

**Cultural heritage impact assessment for the
PROPOSED TOWNSHIP DEVELOPMENT, DAKOTAWEG, UPINGTON, //KHARA
HAIS MUNICIPALITY, NORTHERN CAPE PROVINCE**

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED TOWNSHIP DEVELOPMENT, DAKOTAWEG, UPINGTON, //KHARA HAIS MUNICIPALITY, NORTHERN CAPE PROVINCE

Report No: 2014/JvS/010
Status: Final
Revision No: 0
Date: March 2014

Prepared for:

MEG Omgewingsimpakstudies

Representative: Ms Marquerite Geldenhuys

Postal Address: Private Bag X5879, Postnet Suite 63, Upington, 8800

Tel: (054) 491 3144

E-mail: megeldenhuys@vodamail.co.za

Prepared by:

J van Schalkwyk (D Litt et Phil), Heritage Consultant

ASAPA Registration No.: 168

Principal Investigator: Iron Age, Colonial Period, Industrial Heritage

Postal Address: 62 Coetzer Avenue, Monument Park, 0181

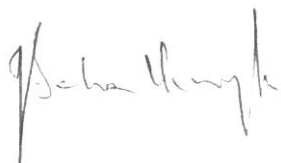
Mobile: 076 790 6777

Fax: 012 347 7270

E-mail: jvschalkwyk@mweb.co.za

Declaration:

I, J.A. van Schalkwyk, declare that I do not have any financial or personal interest in the proposed development, nor its developers or any of their subsidiaries, apart from the provision of heritage assessment and management services.



J A van Schalkwyk (D Litt et Phil)
Heritage Consultant
March 2014

EXECUTIVE SUMMARY

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED TOWNSHIP DEVELOPMENT, DAKOTAWEG, UPINGTON, //KHARA HAIS MUNICIPALITY, NORTHERN CAPE PROVINCE

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area in which it is proposed to develop a township in the Dakotaweg region of Upington.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **MEG Omgewingsimpakstudies** to conduct a Heritage Impact Assessment (HIA) to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the township.

The cultural landscape qualities of the larger region essentially consist of two components. The first is a rural area in which the human occupation is made up of a pre-colonial element (Stone Age) as well as a much later colonial (farmer and industrial/mining) component. The second component is an urban landscape dating to the colonial period and is linked to the rural colonial landscape.

During the site visit it was found that informal settlement has already taken place over most of the study area. This, in effect would have destroyed any pre-colonial heritage sites, features and objects that might have occurred here.

- Although a few stone tools dating to the Middle Stone Age were identified on one section of the site, it is surface material and is therefore not in its original context anymore. It is therefore viewed to have low significance and would not require the proposed development to be adapted.

Therefore, from a heritage point of view we recommend that the proposed development can continue, on condition of acceptance of the above mitigation measures. We request that if archaeological sites or graves are exposed during construction work, it should immediately be reported to a heritage consultant so that an investigation and evaluation of the finds can be made.



J A van Schalkwyk
Heritage Consultant
March 2014

TECHNICAL SUMMARY

Property details						
Province	Northern Cape					
Magisterial district	Gordonia					
Municipality	//Khara Hais					
Topo-cadastral map	2821AC					
Closest town	Upington					
Farm name	-					
Coordinates	Centre point (approximate)					
	No	Latitude	Longitude	No	Latitude	Longitude
	1	-28.44647	21.23927			

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

Development	
Description	Township development
Project name	Dakotaweg Township Development

Land use	
Previous land use	Vacant
Current land use	Urban

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	III
TECHNICAL SUMMARY	IV
TABLE OF CONTENTS	V
LIST OF FIGURES.....	V
GLOSSARY OF TERMS AND ABBREVIATIONS	VI
1. INTRODUCTION.....	1
2. TERMS OF REFERENCE	1
3. HERITAGE RESOURCES	2
4. STUDY APPROACH AND METHODOLOGY	3
5. DESCRIPTION OF THE AFFECTED ENVIRONMENT	4
6. SITE SIGNIFICANCE AND ASSESSMENT	10
7. CONCLUSIONS.....	11
8. REFERENCES.....	13
APPENDIX 1: CONVENTIONS USED TO ASSESS THE SIGNIFICANCE OF HERITAGE RESOURCES	14
APPENDIX 2. RELEVANT LEGISLATION	15

