing, implementation, maintenance, communication, and many others. All these activities are (or will be) based on sound research.
- **Cultural resources:** A broad, generic term covering any physical, natural and spiritual properties and features adapted, used and created by humans in the past and present. Cultural resources are the result of continuing human cultural activity and embody a range of community values and meanings. These resources are non-renewable and finite. Cultural resources include traditional systems of cultural practice, belief or social interaction. They can be, but are not necessarily identified with defined locations.
- **Heritage resources:** The various natural and cultural assets that collectively form the heritage. These assets are also known as cultural and natural resources. Heritage resources (cultural resources) include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

- In-Situ Conservation: The conservation and maintenance of ecosystems, natural habitats and cultural resources in their natural and original surroundings.
- Iron Age: Refers to the last two millennia and 'Early Iron Age' to the first thousand years AD. 'Late Iron Age' refers to the period between the 16<sup>th</sup> century and the 19<sup>th</sup> century and can therefore include the Historical Period.
- Maintenance: Keeping something in good health or repair.
- Pre-historical: Refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the Project Area, to the first appearance or use of 'modern' Western writing brought to the Eastern Highveld by the first Colonists who settled here from the 1840's onwards.
- Preservation: Conservation activities that consolidate and maintain the existing form, material and integrity of a cultural resource.
- Recent past: Refers to the 20<sup>th</sup> century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may, in the near future, qualify as heritage resources.
- Protected area: A geographically defined area designated and managed to achieve specific conservation objectives. Protected areas are dedicated primarily to the protection and enjoyment of natural or cultural heritage, to the maintenance of biodiversity, and to the maintenance of life-support systems. Various types of protected areas occur in South Africa.
- Reconstruction: Re-erecting a structure on its original site using original components.

- Replication: The act or process of reproducing by new construction the exact form and detail of a vanished building, structure, object, or a part thereof, as it appeared at a specific period.
- Restoration: Returning the existing fabric of a place to a known earlier state by removing additions or by reassembling existing components.
- Stone Age: Refers to the prehistoric past, although Late Stone Age people lived in South Africa well into the Historical Period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).
- Sustainability: The ability of an activity to continue indefinitely, at current and projected levels, without depleting social, financial, physical and other resources required to produce the expected benefits.
- Translocation: Dismantling a structure and re-erecting it on a new site using original components.
- Project Area: refers to the area (footprint) where the developer wants to focus its development activities. A particular demarcated area in this report is referred to as the Fokeng project or study area.
- Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types and ranges of heritage resources in any given Project Area (excluding paleontological remains as these studies are done by registered and accredited palaeontologists).
- Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and

dwelling; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of human remains and the relocation of graveyards, etc. Phase II work involves permitting processes, requires the input of different specialists and the co-operation and approval of the SAHRA.

## **EXECUTIVE SUMMARY**

This document contains the report on a Phase I Heritage Impact Assessment (HIA) study which was done according to Section 38 of the National Heritage Resources Act (No 25 of 1999) for proposed prospecting activities to be conducted on Portions 12, 26 and 33 of the farm Boschpoort 248JQ in the Rustenburg Local Municipality of the North West Province.

The aims of the Phase I HIA study were the following:

- To determine if any of the types and ranges of heritage resources (the 'national estate') as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) do occur in the project area and, if so, to establish the significance of these heritage resources.
- To establish the level of significance of any possible impact on these heritage resources.
- To propose appropriate mitigation measures for those types and ranges of heritage resources that may be affected by the proposed mine development project.

The Phase I HIA survey for the project area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- Two intact stone walled sites towards the centre of the project area but more than 1 km away from the area earmarked for prospecting drilling work.

These two stone walled sites were geo-referenced and mapped (Table 1; Figure 9). Their significance is indicated as well as the significance of impact on these heritage resources (Table 2, 3 & 4). Remains of stone walls which used to be part of settlements destroyed by mining activities were not recorded as they have no significance any longer.

### **The significance of the heritage resources**

The two stone walled sites on Portions 12 and 33 are most likely historically and culturally linked with the Tswana and local Fokeng (Bafokeng) people who today occupy the study area. These settlements date from the last five hundred years, have cultural and historical connections with the Fokeng and qualify as archaeological sites which are protected by the National Heritage Resources Act (No 25 of 1999).

The significance of these remains is rated as of high significance. This rating is based on the use of two rating (grading) schemes, namely (Tables 2 & 3):

- A scheme of criteria which qualifies places and objects as part of the national estate as they have cultural significance or other special value (outlined in Section 3 of the NHRA [Act No 25 of 1999] (see Box 1) (Table 2).
- A field rating scheme according to which heritage resources are graded in three tiers (levels) of significance based on the regional occurrence of heritage resources (Section 7 of the NHRA [Act No 25 of 1999] (Table 3).

According to both rating schemes the stone walled settlements in the project area can be rated as of high significance (Tables 2 & 3).

### **Possible impact on the stone walled sites**

The two stone walled sites are located in the central part of the project area where no prospecting activities will take place. The two sites therefore need not to be affected by the proposed prospecting activities.

### **The significance of the impact on the stone walled sites**

The significance of the impact of the proposed prospecting activities on the stone walled sites is very low (Table 4).

### **Managing the stone walled sites**

The stone walled sites are located at a considerable distance from the proposed prospecting activities and need not to be affected by these activities. However, to ensure that no accidental or unplanned activities may lead to damage or destruction of the sites it is recommend that both sites be demarcated with red cautionary tape and sign posts bearing the following inscription: 'Keep out. Archaeological sites are protected by the National Heritage Resources Act (No 25 of 1999). Damage to site may lead to prosecution'.

### **Disclaimer**

This heritage survey may have missed heritage resources as a result of various reasons (Part 1.2, 'Assumptions and limitations'). If any heritage resources of significance is exposed during prospecting or any consequent developmental activities the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

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# **1 INTRODUCTION**

## **1.1 Background and context**

An application for a prospecting right for dimension stone (gabbro-norite) on Portions 12, 26 and 33 of the farm Boschpoort 284JQ in the Rustenburg Local Municipality in the North-West Province has been launched. Borehole drilling is planned in the southern parts of the farm (Figure 1).

This study therefore comprises a heritage survey and assessment according to Section 38 of the National Heritage Resources Act (No 25 of 1999) for the Portions 12, 26 and 33 of the farm Boschpoort 284JQ than may be affected by the proposed drilling activities. The aims with the heritage survey and assessment of the proposed prospecting (project) area were the following:

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) do occur in the project area, and is so.
- To establish the significance of the heritage resources in the project area and the level of significance of any possible impact on any of these heritage resources.
- To propose mitigation measures for those types and ranges of heritage resources that may be affected by the proposed rehabilitation activities.

## **1.2 Assumptions and limitations**

The findings, observations, conclusions and recommendations reached in this report are based on the author's best scientific and professional knowledge and information available at the time of the compilation of the report.

The author has a good understanding of the types and ranges of heritage resources that do occur in and near the project area as he was involved with several heritage impact assessment studies in the area during the last two to three decades (see Part 11, 'Bibliography relating to earlier heritage studies').

The report's findings are based on accepted archaeological survey and assessment techniques and methodologies.

The author preserves the right to modify aspects of the report including the recommendations if and when new information becomes available particularly if this information may have an influence on the reports final results and recommendations.

