Dan Koppie (Remainder of Plat 849 plan res

Fair of 185) now called Subdivision Quiddines

Heritage

outstanding



Heritage Western Cape

Notification of Intent to Develop

Section 38 of the National Heritage Resources Act (Act No. 25, 1999)

Section 38 of the National Heritage Resources Act requires that any person who intends to undertake certain categories of development in the Western Cape (see Part 1) must notify Heritage Western Cape at the very earliest stage of initiating such a development and must furnish details of the location, nature and extent of the proposed development.

This form is designed to assist the developer to provide the necessary information to enable Heritage Western Cape to decide whether a Heritage Impact Assessment will be required.

Note: This form is to be completed when the proposed development <u>does not</u> fulfil the criteria for EIA as set out in the EIA regulations. It <u>may</u> be completed as part of the EIA process to assist in establishing the requirements of Heritage Western Cape with respect to the EIA.

- 1. It is recommended that the form be completed by a professional familiar with heritage conservation issues.
- 2. The completion of Section 7 by heritage specialists is not mandatory, but is recommended in order to expedite decision-making at notification stage.
- 3. Section 7.1 must be completed by a professional archaeologist or palaeontologist.
- 4. Section 7.2 must be completed by a professional heritage practitioner with skills and experience appropriate to the nature of the property and the development proposals.
- 5. Should Section 7 be completed, each page of the form must be signed by the archaeologist/palaeontologist and heritage practitioner
- 6. Additional information may be provided on separate sheets.
- 7. This form is available in electronic format so that it can be completed on computer.

FOR OFFICIAL USE	
	LUNG CHARLES TONG
	OSPI Private Bag/Privatesak XV. CONTVANG/RECE, VED
	ONTVANGIRECE, VED
	2 3 JUN 2008
	Cape Town/Kaapstad 8000
	Cape Town/Kaapstad 8000

PART 1: BASE INFORMATION

i i

Name of property	Damkoppie (Remainder of Farm 185) now called Plot 8419
Street address or location (e.g. off R44)	Overlooking Springfontein Dam, visible from the N1 north
Erf or farm number/s	Plot 8419
Town or District	Beaufort-West
Responsible Local Authority	Beaufort-West
Magisterial District	Beaufort-West
Current use	Recreation
Current zoning	Agriculture II
Predominant land use of surrounding properties	Residential & recreation
Extent of the property	± 25 ha

1.2	CATEGORY OF DEVELOPMENT (S. 38 (1))	Х	Brief description of the nature and extent of the proposed development or activity (See also Part 3.1)
1.	Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length	X	The development of 80 residential plots and two commercial sites with associated infrastructure (roads, sewerage, electricity,
2.	Construction of a bridge or similar structure exceeding 50 m in length		water)
3.	Any development or activity that will change the character of a site–		
	a) exceeding 5 000 m ² in extent	X	
	b) involving three or more existing erven or subdivisions thereof		
	 involving three or more erven or divisions thereof which have been consolidated within the past five years 		
4.	Rezoning of a site exceeding 10 000 m ²	X	
5.	Other (state)		

1.3 INITIATION STAGE OF PROPOS	SED DEVEL	OPMENT
Exploratory (e.g. viability study)		Notes:
Conceptual		See attached proposed site layout plan
Outline proposals	X	
Draft / Sketch plans		
Other (state)		

PART 2: HERITAGE ISSUES

2.1	CONTEXT		
Χ	(check box of all relevant categories)	Brief description/explanation	
	Urban environmental context	The property is located adjacent to the town of Beaufort	
	Rural environmental context	West and immediately south of Springfontein Dam	
Χ	Natural environmental context		
Foi	rmal protection (NHRA)		
	Is the property part of a protected area (S. 28)?	No, but is part of the Beaufort West commonage	
	Is the property part of a heritage area (S. 31)?	No	
Oth	ner		
	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	
	Does the site form part of a historical settlement or townscape?	No	
	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 ¹ ?	No	

