

**HERITAGE MANAGEMENT
PLAN FOR PROPOSED
NCWANE-OKUKU 88KV
POWERLINE LINE
ESTABLISHMENT IN
ZULULAND DISTRICT
MUNICIPALITY, [EIA REF.NO
12/12/20/2108] IN
KWAZULU NATAL PROVINCE**

May 2013

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Final Report

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1. EXECUTIVE SUMMARY

This Heritage Management Plan (HMP) has been commissioned by EnAq Consulting. The plan is for the proposed construction of a 1km 88kV powerline, teeing off from an existing 88kV strain to the substation at Ncwane. The project entails erecting a series of individual pylons whereon electricity-transmitting lines be strung above.

1.1. Legislative brief

This study and the Heritage Management Plan has been compiled in terms of:

- National Heritage Resources Act (Act 25 of 1999) and Amafa KwaZulu Natal Act 4 of 2008.
- The National Environmental Management Act, 1998 (Act 107 of 1998) and associated auxiliary legislation.
- Amafa KwaZulu Natal and SAHRA Heritage Management Guidelines and associated best practice principles.
- Applicable regulations Applicable Eskom Guidelines.

1.2. Project Area

Eskom Holdings Limited proposes to establish a new 88 kV line, within the Ulundi Municipal area. The proposed route is located on portion 4 of Reserve No. 20 of No.15840, Zululand District in KwaZulu Province. The most approximate town to the proposed line is that of Ncwane Township.

1.3. Cultural Heritage Environment

Phase 1 HIA study identified historic and contemporary burial ground and cemetery next to Ncwane substation development site. The affected section of the proposed powerline route is situated within a contemporary degraded cultural landscape with, and surrounded by existing densely built up settlements, and associated infrastructures as well cultivated land. As such the area should be treated as of low to medium significance from cultural landscape perspective. The graveyards and historic settlement sites recorded during Phase 1 HIA study within the 500m-wide powerline route may not be disturbed during the proposed development works. Based on confirmed relationship between tower positions and identified historical burial

ground, this report provided a Heritage Management Plan (HMP) that is designed to aid the construction teams on how to protect any physical heritage resources associated with the project area.

1.4. Heritage Management Plan

The recommendations herein provided are specific to tower-to-tower positions. The HMP focus of:

- Construction Phase: impacts are focused on the development of the new proposed sub-transmission powerlines
- Operational Phase: the HMP takes into consideration that the operational phase of the powerline will not have measurable or significant impact on the physical cultural resources in the receiving area. The powerline will have permanent visual impact, However low and incremental, on the receiving cultural landscape.
- The decommissioning Phase: Should Eskom proposed to decommission and remove the powerline at the end of its life span, the recommendations made for the construction phase would equally apply for any such development.

1.5. Heritage Monitoring

The effectiveness and objectives of the HMP should be met through the implementation on the project constructionEMP are being met during the project implementation phase. As such a heritage monitoring plan forms part of this HMP and should be implemented during powerline construction as affected sections of the powerline as detailed in this report.

1.6. Emergency Procedures

Construction work within the receiving environment has potential to encounter chance archaeological finds and previously unknown archaeological, historical or human burial sites. As such, chance finds procedures and rescue or salvage excavations should be conducted as part of the heritage emergency procedures.

1.7. Heritage Awareness Plan

In terms of the Amafa Act 4 of 2008 and National Heritage Act (Act 25 of 1999), certain classes of heritage resources that include archeological, palaeontological, meteorites and human burial and grave sites enjoy automatic protection and may not be disturbed without prior authorisation from the heritage agency. Unauthorised interferences with these classes of heritage resources constitute a prosecutable crime under law. As such, all project team members including contractors and site workers should be informed about the importance of physical cultural resources they may encounter in the project receiving area.

1.8. Responsibility

The developer's Environmental Department and Environmental Manager are responsible for implementing this HMP through the project EMP.

1.9. Financial Provision

It is a legal requirement that the developer (Eskom) make financial provision for the management of negative heritage impacts.

1.10. Conclusion

The HMP addresses potential powerline construction impacts of all relevant aspects of heritage on site and allows for monitoring during the proposed development.

The overall recommendation is that construction work at Ncwane substation and T-off of the powerline should not interfere with the existing historic burial ground and contemporary cemetery in the proximity of the project area. Chance find procedures document herein should be activated should any previously unknown archaeological or burial sites be encountered during construction phase.

2. ABBREVIATIONS

AIA	Archaeological Impact Assessment
C	Contractor
CECO	Construction Environmental Conservation Officer
EAP	Environmental Assessment Practitioner
ECO	Environmental Conservation Officer
EIA	Environmental Impact Assessment
EM	Environmental Manager
EMP	Environmental Management Plan
HIA	Heritage Impact Assessment
LIA	Late Iron Age
NHRA	Nation Heritage Resources Act, Act 25 of 1999
PM	Project Manager
SM	Site Manager
SAHRA	South African Heritage Resources Agency

3. DEFINITIONS

The following terms used in this A/HIA are defined in the National Heritage Resources Act [NHRA], Act Nr. 25 of 1999, South African Heritage Resources Agency [SAHRA] Policies as well as the Australia ICOMOS Charter (Burra Charter):

Archaeological Materials means remains resulting from human activities, 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.

Chance Finds refers to archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources same as **Heritage Resources** as defined and used in the National Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or graves and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance means the complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

Grave A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

Historic Material means remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

In Situ material means material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Late Iron Age means the period is associated with the development of complex societies and state systems in southern Africa.

Material culture means buildings, structure, features, tools and other artifacts that constitute the remains from past societies.

Site means a distinct spatial cluster of artifacts, structures, organic and environmental remains, as residues of past human activity

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Fabric means all the physical material of the place including components, fixtures, contents and objects.

Conservation means all the processes of looking after a place so as to retain its cultural significance.

Use means the functions of a place, as well as the activities and practices that may occur at the place.

Compatible use means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

Setting means the area around a place, which may include the visual catchment.

Interpretation means all the ways of presenting the cultural significance of a place.

4. INTRODUCTION AND PURPOSE

4.1. Proposed Ncwane-Okuku 88KV Powerline

The proposed Eskom powerline would consist of approximately 1 km of 88kV sub-transmission line from Ncwane switching station to the Okuku Tee. The relevant environmental approvals have been processed along the associated development plans. Amafa KwaZulu Natali also approved the project. This report and HMP will form part of the project construction EMP developed for Eskom by EnAq Consulting. Therefore, the purpose of this study is to inform on management of development impacts on heritage resources in the project-receiving environment.

