

**PHASE 1 HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WIDENING OF THE
N4 ALONG SECTION 5B BETWEEN BELFAST AND MACHADO TOLL PLAZA, THE
PROPOSED INTERCHANGE AT MILLY'S FILLING STATION AND THE PROPOSED
INTERCHANGE ON SECTION 5B AT MACHADODORP, MAPUTO DEVELOPMENT
CORRIDOR, EMAKHAZENI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.**



Leonie Marais-Botes
Heritage Practitioner

868 Endeman Street
Wonderboom South
Pretoria
0084

Mobile: 082 576 6253

E-mail: leoniembotes@gmail.com

*BA (Cultural History and Archaeology) (UP), BA (Hons)
Cultural History (UP), Post Grad Dip Museology (UP), Cert
Conservation of Traditional Buildings (Univ of Canberra)
Post Grad Dip: Heritage (Wits)*

*Accredited member: SA Society for Cultural
History (CH002)*

For:

ROCK ENVIRONMENTAL CONSULTING (PTY) LTD
PO Box 40541
MORELETA PARK
0044

April 2016

© Copyright

Leonie Marais-Botes Heritage Practitioner.

The information contained in this report is the sole intellectual property of Leonie Marais-Botes Heritage Practitioner.

It may only be used for the purposes it was commissioned for by the client.

DISCLAIMER:

Although all possible care is taken to identify/find all sites of cultural importance during the initial survey of the study area, the nature of archaeological and historical sites are as such that it is always possible that hidden or sub-surface sites could be overlooked during the study. Leonie Marais-Botes Heritage Practitioner will not be held liable for such oversights or for the costs incurred as a result thereof.

ACKNOWLEDGEMENTS

Australia ICOMOS. The Burra Charter.

Bergh, J.S. Geskiedenis Atlas van Suid-Afrika. Die vier Noordelike Provinsies. Van Schaik Uitgewers, 1998.

Beyers C.J. (Editor-in-Chief). Dictionary of South African Biography (Vol I – V). Pretoria, 1987.

Coertze, P.J. & Coertze, R.D. Verklarende vakwoordeboek vir Antropologie en Argeologie. Pretoria, 1996.

Government Printers. 1: 50 000

Huffman, T.N. A Handbook to the Iron Age: The Archaeology of Pre- Colonial Farming Societies in Southern Africa. University of KwaZulu-Natal Press, 2007

Human Tissues Act (Act 65 of 1983 as amended)

Jooste, C.P. The Last Pitched Battle of the Anglo-Boer War *in* Military History Journal Vol 12 No 4 – December 2002

National Heritage Resources Act (Act 25 of 1999)

National Environmental Management Act (Act 107 of 1998)

National Monuments Council Burgher Grave Files

Ordinance on Exhumations (no 12 of 1980)

Potgieter, D.J. (editor-in-chief) Standard Encyclopaedia of Southern Africa. London 1971.

Rosenthal E. (Editor) Encyclopaedia of Southern Africa, 1973

The National Archives of South Africa databases.

Contents page

<u>Contents</u>	<u>Page</u>
ABOUT THIS REPORT	5
DEFINITION OF TERMS	6
EXECUTIVE SUMMARY	9
1. INTRODUCTION	10
1.1 WHY A PHASE 1 HIA IS REQUIRED	10
1.1.1 METHOD	10
1.2 PROJECT LOCATION	11
1.3 HISTORY OF THE STUDY AREA	11
1.4 PHOTOGRAPHICAL RECORD OF STUDY AREA	12
2. FINDINGS	20
2.1 Pre-Colonial Heritage Sites	20
2.2 Historical Period Heritage sites	20
2.3 Original Landscape	23
2.4 Intangible Heritage	23
3. CATEGORIES OF HERITAGE VALUE	23
3.1 HERITAGE VALUE WEIGHED AGAINST CULTURAL SIGNIFICANCE CATEGORIES	24
3.2 SPECIFIC CATEGORIES INVESTIGATED AS PER SECTION 3 (1) AND (2) OF THE NATIONAL HERITAGE LEGISLATION (ACT 25 OF 1999)	25
4. DISCUSSION	27
5. RECOMMENDATIONS	27
6. THE WAY FORWARD	27

ABOUT THIS REPORT

The heritage report must reflect that consideration has been given to the history and heritage significance of the study area and that the proposed activities is sensitive towards the heritage resources and does not significantly alter or destroy the heritage significance of the study area.

The heritage report must refer to the heritage resources currently in the study area.

The opinion of an independent heritage consultant is required to evaluate if the proposed work generally follows a good approach that will ensure the conservation of the heritage resources.

