

HERITAGE IMPACT ASSESSMENT OF
PROPOSED INSTALLATION OF ASSAGAY TRUNK WATER MAIN,
ETHEKWINI METROPOLITAN MUNICIPALITY,
KWAZULU-NATAL, SOUTH AFRICA

Prepared for
1World Consultants

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Updated by
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Executive Summary

eThembeni Cultural Heritage was appointed by Arcus GIBB to undertake a heritage impact assessment of a proposed trunk water main in the eThekweni Metropolitan Municipality, in terms of the National Heritage Resources Act No 25 of 1999. The HIA was compiled in November 2010.

The project was submitted for environmental authorisation to the then Department of Agriculture, Environmental Affairs and Rural Development (DAERD) but was rejected due to strong objections from Department of Transport (DoT). Since then EWS has expropriated relevant stretches of land and the route has been changed slightly to avoid land owned by DoT. The environmental authorisation is now required to be resubmitted for approval to Department of Economic Development, Tourism and Environmental Affairs (EDTEA). 1World Consultants have been appointed as the EAP. JLB Consulting was appointed by 1World Consultants to ensure that the altered route does not affect heritage resources and to update the existing HIA where necessary.

Observations

The eThembeni HIA identified no heritage resources within the proposed development area. This was confirmed by JLB Consulting.

Recommended mitigation measures

A number of mitigation measures are provided to guide the developer in the event of chance finds of heritage resources during the construction of the pipeline

Conclusion

JLB Consulting concurs with the previous HIA that the development proceed and that the updated HIA is submitted to Amafa aKwaZulu-Natali in fulfilment of the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999).

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1. Introduction and Background

The project was submitted for environmental authorisation to the KwaZulu-Natal Department of Agriculture, Environmental Affairs and Rural Development (DAERD) but was rejected due to strong objections from Department of Transport (DoT). Since then, eThekweni Municipality: Water & Sanitation Unit (EWS) has expropriated relevant stretches of land and the route for the proposed pipeline has changed slightly to avoid land owned by the DoT. The environmental authorisation is now required to be resubmitted for approval to Department of Economic Development, Tourism and Environmental Affairs (EDTEA) and 1World Consultants have been appointed as the Environmental Assessment Practitioner (EAP) for the re-submission of the project.

During the initial environmental authorisation process, eThembeni Cultural Heritage undertook the heritage impact assessment of the pipeline route in 2010. JLB Consulting was appointed by 1World Consultants to ensure that the altered route does not affect heritage resources and to update the existing HIA report where necessary.

South Africa's heritage resources are both rich and widely diverse, encompassing sites from all periods of human history. Resources may be tangible, such as buildings and archaeological artefacts, or intangible, such as landscapes and living heritage. Their significance is based upon their aesthetic, architectural, historical, scientific, social, spiritual, linguistic, economic or technological values; their representivity of a particular time period; their rarity; and their sphere of influence.

The integrity and significance of heritage resources can be jeopardized by natural (e.g. erosion) and human (e.g. development) activities. In the case of human activities, a range of legislation exists to ensure the timeous identification and effective management of heritage resources for present and future generations.

2. Terms of reference

A Heritage Impact Assessment must address the following key aspects:

- the identification and mapping of all heritage resources in the area affected;
- an assessment of the significance of such resources in terms of heritage assessment criteria set out in regulations;
- an assessment of the impact development on heritage resources;
- an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- plans for mitigation of any adverse effects during and after completion of the proposed development.

3. Project description

The EWS proposes to install a 400mm diameter steel water main pipeline within road reserves in the Assagay suburb in the Outer West Region of the eThekweni Municipality. The proposed pipeline will be approximately 2.9km long and the route alignment runs within the road reserve from a tie-in point at the intersection of Gevers and Assagay Roads, running along Assagay Road until Kassier Road where it runs for a short distance before running along Assagay Crescent and Alverstone Road to the existing 400mm diameter main connection point in Fraser Road (see Figure 1 below). The pipeline is intended to supplement the existing 200mm diameter water main that currently feeds the Summerhills area, where there is a growing demand for additional water.