LIST OF FIGURES

	Page
Fig. 1. Track log of the foot survey.....	4
Fig. 2. Location of the study area (green polygon) in regional context	5
Fig. 3. Views over the study area.....	6
Fig. 4. Aerial view of the proposed development site (c. 2004 & 2012).	6
Fig. 5. Layout of the proposed development.	7
Fig. 6. Features in the region of the study area.	8
Fig. 7. Location of the study area.....	9
Fig. 8. Stone tools and their location in the study area	10

GLOSSARY OF TERMS AND ABBREVIATIONS

TERMS

Study area: Refers to the entire study area as indicated by the client in the accompanying Fig. 1 and 2.

Stone Age: The first and longest part of human history is the Stone Age, which began with the appearance of early humans between 3-2 million years ago. Stone Age people were hunters, gatherers and scavengers who did not live in permanently settled communities. Their stone tools preserve well and are found in most places in South Africa and elsewhere.

Early Stone Age	2 000 000 - 150 000 Before Present
Middle Stone Age	150 000 - 30 000 BP
Late Stone Age	30 000 - until c. AD 200

Iron Age: Period covering the last 1800 years, when new people brought a new way of life to southern Africa. They established settled villages, cultivated domestic crops such as sorghum, millet and beans, and they herded cattle as well as sheep and goats. As they produced their own iron tools, archaeologists call this the Iron Age.

Early Iron Age	AD 200 - AD 900
Middle Iron Age	AD 900 - AD 1300
Late Iron Age	AD 1300 - AD 1830

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

ABBREVIATIONS

ADRC	Archaeological Data Recording Centre
ASAPA	Association of Southern African Professional Archaeologists
CS-G	Chief Surveyor-General
EIA	Early Iron Age
ESA	Early Stone Age
LIA	Late Iron Age
LSA	Later Stone Age
HIA	Heritage Impact Assessment
MSA	Middle Stone Age
NASA	National Archives of South Africa
NHRA	National Heritage Resources Act
PHRA	Provincial Heritage Resources Agency
SAHRA	South African Heritage Resources Agency

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED TOWNSHIP DEVELOPMENT, DAKOTAWEG, UPINGTON, //KHARA HAIS MUNICIPALITY, NORTHERN CAPE PROVINCE

1. INTRODUCTION

It is proposed to develop a township located south of Dakotaweg, near the railway station in the central section of the town of Upington.

South Africa's heritage resources, also described as the 'national estate', comprise a wide range of sites, features, objects and beliefs. According to Section 27(18) of the National Heritage Resources Act (NHRA), Act 25 of 1999, no person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **MEG Omgewingsimpakstudies** to conduct a Heritage Impact Assessment (HIA) to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the township.

This HIA report forms part of the Environmental Impact Assessment (EIA) as required by the EIA Regulations in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and is intended for submission to the South African Heritage Resources Agency (SAHRA).

2. TERMS OF REFERENCE

This report does not deal with development projects outside of or even adjacent to the study area as is presented in Section 5 of this report. The same holds true for heritage sites, except in a generalised sense where it is used to create an overview of the heritage potential in the larger region.

2.1 Scope of work

The aim of this HIA, broadly speaking, is to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the resort.

The scope of work for this study consisted of:

- Conducting of a desk-top investigation of the area, in which all available literature, reports, databases and maps were studied; and
- A visit to the proposed development area.

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development area;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources; and
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

2.2 Limitations

The investigation has been influenced by the following factors:

- During the site visit it was found that informal settlement has already taken place over most of the study area. This, in effect would have destroyed any pre-colonial heritage sites, features and objects that might have occurred here.
- The unpredictability of buried archaeological remains.

