HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF A 400 kV TRANSMISSION LINE BETWEEN ANKERLIG POWER STATION (ALTANTIS) AND THE PROPOSED OMEGA SUB STATION, GROOT OLIFANTSKOP

(Assessment conducted under Section 38 (8) of the
National Heritage Resources Act as part of an EIA)

Prepared for

Savannah Environmental Pty (Ltd)
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EXECUTIVE SUMMARY

The Archaeology Contracts Office (ACO) was appointed by Savannah Environmental Pty (Ltd) to undertake a Heritage Impact Assessment for the construction of a 400kV transmission line between Ankerlig Power Station (situated at Atlantis Industrial Area) and the already authorised Omega substation which is to be constructed on the farm Groot Olifantskop. Three alternative transmission line routes were initially considered during the scoping study. From the results of the scoping study, only 1 of these was identified for assessment during the EIA phase – namely:

- Option A which follows mainly the existing Atlantis-Koeberg 1&2 and Koeberg-Stikland 1 electrical servitudes, as well as a short sub-alternative on Eskom land immediately east of the R27 at Koeberg.

The study area (consisting of a proposed new servitude parallel to the existing Eskom servitude and sub-alternative) was subject to a physical heritage survey for its entire length. Three archaeological sites were noted in or close to Option A. All of these archaeological sites were in a highly transformed environment and assessed to be of little heritage value. The impact of the proposed activity is therefore considered to be low in terms of all generally protected heritage.

No mitigation actions are required.

Glossary

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

Calcrete *A soft sandy calcium carbonate rock related to limestone which often forms in arid areas.*

Early Stone Age *A very early period of human development dating between 300 000 and 2.6 million years ago.*

Fossil *Mineralised bones of animals, shellfish, plants and marine animals. A trace fossil is the track or footprint of a fossil animal that is preserved in stone or consolidated sediment.*

Heritage *That which is inherited and forms part of the National Estate (Historical places, objects, fossils as defined by the National Heritage Resources Act of 2000).*

HWC (Heritage Western Cape) *The provincial compliance agency responsible for the conservation of heritage.*

Late Stone Age (LSA) *In South Africa this time period represents fully modern people who were the ancestors of southern African KhoeKhoen and San groups (40 000 – 300 years ago).*

Middle Stone Age (MSA) *An early period in human history characterised by the development of early human forms into modern humans capable of abstract though process and cognition 300 000 – 40 000 years ago.*

Midden *A pile of debris or dump (shellfish, stone artefacts and bone fragments) left by people after they have occupied a place.*

Palaeontological *Any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace.*

Pleistocene *A geological time period (of 3 million – 20 000 years ago).*

SAHRA South African Heritage Resources Agency.

Structure (historic) *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. Protected structures are those which are over 60 years old.*

Silcrete *A surface rock formed by particles of silica forming a crust and compacting on the*

earths surface. Hence it often takes the form of large nodules or rafts. It was often collected by prehistoric people who used it to make stone artefacts on accounts of the rocks fine grain and predictable fracturing qualities.

Contents

1. INTRODUCTION

The Archaeology Contracts Office (ACO) was appointed by Savannah Environmental to undertake a Heritage Impact Assessment (HIA) for the proposed construction of a 400 kV transmission line between Ankerlig Power Station at Atlantis Industrial area and the already authorised Omega Substation which is to be located on the Farm Olifantskop in the Klipheuval area. This HIA is part of an Environmental Impact Assessment (EIA) process which is being carried out by Savannah Environmental on behalf of the proponent, Eskom.

During the scoping study for this project, 3 alternative options for the transmission lines route were considered. These were:

- Option A which follows mainly the existing Atlantis-Koeberg 1&2 and Koeberg-Stikland 1 electrical servitudes
- Option B which is an entirely new alignment running from Atlantis southwards through a new servitude before joining the Koeberg - Stikland 1 servitude to Omega
- Option C which runs parallel to the existing Atlantis railway which passes close to the Omega Substation site.

