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PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

**MOROJANENG EXT 8 RESIDENTIAL DEVELOPMENT,  
DEWETSDORP, FREE STATE, SOUTH AFRICA**

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## 1) TERMS OF REFERENCE

Phethogo Consulting is in the process of preparing the Environmental Impact Assessment (EIA) for the proposed approximate 44ha Morojaneng Ext 8 Residential Development near the town of Dewetsdorp in the Free State province, South Africa. ArchaeoMaps Archaeological Consultancy has been appointed by Phethogo Consulting to conduct the Phase 1 Archaeological Impact Assessment (AIA) as specialist sub-section to the EIA.

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

Dewetsdorp is located approximately 75km south east (SE) of Bloemfontein on the R702 Bloemfontein / Wepener road at the R717 Dewetsdorp / Reddersburg road junction. The Morojaneng Ext 8 Residential Development will be located on a portion of the property 'Dew Five' cited approximately 2.8km south (S) of Dewetsdorp and immediately adjoining the existing Morojaneng residential area (1:50,000 map ref: 2926DA).

The Morojaneng Ext 8 Residential Development will comprise of the development of 519 erven including 500 erven demarcated for residential purposes, 2 for business purposes, 3 for community facilities (including a crèche), 4 churches and 9 park areas. Associated linear development will include streets, stormwater management, sewerage, powerlines etc. The development has been planned in accordance with environmental floodline requirements.

Development impact will be total, excluding areas exempted from development due to floodline restrictions within the development area. The Morojaneng Ext 8 Residential Development will result in the loss of surface and sub-surface heritage sites / features present in areas of impact.



Figure 1: Dewetsdorp, Free State, South Africa



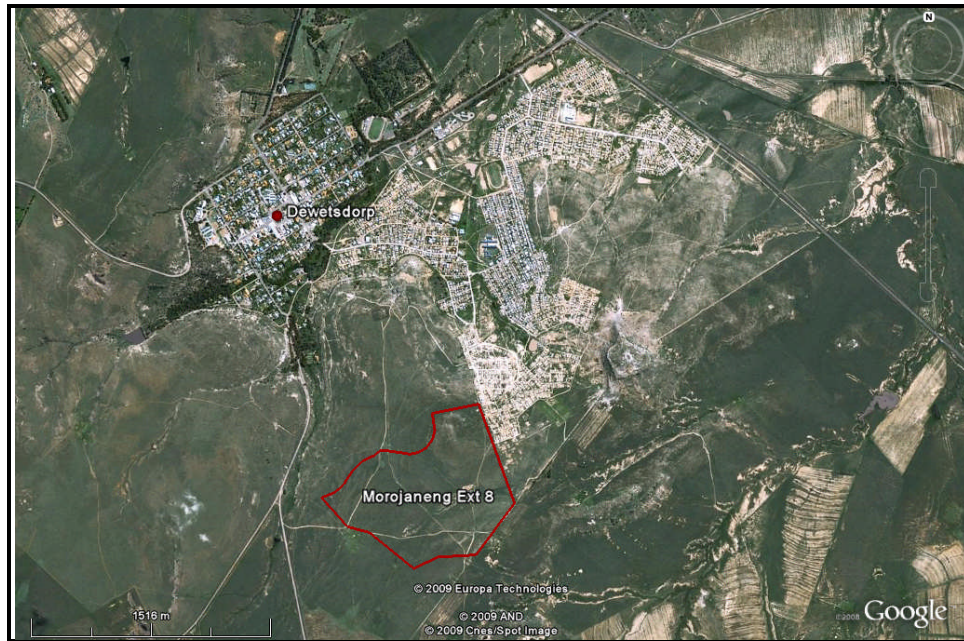


Figure 2: Locality of the Morojaneng Ext 8 Residential Development in relation to Dewetsdorp, Free State

