
**HERITAGE IMPACT ASSESSMENT OF
DUMASI / ZIMBANE - TOMBO POWER LINE AND SUBSTATIONS,
PORT ST JOHNS,
EASTERN CAPE PROVINCE, SOUTH AFRICA**



Assessment and report by



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For **Arcus GIBB (Pty) Ltd**

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31 August 2009

Management summary

eThembeni Cultural Heritage was appointed by Arcus GIBB to undertake a heritage impact assessment of a proposed Eskom project near Port St Johns, in terms of the Heritage Resources Act No 25 of 1999. Two eThembeni staff members inspected the area on 13 and 14 August 2009 and completed a controlled-exclusive surface survey and database search.

The purpose of this heritage impact assessment has been to identify problem areas associated with a proposed power line corridor and potential deviation, and, if possible, identify a preferred route.

We had to take the following factors into consideration:

- The constraints of fieldwork and a desktop study of an approximately 50 metre wide servitude over an 18 kilometre long route, with a potential deviation of about five kilometres;
- The linear nature of the project where tower positions can be altered to avoid direct impacts on heritage resources;
- The greatest impact on landscapes and natural features is created by access roads and other construction and maintenance infrastructure, which alter the landscape permanently and irreversibly, whereas towers have a relatively small footprint that can be rehabilitated once towers have been removed; and
- The locations of new access and maintenance roads, construction camps and other infrastructure associated with the project have not yet been identified and we were thus unable to inspect them.

Our findings are as follows:

- The proposed power line route, without the deviation, is preferable from a heritage perspective, since it is located in an area with similar infrastructure, with the least requirement for new supporting infrastructure, such as access roads.
- No heritage resources are present on the sites of the proposed new substation at Tombo and the existing Kohlo substation.
- The exact power line route should be chosen to minimise the requirements for new infrastructure.
- A heritage practitioner should complete a 'walk-through' of the final selected power line servitude and all other activity areas (access roads, construction camps, etc.) prior to the start of any construction activities.

We recommend that the development proceed with the proposed heritage resource mitigation and have submitted this report to the South African Heritage Resources Agency in fulfilment of the requirements of the Heritage Resources Act 1999. The relevant SAHRA personnel are Mary Leslie (telephone 021 462 4502) and Mr Thanduxolo Lungile (telephone 043 722 1740/2/6).

If permission is granted for the development to proceed, the client is reminded that the Act requires that a developer cease all work immediately and notify SAHRA should any heritage resources, as defined in the Act, be discovered during the course of development activities.

Specialist competency

Len van Schalkwyk is accredited by the Cultural Resources Management section of the Association of South African Professional Archaeologists to undertake heritage impact assessments in South Africa.

Mr van Schalkwyk has a master's degree in archaeology (specialising in the history of early farmers in southern Africa) from the University of Cape Town and 20 years' experience in heritage management. He has worked on projects as diverse as the establishment of the Ondini Cultural Museum in Ulundi, the cultural management of Chobe National Park in Botswana and various archaeological excavations and oral history recording projects. He was part of the writing team that produced the KwaZulu-Natal Heritage Act 1997. He has worked with many rural communities to establish integrated heritage and land use plans and speaks good Zulu.

Mw van Schalkwyk left his position as assistant director of Amafa aKwaZulu-Natali, the provincial cultural heritage authority, to start eThembeni. During the past ten years he has directed more than 800 heritage impact assessments throughout South Africa, as well as in Mozambique.

Declaration of independence

We declare that Len van Schalkwyk, Beth Wahl and eThembeni Cultural Heritage have no financial or personal interest in the proposed development, nor its developers or any of its subsidiaries, apart from in the provision of heritage assessment and management consulting services.