The results of the scoping study found Option A to be best suited for the proposed activity as it represented a consolidation of infrastructure and posed the lowest impact in terms of disruption to the current pattern of land use and minimised impacts on avifauna and ecology. This route alignment, along with a small sub-alternative (on land belonging to Eskom at the Koeberg power station to the east of the R27) was selected for investigation within the EIA, with alternatives B and C being dropped from the programme

2. TERMS OF REFERENCE

The Archaeology Contracts Office was requested to undertake a Heritage Impact Assessment as a specialist component of an EIA for the erection of a new power line parallel to the existing servitude identified in this study as Option A, as well as for the identified sub-alternative.

The study has taken cognisance of heritage generally protected by the National Heritage Resources Act of 1999.

The impacts of the proposed activity were required to be assessed in accordance with the methodological guideline provided by Savannah Environmental Pty Ltd.

Figure 1: Location of the study area (map supplied by Savannah Environmental Pty Ltd)

Figure 2 Location of archaeological sites found on or close to alternative A

3. HERITAGE LEGISLATION

The National Heritage Resources Act (NHRA) (No. 25 of 1999) protects a variety of heritage resources including all palaeontological or prehistoric material, historical artefacts and structures and human remains. Section 38 of the Act states that Heritage Impact Assessments (HIAs) are required for certain kinds of development including:

- the construction of a road, wall, power line, pipeline, canal or other similar linear development or barrier exceeding 300 m in length;
- the construction of a bridge or similar structure greater than 50 m in length;
- any development or other activity which will change the character of a site –
    - exceeding 5 000 m^2 in extent;
    - involving three or more existing erven or subdivisions thereof;
    - involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- the re-zoning of a site exceeding 10 000 m^2 in extent.

The current project involves the construction of a transmission line longer than 300 m.

Stand alone HIAs are not required where an EIA is carried out as long as the EIA contains an adequate HIA component that fulfils the provisions of Section 38. In such cases only those components not addressed by the EIA should be covered by the heritage component. The South African Heritage Resources Agency (SAHRA) is responsible for the protection of National Heritage Sites (grade 1 sites) as well as all historic graves and human remains. HWC is responsible for the management and protection of all Provincial Heritage Sites (grade 2 sites), generally protected heritage and structures (grade 3a – 3c sites) and prehistoric human remains. Disturbance or destruction of any protected heritage material will require a permit issued by the relevant authority.

In terms of the NHRA, the definitions of protected heritage material covered by the various sections are as follows:

- In Section 34, **''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. All such structures greater than 60 years of age are protected. Note that in terms of the legislation all renovations, alterations or changes to any protected structure will also require a permit.
- In Section 35, "**Archaeological''** refers to any material remains resulting from human activity which are older than 100 years of age, in a state of disuse and are in or on land. It includes artefacts, human and hominid remains and artificial features and structures. This means that an archaeological site is any area where there are artefacts (objects made by human hand) and/or ruins that are over 100 years of age. In terms of rock art it includes all area within 10 m of the art.

- In Section 35, ‘‘**Palaeontological’’** includes any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace. The term fossil means mineralised bones of animals, shellfish, plants or marine animals and a trace fossil is the track, footprint or cast of a fossil organism that is preserved in stone or consolidated sediment.
- In Section 36, **“Burial Grounds and Graves”** means any place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place. Note that although isolated **human remains** are not included here, they are protected by other legislation such as the Exhumations Ordinances (12 of 1980) and the Human Tissues Act (No. 65 of 1983).
- “*Cultural landscapes*” are also protected by the Act. Any **“Place”** (site, area, region, structure or group of structures or open space) with **"Cultural significance"** (aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance) can be regarded as a cultural landscape. The compliance authority is permitted to intervene and comment on the design and aesthetic qualities of any development that forms part of, or is within sight of, a heritage place or site.

4. PROJECT DESCRIPTION

4.1. The study area

The study area (Figure 1) consists of a parcel of land situated between the R27 (west) and the N7 (east). The northern extant is the industrial township of Atlantis and towards the south, Blaauberg Hill and the Melkbos area. Within this envelope lies a variety of landscapes – farm lands, brickfields, the Western Province Shooting Range as well as tracts of *sandveld* which have been infested with alien vegetation. Apart from the Blaauberg Hills to the south, the terrain is largely flat punctuated by occasional dune fields. Where agriculture is not taking place, alien plant species are prolific.