3. HERITAGE RESOURCES

3.1 The National Estate

The NHRA (No. 25 of 1999) defines the heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations that must be considered part of the national estate to include:

- places, buildings, structures and equipment of cultural significance;
- places to which oral traditions are attached or which are associated with living heritage;
- historical settlements and townscapes;
- landscapes and natural features of cultural significance;
- geological sites of scientific or cultural importance;
- archaeological and palaeontological sites;
- graves and burial grounds, including-
 - ancestral graves;
 - royal graves and graves of traditional leaders;
 - graves of victims of conflict;
 - graves of individuals designated by the Minister by notice in the Gazette;
 - historical graves and cemeteries; and
 - other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- sites of significance relating to the history of slavery in South Africa;
- movable objects, including-
 - objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - objects to which oral traditions are attached or which are associated with living heritage;
 - ethnographic art and objects;
 - military objects;
 - objects of decorative or fine art;
 - objects of scientific or technological interest; and
 - 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).

3.2 Cultural significance

In the NHRA, Section 2 (vi), it is stated that “cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This is determined in relation to a site or feature’s uniqueness, condition of preservation and research potential.

According to Section 3(3) of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of

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

A matrix was developed whereby the above criteria were applied for the determination of the significance of each identified site (see Appendix 1). This allowed some form of control over the application of similar values for similar identified sites.

4. STUDY APPROACH AND METHODOLOGY

4.1 Extent of the Study

This survey and impact assessment covers the area as presented in Section 5 and as illustrated in Figures 3 and 4. For more information, please see the Technical Summary presented above (p. iv).

4.2 Methodology

4.2.1 Preliminary investigation

4.2.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological, historical sources and heritage impact assessment reports were consulted (Couzens 2004; De Beer 1992; Lange 2006; Morris 1995; Morris & Beaumont 1991; Parsons 2007, 2008; Richardson 2001; Rudner 1953; Rudner & Rudner 1968; Van der Waal-Braaksma & Ferreira 1986).

- Information of a general nature was obtained from these sources.

4.2.1.2 Data bases

The *Heritage Atlas Database*, the *Environmental Potential Atlas*, the *Chief Surveyor General* and the *National Archives of South Africa* were consulted.

- Database surveys produced a number of sites located in adjacent areas.

4.2.1.3 Other sources

Aerial photographs and topocadastral and other maps were also studied - see the list of references below.

- Information of a very general nature was obtained from these sources.

4.2.2 Field survey

The area that had to be investigated was identified by MEG Omgewingsimpakstudies by means of maps. The site was visited on 13 February 2104. As all the areas have already being built up mostly by informal houses (see Fig. 3 & 4) it was accessed only by public roads, many of which ended in cul-de-sac's or were none exiting due to erosion. No "private" property was entered (see Fig. 1 for the track log that was kept of the site survey).