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Introduction and legislation

eThembeni Cultural Heritage was appointed by Arcus GIBB to undertake a heritage impact assessment of a proposed Eskom project near Port St Johns, in terms of the Heritage Resources Act No 25 of 1999. Section 38(1) of the Act requires such an assessment in case of:

- the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- the construction of a bridge or similar structure exceeding 50 m in length;
- any development or other activity which will change the character of a site—
 - (i) exceeding 5 000 m² in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- the re-zoning of a site exceeding 10 000 m² in extent; or
- any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

The Act defines a heritage resource as any place or object of cultural significance i.e. of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This includes, but is not limited to, the following wide range of places and objects:

- living heritage as defined in the National Heritage Council Act No 11 of 1999 (cultural tradition; oral history; performance; ritual; popular memory; skills and techniques; indigenous knowledge systems; and the holistic approach to nature, society and social relationships);
- ecofacts (non-artefactual organic or environmental remains that may reveal aspects of past human activity);
- places, buildings, structures and equipment;
- places to which oral traditions are attached or which are associated with living heritage;
- historical settlements and townscapes;
- landscapes and natural features;
- geological sites of scientific or cultural importance;
- archaeological and palaeontological sites;
- graves and burial grounds;
- sites of significance relating to the history of slavery in South Africa;
- movable objects, but excluding any object made by a living person;
- battlefields; and
- traditional building techniques.

Furthermore, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of—

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

A 'place' is defined as:

- o a site, area or region;
- o a building or other structure (which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure);
- o a group of buildings or other structures (which may include equipment, furniture, fittings and articles associated with or connected with such group of buildings or other structures); and
- o an open space, including a public square, street or park; and in relation to the management of a place, includes the immediate surroundings of a place.

'Structures' means any building, works, device, or other facility made by people and which is fixed to land and any fixtures, fittings and equipment associated therewith older than 60 years.

'Archaeological' means:

- o material remains resulting from human activity which are in a state of disuse and are in or on land and are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
- o rock art, being a form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and is older than 100 years including any area within 10 m of such representation; and
- o wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land or in the maritime cultural zone referred to in section 5 of the Maritime Zones Act 1994 (Act 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which are older than 60 years or which in terms of national legislation are considered to be worthy of conservation;
- o features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

'Palaeontological' means 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.

'Grave' means a place of interment and includes the contents, headstone or other marker of and any other structures on or associated with such place. The South African Heritage Resources Agency will only issue a permit for the alteration of a grave if it is satisfied that every reasonable effort has been made to contact and obtain permission from the families concerned. The following procedures are usually required in the event of exhumation and re-interment:

- o Notification of the impending removals (using appropriate language media and notices at the grave site);
- o Consultation with individuals or communities related or known to the deceased;
- o Satisfactory arrangements for the curation of human remains and / or headstones in a museum, where applicable;
- o Procurement of a permit from SAHRA;
- o Appropriate arrangements for the exhumation (preferably by a suitably trained archaeologist) and re-interment (sometimes by a registered undertaker, in a formally proclaimed cemetery);
- o Observation of rituals or ceremonies required by the families.

Nature of proposed activities (information obtained from the client)

Eskom is proposing to construct a new 132kV double circuit overhead power line in the Port St John's Municipal area to run from the existing Zimbane / Dumasi 132kV line to Tombo, as well as a return 66 kV powerline from Tombo back up to the Kohlo area. A new substation at Tombo and the decommissioning, dismantling and rehabilitation of the existing Kohlo substation proposed. This project forms part of a network-strengthening initiative, providing the opportunity for much needed network strengthening in the Port St Johns area.

Arcus GIBB (Pty) Ltd has been appointed to undertake the necessary Environmental Impact Assessment (EIA) investigations for the planned infrastructure.