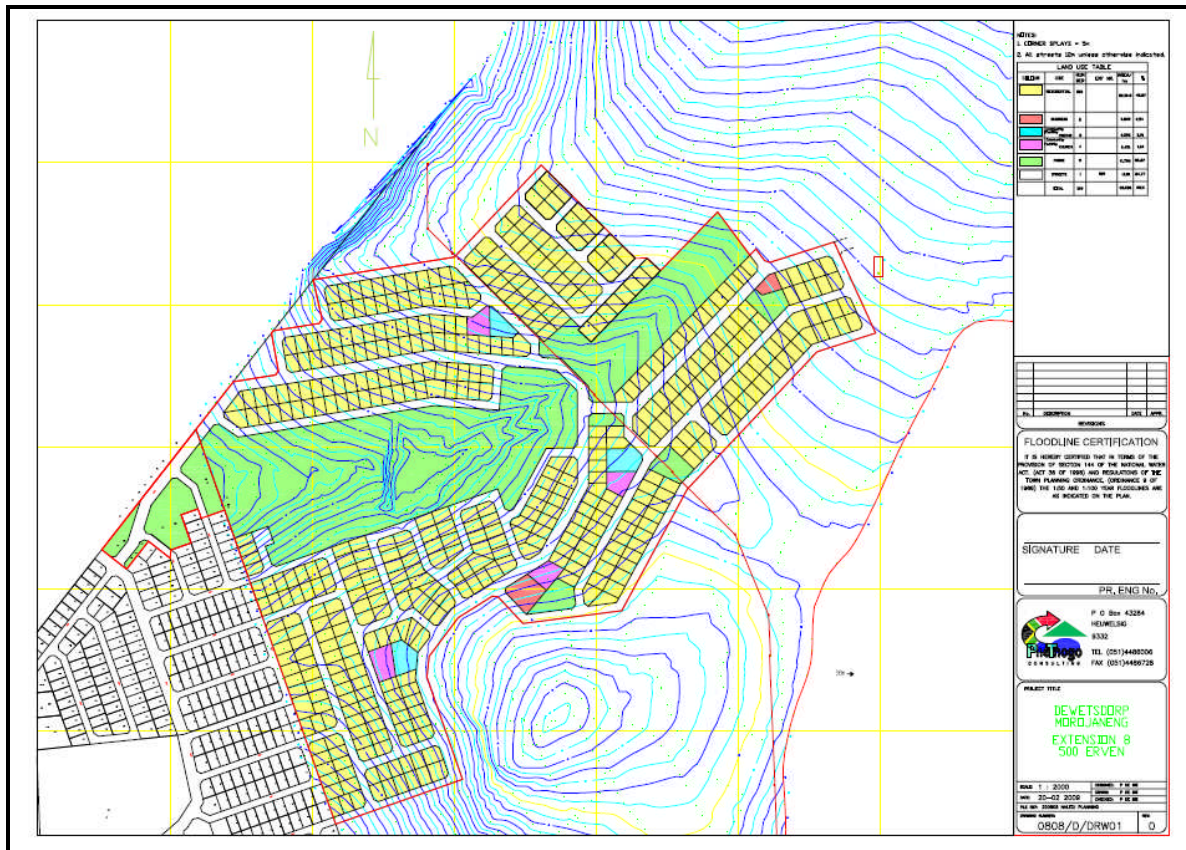


Figure 3: Spatial development layout of the Morojaneng Ext 8 Residential Development

## 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 viewsapes 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 1 day period (2009-03-20) 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).

<b>SAHRA ARCHAEOLOGICAL AND CULTURAL HERITAGE SITE SIGNIFICANCE ASSESSMENT</b>			
<i>SITE SIGNIFICANCE</i>	<i>FIELD RATING</i>	<i>GRADE</i>	<i>RECOMMENDED MITIGATION</i>
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 covered an approximate 65ha area to accommodate the proposed 44ha Morojaneng Ext 8 Residential Development and associated linear development. Access to the study site is via an existing road network.

Visibility ranged from good to fair, a direct result of medium vegetation cover due to the relatively wet preceding season in the south eastern (SE) Free State.

### 2.4) Phase 1 AIA Assessment findings

Five archaeological and heritage sites / features were located during the Morojaneng Ext 8 survey. Of the located resources 1 (Site 1) is situated immediately adjacent to the proposed development area while the other 4 (Sites 2, 3, 4 & 5) is located within the boundaries of the study site. All resources can be assigned a maximum Historical / Colonial Period date, with some inferred to be of very recent origin. In accordance with the Morojaneng Ext 8 spatial development layout all of the located resources will be negatively impacted on by the development including indirect impact at Site 1 due to proximity of the site to the development area and direct impact on Sites 2, 3, 4 & 5.