The National Heritage Resources Act (Act 25 of 1999), the National Environmental Management Act (Act 107 of 1998), Ordinance on Exhumations (no 12 of 1980) and the Human Tissues Act (Act 65 of 1983 as amended) are the guideline documents for a report of this nature.

Leonie Marais-Botes was appointed by Rock Environmental Consulting (Pty) Ltd to carry out a Phase 1 Heritage Impact Assessment (HIA) for the proposed widening of the N4 along section 5B between Belfast and Machado Toll Plaza, the proposed interchange at Milly's Filling Station and the proposed interchange on section 5B at Machadodorp, Maputo Development Corridor, Emakhazeni Local Municipality, Mpumalanga Province. The site visit took place on 25 April 2015.

DEFINITION OF TERMS:

"alter" means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

"archaeological" means—

- (a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
- (b) 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 which is older than 100 years, including any area within 10m of such representation;
- (c) 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 maritime 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; and
- (d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

"conservation", in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance.

"cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

"development" means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including—

- (a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (b) carrying out any works on or over or under a place;
- (c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
- (d) constructing or putting up for display signs or hoardings;
- (e) any change to the natural or existing condition or topography of land; and
- (f) any removal or destruction of trees, or removal of vegetation or topsoil; object that is specifically designated by that state as being of importance.

"grave" means 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 place.

"heritage resource" means any place or object of cultural significance.

"heritage resources authority" means the South African Heritage Resources Agency, or in respect of a province, a provincial heritage resources authority.

"heritage site" means a place declared to be a national heritage site by SAHRA or a place declared to be a provincial heritage site by a provincial heritage resources authority.

"improvement", in relation to heritage resources, includes the repair, restoration and rehabilitation of a place protected in terms of Act 25 of 1999.

"living heritage" means the intangible aspects of inherited culture, and may include—

- (a) cultural tradition;
- (b) oral history;
- (c) performance;
- (d) ritual;
- (e) popular memory;
- (f) skills and techniques;
- (g) indigenous knowledge systems; and
- (h) the holistic approach to nature, society and social relationships.

"local authority" means a municipality as defined in section 10B of the Local Government Transition Act, 1993 (Act No. 209 of 1993).

"management", in relation to heritage resources, includes the conservation, presentation and improvement of a place protected in terms of Act 25 of 1999.

"meteorite" means any naturally-occurring object of extraterrestrial origin.

"object" means any movable property of cultural significance which may be protected in terms of any provisions of Act 25 of 1999, including—

- (a) any archaeological artefact;
- (b) palaeontological and rare geological specimens;
- (c) meteorites; and
- (d) other objects.

"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.

"place" includes—

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

"presentation" includes—

- (a) the exhibition or display of;
- (b) the provision of access and guidance to;
- (c) the provision, publication or display of information in relation to; and
- (d) performances or oral presentations related to, heritage resources protected in terms of Act 25 of 1999.

"public monuments and memorials" means all monuments and memorials—

- (a) erected on land belonging to any branch of central, provincial or local government, or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government; or
- (b) which were paid for by public subscription, government funds, or a public-spirited or military organisation, and are on land belonging to any private individual.

"site" means any area of land, including land covered by water, and including any structures or objects thereon.

"structure" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

“victims of conflict” means—

(a) certain persons who died in any area now included in the Republic as a direct result of any war or conflict as specified in the regulations, but excluding victims of conflict covered by the Commonwealth War Graves

Act, 1992 (Act No. 8 of 1992);

(b) members of the forces of Great Britain and the former British Empire who died in active service in any area now included in the Republic prior to 4 August 1914;

(c) persons who, during the Anglo-Boer War (1899-1902) were removed as prisoners of war from any place now included in the Republic to any place outside South Africa and who died there; and

(d) certain categories of persons who died in the “liberation struggle” as defined in the regulations, and in areas included in the Republic as well as outside the Republic.

EXECUTIVE SUMMARY

Leonie Marais-Botes Heritage Practitioner was requested by Rock Environmental Consulting (Pty) Ltd to conduct a Phase 1 Heritage Impact Assessment (HIA) for the proposed widening of the N4 along section 5B between Belfast and Machado Toll Plaza, the proposed interchange at Milly's Filling Station and the proposed interchange on section 5B at Machadodorp, Maputo Development Corridor, Emakhazeni Local Municipality, Mpumalanga Province.

A field survey was conducted after which a survey of literature was undertaken.

It should be noted that the sub-surface archaeological and/or historical deposits and graves are always a possibility. Care should be taken during any work in the entire area and if any of the above is discovered, an archaeologist/heritage practitioner should be commissioned to investigate.

1. INTRODUCTION

The project entails the upgrading/widening of the existing cross-section of road N4 from between Belfast (at kilometre mark 29.9 E) and the Machado Toll Plaza (at kilometre mark 56.2 E), the construction of a proposed interchange at Milly's filling station and a proposed interchange at Machadodorp.

