



Transnet Capital Projects Ngqura 16 Mtpa Manganese Project

Heritage Management Plan - Kimberley to De Aar

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1. Heritage Management Plan

The heritage management plan (HMP has been completed following the identification of sensitive heritage resources in close vicinity to the existing manganese ore export railway line. The South African Heritage Agency (SAHRA) developed the relevant guidelines for the development of HMPs required for the management of heritage resources or places.

1.1 Introduction

The development of a HMP is a legal requirement in terms of the National Heritage Act (No. 25 of 1999). The aim of such a plan is to assist with the decision making procedures that are undertaken by the heritage resources authority. The document provides guidance to heritage officials in terms of possible conservation methodologies that can be used at sensitive heritage sites identified during site surveys. The initial site survey that was done for the Ngqura 16 Mtpa Manganese Project indicated that historical blockhouses, grave sites, rock art images and battlefield sites of significance border the existing railway line.

The proposed rail upgrade crosses different cultural landscapes, a variety of living heritage resources, tangible and intangible heritage sites. The significance levels of these heritage resources differ and are required to be managed differently.

As such, the HMP is aimed at providing construction workers with guidance in terms of the type of development activities that are allowed at sites in close vicinity of significant heritage resources, what the acceptable behaviour is at construction sites in close vicinity of grave sites and buffer zones that must be adhered to when works are taking place.

1.2 South African Heritage Resources Agency Guidelines

In terms of the guidelines set out for the Site Management Plans presented by SAHRA, a Cultural Management Plan that is similar to a HMP, is a policy that focuses on management of heritage resources (South African Heritage Resources Agency, 2012). The policy also refers to an Integrated Management Plan that involves different policies of which the Cultural Management Plan is one of them (South African Heritage Resources Agency, 2012).

According to SAHRA, heritage site management is inclusive of the control of elements that make up a physical and social environment: physical condition, land use, human visitors and interpretation (South African Heritage Resources Agency, 2012). The completion of a HMP is to conserve and minimize damage to a site. It is aimed at conservation, enhancement, presentation and maintenance of a site (South African Heritage Resources Agency, 2012).

1.3 Objectives

A HMP aims at achieving a balanced heritage management environment focusing on tangible and intangible heritage resources. The following objectives must be met to meet international standards (Australia ICOMOS, 2000):

- Determine a practical solution for site management at sensitive heritage resources sites;
- Protect the cultural heritage values of a place;
- Determine a clearly defined heritage stakeholder management plan;



- Determine an appropriate buffer zone at sensitive heritage sites;
- Describe the type of activity that is allowed at the proposed construction areas; and
- Conduct an assessment of costing that is associated with the implementation of a HMP.

2. Legal Framework

In terms of the National Heritage Act (No. 25 of 1999) it is required that a HMP be completed at areas where heritage resources of significance may be impacted upon. The SAHRA HMP guidelines stipulate what information is needed before the heritage management document would be signed off by the heritage authorities. Only after approval of the HMP may any type of construction commence.

3. Heritage Management Plan Aims

The aim of a HMP is to:

- Direct what needs to be done, how the site must be protected, who will be responsible, who
 will fund it and when this activity must be completed;
- Define the goals to be achieved and the type of activities;
- Guide the future development;
- Determine the monitoring methodology;
- Assist with stakeholder engagement and identification of interested parties
- Explain the permitting procedure;
- Describe any professional requirements and clarifies responsibilities;
- Identify the site value and provides guiding principles for activities on site;
- Minimise loss or avoid adverse impacts on heritage resources;
- Ensure that cultural heritage is incorporated in spatial planning and linked to social strategies;
- Improve the understanding of cultural heritage and the contribution it makes to the broader management processes; and
- Ensure that proper investigation, recording and stakeholder meetings take place.

4. Heritage Management Principles (South African Heritage Resources Agency, 2012)

In terms of basic heritage management principles the following statements explain the reasons for protecting heritage resources that may be under threat of any type of development:

Heritage resources are a valuable, finite, non-renewable and irreplaceable resource;



- Each generation has a moral responsibility to act as a trustee of the natural and cultural heritage that succeeds their generations;
- South Africa consists of rich natural and man-made heritage resources that must be conserved;
- Various cultures have contributed to the heritage resources and have the right to be protected; and
- Every person, community and institution has an obligation to ensure that heritage resources are not destroyed or disturbed.