This heritage survey may have missed heritage resources as a result of tall grass and thick clumps of vegetation at the time of the survey whilst other heritage resources may be located below the surface of the earth and may only be exposed once development commences. It is also possible that heritage resources may simply have been missed as a result of human failure and the extent of the project area.

## **2 DETAILS OF THE SPECIALIST**

**Profession:** Archaeologist, Museologist (Museum Scientists), Lecturer, Heritage Guide Trainer and Heritage Consultant

**Qualifications:**

BA (Archaeology, Anthropology and Psychology) (UP, 1976)

BA (Hons) Archaeology (distinction) (UP, 1979)

MA Archaeology (distinction) (UP, 1985)

D Phil Archaeology (UP, 1989)

Post Graduate Diploma in Museology (Museum Sciences) (UP, 1981)

**Work experience:**

Museum curator and archaeologist for the Rustenburg and Phalaborwa Town Councils (1980-1984)

Head of the Department of Archaeology, National Cultural History Museum in Pretoria (1988-1989)

Lecturer and Senior lecturer Department of Anthropology and Archaeology, University of Pretoria (1990-2003)

Independent Archaeologist and Heritage Consultant (2003-)

**Accreditation:** Member of the Association for Southern African Professional Archaeologists. (ASAPA)

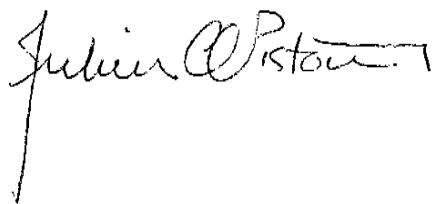
**Summary:** Julius Pistorius is a qualified archaeologist and heritage specialist with extensive experience as a university lecturer, museum scientist, researcher and heritage consultant. His research focussed on the Late Iron Age Tswana and Lowveld-Sotho (particularly the Bamalatji of Phalaborwa). He has published a book on early Tswana settlement in the North-West Province and has completed an unpublished manuscript on the rise of Bamalatji metal workings spheres in Phalaborwa during the last 1 200 years. He has excavated more than twenty LIA settlements in North-West and twelve IA settlements in the Lowveld and has mapped hundreds of stone walled sites in the North-West. He has written a guide for Eskom's field personnel on heritage management. He has published twenty scientific papers in academic journals and several popular articles on archaeology and heritage matters. He collaborated with environmental companies in compiling State of the Environmental Reports for Ekurhuleni, Hartebeespoort and heritage management plans for the Magaliesberg and Waterberg. Since acting as an independent consultant he has done approximately 800 large to small heritage impact

assessment reports. He has a longstanding working relationship with Eskom, Rio Tinto (PMC), Rio Tinto (EXP), Impala Platinum, Angloplats (Rustenburg), Lonmin, Sasol, PMC, Foskor, Kudu and Kelgran Granite, Bafokeng Royal Resources, Pilanesberg Platinum Mine (PPM) etc. as well as with several environmental companies.

### 3 DECLARATION OF INDEPENDENCE

I, Dr Julius CC Pistorius declare the following:

- I act as an independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even, if this result in views and findings that are not favourable for the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialists report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the applications;
- I will comply with the Act, Regulations and other applicable legislation;
- I will consider, to the extent possible, the matters listed in Regulation 13;
- I understand to disclose to the applicant and the competent authority all material information in my possession
- All the particulars furnished by me in this form are true and correct that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority; and
- I realise that a false declaration is offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



**1 February 2019**

## **4 LEGAL FRAMEWORK**

South Africa's heritage resources ('national estate') are protected by international, national, provincial and local legislation which provides regulations, policies and guidelines for the protection, management, promotion and utilization of heritage resources. South Africa's 'national estate' includes a wide range of various types of heritage resources as outlined in Section 3 of the National Heritage Resources Act (NHRA, Act No 25 of 1999) (see Box 1).

At a national level heritage resources are dealt with by the National Heritage Council Act (Act No 11 of 1999) and the National Heritage Resources Act (NHRA, Act No 25 of 1999). According to the NHRA (Act No 25 of 1999) heritage resources are categorized using a three-tier system, namely Grade I (national), Grade II (provincial) and Grade III (local) heritage resources.

At the provincial level, heritage legislation is implemented by Provincial Heritage Resources Agencies (PHRA's) which apply the National Heritage Resources Act (Act 25 of 1999) together with provincial government guidelines and strategic frameworks. Metropolitan or Municipal (local) policy regarding the protection of cultural heritage resources is also linked to national and provincial acts and is implemented by the South African Heritage Resources Agency (SAHRA) and the Provincial Heritage Resources Agencies (PHRA's).

### **4.1 Legislation relevant to heritage resources**

Legislation relevant to South Africa's national estate includes the following:

- National Environmental Management Act (NEMA) Act 107 of 1998
- Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
- National Heritage Resources Act (NHRA) Act 25 of 1999
- Development Facilitation Act (DFA) Act 67 of 1995

**Box 1: Types and ranges of heritage resources (the national estate) as outlined in Section 3 of the National Heritage Resources Act, 1999 (No 25 of 1999).**

The National Heritage Resources Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of heritage resources that qualify as part of the National Estate, namely:

- (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 natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds including-
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders;
  - (iii) graves of victims of conflict;(iv) graves of individuals designated by the Minister by notice in the Gazette;
  - (v) historical graves and cemeteries; and
  - (vi) other human remains which are not covered by in terms of the Human Tissues Act, 1983 (Act No 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including -
- (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
- (ii) objects to which oral traditions are attached or which are associated with living heritage;
- (iii) ethnographic art and objects;
- (iv) military objects;
- (v) objects of decorative or fine art;
- (vi) objects of scientific or technological interest; and
- (vii) books, records, documents, photographs, positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value ...'. These criteria are the following:

- (a) its importance in the community, or pattern of South Africa's history;
- (a) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (b) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (c) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; (h)
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
- (i) sites of significance relating to the history of slavery in South Africa

#### **4.1.1 NEMA**

The NEMA stipulates under Section 2(4)(a) that sustainable development requires the consideration of all relevant factors including (iii) the disturbance of landscapes and sites that constitute the nation's cultural heritage must be avoided, or where it cannot be altogether avoided, is minimised and remedied. Heritage assessments are implemented in terms of the NEMA Section 24 in order to give effect to the general objectives. Procedures considering heritage resource management in terms of the NEMA are summarised under Section 24(4) as amended in 2008. In addition to the NEMA, the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEMPA) may also be applicable. This act applies to protected areas and world heritage sites, declared as such in terms of the World Heritage Convention Act, 1999 (Act No. 49 of 1999) (WHCA).

#### **4.1.2 MPRDA**

The MPRDA stipulates under Section 5(4) no person may prospect for or remove, mine, conduct technical co-operation operations, reconnaissance operations, explore for and produce any mineral or petroleum or commence with any work incidental thereto on any area without (a) an approved environmental management programme or approved environmental management plan, as the case may be.

#### **4.1.3 NHRA**

According to Section 3 of the NHRA (Act No 25 of 1999) the 'national estate' comprises a wide range and various types of heritage resources (see Box 1).