The favoured Option A is a 55 m wide servitude which runs parallel to the existing Eskom power line servitude. The existing servitude is 150 m wide and takes the form of a swathe of grassland that has been cleared of all significant trees, alien bushes and structures. The new power line will be approximately 15 km in length. The ground surface is mostly windblown white sands underlain by ferricretes and shale. There is an inspection road/track along the servitude that is used by Eskom staff who conducts maintenance patrols. Apart from wood cutters, farmers and Eskom staff, the servitudes are not accessible to the public.

4.2. The need for the study

Eskom is in the process of expanding generation and distribution capacity in the South Africa. This has involved the recent construction of the Ankerlig Open Cycle Gas Turbine (OCGT) facility at Atlantis as well as strengthening the electrical transmission network which will see the building of a key new substation “Omega” on the Eskom owned farm, Goot Olifantskop. Eskom propose

to convert the existing Open Cycle Gas Turbines (OCGT) to combined cycle turbines in order to increase efficiency and output. In order to evacuate the additional power generated at this power station, Eskom propose the construction of an additional 400 kV transmission line linking the Ankerlig Power Station with the Omega substation – a direct distance of 12 km or almost 15 km along Option A. The purpose of this study is to assess the impact of further development of power lines on Option A and its associated sub- alternative.

4.3. Activities that will affect the heritage environment

The transmission line will consist of overhead cables suspended from towers placed 400 - 500 m apart. Each steel tower will need to be mounted on concrete footings set into the ground surface. Hence each point of land surface disturbance is confined to the few square meters of the towers bases. The actual servitude will require a service road (normally an unpaved track) or reuse the existing service track while the corridor will have to be cleared of tree cover. During construction the landscape will be subject to a period of temporary disturbance when construction equipment is brought onto site for building of the towers and lifting of the cables.

Heritage sites can be negatively affected by disturbance of the land surface, destruction of significant structures and places as well as any action that will alter the feel and appearance of an historic place or building. Hence, transmission lines are likely to result in moderate impacts to the land surface during the construction phase but permanent changes in terms of visual impacts and changes to the feel of a landscape.

5. METHOD

This study is based on information gained from a team inception workshop, a scoping study, site inspection as well a several studies that have already been completed on land in the area. In addition, the entire length of the proposed servitude has been searched by an archaeologist and assistant making use of off-road motorcycles. Any heritage sites observed were photographed, assigned a co-ordinate/s using a hand held GPS and described.

5.1. Information base

The Ankerlig site, expansion site and transmission line linkages have been subject to previous heritage impact assessments completed as part of an EIA by Hart and Orton (2005-2007).

The farm Brakkekloof has been subject to a heritage impact assessment (as part of an EIA) by Hart and Halkett (2004) for expansion of aspects of the Western Province Shooting Range.

The farms Donkergat, Brakkefontein and Apollo brickfields sites were the subject of a heritage impact assessment as part of an EIA by Halkett and Orton (2005) for the establishment of a new landfill site.

A portion of the farm Vaatjie has been subject to an assessment by Halkett, Orton and Hart (2006) for the purpose of a proposed sand mine.

Portions of the farm Groot Olifantskop have been subject to assessments by Kaplan (ACRM), Hart and Orton (ACO) (2004-2006) as part of the EIA process for the proposed Omega Substation.

Extensive research studies involving the ACO team have taken place on the Farm Duinefontein in recent years.

Orton has just completed a heritage impact assessment for the proposed expansion of the waste water treatment works of the Blaauberg-Melkbos areas (2007).

Halkett has made important observation with respect to open archaeological sites on property adjoining Vaatjie (2006).

The sub-alternative portion of proposed power line route has been surveyed by Hart and Finnegan (2007) as part of the proposed Pebble Bed Modular Reactor EIA.

5.2. Limitations

No limitations were encountered. The entire servitude was accessible to the team thanks to co-operation of landowners. Visibility of ground surface was good given late summer conditions. No trial excavations were conducted.