An existing 66kV supply network currently feeds the Port St Johns Municipal area. In response to planned growth in the Port St Johns area, the existing 66kV supply network is approaching capacity. The existing Kohlo 66/22kV 1X10MVA Substation is currently fed from Dumasi-Kohlo 66kV line and the total transformer peak load in 2006 was about 6 MVA and according to the Electricity Master Plan, this transformer is expected to reach its nameplate rating in 2010 due to the developments expected in the Port St Johns area, hence the need to construct a new substation at Tombo using the existing Dumasi-Zimbane 132 kV line and decommission the existing Kohlo substation. The double circuit powerline will carry a 132 kV circuit from the existing Dumasi/ Zimbane line through to Tombo, as well as a return 66 kV powerline back up to the Kohlo area.

Once the proposed infrastructure is developed, the exiting Zimbane-Dumasi 66 kV line will be decommissioned. In this instance it makes financial and economic sense to change the voltage from 66 kV to 132 kV to cater for the anticipated load as well as not having to refurbish the 66 kV line from Dumasi to Zimbane, which is nearing the end of its life cycle.

It is the intention of Eskom to construct a new 132kV line to feed the Port St Johns area for network strengthening purposes. The nearest 132kV supply is from an existing line, which travels from Zimbane (Mthatha) to Dumasi (Lusikisiki). It is Eskom's intention to take off the existing Zimbane / Dumasi 132kV line at the Majola Tea Estate. The new double circuit line will travel in a southeasterly direction to the proposed new Tombo substation. The sub at Kohlo will be decommissioned, dismantled and rehabilitated and a new 132/22 kV substation will be built at Tombo.

The total length of the proposed power lines amounts to approximately 18 kilometres.

Location and environmental issues (information obtained from the client)

The proposed project is located in the Port St Johns Local Municipal area of the Eastern Cape. Take off will be from the existing Mafini / Dumasi 132kV line at the Majola Tea Estate. The new line will travel in a south easterly direction to Tombo, where a new substation is proposed.

The Tombo Substation is located adjacent to the road that feeds Mpande and is near the R61 road intersection some 20 kilometres from Port St Johns on the road to Mthatha. The locations of the take off point, existing Kohlo substation and the proposed Tombo substation are as follows:

Take Off Point (Majola Tea Reserve)	S 31° 31' 05" E 29° 18' 52"
Existing Kohlo Substation	S 31° 33' 19" E 29° 22' 36"
Proposed New Tombo Substation	S 31° 21' 22" E 29° 22' 33"

Figures 1 and 2 below indicate the regional location and the proposed power line route, respectively.