4.2. Project Description

Disturbed land sections with existing cultivated and previously cultivated farmlands and residential areas, exiting powerlines, boundary fences characterize the project area, and grazing lands. There existing infrastructures such as regional roads, access roads, boundary fence lines, etc. The proposed powerline construction will consist of installation of individual towers that will suspend the powerlines that will traverse from Ncwane switching station to the Okuku Tee. The tower installation will involve digging tower foundations over a footprint area not exceeding 10m x 10m. Furthermore the cumulative footprint impact of each tower is compounded by the fact that the powerline run through an area with existing development including powerlines. In addition, the impact area during construction would be larger since construction personal, equipment lay areas and construction vehicles will also have temporary footprint in the project area. Therefore, heritage resources are not only potentially under threat from the tower position but also from auxiliary development activities such as temporary access roads, construction camps, etc.

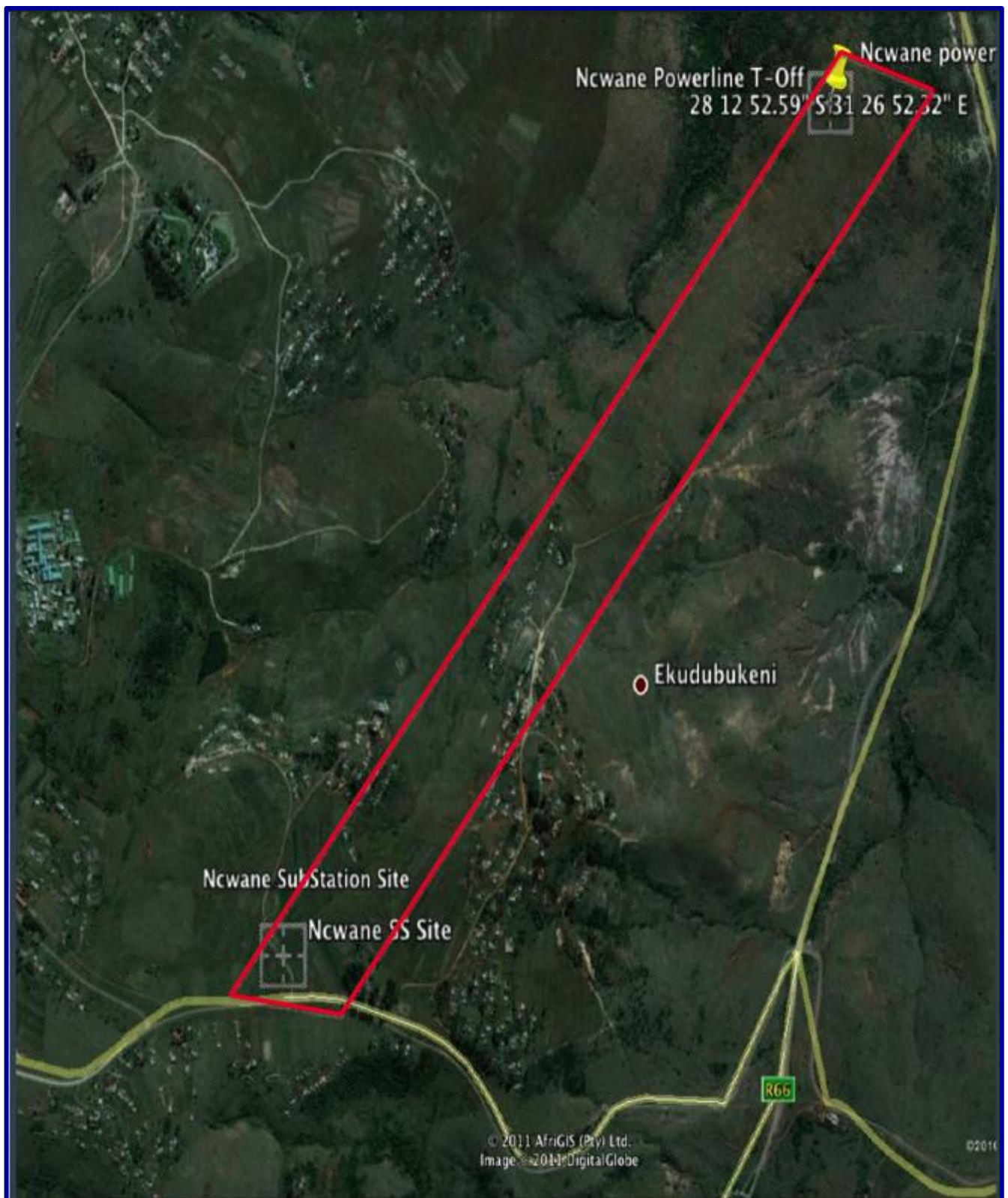


Figure 1: Project area for proposed Ncwane-Okuku sub transmission powerline development.