6. BACKGROUND TO LOCAL HERITAGE

6.1. Palaeontology

The mineralised bones of ancient fauna are often found in this region of the Cape west coast. Fossils are regularly encountered between Woodstock beach, near Cape Town, and Saldanha Bay to the north of Yzerfontein. These include the material excavated from sites such as Elandsfontein (Singer & Wymer 1968), Duinefontein 2 (Klein *et al.* 1999) and Langebaanweg (Halkett & Hart 1999; Hendey 1969; Singer 1961). Fossil bones were also seen at Bakoond (Orton 2007) and Tygerfontein (Halkett & Hart 1995), both to the south of Yzerfontein, and a large collection has been made from an occurrence at Melkbosstrand (Hendey 1968). Material from the Milnerton beach area has also been recorded (Avery 1995; Broom 1909). Fossil material at Milnerton includes terrestrial and marine fauna, as well as shell deposits (Avery 1995). Many of these occurrences occur near the surface with the Melkbosstrand material having been exposed by wind deflation on an old marine terrace some 5 to 6 m above sea level (Hendey 1968). The Duinefontein 2 material occurs buried within red Pleistocene sands immediately north of the Koeberg power station within about 0.7 m of the surface (Klein *et al.* 1999), however it is not clear how far inland the fossiliferous deposits extend.

6.2. Archaeology

Due to the rapid urban expansion of greater Cape Town, little formal archaeological academic

research work has been carried out in the general vicinity of the study area; however various impacts assessments have led to the accumulation of some knowledge. Although southern Africa has been occupied by hominids for more than one million years, little evidence of the earliest occupation is preserved within the local region. The fossil site of Duinefontein 2 in the Koeberg Private Nature Reserve contains Early Stone Age (ESA, >200 thousand years ago (kya)) artefacts and similar isolated items are routinely found in ploughed fields across the south-western Cape. Kaplan (1996, 2000b) reports ESA artefacts from farmlands near the study area.

Middle Stone Age (MSA, 200kya – 20kya) artefacts were found in association with the Melkbosstrand fossils (Hendey 1968) indicating at least some MSA presence in the area. MSA artefacts of the Stillbay type have also been collected in the region of Maitland just south of the study area (Goodwin 1926, 1928) and at a site described as being between Milnerton and Maitland (Goodwin & Van Riet Lowe 1929). Artefacts thought to date to the MSA were observed at Groot Oliphantskop to the east of the Melkbosstrand WWTW (Orton & Hart 2004) and in the region of Vissershok (Kaplan 2002a).

In general, Later Stone Age (LSA, <20kya) sites are far more commonly encountered than earlier material. This may be largely due to burial of older sites beneath recent sand. The only formal excavations to have taken place at an LSA site are those in the near coastal dunes of the Atlantic Beach Golf Estate, just northwest of Blaauwberg Hill and at Melkbosstrand. At the Atlantic Beach sites late Holocene LSA occupation probably pertaining to the Khoekhoen people was found. The sites were located in the high sand dunes and consisted of shell middens and associated artefacts. The lowest shell layers were dated to about AD 700 to AD 750 at AB1 and about AD 1050 at AB3 (Sealy *et al.* 2005). Kaplan (2000a) and Gray (2000) conducted excavations in a shell midden with material probably dating back to the mid-Holocene but this has never been studied further. Hendey (1968) and Avery (1995) also mention the existence of LSA shell middens among the coastal dunes and photographs of Bloubergstrand from the early 1900s in Duminy (1979) show the kind of dunes that would undoubtedly have housed LSA middens. The Atlantic Beach sites are approximately 1.3 km from the sea so the chance of finding further sites within the study area does exist.

LSA artefacts have also been noted from the vicinity of Maitland (Goodwin & Van Riet Lowe 1929), the farm Groot Oliphantskop – site of the Omega sub-station (Kaplan 1996; Orton & Hart 2004) as well as other farms in the area (Kaplan 2004). Halkett (per comm.) reports the presence of Early Stone Age scatters on the farm Vaatjie as well as substantial Late Stone Age open sites on an adjoining property. Early Stone Age material has also be located on the farm Brakkefontein just south of Atlantis (Halkett 2005).

Two burials were reportedly excavated from the Groot Oliphantskop farm in the mid-20th century (Kaplan 1996). Morris (1992) has catalogued human burials from South Africa and records numerous burials from the Milnerton (13 listed), Blaauwberg (20 listed) and Melkbosstrand (22 listed) areas. Others have also been recorded in recent years (e.g. Avery 1995; Deacon & Goosen 1997; Kaplan 2000a, 2002b; Yates 2001) and continue to be found at new development sites.

