#### PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

# EXTENSION TO THE ROCK CLIFF GOLF ESTATE, COVE ROCK, EAST LONDON, EASTERN CAPE, SOUTH AFRICA

**DATE**: 2009-07-22



#### **REPORT TO:**

NISHAL SEWRUTTAN (Biotechnology & Environmental Specialist Consultancy – BESC)

Tel: 043 726 4242; Fax: 043 726 3199; Postal Address: P.O. Box 8241, Nahoon, 5210;

E-mail: nishal@besc.co.za

Dr. ANTONIETA JERARDINO (South African Heritage Resources Agency – SAHRA, APM Unit)
Tel: 021 462 4505; Fax: 021 462 4509; Postal Address: P.O. Box 4637, Cape Town, 8000;
E-mail: ajerardino@sahra.org.za

THANDUXOLO LUNGILE (South African heritage Resources Agency – SAHRA, Eastern Cape)

Tel: 043 722 1740/2/6; Fax: 043 722 1749; Postal Address: P.O. Box 759, East London, 5200;

E-mail: tlungile@ec.sahra.org.za

#### PREPARED BY:

KAREN VAN RYNEVELD (ArchaeoMaps Archaeological Consultancy)

Tel: 051 446 0148 / 084 871 1064; Fax: N/A; Postal Address: P.O. Box 28530, Danhof, 9310;

E-mail: ArchaeoMaps.karen@iburst.co.za / kvanryneveld@gmail.com

#### PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

# EXTENSION TO THE ROCK CLIFF GOLF ESTATE, COVE ROCK, EAST LONDON, EASTERN CAPE, SOUTH AFRICA

## **CONTENTS**

1)	TER	MS OF REFERENCE	3
-,	1.1)	RMS OF REFERENCE  Development Location, Details & Impact	3
2)	THE	E PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT	7
	2.2)	Methodology	7
	2.3) 2.4)	Coverage and Gap Analysis	 3
	2.4.1	1) Remainders of Farms 1214/2, 1214/3 and 1335	8
	2.4.2	2.1) H1 - Historic Period: Residence	21
	•	Conclusion and Recommendations	
3)	RFF	FERENCES CITED	2.4

#### APPENDIX A:

Schematic Outline of the Pre-Historic and Historic Periods

#### APPENDIX B:

Extracts from the National Heritage Resources Act (No 25 of 1999)

## **LIST OF FIGURES**

Figure 38: The C4 contemporary residence	
Figure 38: The C4 contemporary residence	
Figure 37: The C3 contemporary pump station	
Figure 36: An anthropically sterile exposed section	
Figure 35: General view of the Gxulu River in the vicinity of the weir and the C3 pump station	
Figure 34: Anthropically sterile sections of the Gxulu River - 3	
Figure 33: Anthropically sterile sections of the Gxulu River - 2	19
Figure 32: Anthropically sterile sections of the Gxulu River - 1	
Figure 31: Low impact contemporary impact in the central western part of the development area	
Figure 30: Low impact Historical Period impact in the central western part of the development area - 2	
Figure 29: Low impact Historical Period impact in the central western part of the development area - 1	
Figure 28: General view of the eastern part of the Farm 1006 development area	
Figure 27: General view of the central western part of the Farm 1006 development area	
Figure 26: The northern extremities of the Farm 1006 development area	
Figure 25: General view towards the east of the Farm 1006 development area	
Figure 24: General view towards the south of the Farm 1006 development area	
Figure 23: Phase 1 AIA assessment findings of the Farm 1006 area	15
Figure 22: Exposed anthropic sterile sections in the immediate vicinity of the quarry site	14
Figure 21: Close-up of the anthropic sterile section at the quarry site	
Figure 20: General view of the G1 quarry site	
Figure 19: General view of the area immediately north of the G1 quarry site	13
Figure 18: View of the anthropic sterile sections of the riverbed – 1	
Figure 17: View of the anthropic sterile sections of the riverbed – 1	
Figure 15: Sterile sections at the manimate dam	
Figure 15: Sterile sections at the manmade dam	
Figure 13: View of the D1 large manmade dam characterizing the central part of the development area	
Figure 12: General view of the C2 contemporary workers village	
Figure 11: View of the C1 contemporary residence	
background	
Figure 10: General view of the south western part of the development area with the contemporary workers village in the	
section	
Figure 9: General view of the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of the development area displaying a shallow approximate 30cm deep anthropid the southern part of	•
Figure 8: General view of the northern part of the development area	
Figure 7: Phase 1 AIA assessment findings of the remainders of Farms 1214/2, 1214/3 and 1335 area	9
Figure 6: The proposed 'Rock Cliff Golf Estate' (courtesy BESC)	6
Figure 5: The proposed new remainders of Farms 1214/2, 1214/3 and 1335 and Farm 1006 development areas	6
Centre' areas as well as the newly proposed remainders of Farms 1214/2, 1214/3 & 1335 and the Farm 1006 areas	
Figure 4: The proposed 'Rock Cliff Golf Estate' indicating the formerly assessed 'Cove Rock Golf Estate' and 'Hotel & Con	
Figure 3: Geographical confines of the total of the proposed 'Rock Cliff Golf Estate'	
Figure 2: Locality of the proposed Rock Cliff Golf Estate in relation to Cove Rock and East London	
Figure 1: East London, Eastern Cape	4