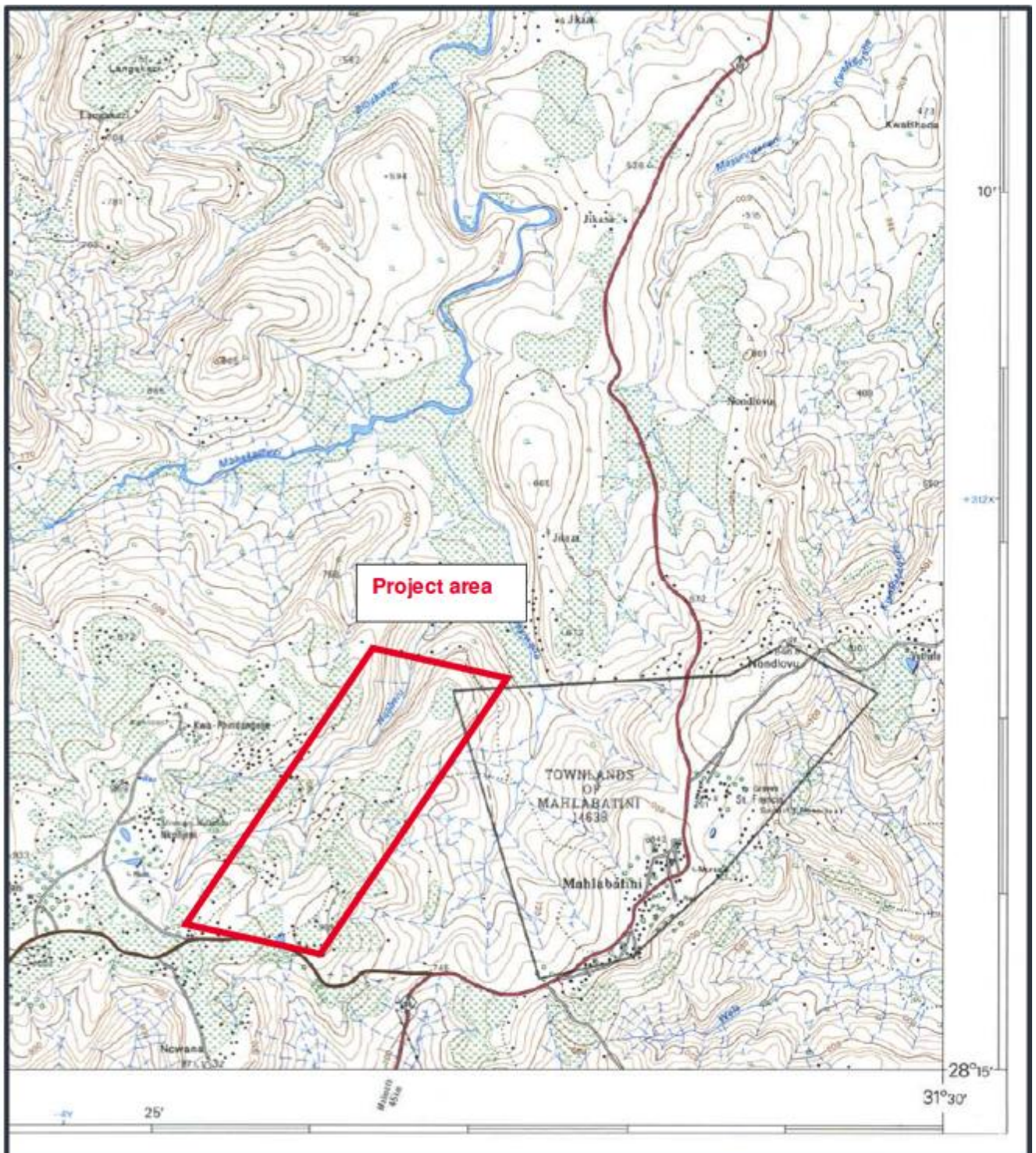


Figure 2: Topographic layout of the project receiving area.

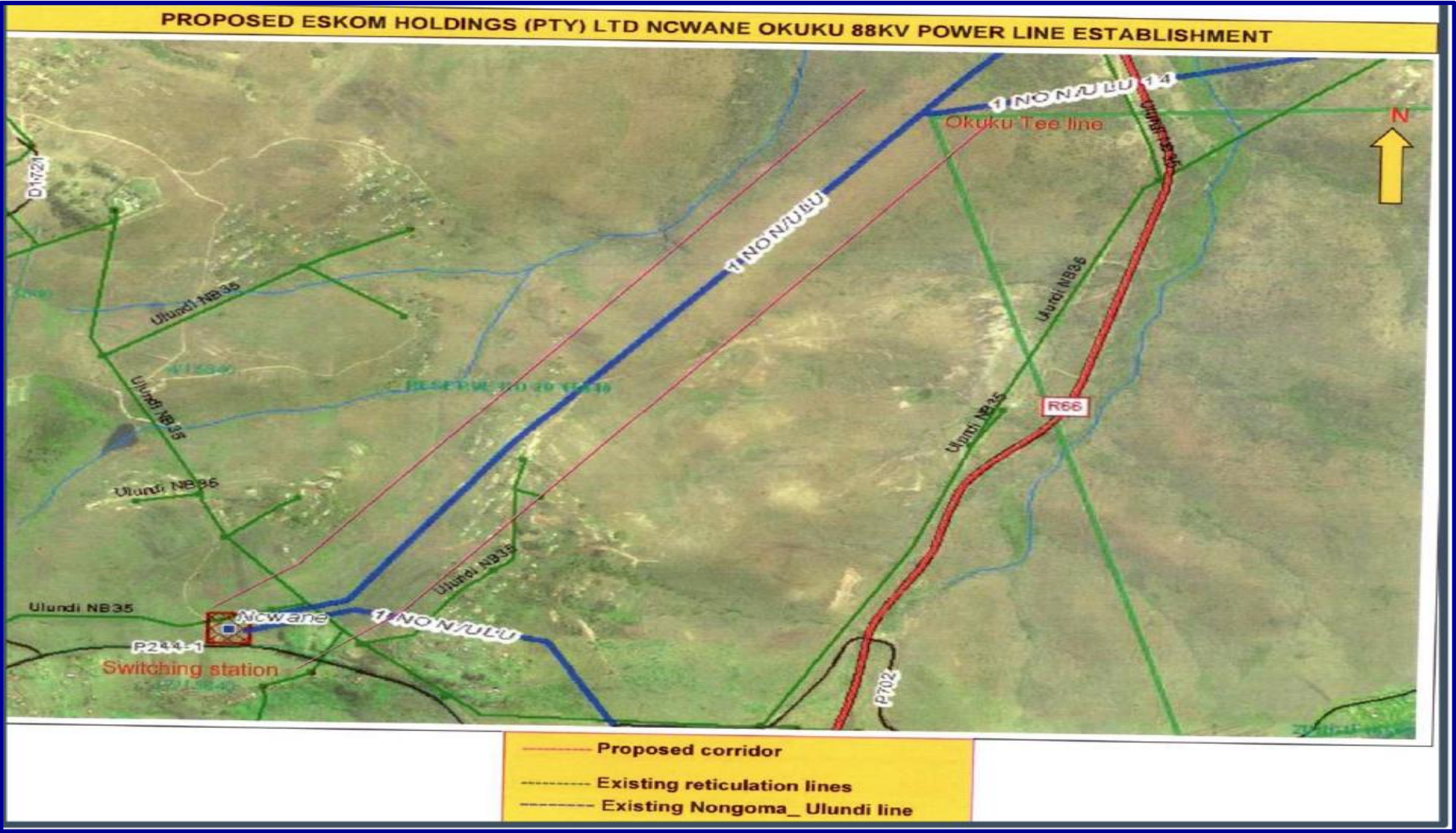


Figure 3: Map showing the study area (After EnAq Environmental Consulting 2011 BID).