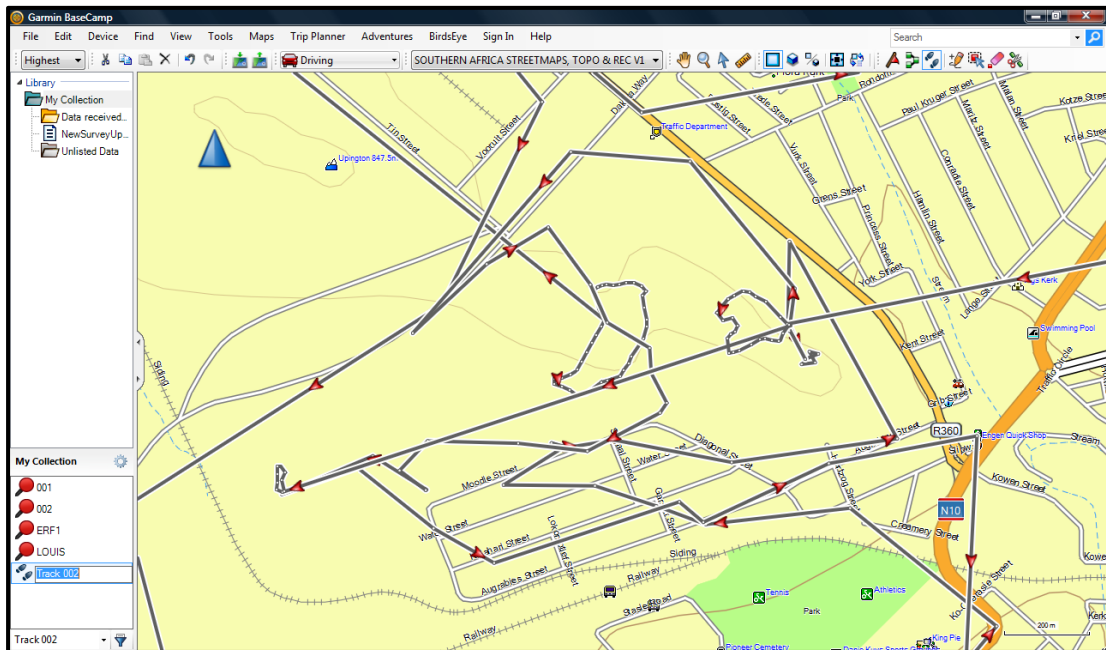


Fig. 1. Track log of the foot survey.

5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

5.1 Site location and description

The study area is located north of the railway station and west of the R360 in the town of Upington. It involves Part Erf 1 and Part Erf 20973. Form more detail, please see the Technical Summary presented on page iv.

The geology is made up of tillite, a sedimentary rock usually formed by the burial and subsequent hardening of glacial till. This is not a material that is suitable for the making of stone tools. The morphology of the region is described irregular plains. The vegetation is classified as Orange River Broken Veld (ENPAT). The site is approximately 2,5km from the Orange River.

During the site visit it was found that informal settlement has already taken place over most of the study area (see Fig 3 & 4). A soccer field was developed on a different section. This, in effect would have destroyed any pre-colonial heritage sites, features and objects that might have occurred here.

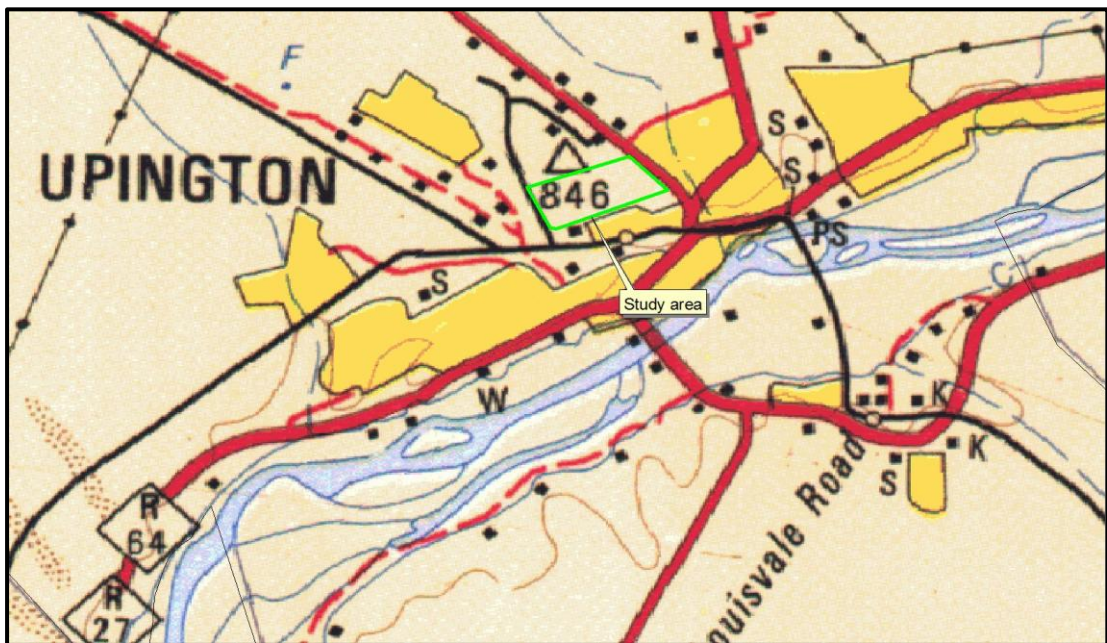


Fig. 2. Location of the study area (green polygon) in regional context. (Map 2820: Chief Surveyor-General)





Fig. 3. Views over the study area.