##### **4.1.3.1 Heritage Impact Assessment studies**

According to Section 38 of the National Heritage Resources Act (Act No 25 of 1999) a Heritage Impact Assessment (HIA) process must be followed under the following circumstances:

- The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length

- The construction of a bridge or similar structure exceeding 50m in length
- Any development or activity that will change the character of a site and which exceeds 5 000m<sup>2</sup> or which involve three or more existing erven or subdivisions thereof
- Re-zoning of a site exceeding 10 000 m<sup>2</sup>
- Any other category provided for in the regulations of SAHRA, a provincial or local heritage authority or any other legislation such as NEMA, MPRDA, etc.

#### **4.1.3.2 Section 34 (Buildings and structures)**

Section 34 of the NHRA provides for general protection of structures older than 60 years. According to Section 34(1) no person may alter (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 any other facility made by people and which is fixed to land and which includes fixtures, fittings and equipment associated with such structures.

Alter means any action which affects the structure, appearance or physical properties of a place or object, whether by way of structural or any other works such as painting, plastering, decorating, etc..

Most importantly, Section 34(1) clearly states that no structure or part thereof may be altered or demolished without a permit issued by the relevant Provincial Heritage Resources Authority (PHRA). These permits will not be granted without a HIA being completed. A destruction permit will thus be required before any removal and/or demolition may take place, unless exempted by the PHRA according to Section 34(2) of the NHRA.

#### **4.1.3.3 Section 35 (Archaeological and palaeontological resources and meteorites)**

Section 35 of the NHRA provides for the general protection of archaeological and palaeontological resources, and meteorites. In the event that archaeological resources are discovered during the course of development, Section 38(3) specifically requires that the discovery must immediately be reported to the PHRA, or local authority or museum who must notify the PHRA. Furthermore, no person may without permits issued by the responsible heritage resources authority may:

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite
- 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; or 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
- alter or demolish any structure or part of a structure which is older than 60 years.

Heritage resources may only be disturbed or moved by an archaeologist after being issued with a permit received from the South African Heritage Resources Agency (SAHRA). In order to demolish heritage resources the developer has to acquire a destruction permit by from SAHRA.

#### **4.1.3.4 Section 36 (Burial grounds and graves)**

Section 36 of the NHRA allows for the general protection of burial grounds and graves. Should burial grounds or graves be found during the course of development, Section 36(6) stipulates that such activities must immediately cease and the discovery reported to the responsible heritage resources authority and the South

African Police Service (SAPS). Section 36 also stipulates that no person without a permit issued by the relevant heritage resources authority may:

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

Section 36 of the NHRA divides graves and burial grounds into the following categories:

- 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

Human remains less than 60 years old are subject to provisions of the National Health Act, 2003 (Act No 61 of 2003), Ordinance 12 of 1980 (Exhumation Ordinance) and Ordinance No 7 of 1925 (Graves and dead bodies Ordinance, repealed by Mpumalanga). Municipal bylaws with regard to graves and graveyards may differ. Professionals involved with the exhumation and relocation of graves and graveyards must establish whether such bylaws exist and must adhere to these laws.

Unidentified graves are handled as if they are older than 60 years until proven otherwise.

Permission for the exhumation and relocation of graves older than sixty years must also be gained from descendants of the deceased (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 Human Tissues Act (Act 65 of 1983 as amended).

#### **4.1.3.5 Section 37 (Public monuments and memorials)**

Section 37 makes provision for the protection of all public monuments and memorials in the same manner as places which are entered in a heritage register referred to in Section 30 of the NHRA.

#### **4.1.3.6 Section 38 (HRM)**

Section 38 (8): The provisions of this section do not apply to a development as described in Section 38 (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation. Section 38(8) ensures cooperative governance between all responsible authorities through ensuring that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of Subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

The Listed Activities in terms of the Government Notice Regulations (GNRs) stipulated under NEMA for which Environmental Authorisation (EA) will be applied for will trigger a HIA as contemplated in Section 38(1) above as follows:

#### 4.4.4 NEMA Appendix 6 requirements

<b>NEMA Regulations (2014) - Appendix 6</b>	<b>Relevant section in report</b>
Details of the specialist who prepared the report	Dr Julius CC Pistorius
The expertise of that person to compile a specialist report including a curriculum vitae	Part 2. Details of the specialist
A declaration that the person is independent in a form as may be specified by the competent authority	Part 3. Declaration of independence
An indication of the scope of, and the purpose for which, the report was prepared	Part 1. Introduction
An indication of the quality and age of base data used for the specialist report	
A description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change	
The duration date and season of the site investigation and the relevance of the season to the outcome of the assessment	
A description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used	
The date and season of the site investigation and the relevance of the season to the outcome of the assessment	Part 6. Approach and Methodology Part 8.1. Field survey
A description of the methodology adopted in preparing the report or carrying out the specialised process	Part 7. Approach and Methodology
The specific identified sensitivity of the site related to the activity and its associated structures and infrastructure	Part 8. Heritage survey
An identification of any areas to be avoided, including buffers	Part 9. Heritage assessment
A map superimposing the activity including the associated structures and infrastructure on the	Figure 9

<b>NEMA Regulations (2014) - Appendix 6</b>	<b>Relevant section in report</b>
environmental sensitivities of the site including areas to be avoided, including buffers;	
A description of any assumptions made and any uncertainties or gaps in knowledge;	Part 1.2. Assumptions and limitations
A description of the findings and potential implications of such findings on the impact of the proposed activity, including identified alternatives, on the environment	Part 9.5 Summary Part 10. Conclusion and recommendations
Any mitigation measures for inclusion in the EMPr	Part 8.3. Managing the heritage resources
Any conditions for inclusion in the environmental authorisation	Part 8.3. Managing the heritage resources
Any monitoring requirements for inclusion in the EMPr or environmental authorisation	Part 8.3. Managing the heritage resources
A reasoned opinion as to whether the proposed activity or portions thereof should be authorised and	Part 9. Conclusion and recommendations
If the opinion is that the proposed activity or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan	Part 8.5. Managing the heritage resources
A description of any consultation process that was undertaken during the course of carrying out the study	Part 6.3. Consultation process undertaken and comments received from stakeholders
A summary and copies if any comments that were received during any consultation process	Part 6.3. Consultation process undertaken and comments received from stakeholders
Any other information requested by the competent authority.	None

## 5 THE FOKENG (BAFOKENG) PROJECT AREA

### 5.1 Location

The proposed prospecting on Portions 12, 26 and 33 of the farm Boschpoort 248JQ coincides with the historical Fokeng's sphere of influence which covered the great divide between the Magaliesberg mountain range in the west and the series of nortite koppies to the east (also referred to as the Thaba-ea-Maralle mountains) an elongated piece of land which is located to the north of the town of Rustenburg (Figure 1).