#### 1) TERMS OF REFERENCE

Biotechnology & Environmental Specialist Consultancy (BESC) has been appointed as independent environmental consultant by the developer, Southern Palace Investment 414 (Pty) Ltd, to prepare the Environmental Impact Assessment (EIA) for the proposed 'Extension to the Rock Cliff Golf Estate', Cove Rock, East London, Eastern Cape. ArchaeoMaps Archaeological Consultancy has been appointed by BESC to conduct the Phase 1 Archaeological Impact Assessment (AIA) as specialist sub-section to the EIA.

#### 1.1) Development Location, Details & Impact

The 'Extension to the Rock Cliff Golf Estate' reflects the developmental evolution of the original 'Cove Rock Golf Estate' and the 'Hotel and Conference Centre' concept; reported on to the South African Heritage Resources Agency (SAHRA) in the Phase 1 Archaeological Impact Assessments (AIA's) 'Phase 1 Archaeological Impact Assessment: Cove Rock Golf Estate, East London, Eastern Cape, South Africa' (ArchaeoMaps – 2008-05-21), 'Phase 1 Archaeological Impact Assessment: Hotel and Conference Centre Development, Portion 2 of Farm 992, Cove Rock, East London, Eastern Cape, South Africa' (ArchaeoMaps – 2008-06-04) and supplemented by the Letter of Recommendation (LoR) 'Exemption from a Phase 1 Archaeological Impact Assessment (AIA) for the beachfront adjoining the Cove Rock Golf Estate and the Hotel and Conference Centre development, Cove Rock East London, Eastern Cape, South Africa' (ArchaeoMaps – 2008-12-12). SAHRA responses and heritage requirements on the above assessments were included in the Archaeological Review Comments: SAHRA File No. 9/2/026/003 (18 August 2008), SAHRA File No. 9/2/026/001 (21 August 2008) and SAHRA File No. 9/2/026/001 (31 March 2009) respectively.

Formerly assessed areas comprising part, directly or indirectly, of the proposed Rock Cliff Golf Estate has thus been addressed in terms of archaeological and heritage compliance and will not be readdressed in this report.

The total of the proposed Rock Cliff Golf Estate will comprise of approximately 331.5ha, of which the previously assessed 'Cove Rock Golf Estate' portion comprises 170ha and the 'Hotel and Conference Centre' portion another 16.5ha. The 'Extension to the Rock Cliff Golf Estate' constitutes 2 newly proposed portions namely:

- 1. The remainders of Farms 1214/2, 1214/3 and 1335 (approximately 80ha); and
- 2. Farm 1006 (approximately 65ha).

The 2 new proposed portions directly adjoins the already assessed areas, located in the Cove Rock area more or less 12 km south west (SW) of the East London City Centre [1:50;000 map ref:3327BB].

Both areas are accessible via the existing tarmac and gravel road network.

The spatial development layout for the newly proposed areas has not been finalized at the time of the assessment. In accordance with the previous spatial development layout additional portions will house low density residential clusters and associated infrastructure, possible extensions to the golf course, as well as a number of conservation areas, focusing on but not confined to rivers and streambeds to compliment the 'Eco Estate' concept and joining with the municipal conservation area located immediately south of Farm 1006, situated between the proposed estate and the beachfront.



Figure 1: East London, Eastern Cape



Figure 2: Locality of the proposed Rock Cliff Golf Estate in relation to Cove Rock and East London



Figure 3: Geographical confines of the total of the proposed `Rock Cliff Golf Estate'



Figure 4: The proposed 'Rock Cliff Golf Estate' indicating the formerly assessed 'Cove Rock Golf Estate' and 'Hotel & Conference Centre' areas as well as the newly proposed remainders of Farms 1214/2, 1214/3 & 1335 and the Farm 1006 areas



 $\textbf{Figure 5:} \ \textit{The proposed new remainders of Farms 1214/2, 1214/3 and 1335 and Farm 1006 development areas.} \\$ 

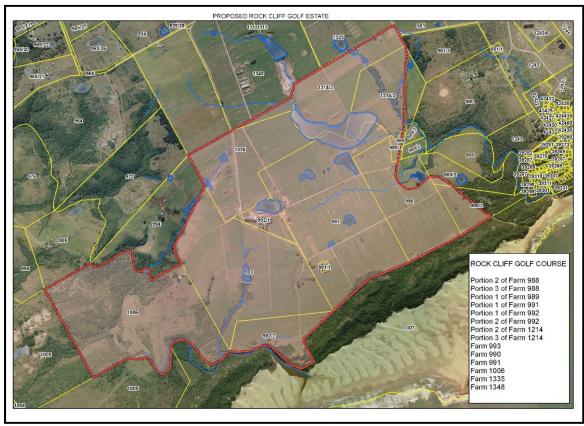


Figure 6: The proposed 'Rock Cliff Golf Estate' (courtesy BESC)

#### 2) THE PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

### 2.1) Archaeological Legislative Compliance

The Phase 1 Archaeological Impact Assessment (AIA) was requested by the South African Heritage Resources Agency (SAHRA) mandatory responsible for the National Heritage Resources Act, Act No 25 of 1999 (NHRA 1999).