Fig. 4. Aerial view of the proposed development site (c. 2004 & 2012).

5.2 Development proposal

The only information on the proposed development available to the heritage consultant is contained in the development plan duplicated in Fig. 5 below. This involves the formal development of streets and housing plots, with some open public spaces.

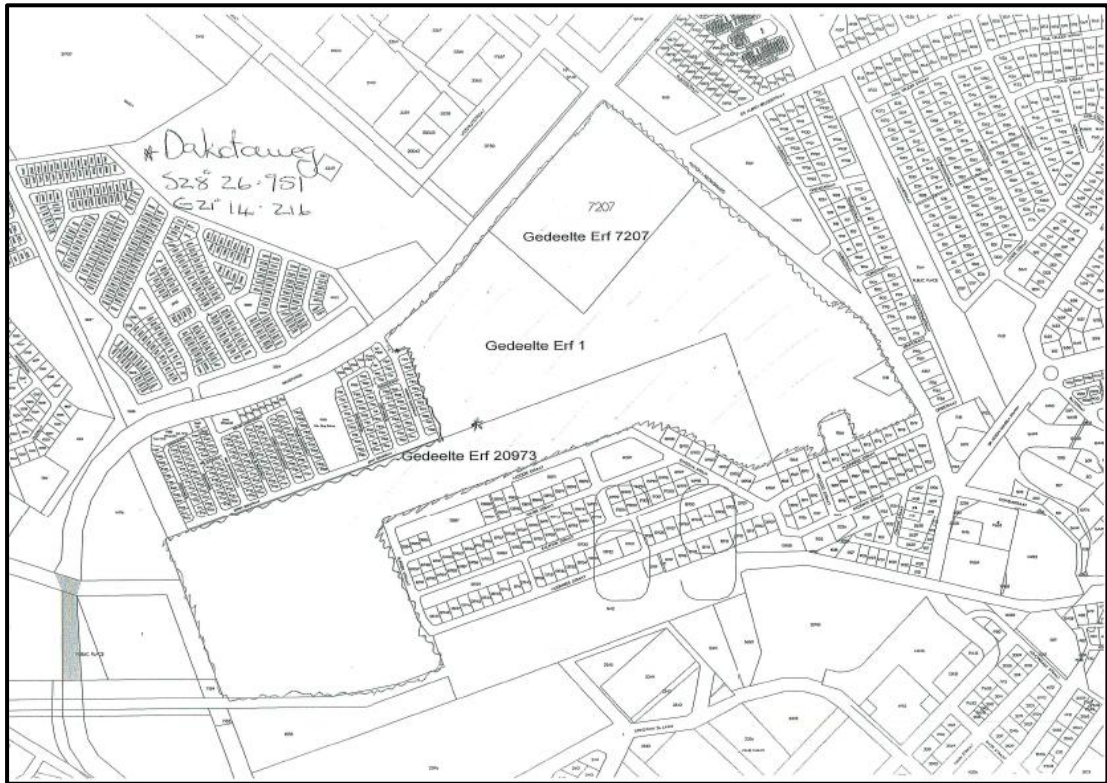


Fig. 5. Layout of the proposed development.
(Map supplied by MEG Omgewingsimpakstudies)

5.3 Regional overview

The aim of this section is to present an overview of the history of the larger region in order to eventually determine the significance of heritage sites identified in the study area, within the context of their historic, aesthetic, scientific and social value, rarity and representivity – see Section 3.2 and Appendix 1 for more information.

The cultural landscape qualities of the larger region essentially consist of two components. The first is a rural area in which the human occupation is made up of a pre-colonial element (Stone Age) as well as a much later colonial (farmer) component. The second component is an urban landscape dating to the colonial period and is linked to the rural colonial landscape.