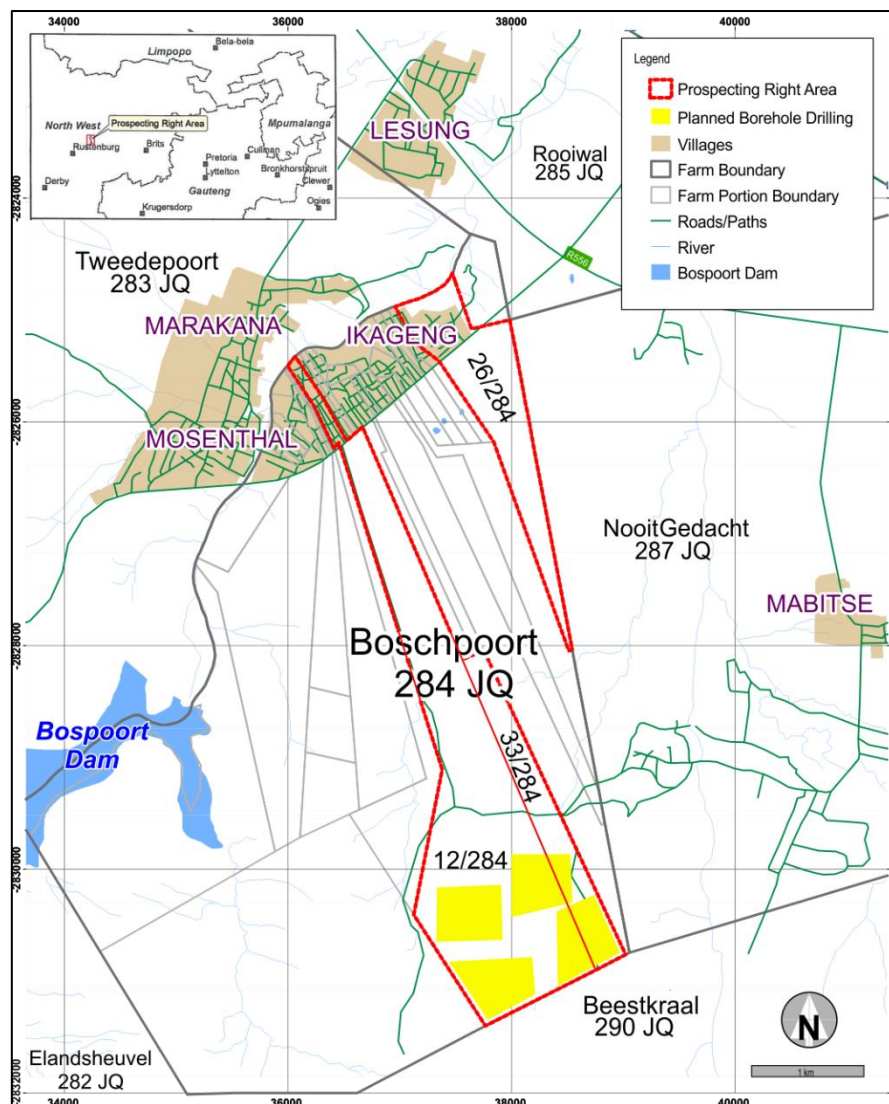


Figure 1- Prospecting rights application for Portions 12, 26 and 33 of Boschpoort 248JQ near Bospoort Dam and Rustenburg in the North West Province (above).

## 5.2 Brief history of the Fokeng

According to oral records and documentary information the Bafokeng arrived south of the Marico River in South Africa centuries ago. Some ruler lists indicate that the Fokeng ruling lineage may date back as long as a millennium years ago. However, Ellenberger is more precise with his genealogical calculations indicating that the group probably entered South Africa during the fifteenth century under the ruler Napo/Nape and then occupied an area east of the Thulane River. Three Fokeng groups detached them from the main branch and moved southwards on different occasions spreading the Fokeng across the country as far as the Free State, the Eastern Highveld, KwaZulu Natal and even as far as the former Transkei in the Eastern Cape. Barely any archaeological research has yet been done on the origins, early settlement history, settlements of rulers and the general unfolding of the Fokeng's history and sphere of influence despite a wealth of historical information and sources on the topic.

The oldest legends state that the Fokeng entered the Transvaal through Tweedepoort, under the leadership of Nape, the earliest known Fokeng chief. This was before AD1700. The group moved south-eastwards and settled on the banks of the Elands River (Kgetleng). During the early Fokeng arrival period two *siboko* were of importance, namely those groups that venerated the *mutlhe* (hare) and others who held the wild grape (*morare*) as their totem. The *kwena* (crocodile), which was venerated by numerous Bakwena chiefdoms from the earliest times also came to be the dominant totem of the Fokeng of Rustenburg.

Important to this investigation is that it appears as if Nape is considered to be the oldest Fokeng ruler south of the Marico River and that he and some followers occupied the mountain Nape. Large concentrations of stone walled settlements were recorded here in the past. It seems as if Nape and some followers, perhaps later in time, moved to the Free State where some of the Fokeng settled at Ntsuanatsatsi a mountain which is also associated with stone walled sites.

The Thaba-ea-Nape (also known as the Thaba-ea-Maralla) range of mountains dividing Marikana from Rustenburg was home to numerous ancestral rulers of the Fokeng people. According to oral tradition different branches (clans) of the Fokeng settled from

the north to the south along this range of mountains from as early as the 17<sup>th</sup> century. The places of settlement were: Serutube, Marekana, Tsitsing (Kanana), Thekoane (Thekwana) and Photsaneng (Bleskop). Only a broad outline of the genealogy of Fokeng rulers, from Nape (AD1700) to Môkgatle (AD1835) is outlined. Settlements that were associated with some of these rulers, although only a few are mentioned in oral tradition, are also indicated.

The domain under Fokeng control during the last two centuries was the following: the northern border was the Kgetleng River (and the Tlôkwa and Kgatla Kgafêla chiefdoms); the western boundary was the Kwena Modimosana chiefdoms and the southern boundary the Magaliesberg. The eastern boundary was determined by the presence of the Kwena Môgôpa and the Kwena Mogale chiefdoms.

The history of the Fokeng begins with Sekete III (Maleriba) who probably ruled in AD1700. He had three sons Kgantsi, Pitswe and Diale. (The last two had the same mother). Kgantsi was born from a Hurutshe father after the Hurutshe had abducted his mother. (Controversy surrounded Sekete's III position until his death, although he was the oldest son).

Diale succeeded Sekete III and his reign probably began in AD1720. His sons were Mokuru, Mogotsi, Ramarwa, Ramogase, Tlase and Ntê. (The first two died young). Diale's sons freed the Fokeng from the Hurutshe's custom to castrate the Fokeng's bulls, an act that was considered offensive by the Fokeng as it indicated the Huruthse's seniority above the Fokeng. This particular incident put an end to the Huruthse's domination of the Fokeng.

With the exception of Ramorwa all the known sons of Diale became leaders of *dikgoro*, Ntê, the progenitor of the *kgoro* Seloko, Tlase, of Mathebetswaane and Ramogware of Metlapeng.

Ramorwa succeeded Diale as chief and had four sons: Mmutle, Sekete, Katane and Mpie.

Sekete succeeded Ramorwa in about AD1790. He was a formidable warrior and is remembered as one of the greatest Fokeng chiefs. The following individuals were sons of Sekete: Thete, Nameng, Nôge, Mogotsi, Molefe, Pitswe, Ramarue, Mohue, Manaana, Rantsogwana and Marahtsane (more can be added). Important individuals were Thete, Nameng and Nôge.

Katane, or Raikane acted as regent for Thethe (also known as Mmakgongwana) who became the next chief. He had the following sons: Diale, Mokgatle, Molotlegi, Molefe, Liphatse and Pogwe. (The first, third and fifth died young). Môngkatle, Molefe and Pogwe played important parts in the next phase of Fokeng history.

Thethe was very fond of his two younger brothers, Nameng and Nôge. The two brothers, however, turned against him. (The main concentration point in Thethe's time was at Makotshaneng [Makojaneng], east of Rustenburg near the Hex River). Thethe fled with his followers and took refuge with the Modimosana Mmatau. The Fokeng accepted Nameng as chief.