The Phase 1 AIA was requested as specialist sub-section to the Environmental Impact Assessment (EIA) in compliance with requirements of the National Environmental Management Act, No 107 of 1998 (NEMA 1998) and associated regulations (2006), and the NHRA 1999 and associated regulations (2000).

The Phase 1 AIA aimed to locate, identify and assess the significance of cultural heritage resources, inclusive of archaeological deposits / sites, built structures older than 60 years, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict and cultural landscapes or viewscapes as defined and protected by the NHRA 1999, that may be affected by the proposed development. Palaeontological deposits / sites as defined and protected by the NHRA 1999 are not included as subject to this report.

### 2.2) Methodology

The Phase 1 AIA was conducted over a 2 day period (2009-07-09 to 2009-07-10) by one archaeologist. The assessment was done by foot and limited to a Phase 1 surface survey; no excavation or sub-surface testing was done. GPS co-ordinates were taken with a Garmin GPSmap 60CSx GPS (Datum: WGS84). Photographic documentation was done with a Pentax K10D camera. A combination of Garmap and Google Earth software was used in the display of spatial information.

Archaeological and cultural heritage site significance assessment and associated mitigation recommendations were done according to the system prescribed by SAHRA (2007).

SITE SIGNIFICANCE	FIELD RATING	GRADE	RECOMMENDED MITIGATION
High Significance	National Significance	Grade 1	Site conservation / Site development
High Significance	Provincial Significance	Grade 2	Site conservation / Site development
High Significance	Local Significance	Grade 3A / 3B	Site conservation or extensive mitigation prior to development, destruction
High / Medium Significance	Generally Protected A	-	Site conservation or mitigation prior to development / destruction
Medium Significance	Generally Protected B	-	Site conservation or mitigation / test excavation / systematic sampling / monitoring prior to or during development / destruction
Low Significance	Generally Protected C	-	On-site sampling, monitoring or no archaeological mitigation required prior to or during development / destruction

**Table 1:** SAHRA archaeological and cultural heritage site significance assessment and mitigation recommendations

## 2.3) Coverage and Gap Analysis

The Phase 1 AIA of the approximate 80ha remainders of Farms 1214/2, 1214/3 and 1335 area covered the total of the proposed study site inclusive of the large manmade dam, also included in the 'Cove Rock Golf Estate' assessment, based on proximity to the then defined area. Visibility across the area, converted largely into grazing for dairy farming purposes, excluding a few small river and streambeds, can be described as good to relatively fair.

Assessment of the proposed 65ha Farm 1006 area proved more problematic. Thick vegetation resulted in the northern (N) extremities of the area being inaccessible and therefore excluded from the assessment. Vegetation in the central western (W) and south eastern (SE) part resulted in spot assessment and thick vegetation along the riverbed, often characterized by alien invaders, proved time and again inaccessible. The assessment thus focused on the central part of the development area where visibility can be described as fair to poor, again due to high grass cover.

## 2.4) Phase 1 AIA Assessment findings

One archaeological and cultural heritage resource (Site H1), as defined and protected by the NHRA 1999, was discovered during the Phase 1 AIA assessment of the proposed 'Extension to the Rock Cliff Golf Estate'. Site H1 comprises of a Historic Period (pre-dating 60 years of age) structure, located on the Farm 1006 development area. In addition 4 contemporary heritage resources (Sites C1-C4) are evidence of more recent tangible cultural activity on the land.

Phase 1 AIA findings can briefly be described as:

#### 2.4.1) Remainders of Farms 1214/2, 1214/3 and 1335

The remainders of Farms 1214/2, 1214/3 and 1335 are at present utilized for dairy farming and comprise mainly of camped grazing fields. No archaeological or cultural heritage resources were identified on the surface of the development area. 2 Contemporary cultural resources were identified:

- 1. C1 Contemporary Residence (S33°03′53.3″; E27°48′56.6″): According to the current occupant the residence does not pre-date 60 years of age. Particularly roof coverings of the main residence and the nearby 'rondawel', in type very similar to the Historic Period holiday resort residences at the Hotel & Conference Centre development area, suggest relative age; albeit not necessarily older than 60 years. The structure, post-dating 60 years of age, is by implication not formally protected under the NHRA 1999. Alteration or destruction of the site *in lieu* of the development is not subject to SAHRA application / approval.
- 2. C2 Workers Village (S33°04'32.6"; E27°48'15.8"): Residences at the contemporary workers village post-dates 60 years of age. The site is thus not formally protected under the NHRA 1999; alteration or destruction thereof is not subject to SAHRA application or approval.