Stone Age

Surveys done for example by Sampson (1985) to the south-east of the study area indicated a rich legacy in Stone Age sites in the Karoo. However, the region of the study area seems to have been a bit more marginal as no major sites or traditions have been identified in the region.

Occupation by early humans would probably date to the Middle Stone Age and would consist of open sites in the vicinity of stream beds or hills and outcrops. Population density might have increased during the Later Stone Age and people would have occupied rock shelters where available as well as open sites. During this later period they also produced rock engravings, although none are known from the immediate region.

Recently Parsons (2007, 2008) demonstrated that the so-called Swartkop and Dornfontein industries possibly relate to different socio-economies – those of hunter-gatherers and stock keepers. Based on an analysis of material recovered from five sites in the Northern Cape Province, all dating to the last two millennia, she compare variability between assemblages attributed to the Swartkop and Dornfontein industries and identify areas of overlap and difference.

Historic period

The town of Upington, originally known as Olijvenhoutsdrift, was founded in 1871 as part of a mission station by the German missionary Rev Schröder. The town was renamed in 1884 after Sir Thomas Upington, who was the Prime Minister of the Cape Colony and who visited the town in 1884.

An irrigation canal was started by Rev Schröder in 1883. It was completed in 1885. By 1884 there were already 77 irrigation farms. Nowadays, it is disputed that Schröder was the original builder of the canal, and it is claimed that he only carried on with an idea that was started by a local inhabitant by the name of Abraham September.



Fig. 6. Features in the region of the study area.

5.4 Identified sites

The following cultural heritage resources were identified in the study area (Fig. 7):

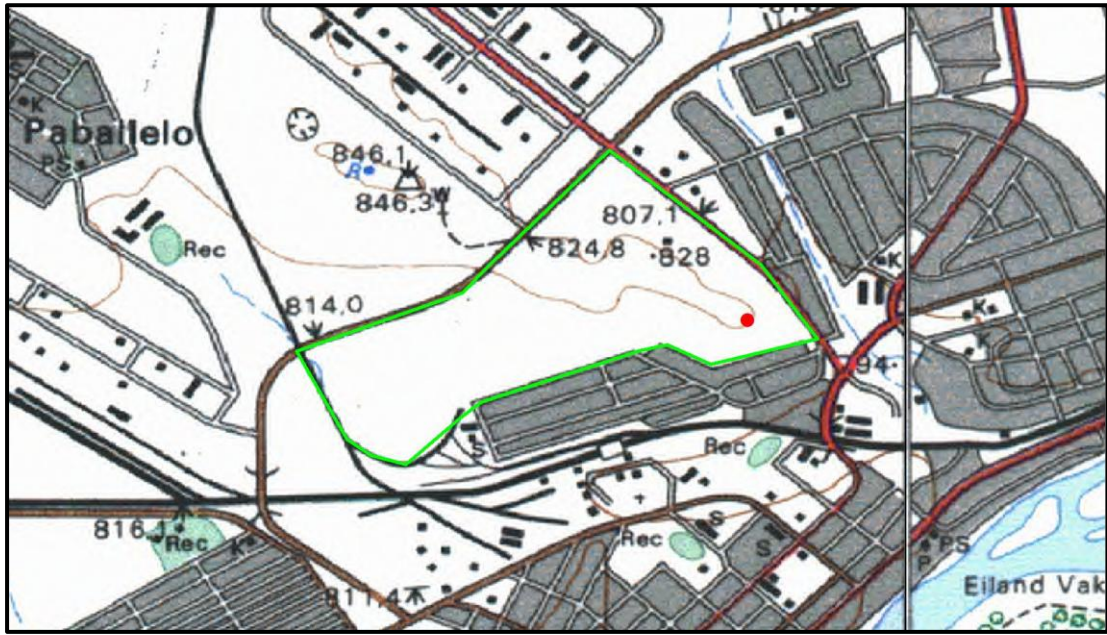


Fig. 7. Location of the study area.
(Map 2821AC: Chief Surveyor-General)