The primary responsibility of EWS is to provide water and sanitation services to all customers in the municipality. Eradicating the backlog of the provision of both services is a key priority for the EWS. The water backlog has been reduced to 15% of the 1996 figure and the sewerage backlog stands at approximately 50% of the 1996 figure. The following goals have been identified by the EWS as pertinent to enable the eradication of the backlog of water and sanitation services:

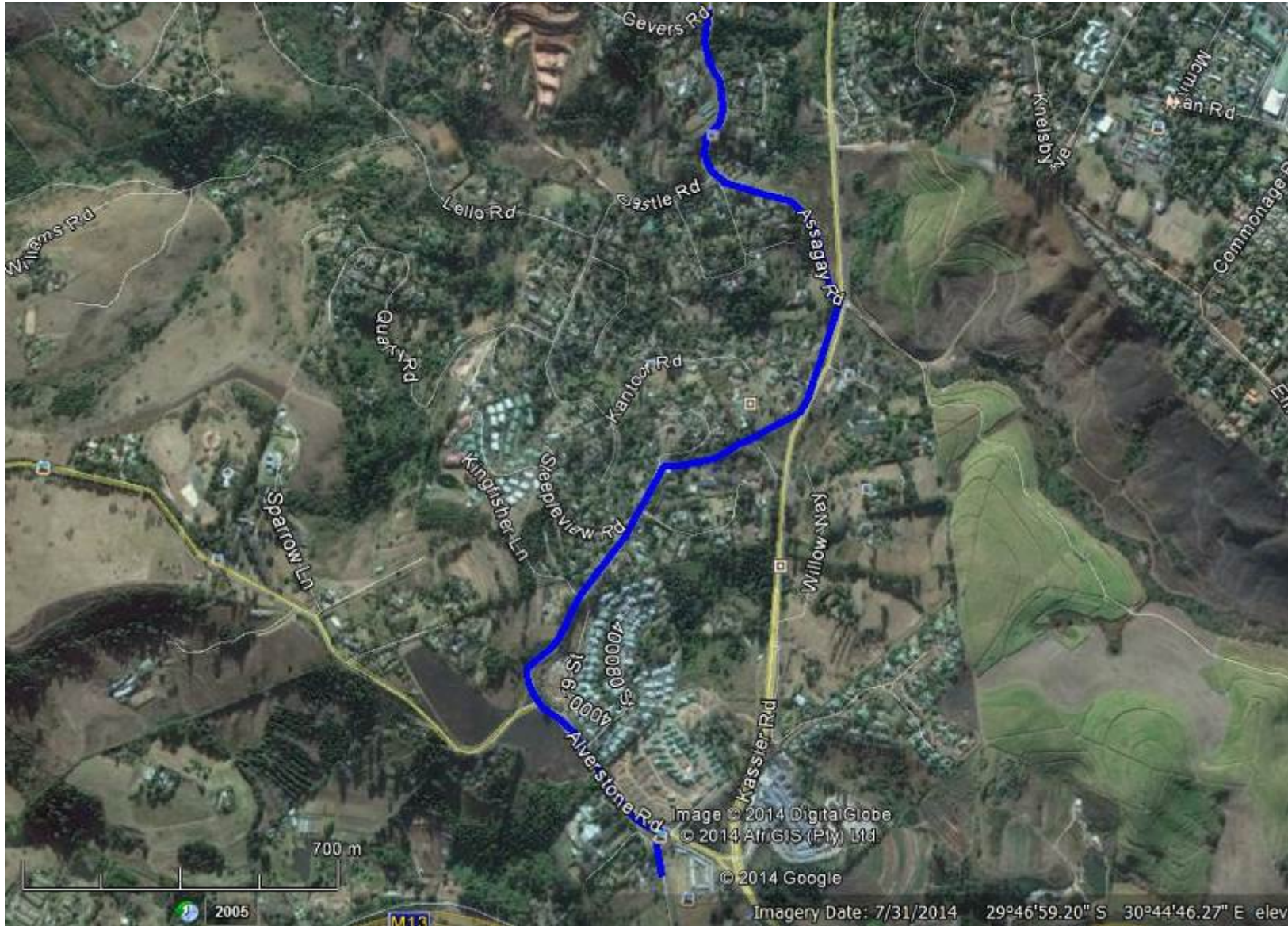
- Reducing non-revenue water from the present level of 30%, to 25%, over the next 5 years;
- Improving asset management systems;
- Training young graduates in engineering and retaining skilled staff to respond to the shortage of engineers and professional skills in SA;
- Improving performance management systems; and
- Improving customer services and services payment levels, which are currently just over 90%.

