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**PROJECT 2010/6**

**FINAL HERITAGE IMPACT ASSESSMENT REPORT:  
PROPOSED LAND USE CHANGE TO PROVIDE FOR THE  
EXTENSION OF THE TOWN OF DIBENG, GAMAGARA LOCAL  
MUNICIPALITY, NORTHERN CAPE PROVINCE**



The first Dutch Reformed Church building in Dibeng

**SUBMITTED FOR CONSIDERATION TO**

**SAHRA Archaeology, Palaeontology and Meteorites Unit  
SAHRA Burial Grounds and Graves Unit  
Northern Cape Provincial Heritage Resources Authority**

**On behalf of**

**Marquerite Geldenhuys  
MEG Omgewingsimpakstudies  
Upington**

**DATE: 5 November 2010**

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## EXECUTIVE SUMMARY

This report contains a heritage impact assessment (HIA) investigation in accordance with the provisions of Sections 38(1) and 38(3) of the *National Heritage Resources Act (25/1999)* for purposes of authorising a proposed change of land use on a Portion of Portion 1 of the farm Wincanton 472 and a Portion of Erf 1 in the town of Dibeng on the farm Deben 473. This HIA forms part of the process of obtaining the necessary environmental authorisations for the project, which comprises a change of land use to provide for the extension of the town of Dibeng. Dibeng is located 19 km north-west of the town of Kathu, 43 km south of Hotazel and forms part of the Gamagara Local Municipality and the magisterial district of Kuruman, Northern Cape Province.

**The report is accompanied by a separate archaeological impact assessment report (JA van Schalkwyk).** No separate palaeontological study was deemed necessary since a desktop study was done for another farming development in the same type of geological area. The results of this study have been included in this report.<sup>1</sup>

The proposed change of land use affects two different areas. Dibeng 1, a smaller, western area (16 hectares) is located on a Portion of Erf 1 in Dibeng and has an irregular shape, determined by the existing road network. It consists of vacant, densely vegetated land with sandy vehicle tracks, a few modern industrial buildings, the remains of a recreational site and a cemetery. Dibeng 2, a much larger, eastern area (120 hectares) forms a crescent around the existing Dibeng township and consists of vacant, very densely vegetated land with informal quarries and landfill sites, footpaths and vehicle tracks.

As a cultural landscape this flat and featureless environment can be classified as a relic landscape (former farm land) and, to a lesser extent, a historic archaeological landscape.

The corner co-ordinates of Dibeng 1 are:

DB 1-A 27°35'53.09"S 22°52'4.79"E  
DB 1-B 27°36'5.78"S 22°52'5.66"E  
DB 1-C 27°36'1.31"S 22°52'21.78"E  
DB 1-D 27°35'50.87"S 22°52'29.27"E  
DB 1-E 27°35'51.63"S 22°52'16.60"E  
DB 1-F 27°35'52.45"S 22°52'9.90"E

The corner co-ordinates of Dibeng 2 are:

DB 2-A 27°35'38.45"S 22°52'58.09"E  
DB 2-B 27°35'30.20"S 22°52'41.64"E  
DB 2-C 27°35'11.80"S 22°52'55.29"E  
DB 2-D 27°35'15.31"S 22°53'38.64"E  
DB 2-E 27°35'32.83"S 22°53'49.33"E  
DB 2-F 27°35'56.17"S 22°53'52.51"E  
DB 2-G 27°35'28.82"S 22°53'30.15"E  
DB 2-H 27°35'28.82"S 22°53'30.15"E

The study area is development is underlain by rocks of the Namaqua-Natal Metamorphic Province which are Precambrian in age. From current knowledge the Namaqua-Natal Metamorphic Province, which comprises igneous and metamorphic rocks, does not contain any fossils and as these rocks are Precambrian age the only fossils which could be expected at the time of formation would be microfossils. Despite the proximity of the study area to the Orange River, from the 1:250 000 Geological Map (2820 Upington, 1997) there are no Tertiary or Quaternary deposits present in the area to be developed and it is thus unlikely that fossils of Tertiary or Quaternary age are present.<sup>2</sup>

As a cultural landscape, this area can be categorised as a relic landscape (former farm land), exhibiting past human interventions and impacts such as:

- Fences, roads and tracks

<sup>1</sup> B Rubidge, 2009, Farm Keboes 37, Upington: Palaeontological impact

<sup>2</sup> B Rubidge, 2009, Farm Keboes 37, Upington: Palaeontological impact

- Quarries
- Recreation
- Landfill

The proposed extension areas are at present mainly vacant except for the cemetery on Dibeng 2.

The intended development comprises the change of land use for residential and commercial development and this provided the following “triggers” for an HIA:

- Development larger than 5000 square meters (about 149 hectares)
- The region is known for its Stone Age artefacts

The general aim of any HIA is to ensure that the needs of socio-economic development are balanced by the needs to preserve significant heritage resources.

The purpose of this report is to identify and assess features of heritage significance, identify possible impacts and propose management measures to mitigate negative impacts. This information must enable the relevant heritage authority to approve the proposed development as required in terms of Section 38 of the NHRA.

The HIA investigation was conducted as follows:

- Desktop study, including perusal of existing archaeological reports and general publications about the broader area
- Field survey in March 2010 by members of Cultmatrix

Heritage impacts are categorised as:

- Neutral (no impact)
- Direct or physical impacts, implying alteration or destruction of heritage features within the project boundaries
- Indirect impacts, e.g. restriction of access or visual intrusion concerning the broader environment
- Cumulative impacts that are combinations of the above

The predicted heritage impacts are mainly neutral since no heritage resources of significance were identified. The exception is the cemetery on Dibeng 2, which will be enhanced by surrounding development. The cemetery near Dibeng 2 will not be impacted since this is located outside the proposed township extension area.

Visual impacts are of less importance because large portions of the study area have already been transformed by previous extensions to the town.

Impact can be managed through one or a combination of the following measures:

- Mitigation (minimising adverse impacts through further documentation and research before a place is altered or destroyed)
- Avoidance
- Compensation (balancing of making good the destruction of one heritage feature by the preservation of another one)
- Enhancement (positive impacts on heritage features)
- Rehabilitation (re-use of preserved heritage features)
- Interpretation (providing information on heritage features)
- Memorialisation (retaining the memory of heritage features that have been destroyed)
- No action
- Relocation (historic equipment, graves)
- Alternatives

Of the above measures, “no action” and mitigation apply in the case of this project.

This report complies as follows with the provisions of Section 38 (3) of the *National Heritage Resources Act* (Act 25 of 1999):

- (a) Identification and mapping of heritage resources
- (b) Cultural significance
- (c) Predicted impacts
- (f) Impact management measures

See Table 1 (below).

**TABLE 1: Identification of heritage features, impacts and mitigation measures**

S 3(2) NHRA heritage resource	(a) Identification		(b) Significance	(c) Impact		(d) Recommended impact management
	Site	GPS		Study area	Impact type, certainty and significance	
Buildings, structures, places and equipment of cultural significance	None	-	-	-	-	-
Areas to which oral traditions are attached or which are associated with intangible heritage	None	-	-	-	-	-
Historical settlements and landscapes	None	-	-	-	-	-
Landscapes and natural features of cultural significance	None	-	-	-	-	-
Geological sites of scientific or cultural importance	None	-	-	-	-	None
Archaeological and palaeontological sites	Chance finds	Unknown	Low local?	Both	Unknown	Report and evaluate any graves or archaeological features and artefacts when found
Graves and burial sites	Cemetery	27°35'54.23"S 22°52'23.92"E	High local	Dibeng 1	Definitely no impact - neutral	Protect and monitor for any damage during site preparation and construction work
	Cemetery	-	High local	Dibeng 2	Definitely no impact - neutral	Protect and monitor for any damage during site preparation and construction work
Features associated with labour history	None	-	-	-	-	
Movable objects	None	-	-	-	-	

**(d) Social and economic benefits**

The development will have no direct benefits related to the conservation of heritage resources (structures) since none of significance were identified and will be affected.

The socio-economic benefits are associated with the provision for additional housing in anticipating of demand resulting from the operation of the neighbouring iron and manganese mines, the retention of jobs in the construction sector and the creation of temporary employment.

**(e) Public consultation**

This was part of the EIA process. Appendix 4 contains a summarised report. There we no comments or objections against the proposed land-use change from a heritage perspective.



### **(g) Mitigation during construction**

Except for monitoring of any chance finds (graves, archaeological features) during site preparation and construction work, no mitigation measures apply.

#### **Findings and recommendations**

The two areas proposed for residential and commercial development are located in a cultural landscape classified primarily as relic farmland. This class of landscape is of low heritage sensitivity because it is able to absorb new development with some adverse effects.

The predicted impacts are of not of a direct and physical nature. Visual intrusion as an indirect impact is not an important issue since the proposed development will have a low visual scale, is located in an environmentally degraded area (bush encroachment etc) and is bordering on land that has been transformed by housing and infrastructure. Noise, dust, pollution and restrictions of access patterns as indirect impacts are also not issues.

Cultmatrix states that there are no compelling reasons not to authorise the proposed change of land use and that the proposed development can continue provided that the following mitigation measures are adopted as a heritage management tool:

1. Should any hidden human remains (highly unlikely) be disturbed, exposed or uncovered during site clearing and excavations, these should immediately be reported to an archaeologist. Burial remains should not be disturbed or removed until inspected by an archaeologist.
2. Site clearing and excavation activities must be monitored for the occurrence of any hidden palaeontological material (fossils), archaeological material (Stone Age tools) and similar chance finds (such as historic middens and foundations) and if any are exposed, this should be reported to an archaeologist so that an investigation and evaluation of the finds can be made.
3. The two cemeteries should be protected and monitored during construction work.



**RC DE JONG**  
**Public Officer and Principal Investigator**

**Date: 5 November 2010**

# 1. REPORT CONTEXT

## 1.1 General notes

1. The structure of this report is based on:
  - SOUTH AFRICAN HERITAGE RESOURCES AGENCY, Heritage Impact Assessment: Notification of intent to develop (form)
  - DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING, PROVINCIAL GOVERNMENT OF THE WESTERN CAPE, 2005, Guideline for involving heritage specialists in EIA processes (document)
  - DEPARTMENT OF ENVIRONMENT AFFAIRS AND TOURISM, Integrated Environmental Management Guidelines
  - SOUTH AFRICAN HERITAGE RESOURCES AGENCY, 2006, *Minimum standards: Archaeological and palaeontological components of impact assessment reports* (unpublished).
  - WORLD BANK, *Environmental Assessment Sourcebook Update No 8, September 1994: Cultural Heritage in Environmental Assessment*.
  - Best-practice HIA reports submitted by Cultmatrix and other heritage consultants
2. This report is informed by the *National Heritage Resources Act (25/1999)* (NHRA) and is consistent with the various ICOMOS charters for places of cultural significance.
3. Recommendations contained in this application do not exempt the applicant from complying with any national, provincial and municipal legislation or other regulatory requirements, including any protection or management or general provision in terms of the NHRA.
4. Rights and responsibilities that arise from this report are those of the applicant and not that of Cultmatrix cc. Cultmatrix cc assumes no responsibility for compliance with conditions that may be required by SAHRA in terms of this report.
5. Cultmatrix assumes no responsibility whatsoever for any loss or damages that may be suffered as a direct or indirect result of information contained in this application. Any claim that may however arise is limited to the amount paid to Cultmatrix for services rendered to compile this report.