Nameng reigned for only eight months after the enforced departure of Thethe as he was killed by the doings of Nôge, who now became chief.

Nôge's rule commenced in about 1820 and ended when he was ousted in 1829 to 1830. Nôge's reign represents a stormy period in Fokeng history. Thethe invited the Pedi to attack the Fokeng whereupon Malekutu destroyed the Fokeng in 1823 to 1824. The devastation caused by the Pedi accounts for the fact that Mzilikazi amassed very little from the Fokeng's territory in 1826 to 1829.

Nôge killed Ndebele visitors to his village. He occupied the summit of Ntlhane, a 'hillock near Malejane', with his followers and bolstered the foot and slopes with wooden stockades. The Fokeng pounded the Ndebele with stones forcing them to retreat.

Nôge became unpopular and fled to Moshoeshoe in the Orange Free State.

Môngkatle's accession was somewhere between 1834 and 1836. His reign had hardly begun when the Voortrekkers drove the Ndebele out of the Transvaal. He remained in

office until his death in 1891 when he was about eighty years old. His principal village was named Mmakgongwana (after Thethe), today located in Rustenburg and partly on Paardekraal. Dirêpotsana Hill, where Phokeng now stands, was also re-occupied as residential area in Mokgatlé's time.

## 6 APPROACH AND METHODOLOGY

This heritage survey and impact assessment study was conducted by means of the following:

### 6.1 Field survey

A field survey was conducted on 1 and 4 February 2019. Archaeological visibility was impaired as summer rain is currently falling in the area which contributes to dense patches with grass and thick clumps of vegetation particularly trees which occur between old dimension stone waste rock dumps. This inhibits the recognising of stone wall remains which still may exist between the former mine workings.



**Figure 2- GPS track log which was registered with a GPS instrument. Pedestrian surveys were conducted from the main pathway. The project area is totally disturbed except in the north where no mining occurred in the past. However, this piece of land has also been altered as a result of ploughing fields for dry land agriculture (above).**

The field survey was conducted by means of following two-track roads which criss-cross the project area and which developed as a result of earlier dimension stone mining. Otherwise foot paths were utilized to conduct pedestrian surveys into the bush between the old mine workings.

All coordinates for heritage resources recorded were done with a Garmin Etrex hand set Global Positioning System (instrument) with an accuracy of < 15m.

Google imagery was used as a supplementary source (*prior* to and after fieldwork) to establish the possible presence of heritage resources such as stone walls.

The nature and character of the project area is further illuminated with descriptions and photographs in Part 8.1 'The field survey'.

## **6.2 Databases, literature survey and maps**

Databases kept and maintained at institutions such as the PHRA, the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria and SAHRA's national archive (SAHRIS) were consulted by the author to determine whether any heritage resources of significance had been identified during earlier heritage surveys in or near the project area. Nevertheless heritage resources may have been missed as a result of various factors (Part 1.3, 'Assumptions and limitations').

## **6.3 Consultation process undertaken and comments received from stakeholders**

No specific consultation process was undertaken for the purposes of the heritage study as the stakeholder consultation for the project is being done by Ethical Exchange Sustainable Services.

## **6.4 Significance ratings**

The significance of possible impacts on the heritage resources was determined using a ranking scale based on the following:

- Occurrence
  - Probability of occurrence (how likely is it that the impact may/will occur?), and
  - Duration of occurrence (how long may/will it last?)
- Severity
  - Magnitude (severity) of impact (will the impact be of high, moderate or low severity?), and
  - Scale/extent of impact (will the impact affect the national, regional or local environment, or only that of the site?).

Each of these factors has been assessed for each potential impact using the following ranking scales:

Probability: 5 – Definite/don't know 4 – Highly probable 3 – Medium probability 2 – Low probability 1 – Improbable 0 – None	Duration: 5 – Permanent 4 – Long-term (ceases with the operational life) 3 - Medium-term (5-15 years) 2 - Short-term (0-5 years) 1 – Immediate
Scale: 5 – International 4 – National 3 – Regional 2 – Local 1 – Site only 0 – None	Magnitude: 10 - Very high/don't know 8 – High 6 – Moderate 4 – Low 2 – Minor

The heritage significance of each potential impact was assessed using the following formula:

$$\text{Significance Points (SP)} = (\text{Magnitude} + \text{Duration} + \text{Scale}) \times \text{Probability}$$

The maximum value is 100 Significance Points (SP). Potential environmental impacts are rated as very high, high, moderate, low or very low significance on the following basis:

- More than 80 significance points indicates VERY HIGH heritage significance.
- Between 60 and 80 significance points indicates HIGH heritage significance.
- Between 40 and 60 significance points indicates MODERATE heritage significance.
- Between 20 and 40 significance points indicates LOW heritage significance.
- Less than 20 significance points indicates VERY LOW heritage significance.

## **7 THE HERITAGE SURVEY**

### **7.1 The field survey**

The project area comprises red and black soil and is flat in the north whilst norite knolls and hills abound in the south. Stone walled sites that used to occur in the area were preciously destroyed as a result of historical mining activities. Remnants of stone walls may still exist but would be of low significance due to damage incurred. The proposed prospecting activities will be conducted where the former mining activities have occurred. The project area therefore is not a pristine piece of land any longer and is covered with the remnants of former mining activities, particularly in the area where borehole drilling will take place. The historical mining activities have largely altered the state of the environment as most of the rock outcrops in the project area have been mined for their dimension stone bearing rock. The veld around the kopjes and mine dumps has also been disturbed as a result of these earlier mining activities. Only the northern parts of the project area have not been affected by mining. However, this piece of land is also disturbed as agricultural fields and parts of the villages of Marakana, Lesung and Ikageng have been established on the northern perimeter of the project area.



**Figure 3- The northern parts of Portions 12 and 26 where no prospecting will occur are covered with agricultural fields (above).**



**Figure 4- Former dimension stone mining has affected and altered the project area where the proposed prospecting activities are to take place (above).**



**Figure 5- Entrance to one of several quarries which used to exist in the project area (above).**



**Figure 6- Most of the kopjes in the prospecting area have been quarried in the past and several stone walled sites were destroyed along the base lines of these kopjes (above).**



**Figure 7- Open spaces between quarries have been utilized as work surfaces for mining relating activities such as this block store yard (above).**



**Figure 8- The far northern parts of Portion 12 and 33 currently serves as residential areas for Lesung, Ikageng and Marakana (above).**