The eThekweni Municipality has set as a target of supplying all households in Durban with access to potable water within 5 years of June 2008. As part of reaching this target the EWS has identified the probable water shortages that are eminent with the rapid expansion of the Summerhills area and wish to install a secondary pipeline to supply the additional water demand in the area.

The pipeline will be a 400mm diameter steel water main pipeline for the bulk supply of water to consumers. It will be laid in an approximately 1m wide by 3m deep trench. No household tie-in connections will be made directly to the pipeline along its path through Assagay as it is a trunk main (bulk main) line.

The pipeline will be laid on a 100mm thick bedding cradle of river sand (above and below the pipe) and covered with a general 1m cover. The bedding material is free of stones and debris.

The EWS have stated that the intention is to install the pipeline within the road reserve and stay outside of driveways and verges as far as possible, although some of the road reserve has been claimed as verges. Where the pipeline is installed within the road itself, the road will be rebuilt above it according to the standards defined by the class of the road.



4. Receiving environment

4.1 Project location

The pipeline is proposed to be installed within the road reserve along various roads in Assagay (Figures 1, 2 and 3). The alignment passes primarily through the residential portion of Assagay although it does bypass some business properties. The study area can therefore be described as mixed use in certain areas, and pure residential in others. The co-ordinates for the project are as follows:

Start S29° 46'25"; E30° 44'59";

Middle S29° 46'56"; E30° 44'44";

End S29° 47'27"; E30° 44'19"

4.2 Environmental description

The proposed pipeline is located within road reserves which are currently occupied by paved or grassed verges, with a wetland being traversed at one point along the route. The wetland area has been previously impacted by development, with modification to the natural hydrological functioning of the channel, as well as colonisation of the channel and wetland zone by exotic plants and trees.

4.3 Potential impacts

Potential **direct impacts that could occur due to installation:**

– Wetland impacts

Disturbance of wetland vegetation and habitat; Disturbance of wetland soils and alteration of wetland geomorphology; Erosion and sedimentation from construction activities; Invasion by exotic plants.

– Stream / drainage line impacts

Alteration of hydrological functioning within the stream channel; Pollution of the immediate and downstream environment (hazardous substances and general wastes); Impact on stream morphology; Disturbance of in-stream habitat.

– Construction related direct impacts

Traffic disturbance and congestion to residents and commuters along affected roads in Assagay; Closure of Gevers Road (when pipeline is installed across it); Water interruptions.

– Nuisance impacts

Visual and aesthetic impacts of construction activity; Noise impact of construction vehicles and equipment; Positive impact associated with the provision of additional potable water to residents of Summerhills; Potential spillage of hazardous material such as oil or fuel.

Potential **indirect impacts that could occur due to installation:**

- Construction litter; contamination of water courses from spilled hazardous materials (e.g. oil or fuel); smoke emissions from construction activities.

Potential **cumulative impacts that could occur due to installation:**

- Construction related cumulative impacts; disturbance to residents; downstream contamination of river system.

Potential **direct impacts during the operational phase:**

- Adequate provision of water to the Summerhills consumers; Potential re-disturbance of wetland for maintenance activities; Potential impacts due to maintenance of pipeline.

Potential **indirect impacts during the operational phase:**

- Wetland not adequately rehabilitated resulting in indigenous grasses not re-established; disruption in flow of water through the wetland; and continuous erosion of bare ground.