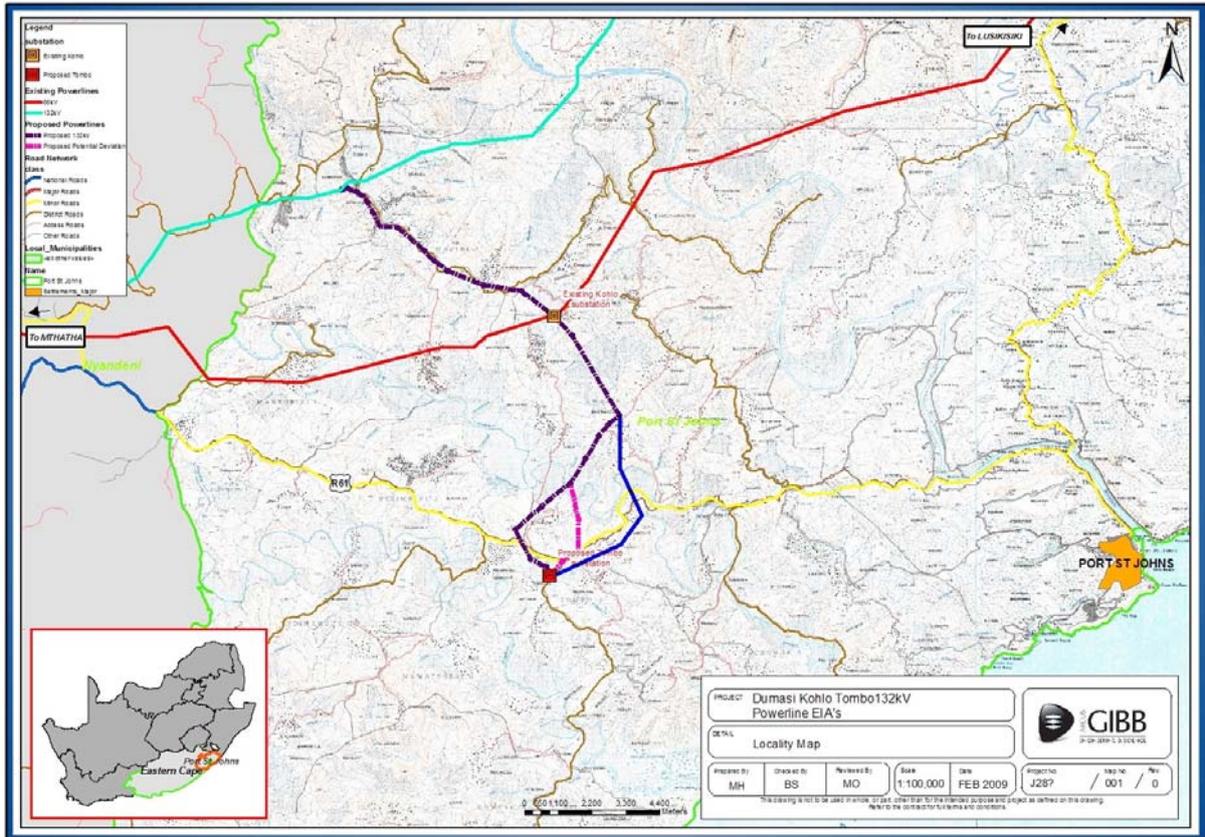


Figure 1. Proposed Dumasikohlo / Tombo - 132kV power line in sub regional context.