2.2	PROPERTY FEATURES AND CHAP	RACTERISTICS	
X	(check box if YES)	Brief description	
	Has the site been previously cultivated or developed?	The site is in a severely degraded condition	
	Are there any significant landscape features on the property?	No	
	Are there any sites or features of geological significance on the property?	No	
	Does the property have any rocky outcrops on it?	Yes – a few small outcrops occur	
	Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	The property is located alongside the Springfontein Dam	
	Does the property have any sea frontage?	No	
	Does the property form part of a coastal dune system?	No	
	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	

2.3 HERITAGE RESOURCES ² ON THE PROPERTY		
Χ	(check box if present on the property)	Name / List / Brief description
For	mal protections (NHRA)	
	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
Ger	neral protections (NHRA)	
	structures older than 60 years (S. 34)	No
X	archaeological ³ site or material (S. 35)	Low density scatter of stone tools
	palaeontological ⁴ site or material (S. 35)	Yes – a Palaeontological Impact Assessment has been carried out by Dr John Almond
	graves or burial grounds (S. 36)	No
	public monuments or memorials ⁵ (S. 37)	There is a ruined stone `monument', celebrating the town of Beaufort West, dated 1971
Oth	ner	
	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

2.4 PROPERTY HISTORY AND ASSOCIATIONS			
X	(check box if YES)	Brief description/explanation	
	Provide a brief history of the property (e.g. when granted, previous owners and uses).	Property forms part of the Beaufort West commonage and is used mainly as a recreational space – picnics, braais, boating, swimming, off road motorbikes, 4 x 4 vehicles, quad bikes, etc	
	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 ⁶ ?	No	
	Are there any oral traditions attached to the property?	No	

	(check box of all relevant categories)	Brief description/explanation
	Important in the community or pattern of South Africa's (or Western Cape's) history.	No
	Associated with the life or work of a person , group or organisation of importance in history.	No
	Associated with the history of slavery.	No
	Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	No
	Exhibits particular aesthetic characteristics valued by a community or cultural group	No
	Demonstrates a high degree of creative or technical achievement at a particular period	No
	Has potential to yield information that will contribute to an understanding of natural or cultural heritage	No
	Typical: Demonstrates the principal characteristics of a particular class of natural or cultural places	No
	Rare: Possesses uncommon, rare or en- dangered aspects of natural or cultural heritage	No
Plea	ase provide a brief statement of significance	

PART 3: POTENTIAL IMPACT OF DEVELOPMENT

Brief description of proposed	The development of 80 residential plots and two commercial
development.	sites with associated infrastructure (roads, sewerage, electricity, water)
Monetary value.	
Anticipated starting date.	As soon as approvals granted
Anticipated duration of work.	
Does it involve change in land use?	Yes
Extent of land coverage of the proposed development.	± 10 ha
Does it require the provision of additional services? (e.g. roads, sewerage, water, electricity)	Yes
Does it involve excavation or earth moving?	Yes
Does it involve landscaping?	Yes
Does it involve construction work?	Yes
What is the total floor area?	
How many storeys including parking?	Single and double story, including hotel site
What is the maximum height above natural ground level?	

3.2 POTENTIAL IMPACT	
What impact will the proposed development have on the heritage values of the context of the property? (e.g. visibility, change in character)	The development will be carefully situated so as not to cause any negative visual intrusion. It will only be visible from the N1 south. Roof and wall colours will be muted to reflect the surrounding landscape.
Are any heritage resources listed in Part 2 affected by the proposed development? If so, how?	Yes - See specialist archaeology report

Please summarise any public/social benefits of the proposed development.

Employment opportunities will be created during the construction phase of the project, in an area where unemployment is very high (as much as 65% according to reports). There will also be employment opportunities created in the domestic sector, as well as in the business and hospitality (hotel and conferencing) industry.