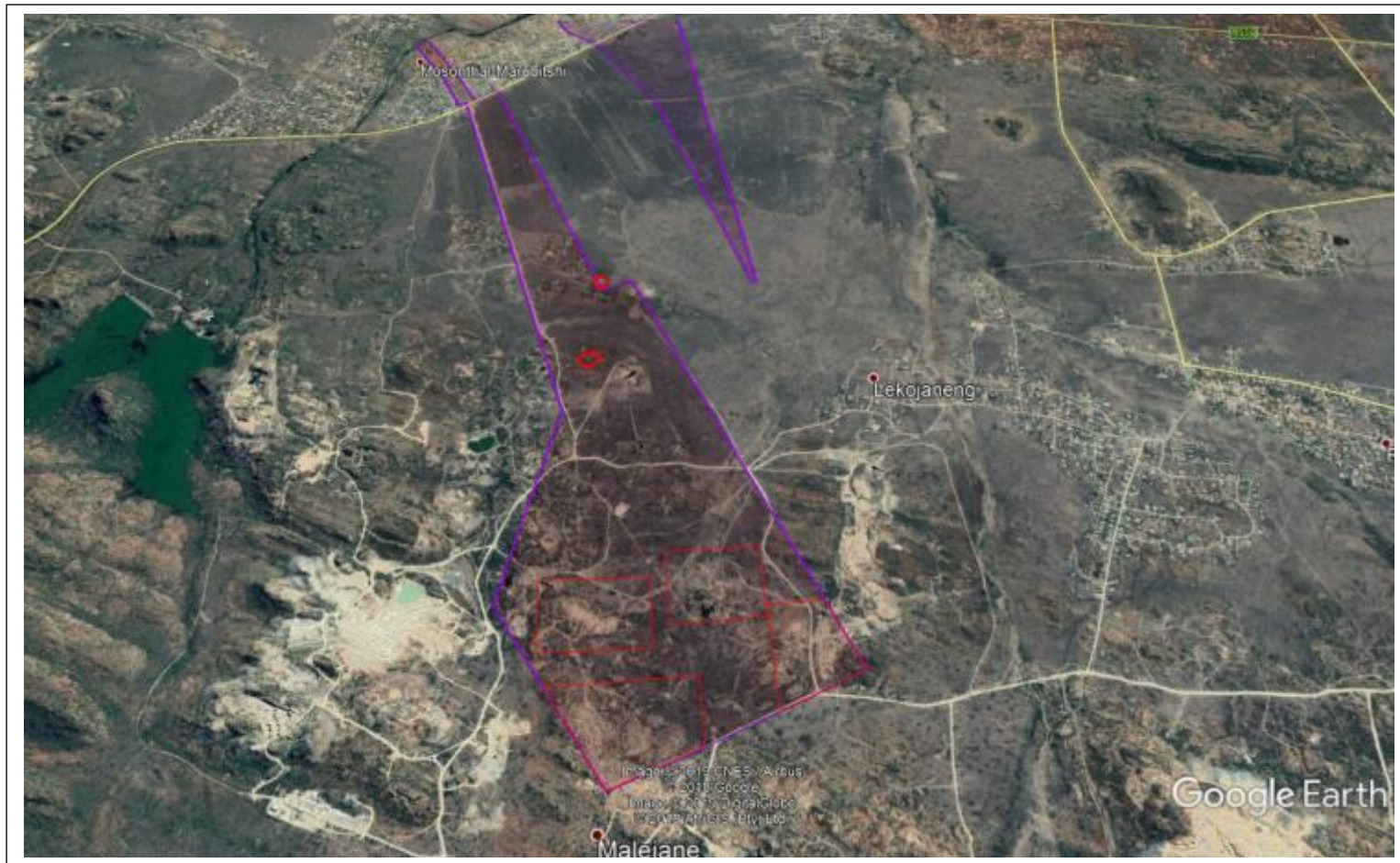
## **7.2 Types and ranges of heritage resources**

The Phase I HIA survey for the project area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- Two intact stone walled sites towards the centre of the project area.

These two stone walled sites were geo-referenced and mapped (Table 1; Figure 9). Their significance is indicated as well as the significance of impact on these heritage resources (Tables 2, 3 & 4).

Remains of stone walls which used to be part of settlements were not recorded as they have no significance any longer.



**Figure 9- Two stone walled sites from the Late Iron demarcated as red circles occur in the centre of the project area. However, they will not be affected by the proposed prospecting and mining activities (above).**

### 7.2.1 The stone walled sites

Two stone walled sites dating from the Late Iron Age and historical period (AD1600 to AD1840) occur in the central part of the project area.

These sites probably represent small villages such as *dikgoro* which were occupied by a number of related family groups (*masika*) under the authority of a headman (*kgosana*). The outer perimeter of the sites comprises homesteads (*malapa*) where the inhabitants of the sites lived. Large and small stock such as cattle, sheep and goat were kept in enclosures in the central parts of the sites.



**Figure 10- Remains of the first of two stone walled sites which are still intact in the central part of the prospecting area. These sites need not to be affected by the prospecting and mining activities (above).**



**Figure 10- Remains of the second of two stone walled sites which are still intact in the central part of the prospecting area. These sites need not to be affected by the prospecting and mining activities (above).**

### **7.3 Tables**

<b>Stone walled sites</b>	<b>Coordinates</b>	<b>Significance</b>
LIA01	<u>Boschpoort 248JQ</u> 25° 33' 33.14"s 27° 22' 24.99"e	High
LIA02	<u>Boschpoort 248JQ</u> 25° 33' 53.81"s 27° 22' 24.28"e	High

**Table 1- Coordinates for two remaining stone walled sites in the project area (above).**

## **8 THE HERITAGE ASSESSMENT**

### **8.1 The significance of the heritage resources**

The two stone walled sites on Portions 12 and 33 are most likely historically and culturally linked with the Tswana and local Fokeng people who today occupy the study area. These settlements date from the last five hundred years, have cultural and historical connections with the Fokeng and qualify as archaeological sites which are protected by the National Heritage Resources Act (No 25 of 1999).

The significance of these remains is rated as of medium-high significance. This rating is based on the use of two rating (grading) schemes, namely (Tables 1 & 2):

- A scheme of criteria which qualifies places and objects as part of the national estate as they have cultural significance or other special value (outlined in Section 3 of the NHRA [Act No 25 of 1999] (see Box 1) (Table 2).
- A field rating scheme according to which heritage resources are graded in three tiers (levels) of significance based on the regional occurrence of heritage resources (Section 7 of the NHRA [Act No 25 of 1999] (Table 3).

#### **8.1.1 Rating criteria applicable to the national estate**

The NHRA (No 25 of 1999) distinguishes nine criteria for places and objects to qualify as 'part of the national estate' if they have cultural significance or other special value. These criteria are the following, (Table 10) (also see Box 1):

- Its importance in/to the community, or pattern of South Africa's history;
- Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

- Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- Sites of significance relating to the history of slavery in South Africa.

The highlighted criteria reflect aspects of the historical, social, cultural, ideological and scientific significance of the stone walled sites and include all tangible and intangible aspects associated with the settlements. Based on the criteria for places and objects to qualify as 'part of the national estate' it can therefore be said that the stone walled sites also have research and other informative values which can be used and applied as specified by the National Heritage Resources Act (No 25 of 1999) for the enrichment and enjoyment of all people in South Africa.

Significance rating	Low	Low-Medium	Medium	Med-high	High
Historical significance					x
Social significance					x
Cultural significance					x
Ideological significance					x
Scientific significance (research, use, application, e.g. in tourism industry)					x

**Table 2- Rating the significance level of the two stone walled settlements in the prospecting area as part of the national estate (above).**

The significance of the stone walled sites in the project area therefore is graded as high (Table 2).

### 8.1.2 Field rating scheme for archaeological sites

Grading of heritage resources remains the responsibility of heritage resources authorities. However, in terms of minimum standards SAHRA requires that heritage reports include field ratings in order to comply with Section 38 of the NHRA (No 25 of 1999). The NHRA (No 25 of 1999, Section 7) provides for a three-tier grading system for heritage resources. The field rating process is designed to provide a qualitative and quantitative rating of heritage resources. The rating system distinguishes three categories of heritage resources (Table 3):

- Grade I Heritage resources hold qualities so exceptional that they are of special national significance.
- Grade II Heritage resources hold qualities which make them significant within the context of a province or a region.
- Grade III heritage resources are worthy of conservation, i.e. are generally protected in terms of Sections 33 to 37 of the NHRA (No 25 of 1999).