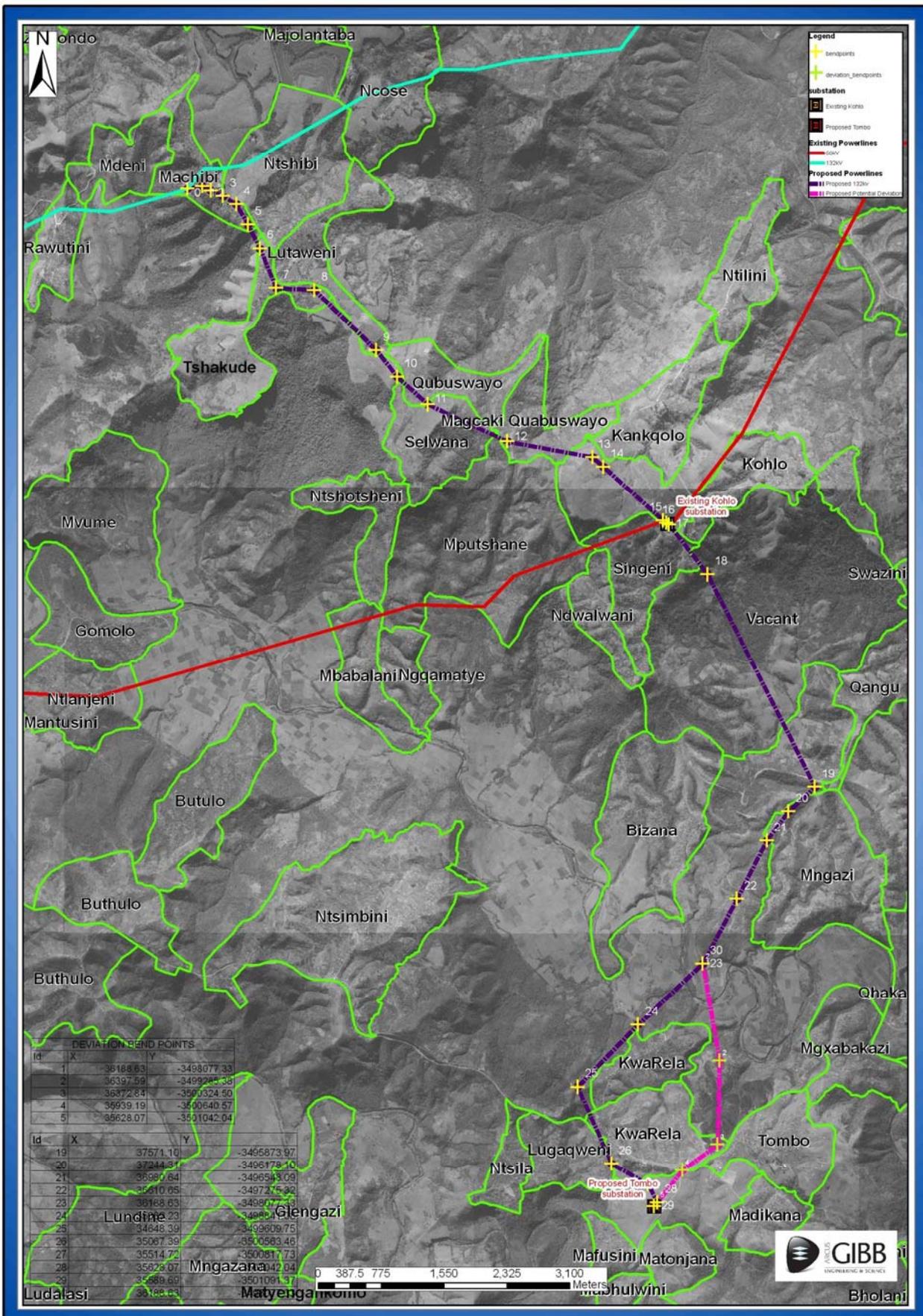


Figure 2. Proposed Dumasi / Zimbane Tombo 132kV power line indicated in purple, with a potential deviation indicated in pink.

The key issues to be addressed in the EIA include:

- The potential impact on avifauna and vegetation, which are known to occur in the area;
- Potential pollution of surface water bodies during construction;
- Erosion and top soil loss;
- Rehabilitation and decommissioning of sites;
- Sourcing of borrow material for construction of the substation;
- Visual and aesthetic impacts;
- Land use and land capability;
- Noise disturbances;
- Health and safety; and
- Job creation.

Methodology

Two eThembeni staff members inspected the area on 13 and 14 August 2009, accompanied by Richard Judge of Arcus GIBB. We completed a controlled-exclusive surface survey of the substation locations, where 'sufficient information exists on an area to make solid and defensible assumptions and judgements about where [heritage resource] sites may and may not be' and 'an inspection of the surface of the ground, wherever this surface is visible, is made, with no substantial attempt to clear brush, turf, deadfall, leaves or other material that may cover the surface and with no attempt to look beneath the surface beyond the inspection of rodent burrows, cut banks and other exposures that are observed by accident' (King 1978¹).

We consulted various provincial databases, including historical, archaeological and geological sources and sourced a concise account of South Africa's pre and postcolonial history (available on request). We assessed the value and significance of heritage resources, as defined in the Heritage Resources Act 1999 and the criteria contained in Appendix A. Culturally significant landscapes were assessed according to the criteria in Appendix B.

Geographic coordinates were obtained with a handheld Garmin GPS72 global positioning unit. Photographs were taken with a Nikon Coolpix S200 digital camera. A statement of independence and a summary of our ability to undertake this heritage impact assessment are available on request.

We had to take the following factors into consideration:

- The constraints of fieldwork and a desktop study of an approximately 50 metre wide servitude over an 18 kilometre long route, with a potential deviation of about five kilometres;
- The linear nature of the project where tower positions can be altered to avoid direct impacts on heritage resources;
- The greatest impact on landscapes and natural features is created by access roads and other construction and maintenance infrastructure, which alter the landscape permanently and irreversibly, whereas towers have a relatively small footprint that can be rehabilitated once towers have been removed; and
- The locations of new access and maintenance roads, construction camps and other infrastructure associated with the project have not yet been identified and we were thus unable to inspect them.