Spatial localities and basic identifications of the resources can briefly be summarized as:

<b>Site 1:</b>	S29°36'07.4"; E26°40'08.7"	- Historical Period (farmstead)
<b>Site 2:</b>	S29°35'52.3"; E26°40'52.3"	- Historical Period (kraal / workers residences / grave?)
<b>Site 3:</b>	S29°35'50.9"; E26°40'29.2"	- Historical Period / Contemporary (stock related activities)
<b>Site 4:</b>	S29°36'05.3"; E26°40'40.4"	- Historical Period / Contemporary (property fence)
<b>Site 5:</b>	S29°36'05.2"; E26°40'35.7"	- Historical Period / Contemporary (stock related activities)

Site significance ratings and recommendations relating to the identified archaeological and heritage resources includes:

1. Of the identified resources **Site 1** is the most significant, ascribed a SAHRA *Medium Significance* and a *Generally Protected B* field rating. It is recommended that the site be either formally conserved or mitigated (Phase 2 Archaeological excavations) prior to development.
2. **Site 2** is ascribed a SAHRA *Low Significance* and *Generally Protected C* field rating. It is recommended that the site be either conserved (no development in the demarcated area) or that development coincide with an archaeological monitoring and if necessary sampling project (on-site archaeological monitoring at the time of sub-surface development / construction impact at the site).
3. **Site 3, Site 4** and **Site 5** are ascribed a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is recommended that the sites be destroyed *in lieu* of the development, in other words that development at the site localities proceed (site destruction) without the developer having to apply for a SAHRA *Site Destruction Permit*.

Cultural resources on the remainder of the area comprised of recent brick water pump (?) structures scattered across the development area and a number of small fenced stock enclosures located along the eastern boundary of the study site and belonging to and managed by residents of Morojaneng. Contemporary stock, primarily cattle farming activities is further evidenced by remains of a recent cattle



enclosure (kraal) located at  $S29^{\circ}36'07.1''$ ;  $E26^{\circ}40'25.8''$  and within the boundaries of the proposed development area. The site is identified only by vegetation change in a circular pattern.

Sub-surface anthropic sterility is inferred based on a number of geotechnical pick and shovel test pit exposures scattered across the development area, on average very shallow and not exceeding approximately 25cm in depth. Erosion sections towards the dam located at  $S29^{\circ}35'58.4''$ ;  $E26^{\circ}40'35.5''$  did not yield a cultural component / layer, up to approximately 1m in sub-surface depth. Erosion sections proved to be unanimously anthropically sterile.



**Figure 4:** *The Morojaneng Ext 8 Residential Development AIA assessed area*



**Figure 5:** *Spatial distribution of the Phase 1 Morojaneng Ext 8 Residential Development AIA findings*





Figure 6: *General view of the development area*



Figure 10: *Geotech test pits yielded sterile sections*



Figure 7: *The existing Morojaneng development*



Figure 11: *Contemporary kraal remains*



Figure 8: *Contemporary stock enclosures*

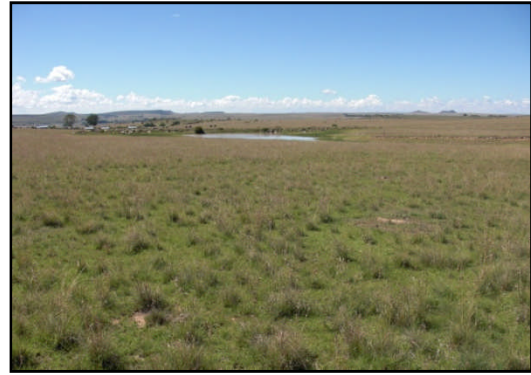


Figure 12: *General view of the dam*



Figure 9: *Contemporary development features*



Figure 13: *Erosion sections at the dam*

2.4.1) Site 1:  $S29^{\circ}36'07.4''$ ;  $E26^{\circ}40'08.7''$

- Historical Period (farmstead)



Figure 14: Spatial setting of Site 1

Site 1 is located immediately south east (SE) of the proposed Morojaneng Ext 8 study site. Sand stone features identified include the stone foundations of 3 possible residential structures and 1 cattle ramp amidst a scatter of small debris and stock enclosure middens in a rough oval area characterized by sparse vegetation in relation to the immediate surrounds (green line). Identified structures can briefly be described as:

1. **S1-1** ( $S29^{\circ}36'08.0''$ ;  $E26^{\circ}40'07.3''$ ): S1-1 is characterized by the neatly outlined approximate 3x5m rectangular single roomed structure foundation. Foundation stones are stacked in single pile. Structure foundations may represent an early stock enclosure (kraal) or stables.
2. **S1-2** ( $S29^{\circ}36'05.3''$ ;  $E26^{\circ}40'06.5''$ ): S1-2 represents structure foundations of what seemed to have been a 2 roomed residential structure, bedroom and kitchen / living room, with both rooms having been in the region of 3x3m to 3x4m in size. A small approximate 1x1m stone outline in the corner of the southern (S) rooms' demarcation may represent the position of the original clay oven. Structure foundations also revealed what seemed to have been the hallway with 3-4 flat stones perhaps indicative of the doorway. Alternatively this 'hallway' may represent what is sometimes referred to as a 'hidden wall' or 'secret room', where 'Boers' or Afrikaans farmers used to hide belongings, furniture and even family members in times of war. The structure may well date to the 1800's.
3. **S1-3** ( $S29^{\circ}36'06.8''$ ;  $E26^{\circ}40'08.0''$ ): S1-3 is characterized by residential foundation remains of what comprised a clearly identifiable 2 roomed but perhaps 3 roomed structure. Identifiable rooms are in the region of 3x4m in size, again inferred to represent a bedroom and kitchen /

living room. The floor level of the structure seems to have been raised, at least for the 2 clearly identifiable rooms. The northern (N) room seems to have had a now overgrown stone paved floor; paving was not identified in the southern (S) room. South (S) of this room is the remains of a small straight wall, which may imply a third room to the house and indicative of separated living and kitchen space. The structure is inferred to date to the late 1800's or early 1900's.

4. **S1-4** (S29°36'09.1"; E26°40'09.1"): S1-4 demarcates the position of a cattle ramp, an evident much later addition to the site, commenting in itself on long site occupation or period of use. The site comprises the ruined stone ramp structure complete with an angled piece of early / rough cement with handmade grooves as part of the ramp. The general area of the ramp has evidently also served as a dumping site in more recent times with plastic, much more recent casted cement and building rubble, glass, metal etc scattered about. The structure may well date to the mid 1900's.