Field rating	Grade	Significance	Recommended mitigation
National significance	Grade 1	High significance	Nominate national site. Conservation
<b>Provincial significance</b>	<b>Grade 2</b>	<b>High significance</b>	<b>Nominate provincial site. Conservation</b>
Local significance	Grade 3A	High significance	Conservation. Mitigation not advised.
Local significance	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected (GP.A)	-	Medium to High significance	Mitigation before destruction
Generally Protected (GP.B)	-	Medium significance	Recording before destruction
Generally Protected (GP.C)	-	Low significance	Destruction

**Table 3- Field rating (grading) for stone walled settlements in the Bafokeng District (above).**

According to the highlighted criteria the stone walled settlements in the project area can be rated as of high significance (Table 3).

## **8.2 Possible impact on the stone walled sites**

The two stone walled sites are located in the central part of the project area where no prospecting activities will take place. The two sites therefore need not to be affected by the proposed prospecting activities.

### **8.2.1 The significance of the impact on the stone walled sites**

The significance of the impact of the proposed prospecting activities on the stone walled sites is low (Table 4)

	Probability of impact	Magnitude of impact	Duration of impact	Scale	Significance points	Significance rating	Significance after management
LIA01	1	2	1	1	4	Very low	Very low
LIA02	1	2	1	1	4	Very low	Very low

**Table 4- The significance of the impact of prospecting activities on the stone walled sites is low and will remain low if the management measures outlined in the report is implemented (above).**

## **8.3 Managing the stone walled sites**

The stone walled sites are located at a considerable distance from the proposed prospecting activities and need not to be affected by these activities. However, to ensure that no accidental or unplanned activities may lead to damage or destruction of the sites it is recommend that both sites be demarcated with red cautionary tape and sign posts bearing the following inscription: 'Keep out. Archaeological sites protected by the National Heritage Resources Act (No 25 of 1999). Damage to site may lead to prosecution'.

## **9 CONCLUSIONS AND RECOMMENDATIONS**

The Phase I HIA survey for the project area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- Two intact stone walled sites towards the centre of the project area.

These two stone walled sites were geo-referenced and mapped (Table 1; Figure 9). Their significance is indicated as well as the significance of impact on these heritage resources (Table 2, 3 & 4). Remains of stone walls which used to be part of settlements destroyed by mining activities were not recorded as they have no significance any longer.

### **The significance of the heritage resources**

The two stone walled sites on Portions 12 and 33 are most likely historically and culturally linked with the Tswana and local Fokeng people who today occupy the study area. These settlements date from the last five hundred years, have cultural and historical connections with the Fokeng and qualify as archaeological sites which are protected by the National Heritage Resources Act (No 25 of 1999).

The significance of these remains is rated as of medium-high significance. This rating is based on the use of two rating (grading) schemes, namely (Tables 1 & 2):

- A scheme of criteria which qualifies places and objects as part of the national estate as they have cultural significance or other special value (outlined in Section 3 of the NHRA [Act No 25 of 1999] (see Box 1) (Table 2).
- A field rating scheme according to which heritage resources are graded in three tiers (levels) of significance based on the regional occurrence of heritage resources (Section 7 of the NHRA [Act No 25 of 1999] (Table 3).

According to both rating schemes the stone walled settlements in the project area can be rated as of high significance (Tables 2 & 3).

### **Possible impact on the stone walled sites**

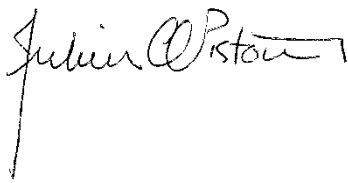
The two stone walled sites are located in the central part of the project area where no prospecting activities will take place. The two sites therefore need not to be affected by the proposed prospecting activities.

### **The significance of the impact on the stone walled sites**

The significance of the impact of the proposed prospecting activities on the stone walled sites is low (Table 4).

### **Managing the stone walled sites**

The stone walled sites are located at a considerable distance from the proposed prospecting activities and need not to be affected by these activities. However, to ensure that no accidental or unplanned activities may lead to damage or destruction of the sites it is recommend that both sites be demarcated with red cautionary tape and sign posts bearing the following inscription: 'Keep out. Archaeological sites protected by the National Heritage Resources Act (No 25 of 1999). Damage to site may lead to prosecution'.

A handwritten signature in black ink, appearing to read 'Julius CC Pistorius', with a long vertical line extending downwards from the end of the signature.

**Dr Julius CC Pistorius**  
**Archaeologist & Heritage Consultant**

## 10 SELECT BIBLIOGRAPHY

Bergh, J.S. 1992. Die vestiging van die Voortrekkers noord van die Vaalrivier tot 1840. *Historia*, 37(2); 38-42.

Breutz, P.L. 1953. *The tribes of Rustenburg and the Pilanesberg districts*. Pretoria: Government Printer.

Breutz, P.L. 1986. *A History of the Batswana and Origin of Bophuthatswana*. Thumbprint: Margate.

Coertze, R.D. 1987. *Bafokeng family law and law of succession*. Revised edition. Pretoria: Sabra.

De Beer, B.K. 1975. *Agter die Magalies*. Postma Publikasies:Fontainebleau.

Erasmus, B.P.J. 1995. Oppad in Suid Afrika. 'n Gids tot Suid Afrika, Streek vir Streek. Jonathan Ball Uitgewers Bpk.

Harris, C. 1963. *The wild sports of Southern Africa*. London:John Murray.

Horn, A.C. 1996. Okkupasie van die Bankeveld voor 1840 n.C.: 'n sintese. *Suid Afrikaanse Tydskrif vir Etnologie*. 19(1), 17-27.

Lye, W.F. (ed.) 1975. *Andrew Smith's journal of his expedition into the interior of South Africa, 1834-1836*. Cape Town: Balkema.

Mason, R.J. 1968. Iron Age settlement in the Transvaal and Natal revealed by aerial photography and excavation. *African Studies*, 27(4).

Mbenga, B. & Manson, A. 2010. People of the dew. A history of the Bafokeng of Rustenburg District, South Africa, from early times to 2000. Jacana Media (Pty) Ltd. Auckland Park.

Pistorius, J.C.C. 1992. *Molokwane an Iron Age Bakwena Village. Early Tswana settlement in the Western Transvaal*. Perskor: Johannesburg. (pp79).

Pistorius, J.C.C. 1994. Molokwane, a seventeenth century Batswana village. *South African Journal of Ethnology*. 17(2), 38-53.

Pistorius, J.C.C. 1996a. Spatial expressions in the *kgosing* of Molokwane. *South African Journal of Ethnology*. 19(4), 143-164.

Pistorius, J.C.C. 1996b. 'n Fase 1 Argeologiese Ondersoek en Evaluering van die Voorkoms van Argeologiese Terreine binne die beoogde Noordsigwoonbuurt van Rustenburg. (Medewerkers M. Hutten en S. Gaigher). Verslag voorberei vir EVN Projektebestuur (Pretoria), die Oorgangsraad van Rustenburg en Fox Lake & Bauhaus Ontwikkelaars. (36pp).