The assumptions and limitations of this heritage impact assessment are as follows:

- We have assumed that the description of the proposed project, provided by the client, is accurate.
- We have assumed that the public consultation process undertaken as part of the Environmental Impact Assessment is sufficient and adequate and does not require repetition as part of the heritage impact assessment.
- Soil surface visibility was moderate overall.

¹ King, T. F. 1989. The archaeological survey: methods and uses. Quoted in Canter, L. W. 1996. Environmental impact assessment. Second Edition. New York: McGraw-Hill, Inc.

- o No subsurface investigation (including excavations or sampling) were undertaken, since a permit from SAHRA is required to disturb a heritage resource. Accordingly, subsurface heritage resources might be present and we remind the client that the Act requires that a developer cease all work immediately and notify SAHRA should any heritage resources, as defined in the Act, be discovered during the course of development activities.

Observations and recommendations

No development activities associated with the proposed project had begun at the time of our visit, in accordance with national heritage legislation. The landscape comprises scattered rural settlements surrounded by agricultural fields and grazing lands. Existing infrastructure comprises gravel district roads, 66kV and 132kV power lines, schools, clinic and shops. The proposed development is in keeping with this landscape. The following photographs illustrate the study area.



Figure 3. The location of the proposed Tombo Substation.



Figure 4. The existing Kohlo Substation.



Figure 5. The take off point at Majola Tea Reserve.



Figure 6. A view along the proposed power line route.

Our findings are as follows:

- The proposed power line route, without the deviation, is preferable from a heritage perspective, since it is located in an area with similar infrastructure, with the least requirement for new supporting infrastructure, such as access roads.
- No heritage resources are present on the sites of the proposed new substation at Tombo and the existing Kohlo substation.
- The exact power line route should be chosen to minimise the requirements for new infrastructure.
- A heritage practitioner should complete a 'walk-through' of the final selected power line servitude and all other activity areas (access roads, construction camps, etc.) prior to the start of any construction activities.

Conclusion

We recommend that the development proceed with the proposed heritage resource mitigation and have submitted this report to SAHRA in fulfilment of the requirements of the Heritage Resources Act 1999. According to Section 38(4) of the Act the report shall be considered timeously by the Council which shall, after consultation with the person proposing the development, decide:

- whether or not the development may proceed;
- any limitations or conditions are to be applied to the development;
- what general protections in terms of this Act apply, and what formal protections may be applied to such heritage resources;
- whether compensatory action shall be required in respect of any heritage resources damaged or destroyed as a result of the development; and
- whether the appointment of specialists is required as a condition of approval of the proposal.

The relevant SAHRA personnel are Mary Leslie (telephone 021 462 4502) and Mr Thanduxolo Lungile (telephone 043 722 1740/2/6).

APPENDIX A

SIGNIFICANCE AND VALUE OF HERITAGE RESOURCE SITES

The following guidelines for determining site significance were developed by the South African Heritage Resources Agency in 2003. We use them in conjunction with tables of our own formulation (see that for the Southern African Iron Age, below) when considering intrinsic site significance and significance relative to development activities, as well as when recommending mitigatory action.

Type of Resource

Place

Structure

Archaeological Site

Palaeontological Site

Geological Feature

Grave

Type of Significance

1. Historical Value

It is important in the community, or pattern of history

- Importance in the evolution of cultural landscapes and settlement patterns
- Importance in exhibiting density, richness or diversity of cultural features illustrating the human occupation and evolution of the nation, Province, region or locality.
- Importance for association with events, developments or cultural phases that have had a significant role in the human occupation and evolution of the nation, Province, region or community.
- Importance as an example for technical, creative, design or artistic excellence, innovation or achievement in a particular period

It has strong or special association with the life or work of a person, group or organisation of importance in history

- Importance for close associations with individuals, groups or organisations whose life, works or activities have been significant within the history of the nation, Province, region or community.