## 1.2 Purpose of the report

The purpose of this report is to identify and assess features of heritage significance, identify possible impacts and propose management measures to mitigate negative impacts. This information must enable the relevant heritage authority to approve the proposed development as required in terms of Section 38 of the NHRA.

The below table lists and describes the three general categories of heritage impact assessment studies and reports, which offices are involved (i.e. to which offices reports should be submitted) and which type of response is required from these offices.

**TABLE 2: Applicable category of heritage impact assessment study and report**

Type of study and report	Aim	Office involved	Requested response
Screening: Not this report	The aim of the screening investigation is to provide an informed heritage-related opinion about the proposed development by an appropriate heritage specialist. The objectives of this investigation are to screen potential heritage issues through a site inspection, to develop a broad understanding of heritage policy-related context, to review any existing data on the history and heritage significance of the site, to check if the site has any formal heritage status, to discuss the proposed development with heritage contacts and to scan the development proposals. The result of this investigation is a brief statement indicating potential heritage impacts/issues and the need for further investigation.	-	-
		-	-
		-	-

Type of study and report	Aim	Office involved	Requested response
Scoping (basic assessment): Not this report	The aim of the scoping investigation is to analyse heritage issues and how to manage them within the context of the proposed development. The objectives are to assess heritage significance (involving site inspections and basic desktop and archival research); to identify the need for further detailed inputs by heritage specialists, to consult with local heritage groups and experts, to review the general compatibility of the development proposals with heritage policy and to assess the acceptability of the proposed development from a heritage perspective. The result of this investigation is a heritage scoping report indicating the presence/absence of heritage resources and how to manage them in the context of the proposed development.	-	-
		-	-
		-	-
Full HIA: This report	The aim of the full HIA investigation is to analyse and recommend heritage management mitigation measures and monitoring programmes. The objectives are to analyse heritage issues, to research the chronology of the site and its role in the broader context, to undertake a comprehensive assessment of heritage significance, to analyse the nature and scale of the proposed development, to consult with local heritage groups and experts as part of the broader EIA stakeholder engagement process, to establish the compatibility of the proposed development with heritage and other statutory frameworks and to assess alternatives in order to promote heritage conservation issues.	Northern Cape Provincial Heritage Resources Authority	Comments on built environment and approval of development
		SAHRA Palaeontology, Archaeology and Meteorites Unit	Comments
		SAHRA Burial Grounds and Graves Unit (Pretoria)	Comments

### 1.3 Terms of reference

- To survey the proposed extension areas as well as the surrounding environment
- To identify and map heritage resources that may be affected directly and
- To assess the cultural significance of these heritage resources
- To assess the impact of the development on these heritage resources
- To assess the benefits of conserving these heritage resources in relationship to the socio-economic benefits of the development
- To provide the public with an opportunity to comment on the heritage aspects of the proposed development
- To consider alternatives if heritage resources will be affected in a negative manner
- To determine methods to mitigate negative impacts before, during and after construction activities
- To compare sections of the authorised route with sections of the amended route in terms of heritage impact risks

### 1.4 History of the report

This report is the final report and has been preceded by a draft report (March 2010).

### 1.5 Legal context of the report

ACT	COMPONENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impacts on buildings and structures older than 60 years	None	-
	S 35	Impacts on archaeological and palaeontological heritage resources	None	Monitor during site preparation work
	S 36	Impacts on graves	None	Dibeng 1 cemetery will not be adversely affected but should be protected and monitored
	S 37	Impacts on public monuments	None present	-
	S 38	Developments requiring an HIA	Development is listed activity	Full HIA
NEMA	EIA Regulations	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

ACT	COMPONENT	IMPLICATION	RELEVANCE	COMPLIANCE
Other	-	-	-	-

## 1.6 Planning context of the report

No information was available but the assumption is that the proposed extensions are part of the municipal SDF and IDP.

## 1.7 Development criteria in terms of Section 38 of the NHRA

1.7	Development criteria in terms of Section 38(1)	Yes/No details
1.7.1	Construction of road, wall, power line, pipeline, canal or other linear form of development or barrier exceeding 300m in length	Yes
1.7.2	Construction of bridge or similar structure exceeding 50m in length	No
1.7.3	Development exceeding 5000 sq m	Yes
1.7.4	Development involving three or more existing erven or subdivisions	No
1.7.5	Development involving three or more erven or divisions that have been consolidated within past five years	No
1.7.6	Rezoning of site exceeding 10 000 sq m	Yes
1.7.7	Any other development category, public open space, squares, parks, recreation grounds	No

## 1.8 Property details

1.8	Property details	
1.8.1	Name and location of property	Dibeng extensions
1.8.2	Erf or farm numbers	Portion of Portion 1 of the farm Wincanton 472 and a Portion of Erf 1 in the town of Dibeng on the farm Deben 473
1.8.3	Magisterial district	Kuruman
1.8.4	Closest town	Dibeng
1.8.5	Local authority	Gamagara
1.8.5	Current use	Vacant, burial
1.8.5	Current zoning	Not available
1.8.5	Predominant land use of surrounding properties	Agricultural, residential, transport, commercial, vacant
1.8.9	Total extent of properties	135 hectares

## 1.9 Property ownership

1.9	Property owners	
1.9.1	Farms	Portion of Portion 1 of the farm Wincanton 472 and a Portion of Erf 1 in the town of Dibeng on the farm Deben 473
1.9.2	Name and contract address	Gamagara municipality
1.9.3	Telephone number	-
1.9.4	Fax number	-
1.9.5	E-mail	-

## 1.10 Developer

1.10	Developer	
1.10.1	Name and contact address	Gamagara municipality
1.10.2	Telephone number	-
1.10.3	Fax	-
1.10.4	E-mail	-

## 1.11 Environmental practitioner

1.11	Environmental Specialist	
1.11.1	Name and contact address	Marquerite Geldenhuys, MEG Omgewingsimpakstudies,

<b>1.11</b>	<b>Environmental Specialist</b>	
		Private Bag X 5879, Postnet Suite 63, Upington 8800
1.11.2	Telephone number	(054) 491-3144
1.11.3	Fax	As above
1.11.4	E-mail	<a href="mailto:megeldenhuys@vodamail.co.za">megeldenhuys@vodamail.co.za</a>

### 1.12 Heritage assessment practitioners

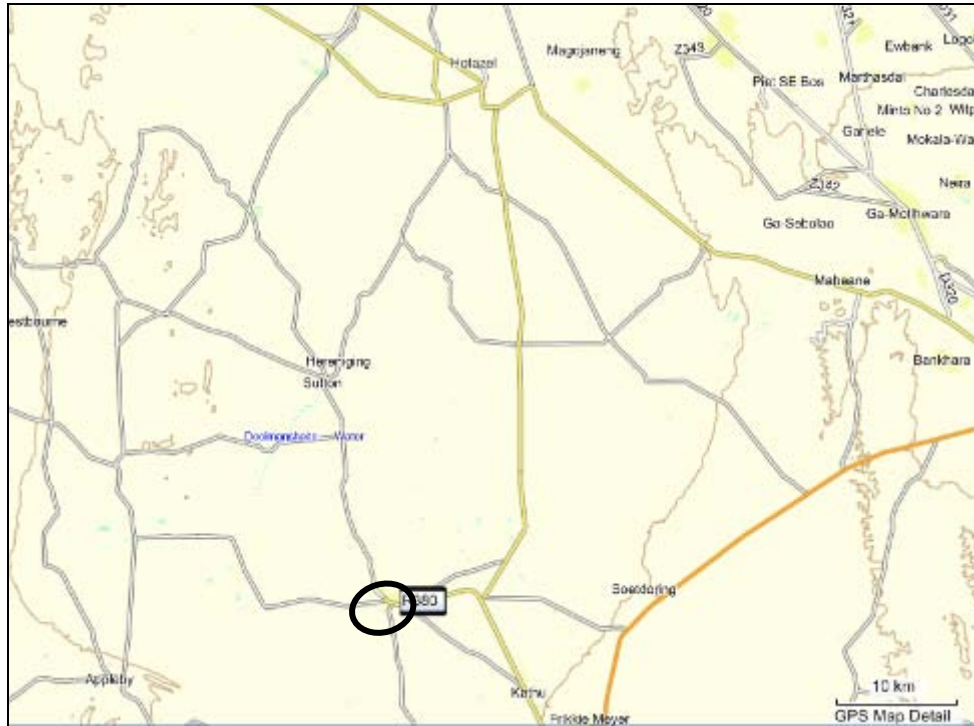
<b>1.12</b>	<b>Specialist (1)</b>	
1.12.1	Name and contact address	Dr RC de Jong (Principal Member: Cultmatrix cc), PO Box 12013, Queenswood 0121, Pretoria
1.12.2	Qualifications and field of expertise	PhD (Cultural History) UP (1990), Post-Graduate Museology Diploma UP (1979), generalist heritage management specialist with experience in museums and heritage since 1983
1.12.3	Relevant experience in study area	HIAs for developments at Hotazel, Sesheng, Kathu, Olifantshoek
1.12.4	Telephone number	(082) 577-4741
1.12.5	Fax number	(086) 612-7383
1.12.6	E-mail	<a href="mailto:cultmat@iafrica.com">cultmat@iafrica.com</a>

<b>Specialist 2</b>		
1.12.1	Name and contact address	Dr JA van Schalkwyk, PO Box 26389, Monument Park 0105
1.12.2	Qualifications and field of expertise	DLitt et Phil (UNISA), Post-Graduate Museology Diploma UP, general heritage management specialist with experience in museums and heritage, ASAPA accredited archaeologist
1.12.3	Relevant experience in study area	Archaeological studies for HIAs in the broader area including Hotazel, Sesheng, Kathu, Olifantshoek
1.12.4	Telephone number	(012) 347-7270
1.12.5	Fax number	
1.12.6	E-mail	<a href="mailto:jvschalkwyk@mweb.co.za">jvschalkwyk@mweb.co.za</a>

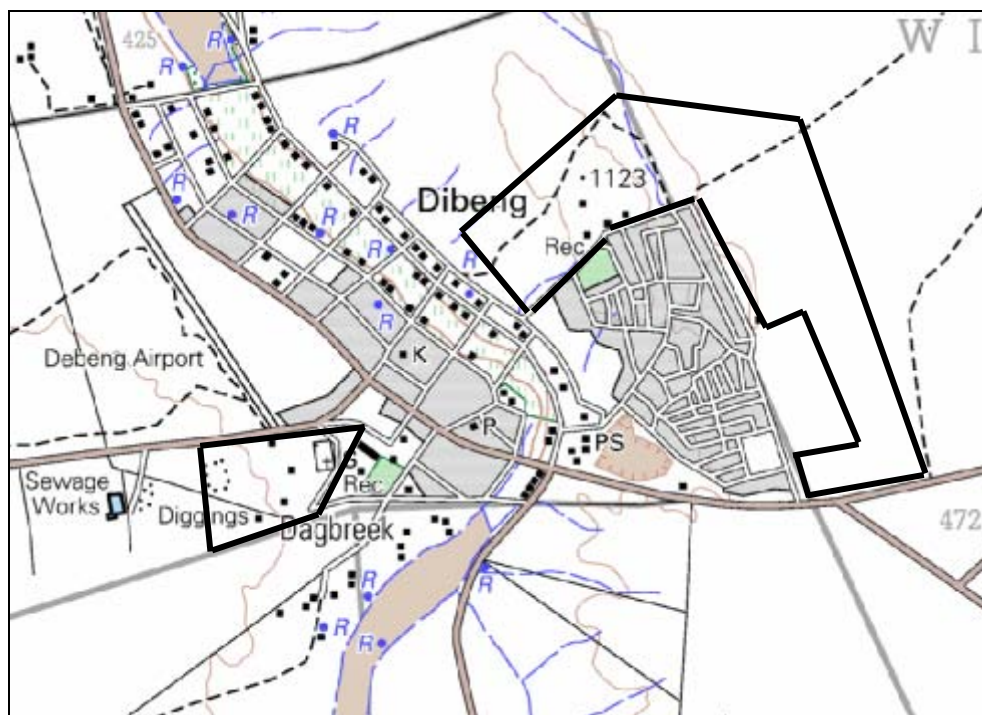
## 2. DEVELOPMENT CONTEXT

### 2.1 Development site/area location and boundaries

Dibeng is located 19 km north-west of the town of Kathu, 43 km south of Hotazel and forms part of the Gamagara Local Municipality and the magisterial district of Kuruman, Northern Cape Province.