PART 4: POLICY, PLANNING AND LEGAL CONTEXT

X	(check box if YES)	Details/explanation
Χ	Does the proposed development conform with regional and local planning policies? (e.g. SDF, Sectoral Plans)	In-line with the Beaufort-West SDF
X	Does the development require any departures or consent use in terms of the Zoning Scheme?	Rezoning from Agriculture to Residential/Commercial.
	Has an application been submitted to the planning authority?	Not yet
	Has their comment or approval been obtained? (attach copy)	No
	Is planning permission required for any subdivision or consolidation?	Yes
	Has an application been submitted to the planning authority?	Not yet
	Has their comment or approval been obtained? (attach copy)	No
	Are there title deed restrictions linked to the property?	No
	Does the property have any special conservation status?	No
	Are there any other restrictions on the property?	No
X	Is the proposed development subject to the EIA regulations of the Environment Conservation Act (Act 73 of 1989)?	Basic Assessment is running.
	Has an application (or environmental checklist) been submitted to DECAS? What are the requirements of DECAS?	Not yet
Χ	At what stage in the IEM process is the application (scoping phase, EIA etc.)	Draft Basic Assessment has been completed
	Has any assessment of the heritage impact of the proposed development been undertaken in terms of the EIA or planning process?	Yes
	Are any such studies currently being undertaken?	Yes - archaeology and palaeontology
	Is approval from any other authority required?	Heritage Western Cape and DEADP
	Has permission for similar development on this site been refused by any authority in the	No

past?	
Have interested and affected bodies have been consulted? Please list them and attach any responses.	Public participation is being facilitated by Eco Bound environmental consultants - in George

PART 5: APPLICANT DETAILS

REGISTERED	PROPERTY OWNER			
Name	Beaufort-West Municipality			
Address	PO Box 582, BEAUFORT-WEST, 6	6970		
Telephone	023 4148100			
Fax	023 4152811			
E-mail	bwesmun@intekom.co.za			
Signature		Dat	е	

DEVELOPER				
Name	Airpark Beaufort West (Pty) Ltd., Zwingli & Marion Holzapfel,			
Address	P.O.Box 1294, Beaufort West, 6970			
Telephone	023-4144434			
Fax	086-6319814			
E-mail	zwingli@woodapple.net			
Signature		Date	15.02.2008	

Name	Jonathan Kaplan - Agency for Cultural Resource Management		
Address	PO Box 159, Riebeek West, 7306		
Telephone	(022) 461 2755		
Fax	(022) 461 2755		
E-mail	acrm@wcaccess.co.za		
Field of expertise & qualifications	Stone Age; MA (1989) Archaeology, Univ. of Cape Town		1
Signature	de la companya della	Date	18 February, 2008

PART 6: ATTACHMENTS

1	Plan, aerial photo and/or orthophoto clearly showing location and context of property.						
	Site plan or aerial photograph clearly indicating the position of all heritage resources and features.						
V	Photographs of the site, showing its characteristics and heritage resources.						
V	Relevant sketch proposals, development plans, architectural and engineering drawings and landscaping plans.						
	Responses from other authorities.						
	Responses from any interested and affected parties.						
1	Any archaeological reports or other reports that may have been carried out on the property or properties within the immediate area.						
	Any other pertinent information to assist with decision-making.						

PART 7. RECOMMENDATIONS BY HERITAGE SPECIALISTS

It is recommended that this section be completed in order to expedite the approval process.

Further investigation required	Yes/No	Describe issues and concerns
Palaeontology	Yes	ECO to be briefed by palaeontologist.
Pre-colonial archaeology	No	
Historical archaeology	No	
Industrial archaeology	No	
No further archaeological or palaeontological investigation		
Other recommendations (use additional pages if necessary)		•

I have reviewed the property and the proposed development and this completed form and make the recommendations above.

Name of Archaeologist/Palaeontologist Jonathan Kaplan

Qualifications, field of expertise MA (1989) Archaeology, Univ. of Cape Town; Stone Age.

Signature..

Date 18 February 2008.

Further investigation required	Yes/No	Describe issues and concerns
Existing Conservation and Planning Documentation	No	
Planning	No	
Urban Design	No	
Built Environment	No	
Architecture	No	
Cultural Landscape	No	
Visual Impact	No	
History	No	
Archival	No	
Title Deeds Survey	No	
Published Information	No	
Oral History	No	
Social History	No	
Other specialist study (specify) S	No	
Public Consultation	Yes	Facilitated by Eco Bound Environmental PO Box 10274 GEORGE 6530
Specialist Groups		
Neighbours	Yes	
Open House	Yes	
Public Meeting	Yes	
Public Advertisement	Yes	
Other		
No further specialist conservation studies required	No	
Heritage Impact Assessment required, to be co-ordinated by a generalist heritage practitioner	No	
Other recommendations (use additional pages if necessary)		

I have reviewed the property and the proposed development and this completed form and make the recommendations above.

