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REPORT ON A PHASE 1 HERITAGE ASSESSMENT FOR A MINING RIGTHS APPLICATION ON PORTION 6 OF THE FARM PALMIETFONTEIN 208JP MOSES KOTANE LOCAL MUNICIPALITY, BOJANALA DISTRICT MUNICIPALITY, MAGISTERIAL DISTRICT OF MANKWE, NORTHWEST PROVINCE

For:

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REPORT: APAC018/53

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SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Prescali Environmental Consultants (Pty) Ltd to undertake a Phase 1 HIA for a Minign Permit Application on Portion 6 of the farm Palmietfontein 208JP (Moses Kotane Local Municipality, Bojanala District Municipality, Magisterial District of Mankwe) in the North West Province.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. Although there are no known sites in the specific study area, some were identified during the assessment. The study area has been extensively disturbed by earlier mining activities as well. The report will discuss the results of the desktop and field assessment and provide recommendations on the way forward at the end of the document.

From a Cultural Heritage point of view the proposed Minign Permit Application and related development can continue, taking into consideration the mitigation measures proposed at the end of the report.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Prescali Environmental Consultants (Pty) Ltd to undertake a Phase 1 HIA for a Minign Permit Application on Portion 6 of the farm Palmietfontein 208JP (Moses Kotane Local Municipality, Bojanala District Municipality, Magisterial District of Mankwe) in the North West Province.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. Although there are no known sites in the specific study area, some were identified during the assessment. The study area has been extensively disturbed by earlier mining activities as well.

The client indicated the location and boundaries of the Project Area, and the assessment focused on this area. The Specialist Team was accompanied to the study area by representatives of the Bakubung Ba-Ratheo Tribal Authority (the surface landowner).

2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

- 1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
- 2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
- 3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
- 4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
- 5. Review applicable legislative requirements;

3. 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).

3.1 The National Heritage Resources Act

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

- a. Archaeological artifacts, 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. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate 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. Sites of Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, 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. 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 palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- 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.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations** (**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 to) 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**).

3.2 The National Environmental Management Act

This act 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.

4. METHODOLOGY

4.1 Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

4.2 Field survey

The field assessment section of the study was conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects was determined by means of a Global Positioning System (GPS), while detailed photographs were also taken where possible.

4.3 Oral histories

People from local communities are sometimes 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.

4.4 Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. 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.

5. DESCRIPTION OF THE AREA

APelser Archaeological Consulting (APAC) was appointed by Prescali Environmental Consultants (Pty) Ltd to undertake a Phase 1 HIA for a Minign Permit Application on Portion 6 of the farm Palmietfontein 208JP (Moses Kotane Local Municipality, Bojanala District Municipality, Magisterial District of Mankwe) in the North West Province.

The study area has been extensively disturbed by recent past mining activities and as a result the natural vegetation and topography has been changed to a large degree. Some patches of natural vegetation (bushveld/thornveld) inside and around the area still exist, while rocky outcrops and ridges around the area are also present. Remnants of recent mining related structures are also found in the area. In general visibility was good during the assessment that was done mostly on foot.



Fig.1: General location of study area (Google Earth 2018).



Fig.2: Closer view of study area (Google Earth 2018).

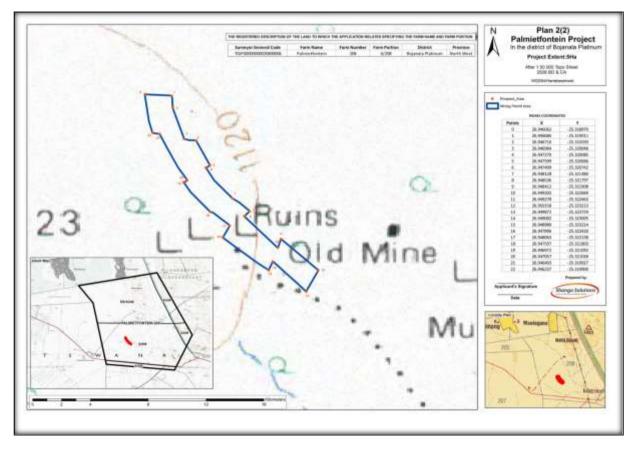


Fig.3: Location Map & Layout Plan (provided by Prescali Environmental).



Fig.4: View of section of area.



Fig.5: Another view showing mine dumps and workings.