4.1 Conservation Principles (South African Heritage Resources Agency, 2012)

Conservation principles are consistent of the following:

- To return or recover cultural places of interest;
- To educate communities in respecting the value of natural and cultural landscapes;
- To conserve natural and cultural heritage resources via an investigation completed by an inter-disciplinary team;
- To determine and analyse the evidence gathered and include public as well as local community knowledge in the conservation process;
- To use proper conservation policies;
- To record natural and cultural heritage resources and ensure that the documented data is transferred to an appropriate archive;
- To ensure that appropriate supervision and monitoring are undertaken at all time of the development stages;
- To ensure that all aspects of cultural conservation are taken into consideration;
- A heritage resource is not conserved as one aspect by itself, but the areas surrounding the resource are also protected;
- As little as possible intervention must be undertaken when development commences close to or at a heritage resources site;
- Architectural features, elements or components which have deteriorated must be repaired and not replaced;
- The conservation of heritage resources must include the contribution of all relevant disciplines;
- If additions and alterations are done, it must allow for the original material to stay intact;
- Historical places are protected with the contents included. None of the removable objects may be taken out of context;



- Buildings must be conserved within its original position and may not be relocated. This is
 only allowed if work is completed that will have an impact on the sole means of ensuring
 survival; and
- Culturally valuable buildings must be occupied and used at all times.

5. Site Significance

Site significance is derived from the following statements:

Cultural Value

The cultural value of an area is determined by establishing the significance associated with heritage resources positioned within a specific cultural landscape (South African Heritage Resources Agency, 2012). In this case the stone age material, South African War history, diamond digging time period and rock art sites hold a cultural value associated with the heritage resources of the Northern Cape and the local community.

Social Value

The social value of heritage resources provides a focus on the spiritual, political, national and any other cultural attachments to the area. The area is linked to a significant South African war landscape, Stone Age cultural environment, indigenous groups and rock art cultural environment. On a provincial and local level, communities have placed a social value and attachment to the heritage resources identified at the proposed impacted areas. A social value of heritage resources adds a contribution to the daily lives of communities who live in close vicinity of the significant heritage resources areas. Taking all these cultural attributes into account, the area is of a symbolic value on a provincial and local level.

Historic Value

Historic value can be described in the significance it contributes to the knowledge of our past. A historical place can be linked to a cultural time period, type of human activity or a particular individual. The site in question is part of an in depth historical South African War value and diamond digging history.

Scientific Value

A site may have a scientific or research value that could provide significant data. The Middle Stone Age material identified may yield such data in terms of the stone age cultural landscape of the Kimberley to De Aar area. Scientific value includes local and institutional knowledge.

Aesthetics Value

Aesthetic value can be defined as the beauty of design or the frame of mind a place demonstrates. An area has a certain aesthetic symbolism which represents historical events. This value cannot be measured and is experiences differently experienced by local community members and visitors to the site.



5.1 Site condition and conservation history

The railway alignment is part of the cultural landscape and is adding to the heritage value of the area.

The historical station buildings have been occupied by illegal settlers, but no structures were damaged, demolished or altered purposely. Grave sites, structures, rock art and stone age material that abut the railway reserve have not been impacted upon. It seems that some archaeological site patterns have been damaged when the railway line was originally developed.

6. Visitor Management

A visitor management plan will be developed once additional studies have been completed. This will be linked to accessibility of heritage sites at areas positioned close to the railway line.

7. Action Plan

The action plan for Kimberley to De Aar includes the following activities:

- Provide the client with recommendations and HMP requirements.
- It is recommended that the Environmental Control Officer, Contractor and associated staff attend a heritage resources workshop. This will ensure that the relevant data is transferred to the correct people. A basic explanation of the type of heritage resources that may be uncovered, the method of handling the situation and the reasons for managing the heritage resources must be explained. A workshop allows for questions and to provide clarity in terms of the HMP requirements.

8. Permits

A sampling and monitoring permit should be issued for rescue work before development commences. Furthermore, such a permit will ensure that should the professional archaeologist discover any stone age material or other heritage objects, the material can be rescued and exported to the closest archives (museums or repository such as the McGregor Museum in Kimberley, Northern Cape.). A detailed permitting strategy has been included as part of the overall environmental impact assessment study.

9. Monitoring and Evaluation

Monitoring is advised during and after construction. An archaeologist must assess the site as soon as earthmoving activities commence to determine if any in situ material has been exposed. Thereafter the Environmental Control Officer must report on a monthly basis, on any heritage management issues that occurred. It must be emphasised that should any heritage resources be uncovered during and after construction that a professional accredited archaeologist attend to the site to provide guidance and determine the best way forward.