5.4.1 Stone Age

NHRA Category	Archaeological and palaeontological sites		
Protection status	General Protection - Section 35: Archaeology, palaeontology and meteorites		
Location	Surface scatter		
Description	<p>A small number of stone tools, all dating to the Middle Stone Age were identified in the south-eastern section of the study area and has a density of approximately 1 artefact per 20 m². This was determined by walking transects with a measured pace across the area. The artefacts only occur on a small hill, which has already being impacted on by the development of water reservoirs and much erosion.</p> <p>The material is banded iron stone. Cores, flakes and unspecific tools (probably all scrapers) were identified. The presence of cores and flakes indicate that these were factory sites where material, probably sourced on locally, was worked into tools.</p> <p>As these artefacts are surface finds, they are viewed not to be in their original context anymore and therefore are judged to have low significance.</p>		
Significance	Low on a regional level – Grade III		
Mitigation	No further action necessary		



Fig. 8. Stone tools and their location in the study area.

5.4.2 Iron Age

- No sites, features or objects dating to the Iron Age were identified in the study area.

5.4.3 Historic period

- No sites, features or objects dating to the historic period were identified in the study area.

6. SITE SIGNIFICANCE AND ASSESSMENT

6.1 Heritage assessment criteria and grading

The NHRA stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act:

- **Grade I:** Heritage resources with qualities so exceptional that they are of special national significance;
- **Grade II:** Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- **Grade III:** Other heritage resources worthy of conservation, on a local authority level.

The occurrence of sites with a Grade I significance will demand that the development activities be drastically altered in order to retain these sites in their original state. For Grade II and Grade III sites, the applicable of mitigation measures would allow the development activities to continue.

6.2 Statement of significance

A matrix was developed whereby the above criteria, as set out in Sections 3(3) and 7 of the NHRA, No. 25 of 1999, were applied for each identified site (see Appendix 1). This allowed some form of control over the application of similar values for similar sites. Three categories of significance are recognized: low, medium and high. In terms of Section 7 of the NHRA, all

the sites currently known or which are expected to occur in the study area are evaluated to have a grading as identified in the table below.

Table 1. Summary of identified heritage resources in the study area.

Identified heritage resources	
<i>Category, according to NHRA</i>	<i>Identification/Description</i>
Formal protections (NHRA)	
National heritage site (Section 27)	None
Provincial heritage site (Section 27)	None
Provisional protection (Section 29)	None
Place listed in heritage register (Section 30)	None
General protections (NHRA)	
structures older than 60 years (Section 34)	None
archaeological site or material (Section 35)	Yes
palaeontological site or material (Section 35)	None
graves or burial grounds (Section 36)	None
public monuments or memorials (Section 37)	None
Other	
Any other heritage resources (describe)	None

6.3 Impact assessment

Impact analysis of cultural heritage resources under threat of the proposed development, are based on the present understanding of the development.

- Although a few stone tools dating to the Middle Stone Age were identified on one section of the site, it is surface material and is therefore not in its original context anymore. It is therefore viewed to have low significance and would not require the proposed development to be adapted.

7. CONCLUSIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area in which it is proposed to develop a township in the Dakotaweg region of Upington.

The cultural landscape qualities of the larger region essentially consist of two components. The first is a rural area in which the human occupation is made up of a pre-colonial element (Stone Age) as well as a much later colonial (farmer and industrial/mining) component. The second component is an urban landscape dating to the colonial period and is linked to the rural colonial landscape.

During the site visit it was found that informal settlement has already taken place over most of the study area. This, in effect would have destroyed any pre-colonial heritage sites, features and objects that might have occurred here.

- Although a few stone tools dating to the Middle Stone Age were identified on one section of the site, it is surface material and is therefore not in its original context anymore. It is therefore viewed to have low significance and would not require the proposed development to be adapted.

Therefore, from a heritage point of view we recommend that the proposed development can continue, on condition of acceptance of the above mitigation measures. We request that if archaeological sites or graves are exposed during construction work, it should immediately be reported to a heritage consultant so that an investigation and evaluation of the finds can be made.