The new extended road reserve (Belfast to Machado Toll Plaza) will be an extra 15-20m to the south of the existing 42m road reserve. As a result of widening several new service roads for farmers will be constructed parallel and south of the new road reserve. This is to provide safe access onto the N4.

New service roads for farmers will be created where most needed, next to the extra 15-20m of road reserve. This will therefore be in areas along this section of the N4 where unsafe accesses exist within relatively short distances from each other. The accesses in these areas will be grouped into one access where possible, to create a safer environment.

1.1 WHY A PHASE 1 HERITAGE IMPACT ASSESSMENT IS REQUIRED?

This project may potentially impact on any types and ranges of heritage resources that are outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999). Subsequently a Phase 1 Heritage Impact Assessment (HIA) was commissioned by ROCK Environmental Consulting (Pty) Ltd. and conducted by Leonie Marais-Botes.

1.1.1 METHOD

The objective of this Phase 1 Heritage Impact Assessment (HIA) was to gain an overall understanding of the heritage sensitivities of the area and indicate how they may be impacted on through development activities. The site survey took place on 25 April 2015.

In order to establish heritage significance the following method was followed:

- Investigation of primary resources (archival information)
- Investigation of secondary resources (literature and maps)
- Physical evidence (site investigation)
- Determining Heritage Significance.

1.2 PROJECT LOCATION

On the N4 from between Belfast (at kilometre mark 29.9 E) and the Machado Toll Plaza (at kilometre mark 56.2 E).

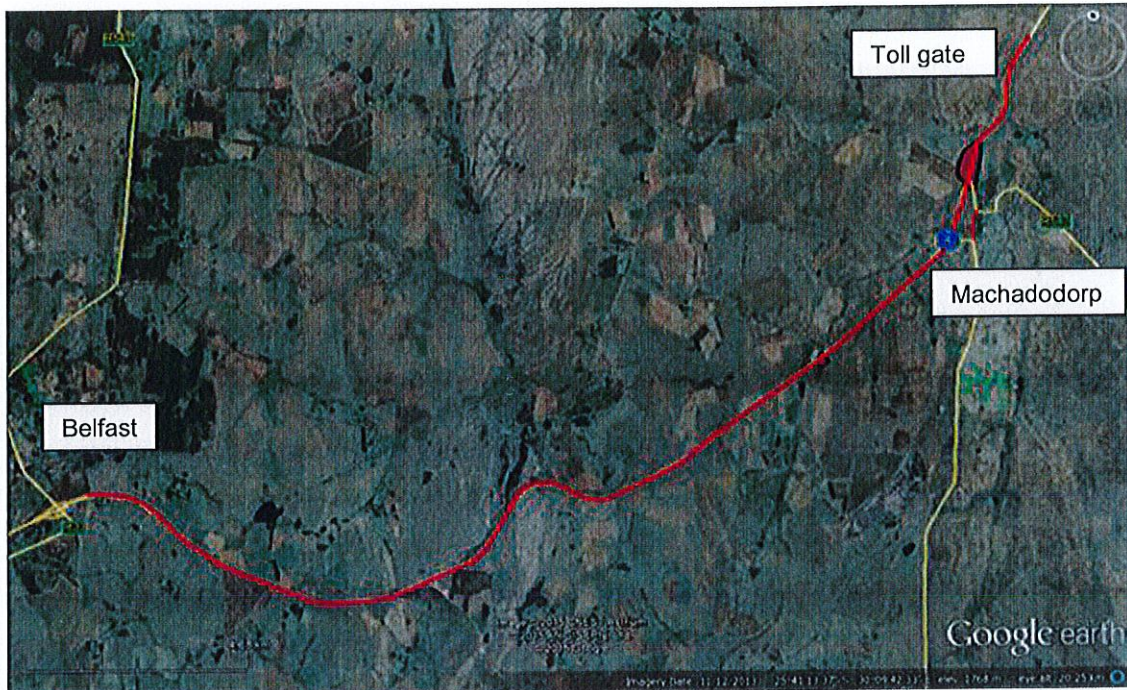


Figure 1: Study area

1.3 HISTORY OF THE STUDY AREA

Belfast

Belfast is a town in Mpumalanga named after Belfast in Ireland, home town of the founder, Mr O'Brien in the late 19th century. During the South African War (1899-1902) in 1901 severe fighting took place near Belfast. Chief industry is farming and trout fishing¹.

Machadodorp

Machadodorp was established in 1895 when the railway was built and named after the Portuguese General J.J. Machado, who played a part in realising the project. During the South African War Machadodorp was the seat of Government of the Zuid-Afrikaansche Republiek after the annexation of Pretoria (May 30 to August 27, 1900). It saw considerable fighting during the said war².