Potential **cumulative impacts during the operational phase:**

- Reduction in the backlog of water provision by eThekweni Municipality.

5. Site inspection

A follow up site inspection was undertaken on 23 April 2016. The inspection of most sections of the pipeline route found that there were very few areas that were undisturbed. In some sections, there are small areas of undisturbed land but even in these no heritage sites or resources were found. Sections of the pipeline route are highly manicured compounding the provided below.



Figure 2. Top section of northern section of route for trunk water main



Figure 3. Lower northern section of route of trunk water main



Figure 4. Middle to southern section of route showing markers for existing pipeline



Figure 5. Intersection of Assagay and Alverstone roads in southern section of route



Figure 6. Southern end of route

6. Observations

No development activities associated with the proposed project had begun at the time of the site visit. The following table summarises the heritage resources assessed, and specialist observations. These observations are supported by JLB Consulting.

Table 1. Heritage resources and observations: trunk water main, Assagay.

Heritage resource type	Observation
Living heritage	None were identified within the proposed development area.
Ecofacts	None were identified within the proposed development area.
Places, buildings, structures and equipment	None were identified within the proposed development area.
Places to which oral traditions are attached or which are associated with living heritage	None were identified within the proposed development area.
Historical settlements and townscapes	None were identified within the proposed development area.
Landscapes and natural features	No formally protected landscapes or natural features are present within the proposed development area.
Geological sites of scientific or cultural importance	None were identified within the proposed development area.
Archaeological sites	None were identified within the proposed development area.
Graves and burial grounds	None were identified within the proposed development area.
Movable objects excluding any object made by a living person	None were identified within the proposed development area.
Battlefields	None were identified within the proposed development area.
Traditional building techniques	None were identified within the proposed development area.

7. Recommended mitigation measures

- For any chance finds, such as grave sites, all work will cease in the area affected and the Contractor will immediately inform the Project Manager. A registered heritage specialist must be called to site for inspection. The relevant heritage resource agency (Amafa) must be informed about the finding.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Written permission must be obtained from Amafa if heritage resources, including graves, are to be removed, destroyed or altered.
- All heritage resources found in close proximity to the construction area to be protected by a 3m buffer in which no construction can take place. The buffer material (danger tape, fencing, etc.) must be highly visible to construction crews.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- If there are chance finds of fossils during construction, work in the area of the find must be stopped and a palaeontologist must be called to the site in order to assess the fossils and rescue them if necessary (with an Amafa permit). The fossils must then be housed in a suitable, recognized institute.

8. Recommended monitoring

The possibility of finding intact heritage resources, such as sub-surface archaeological sites is deemed to be low due to the disturbed nature of the most of the pipeline route that will take place largely in a road reserve in a highly developed area. However, the developer, contractor and Environmental Control Officer (ECO) must be made aware of the chance find protocol as provided in Section 7 above.

9. Summary of findings in terms of the National Heritage Resources Act 1999 Section 38(3)

- The identification and mapping of all heritage resources in the area affected
None.
- An assessment of the significance of such resources in terms of the heritage assessment criteria set out in regulations
Not applicable.
- An assessment of the impact of development on such heritage resources
Not applicable.
- An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development
Not applicable.
- The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources

The client has undertaken such consultation in terms of statutory requirements and retains the relevant documentation.

- If heritage resources will be adversely affected by the proposed development, the consideration of alternatives
Not applicable.
- Plans for mitigation of any adverse effects during and after completion of the proposed development
Not applicable.

10. Conclusion

It is recommended that the development proceed and that this report be submitted to Amafa aKwaZulu-Natali in fulfilment of the requirements of the National Heritage Resources Act. 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.