Name of Heritage Practitioner Jonathan Kaplan.

Qualifications, field of expertise MA (1989) Archaeology, Univ. of Cape Town; Stone Age.

Signature

Date 18 February 2008

PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED DEVELOPMENT REMAINDER OF FARM 185 (NOW CALLED PLOT 8419) BEAUFORT WEST WESTERN CAPE PROVINCE

Prepared for

Airpark Beaufort West (Pty) Ltd

Att: Mr Zwingli Holzapfel PO Box 1294 Beaufort West 6970

By



Jonathan Kaplan

Agency for Cultural Resource Management

P.O. Box 159 Riebeek West 7306 Ph/Fax: 022 461 2755

Cellular: 082 321 0172 E-mail: acrm@wcaccess.co.za

> FEBRUARY 2008

Executive summary

A Phase 1 Archaeological Impact Assessment of the proposed development of Plot 8419 (Remainder of Farm 185) in Beaufort West in the Western Cape Province has identified no significant impacts to pre-colonial archaeological material that will need to mitigated, prior to proposed development activities.

Table of Contents

		Page
Exe	ecutive summary	1
1.	INTRODUCTION	3
2.	TERMS OF REFERENCE	3
3.	THE STUDY SITE	4
4.1 4.2 4.3	STUDY APPROACH Method of survey Constraints and limitations Identification of potential risks Results of the desk-top study	7 7 7 7
5.1 5.2	LEGISLATIVE REQUIREMENTS The National Heritage Resources Act Archaeology (Section 25 (4)) Burials ground & graves (Section 36 (3))	8 8 8
6.	FINDINGS	9
7.	IMPACT STATEMENT	9
8.	CONCLUSION	9
9	REFERENCES	10

1. INTRODUCTION

Airpark Beaufort West (Pty) Ltd requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment (AIA) for the proposed development of Remainder of Farm 185 (now called Plot 8419) in Beaufort West, in the Western Cape Province.

The proposed project comprises the development of 80 residential plots and two commercial sites, including a hotel/conferencing facility, with associated infrastructure such as roads, parking, sewerage, electricity, water, etc.

Plot 8419 is currently zoned Agriculture II and will be rezoned and subdivided to accommodate the proposed development activities.

The extent of the proposed development (about 10 ha) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate and map archaeological sites and remains that may be negatively impacted by the planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

A Notification of Intent to Develop (NID) checklist has been completed by the archaeologist and submitted to Heritage Western Cape (Belcom) for comment.

A palaeontological impact assessment of the proposed project has been undertaken by consulting palaeontologist Dr John Almond.

2. TERMS OF REFERENCE

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify and map any sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed site;
- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed site

3. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the study site is illustrated in Figure 2.

The subject property (S° 32 20 831 E° 22 35 690 on map datum wgs 84) is known as Damkoppie and is located north of Beaufort West, but south of Springfontein Dam. The proposed site lies vacant, and is in a severely degraded condition. A powerline, servitude defines the southern boundary of the property. During the construction of the dam, a lot of activity took place in this area resulting in numerous terraces being made on the Damkoppie property. Signs of this are still clearly visible. There are numerous gravel roads and tracks that intersect the property and there is evidence of much diggings, excavations and disturbance. Sheet erosion is guite widespread. Dumping of litter is also very evident. The site is currently used as recreational space and there are the remnants of old braai and picnic places on the steeper cliffs, as well as at the dam edge. There are a few outcroppings of mudstone on the site, as well as some dolerite boulders. The site slopes very steeply in the western portion (overlooking the dam), but is fairly flat and stony alongside the dam (Figures 3-10). There are no old buildings or structures on the property. A ruined monument dated 1971 is situated in the far north western portion of the property. Surrounding land-use comprises residential, vacant farmland and recreational space. The extent of the study site is about 25 ha of which only half will be used for the proposed development (refer to Figure 2).