Battle of Bergendal

The battle of Bergendal was the last of the pitched battles of the Anglo-Boer War (South African war 1899-1902). The battle lasted from 21 to 27 August 1900. Its climax came on the last day, when 70 men of the Johannesburg Zuid-Afrikaansche Rijdende Politie (ZARP), a special

¹ E. Rosenthal, Encyclopaedia of Southern Africa, p. 53.

² E. Rosenthal, Encyclopaedia of Southern Africa, p. 338.

mounted police corps of the Zuid-Afrikaansche Republiek (ZAR) or the Transvaal Republic, faced a full attack by General Sir Redvers Buller's Natal Field Army (also referred to as the Natal Field Force)³.

1.4 PHOTOGRAPHIC RECORD OF STUDY AREA

AREA EARMARKED FOR DEVELOPMENT AT THE PROPOSED INTERCHANGE ON SECTION 5B AT MACHADODOEP



Figure 2: Area earmarked for development at the proposed interchange on section 5B at Machadodorp.

³C.P JOOSTE, THE BATTLE OF BERGENDAL: THE LAST PITCHED BATTLE OF THE ANGLO-BOER WAR IN *Military History Journal* Vol 12 No 4 - December 2002



Figure 3: Area earmarked for development at the proposed interchange on section 5B at Machadodorp.



Figure 4: Area earmarked for development at the proposed interchange on section 5B at Machadodorp.

AREA EARMARKED FOR DEVELOPMENT: PROPOSED R36 LINK ROAD



Figure 5: Area earmarked for development: Proposed R36 Link Road.



Figure 6: Area earmarked for development: Proposed R36 Link Road.



Figure 7: Area earmarked for development: Proposed R36 Link Road.

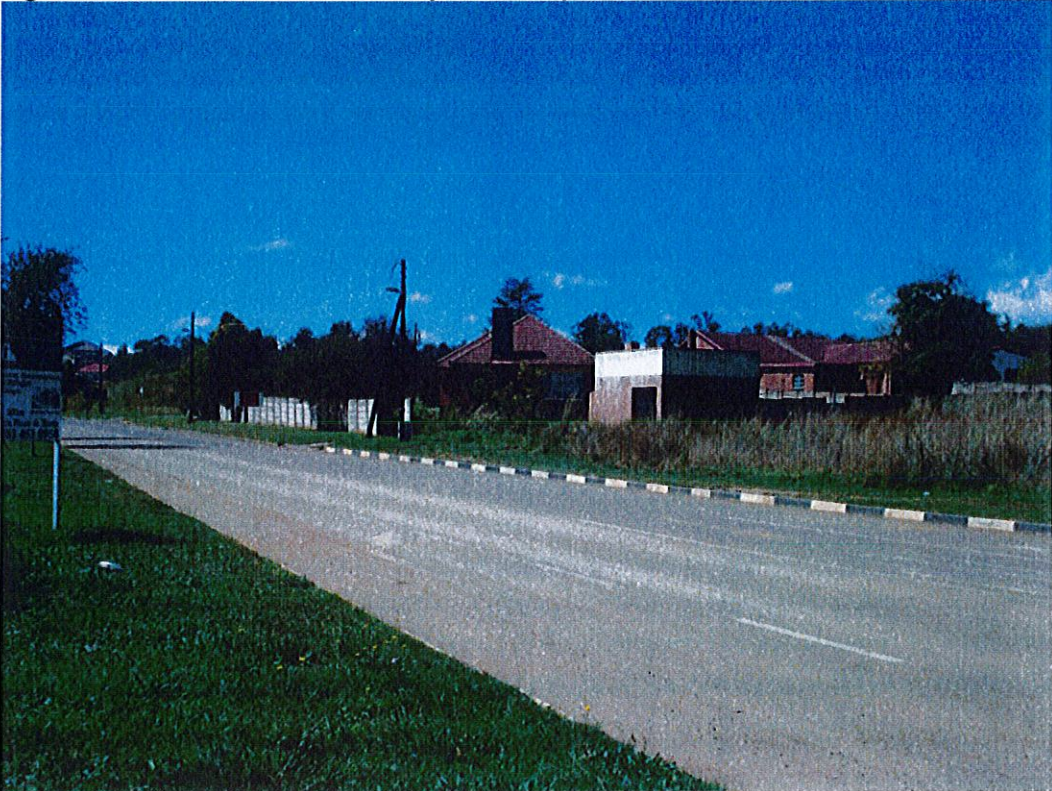


Figure 8: Area earmarked for development: Proposed R36 Link Road.