6.3. History

During the early years of the Cape Colony the Dutch settlers made use of the area for grazing but they are unlikely to have left any trace of this use. Early land grants resulted in the construction of farm buildings but not many remain intact today. Those at Groot Oliphantskop are, however, excellent and well preserved examples (Orton & Hart 2004) and, although now modified, the farmstead immediately north of the Blaauwberg Hill also relates to historical occupation of the area. There are excellent examples of vernacular farm structures on the farm Brakkefontein as well as Vaatjie.

The most significant historical event to take place in the area was the Battle of Blaauwberg which occurred in early January 1806. This battle signalled the end of the Dutch occupation of the Cape when the British forces landed at Melkbosstrand, marched over the saddle at the north-eastern edge of Blouberg Hill and defeated the Dutch in a battle among the sand dunes to the east of Kleinberg. This event took place just south of the study area and will not be affected by the proposed activity.

7. FINDINGS OF SURVEY

7.1. Cultural landscape

The existing servitude already contains two 400 kV transmission lines and towers. Further lines will be an addition to a scenario where electrical infrastructure is a locally accepted feature of the landscape. This is not expected to detract from the scenic qualities of the area as this has already been impacted by the existing servitudes.

In terms of broader cultural landscape issues, attention is drawn to the fine Victorian farmstead at the farm Vaatjie. This building is worthy of notation on the Provincial Heritage Register. The house will not be impacted by the proposed activity as it is at least 2 km from the Eskom servitude.

7.2. Structures

No generally protected buildings were identified in or close to Option A and the sub-alternative.

7.3. Palaeontology

No surface palaeontology was identified in or close to Option A and the sub-alternative.

7.4. Archaeology (pre-colonial)

Three archaeological sites were found. These were all on ploughed agricultural land towards the south of the study area. No material was recorded on the sandy stretches of the servitude between Vaatjie and Atlantis. The area between Ankerlig and the entrance to the shooting range, where the lines turn south-west towards Koeberg is already heavily affected by construction of the railway line and station, the shooting range road and development of the industrial area.

Figure 3 Site 1 (left), large silcrete chunck and patinated informal ESA material (right)

Site 1 (S 33 41 44.1 and E 18 29 26.7 Vaatjie) This is an area of scattered silcrete chunks, varying in size up to 30 to 40cm, irregular cores and a number of flakes and bifaces of later ESA or perhaps MSA age. Conversation with the farmer, Mr Stofberg revealed that it is very likely that the more finely made (and diagnostic) artefacts have been removed or collected some time ago. The silcrete is heavily patinated and iron-stained. There is no silcrete outcrop at this site although larger silcrete boulders up to a meter in diameter have been cleared from the field and piled to the one side, as is the general practice. It is likely that a secrete raft once existed here, the material having been quarried to a minor extent by prehistoric people. The raft was probably removed by farmers while lands were being prepared for agriculture. The site lies in a disturbed context and is not considered significant in heritage terms.

Figure 4 Disturbed area with silcrete boulder at site 2

Site 2 (S 33 42 17.2 and E 18 30 17.7 Groot Olifantskop) A rather disturbed area extending from eastern end, site GO7 (ACO report 2004), intersected by both the R304 and

the Atlantis railway line, a distance of nearly 300 m. This area is underlain by “raft silcrete” which is exposed in places, particularly under the gum trees to the west of the railway line. There are some flakes on the surface and evidence of quarrying of the silcrete outcrops. No formal tools were seen, but the size and patina of the artefacts suggest at least MSA age. Large silcrete boulders also occur alongside the R304.

The site lies in a disturbed context and is not considered significant in heritage terms.

Site 3 (S 33 42 11.5 and E 18 29 57.5 Groot Olifantskop)

Also associated with a low grade silcrete raft which has been quarried, the site extends along a low ridge for at least 200 m rarely reaching 50 m wide and overlain with sand in places. There are rather more artefacts here, but again, nothing formal or diagnostic was seen. This pattern is typical of quarry sites where formal artefact types are rare.