Crosses observed at the workers village do not demarcate graves, but localized religious practices directly associated with the community. Tangible religious markers, of contemporary origin and association, are not indicative of a 'site of cultural significance associated with oral histories' or a 'cultural landscape' as protected by SAHRA. No cemetery is associated with the workers village; the municipal cemetery has been customarily used. Only a single grave is known from the general area, believed to be a Historic Period grave located on the dairy farm, but on the portion north (N) of the proposed remainders of Farms 1214/2, 1214/3 and 1335 development area and not included in the geographical confines of the Rock Cliff Golf Estate site.

No archaeological sites or artefacts were encountered on the surface of the proposed development area. Sub-surface inspection focused on the large manmade dam (D1) and the quarry site (G1) and immediate surrounds where sections in excess of 2m in depth were exposed. D1 sections, as reported on in the Cove Rock assessment, yielded no cultural layer or associated artefacts. Sections at the G1 quarry site proved culturally barren, as did exposed sections associated with the nearby dam and scraped disturbance exposing at least 1 large section and a number of smaller ones north (N) of the G1 locality. In addition smaller dam sections, limited erosion and other sections across the development area all proved anthropically sterile.

Riverbeds in the north east (NE) of the development area yielded little to no geological stratigraphy and no cultural member.

(Current grass cover across the development area may well obscure archaeological and cultural heritage resources. Sub-surface anthropic sterility at inspected sections however supports surface absence of sites, but sites may be uncovered once the grass cover is cleared and development impact on the underlying dune substrate.)



Figure 7: Phase 1 AIA assessment findings of the remainders of Farms 1214/2, 1214/3 and 1335 area



Figure 8: General view of the northern part of the development area



Figure 9: General view of the southern part of the development area displaying a shallow approximate 30cm deep anthropic sterile section



Figure 10: General view of the south western part of the development area with the contemporary workers village in the background



Figure 11: View of the C1 contemporary residence



Figure 12: General view of the C2 contemporary workers village



Figure 13: View of the D1 large manmade dam characterizing the central part of the development area



Figure 14: Close-up of the manmade dam



Figure 15: Sterile sections at the manmade dam



Figure 16: Overview of the north eastern river area characterized by more lush vegetation



Figure 17: View of the anthropic sterile sections of the riverbed - 1



Figure 18: View of the anthropic sterile sections of the riverbed -  $\mathbf{1}$ 



Figure 19: General view of the area immediately north of the G1 quarry site

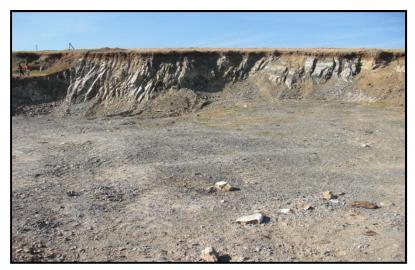


Figure 20: General view of the G1 quarry site



Figure 21: Close-up of the anthropic sterile section at the quarry site



Figure 22: Exposed anthropic sterile sections in the immediate vicinity of the quarry site

#### 2.4.2) Farm 1006

One archaeological and cultural heritage resource (Site H1) as defined and protected by the NHRA 1999 was recorded during the Phase 1 AIA of the proposed Farm 1006 development area. Site H1, a Historic Period structure / residence is described in Section 2.4.2.1. The remainder of the Farm 1006 development area yielded a number of contemporary cultural resources and Historic Period farming infrastructure directly associated with Site H1.

The 2 contemporary cultural resources located on Farm 1006 can briefly be described as:

- 1. C3 Pump Station (S33°05'01.8"; E27°48'08.1"): The pump station situated on the banks of the Gxulu River, in the direct vicinity of the weir (1990's early 2000's), post-dates 60 years of age and is not formally protected under the NHRA 1999. The structure, being located within the floodline restriction zone and with added benefit to the development, is not expected to be impacted on by the proposed development. Nonetheless, alteration or destruction to the site is not subject to SAHRA application / approval.
- 2. C4 *Temporary Residence* (S33°05′03.7"; E27°48′10.4"): The Site C4 temporary residence post-dates 60 years of age; the site is by implication not formally protected under the NHRA 1999. Alteration or destruction of the site *in lieu* of the development is not subject to SAHRA application / approval.