APPENDIX A

STATUTORY REQUIREMENTS

General

The identification, evaluation and management of heritage resources in South Africa is required and governed by the following legislation:

- National Environmental Management Act (NEMA) Act No 107 of 1998
 - a. Basic Environmental Assessment – Section (23)(2)(d)
 - b. Environmental Scoping Report – Section (29)(1)(d)
 - c. Environmental Impacts Assessment – Section (32)(2)(d)
 - d. Environmental Management Plan – Section (34)(b)
- National Heritage Resources Act (NHRA) Act No 25 of 1999
 - a. Protection of heritage resources – Sections 34 to 36
 - b. Heritage Resources Management – Section 38
- Minerals and Petroleum Resources Development Act (MPRDA) Act No 28 of 2002
 - a. Section 39(3)
- Development Facilitation Act (DFA) Act No 67 of 1995.
 - a. The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995 Section 31.

National Heritage Resources Act No 25 of 1999

Section 38(1) of the National Heritage Resources Act of 1999 requires a heritage impact 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:

- a site, area or region;
- a building or other structure which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure;
- 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;

- 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 includes any fixtures, fittings and equipment associated therewith.

‘Archaeological’ means –

- 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;
- rock art, being any 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;
- wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- 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.

Management of graves and burial grounds

– Definitions

Grave

The National Heritage Resources Act No 25 of 1999 defines a grave as a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such a place.

The KwaZulu-Natal Cemeteries and Crematoria Act No 12 of 1996 defines a grave as an excavation in which human remains have been intentionally placed for the purposes of burial, but excludes any such excavation where all human remains have been removed.

Burial ground

The term ‘burial ground’ does not appear to have a legal definition. In common usage the term is used for management purposes to describe two or more graves that are grouped closely enough to be managed as a single entity.

Cemetery

The KwaZulu-Natal Cemeteries and Crematoria Act No 12 of 1996 defines a cemetery as any place

- (a) where human remains are buried in an orderly, systematic and pre-planned manner in identifiable burial plots;
- (b) which is intended to be permanently set aside for and used only for the purposes of the burial of human remains.

– Protection of graves and cemeteries

No person may damage, alter, exhume, or remove from its original position any grave, as defined above, without permission from the relevant authority, as detailed in the following table.

Grave type	Relevant legislation	Administrative authority – disinterment	Administrative authority – reburial
Graves located within a formal cemetery administered by a local authority	KwaZulu-Natal Cemeteries and Crematoria Act No 12 of 1996 Human Tissues Act No 65 of 1983	National and / or Provincial Departments of Health	If relocated to formal cemetery – relevant local authority.
Graves younger than 60 years located outside a formal cemetery administered by a local authority and the graves of victims of conflict	KwaZulu-Natal Heritage Act No 4 of 2008 Human Tissues Act No 65 of 1983	Amafa aKwaZulu-Natali, the provincial heritage management organisation	If relocated to private or communal property – Amafa. If relocated to formal cemetery – Amafa and relevant local authority.
Graves older than 60 years located outside a formal cemetery administered by a local authority	National Heritage Resources Act No 25 of 1999 Human Tissues Act of 1983	South African Heritage Resources Agency (SAHRA), the national heritage management organisation	If relocated to private or communal property – SAHRA. If relocated to formal cemetery – SAHRA and relevant local authority.

– Procedures required for permission to disinter and rebury graves

The procedure for consultation regarding burial grounds and graves (Section 36 of the National Heritage Resources Act of 1999) is applicable to all graves located outside a formal cemetery administered by a local authority. The following extract from this legislation is applicable to this policy document:

SAHRA or Amafa may not issue a permit for any alteration to or disinterment or reburial of a grave 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.

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 Services 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.

APPENDIX B

METHODOLOGY

Criteria for assessing the 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.

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; National; Provincial; Regional; Local

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

The management of cultural landscapes

The Cultural Landscape Foundation¹ 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.

¹ 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.

What are cultural landscapes? by Alice E. Ingerson, Institute for Cultural Landscape Studies²

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

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 neighbourhood, 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.

² 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.

APPENDIX C

DECLARATION OF INDEPENDENCE

It was declared 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 impact assessment and management consulting services.

Jean Beater of JLB Consulting has no financial or personal interest in the proposed development, nor its developers, apart from the provision of heritage and environmental consulting services.