10. Heritage Stakeholder Engagement

In terms of stakeholder engagement the following affected parties must be communicated with:

Client

Continuous liaison with the client is required to enable knowledge transfer and also to indicate the risk issues. The following client representative who is positioned in the Kimberley area should be involved in the Kimberley to De Aar heritage resources stakeholder management process:

Cobus Cloete

Depot Engineering Manager

Infrastructure Maintenance

Network Planning

Kimberley

Tel: (053)838 3227 / 083 284 6199

Email: <u>Cobus.Cloete@transnet.net</u>

South African Heritage Resources Agency (SAHRA)

SAHRA is the main authority responsible for the archaeological resources located between Kimberley and De Aar. They will be responsible for issuing of sampling permits during the monitoring phases of the development. SAHRA's Archaeology and Palaeontology Unit is also responsible for providing comments in terms of the management of archaeological and palaeontological sites. SAHRA's details are as follows:

The Chief Executive Officer

111 Harrington Street

Cape Town

8001

Tel: (021) 462 4502

Fax: (021) 462 4509

Provincial Heritage Resources Authority (PHRA)

The PHRA is responsible for provincial heritage resources of significance that are inclusive of historical structures, grave sites and living heritage resources. They are responsible for commenting on heritage resources of provincial value. The heritage practitioner must engage with the PHRA to ensure that the relevant comments have been made and that their heritage management requirements are adhered to during construction. The Northern Cape (Ngwao Boswa ya Kapa Bokone) PHRA contact details are as follows:

Andrew Ratha Timothy



Heritage Officer

Tel: 079 036 9294

Email: ratha.timothy@gmail.com

Local Museums

The local museums positioned between Kimberley and De Aar area must be communicated with during and after construction. They may assist with any information regarding the historical background of the area, sensitive sites and who to contact when heritage resources are accidently uncovered. The local museum that may assist with guidance in terms of heritage resources management is McGregor Museum in Kimberley and the head of archaeology may be contacted at:

Dr David Morris

Head of Archaeology

McGregor Museum

Cell: 082 222 4777

Tel: (053) 839 2706

Fax: (053) 842 1433

Department of Sports, Arts and Culture

The Department of Sports, Arts and Culture in the Northern Cape may be contacted if any information is needed in terms of cultural assets and any issues related to social development. The department may be contacted at:

MJ Sinthumule

Assistant Manager: Heritage

Department of Sports, Arts and Culture

Cell: 083 652 2476

Historical Interest Groups

Historical interest groups have an interest in protecting the heritage resources at the Kimberley to De Aar area and may be of assistance when heritage objects are uncovered. Although the interests groups may not remove any archaeological material from the impacted area, they will be able to provide the Environmental Control Officer and construction workers with necessary guidance. The following list of historical associations may assist with any questions in terms historical resources positioned in and around construction areas:

South African Military History Society

Tel: (011)784 6232



Tel: (010) 237 0676 South African History Online is a society that contributes to the understanding of local historical resources. They should be available to assist with any questions related to local historical resources positioned in the vicinity of the construction areas. The Cape Town office may be contacted at the following details:

Tel: (021) 447 4365

Email: info@sahistory.org.za

Doornbult Anglo Boer War Historical and Archaeological Site

Mrs Rina Wiid

Tel: (053) 203 8105

Local Community Members

Local community members have an interest in their historical resources and an in depth knowledge regarding the location of sensitive areas. It is advised that local community members are included in the heritage resources decision making process. It is recommended that a public meeting is held at a central point for example at McGregor Museum where community members could raise their concerns in terms of any heritage resources concerns.

Kimberley Tourism

Kimberley Tourism plays a significant role in promoting the heritage resources within the borders of the Sol Plaatjie Local Municipality. They may be contacted if any information is needed regarding tourism venues that are regularly used by visitors. Kimberley Tourism can be reached at the following contact details:

Tel: (053) 832 7298

Email: tourism@solplaatjie.org.za

11. Heritage Resources Management Strategy

The recommendations for site management must indicate:

- The type of activity that will occur;
- The best way of protecting the heritage resources;
- Measures that are required to be taken should any heritage resources be damaged by accident or on purpose (Department of Indigenous Affairs, Government of Australia, 2009).

Effective and active measures should be taken for the protection, conservation and presentation of cultural as well as natural heritage resources (Stovel Herb, 1998)

11.1 Proposed Hazard Management

The table below provides an indication of the type of hazards that may occur and a methodology to minimise or remove the possible impact.