4.3. Study Terms Of Reference

This HMP is developed in line with Amafa and SAHRA regulations. In essence, both the national legislations and provincial provisions provide protection for the following categories of heritage resources:

- Landscapes, cultural or natural;
- Buildings or structures older than 60 years;
- Archaeological Sites, palaeontological material and meteorites;
- Burial grounds and graves;
- Public monuments and memorials;
- Living heritage (defined as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships)

5. LEGAL FRAMEWORK, BEST PRACTICE GUIDELINE AND EXISTING HERITAGE MANAGEMENT SYSTEM

This HMP report is a component and should be applied as part of broader EMP Study and addresses the requirements of the NHRA Act 25 of 1999 and EMP Terms of Reference in relation to the assessment of impacts of the proposed powerline development on the cultural and heritage resources associated with the receiving environment.

5.1. Legal Framework

Relevant HIA studies and approvals were conducted and granted respectively (see Figure 3). The statutory mandate of heritage management plan (HMP) studies is to encourage and facilitate the protection and conservation of archaeological and physical cultural heritage sites, in accordance with the provisions of the provincial heritage act, Act 4 of 2008 and the National Heritage Resources Act, Act 25 of 1999 and auxiliary regulations. Both provincial and national legislations protects all defined heritage resources including archaeological, palaeontological, prehistoric and

historical material (including ruins) more than 100 years old (under Section 35), human remains older than 60 years and located outside of a formal cemetery administered by a local authority (under Section 36, NHRA) and non-ruined structures older than 60 years (under Section 34 NHRA). A broader protection is also offered to Landscapes with cultural significance, which are also protected under the definition of the National Estate (Section 3 (3.2d) NHRA).



<p>Amafa AkwaZulu-Natali Heritage KwaZulu-Natal Erfenis KwaZulu-Natal</p>		<p>PO Box 2685 Pietermaritzburg 3200 Tel: 033 394 6543 Fax: 033 342 6097 Email: amafa.pmb2@mweb.co.za Website: www.heritagekzn.co.za</p>
<p>Date: 16 May 2011 Attention: Urvassi Hurburun Tel: 031 262 2171 Fax: 031 262 2279 Email: enaq@vodamail.co.za</p>		<p>Ref: 11/05/16-01</p>
<p>Dear Urvassi</p>		
<p><u>RE: Proposed Ncwane-Okuku 88kV Powerline</u></p>		
<p>In view of the HIA-report by Nzumbululo received for the above proposed development, in terms of KwaZulu Natal Heritage Act No. 4 of 2008 and the National Heritage Resources Act No.25 of 1999 (Section 38 (1)), we have no objection to the proposed development within recommendations described by the heritage Specialist in the HIA report.</p>		
<p>You are however required to adhere to the below-mentioned recommendations:</p>		
<p><u>Conditions:</u></p>		
<ol style="list-style-type: none"> 1. Amafa should be contacted if any heritage objects are identified during earthmoving activities and all development should cease until further notice. 2. No structures older than sixty years or parts thereof are allowed to be demolished, altered or extended without a permit from Amafa. 3. No activities are allowed within 50m of a site which contains rock art. 4. Amafa should be contacted if any graves are identified during construction and the following procedure is to be followed: <ul style="list-style-type: none"> • stop construction • report finding to local police station • report to Amafa to investigate. 		
<p>Heritage Resources are protected in terms of the KwaZulu-Natal Heritage Act (No. 10 of 1997).</p>		
<p>Best regards,</p>		
		
<p>Sello Mokhanya (Principal Heritage Officer – Archaeology)</p>		

Figure 4: Letter of approval issued by KwaZulu Natal provincial heritage authority.

The heritage legislation is implemented through the provincial heritage agency, Amafa KwaZulu Natal and the SAHRA. Permits must be acquired from the Heritage Resources Agency before a heritage site (including graves and cemeteries) can be affected or destroyed during development activities.

Additional legal requirements are covered in the associated EMP guided by applicable National Environmental Management Act, 1998 (Act No. 107 of 1998) and the National Environmental Management Amendment Act, 2008 (Act No. 62 of 2008) (NEMA).

5.2. Best Practice Guidelines and existing Heritage Management Systems

The best practice guidelines for heritage management in South Africa are provided by the Amafa and SAHRA Guidelines. Other applicable international best practice include the Burra Charter (Australia), the World Bank Operational Policies (Protection of Physical Cultural Properties) as well as ICOMOS Guidelines (UNESCO WHC).

Eskom SOC Limited (the developer) subscribes to ISO14001 Certified EMS and has developed and implements an Environmental Management Systems (EMS) that are certified to the ISO14001 International Environmental Management Standard. This International Standard, as per SANAS ISO14001:

2004 Edition 2, Environmental Management Systems - Requirements with guidance for use, states that the Standard "specifies requirements for an environmental management system to enable an organisation to develop and implement a policy and objectives which take into account legal requirements and other requirements to which the organisation subscribes, and information about significant environmental aspects. It applies to those environmental aspects that the organisation identifies as those which it can control and those which it can influence. The system

enables an organisation to develop an environmental policy, establish objectives and processes to achieve the policy commitments, take action as needed to improve its performance and demonstrate the conformity of the system to the requirements of the ISO14001 International Standard“.

Following international best practice, heritage resources are considered part of the environment and as such are also covered under this EMS. Therefore, all Eskom policies that protect or guide environmental management are taken to also protect cultural and physical heritage resources in the context of Eskom projects.

6. HERITAGE STATUS QUO

The biophysical environmental status is covered in the EMP. This section only addresses the cultural environment of the project area.

The affected project area is situated in an area where subsistence agriculture (crop and animal husbandry) is the main activity. Mining activities are also prominent together with associated residential settlements. Some of the developments include irrigation pipelines, dams, farmhouses and animal husbandry. In addition access roads are some of the developments that resulted in the degradation of the environment. The powerline servitudes run along such already disturbed landscape (See Figures 4 and 5).

6.1. Current Land Use And Description Of The Project Site



Figure 5: Existing agricultural landscape and existing powerlines in project area.



Figure 6: Plates a(L) and b(R): OVERVIEW OF AREA showing moderate slope, moderate housing density, subsistence farming, grassland and view of existing 88kV Nongoma-Ulundi powerline (Photos after EnAq 2011).

6.2. Archaeological and historical sites

The heritage survey conducted in Phase 1 HIA study did not identify any archeological or historical sites on direct path of powerline installation within the project area.