**FIGURE 1: General location of the study area**



**FIGURE 2: Portion of 2722 DB Dibeng (2001) indicating the boundaries of the extension areas**



**FIGURE 3: Google Earth image (2006) of the extension areas Dibeng 1 (west) and 2 (east)**

## 2.2 Description of distinguishing regional features

### 2.2.1 Environmental features

**TABLE 3: Environmental features**

COMPONENT	DESCRIPTION
Acocks veld type	Kalahari Thornveld and Shrubland
Geological and mining	Manganese and iron mines
Geology	Siliclastic
Hydrology	Ga-Mogara River (outside extension areas)
Land cover	Shrubland
Land use	Vacant
Vegetation	Kalahari Plains Thornveld
Landscape sensitivity index	1-3
Slope	0-9%
Terrain morphology	Plains
Wetlands	None

## 2.2.2 Heritage features

**TABLE 4: Heritage features**

<b>S 3(2) NHRA heritage resource</b>	<b>DESCRIPTION</b>
Buildings, structures, places and equipment of cultural significance	Tracks, fences, foundations, quarries, industrial buildings
Areas to which oral traditions are attached or which are associated with intangible heritage	None
Historical settlements and landscapes	Dibeng town
Landscapes and natural features of cultural significance	Historic farmland
Geological sites of scientific or cultural importance	None
Archaeological and palaeontological sites	Broader area is known for Early, Middle and late Stone Age artefacts (out of context)
Graves and burial grounds	Cemetery inside Dibeng 1
Areas of significance related to labour history	None
Movable objects	None

## 2.2.3 Site description

The proposed change of land use affects two different areas. Dibeng 1, a smaller, western area (16 hectares) is located on a Portion of Erf 1 in Dibeng and has an irregular shape, determined by the existing road network. It consists of vacant, densely vegetated land with sandy vehicle tracks, a few modern industrial buildings, the remains of a recreational site and a cemetery. Dibeng 2, a much larger, eastern area (120 hectares) forms a crescent around the existing Dibeng township and consists of vacant, very densely vegetated land with informal quarries and landfill sites, footpaths and vehicle tracks.

As a cultural landscape this flat and featureless environment can be classified as a relic landscape (former farm land) and, to a lesser extent, a historic archaeological landscape.

The corner co-ordinates of Dibeng 1 are:

DB 1-A 27°35'53.09"S 22°52'4.79"E  
 DB 1-B 27°36'5.78"S 22°52'5.66"E  
 DB 1-C 27°36'1.31"S 22°52'21.78"E  
 DB 1-D 27°35'50.87"S 22°52'29.27"E  
 DB 1-E 27°35'51.63"S 22°52'16.60"E  
 DB 1-F 27°35'52.45"S 22°52'9.90"E

The corner co-ordinates of Dibeng 2 are:

DB 2-A 27°35'38.45"S 22°52'58.09"E  
 DB 2-B 27°35'30.20"S 22°52'41.64"E  
 DB 2-C 27°35'11.80"S 22°52'55.29"E  
 DB 2-D 27°35'15.31"S 22°53'38.64"E  
 DB 2-E 27°35'32.83"S 22°53'49.33"E  
 DB 2-F 27°35'56.17"S 22°53'52.51"E  
 DB 2-G 27°35'28.82"S 22°53'30.15"E  
 DB 2-H 27°35'28.82"S 22°53'30.15"E



### 2.2.4 Surrounding environment

AREA	DESCRIPTION
East	Farm land
North	Farm land
West	Farm land
South	Farm land

### 2.3 Development description

2.3	Development description	
2.3.1	Nature of proposed development	Change of land-use to provide for residential and commercial extensions to Dibeng
2.3.2	Predicted impacts on heritage value of site and contents	None
2.3.3	Structures older than 60 years affected by proposed development	No
2.3.4	Rezoning or change of land use	Yes: Farm land to residential and commercial
2.3.5	Construction work	Yes
2.3.6	Total floor area of proposed development	-
2.3.7	Extent of land coverage of development	135 hectares
2.3.8	Earth moving and excavation	Yes
2.3.9	Number of storeys	Single
2.3.10	Maximum height above ground level	-
2.3.11	Monetary value development	Not available
2.3.12	Time frames	Urgent



**FIGURE 4: View across a portion of the development area (Dibeng 1)**

### 3. HERITAGE IMPACT CONTEXT

#### 3.1 Cultural landscape evidence

The concept of cultural landscapes is of more recent origin and, although the definitions of the National Heritage Resources Act bear reference, is primarily grounded in international doctrinal texts in the form of Charters and Recommendations produced by ICOMOS and UNESCO. The most recent and authoritative text is the World Heritage Cultural Landscapes handbook, published by the World Heritage Centre (2009).

The term “cultural landscape” embraces a diversity of manifestations of the interaction between humankind and its natural environment. Cultural landscapes often reflect specific techniques of sustainable *land-use*, considering the characteristics and limits of the natural environment they are established in, and a specific spiritual relation to nature. Cultural landscapes are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal. They are categorized on the basis both of their value and of their representativity in terms of a clearly defined geo-cultural *region* and also for their capacity to illustrate the essential and distinct cultural elements of such regions. The term “cultural landscape” embraces a diversity of manifestations of the interaction between humankind and its natural environment.

The World Heritage Committee distinguishes between three categories of cultural landscapes:

- Clearly defined landscapes, designed and created intentionally by people, such as parkland and urban areas
- Organically evolved landscapes that has developed over time, including relic landscapes (where a certain activity has ceased to exist) and continuing landscapes (which retain an active social role and where the evolutionary process is still in progress)
- Associative landscapes, which are essentially natural landscapes with significant human associations in the realm of the intangible heritage

All three categories exist in the study area. However, they are too broad in terms of the practical mapping and assessment of heritage elements; hence, the following criteria for classifying the type of cultural landscape have been used:

**TABLE 5: Cultural landscape classification**

HERITAGE LANDSCAPE CONTEXT	ELEMENTS	EVIDENCE
A. PALAEOLOGICAL LANDSCAPE CONTEXT	Fossil remains. Such resources are typically found in specific geographical areas, e.g. the Karoo and are embedded in ancient rock and limestone/calcrete formations.	None
B. ARCHAEOLOGICAL LANDSCAPE CONTEXT (TERRIARY LANDSCAPE)	<p>Archaeological remains dating to the following periods:</p> <ul style="list-style-type: none"> <li>• Early Stone Age</li> <li>• Middle Stone Age</li> <li>• Late Stone Age</li> <li>• Early Iron Age</li> <li>• Late Iron Age</li> <li>• Historical</li> </ul>	Potential for Stone Age artefacts
C. HISTORICAL BUILT URBAN LANDSCAPE CONTEXT	<ul style="list-style-type: none"> <li>• Historical townscapes/streetscapes</li> <li>• Historical structures; i.e. older than 60 years</li> <li>• Formal public spaces</li> <li>• Formally declared urban conservation areas</li> <li>• Places associated with social identity/displacement</li> </ul>	None

D. HISTORICAL FARMLAND CONTEXT (PRIMARY LANDSCAPE)	<p>These possess distinctive patterns of settlement and historical features such as:</p> <ul style="list-style-type: none"> <li>• Historical farm werfs</li> <li>• Historical farm workers villages/settlements</li> <li>• Irrigation furrows</li> <li>• Tree alignments and groupings</li> <li>• Historical routes and pathways</li> <li>• Distinctive types of planting</li> <li>• Distinctive architecture of cultivation e.g. planting blocks, trellising, terracing, ornamental planting.</li> </ul>	None
E. HISTORICAL RURAL TOWN CONTEXT	<ul style="list-style-type: none"> <li>• Historical mission settlements</li> <li>• Historical townscapes</li> </ul>	None
F. PRISTINE/NATURAL LANDSCAPE CONTEXT	<ul style="list-style-type: none"> <li>• Historical patterns of access to a natural amenity</li> <li>• Formally proclaimed nature reserves</li> <li>• Evidence of pre-colonial occupation</li> <li>• Scenic resources, e.g. view corridors, viewing sites, visual edges, visual linkages</li> <li>• Historical structures/settlements older than 60 years</li> <li>• Pre-colonial or historical burial sites</li> <li>• Geological sites of cultural significance.</li> </ul>	None
<b>G. RELIC LANDSCAPE CONTEXT (Primary landscape)</b>	<ul style="list-style-type: none"> <li>• <b>Past farming settlements</b></li> <li>• <b>Past industrial sites</b></li> <li>• <b>Places of isolation related to attitudes to medical treatment</b></li> <li>• <b>Battle sites</b></li> <li>• <b>Sites of displacement,</b></li> </ul>	<b>Yes</b>
<b>H. BURIAL GROUND &amp; GRAVE SITE CONTEXT (Secondary landscape)</b>	<ul style="list-style-type: none"> <li>• <b>Pre-colonial burials (marked or unmarked, known or unknown)</b></li> <li>• <b>Historical graves (marked or unmarked, known or unknown)</b></li> <li>• <b>Human remains (older than 100 years)</b></li> <li>• <b>Associated burial goods (older than 100 years)</b></li> <li>• <b>Burial architecture (older than 60 years)</b></li> </ul>	<b>Cemetery on Dibeng 1</b>
I. ASSOCIATED LANDSCAPE CONTEXT	<ul style="list-style-type: none"> <li>• Sites associated with living heritage e.g. initiation sites, harvesting of natural resources for traditional medicinal purposes</li> <li>• Sites associated with displacement &amp; contestation</li> <li>• Sites of political conflict/struggle</li> <li>• Sites associated with an historic event/person</li> <li>• Sites associated with public memory</li> </ul>	None
J. HISTORICAL FARM WERF CONTEXT	<ul style="list-style-type: none"> <li>• Setting of werf and its context</li> <li>• Composition of structures</li> <li>• Historical/architectural value of individual structures</li> <li>• Tree alignments</li> <li>• Views to and from</li> <li>• Axial relationships</li> <li>• System of enclosure, e.g. werf walls</li> <li>• Systems of water reticulation and irrigation, e.g. furrows</li> <li>• Sites associated with slavery and farm labour</li> <li>• Colonial period archaeology</li> </ul>	None
K. HISTORICAL INSTITUTIONAL LANDSCAPE CONTEXT	<ul style="list-style-type: none"> <li>• Historical prisons</li> <li>• Hospital sites</li> <li>• Historical school/reformatory sites</li> <li>• Military bases</li> </ul>	None
L. SCENIC/VISUAL	<ul style="list-style-type: none"> <li>• Scenic routes</li> </ul>	None

K. AMENITY LANDSCAPE CONTEXT	<ul style="list-style-type: none"> <li>• View sheds</li> <li>• View points</li> <li>• Views to and from</li> <li>• Gateway conditions</li> <li>• Distinctive representative landscape conditions</li> <li>• Scenic corridors</li> </ul>	
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### 3.2 Determining levels of sensitivity and potential impacts

Sensitivity is the ability of a cultural landscape (or heritage resource) to absorb changes or adapt to changes whilst maintaining an acceptable degree of cultural significance.