Figure 5 Silcrete boulders at site 3

8. ASSESSMENT OF IMPACTS

8.1. Cultural landscape

Since the Eskom servitude is already established and now a recognised element of the landscape, the addition of a further transmission line is not expected to constitute a significant impact. Re-use of the existing alignment and consolidation of the electrical infrastructure is far more preferable than creating a completely new route which will subject the area to a new visual intrusion. Mitigation action (if needed) lies within the domain of visual impact assessment.

NATURE OF IMPACT: Impacts to cultural landscape (historical pattern of settlement) The possible impact would be visible physical disruption of the historical pattern of land- use.		
	Without mitigation	**With mitigation**
EXTENT	Local (1)	N/a
DURATION	Long term (4)	N/a
MAGINITUDE	Small (1)	N/a
PROBABILITY	Unlikely (2)	N/a
SIGNIFICANCE	Low (12)	N/a
STATUS	Neutral – negative	N/a
REVERSIBILITY	reversible	N/a
IRREPLACEABLE LOSS OF RESOURCES?	No	N/a
CAN IMPACTS BE MITIGATED?	Mitigation not required	
MITIGATION: No mitigation required		
CUMULATIVE IMPACTS: N/a		
RESIDUAL IMPACTS: N/a		

Table 1 Summary of impacts to cultural landscape

8.2. Archaeological sites

The 3 archaeological sites identified are already highly disturbed. In the unlikely event that any of the tower footings rest on any of these sites, the impact that will take place will be the moderate lateral displacement of already disturbed stone artefacts. This is an impact of very low significance. Since the material will continue to lie on the landscape, effectively protected by the presence of the servitude it is concluded that the proposed activity does not constitute an impact requiring any mitigation action.

NATURE OF IMPACT: Impacts to pre-colonial archaeology caused by destruction and displacement of archaeological material but excavation of bases for towers.		
	Without mitigation	**With mitigation**
EXTENT	Local (1)	N/a
DURATION	Permanent (5)	N/a
MAGINITUDE	Small (1)	N/a
PROBABILITY	Unlikely (2)	N/a
SIGNIFICANCE	Low (12)	N/a
STATUS	Neutral – negative	N/a
REVERSIBILITY	irreversible	N/a
IRREPLACEABLE LOSS OF RESOURCES?	No	N/a
CAN IMPACTS BE	Mitigation not required	

MITIGATED?		
MITIGATION: No mitigation required. Site environmental officer must report any unexpected finds of archaeological material, fossil bone or human remains to relevant authority.		
CUMULATIVE IMPACTS: N/a		
RESIDUAL IMPACTS: N/a		

Table 2 Summary of impacts to archaeological material

9. HERITAGE MANAGEMENT PLANNING

The objective of this section of the report is to provide a mechanism for the conservation of heritage and associated values within the context of the proposed activity. In terms of the low significance of identified impacts to heritage, minimal management action is necessary.

The fact that the 3 archaeological sites identified in the servitude are already highly impacted and dispersed warrants no further action on the side of the proponent. It is not necessary to shift tower bases as further disturbance to small portions of these sites will not alter their character, spatial patterning or scientific potential.

9.1. Action required during the proposed activity

Should any finds be unearthed during construction activity, an archaeologist and Heritage Western Cape should be informed immediately. The relevant contact person at Heritage Western Cape is Ms Celeste Booth (021 4839685). The person responsible for reporting any finds that evoke concern should be a senior person on site, or an environmental control officer who is on site during construction.

9.2. Human remains

Human remains can occur anywhere on the landscape. Most archaeologists retrieve several skeletons a year from various development projects around the province, so finds of this nature are not necessarily rare. Human remains are protected by several sets of legislation which means that certain protocols must be followed in the event of a find.

1) leave the remains in place, nothing should be moved
2) Cordon off the area
3) Call Ms Mary Leslie at SAHRA (021 4624509)
4) Contact an archaeologist
5) Once an archaeologist has examined the find, the archaeologist/SAHRA should contact SA Police services and the state pathologist to report human remains
6) If the human remains are found to be a legitimate burial or a pre-colonial burial, an emergency exhumation permit will be issued by SAHRA or HWC
7) If a crime is suspected, a police docket will need to be opened.

10. CONCLUSION

Both Option A and the sub-alternative are considered to be equally suitable for the proposed activity in heritage terms. The finding of this report is that no significant impacts will occur and no mitigation is necessary, apart from the precautionary requirements detailed in section 9.

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