Fig.6: A further view of the impact of mining in the study area.



Fig.7: General view of the area.



Fig.8: More mine dumps and workings in the area.

6. DISCUSSION

A short background to the archaeology & history of the larger geographical and specific study area is given in the section below before the results of the fieldwork will be discussed.

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is however important to note that these dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago Middle Stone Age (MSA) less than 300 000 – 20 000 years ago Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

There are no known Stone Age sites or features in the specific study area, and no material were identified during the area assessment. It should be noted that it is possible that single out of context tools could be located in the area. The closest known Stone Age sites in the larger geographical area are located in the so-called Magaliesberg Research Area and at a site called Kruger Cave. These sites are all dated to the Later Stone Age (Bergh 1999: 4).

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts. In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (Bergh 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 closest known Iron Age sites to the area are those of Broederstroom (EIA) and known LIA sites in the Pilanesberg area (Bergh 1999: 7; Morton 2013: 15-26). Some possible Late Iron Age stone-walled settlement remains were identified in the larger area around the study section during the assessment and will be discussed later on in the report. By the early 19th century the Kgatla were settled in the area (Bergh 1999: 10), while the Ndebele of Mzilikazi moved into the area by the 1830's during the so-called difaqane (Bergh 1999: 11).

Based on his pottery research, Huffman indicates that the following LIA pottery traditions could be present in the area. This includes the Madikwe; Olifantspoort; Rooiberg; Uitkomst & Buispoort facies of the Urewe Tradition, dating to alternatively AD1500-1700; AD1650 – 1750; AD1650-1820 & AD1700-1840 (Huffman 2007: 171; 175; 191; 199 & 203).

The historical period started with the moving into the area of people who could read and write (European travellers, missionaries, the Voortrekkers). The first Europeans to move into and close to the study area were the groups of Moffat & Archbell and Schoon & McLuckie (both in 1829), followed by Cornwallis Harris in 1836 and then by David Livingstone in 1847 (Bergh 1999: 12-13). They were followed closely by the Voortrekkers and European farmers (p. 14).

"Pilanesberg, is named after a Tswana chief, Pilane. The Pilanesberg Game Reserve borders with the entertainment complex Sun City Resort. The northern region of the Pilanesberg Game Reserve was traditionally owned by the Bakgatla-ba-Kgafela (commonly known as the Bakgatla) tribe. A mission station was established in this section of the park.

The southern section of the Pilanesberg game reserve was originally a set of farms which were sold to and registered in the names of a number of Boer farmers by the Transvaal government in the 1860s. These farmers were responsible for building the Mankwe dam-which is the Pilanesberg's largest standing water reservoir. Under Apartheid policies the Boer farms were bought by the Government during the 1960's and the Bakubung tribe from nearby Ventersdorp settled on the land. The land was then subsequently delivered to Bophuthatswana, a large bantustan or "homeland" established under the Apartheid Government.

Bophuthatswana decided to re-introduce wildlife and convert the Pilanesberg into a game reserve. The Bakgatla tribe, under Chief Tsidimane Pilane, agreed to the inclusion of the mountainous region of their property within the Pilanesberg reserve. The 60 families were re-settled under an agreement with the tribal authority. They were moved to a newly planned town to the east of the Pilanesberg Game Reserve. Around the same time, Sun International obtained a ninety-nine-year leasehold over an adjacent farm and built the Sun City complex" (From Pilanesberg History – SA Places www.places.co.za).

The oldest map obtained from the Chief Surveyor General's database (www.csg.dla.gov.za) for the farm Palmietfontein 208JP (Document 10GKRP01) dates to 1958. It shows that the

farm was then numbered as No.567 and was situated in the Rustenburg District. It was surveyed between May 1952 & June 1958. Portion 5 (& 6) was surveyed in July 1991 (CSG Document 10000407). No archaeological or historical sites or features could be identified on these maps.