Within the context of this study, levels of sensitivity can generally be associated with certain classes or categories of cultural landscapes as tabulated below.

**TABLE 6: Relationship between cultural landscape classes and levels of sensitivity**

Sensitivity level	Implication	Landscape class	Evidence
D	Ability to absorb without adverse effects and very little mitigation	Relic farmland landscape	Of little or no intrinsic, associational or contextual heritage value due to disturbed, degraded conditions or extent of irreversible damage
C	Ability to absorb with some adverse effects and some mitigation	Historical farmland Historical farm werfs Institutional landscapes	Of medium to low intrinsic, associational or contextual heritage value within a national, provincial and local context
B	Ability to absorb with considerable adverse effects and intensive mitigation	Burial grounds and graves Palaeontological and archaeological landscapes Associated landscapes	Of moderate to high intrinsic, associational and contextual value within a local context
A	No or very little ability to absorb	Historical built environments Natural landscapes Amenity/Visual/Scenic landscapes	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context

### 3.3 Determining potential impacts

**TABLE 7: Categories of development types**

CATEGORY	DESCRIPTION	EVIDENCE
A: Minimal intensity development	<ul style="list-style-type: none"> <li>• No rezoning involved; within existing use rights</li> <li>• No subdivision involved</li> <li>• Upgrading of existing infrastructure within existing envelopes</li> <li>• Minor internal changes to existing structures</li> <li>• New building footprints limited to less than 1000m<sup>2</sup></li> </ul>	No
B: Low-intensity development	<ul style="list-style-type: none"> <li>• Spot rezoning with no change to overall zoning of a site</li> <li>• Linear development less than 100m</li> <li>• Building footprints between 1000m<sup>2</sup>-2000m<sup>2</sup></li> <li>• Minor changes to external envelop of existing structures (less than 25%)</li> <li>• Minor changes in relation to bulk and height of immediately adjacent structures (less than 25%).</li> </ul>	No
C: Moderate intensity development	<ul style="list-style-type: none"> <li>• Rezoning of a site between 5000m<sup>2</sup>-10 000m<sup>2</sup></li> <li>• Linear development between 100m and 300m</li> <li>• Building footprints between 2000m<sup>2</sup> and 5000m<sup>2</sup></li> <li>• Substantial changes to external envelop of existing structures (more than 50%)</li> <li>• Substantial increase in bulk and height in relation to immediately adjacent buildings (more than 50%)</li> </ul>	No

CATEGORY	DESCRIPTION	EVIDENCE
<b>D: High intensity development</b>	<ul style="list-style-type: none"> <li>• Rezoning of a site in excess of 10 000m<sup>2</sup></li> <li>• Linear development in excess of 300m</li> <li>• Any development changing the character of a site exceeding 5000m<sup>2</sup> or involving the subdivision of a site into three or more erven</li> <li>• Substantial increase in bulk and height in relation to immediately adjacent buildings (more than 100%)</li> </ul>	Residential and commercial development

### 3.4 Expected impact significance

**TABLE 8: Expected impact significance matrix**

HERITAGE CONTEXT	TYPE OF DEVELOPMENT			
	CATEGORY A	CATEGORY B	CATEGORY C	CATEGORY D
A: High heritage value	Moderate heritage impact expected	High heritage impact expected	Very high heritage impact expected	Very high heritage impact expected
B: Medium to high heritage value	Minimal heritage impact expected	Moderate heritage impact expected	High heritage impact expected	Very high heritage impact expected
C: Medium to low heritage value	Little or no heritage impact expected	Minimal heritage impact expected	Moderate heritage impact expected	High heritage impact expected
D: Low heritage value	Little or no heritage impact expected	Little or no heritage impact expected	Minimal heritage value expected	<b>Moderate heritage impact expected</b>

## 4. HERITAGE IMPACT ASSESSMENT

### 4.1 Approach

#### 4.1.1 Definitions and assumptions

The following aspects have a direct bearing on the investigation and the resulting report:

- *Cultural (heritage) resources* are all non-physical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- The *cultural significance* of sites and artefacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.
- The *value* is related to concepts such as *worth, merit, attraction or appeal*, concepts that are associated with the (current) usefulness and condition of a place or an object. Hence, in the development area, there are instances where elements of the place have a high level of significance but a lower level of value.
- It must be kept in mind that significance and value are not mutually exclusive, and that the evaluation of any feature is based on a combination or balance between the two.
- Isolated occurrences: findings of artefacts or other remains located apart from archaeological sites. Although these are noted and samples are collected, it is not used in impact assessment and therefore do not feature in the report.
- Traditional cultural use: resources which are culturally important to people.
- All archaeological remains, artificial features and structures older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the National Heritage Resources Act (NHRA) (Act No. 25 of 1999). No archaeological artefact, assemblage or settlement (site) and no historical building or structure older than 60 years may be altered, moved or destroyed without the necessary authorisation from the South African Heritage Resources Agency (SAHRA) or a provincial heritage resources authority. Full cognisance is taken of this Act in making recommendations in this report.
- The guidelines as provided by the NHRA (Act No. 25 of 1999) in Section 3, with special reference to subsection 3, and the Australian ICOMOS Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.
- It should be kept in mind that archaeological deposits usually occur below ground level. Should artefacts or skeletal material be revealed at the site during construction, such activities should be halted, and it would be required that the heritage consultants would be required to be notified in order for an investigation and evaluation of the find(s) to take place (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).

#### 4.1.2 Limiting/Restricting factors

The investigation has been influenced by the following factors related to the overall HIA:

- Unpredictability of buried archaeological remains (absence of evidence does not mean evidence of absence)
- The archaeological visibility was down to virtually zero in most areas due to dense vegetation cover

### 4.1.3 Field work

This was done through foot and vehicle investigations of the study area in March 2010. During the site inspection the respective properties were examined in some detail. Certain parts of the landscape were found generally to exhibit low archaeological visibility and were checked at random intervals, while features in the respective landscapes that were more likely to have been foci for past human activity were assessed more systematically.

An assessment was made regarding reports for other developments in the region that have been submitted to SAHRA. None covered areas within 15 km of Dibeng.



**FIGURE 5: Google Earth image indicating locations of developments for which other reports have been submitted to SAHRA**

### 4.1.4 Desktop study

- Published literature
- Aerial images (contemporary)
- Cadastral diagrams
- Archival records
- Maps (historical and contemporary)
- Title deeds

#### 4.1.5 Verbal information

- None

#### 4.2 General issues of site and context

<b>4.2.1 Context</b>		
	<i>(check box of all relevant categories)</i>	<i>Brief description/explanation</i>
x	Urban environmental context	<ul style="list-style-type: none"> <li>• Roads</li> <li>• Vacant land</li> <li>• Former grazing land</li> <li>• Dwellings</li> <li>• Urban areas</li> </ul>
	Rural environmental context	
	Natural environmental context	
<b>Formal protection (NHRA)</b>		
	Is the property part of a protected area (S. 28)?	No
	Is the property part of a heritage area (S. 31)?	No
<b>Other</b>		
	Is the property near to or visible from any protected heritage sites?	No
	Is the property part of a conservation area or special area in terms of the Zoning Scheme?	No
x	Does the site form part of a historical settlement or townscape?	Located on outskirts of Dibeng
	Does the site form part of a rural cultural landscape?	No
	Does the site form part of a natural landscape of cultural significance?	No
	Is the site within or adjacent to a scenic route?	No
	Is the property within or adjacent to any other area which has special environmental or heritage protection?	No
	Does the general context or any adjoining properties have cultural significance?	No

<b>4.2.2 Property features and characteristics</b>		
	<i>(check box if YES)</i>	<i>Brief description</i>
x	Have there been any previous development impacts on the property?	Yes: Roads, tracks, grazing land, fences, cemetery, etc.
x	Are there any significant landscape features on the property?	Gullies
	Are there any sites or features of geological significance on the property?	No
	Does the property have any rocky outcrops on it?	No
x	Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	Ga-Mogara River
	Does the property have any sea frontage?	No
	Does the property form part of a coastal dune system?	No



<b>4.2.2 Property features and characteristics</b>		
	Are there any marine shell heaps or scatters on the property?	No
	Is the property or part thereof on land reclaimed from the sea?	No

<b>4.2.3 Heritage resources on the property</b>		
	<i>(check box if present on the property)</i>	<i>Name / List / Brief description</i>
<b>Formal protections (NHRA)</b>		
	National heritage site (S. 27)	No
	Provincial heritage site (S. 27)	No
	Provisional protection (s.29)	No
	Place listed in heritage register (S. 30)	No
<b>General protections (NHRA)</b>		
	structures older than 60 years (S. 34)	No
x	archaeological site or material (S. 35)	Possible (chance finds)
x	palaeontological site or material (S. 35)	Possible (chance finds)
x	graves or burial grounds (S. 36)	Cemeteries in Dibeng 1 and Dibeng 2
	public monuments or memorials (S. 37)	No
<b>Other</b>		
	Any heritage resource identified in a heritage survey (state author and date of survey and survey grading/s)	No
	Any other heritage resources (describe)	No

<b>4.2.4 Property history and associations</b>		
	<i>(check box if YES)</i>	<i>Brief description/explanation</i>
x	Provide a brief history of the property (e.g. when granted, previous owners and uses).	See Appendix 1
	Is the property associated with any important persons or groups?	No
	Is the property associated with any important events, activities or public memory?	No
	Does the property have any direct association with the history of slavery?	No
	Is the property associated with or used for living heritage?	No
	Are there any oral traditions attached to the property?	No