Figure 7: Plates a(L) and b(R): cluster of stonewalling structures recorded in the project area. These sites are not within the powerline servitude, but they represent the possibility of encountering archaeological remains du subsurface during the construction (Photo: Author 2011).

Phase 1 HIA study identified a concentration of historical stonewall remains within an existing powerline servitude. The sites are on coordinates:

28°13'7.49" S 31°26'34.78"E

28°13'8.55" S 31°26'35.73"E

28°13'7.38" S 31°26'39.80"E

The sites are not directly affected by the proposed powerline installation. No listed or significant historical physical cultural properties are on direct path of the project area regardless of the observation that the affected general landscape is associated with historical events such as colonial wars and the recent African peopling of the region, no listed specific historical sites are on the proposed development sites (Phase 1 HIA Report, 2011).

6.3. Burial grounds and graves

Two burial ground sites were recorded within the 500m-wide powerline servitude area. One contemporary graveyard with more than thirty historic and contemporary graves was recorded next to the proposed terminal point near the Ncwane substation site. The second burial ground site is a historical site with at least six graves at coordinates 28° 13'18. 10" S 31° 26'32.19"E. This site is located under the existing powerline and is associated with the historical settlement remains discussed above.



Figure 8: Graveyard situated in proximity of Ncwane substation development site from which the sub transmission powerline will T-off.

From a heritage perspective, burial grounds and gravesites are accorded the highest social significance threshold (see Appendix 3). They have both historical and social significance and are considered sacred. Wherever they exist, or when they are accidentally discovered during development, they may not be tempered with or interfered with during any proposed development.

The possibility of encountering human remains during subsurface earth moving works anywhere on the landscape is ever present. It is common that accidental burial finds are made on construction sites from time to time across the country particularly on historical cultural landscapes similar to the development project area.

Significance valuation for Burial Ground, Historic Cemeteries and Individual Graves

The recorded burial grounds retain high cultural significance and are full protected by the applicable legislations. The sites may not be disturbed in any form during the proposed powerline development. The significance of burial grounds and gravesites is closely tied to their age and historical, cultural and social context.

6.4. Historical Monuments

There are currently no places within the project area that are listed on the Provincial or National Heritage List.

6.5. STATEMENT OF SIGNIFICANCE

A contemporary and historic burial ground is situated within the proposed powerline and substation servitude proximity. Stonewall site was also recorded on portion in proximity of the powerline servitude. No other physical cultural properties, including archaeological or historical sites, were recorded on the project area. Apart from the potential of the bushy vegetation to be sources of ethnobotanical resources for the local herbs and medicine people from the township, to significance was accorded to the affected cultural landscape. The area is heavily degraded and is not unique in any sense from a cultural resources perspective.



Figure 9: Okuku Tee off section.

Furthermore, the proposed developments will not alter the aesthetic value of the area in any radical way since it will add value to the constantly changing and developing settlements which already exists in the area. No specific claims to

historical attachments to the area were recorded. All these factors put together confirms the low cultural significance of the project area.

7. HERITAGE MANAGEMENT PLAN FOR NCWANE-OKUKU POWERLINE DEVELOPMENT

7.1. Heritage Management Objectives

Eskom's vision is to leave a positive environmental and heritage legacy once the powerline is in operation and maintenance phases. To achieve this legacy it is necessary to set certain objectives during the various phases of the Life of the Powerline and to ensure that these objectives are met and management measures frequently assessed to ensure its effectiveness.

Objective

- Protection of archaeological, burial ground, and historical sites identified in project area and land considered to be of cultural value;
- Protection of known physical cultural property sites against vandalism, destruction and theft; and
- The preservation and appropriate management of new archaeological finds should these be discovered during construction of the loop-in and loop-out powerlines in the project area.

Objectives related to Cultural-Heritage Resources

- To ensure that all construction personnel are educated or conscientised in the measures required to be followed should any cultural-historic heritage resources be uncovered; and
- To ensure that all cultural heritage resources are adequately protected.

Objectives related to Cultural Landscape Aesthetic Appearance:

- To leave behind a rehabilitated powerline servitude site that, in general, is not only neat and tidy, giving an acceptable overall aesthetic appearance that does not compromise the planned end land use:
- Tiding-up the rehabilitated construction area from construction waste and rubble;

- Landscaping the disturbed areas as directed by the visual assessment to blend in with the surrounding landscape, as far as possible;
- Shaping and leveling general surface rehabilitated areas to create landforms that emulate the surroundings; and
- Ensuring that the rehabilitated construction area is suitably vegetated, where feasible.

Objectives related to the Contractors Camp

- Measures to confine activities to the actual contractors' camp will be put in place to ensure that they should not interfere with any heritage resources in the area; and
 - Pollution and contamination prevention methods will be put in place at the camp to protect the receiving cultural landscape.
-

8. HERITAGE MANAGEMENT MITIGATION MEASURES

Table 1: HMP Components for proposed powerline development.

SITE REF	HERITAGE ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	RESPONSIBLE PARTY	PENALTY	METHOD STATEMENT REQUIRED
Chance Archaeological & Burial Sites	The entire Ncwane-Okuku powerline servitude traverses an archaeological, historic and contemporary cultural landscape. The area is marked with archaeological, historical and contemporary land use sites. Towers positions are located in contemporary agricultural landscape with not surficial visible archaeological sites due to the surface degradation. However, there are possibilities of encountering unknown archaeological material during	<p>Possible damage to previously unidentified archaeological and burial sites during construction phase.</p> <ul style="list-style-type: none"> Unanticipated impacts on archaeological sites where project actions inadvertently uncovered significant archaeological sites. Loss of historic cultural landscape; Destruction of burial sites and associated graves Loss of aesthetic value due to 	<p>In situations where unpredicted impacts occur construction activities must be stopped and the heritage authority should be notified immediately.</p> <p>Where remedial action is warranted, minimize disruption in construction scheduling while recovering archaeological data. Where necessary, implement emergency measures to mitigate.</p> <ul style="list-style-type: none"> Where burial sites are accidentally disturbed during construction, the affected area should be demarcated as no- 	<ul style="list-style-type: none"> Contractor / Project Manager Archaeologist Project EO 	<p>Fine and or imprisonment under the AMAFA KWAZULU NATAL PHRA Act & NHRA</p>	<p>Monitoring measures should be issued as instruction within the project EMP.</p> <p>PM/EO/Archaeologist Monitor construction work on sites where such development projects commences within the farm.</p>

	<p>subsurface construction work which may disturb previously unidentified chance finds.</p>	<p>construction work</p> <ul style="list-style-type: none"> • Loss of sense of place <p>Loss of intangible heritage value due to change in land use</p>	<p>go zone by use of fencing during construction, and access thereto by the construction team must be denied.</p> <ul style="list-style-type: none"> • Accidentally discovered burials in development context should be salvaged and rescued to safe sites as may be directed by relevant heritage authority. The heritage officer responsible should secure relevant heritage and health authorities permits for possible relocation of affected graves accidentally encountered during construction work. 			
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9. HERITAGE MANAGEMENT IMPLEMENTATION PLAN

Table 2: HMP Mitigation Aspects of the Powerline development.