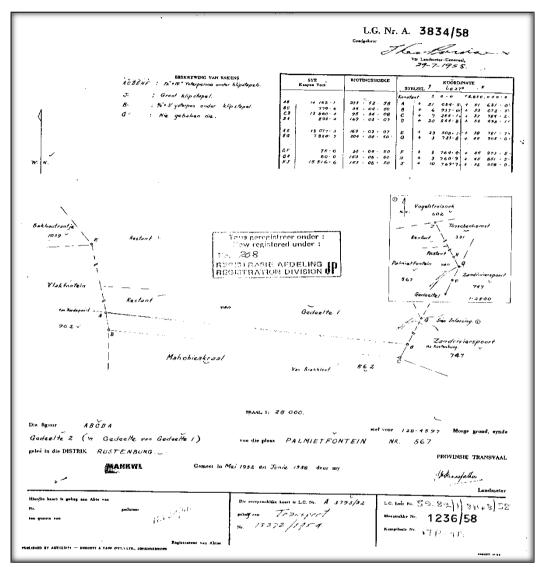


Fig.9: 1958 Map of Palmietfontein (www.csg.dla.gov.za).

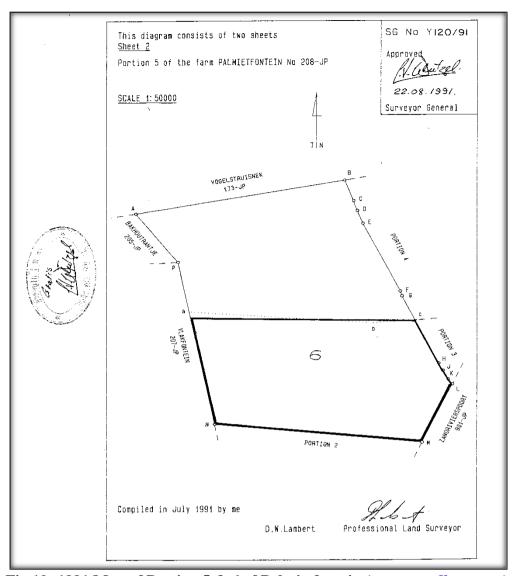


Fig.10: 1991 Map of Portion 5 & 6 of Palmietfontein (www.csg.dla.gov.za).

Results of the August 2018 Fieldwork

Six (6) sites of cultural heritage (archaeological and/or historical) origin and significance were identified during the field assessment. None of these are located inside the study area/development footprint and as a result will not be directly impacted upon by it. However, their location in close proximity to it and the high significance of some of these sites does warrant the implementation of mitigation measures to prevent any possible (even if indirect) negative impacts on them by the proposed mining related activities.

Sites 1, 2 & 3 contains the remains of various stone-packed enclosures, as well as a number of possible stone-packed graves (indicated to the team by the community representatives). These stone-packed features (both circular and in some instances square or rectangular) represent hut/rondavel foundations, possible storage areas and livestock enclosures (kraals). Some material deposit (in the form of porcelain, glass, metal objects and pottery) seems to indicate a historical origin, although there might be an earlier Late Iron Age relationship as well. It is possible that these remains – remnants of earlier settlement here – could be related to earlier

farming activities in the area and/or the recent old mining here. It most likely dates to between the late 19th and mid-20th centuries.

Site 4 is a large informal cemetery containing in excess of 40 graves. These graves, all stone-packed and without any headstones, are situated in at least 5 distinct rows. It is possible that these graves are related to the Site 1-3 settlement remains. According to the BaKubung Ba Ratheo Community representatives the origin and age of the graves are not known, and efforts to trace possible descendants have been unsuccessful in the past years.

Site 5 contains various structures related to the old mining activities in the area. The structures of cement, brick and plaster are not older than years of age and are in varying stages of disrepair. These structures are not of any historical significance and no further mitigation is required.

Site 6 is another site containing some stone-packed circular enclosures and probable related to Sites 1-3.

The following is recommended in terms of the sites recorded:

- 1. Sites 1-3 & 6: Map and document in detail. Fence in to prevent accidental damage by future mining activities. Include in a Cultural Heritage Management Plan (CHMP).
- 2. Site 4 Cemetery: Graves always carry a High Significance rating in terms of Cultural Heritage. Even though the site is located outside of the study area there is always a possibility of accidental damage to vandalism etc. It is recommended that the site be cleaned, fenced-in properly with an access gate and that the site be included in the CHMP recommended above.
- 3. Site 5 and related mining structures: No further mitigation needed

GPS Locations: S25 19 24.40 E26 56 53.50 (1); S25 19 25.90 E26 56 53.70 (2); S25 19 27.00 E26 56 52.80 (3); S25 19 28.70 E26 56 47.60 (4); S25 19 21.50 E26 56 47.50 (5); S25 19 20.06 E26 56 48.82 (6).