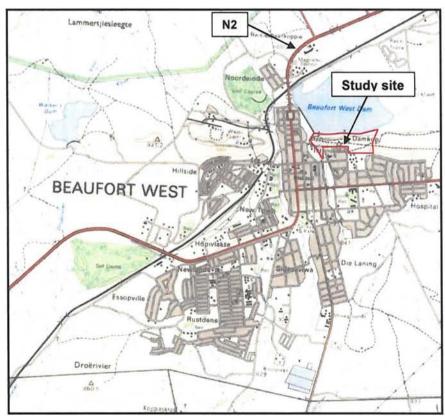


Figure 1. Locality map (3222BC Beaufort West)

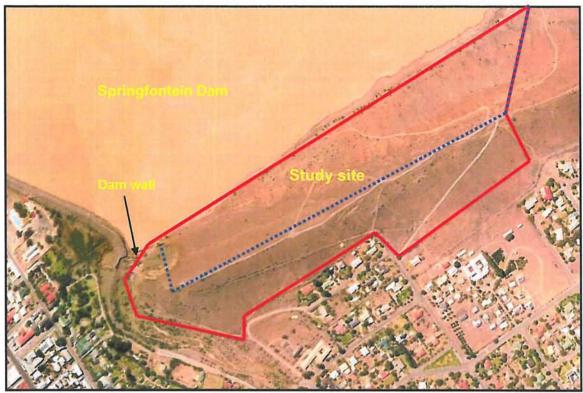


Figure 2. Aerial photograph of the study site. Only the area within the dashed blue line will be developed. The remainder will be rehabilitated and remain Open Space

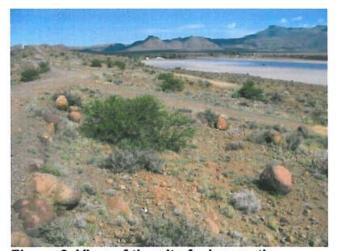


Figure 3. View of the site facing north



Figure 4. View of the site facing north



Figure 5. View of the site facing south



Figure 6. View of the site facing south



Figure 7. View of the site facing south



Figure 8. View of the site facing north



Figure 9. View of the site facing south



Figure 10. View of the site facing north

4. STUDY APPROACH

4.1 Method of survey

The approach followed in the archaeological study entailed a foot survey of the proposed site. The focus of the study was on the proposed development footprint (see Figure 2). No development will take place in the western portion of the study site which will be rehabilitated and restored and be retained as Open Space.

The site visit and assessment took place on the 14th February, 2008.

A desktop study was also undertaken.

4.2 Constraints and limitations

There are no constraints or limitations associated with the proposed development.

4.3 Identification of potential risks

There are no archaeological risks associated with the proposed development.

It is unlikely, but unmarked human burials may be exposed or uncovered during earthmoving operations.

4.4 Results of the desk top study

Several archaeological studies have recently been conducted in the Beaufort West area. Pre-colonial archaeological heritage remains have been recorded in the Karoo National Park (KNP) just outside Beaufort West. The remains comprise mostly Later Stone Age (LSA) and Middle Stone Age (MSA) tools, although some Early Stone Age (ESA) implements have also been documented (Kaplan 2005). MSA and ESA sites have been documented on several farms outside the Park, including Phaisant Kraal, Steenrotsfontein, La-De-Da, and Buffels Valley (Kaplan 2002).

Relatively large numbers of MSA and LSA tools were also recently recorded during a study of 19 borrow pits in the Beaufort West area (Kaplan 2007). Bushman paintings have also been recorded inside the KNP (Kaplan 2002). The Karoo region is shot through by dolerite dykes where the raw material known as hornfels (or indurated shale) is ubiquitous and an excellent source for making stone tools. The vast majority of LSA and MSA tools found in the KNP and surrounding farms are in the hornfels, while ESA tools tend mostly to be in quartzite (Kaplan 2002, 2005).

Other studies have shown that scatters of stone tools are super-abundant in the Upper Karoo (see for example Humphreys 1979; Sampson 1972).