Table 11-1: Possible Hazards

Possible Hazards	Impact	Management Strategy	Responsible Institution
Waste	Disturbance of heritage resources and destruction of the cultural landscape.	Properly enforced waste management guidelines.	Transnet
Fire	Total destruction of heritage resources.	Implementation of a fire control plan. No fire is allowed at the areas of where stone tools were identified.	Transnet
Removal of artefacts	Permanent loss of information.	No artefacts must be removed without a permit from SAHRA.	ECO must audit during and after construction Transnet
Unnecessary earthmoving activities or digging	Permanent loss of in situ material.	Earthmoving activities must be limited to the development areas.	ECO must audit during and after construction
		No additional digging is permitted.	Transnet
Spills	Permanent damage of heritage resources.	Immediate rescue work will be required The local museum or heritage authorities (McGregor Museum and SAHRA) must be notified.	Transnet must inform
Floods	Permanent loss of heritage resources or the displacement of heritage resources from their original context.	Undertake archaeological rescue work and determine if any heritage objects may be removed from the site.	Transnet
		The local museum or heritage authorities (McGregor Museum and SAHRA) must be notified.	



11.2 Proposed buffer zones at sensitive heritage resources areas

Table 11-2: Proposed Heritage Buffer Zones

Type of Heritage Resource	Proposed Buffer zone
Rock Art Sites	50 metres
Grave Sites	50 metres
Historical Structures	50 metres
Battlefield Sites	100 metres

11.3 Rock art sites and construction activities

No rock art sites are positioned within the railway reserve, but it has been indicated in previous reports (University of Pretoria, 2008), that rock art sites are positioned within 50 metres of the railway line. The rock art sites of significance are listed on the Heritage Resources Map provided as part of the upgraded Phase 1 Heritage Impact Assessment. As such, guidance is provided below in terms of the type of behaviour required at these sensitive areas.

- No construction activities are allowed within 50 metres from any rock art sites;
- No rock art sites are allowed to be visited without the appropriate permission from the relevant heritage authorities;
- Rock art images may not be touched;
- No water is allowed on the rock art:
- No markings, writings or other images may be made on the surface of the rock art or at areas close to the rock art site;
- No archaeological artefacts are allowed to be removed from the rock art site or neighbouring areas;
- The proliferation of dust, vandalism or blasting activities should be prevented from occurring within the demarcated buffer zone; and
- Rock art areas are places of spiritual value and must be respected at all times.

11.4 Grave sites

Grave sites may not be disturbed. The following requirements must be adhered to at areas where construction is to take place close to burial areas:

- The graves must be fenced off to prevent any person from entering the site;
- No person is allowed to enter the buffer zone area without an approval from the appointed archaeologist and the heritage agency;
- No construction activity is allowed within 50 metres from grave sites;



- No borrow pit and laydown developments are allowed within 50 metres from a burial site;
 and
- Heritage objects scattered on the surface in the vicinity of the burial area may not be removed.

11.5 Historical Structures

The following requirements must be adhered to at areas where construction is to take place close to historical structures:

- No construction activities are allowed within 50 metres of historical structures that are positioned in the close vicinity of the development area;
- No access is allowed at the historical structures and no person may enter the buildings without authorisation from the relevant heritage agency; and
- The areas that surround the historical structures must be kept clean and no building material may be dumped next to the historical structures.

11.6 South African War Battlefield Sites

The South African War battlefield sites are cultural landscapes that are valued by the local communities. An appropriately sensitive attitude towards these battlefield sites must be adopted during construction at development areas positioned close to Spytfontein, Magersfontein, Modderriver, Jacobsdal, Graspan and Belmont:

- No heritage objects discovered during construction may be removed without authorisation from SAHRA and the PHRA; and
- Entrance to these areas is only allowed with the relevant permissions from the heritage authorities.

11.7 Mitigation

During earthmoving activities and vegetation clearance heritage objects are uncovered. In such a scenario the following actions should happen:

- Contact a professional accredited archaeologist, the local museum and SAHRA to inform them about the discovery;
- Do not remove any of heritage objects before an accredited archaeologist has not visited the site to determine what the significance of the findings are; and
- Only proceed with construction activities after approval has been received from SAHRA.

12. Conclusion and the Way Forward

In conclusion, the HMP is a document that guides proposed activities and behaviour that are expected to take place at construction sites. The document should be used as part of a monitoring system to ensure that heritage sites that are positioned in the railway reserve areas or border the proposed development are conserved and protected.



13. Bibliography

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