Cultural Significance: Medium to High.

Heritage Significance: Grade III.

Field Ratings: Local Grade IIIB: Should be included in the heritage register and may be

mitigated (High/Medium significance)

Mitigation: See above.

Based on the assessment it is therefore recommended that the development can continue, taking consideration of the recommendations made at the end of this report. Furthermore it should be noted that although all efforts were made to cover the total area and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. This will include low stone-packed or unmarked graves. This aspect should be kept in mind when development work commences and if any sites (including graves) are identified then an expert should be called in to investigate and recommend on the best way forward.



Fig.11: Possible stone-packed grave at Site 1.



Fig.12: Stone-packed walling at Site 1.



Fig.13: Possible infant grave at Site 2.



Fig.14: Remnants of housing at Site 1.



Fig.15: Undecorated pottery at Site 2.



Fig.16: Stone-packed feature at Site 2.



Fig.17: Possible grave at Site 3.

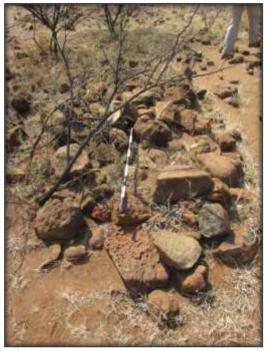


Fig.18: Another possible grave at Site 3.



Fig.19: Foundations of hut at Site 3.



Fig.20: More hut remains at Site 3.



Fig.21: Stone-walling at Site 3.



Fig.22: A view of some of the graves at Site 4.



Fig.23: More of the Site 4 graves.



Fig.24: Recent remains of structure close to Site 5.



Fig.25: More of the Site 5 remains.



Fig.26: Toilet remains close to Site 5.



Fig.27: Site 6 stone-packed features.

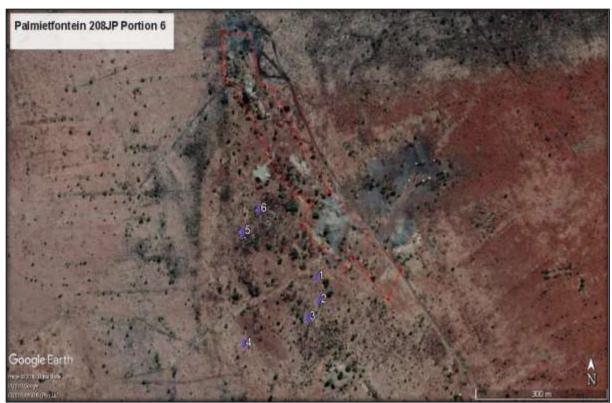


Fig.28: Aerial view of study area showing location of sites recorded (Google Earth 2018).

7. CONCLUSIONS AND RECOMMENDATIONS

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Six (6) sites of cultural heritage (archaeological and/or historical) origin and significance were identified during the field assessment. None of these are located inside the study area/development footprint and as a result will not be directly impacted upon by it. However, their location in close proximity to it and the high significance of some of these sites does warrant the implementation of mitigation measures to prevent any possible (even if indirect) negative impacts on them by the proposed mining related activities.

The following is recommended in terms of the sites recorded:

- 1. Sites 1-3 & 6: Map and document in detail. Fence in to prevent accidental damage by future mining activities. Include in a Cultural Heritage Management Plan.
- 2. Site 4 Cemetery: Graves always carry a High Significance rating i.t.o Cultural Heritage. Even though the site is located outside of the study area there is always a possibility of accidental damage to vandalism etc. It is recommended that the site be cleaned, fenced-in properly with an access gate and that the site be included in the CHMP recommended above.
- 3. Site 5 and related mining structures: No further mitigation needed

Finally, it should be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.

From a cultural heritage point of view the development can therefore continue, taking cognizance of the above recommendations.

8. REFERENCES

Aerial views of general & closer study area location, as well as Site locations: Google Earth 2018.

Location Map: Provided by Prescali Environmental Consultants.

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Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

Pilanesberg History – SA Places <u>www.places.co.za</u>.

Chief Surveyor General Database – www.csg.dla.gov.za. Documents (1) 10GKRP01 & (2) 10000407.

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 artifacts, found on 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: Artifact (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.

Aestetic 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 a 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:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. 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, assess their significance, make comments on the impact of the development and makes 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.