8. REFERENCES

8.1 Data bases

Chief Surveyor General
Environmental Potential Atlas, Department of Environmental Affairs and Tourism.
Heritage Atlas Database, Pretoria.
National Archives of South Africa

8.2 Literature

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Humphreys, A.J.B. 1976. Note on the southern limits of Iron Age settlement in the Northern Cape. *South African Archaeological Bulletin* 31(121/122):54-57

Lange, M.E. 2006. *Women reading the Gariep River, Upington: structured inclusion*. Unpublished MA thesis. Durban: University of KwaZulu-Natal.

Norman, N. & Whitfield, G. 2006. *Geological Journeys*. Cape Town: Struik Publishers.

Parsons, I. 2007. Hunter-gathers or herders? Reconsidering the Swartkop and Doornfontein Industries, Northern Cape Province, South Africa. *Before Farming* 4.

Parsons, I. 2008. Five Later Stone Age artefact assemblages from the interior Northern Cape province. *South African Archaeological Bulletin* 63(187):51-60.

Raper, P.E. 2004. South African place names. Johannesburg: Jonathan Ball Publishers.

Richardson, D. 2001. *Historic sites of South Africa*. Cape Town: Struik Publishers.

Rudner, I. 1953. Decorated ostrich egg-shell and stone implements from the Upington area. *South African Archaeological Bulletin* 8(31):82-84.

Rudner, J. & Rudner, I. 1968. Rock-art in the Thirstland areas. *South African Archaeological Bulletin* 23:75-89.

Van Schalkwyk, J.A. 2010. *Archaeological impact survey report for the land use change on sections of the farm Vaalkoppies 40, Gordonia district, Northern Cape Province*. Unpublished report 2010/JvS/069.

Van Schalkwyk, J.A. 2011. *Heritage impact assessment report for the proposed establishment of the Inca Solar PV Power Plant, Kakamas region, Northern Cape Province*. Unpublished report 2011/JvS/030.

Van Schalkwyk, J.A. 2012. *Heritage impact assessment for the proposed development of an agri-estate on the farm Melkstroom east of Upington, Gordonia magisterial district, Northern Cape Province*. Unpublished report 2012/JvS/012.

Wilson, M.G.C. & Anhaeusser, C.R. 1998. *The Mineral Resources of South Africa*. Sixth Edition. Handbook 16. Pretoria: Council for Geosciences.

8.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2821AC
Google Earth

APPENDIX 1: CONVENTIONS USED TO ASSESS THE SIGNIFICANCE OF HERITAGE RESOURCES

Significance

According to the NHRA, Section 2(vi) the **significance** of heritage sites and artefacts is determined by its aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technical value in relation to the 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.

Matrix used for assessing the significance of each identified site/feature

1. Historic value				
Is it important in the community, or pattern of history				
Does it have strong or special association with the life or work of a person, group or organisation of importance in history				
Does it have significance relating to the history of slavery				
2. Aesthetic value				
It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group				
3. Scientific value				
Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage				
Is it important in demonstrating a high degree of creative or technical achievement at a particular period				
4. Social value				
Does it have strong or special association with a particular community or cultural group for social, cultural or spiritual reasons				
5. Rarity				
Does it possess uncommon, rare or endangered aspects of natural or cultural heritage				
6. Representivity				
Is it important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects				
Importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class				
Importance in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province, region or locality.				
7. Sphere of Significance		High	Medium	Low
International				
National				
Provincial				
Regional				
Local				
Specific community				
8. Significance rating of feature				
1.	Low			
2.	Medium			
3.	High			

APPENDIX 2. RELEVANT LEGISLATION

All archaeological and palaeontological sites and meteorites are protected by the National Heritage Resources Act (Act no 25 of 1999) as stated in Section 35:

(1) Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.

(2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.

(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

(4) No person may, without a permit issued by the responsible heritage resources authority-

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

In terms of cemeteries and graves the following (Section 36):

(1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

(3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.