No.	Activity	Mitigation Measures	Duration	Frequency	Responsibility	Accountable	Contacted	Informed
Pre-Construction Phase								
1	Planning	Ensure all known sites of cultural, burial grounds, archaeological, and historical significance are demarcated on the site layout plan, and marked as no-go areas.	Throughout Project	Weekly Inspection	Eskom Contractor [C] CECO	Site Manager (SM)	ECO	EA EM PM SAHRA
Construction Phase								
1	Emergency Response	Should any archaeological or physical cultural property heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped until heritage authority has cleared the development to continue.	Throughout Project	Throughout	C CECO	SM	ECO	EA EM PM SAHRA
		Should any archaeological, burial ground, cultural property heritage resources be exposed during excavation or be found on development site, a registered heritage specialist or AMAFA KWAZULU NATAL PHRA official must be called to site for inspection.	Throughout Project	Throughout	C CECO	SM	ECO	EA EM PM

	Under no circumstances may any burial ground, grave, archaeological, historical or any physical cultural property heritage material be destroyed or removed from site;	Throughout Project	Throughout	C CECO	SM	ECO	EA EM PM
	Should remains and/or artefacts be discovered on the development site during earthworks, all work will cease in the area affected and the Contractor will immediately inform the Construction Manager who in turn will inform AMAFA KWAZULU NATAL PHRA.	Throughout Project	When necessary	C CECO	SM	ECO	EA EM PM
	Should any remains be found on site that is potentially human remains, the Amafa KwaZulu Natal PHRA and South African Police Service should be contacted immediately.	Throughout Project	When necessary	C CECO	SM	ECO	EA EM PM
Rehabilitation Phase							
	Same as construction phase.						
Operational Phase							
	Same as construction phase.						

10. CONCLUSION

This HMP has been compiled in terms of the provisions of the provincial and national environmental and heritage management legislations. This document is, furthermore, compiled to comply with those conditions set out in Amafa and SAHRA Regulations pertaining to protection and management of cultural heritage resources. It comprehensively addresses potential powerline development impacts on all relevant aspects related to the proposed construction activities on the receiving environment and allows for continuous improvement through regular monitoring and reporting to throughout the life cycle of the proposed development. In the unlikely event that future changes to the overall project HMP and EMP become necessary due to site-specific changes and developments will be addressed through an HMP and EMP amendment process.

11. BIBLIOGRAPHY

- AUSTRALIA ICOMOS (1999) The Burra Charter: The Australia ICOMOS charter for places of cultural significance. Burwood.
- BICKFORD, A AND SULLIVAN, S. 1977. "Assessing the research significance of historic sites" in S Sullivan and S Bowdler (eds) Site Surveys and Significance assessment in Australian Archaeology. Canberra: ANU.
- BURKE, H. And SMITH, C. 2004. The archaeologist's field handbook. Australia. Allen and Unwin.
- COOPER, M. A., FIRTH, A., CARMAN, J. & WHEATLEY, D. (eds.) 1995: Managing Archaeology. London: Routledge.
- GLAZEWSKI, J., 2000: Environmental Law in South Africa. Durban: Butterworths.
- SOUTH AFRICA, 1983. Human Tissue Act. Government Gazette.
- SOUTH AFRICA 1999. NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999), Government Gazette. Cape Town.
- SAHRA APMHOB. 2004. Policy for the management of Archaeology, Palaeontology, Meteorites and Heritage Object. . SAHRA: Cape Town.
- SAHRA APM. 2006. Guidelines: Minimum standards for the archaeological and palaeontological Component of Impact Assessment Reports. . SAHRA: Cape Town.
- SAHRA APMHOB 2002. General Introduction to surveys, impact assessments and management plans. . SAHRA: CT.
- SAHRA. 2002. General guidelines to Archaeological Permitting Policy. SAHRA: Cape Town.
- SAHRA. 2002. General Introduction to surveys, impact assessments and management plans.
- SAHRA. What to do when Graves are uncovered accidentally.
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APPENDIX 1: HUMAN REMAINS AND BURIALS IN DEVELOPMENT CONTEXT

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Developers, land use planners and professional specialist service providers often encounter difficult situations with regards to burial grounds, cemeteries and graves that may be encountered in development contexts. This may be before or during a development project. There are different procedures that need to be followed when a development is considered on an area that will impact upon or destroy existing burial grounds, cemeteries or individual graves. In contexts where human remains are accidentally found during development work such as road construction or building construction, there are different sets of intervention regulations that should be instigated. This brief is an attempt to highlight the relevant regulations with emphasis on procedures to be followed when burial grounds, cemeteries and graves are found in development planning and development work contexts. The applicable regulations operate within the national heritage and local government legislations and ordinances passed in this regard. These guidelines assist you to follow the legal pathway.

1. First, establish the context of the burial:

A. Are the remains less than 60 years old? If so, they may be subject to provisions of the Human Tissue Act, Cemeteries Ordinance(s) and to local, regional, or municipal regulations, which vary from place to place. The finding of such remains must be reported to the police but are not automatically protected by the National Heritage Resources Act (Act 25 of 1999).

B. Is this the grave of a victim of conflict? If so, it is protected by the National Heritage Resources Act (Section 36(3a)). (Relevant extracts from the Act and Regulations are included below).

C. Is it a grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority? If so, it is protected by the National Heritage Resources Act (Section 36(3b)).

D. Are the human or hominid remains older than 100 years? If so, they are protected by the National Heritage Resources Act (Section 35(4), see also definition of "archaeological" in Section 2).