AREA EARMARKED FOR DEVELOPMENT AT THE PROPOSED INTERCHANGE AT MILLY'S FILLING STATION



Figure 9: Area earmarked for development at the proposed interchange at Milly's Filling Station.



Figure 10: Area earmarked for development at the proposed interchange at Milly's Filling Station.



Figure 11: Area earmarked for development at the proposed interchange at Milly's Filling Station.



Figure 12: Area earmarked for development at the proposed interchange at Milly's Filling Station.

PROPOSED WIDENING OF THE N4 ALONG SECTION 5B BETWEEN BELFAST AND MACHADO TOLL PLAZA



Figure 13: Area earmarked for development. Proposed widening of the N4 along section 5B between Belfast and Machado Toll Plaza.



Figure 14: Area earmarked for development. Proposed widening of the N4 along section 5B between Belfast and Machado Toll Plaza. Farm cemetery near Bergendal Monument.

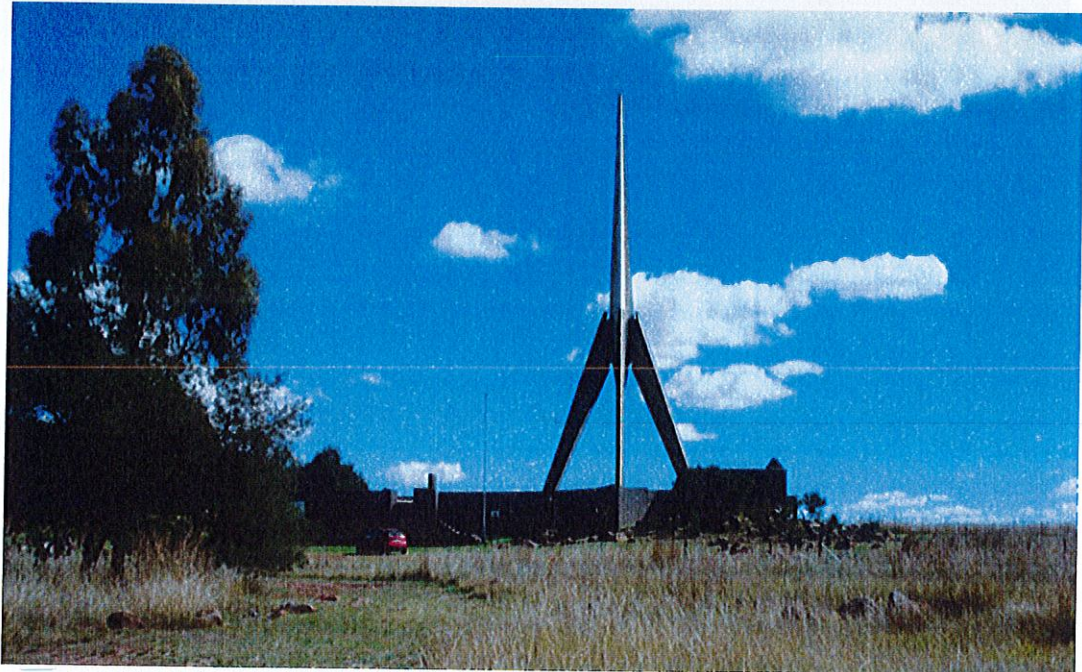


Figure 15: Area earmarked for development. Proposed widening of the N4 along section 5B between Belfast and Machado Toll Plaza. Bergendal Monument.



Figure 16: Area earmarked for development. Proposed widening of the N4 along section 5B between Belfast and Machado Toll Plaza. Bergendal Monument entrance gate.

2. FINDINGS

2.1 PRE-COLONIAL HERITAGE SITES

Possibilities: Greater study area taken into account.

Stone Age

The Stone Age is the period in human history when stone material was mainly used to produce tools⁴. In South Africa the Stone Age can be divided in three periods⁵;

- Early Stone Age 2 000 000 – 150 000 years ago
- Middle Stone Age 150 000 – 30 000 years ago
- Late Stone Age 40 000 years ago - +/- 1850 AD
-

Iron Age

The Iron Age is the period in human history when metal was mainly used to produce artefacts⁶. In South Africa the Iron Age can be divided in three periods;

- Early Iron Age 250-900 AD
- Middle Iron Age 900-1300 AD
- Late Iron Age 1300-1840 AD⁷

There are no pre-colonial heritage sites evident in the study area. This can be attributed to previous farming and other infrastructure development activities in the study area.

2.2 HISTORICAL PERIOD HERITAGE SITES

Possibilities: Greater study area taken into account.

- Pioneer sites;
- Sites associated with early mining;
- Structures older than 60 years;
- Graves (Graves younger than 60 years, graves older than 60 years, but younger than 100 years, graves older than 100 years, graves of victims of conflict or of individuals of royal descent);
- Public Monuments and Memorials.