Pistorius, J.C.C. 1997a. The Matabele village which eluded History, Part I. *South African Journal of Ethnology*. 20(1), 26-38.

Pistorius, J.C.C. 1997b. The Matabele village which eluded History, Part II. *South African Journal of Ethnology*. 20(2), 43-55.

Pistorius, J.C.C. 1997c. *Mmatshetshela a settlement from the difaqane or pre-difaqane period on the farm Tweedepoort (283JQ) in the Rustenburg district of the North-West Province: Results of a Phase II archaeological investigation for the Vaalkop Southern Regional Water Supply Scheme*. Report prepared for EVN Consulting Engineers, Magalies Water & the National Monuments Council.

Pistorius, J.C.C. 1998. EmHlalandlela, a Matabele settlement in the Bankeveld. *South African Journal of Ethnology*. 21(2), 55-65.

Pistorius, J.C.C. 2000. New Late Iron Age spatial identities in the Bankeveld. *South African Journal of Ethnology*. 23 (4), 150-163.

Pistorius, J.C.C. 2001. Late Iron Age sites on Mmatshetshela Mountain in the Central Bankeveld of the North-West Province, South Africa. *South African Archaeological Bulletin*. 56 (173&174), 45-56.

Pistorius, J.C.C. 2003. A report on the investigation of a Late Iron Age complex on the farms Boschpoort 284JQ, Elandsheuvel 282JQ, Klipgat 281JQ and Beestkraal 290JQ near Marikana in the North-West Province of South Africa. Unpublished report prepared for Kelgran Granite.

Pretorius, Z.L. 1967. *Die Geskiedenis van Rustenburg, 1851-1918*. MA verhandeling. Potchefstroom: PU vir CHO.

Rasmussen, R.K. 1978. *Migrant Kingdom: Mzilikazi's Ndebele in South Africa*. David Philip: Cape Town.

Schapera, I. 1952. *The ethnic composition of Tswana tribes*. Monographs on Social Anthropology, No 11. London School of Economics and Political Science.

Schapera, I. 1942. A short history of the Bakgatla Bagakgafela of Bechuanaland Protectorate. Communications from the School of African Studies. University of Cape Town.

TNAD 1905. Short History of the Native Tribes of the Transvaal. Government Printer: Pretoria.

Môkgatle, N. 1971. Autobiography of an unknown South African. London: University of California Press.

Schapera, I. 1955. A handbook of Tswana law and customs. Oxford University Press: London.

Schapera, I. 1976. The Tswana. Great Britain: Clarke, Doble & Brendon.

Viljoen, M.J. & Reimold, W.U. 1999. *An introduction to South Africa's geological and mining heritage*. The Geological Society of South Africa. Mintek. Randburg.

Wagner, P.A. 1973. *The platinum deposits and mines of South Africa*. Struik: Cape Town.

## **11 BIBLIOGRAPHY RELATING TO EARLIER HERITAGE STUDIES**

Pistorius, J.C.C. 2000a. An Archaeological scoping report on possible cultural resources on a part of the farm Boschoek 103JQ in the Rustenburg District of the North West: Proposed development of a new town by Amplats. Unpublished report prepared for Landscape Dynamics and Amplats.

Pistorius, J.C.C. 2000b. An Archaeological scoping report supplemented with a Phase I Archaeological survey for SA Chrome's proposed new Ferrochrome Smelter on the farm Boschhoek 103JQ in the Rustenburg District of the Central Bankeveld in the North West Province. Unpublished report prepared for Metago Environmental Engineers.

Pistorius, J.C.C. 2003. A Report on the investigation of a Late Iron Age Complex on the farms Boschpoort 284JQ, Elandsheuwel 282JQ, Klipgat 281JQ and Beestkraal 290JQ near Marikana in the North-West Province of South Africa, Unpublished report for Kudu Granite, Marlin Granite and Red Granite Granite.

Pistorius, J.C.C. 2003. A Heritage Impact Assessment (HIA) study for Impala Platinum's proposed new No 20 Shaft Complex on the farms Goedgedacht 110JQ and Boschkoppie 104JQ in the Bojkone-Bothlaba District Municipality of the North-West Province. Unpublished report prepared for Ground Water Consulting Services CC.

Pistorius, J.C.C. 2003a. A Heritage Impact Assessment (HIA) for SA Ferrochrome's new proposed expansion operations in Boschoek north of Rustenburg in in the North West Province. Unpublished report prepared for Metago Environmental Engineers.

Pistorius, J.C.C. 2004. A Heritage Impact Assessment (HIA) study for Impala Platinum's proposed new No 16 Shaft Complex on the farm Reinkoyalskraal 278JQ in the Bojkone-Bothlaba District Municipality of the North-West Province. Unpublished report prepared for Ground Water Consulting Services CC.

Pistorius, J.C.C. 2005. Results on a Phase II Heritage Impact Assessment study. An investigation of a Late Iron Age site on the farm Reikoyalskraal 287JQ in the Bankeveld

of North-West Province of South Africa. Unpublished report prepared for Ground Water Consulting Services CC.

Pistorius, J.C.C. 2006. A Phase I Heritage Impact Assessment (HIA) study for Impala Platinum's Exploration activities near Rustenburg in North-West Province of South Africa. Unpublished report Impala Platinum

Pistorius, J.C.C. 2007. Preliminary report on a heritage survey for the Ga-Nape Late Iron Age Complex on Welbekend 117 in the Rustenburg (Bafokeng) District in the North-West Province of South Africa. Unpublished report prepared for Royal Bafokeng Resources.

Pistorius, J.C.C. 2006. A Phase I Heritage Impact Assessment (HIA) study for the Impala Platinum Shaft 17 Complex on the farm Vlakfontein 276JQ near Rustenburg in the North-West Province of South Africa. Unpublished report for Golder Associates and for Impala Platinum.

Pistorius, J.C.C. 2006. A Phase I Heritage Impact Assessment (HIA) study for Impala Platinum's exploration activities near Rustenburg in the North-West Province of South Africa. Unpublished report for Golder Associates and for Impala Platinum.

Pistorius, JCC 2008. A Phase I Heritage Impact Assessment for the Chaneng sewer treatment plant and sewer pipelines in the Rustenburg (Bafokeng) District in the North-West Province of South Africa. Unpublished report prepared for Naledzi Environmental Consultants and the Royal Bafokeng Administration.

Pistorius, J.C.C. 2010. Report on a preliminary Heritage Survey for Impala Platinum's proposed new Shaft 18 complex on Toulon 111JQ and Roodekraalspruit 113JQ in the Rustenburg District of the North-West Province of South Africa. Unpublished report prepared for Impala Platinum Mine.

Pistorius, J.C.C. 2005. A preliminary investigation of a settlement unit (*kgoro*) in the Tlhôgôkgôlô (Wolhuterskop) *motse* of the Bakwena Bamogale (Bapo) with the aim of

developing this Late Iron Age stone walled complex into an archaeo-tourism destination. Unpublished report for the Madibeng Town Council.

Pistorius, J.C.C. 2016. A Phase I Heritage Impact Assessment for the proposed Nuco Chrome Mine in the Rustenburg (Bafokeng) District in the North-West. Unpublished report for Agreenco Environmental Projects.