It has significance relating to the history of slavery

- Importance for a direct link to the history of slavery in South Africa.

2. Aesthetic Value

It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group

- Importance to a community for aesthetic characteristics held in high esteem or otherwise valued by the community.
- Importance for its creative, design or artistic excellence, innovation or achievement.
- Importance for its contribution to the aesthetic values of the setting demonstrated by a landmark quality or having impact on important vistas or otherwise contributing to the identified aesthetic qualities of the cultural environs or the natural landscape within which it is located.
- In the case of an historic precinct, importance for the aesthetic character created by the individual components which collectively form a significant streetscape, townscape or cultural environment.

3. Scientific Value

It has potential to yield information that will contribute to an understanding of natural or cultural heritage

- Importance for information contributing to a wider understanding of natural or cultural history by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.
- Importance for information contributing to a wider understanding of the origin of the universe or of the development of the earth.
- Importance for information contributing to a wider understanding of the origin of life; the development of plant or animal species, or the biological or cultural development of hominid or human species.
- Importance for its potential to yield information contributing to a wider understanding of the history of human occupation of the nation, Province, region or locality.

It is important in demonstrating a high degree of creative or technical achievement at a particular period

- Importance for its technical innovation or achievement.

4. Social Value

It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons

- Importance as a place highly valued by a community or cultural group for reasons of social, cultural, religious, spiritual, symbolic, aesthetic or educational associations.
- Importance in contributing to a community's sense of place.

Degrees of Significance

Rarity

It possesses uncommon, rare or endangered aspects of natural or cultural heritage

- Importance for rare, endangered or uncommon structures, landscapes or phenomena.

Representivity

It is important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects

Importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class.

Importance in demonstrating the principal characteristics 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.

Sphere of Significance	High	Medium	Low	
International	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
National	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Provincial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Regional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Local	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specific Community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----

What other similar sites may be compared to this site?

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Southern African Iron Age

	Significance		
	- low	- medium	- high
Unique or type site			Yes
Formal protection			Yes
Spatial patterning	?Yes	?Yes	?Yes
Degree of disturbance	75 – 100%	25 – 74%	0 – 24%
Organic remains (list types)	0 – 5 / m ²	6 – 10 / m ²	11 + / m ²
Inorganic remains (list types)	0 – 5 / m ²	6 – 10 / m ²	11 + / m ²
Ancestral graves			Present
Horizontal extent of site	< 100m ²	101 – 1000m ²	1000 + m ²
Depth of deposit	< 20cm	21 – 50cm	51 + cm
Spiritual association			Yes
Oral history association			Yes
➤ Research potential			High
➤ Educational potential			High

Please note that this table is a tool to be used by qualified cultural heritage managers who are also experienced site assessors.

APPENDIX B

THE MANAGEMENT OF CULTURAL LANDSCAPES

The Cultural Landscape Foundation² defines cultural landscapes as follows:

A cultural landscape is a geographic area that includes resources and natural resources associated with a historic event, activity, or person. Sometimes cultural landscapes are the result of one person or group of people acting upon the land. Other times they are the result of an idea one person or a group had and then created at that time. Cultural landscapes can range from thousands of acres of rural lands to a small homestead with a front yard of less than one acre. They include grand estates, farmland, public gardens and parks, college campuses, cemeteries, scenic highways and even industrial sites.

Four general types of Cultural Landscapes, not mutually exclusive, are:

- Historic Sites
- Historic Designed Landscapes
- Historic Vernacular Landscapes
- Ethnographic Landscapes

Cultural Landscapes can:

- Be man-made expressions of visual and spatial relationships.
- Serve as texts and narratives of cultures.
- Be valuable expressions of regional identity.
- Be works of art that are part of our national heritage.
- Exist in relationship to their ecological contexts.