### **4.3 Summarised identification and significance assessment of heritage resources**

See Appendix 3 for significance assessment criteria

**TABLE 9: Identification and significance assessment of heritage features**

S 3(2) NHRA heritage resource category	ELEMENTS	INDICATORS OF HERITAGE SIGNIFICANCE											CUMULATIVE SIGNIFICANCE RATING (TOTAL 30) 1-9 = Low 10-19 = Medium 20-30 = High
		HISTORICAL	RARE	SCIENTIFIC	TYPICAL	AESTHETIC	TECHNOLOGICAL	PERSON COMMUNITY	LANDMARK	MATERIAL CONDITION	SUSTAINABILITY		
Buildings, structures, places and equipment of cultural significance	None	-	-	-	-	-	-	-	-	-	-	-	-
Areas to which oral traditions are attached or which are associated with intangible heritage	None	-	-	-	-	-	-	-	-	-	-	-	-
Historical settlements and landscapes	None	-	-	-	-	-	-	-	-	-	-	-	-
Landscapes and natural features of cultural significance	None	-	-	-	-	-	-	-	-	-	-	-	-
Geological sites of scientific or cultural importance	None	-	-	-	-	-	-	-	-	-	-	-	-
Archaeological and palaeontological sites	Stone Age artefacts and fossils (chance finds)	-	-	-	-	-	-	-	-	-	-	-	Unknown
Graves and burial grounds	Cemeteries	2	1	2	3	2	2	3	2	3	3	3	23 = High local
Areas of significance related to labour history	None	-	-	-	-	-	-	-	-	-	-	-	-
Movable objects	None	-	-	-	-	-	-	-	-	-	-	-	-

#### 4.4 Impact assessment



**FIGURE 6: Google Earth image (2006) of the Dibeng 1 area indicating the cemetery and the remains of recreation facilities**

**4.4.1 Cemetery (smaller)**

S 3(2) NHRA heritage resource	(a) Identification		(b) Significance	(c) Impact		(d) Recommended impact management
	Site	GPS		Study area	Impact type, certainty and significance	
Burial grounds and graves	Cemetery	27°35'54.23"S 22°52'23.92"E	High local	Dibeng 1	Definitely no impact - neutral	Protect and monitor for any damage during site preparation and construction work



**FIGURE 7: Google Earth image (2006) of the Dibeng 2 extension area indicating the site of the large cemetery**

**4.4.2 Summarised impact assessment**

**TABLE 10: Identification of heritage features, impacts and impact management measures**

S 3(2) NHRA heritage resource	(a) Identification		(b) Significance	(c) Impact		(d) Recommended impact management
	Site	GPS		Study area	Impact type, certainty and significance	
Buildings, structures, places and equipment of cultural significance	None	-	-	-	-	-
Areas to which oral traditions are attached or which are associated with intangible heritage	None	-	-	-	-	-

S 3(2) NHRA heritage resource	(a) Identification		(b) Significance	(c) Impact		(d) Recommended impact management
	Site	GPS		Study area	Impact type, certainty and significance	
Historical settlements and landscapes	None	-	-	-	-	-
Landscapes and natural features of cultural significance	None	-	-	-	-	-
Geological sites of scientific or cultural importance	None	-	-	-	-	None
Archaeological and palaeontological sites	Chance finds	Unknown	Low local?	Both	Unknown	Report and evaluate any graves or archaeological features and artefacts when found
Graves and burial sites	Cemetery	27°35'54.23"S 22°52'23.92"E	High local	Dibeng 1	Definitely no impact - neutral	Protect and monitor for any damage during site preparation and construction work
	Cemetery	-	High local	Dibeng 2	Definitely no impact - neutral	Protect and monitor for any damage during site preparation and construction work
Features associated with labour history	None	-	-	-	-	
Movable objects	None	-	-	-	-	

#### 4.5 Social and economic benefits

The development will have no direct benefits related to the conservation of heritage resources (structures) since none of significance were identified and will be affected.

The socio-economic benefits are associated with the provision for additional housing in anticipating of demand resulting from the operation of the neighbouring iron and manganese mines, the retention of jobs in the construction sector and the creation of temporary employment.

#### 4.6 Consultation with affected communities

This was part of the EIA process. Appendix 4 contains a summarised report. There were no comments or objections against the proposed land-use change from a heritage perspective.

#### 4.7 Identification of other risk sources

The following project actions may impact negatively on any potential palaeontological and archaeological sites and remains.

The actions are likely to occur during the preparation phases of the proposed project:

- Earthworks and excavations may expose or uncover objects and artefacts and unmarked human burials.

#### 4.8 Key mitigation and enhancement measures before and during construction

- Monitor for chance finds (e.g. burial sites, old waste disposal sites, artefacts, fossils)

#### 4.9 Consideration of alternatives

No alternatives are considered.

#### **4.10 Summarised findings and recommendations**

The two areas proposed for residential and commercial development are located in a cultural landscape classified primarily as relic farmland. This class of landscape is of low heritage sensitivity because it is able to absorb new development with some adverse effects.

The predicted impacts are of not of a direct and physical nature. Visual intrusion as an indirect impact is not an important issue since the proposed development will have a low visual scale, is located in an environmentally degraded area (bush encroachment etc) and is bordering on land that has been transformed by housing and infrastructure. Noise, dust, pollution and restrictions of access patterns as indirect impacts are also not issues.

Cultmatrix states that there are no compelling reasons not to authorise the proposed change of land use and that the proposed development can continue provided that the following mitigation measures are adopted as a heritage management tool:

1. Should any hidden human remains (highly unlikely) be disturbed, exposed or uncovered during site clearing and excavations, these should immediately be reported to an archaeologist. Burial remains should not be disturbed or removed until inspected by an archaeologist.
2. Site clearing and excavation activities must be monitored for the occurrence of any hidden palaeontological material (fossils), archaeological material (Stone Age tools) and similar chance finds (such as historic middens and foundations) and if any are exposed, this should be reported to an archaeologist so that an investigation and evaluation of the finds can be made.
3. The two cemeteries should be protected and monitored during construction work.

## APPENDIX 1: SOCIO-CULTURAL HISTORY OF DEVELOPMENT AREA

Dibeng is located in a part of the Northern Cape Province commonly referred to as the “Green Kalahari”. At the time of the appearance of the first hominids, the plains and hills would have consisted of widespread grasslands, scattered Bushveld and broken woodlands. These grasslands would have been dominated by large herds of mammalian grazers and the predators feeding on them. River courses had woodland fringes, which would have been home to various primates, as well as hippopotamus, lechwe and waterbuck.

During 1974 a discovery of animal fossils and Early Stone Age artefacts was made in the Kathu Pan further to the south by Naas Viljoen, a previous manager of the Sishen farm. Many prehistoric bone fossils and artefacts were picked up by people over a wide area without realising the significance of these finds.

The first communities were hunters and gatherers who were able to make tools and weapons from stone, bone and wood. About 2,4 million years BP, early hominids known as *Australopithecus africanus* lived at Taung (a world heritage site), one of South Africa’s most important palaeontological sites.

The australopithecines were gradually displaced by another early hominid, *Homo habilis*, and eventually disappeared. *Homo habilis* had evolved into the more advanced *Homo erectus* (also known as *Homo ergaster*) by 1,8 million years BP, which was responsible for the development of large stone cutters and cleavers that collectively constitute the so-called Early Stone Age (ESA).

By 250 000 years BP, the large cleavers and hand axes of the ESA disappeared and were replaced by a larger variety of smaller tools and weapons of diverse shapes and sizes, made by different techniques. This change in technology marks the beginning of the Middle Stone Age (MSA). During the MSA, early humans still settled in the open along or near water sources but also took shelter in caves. The MSA marks the transition from a more archaic *Homo* (*Homo ergaster*) to anatomically modern humans, *Homo sapiens*. With this physical development the first signs of art, decoration and symbolism began to appear.

The Later Stone Age (LSA), which occurred from about 20 000 years ago, is signalled by a series of technological innovations and social transformations within these early hunter-gatherer societies. The hunting apparatus now included two important innovations, the bow and the link-shaft arrow. Link-shaft arrows were constructed with a poisoned bone tip, a link and shaft that fell away on impact, leaving the poison tip imbedded in the animal. Other innovations included bored stones, used as digging-stick weights to aid in uprooting tubers and roots; small stone tools, often less than 25 mm in length, used for cutting meat and scraping hides; polished bone tools such as needles; twine made from plant fibre or leather; tortoiseshell bowls; fishing equipment, including hooks and sinkers; bone tools with decoration; high frequencies of ostrich eggshell beads and an increase in ornaments and artwork.

The LSA is associated with San communities as well as with Khoi groups that arrived from the northern interior about 2000 years BP.

All three Stone Age periods are well represented around Kathu but no evidence was found on the Dibeng development site. This is probably because of the absence of hills, which mainly occur further away to the east and south of Dibeng. Most Stone Age artefacts and sites seem to date to the Early Stone Age.

Early Iron Age occupation did not take place in the region and seems as if the earliest people to live settled lives here were those of Tswana-speaking origin (Tlhaping and Tlharo) that settled mostly to the north and a bit to the west of Kuruman.

While there is some evidence that the Early Iron Age continued into the 15th century in the Lowveld, on the escarpment it had ended by AD1100. The Highveld became active again from the 15th century onwards due to a gradually warmer and wetter climate. From here communities spread to other parts of the interior. This later phase, termed the Late Iron Age (LIA), was accompanied by extensive stonewalled settlements, such as the Tlhaping capital Dithakong, 40 km north of Kuruman.

Sotho-Tswana and Nguni societies, the descendants of the LIA mixed farming communities, found the region already sparsely inhabited by the Late Stone Age (LSA) Khoisan groups, the so-called ‘first people’. Most of them were eventually assimilated by LIA communities and only a few managed to survive, such as the Korana and Griqua. This period of contact is sometimes known as the Ceramic Late

Stone Age and is represented by the Blinkklipkop specularite mine near Postmasburg and finds at the Kathu Pan.

From LIA communities tribal societies emerged conveniently grouped according to their languages. The region became home to Western Sotho communities speaking Setswana, such as the Tlhaping, Rolong, Phiring, Fokeng, Kwena, Kgatla, Hurutshe, Taung, Tlharo and Ngwaketse tribal communities.

Factors such as population expansion, increasing pressure on natural resources, the emergence of power blocs, attempts to control trade and penetration by Griquas, Korana and white communities from the south-west resulted in a period of instability in Southern Africa that began in the late 18<sup>th</sup> century and effectively ended with the settlement of white farmers in the interior. This period, known as the *difaqane* or *Mfecane*, also affected the Northern Cape Province, although at a relatively late stage compared to the rest of Southern Africa. Here, the period of instability, beginning in the mid-1820s, was triggered by the incursion of displaced refugees associated with the Tlokwa, Fokeng, Hlakwa and Phuting tribal groups.

The *difaqane* coincided with the penetration of the interior of South Africa by white traders, hunters, explorers and missionaries. The first was PJ Truter's and William Somerville's journey of 1801, which reached Dithakong at Kuruman. They were followed by Cowan, Donovan, Burchell and Campbell and resulted in the establishment of a London Mission Society station near Kuruman in 1817 by James Read.