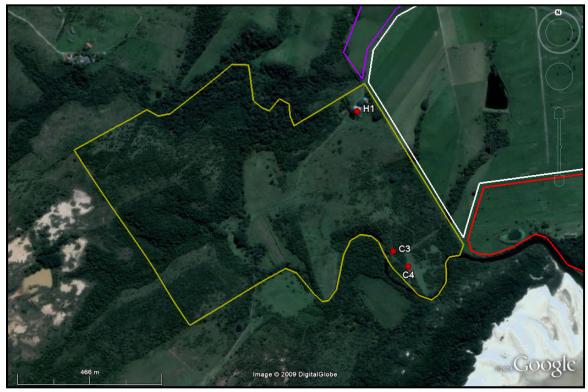


Figure 23: Phase 1 AIA assessment findings of the Farm 1006 area

No archaeological sites were encountered on the surface of the proposed development area. Low impact contemporary farming infrastructure as well as Historic Period development, directly associated with the Site H1 residence and by implication pre-dating 100 years of age, including a small cement dam, bridge etc characterized the surface of the development area. Surface assessment was however hampered by

high grass cover and dense thicket. With few exposed sections at the Farm 1006 study site, sub-surface inspection was restricted, due to thick vegetation, to spot assessment along the banks of the Gxulu River. No archaeological or cultural site or member was identified.



Figure 24: General view towards the south of the Farm 1006 development area



Figure 25: General view towards the east of the Farm 1006 development area



Figure 26: The northern extremities of the Farm 1006 development area



Figure 27: General view of the central western part of the Farm 1006 development area



Figure 28: General view of the eastern part of the Farm 1006 development area



 $\textbf{Figure 29:} \ Low\ impact\ \textit{Historical Period impact in the central western part\ of the\ development\ area\cdot 1$ 



 $\textbf{Figure 30:} \ Low\ impact\ \textit{Historical Period impact in the central western part\ of the\ development\ area\cdot 2$ 



Figure 31: Low impact contemporary impact in the central western part of the development area



Figure 32: Anthropically sterile sections of the Gxulu River -  $\mathbf{1}$ 



 $\textbf{Figure 33:} \ \textit{Anthropically sterile sections of the Gxulu River - 2}$ 



 $\textbf{Figure 34:} \ \textit{Anthropically sterile sections of the Gxulu River - 3}$ 



Figure 35: General view of the Gxulu River in the vicinity of the weir and the C3 pump station



Figure 36: An anthropically sterile exposed section



Figure 37: The C3 contemporary pump station



Figure 38: The C4 contemporary residence

# 2.4.2.1) H1 - Historic Period: Residence (\$33°04'46.4; \$27°48'04.6)

Site H1 demarcates the original farmhouse on the property. The exact age of the residence is not known but pre-dates 100 years of age (Pers comm.: Mrs Ludge). The original structure has been slightly altered in the interim. Alterations have not impacted significantly on the structure and not to a level where impact can be detected on the original style of the structure. Architecturally however the residence is of low stylistic heritage value.



Figure 39: The Site H1 Historic Period residence



#### SIGNIFICANCE RATING & RECOMMENDATIONS:

The Historical Period Site H1 residence pre-dates 60 years of age and is by implication formally protected under the NHRA 1999. The site is ascribed a **SAHRA** *Medium Significance* and *Generally Protected B* field rating. It is recommended that the site be either formally conserved or mitigated prior to development.

#### Minimum recommended conservation measures includes:

- 1. That the site be conserved in situ.
- 2. That all future alterations to the site, for purposes of conservation or inclusion in the Estate infrastructure be done under a *Site Alteration Permit* to be applied for by the developer to the Eastern Cape Provincial Heritage Resources Agency's (ECPHRA) Built Environment Section.

OR

#### Minimum recommended mitigation measures (Phase 2 Archaeological Mitigation) includes:

 That the site be legally destroyed in lieu of the development. Site destruction should proceed under an ECPHRA Site Destruction Permit. Permit application forms can be obtained directly from the ECPHRA Built Environment Section. Upon receipt of an ECPHRA Site Destruction Permit the developer may legally destroy the site / resource, after which development may continue across the original site locale.

#### 2.5) Conclusion and Recommendations

One archaeological and cultural heritage resource, as defined and protected by the NHRA 1999 was identified during the Phase 1 AIA of the proposed 'Extension to the Rock Cliff Golf Estate' study site, including the approximate 80ha remainders of Farms 1214/2, 1214/3 and 1335 and the approximate 65ha Farm 1006 study sites, Cove Rock, East London. The identified resource, **Site H1**, constitutes a Historic Period structure (residence) located on the Farm 1006 development portion.



#### Recommendations:

It is recommended that, with reference to cultural heritage compliance as per the requirements of the NHRA 1999, development across the proposed 'Extension to the Rock Cliff Golf Estate' study sites proceeds as applied for provided the developer complies with the following requirements:

Site H1 – Historic Period structure (\$33°04'46.4"; 27°48'04.6"): Site H1 is ascribed a SAHRA Medium Significance and Generally Protected B field rating; it is recommended that the site be either conserved (no development impact on the site and all future alterations to be done under an ECPHRA Site Alteration Permit) or that the site be mitigated (site destruction under an ECPHRA Site Destruction Permit after which development may legally proceed across the original locale of the site), prior to development.