2. Second, refer to the terms of the National Heritage Resources Act most appropriate to the situation, or to other Acts and Ordinances:

A. Human remains that are NOT protected in terms of the National Heritage Resources Act (i.e. less than 60 years old and not a grave of a victim of conflict or of cultural significance) are subject to provisions of the Human Tissue Act and to local and regional regulations, for example Cemeteries Ordinances applicable in different Provincial and local Authorities.

B). All finds of human remains must be reported to the nearest police station to ascertain whether or not a crime has been committed.

C). If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains may be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities given their consent to the unknown remains to be re-buried in their area, such re-interment may be conducted under the same regulations as would apply for known human remains.

3. In the event that a graveyard is to be moved or developed for another purpose, it is incumbent on the local authority to publish a list of the names of all the persons buried in the graveyard if there are gravestones or simply a notification that graves in the relevant graveyard are to be disturbed. Such a list would have to be compiled from the names on the gravestones or from parish or other records. The published list would call on the relatives of the deceased to react within a certain period to claim the remains for re-interment. If the relatives do not react to the advertisement, the remains may be re-interred at the discretion of the local authority.

A. However, it is the responsibility of the developer to ensure that none of the affected graves within the cemetery are burials of victims of conflict. The applicant is also required in line with the heritage legislation to verify that the graves have no social significance to the local communities.

B. It is illegal in terms of the Human Tissue Act for individuals to keep human remains, even if they have a permit, and even if the material was found on their own land.

4. The Exhumations Ordinance (Ordinance No. 12 of 1980 and as amended) is also relevant. Its purpose is "To prohibit the desecration, destruction and damaging of graves in cemeteries and receptacles containing bodies; to regulate the exhumation, disturbance, removal and re-interment of bodies, and to provide for matters incidental thereto". This ordinance is supplemented and support by local authorities regulations, municipality by-laws and ordinances.

DEFINITIONS AND APPLICABLE REGULATIONS

1). A "Cemetery" is defined as any land, whether public or private, containing one or more graves.

2). A "grave" includes "(a) any place, whether wholly or partly above or below the level of ground and whether public or private, in which a body is permanently interred or intended to be permanently interred, whether in a coffin or other receptacle or not, and (b) any monument,

tombstone, cross, inscription, rail, fence, chain, erection or other structure of whatsoever nature forming part of or appurtenant to a grave.

3). No person shall desecrate, destroy or damage any grave in a cemetery, or any coffin or urn without written approval of the Administrator.

4). No person shall exhume, disturb, remove or re-inter anybody in a cemetery, or any coffin or urn without written approval of the Administrator.

5). Application must be made for such approval in writing, together with:

a). A statement of where the body is to be re-interred.

b). Why it is to be exhumed.

c). The methods proposed for exhumation.

d). Written permission from local authorities, nearest available relatives and their religious body owning or managing the cemetery, and where all such permission cannot be obtained, the application must give reasons why not.

6). The Administrator has the power to vary any conditions and to impose additional conditions.

7). Anyone found guilty and convicted is liable for a maximum fine of R200 and maximum prison sentence of six months.

5. Human remains from the graves of victims of conflict, or any burial ground or part thereof which contains such graves and any other graves that are deemed to be of cultural significance may not be destroyed, damaged, altered, exhumed or removed from their original positions without a permit from the National Heritage Resources Agency. They are administered by the Graves of Conflict Division at the SAHRA offices in Johannesburg.

"Victims of Conflict" are:

a). Those who died in this country as a result of any war or conflict but excluding those covered by the Commonwealth War Graves Act, 1992 (Act No. 8 of 1992).

b). Members of the forces of Great Britain and the former British Empire who died in active service before 4 August 1914.

c). Those who, during the Anglo Boer War (1899-1902) were removed from South Africa as prisoners and died outside South Africa, and,

d). Those people, as defined in the regulations, who died in the "liberation struggle" both within and outside South Africa.

6. Any burial that is older than 60 years, which is outside a formal cemetery administered by a local authority, is protected in terms of Section 36(3b) of the National Heritage Resources Act. No person shall destroy damage, alter, exhume or remove from its original position, remove from its original site or export from the Republic any such grave without a permit from the SAHRA.

There are some important new considerations applicable to B & C (above).

SAHRA may, for various reasons, issue a permit to disturb a burial that is known to be a grave of conflict or older than 65 years, or to use, at a burial ground, equipment for excavation or the detection or the recovery of metals.

(Permit applications must be made on the official form Application for Permit: Burial Grounds and Graves available from SAHRA or provincial heritage resources authorities.) Before doing so, however, SAHRA must be satisfied that the applicant:

- a). Has made satisfactory arrangements for the exhumation and re- interment of the contents of such a grave at the cost of the applicant.
- b). Has made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such a grave and,
- c). Has reached an agreement with these communities and individuals regarding the future of such a grave or burial ground.

PROCEDURE FOR CONSULTATION

The regulations in the schedule describe the procedure of consultation regarding the burial grounds and graves. These apply to anyone who intends to apply for a permit to destroy damage, alter, remove from its original position or otherwise disturb any grave or burial ground older than 60 years that is situated outside a formal cemetery administered by a local authority. The applicant must make a concerted effort to identify the descendants and family members of the persons buried in and/or any other person or community by tradition concerned with such grave or burial ground by:

- 1). Archival and documentary research regarding the origin of the grave or burial ground;
- 2). Direct consultation with local community organizations and/or members;
- 3). The erection for at least 60 days of a notice at the grave or burial ground, displaying in all the official languages of the province concerned, information about the proposals affecting the site, the telephone number and address at which the applicant can be contacted by any interested person and the date by which contact must be made, which must be at least 7 days after the end of the period of erection of the notice; and
- 4). Advertising in the local press.

The applicant must keep records of the actions undertaken, including the names and contact details of all persons and organizations contacted and their response, and a copy of such records must be submitted to the provincial heritage resources authority with the application.

Unless otherwise agreed by the interested parties, the applicant is responsible for the cost of any remedial action required.

If the consultation fails to reach an agreement, the applicant must submit records of the consultation and the comments of all interested parties as part of the application to the provincial heritage resources authority.