The Great Trek of the Boers from the Cape in 1836 brought large numbers of Voortrekkers up to the borders of large regions known as Bechuanaland and Griqualand West, thereby coming into conflict with many Tswana groups and also the missionaries of the London Mission Society. The conflict between Boer and Tswana communities escalated in the 1860s and 1870s when the Korana and Griqua communities became involved and later also the British government. The conflict mainly centred on land claims by various communities. For decades the western border of the Transvaal Boer republic was not fixed. Only through arbitration (the Keate Arbitration), triggered by the discovery of gold at Tati (1866) and diamonds at Hopetown (1867) was part of the western border finally determined in 1871. Ten years later, the Pretoria Convention fixed the entire western border, thereby finally excluding Bechuanaland and Griqualand West from Boer domination.

Griqualand West was annexed by Britain in 1871 and this was one of the factors that eventually resulted in the Langberg Rebellion of 1878 when the Tlharo rose up against colonial domination and white settlement. A small force led by Colonel Charles Warren rapidly crushed the revolt, followed by general amnesty granted to the Tlharo in November. A "native reserve" was proclaimed for the Tlharo community in 1886, demarcating the Langberg, Deben, Kathu, Gatlhose and Maremane areas for settlement.

Geographically, Dibeng is part of a region once known as British Bechuanaland. Formerly a frontier area beyond colonial interest and control, it was proclaimed a British protectorate in 1885, primarily to secure access to Central Africa by preventing the Boers (through their Stellaland and Goosen republics) linking up with the German-occupied South-West Africa (Namibia). In 1895 the British incorporated British Bechuanaland into the Cape Colony. Prior to this the area outside the Langberg Reserve was surveyed into farms, amongst them Wincanton 472, which was surveyed by Dirk Roos in 1893.

In 1897 another Tswana uprising took place. This was also quelled by colonial forces. The Langberg and the other "reserves" were abolished and proclaimed as "Crown Land", which was surveyed into farms that were given out to white farmers. The Bechuanaland Native Reserves Commission, which was tasked to do this, visited the area in October 1897 and recommended that the Deben portion of the reserve should be divided into two farms. Like the other farms comprising the former Langberg Reserve, its size would be about 2570 hectares. JC Wessels surveyed the new farm Deben 473 in 1897-1898. The second farm was called Andrew.

The region remained sparsely populated until the advent of the 20<sup>th</sup> century, when cattle farming became popular.

John Sutherland acquired Deben in 1906 for purposes of establishing a town and an agricultural settlement. The Dutch Reformed Church established a congregation here in 1909. A school followed in 1914 but it took until 1916 before a proper town, named *Dibeng*, was established. The name is derived from the Tswana word meaning *first place to drink* or *place to drink*, because it was one of the first places where travellers from Kuruman could obtain water (from the Ga-Mogara River).

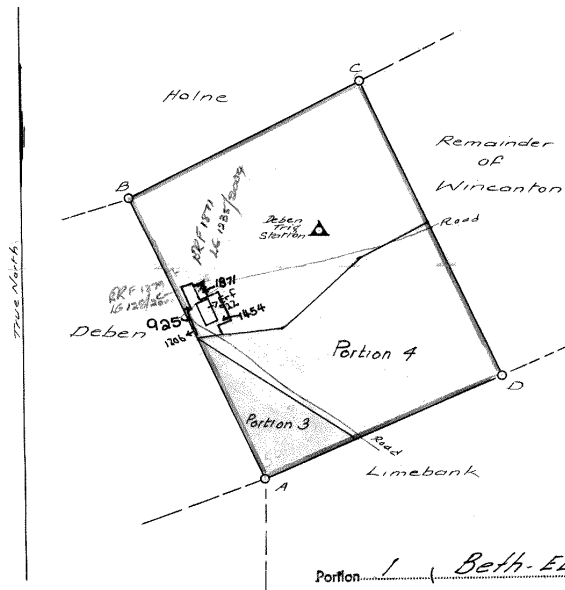


The numerical data of this Diagram are  
 No. <sup>F</sup> 3293 - 1920  
 3490

consistent.

Approved No. 3964  
 577-100  
 Examiner. J. R. Brooke  
 SURVEYOR-GENERAL

AT 21



Sides		Angles			
AB	1162.84	A	92	17	50
BC	955.99	B	91	8	10
CD	1220.14	C	88	50	40
DA	956.12	D	87	43	20

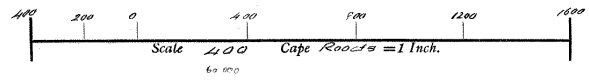
  

Co-ordinates	
A	+4772.11 -1559.46
B	+5265.44 -2612.47
C	+4407.96 -3035.13
D	+3890.73 -1930.06

Deben +4564.76 -2482.97

Portion 1 (Beth-El)  
 (a portion of Portion.....) of the farm  
 Wincanton No. 472  
 KURUMAN

THE FARM No. KURUMAN



The above diagram lettered A B C D represents 1897 morgen  
 359 square rods - square feet of land situate in the Field-Cornety of No 5 Korannaberg  
 Division of Kuruman being Beth-El portion of the Farm Wincanton  
 granted to J. J. Scherman on the 25<sup>th</sup> September 1912

Bounded NW<sup>nds</sup> by Holne  
 NE<sup>nds</sup> " Remainder of Wincanton  
 SE<sup>nds</sup> " Limebank  
 SW<sup>nds</sup> " Deben

For list of deductions  
 see back of diagram.

Surveyed and beaconsed by me according to regulations.

HL-68D  
 Government Land Surveyor.

August 1920  
 I certify that this diagram belongs to the Transfer issued this day in favour of  
 VRYBURG Deeds Office, } Louis Petrus Steyn  
 1917 }  
 T. MARKWILL }  
 J. TATIONER, CAP. }  
 1 October 1920 Assistant REGISTRAR DEEDS.

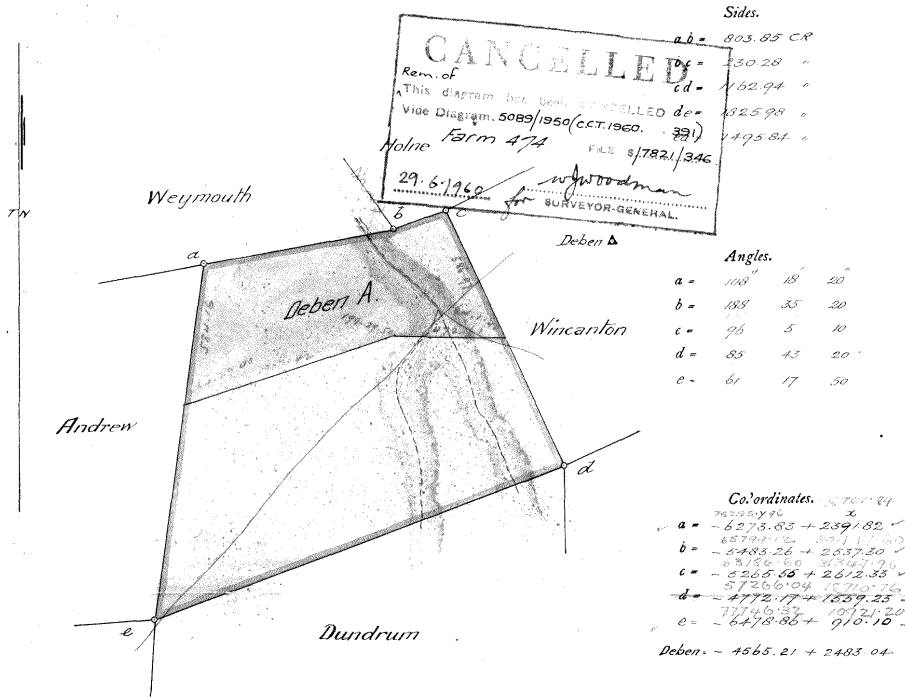
FIGURE 8: Survey diagram of a portion of Wincanton (1893)

The numerical data of this diagram are sufficiently consistent.  
 No 1357/1898

φ Ur: Q. 18-38

Examined

1357  
1898



For subdivisions of this (line) - a outline V. L. II. 117

THE FARM Deben No 473  
 KURUMAN

LANGEBERG Confiscated Lands.



The above Diagram lettered a. b. c. d. e. represents 2948 morgen 558 sq. roods of CROWN LAND, being Lot No. 8 called **DEBEN** situate in the Field Cornetcy No. 12. Division of VRYBURG.

Bounded N. by Weymouth and Holne.  
 SE by Dundrum.  
 NE. by Wincanton.  
 W. by Andrew.

Beacons pointed out to John Lutherland

Framed from actual survey by me.  
J. C. Wessels  
 Government Land Surveyor.

I certify that this diagram belongs to the title deed this day issued in favour of John Lutherland.

Surveyor-General's Office.  
 4/1/1906.

W. P. Bitchard  
 for Acty Surveyor-General

Dec 1897 to July 1898

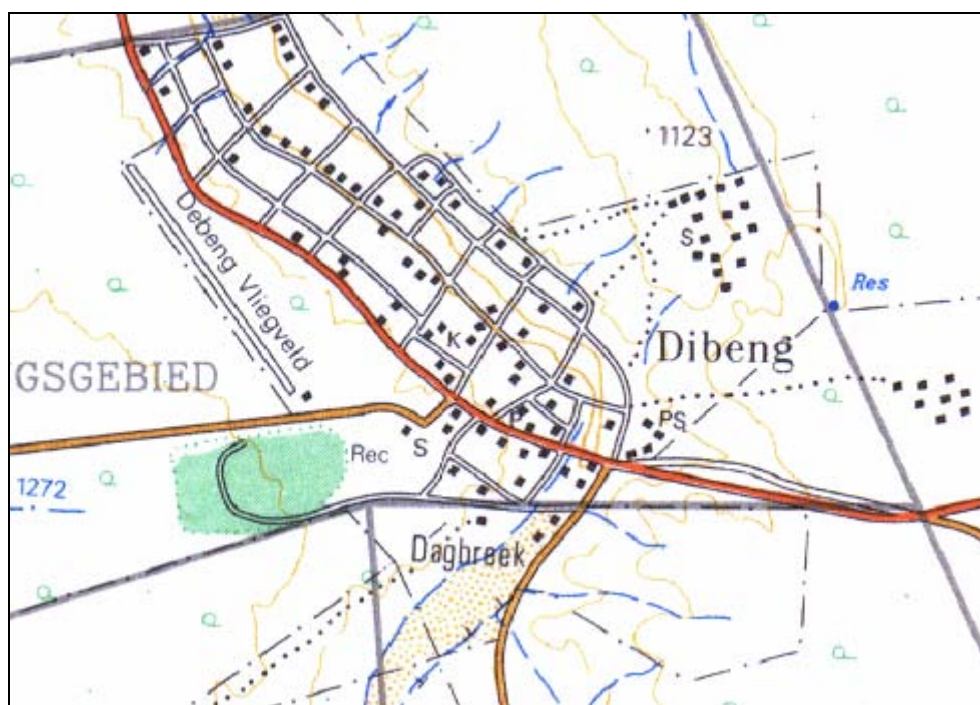
For list of deductions see back of diagram

FIGURE 9: Survey diagram of Deben (1898)

The other religious congregation that was active at Dibeng was the London Missionary Society, which founded a school for the “Coloured” community, from whom a “private location” was established in 1933 on a portion of Dibeng. In 1952, in terms of the Group Areas Act, a start was made with formalising the existing Dibeng “location” by providing areas for the African and “Coloured” community.