The study area of the proposed project also falls within known fossil-bearing deposits, or bizones. Each bizone is defined by its own characteristic set of fauna (Dr John Almond pers. comm.). The Beaufort West area is located in a geological region known as the Karoo Supergroup, made up primarily of sandstones, siltstones, mudstones and shales (also called the Beaufort Group). The area around Beaufort West for example, is considered to be the richest collecting ground for mammal and reptile-like fossils (or

Karoo vertebrates) and plants in the world. The fossils found in this area are approximately 250 million years old. Well-preserved fossils have been found on a number of farms in the Beaufort West area, including, Rietfontein, Waaikraal, Kuilspoort, La-De-Da and Spitskop. Vindragersfontein is a well-known locality where extensive collections have been done (Dr Roger Smith Iziko: SA Museum pers. comm. 2002).

5. LEGISLATIVE REQUIREMENTS

5.1 The National Heritage Resources Act (Act No. 25 of 1999)

The National Heritage Resources (NHR) Act requires that "...any development or other activity which will change the character of a site exceeding 5 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment"

The relevant sections of the Act are briefly outlined below.

5.2 Archaeology (Section 35 (4))

Section 35 (4) of the NHR stipulates that no person may, without a permit issued by HWC, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

5.3 Burial grounds and graves (Section 36 (3))

Section 36 (3) of the NHR stipulates that no person may, without a permit issued by the South African Heritage Resources Agency (SAHRA), destroy, damage, alter, exhume or 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.

6. FINDINGS

Very low density scatters of MSA and LSA lithic assemblages were documented during the study of Plot 8419 Beaufort West, Less than 20 stone tools overall were counted. Most of the tools were located on the steeper slopes overlooking Springfontein Dam, while only four tools were found on the flat strip of land alongside the dam. The tools comprise a long, utilised blade, several flake tools, chunks and two blade cores. Two small retouched flakes one miscellaneous retouched backed bladelet was also found. All the tools are in indurated shale, while several of the larger (MSA) flakes are guite heavily patinated. The tools were all found in a disturbed and modified context.

The archaeological remains have been rated as having low local significance.



Figure 11. Collection of stone tools. Scale is cm

7. IMPACT STATEMENT

The overall impact of the proposed project on pre-colonial archaeological heritage remains is rated as being **low**.

Few, if any, archaeological remains are likely to be exposed or uncovered during earthmoving operations. The site is already severely degraded.

The property is not considered to be archaeologically sensitive, vulnerable or threatened.

8. CONCLUSION

The Phase 1 Archaeological Impact Assessment of the proposed development of Plot 8419 Beaufort West (Remainder of Farm 185) has identified no significant impacts to pre-colonial archaeological material that will need to mitigated, prior to the proposed development activities.

 Should any human remains be disturbed, exposed or uncovered during excavations, and earthworks for the proposed project, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie (021) 462 4502), or Heritage Western Cape (Mr L. Tyali (021) 483 9692). Burial remains should not be disturbed or removed until inspected by the archaeologist.

9. REFERENCES

Humphreys, A. J, B. 1979. The Holocene Sequence of the Northern Cape and its position in the prehistory of South Africa. Unpublished Ph.D. thesis: University of Cape Town.

Kaplan, J. 2007. Archaeological investigation of 19 borrow pits for the proposed regravelling of four trunk and divisional road sections in the Beaufort West area in the Central Karoo Western Cape Province. Report prepared for CCA Environmental (Pty) Ltd.

Kaplan, J. 2006. Phase 1 Archaeological Impact Assessment proposed Klawervlei Powerline Karoo National Park. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2005. Archaeological heritage scoping proposed construction and upgrading of new roads in the Karoo National Park. Report prepared for Ecobound Environmental. Agency for Cultural Resource Management.

Kaplan, J. 2002. Heritage Management Plan Gamma-Omega 765 Kv Transmission Line. Report prepared for PD Naidoo & Associates and PBA International. Agency for Cultural Resource Management.

Parkington, J.E. 1980. Time and place: some observations on spatial and temporal patterning in the Late Stone Age sequence in southern Africa. South African Archaeological Bulletin 35:73-83.

Sampson, C.G. 1972. The Stone Age industries of the Orange River Scheme and South Africa. Memoirs of the National Museum Bloemfontein 6:1-283.