There are structures older than 60 years situated in the study area. These structures are located near the proposed R 36 link road.

Two cemeteries are situated in the study area.

1. *Machadodorp Municipal Cemetery.*

⁴ P. J. Coertze & R.D. Coertze, Verklarende vakwoordeboek vir Antropologie en Argeologie.

⁵ S.A. Korsman & A. Meyer, Die Steentydperk en Rotskuns in J.S. Bergh (red) Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.

⁶ P.J. Coertze & R.D. Coertze, Verklarende vakwoordeboek vir Antropologie en Argeologie.

⁷ M.M. van der Ryst & A Meyer. Die Ystertydperk in J.S. Bergh (red) Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies and T.N Huffman, A Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.

2. *Farm cemetery near Bergendal South African War (Anglo-Boer War 1899-1902) Monument.*
Public Monuments Monuments and Memorials: Bergendal Monument and British War Graves Monument



Figure 17: Machadodorp Municipal Cemetery



Figure 18: Farm cemetery near the Berg-en-Dal Monument

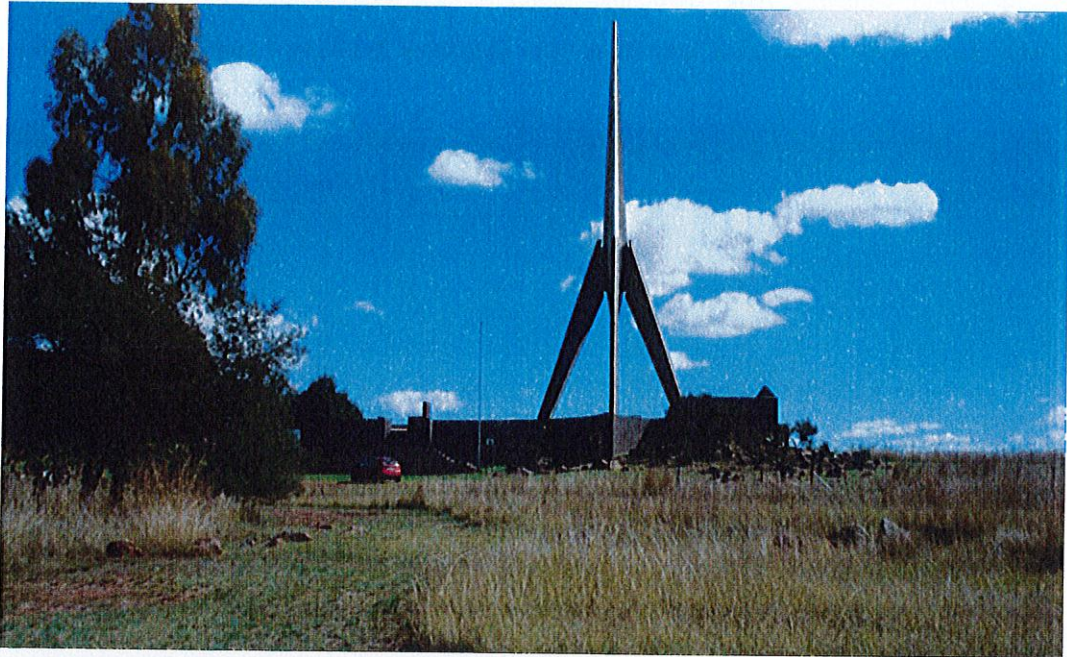


Figure 19: Berg-and-Dal Monument commemorating an important battle during the South African War (Anglo-Boer War 1899-1902) is situated in the study area.