In 1922 the economic potential of manganese deposits near Postmasburg was recognised and production commenced in 1930 after the completion of a rail link. Shortly afterwards the Kalahari Manganese Field (KMF) further north was identified and in 1940 the Black Rock Mine was opened. Following further discoveries more to the south, SAMANCOR acquired the farm Hotazel in 1955 where the Hotazel Mine started operations. A railway line between Sishen and Hotazel was constructed in 1959 and small mining village sprung up near the mine. Expansion of the village was promoted by the electrification of the railway line and the opening of the Wessels and Mamantwan mines in the vicinity.

The advent of mining boosted the local population of Dibeng, although a new town, Kathu, was established to serve the work force of the iron mine at Sishen. The Dibeng “location” was extended on to the neighbouring farm Wincanton. The existing manganese mines and planned new ones are continuing to attract more people to Dibeng; hence the need for formalising the extension of the town.



**FIGURE 10: 2722 DB Dibeng in 1974 when the “location” was still small but had already been extended on to Wincanton**

## APPENDIX 2: INFORMATION SOURCES USED IN THIS REPORT

### Databases

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.  
Heritage Sites Database, Pretoria  
WinDeed Property Database  
SAHRA database of archaeological impact assessment reports (2009)

### Literature

BEAUMONT, P.B. & MORRIS, D. (Eds.). 1990. *Guide to the Archaeological Sites in the Northern Cape*. Kimberley: McGregor Museum.

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CAIRNCROSS, B, et al (eds), 1997, *The manganese adventure. The South African Manganese Fields*. Johannesburg: ASSORE.

ICOMOS Australia. 1999. *The Australia ICOMOS Burra Charter for the conservation of places of cultural significance*.

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MITCHELL, P, 2002, *The archaeology of Southern Africa*. Cambridge: Cambridge University Press.

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SNYMAN, PHR, nd, *Danielskuil*.

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*Standard Encyclopedia of Southern Africa*.

WILSON, MGC, & ANHAEUSSER, CR, 1998, *The mineral resources of South Africa*, Council for Geoscience Handbook 16. Pretoria: Council for Geoscience.

### Unpublished reports

RUBIDGE, B, 2009, *Farm Keboes 37, Upington: Palaeontological impact*. Unpublished desktop report prepared for Cultmatrix by Wits University.

DREYER, J, 2007, *First phase archaeological and cultural heritage assessment of the proposed Garona-Mercury transmission power line, Northern Cape, North-West Province and Free State*. Unpublished report submitted to ESKOM.

MORRIS, D, 2005, *Report on a Phase 1 Archaeological Impact Assessment of proposed mining areas on the farms Ploegfontein, Klipbankfontein, Welgevonden, Leeuwfontein, Wolhaarkop and Kapsteviel, west of Postmasburg, Northern Cape*. Kimberley: McGregor Museum.

*Northern Cape State of the Environment Report, 2004: Human settlements specialist report*.

### Maps

2722 DB Dibeng (1974, 2001)

Maps provided by client

## Aerial photos

Google Earth (2005)

## Internet

[http://www.ngkerk.org.za/noordkaap/gemeentes\\_body.asp?gemeente\\_id=11](http://www.ngkerk.org.za/noordkaap/gemeentes_body.asp?gemeente_id=11)

## National Archives

DEPOT KAB  
SOURCE PAW  
TYPE LEER  
VOLUME\_NO 119  
SYSTEM 01  
REFERENCE SBB52/2A  
PART 1  
DESCRIPTION KURUMAN DIVISION. DEBEN PRIMARY.  
STARTING 1914  
ENDING 1925

DEPOT KAB  
SOURCE T  
TYPE LEER  
VOLUME\_NO 973  
SYSTEM 01  
REFERENCE 1075  
PART 1  
DESCRIPTION FORWARDING OF MORTGAGE BONDS FOR LOT 269 GAMAGARA PURCHASE MC  
BOSHOFF AND LOT 279 DEBEN PURCHASER J SUTHERLAND BOTH DIVISION OF  
VRYBURG TO THE COLONIAL GOVERNMENT  
STARTING 1906  
ENDING 1906

DEPOT KAB  
SOURCE LND  
TYPE LEER  
VOLUME\_NO 1/591  
SYSTEM 01  
REFERENCE L10554  
PART 1  
DESCRIPTION GRAZING RIGHTS ON FARM DEBEN, KURUMAN: REQUESTING.  
STARTING 1897  
ENDING 1897

DEPOT KAB  
SOURCE LND  
TYPE LEER  
VOLUME\_NO 1/594  
SYSTEM 01  
REFERENCE L10699  
PART 1  
DESCRIPTION DEBEN, SOEHONG VALLEY, LANGEBERG, KURUMAN: APPLICATION ON BEHALF OF  
WP SHUTTER TO LEASE OR PURCHASE.  
STARTING 1897  
ENDING 1897

DEPOT KAB  
SOURCE PAS  
TYPE LEER  
VOLUME\_NO 4/519  
SYSTEM 01  
REFERENCE A12  
PART 1  
DESCRIPTION KURUMAN. DEVIATION OF ROADS ON THE FARMS WINCANTON AND DEBEN.  
STARTING 1913  
ENDING 1913

DEPOT KAB  
SOURCE PAE  
TYPE LEER  
VOLUME\_NO 42A  
SYSTEM 01

REFERENCE CMS86/57  
PART 1  
DESCRIPTION COLOURED SCHOOL STAFF APPOINTMENTS AND GENERAL ADMINISTRATION.  
KURUMAN: DEBEN LONDON MISSIONARY SOCIETY COLOURED SCHOOL.  
STARTING 1932  
ENDING 1937

DEPOT KAB  
SOURCE 1/KMN  
TYPE LEER  
VOLUME\_NO 13/27  
SYSTEM 03  
REFERENCE 29/3/3/148  
PART 1  
DESCRIPTION RURAL REHABILITATION. APPLICATION BYWONER'S HOUSE. VAN ZYL, JD.  
PRIVATE BAG WINTON, VIA DEBEN.  
STARTING 1935  
ENDING 1941

DEPOT KAB  
SOURCE PAS  
TYPE LEER  
VOLUME\_NO 2/290  
SYSTEM 02  
REFERENCE L52/C/15  
PART 1  
DESCRIPTION KURUMAN DIVISION. PROPOSED TOWNSHIP AT DEBEN.  
STARTING 1916  
ENDING 1917

DEPOT KAB  
SOURCE KUS  
TYPE LEER  
VOLUME\_NO 2/404  
SYSTEM 01  
REFERENCE 5/2/1/F74  
PART 1  
DESCRIPTION WOONGEBIEDE EN BEHUISING. AFBAKENING EN BEPLANNING. DEBEN.  
STARTING 19810000  
ENDING 19820000

DEPOT KAB  
SOURCE KUS  
TYPE LEER  
VOLUME\_NO 2/449  
SYSTEM 01  
REFERENCE 5/5/2/F74  
PART 2  
DESCRIPTION BESTUURS EN BUURTSAKEKOMITEES. PLAASLIKE BESTUUR VIR  
BRUINGEMEENSKAP. DEBEN.  
STARTING 19860000  
ENDING 19900000

DEPOT KAB  
SOURCE KUS  
TYPE LEER  
VOLUME\_NO 1/38  
SYSTEM 01  
REFERENCE 5/2/1/F74  
PART 1  
DESCRIPTION SEKRETARIS VAN KLEURLINGBETREKKINGE. WOONGEBIEDE. AFBAKENING EN  
BEPLANNING. DEBEN, KAAP.  
STARTING 19560000  
ENDING 19690000

DEPOT KAB  
SOURCE 4/KMN  
TYPE LEER  
VOLUME\_NO 4/1/15  
SYSTEM 01  
REFERENCE 1/6/3/1  
PART 1  
DESCRIPTION VERLEGGING. DINGLE-DEBEN PAD.  
STARTING 19460000  
ENDING 19500000

DEPOT KAB  
SOURCE 4/KMN

TYPE LEER  
VOLUME\_NO 4/1/69  
SYSTEM 02  
REFERENCE D/4  
PART 1  
DESCRIPTION DEBEN PLAASLIKE BESTUUR.  
STARTING 19610000  
ENDING 19820000

DEPOT KAB  
SOURCE PAA  
TYPE LEER  
VOLUME\_NO 459  
SYSTEM 01  
REFERENCE AF59/1/2  
PART 1  
DESCRIPTION KURUMAN DIVISION. TOWNSHIPS BOARD. DEBEN, EXTENSION NO. 1.  
STARTING 19480000  
ENDING 19480000  
REMARKS OLD FILE NO. TP44/A/1/2.

DEPOT SAB  
SOURCE PM  
TYPE LEER  
VOLUME\_NO 1/1/360  
SYSTEM 01  
REFERENCE PM217/1/1916  
PART 1  
DESCRIPTION TOWNSHIPS. "DEBEN" BECHUANALAND.  
STARTING 1916  
ENDING 1916

DEPOT SAB  
SOURCE NTS  
TYPE LEER  
VOLUME\_NO 4463  
SYSTEM 01  
REFERENCE 468/313  
PART 1  
DESCRIPTION DEBEN LOCATION REGULATIONS.  
STARTING 1936  
ENDING 1955

DEPOT SAB  
SOURCE NTS  
TYPE LEER  
VOLUME\_NO 6129  
SYSTEM 01  
REFERENCE 468/313N  
PART 1  
DESCRIPTION STIGTING VAN LOKASIES. / ESTABLISHMENT OF LOCATIONS. DEBEN.  
STARTING 1952  
ENDING 1960  
REMARKS NEW FILE A19/1151.

DEPOT SAB  
SOURCE NTS  
TYPE LEER  
VOLUME\_NO 6237  
SYSTEM 01  
REFERENCE 468/313O  
PART 1  
DESCRIPTION ESTABLISHMENT OF HOSTELS. DEBEN.  
STARTING 1958  
ENDING 1958

DEPOT SAB  
SOURCE NTS  
TYPE LEER  
VOLUME\_NO 6416  
SYSTEM 01  
REFERENCE 468/313P  
PART 1  
DESCRIPTION LOCATION REGULATIONS. DEBEN LOCAL BOARD.  
STARTING 1952  
ENDING 1958

DEPOT SAB  
SOURCE NTS  
TYPE LEER  
VOLUME\_NO 8164  
SYSTEM 01  
REFERENCE 42/342  
PART 1  
DESCRIPTION KURUMAN. PRIVATE LOCATION DEBEN.  
STARTING 1933  
ENDING 1941

DEPOT SAB  
SOURCE BEP  
TYPE LEER  
VOLUME\_NO 490  
SYSTEM 01  
REFERENCE G7/510  
PART 1  
DESCRIPTION AANSOEK OM 'N GROEPSGEBIED IN DEBEN.  
STARTING 19550000  
ENDING 19580000

DEPOT SAB  
SOURCE BEP  
TYPE LEER  
VOLUME\_NO 490  
SYSTEM 01  
REFERENCE G7/510/2  
PART 1  
DESCRIPTION INSTELLING VAN 'N GROEPSGEBIED DEBEN BANTOEWOONGEBIED.  
STARTING 19640000  
ENDING 19640000

DEPOT TBK  
SOURCE KUS  
TYPE LEER  
VOLUME\_NO 1922  
SYSTEM 02  
REFERENCE 7/12/6/E1532  
PART 1  
DESCRIPTION BIBLIOTEEKTOEKENNINGS:. DEBEN NEDERDUITSE GEREFORMEERDE KERK  
KLEURLINGSKOOL.  
STARTING 1963  
ENDING 1966  
REMARKS L2/88/12/08.