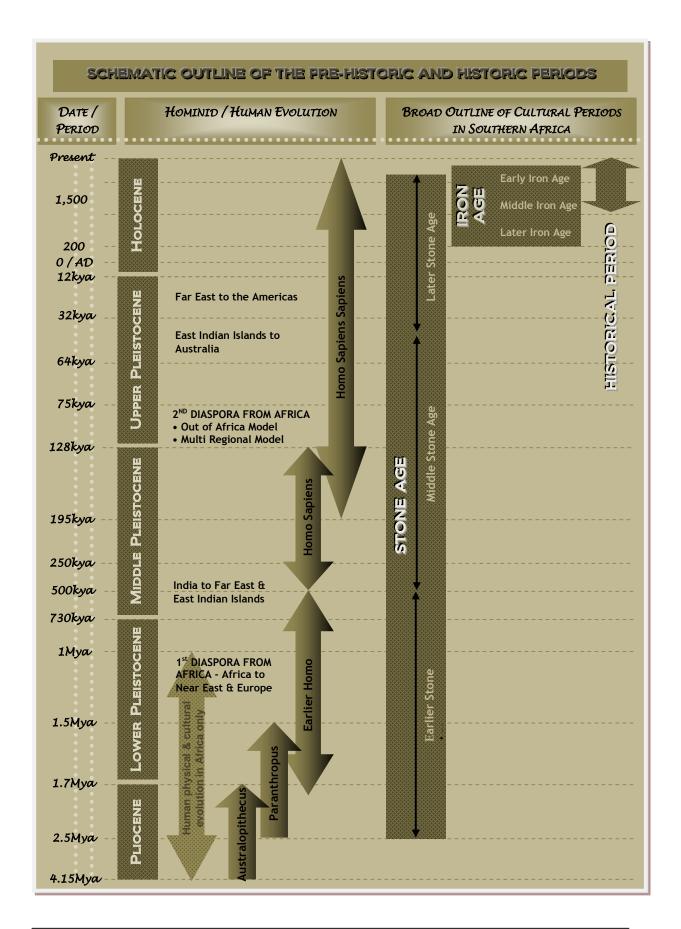
REMAINDERS OF FARMS 1214/2, 1214/3 & 1335 AND FARM 1006, COVE ROCK, EAST LONDON								
IAP ODE	SITE	Type / Period	DESCRIPTION	Co-ordinates	PRELIMINARY RECOMMENDATIONS			
	OPMENT AREA	: Remainders of Fa	RMS 1214/2, 1214	l/3 & 1335				
	-	-	-	S33°04'19.7"; E27°48'06.7"	N/A			
	-	-	-	\$33°04'06.8"; E27°48'34.3"	N/A			
	-	-	-	S33°04'04.2"; E27°48'34.5"	N/A			
	-	-	-	\$33°03'50.9"; E27°48'59.6"	N/A			
	-	-	-	S33°03′57.0"; E27°49′03.7"	N/A			
	-	-	-	S33°04'10.6"; E27°49'03.0"	N/A			
	-	-	-	S33°04'14.1"; E27°48'59.1"	N/A			
	-	-	-	S33°04′18.0"; E27°48′46.9"	N/A			
	-	-	-	S33°04′14.4″; E27°48′34.9″	N/A			
0	-	-	-	S33°04'33.7"; E27°48'17.8"	N/A			
1	-	-	-	S33°04'36.6"; E27°48'09.8"	N/A			
2	-	-	-	S33°04'43.5"; E27°48'05.4"	N/A			
3	-	-	-	S33°04'40.7"; E27°48'03.1"	N/A			
4				S33°04'26.1"; E27°48'11.0"	N/A			
1	Site C1	Contemporary	Residence	S33°03′53.3"; E27°48′56.6"	N/A			
2	Site C2	Contemporary	Workers village	S33°04′32.6″; E27°48′15.8″	N/A			
-	Cita D1	Feature	Dam	S33°04'14.8"; E27°48'47.9"	41/4			
	_	Feature	Quarry	S33°04′25.4″; E27°48′12.8″	N/A N/A proximate 80ha remainders of Farms			
1 lo arcl 214/2 DEVEL	Site G1 haeological or cu	Feature Iltural heritage resource I development area	Quarry s were discovered o	S33°04′25.4″; E27°48′12.8″ during the Phase 1 AIA of the ap <sub>l</sub>	N/A proximate 80ha remainders of Farms			
1 o arch 214/2 <b>DEVEL</b>	Site G1 haeological or cu , 1214/3 & 1335	Feature Iltural heritage resource I development area	Quarry s were discovered o	\$33°04'25.4"; E27°48'12.8" during the Phase 1 AIA of the app \$33°05'07.6"; E27°48'13.2"	N/A proximate 80ha remainders of Farms  N/A			
1 o arch 214/2 DEVEL	Site G1 haeological or cu 1, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource development area : FARM 1006	Quarry s were discovered o - -	\$33°04'25.4"; E27°48'12.8" during the Phase 1 AIA of the app \$33°05'07.6"; E27°48'13.2" \$33°05'00.2"; E27°48'04.7"	N/A proximate 80ha remainders of Farms  N/A  N/A  N/A			
1 o arch 214/2 DEVEL	Site G1 haeological or cu , 1214/3 & 1335	Feature Iltural heritage resource I development area I FARM 1006	Quarry s were discovered of - - -	\$33°04'25.4"; E27°48'12.8" during the Phase 1 AIA of the app \$33°05'07.6"; E27°48'13.2" \$33°05'00.2"; E27°48'04.7" \$33°05'07.5"; E27°47'59.5"	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A			
1 o arch 214/2 DEVEL	Site G1 haeological or cu	Feature Iltural heritage resource Idevelopment area Image: FARM 1006 Image	Quarry s were discovered of - - - -	\$33°04'25.4"; E27°48'12.8" during the Phase 1 AIA of the app \$33°05'07.6"; E27°48'13.2" \$33°05'00.2"; E27°48'04.7" \$33°05'07.5"; E27°47'59.5" \$33°05'03.6"; E27°47'54.6"	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A			
1 o arch 214/2 DEVEL	Site G1 haeological or cu	Feature Iltural heritage resource Idevelopment area Image: FARM 1006 Image	Quarry s were discovered of	\$33°04'25.4"; E27°48'12.8"  during the Phase 1 AIA of the applications of the phase 1 AIA of the application of the phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A			