In the case of a burial discovered by accident, the regulations state that when a grave is discovered accidentally in the course of development or other activity:

- a). SAHRA or the provincial heritage resources authority (or delegated representative) must, in co-operation with the Police, inspect the grave and decide whether it is likely to be older than 60 years or otherwise protected in terms of the Act; and whether any further graves exist in the vicinity.
- b). If the grave is likely to be so protected, no activity may be resumed in the immediate vicinity of the grave, without due investigation approved by SAHRA or the provincial heritage resources authority; and
- c). SAHRA or the provincial heritage resources authority may at its discretion modify these provisions in order to expedite the satisfactory resolution of the matter.
- d). Archaeological material, which includes human and hominid remains that are older than 100 years (see definition in section 2 of the Act), is protected by the National Heritage Resources Act (Section 35(4)), which states that no person may, without a permit issued by the responsible heritage resources authority - destroy, damage, excavate, alter or remove from its original site any archaeological or palaeontological material.

The implications are that anyone who has removed human remains of this description from the original site must have a permit to do so. If they do not have a permit, and if they are convicted of an offence in terms of the National Heritage Resources Act as a result, they must be liable to a maximum fine of R100 000 or five years imprisonment, or both.

TREAT HUMAN REMAINS WITH RESPECT

- a). Every attempt should be made to conserve graves in situ. Graves should not be moved unless this is the only means of ensuring their conservation.
 - b). The removal of any grave or graveyard or the exhumation of any remains should be preceded by an historical and archaeological report and a complete recording of original location, layout, appearance and inscriptions by means of measured drawings and photographs. The report and recording should be placed in a permanent archive.
 - c). Where the site is to be re-used, it is essential that all human and other remains be properly exhumed and the site left completely clear.
 - d). Exhumations should be done under the supervision of an archaeologist, who would assist with the identification, classification, recording and preservation of the remains.
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- e). No buried artifacts should be removed from any protected grave or graveyard without the prior approval of SAHRA. All artifacts should be re-buried with the remains with which they are associated. If this is not possible, proper arrangements should be made for the storage of such relics with the approval of SAHRA.
 - f). The remains from each grave should be placed in individual caskets or other suitable containers, permanently marked for identification.
 - g). The site, layout and design of the area for re-interment should take into account the history and culture associated with, and the design of, the original grave or graveyard.
 - h). Re-burials in mass graves and the use of common vaults are not recommended.
 - i). Remains from each grave should be re-buried individually and marked with the original grave markers and surrounds.
 - j). Grouping of graves, e.g. in families, should be retained in the new layout.
 - k). Material from the original grave or graveyard such as chains, kerbstones, railing and should be re-used at the new site wherever possible.
 - l). A plaque recording the origin of the graves should be erected at the site of re-burial.
 - m). Individuals or groups related to the deceased who claim the return of human remains in museums and other institutions should be assisted to obtain documentary proof of their ancestral linkages.
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APPENDIX 2: LEGAL BACK GROUND AND PRINCIPLES OF HERITAGE RESOURCES MANAGEMENT IN SOUTH AFRICA

Extracts relevant to this report from the National Heritage Resources Act No. 25 of 1999, (Sections 5, 36 and 47):

General principles for heritage resources management

5. (1) All authorities, bodies and persons performing functions and exercising powers in terms of this Act for the management of heritage resources must recognise the following principles:

(a) Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and as they are valuable, finite, non-renewable and irreplaceable they must be carefully managed to ensure their survival;

(b) every generation has a moral responsibility to act as trustee of the national heritage for succeeding generations and the State has an obligation to manage heritage resources in the interests of all South Africans;

(c) heritage resources have the capacity to promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity; and

(d) heritage resources management must guard against the use of heritage for sectarian purposes or political gain.

(2) To ensure that heritage resources are effectively managed—

(a) the skills and capacities of persons and communities involved in heritage resources management must be developed; and

(b) provision must be made for the ongoing education and training of existing and new heritage resources management workers.

(3) Laws, procedures and administrative practices must—

(a) be clear and generally available to those affected thereby;

(b) in addition to serving as regulatory measures, also provide guidance and information to those affected thereby; and

(c) give further content to the fundamental rights set out in the Constitution.

(4) Heritage resources form an important part of the history and beliefs of communities and must be managed in a way that acknowledges the right of affected communities to be consulted and to participate in their management.

(5) Heritage resources contribute significantly to research, education and tourism and they must be developed and presented for these purposes in a way that ensures dignity and respect for cultural values.

(6) Policy, administrative practice and legislation must promote the integration of heritage resources conservation in urban and rural planning and social and economic development.

(7) The identification, assessment and management of the heritage resources of South Africa must—

(a) take account of all relevant cultural values and indigenous knowledge systems;

(b) take account of material or cultural heritage value and involve the least possible alteration or loss of it;

(c) promote the use and enjoyment of and access to heritage resources, in a way consistent with their cultural significance and conservation needs;

(d) contribute to social and economic development;

(e) safeguard the options of present and future generations; and

(f) be fully researched, documented and recorded.

Burial grounds and graves

36. (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

(3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—

(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, 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 equipment, or any equipment which assists in the detection or recovery of metals.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents

of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources

authority.

(5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority—

(a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and

(b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.

(6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—

(a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and

(b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

(7) (a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.

(b) The Minister must publish such lists as he or she approves in the Gazette.

(8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.

(9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

General policy

47. (1) SAHRA and a provincial heritage resources authority—

(a) must, within three years after the commencement of this Act, adopt statements of general policy for the management of all heritage resources owned or controlled by it or vested in it; and

(b) may from time to time amend such statements so that they are adapted to changing circumstances or in accordance with increased knowledge; and

(c) must review any such statement within 10 years after its adoption.

(2) Each heritage resources authority must adopt for any place which is protected in terms of this Act and is owned or controlled by it or vested in it, a plan for the management of such place in accordance with the best environmental, heritage conservation, scientific and educational principles that can reasonably be applied taking into account the location, size and nature of the place and the resources of the authority concerned, and may from time to time review any such plan.

(3) A conservation management plan may at the discretion of the heritage resources authority concerned and for a period not exceeding 10 years, be operated either solely by the heritage resources authority or in conjunction with an environmental or tourism authority or under contractual arrangements, on such terms and conditions as the heritage resources authority may determine.

(4) Regulations by the heritage resources authority concerned must provide for a process whereby, prior to the adoption or amendment of any statement of general policy or any conservation management plan, the public and interested organisations are notified of the availability of a draft statement or plan for inspection, and comment is invited and considered by the heritage resources authority concerned.

(5) A heritage resources authority may not act in any manner inconsistent with any statement of general policy or conservation management plan.

(6) All current statements of general policy and conservation management plans adopted by a heritage resources authority must be available for public inspection on request.