What are cultural landscapes? by Alice E. Ingerson, Institute for Cultural Landscape Studies³

Virtually all landscapes have cultural associations, because virtually all landscapes have been affected in some way by human action or perception. Therefore, the Institute for Cultural Landscape Studies does not use the phrase "cultural landscape" to mean a special type of landscape. Instead, we use "cultural landscape" to mean a way of seeing landscapes that emphasizes the interaction between human beings and nature over time. ICLS also works with many other organizations, some of which have contrasting or even conflicting definitions of "cultural landscape":

individual, special, aesthetic, collective, representative, useful, cultural, related to the arts (consciously designed objects), ideas of enduring value related to the everyday beliefs and practices of a group of people, the work of landscape architects or garden designers, scenery portrayed in a painting or photograph, or that is seen as worth painting or photographing, the land that can be seen from a single vantage point (usually larger than a "site", smaller than a "region"), "nearly everything we see when we go outdoors" — Peirce Lewis 1979

² Though professional techniques for identifying, documenting, and managing cultural landscapes have evolved rapidly in the past 30 years, the results of the professionals' work often fails to reach the general public. Consequently, many of the places in which we live, work, and play often change considerably—sometimes over years and sometimes overnight! The Cultural Landscape Foundation is the only not-for-profit foundation in America dedicated to increasing the public's awareness of the importance and irreplaceable legacy of cultural landscapes. Through education, technical assistance, and outreach, the Cultural Landscape Foundation aims to broaden the support and understanding for cultural landscapes nationwide in hopes of saving our priceless heritage for future generations. The CLF achieves this mission by: (1) heightening the awareness of those who impact cultural landscapes; (2) assisting those groups and organizations who are working to increase the appreciation and recognition of cultural landscapes; and, (3) developing educational tools for young people to better connect them to their cultural landscape environs.

³ From the website of the Institute for Cultural Landscape Studies of the Arnold Arboretum (<http://www.icls.harvard.edu>), © The President and Fellows of Harvard College. The Institute for Cultural Landscape Studies was formed in 1997 to support the emerging community of professionals and volunteers who manage and interpret landscapes with a significant history of human use, particularly in the northeastern United States. These practitioners work with a wide variety of places, from historic gardens and public parks to urban streetscapes, broad agricultural or industrial regions, and conservation or ecological reserves. These landscapes are neither static nor self-contained. Managing them requires active experimentation and continuous learning, to understand how past events and decisions produced today's landscapes, and how today's decisions and events are already producing tomorrow's landscapes. The Institute for Cultural Landscape Studies worked with nonprofit organizations, public agencies, and colleges and universities to capture place-based knowledge about cultural landscapes, and to respond to emerging issues.

The National Park Service and the National Register of Historic Places, as well as organizations that look to these agencies for management models and standards, use the operational definition of "cultural landscape" from the 1996 Secretary of the Interior's . . . Guidelines for the Treatment of Cultural Landscapes:

a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

Historic landscapes, unlike works of art, have to function as contemporary environments — we have literally to enter and become involved with them. — Catherine Howett 1987

Much public discussion about cultural landscapes is about preserving special or historic places. Yet the definition of "special" varies over time, among different cultures, and in different places. A landscape valued by one group may be simply invisible, or even offensive, to another. Next to an official historic district may be a neighborhood that is not eligible for any special treatment but has deep meaning and associations for the people who live there. Mobile homes may be critical to a farm economy, though they jar the sensibilities of visitors expecting to see only white clapboard houses and wooded hillsides from a "scenic overlook" in a state forest. The historic district and the ordinary neighborhood, working farms and protected forests, are all cultural landscapes.

Even when landscape preservation standards are broadened to include a wide range of landscape types, strict preservation is not always an appropriate stance. Designers and communities may also choose to transform existing landscapes or create new ones. Managing cultural landscapes thus involves planning for positive change as well as preventing negative change.