DEPOT TBK  
SOURCE PAE(L2)  
TYPE LEER  
VOLUME\_NO 818  
SYSTEM 01  
REFERENCE L2/88/7/01  
PART 1  
DESCRIPTION KURUMAN. DEBEN LONDON MISSIONARY SOCIETY. GENERAL.  
STARTING 1953  
ENDING 1957

DEPOT TBK  
SOURCE KUS  
TYPE LEER  
VOLUME\_NO 858  
SYSTEM 02  
REFERENCE 6/16/1/E1532  
PART 1  
DESCRIPTION REELINGS EN NAVRAE IN VERBAND MET SALARISBETALINGS. DEBEN  
NEDERDUITSE GEREFORMEERDE KERK PRIMERE - DIBENG.  
STARTING 1965  
ENDING 1965

DEPOT TBK  
SOURCE PAA(AA)  
TYPE LEER  
VOLUME\_NO A/198  
SYSTEM 01  
REFERENCE AA313/12/11  
PART 1  
DESCRIPTION DEBEN LOCAL BOARD: LOANS: PUBLIC BUILDINGS.



STARTING 1956  
ENDING 1960

DEPOT TBK  
SOURCE PAA(AA)  
TYPE LEER  
VOLUME\_NO E/1069  
SYSTEM 01  
REFERENCE AA313/52/4/4  
PART 1

DESCRIPTION DEBEN LOCAL BOARD: CLOSING OF CHURCH CEMETERY.  
STARTING 1955  
ENDING 1955

## APPENDIX 3: GLOSSARY OF TERMS

### Cultural significance (Burra Charter)

Aesthetic, historic, scientific, social or spiritual importance, meaning or noteworthiness for past, present or future generations

Cultural significance is embodied in the place itself (intrinsic significance), its fabric, setting, use, associations, meanings, records, related places and related objects.

Cultural significance is assessed in terms of the following criteria, some of which are embodied in the NHRA:

- Historic value: Material or intangible evidence resulting from changing social, political and environmental circumstances or conditions
- Rarity: Unique or unusual features also possess rarity value, apart from their age. Section 34 of the NHRA provided general protection for all structures older than 60 years. This does not imply that recently erected structures cannot possess rarity, or for that matter cultural value.
- Scientific value: Indicates research potential (the capacity to yield more knowledge)
- Typical: Indicates that the feature is a good example of a certain class or type of heritage resource
- Aesthetic: Other than artistic or architectural expression, aesthetic value can also be evident in craftsmanship, technique, visual cohesion (harmony), visual evidence of permanence and stability, setting etc.
- Technological: Indicates value in terms of a technological achievement
- Personal/Community: Indicates value in terms of association with a certain person, community, organisation or cultural group
- Landmark: A sense of place or belonging involves the physical and visual relationship between a feature and its environment.
- Condition (material integrity): Indicates substantial evidence of authentic fabric with minor degree of lost or obliterated fabric; also refers to a structure's restoration potential
- Sustainability: The potential for lasting economic viability (use) and the perpetuation of the original use or part thereof.

### Heritage resources/features (NHRA)

Any place or object of cultural significance, including:

(a) places, buildings, structures and equipment of cultural significance;

(b) places to 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 of slavery 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 interest; 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).

#### Heritage significance (NHRA)

(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 places or 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 or 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.

#### Historic period

Since the arrival of the white settlers - c. AD 1840 in this part of the country

#### Impact

A description of the effect of an aspect of the development on a specified component of the biophysical, social or economic environment within a defined time and space

#### Impact assessment

Issues that cannot be resolved during screening (Level 1) and scoping (Level 2) and thus require further investigation

#### Intangible heritage

Defined in terms of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) as:

- Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage;
- Performing arts;
- Social practices, rituals and festive events;
- Knowledge and practices concerning nature and the universe;
- Traditional craftsmanship.

The "intangible cultural heritage" means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

Visual and social impact assessments as part of an HIA are directly associated with intangible cultural heritage.

## **Iron Age**

Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830

## **Issue**

A question that asks what the impact of the proposed development will be on some element of the environment

## **Maintenance**

Keeping something in good health or repair

## **Management actions**

Actions that enhance benefits associated with a proposed development or avoid, mitigate, restore, rehabilitate or compensate for the negative impacts

## **Preservation**

Conservation activities that consolidate and maintain the existing form, material and integrity of a cultural resource

## **Reconstruction**

Re-erecting a structure on its original site using original components

## **Rehabilitation**

Re-using an original building or structure for its historic purpose or placing it in a new use that requires minimal change to the building or structure characteristics and its site and environment.

## **Restoration**

Returning the existing fabric of a place to a known earlier state by removing additions or by reassembling existing components

**SAHRA** - South African Heritage Resources Agency

## **Stone Age**

Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200

## **Value**

Worth, conservation utility, desirability to conserve etc in terms of physical condition, level of significance (importance), economy (feasibility), possible new uses and associations/comparisons with similar features elsewhere

## APPENDIX 4: PUBLIC PARTICIPATION REPORT

DIBENG RESIDENTIAL DEVELOPMENT – SEPTEMBER 2010

### 4 PUBLIC PARTICIPATION

A detailed public participation process had been followed to identify all possible interested and affected parties (I & AP=s) as well as any issues of significance to the project.

#### 4.1 Notification

Steps taken to notify potentially interested and affected parties of the application: The public participation process had been done by means of a newspaper advertisement in the “Kathu Gazette” (10 April 2010), an on-site notice, a public meeting held on 14 July 2010, consultation with various stakeholders, as well as organizations, government departments etc.

##### *Proof of notification*

Notice boards, advertisements and notices notifying potentially interested and affected parties of the application has been displayed, placed or given.

#### 4.2 Registered interested and affected parties

During the public participation process the following interested and affected parties were identified and had been consulted:

NAME	ADDRESS	NOTIFIED BY:
DENC Department of Environment and Nature Conservation	Private Bag X6102, KIMBERLEY, 8300	SCOPING REPORT
DWA Department of <b>Water Affairs</b>	Private Bag X6101, KIMBERLEY, 8300	SCOPING REPORT
DAFF Department of Agriculture, <b>Forestry</b> and Fisheries	Private Bag X5912, UPINGTON, 8801	SCOPING REPORT
Gamagara Municipality	P O Box 1001, KATHU, 8446	SCOPING REPORT
Councillor Hanties	P O Box 1001, KATHU, 8446	LETTER/MEETING

#### 4.3 Issues identified

The following comments have been received from interested and affected parties and community during public meeting (See Annexure 3 – 7):

<b>NAME</b>	<b>DATE RECEIVED</b>	<b>COMMENTS AND RESPONSE</b>
DWA Department of <b>Water Affairs</b>	20.05.2010	<p>The comments and inputs from Department of Water Affairs (Kimberley), were formally requested, and received on 20 May 2010.</p> <p>Discussion of inputs and answers: (See inputs - Annexure 3)</p> <ul style="list-style-type: none"> <li>• Protected trees – The Department of Agriculture, Forestry and Fisheries commented on this proposed development (see Annexure 4)</li> <li>• Change in land use – As soon as the applicant receive the authorization for this EIA application the process of detail planning by the town planner will start for the change in land use/rezoning application to the Gamagara Municipality.</li> <li>• Upgrading of water supply – and sewage system – This request from the Dept of Water Affairs that any upgrading of water supply- and sewage system must be consulted with the said department will be put in as a condition to the authorization of this EIA.</li> <li>• Proof of additional hydraulic load – According to the engineer, Mr L Botha from the Gamagara Municipality, dated 10 August 2010, the sewage works of Dibeng is in the process of upgrading and the MIG funds will be used for this project.</li> <li>• Gamagara Municipality must provide proof of the authorization for the existing water use to the Department of Water Affairs – A copy of the water use permit will be requested from the Gamagara Municipality and send to the Department of Water Affairs. Mr L Botha from Gamagara Municipality indicated that an investigation is currently underway to extent the existing Vaal-Gamagara water</li> </ul>

		<p>pipeline to Dibeng in order to be able to provide Sedibeng with water instead of using the groundwater resources in the area.</p> <ul style="list-style-type: none"> <li>• Impact and mitigation – This aspect is discussed in the EIA under Section F and in the attached EMP.</li> <li>• Storm water management in construction- and operational phase – After authorization of this EIA the necessary precautionary measures will be taken during the planning phases in order to address the stormwater management issues.</li> <li>• Submit Environmental authorization to the Department of Water Affairs – The applicant must submit the authorization to the Department of Water Affairs as it is one of the conditions in the authorization.</li> <li>• Groundwater report – As indicated in the Scoping Report, the information on the groundwater has been obtained from the following report done earlier: “Preliminary assessment of the hydrogeology of the province of the Northern Cape” (Toens, 1996). A copy of the relevant section will be send to the Department of Water Affairs.</li> </ul>
<p>DAFF Department of Agricultural, <b>Forestry</b> and Fisheries</p>	<p>10.05.2010</p>	<p>Discussion of inputs and answers: (See inputs - Annexure 4)</p> <ul style="list-style-type: none"> <li>• The department requested mitigation measures to avoid and/or minimize the impact on protected trees – the impacts (see par. 6.4) have been identified in the Biophysical Assessment (annexure 1), together with detailed mitigation measures.</li> <li>• Large specimens of <i>Acacia erioloba</i> and <i>Boscia albitrunca</i> should be conserved and seedlings and young protected trees with heights of 1 meter and less should be relocated to appropriate sites - This requirement has been included in the mitigation measures and should also be included in the conditions for environmental authorization</li> </ul>

		<ul style="list-style-type: none"> <li>• No disturbance and/or removal of any protected tree specie may take place without a Forest Act license. - This requirement has been included as a requirement for the development.</li> <li>• The department requested a copy of the Environmental Management Plan. - A copy of the Environmental Management Plan together with the Biophysical Assessment will be provided to the department as requested.</li> </ul>
Archaeological Impact survey Heritage Impact Assessment	01.06.2010	Specialist studies (Heritage Impact Assessment Report, an Archaeological Impact Survey Report and a Palaeontological desktop study) were undertaken to determine whether there are any sites of archaeological or heritage importance. Cultmatrix states that there are no compelling reasons not to authorise the proposed change of land use and that the proposed development can continue provided that the mitigation as described in par. 6.1 will be met (Annexure 2).

**INTERESTED PARTIES FROM THE COMMUNITY OF OLIFANTSHOEK:**

PUBLIC MEETING (see attendance list – annexure 6)	14.07.2010	A public meeting was held on 14 July 2010 and after the processes and project was explained, sufficient time was given for inputs and questions. The community indicated that they are all in favour of the proposed development and the community leaders indicated that they are all anxiously awaiting the proposed the development. No other issues and or concerns with regard to the proposed development were raised.