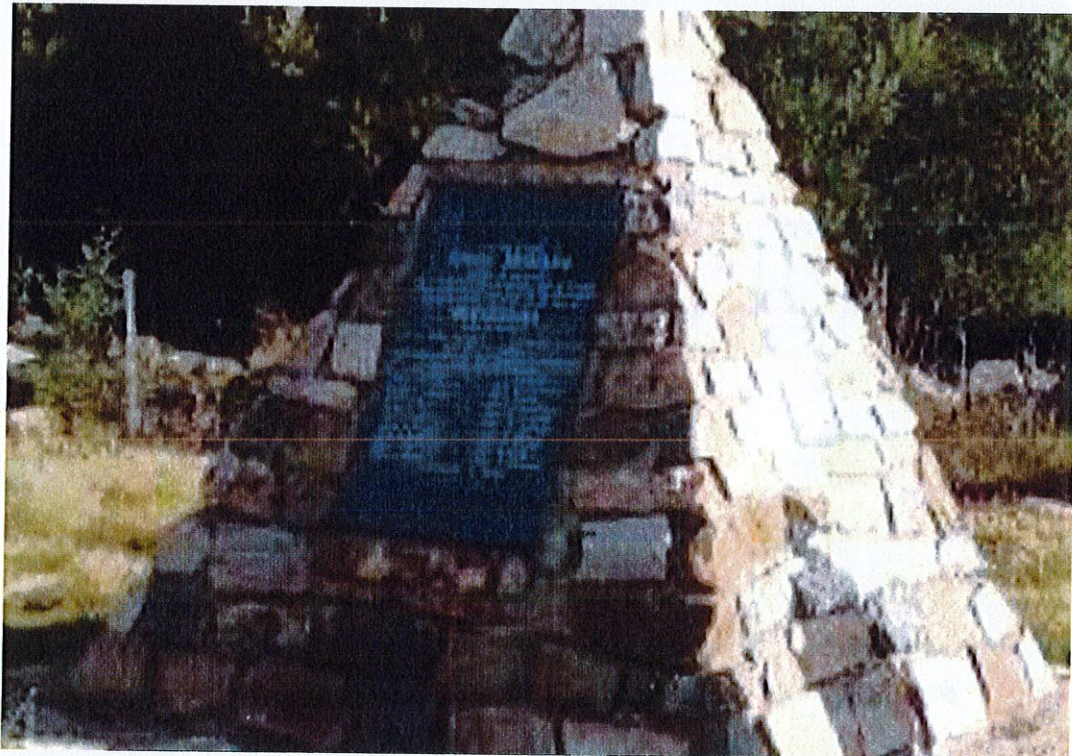


Figure 20: British War Graves Monument.

2.3 ORIGINAL LANDSCAPE

Farming and infrastructure development have altered the original landscape in most of the study area.

2.4 INTANGIBLE HERITAGE

The intangible heritage of the greater study area can be found in the stories of past and present inhabitants.

3 CATEGORIES OF HERITAGE VALUE (ACT 25 OF 1999)

The National Heritage Resources Act (Act 25 of 1999) identifies the following categories of value under section 3(1) and (2) of the Act under the heading "National Estate":

- "3 (1) For the purpose of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- (2) Without limiting the generality of subsection (1), the national estate may include-
- (a) places, buildings, structures and equipment of cultural significance;
 - (b) places which oral traditions are attached or which are associated with living heritage;
 - (c) historical settlements and townscapes;
 - (d) landscapes and natural features of cultural significance;
 - (e) geological sites of scientific or cultural importance;
 - (f) archaeological and palaeontological sites;
 - (g) graves and burial grounds, including-
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
 - (h) sites of significance relating to the history in South Africa;
 - (i) movable objects, including-
 - (i) objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interests; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that

are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

- (3) Without limiting the generality of the subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of-
- (a) Its importance in the community, or pattern of South Africa's history;
 - (b) Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
 - (c) Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
 - (d) Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural objects;
 - (e) Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
 - (f) Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
 - (g) Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
 - (h) Its strong or special association with the life and work of a person, group or organisation of importance in the history of South Africa; and
 - (i) Sites of significance relating to the history of slavery in South Africa."

3.1 HERITAGE VALUE OF WEIGHED AGAINST CULTURAL SIGNIFICANCE CATEGORIES

3.1.1 Spiritual value

During the site visit/field work no indication of any spiritual activity was observed on/near the proposed site. Thus no sites of spiritual value will be impacted on by the proposed project.

3.1.2 Scientific value

No sites of scientific value was observed on or near the site earmarked for development.

3.1.3 Historical value

The Bergendal Monument site can be regarded as of historic value.

3.1.4 Aesthetic value

The Bergendal Monument site (including the British War Graves Monument and entrance gate) can be regarded as of aesthetic value.

3.1.5 Social value

Social value is attributed to sites that are used by the community for recreation and formal and informal meetings regarding matters that are important to the community. These sites include parks, community halls, sport fields etc. None of the said evident in the immediate study area.

3.2 SPECIFIC CATEGORIES INVESTIGATED AS PER SECTION 3 (1) AND (2) OF THE NATIONAL HERITAGE LEGISLATION (ACT 25 OF 1999)

3.2.1 Does the site/s provide the context for a wider number of places, buildings, structures and equipment of cultural significance?

The study area does not provide context, but is part of a context which include a wider number of places, buildings, structures and equipment of cultural significance.

3.2.2 Does the site/s contain places to which oral traditions are attached or which are associated with living heritage?

Places to which oral traditions are attached or associated with living heritage are usually find in conjunction with traditional settlements and villages which still practises age old traditions. None of these are evident near or on the proposed site.

3.2.3 Does the site/s contain historical settlements?

No historical settlements are located on or near the proposed site.