1 o arch 214/2 EVEL	Site G1 haeological or cu	Feature Iltural heritage resource Idevelopment area Image: FARM 1006 Image	Quarry s were discovered of	\$33°04'25.4"; E27°48'12.8"  during the Phase 1 AIA of the applications of the phase 1 AIA of the application of the phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 o arch 214/2 DEVEL	Site G1 haeological or cu 2, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area Image: FARM 1006 Image	Quarry s were discovered of	\$33°04'25.4"; E27°48'12.8"  during the Phase 1 AIA of the application of the phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 o arch 214/2 EVEL	Site G1 haeological or cu 2, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area :: FARM 1006	Quarry s were discovered of	\$33°04′25.4″; E27°48′12.8″ during the Phase 1 AIA of the application of the phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 o arch 214/2 DEVEL	Site G1 haeological or cu 2, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area :: FARM 1006	Quarry s were discovered of	\$33°04′25.4″; E27°48′12.8″ during the Phase 1 AIA of the application of the phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
o arch 214/2 DEVEL	Site G1 haeological or cu l, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area :: FARM 1006	Quarry s were discovered of	\$33°04′25.4″; E27°48′12.8″ during the Phase 1 AIA of the application of the Phase 1 AIA of the AIA of the Phase 1 AIA of the AIA of the Phase 1 AIA of the Phase 1 AIA of the AIA o	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 o arcide	Site G1 haeological or cu 2, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area :: FARM 1006	Quarry s were discovered of	\$33°04′25.4″; E27°48′12.8″ during the Phase 1 AIA of the application of the Phase 1 AIA of the AIA of the AIA of the Phase 1 AIA of the Phase 1 AIA of the AIA of the Phase 1 AIA of the	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1	Site G1 haeological or cu l, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area :: FARM 1006	Quarry s were discovered of	\$33°04′25.4″; E27°48′12.8″  during the Phase 1 AIA of the application of the Phase 1 AIA of the AIA of the Phase 1 AIA of the P	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1	Site G1 haeological or cu l, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Is development area Interest Farm 1006 Interest Farm 10	Quarry s were discovered of	\$33°04′25.4″; E27°48′12.8″ during the Phase 1 AIA of the application of the Phase 1 AIA of the AIA of the Phase 1 AIA of the AIA of the Phase 1 AIA of the Phase 1 AIA of the Phase 1 AIA of the AIA of the Phase 1 AIA of the	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 o arcti	Site G1 haeological or cu haeo	Feature Iltural heritage resource I development area I FARM 1006	Quarry s were discovered of	\$33°04'25.4"; E27°48'12.8"  during the Phase 1 AIA of the application of the Phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 0 o arch 2214/2 2EVEL	Site G1 haeological or cu 1, 1214/3 & 1335 OPMENT AREA	Feature Iltural heritage resource Idevelopment area IFARM 1006	Quarry s were discovered of	\$33°04'25.4"; E27°48'12.8"  during the Phase 1 AIA of the application of the Phase 1 AIA of the AIA of the Phase 1 AIA of the P	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			
1 lo arch 214/2 DEVEL	Site G1 haeological or cu haeo	Feature Iltural heritage resource I development area I FARM 1006	Quarry s were discovered of	\$33°04'25.4"; E27°48'12.8"  during the Phase 1 AIA of the application of the Phase 1 AIA	N/A proximate 80ha remainders of Farms  N/A N/A N/A N/A N/A N/A N/A N/A N/A N/			

**Table 2:** Phase 1 AIA assessment findings - co-ordinate details

**NOTE**: Should any archaeological or cultural heritage resources as defined and protected by the NHRA 1999 and not reported on in this report be identified during the course of development the developer should immediately cease operation in the vicinity of the find and report the site to SAHRA.

## 3) REFERENCES CITED

- 1. South African Government. (No. 107) of 1998. *National Environmental Management Act*.
- 2. South African Government. (No. 25) of 1999. *National Heritage Resources Act*.
- 3. South African Heritage Resources Agency. 2007. *Minimum standards for the archaeological and heritage components of impact assessments*. Unpublished guidelines.



#### EXTRACTS FROM THE

## NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999)

#### **DEFINITIONS**

#### Section 2

In this Act, unless the context requires otherwise:

- ii. "Archaeological" means
  - a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures:
  - b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10 m of such representation:
  - c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic,... and any cargo, debris, or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation.
- viii. "Development" means any physical intervention, excavation or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including
  - a) construction, alteration, demolition, removal or change of use of a place or structure at a place;
  - b) carrying out any works on or over or under a place;
  - c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
  - d) constructing or putting up for display signs or hoardings;
  - ) any change to the natural or existing condition or topography of land; and
  - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- xiii. "Grave" means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;
- xxi. "Living heritage" means the intangible aspects of inherited culture, and may include
  - a) cultural tradition;
  - b) oral history;
  - c) performance:
  - d) ritual;
  - e) popular memory;
  - f) skills and techniques;
  - indigenous knowledge systems; and
  - h) the holistic approach to nature, society and social relationships.
- xxxi. "Palaeontological" means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trance;
- xli. "Site" means any area of land, including land covered by water, and including any structures or objects thereon;
- xliv. "Structure" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

#### **NATIONAL ESTATE**

#### Section 3

- For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- 2) Without limiting the generality of subsection 1), the national estate may include
  - a) places, buildings, structures and equipment of cultural significance;
  - b) places to which oral traditions are attached or which are associated with living heritage;
  - 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 -
    - 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;
    - 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).

#### STRUCTURES

#### Section 34

1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

# ARCHAEOLOGY, PALAEONTOLOGY AND METEORITES Section 35

- 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;
  - 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 assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- 5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may
  - a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
  - carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
  - c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph a) to apply for a permit as required in subsection 4); and
  - d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

#### **BURIAL GROUNDS AND GRAVES**

#### Section 36

- 3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority
  - 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 of any burial ground or grave referred to in subsection 3a) 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.
- 5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection 3b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority
  - made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
  - b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- 6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority
  - a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
  - b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-internment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

#### HERITAGE RESOURCES MANAGEMENT

#### Section 38

- 1) Subject to the provisions of subsections 7), 8) and 9), any person who intends to undertake a development categorised as
  - a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length:
  - the construction of a bridge or similar structure exceeding 50 m in length;
  - c) any development or other activity which will change the character of a site
    - i. exceeding 5 000 m<sup>2</sup> in extent; or
    - ii. involving three or more existing erven or subdivisions thereof; or
    - iii. involving three or more erven or subdivisions thereof which have been consolidated within the past five
    - the costs which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
  - d) the rezoning of a site exceeding 10 000 m<sup>2</sup> in extent; or
  - e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

- 2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection 1)
  - if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
  - notify the person concerned that this section does not apply.
- 3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2a) ...
- 1) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development decide
  - a) whether or not the development may proceed;
  - b) any limitations or conditions to be applied to the development;
  - c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
  - d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
  - e) whether the appointment of specialists is required as a condition of approval of the proposal.

# APPOINTMENT AND POWERS OF HERITAGE INSPECTORS Section 50

- 7) Subject to the provision of any other law, a heritage inspector or any other person authorised by a heritage resources authority in writing, may at all reasonable times enter upon any land or premises for the purpose of inspecting any heritage resource protected in terms of the provisions of this Act, or any other property in respect of which the heritage resources authority is exercising its functions and powers in terms of this Act, and may take photographs, make measurements and sketches and use any other means of recording information necessary for the purposes of this Act.
- 8) A heritage inspector may at any time inspect work being done under a permit issued in terms of this Act and may for that purpose at all reasonable times enter any place protected in terms of this Act.
- Where a heritage inspector has reasonable grounds to suspect that an offence in terms of this Act has been, is being, or is about to be committed, the heritage inspector may with such assistance as he or she thinks necessary
  - enter and search any place, premises, vehicle, vessel or craft, and for that purpose stop and detain any vehicle, vessel or craft, in or on which the heritage inspector believes, on reasonable grounds, there is evidence related to that offence;
  - confiscate and detain any heritage resource or evidence concerned with the commission of the offence pending any further order from the responsible heritage resources authority; and
  - c) take such action as is reasonably necessary to prevent the commission of an offence in terms of this Act.
- 10) A heritage inspector may, if there is reason to believe that any work is being done or any action is being taken in contravention of this Act or the conditions of a permit issued in terms of this Act, order the immediate cessation of such work or action pending any further order from the responsible heritage resources authority.