3.2.4 Does the site/s contain landscapes and natural features of cultural significance?

Due to infra-structure development and farming activities the original character of the landscape have been altered significantly in the study area. The site does not contain natural features of cultural significance.

3.2.5 Does the site/s contain geological sites of cultural importance?

Geological sites of cultural importance include meteorite sites (Tswaing Crater and Vredefort Dome), fossil sites (Karoo and Krugersdorp area), important mountain ranges or ridges (Magaliesburg, Drakensberg etc.). The proposed site is not located in an area known for sites of this importance.

3.2.6 Does the site/s contain a wide range of archaeological sites?

The proposed site does not contain any surface archaeological deposits, a possible reason is previous infra-structure development and farming activities in the greater study area.

The possibility of sub-surface findings always exists and should be taken into consideration in the Environmental Management Plan.

If sub-surface archaeological material is discovered work must stop and a heritage practitioner preferably an archaeologist contacted to assess the find and make recommendations.

3.2.7 Does the site/s contain any marked graves and burial grounds?

The study area does contain marked graves.

One municipal cemetery and a farm cemetery are situated in the study area.

The possibility of graves not visible to the human eye always exists and this should be taken into consideration in the Environmental Management Plan.

It is important to note that all graves and cemeteries are of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (Act 25 of 1999) whenever graves are 60 years and older. Other legislation with regard to graves includes those when graves are exhumed and relocated, namely the Ordinance on Exhumations (no 12 of 1980) and the Human Tissues Act (Act 65 of 1983 as amended).

If sub-surface graves are discovered work should stop and a professional preferably an archaeologist contacted to assess the age of the grave/graves and to advise on the way forward.

3.2.8 Does the site/s contain aspects that relate to the history of slavery?

This is not an area associated with the history of slavery like the Western Cape Province.

3.2.9 Can the place be considered as a place that is important to the community or in the pattern of South African history?

In primary and secondary sources the proposed site is not described as important to the community or in the pattern of South African history.⁸

3.2.10 Does the site/s embody the quality of a place possessing uncommon or rare endangered aspects of South Africa's natural and cultural heritage?

The proposed site does not possess uncommon, rare or endangered aspects of South Africa's natural and cultural heritage. These sites are usually regarded as Grade 1 or World Heritage Sites.

3.2.11 Does the site/s demonstrate the principal characteristics of South Africa's natural or cultural places?

The proposed site does not demonstrate the principal characteristics of South Africa's natural or cultural places. These characteristics are usually associated with aesthetic significance.

3.2.12 Does the site/s exhibit particular aesthetic characteristics valued by the community or cultural groups?

This part of the greater study area does not exhibit particular aesthetic characteristics valued by the community or cultural groups. The reason being the low density of heritage buildings and structures located in the greater study area.

⁸ Standard Encyclopaedia of Southern Africa and the TAB database at the National Archives of South Africa;

J.S. Bergh (red), Geskiedenisatlas van Suid-Afrika. Die Vier Noordelike Provinsies.

3.2.13 Does the site/s contain elements, which are important in demonstrating a high degree of creative technical achievement?

The site does not contain elements which are important in demonstrating a high degree of creative technical achievement. Reason being none of the above are evident on site.

3.2.14 Does the site/s have strong and special associations with particular communities and cultural groups for social, cultural and spiritual reasons?

The study area does not have a strong or special association with particular communities and cultural groups for social, cultural and spiritual reasons. No comment in this regard was received during the public participation period.

3.2.15 Does the site/s have a strong and special association with the life or work of a person, group or organisation?

No indication of the above could be found in primary and secondary research sources.⁹ During the Public Participation Process (PPP) no issues in this regard were raised.

⁹ Dictionary of South African Biography (vol I-V) and the TAB database at the National Archives of South Africa

4. DISCUSSION

- The entrance to the Bergendal Monument is part of the design of the said monument and if this entrance are to be altered or moved a formal application will have to be submitted to the Provincial Heritage Authority of Mpumalanga.
- The proposed new interchange at Machadodorp is very close to the municipal cemetery. It is advised that a buffer zone of at least 50 meters be allowed from the border of the cemetery to the proposed development.
- The proposed widening of the existing highway will occur in areas previously altered by roadmaking activities.

5. RECOMMENDATIONS

- Other than the above there are no visible restrictions or negative impacts in terms of heritage associated with the site. In terms of heritage, the above taken into account, this project can proceed.
- The discovery of subsurface archaeological and/or historical material as well as graves must be taken into account in the Environmental Management Plan. See 3.2.6 and 3.2.7.

6. THE WAY FORWARD

- **Submit this report as a Section 38 application to the South African Heritage Resources Agency (SAHRA) or one of its subsidiaries for comment/approval.**