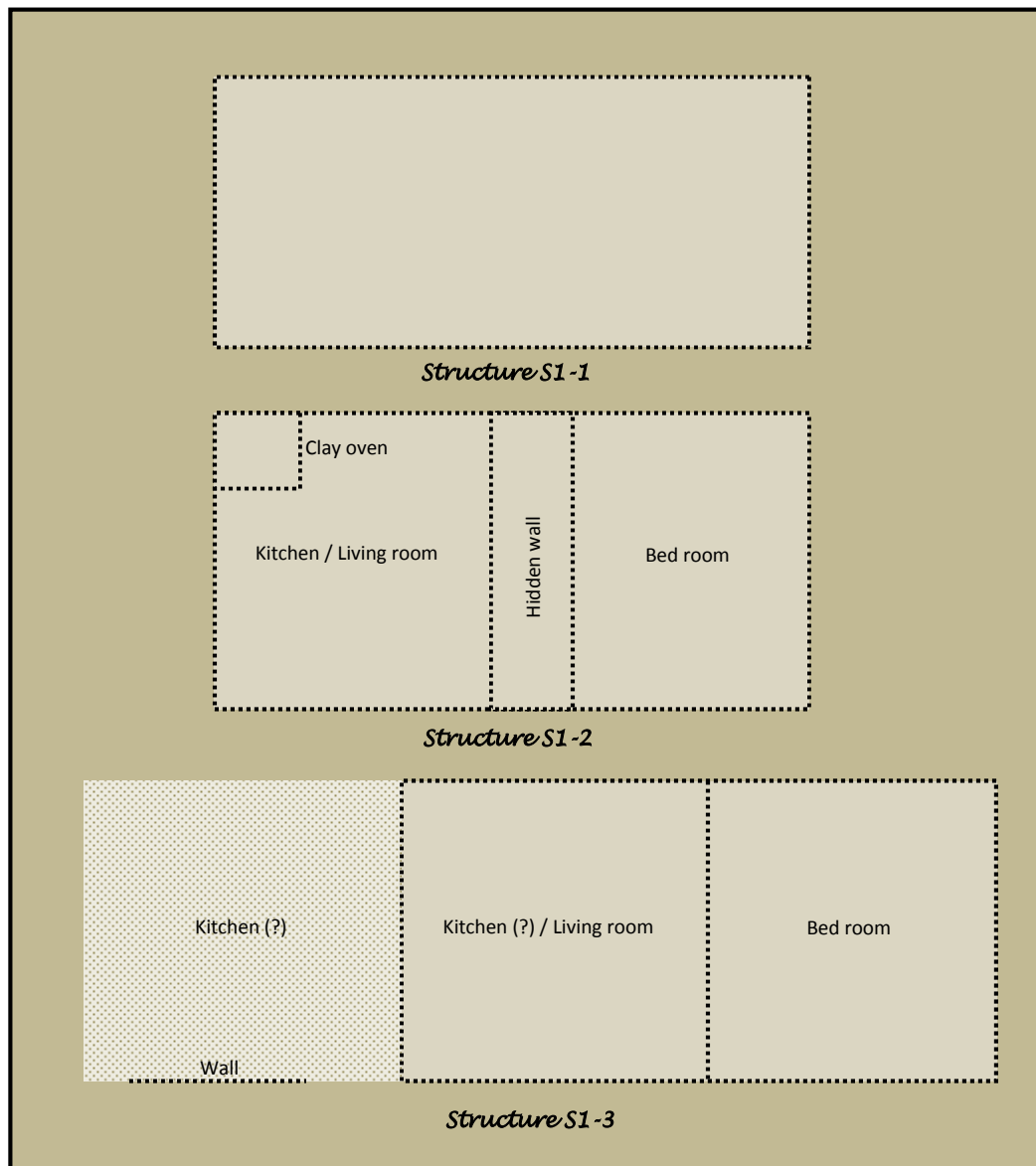


Figure 15: Schematic representations of structures S1-1, S1-2 and S1-3 (not to scale)

Very little artefactual material directly associated with the foundation remains were located, but comprised of porcelain pieces and perhaps some glass and metal. The site was however in more recent times used as a dump site with limited plastic and more recent rusted metal, glass and cement castings scattered across the area.

Slightly east of the main site is a singular grave, S1-G located at S29°36'07.1"; E26°40'10.9", the rectangular surface of which was stone stacked and cement paved with an uninscribed cement headstone. Patterned peck marks on the headstone is indicative of a plaque having been attached in memory of the deceased in the past. The gravesite is directly associated with the structure remains; but temporally, based on the rough cement mixture more directly associated with the latter part of the sites' occupation and the cattle ramp (mid 1900's).

The date of origin of the site remains unknown, but can reasonably be inferred to well predate 60 years of age. The site is inferred to represent the remains of the original farmstead. Site 1 is thus formally protected under the NHRA 1999. The site will not be directly impacted on by the proposed Morojaneng Ext 8 Residential Development, but due to proximity of Site 1 to the development area indirect impact on the site will be inevitable.



#### **SIGNIFICANCE RATING & RECOMMENDATIONS:**

The **Site 1** complex pre-dates 60 years of age and is by implication formally protected under the NHRA 1999. Inferred continued use of the site over a period of more than 100 years in association with changing architectural styles and possible in tact midden material are further important site characteristics. 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 1 area be fenced with a clearly visible fence and at least one access gate.
2. The fenced / conservation area should include all identified structures, including the gravesite as a single unit. Recommended conservation demarcations as displayed on the map (blue line) would allow for a minimum of an 8m buffer zone and can be summarized as:
  - A - S29°36'03.8"; E26°40'07.8"
  - B - S29°36'07.6"; E26°40'12.1"
  - C - S29°36'10.1"; E26°40'09.1"
  - D - S29°36'06.2"; E26°40'04.9"
3. Conservation measures should be in place prior to commencement of development.

**OR**

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

1. Archaeological excavation at structures and midden areas and relocation of the grave under a SAHRA *Excavation Permit* issued to an ASAPA accredited CRM archaeologist.
2. SAHRA minimum standards for the public participation and relocation process relating to grave sites should be complied with.
3. Phase 2 Archaeological Mitigation should precede or at minimum coincide with the development phase of the project.





Figure 16: *General view of Site 1*



Figure 20: *Stone wall remains close to S1-3*



Figure 17: *Remains of the S1-1 residential structure*



Figure 21: *Remains of the S1-4 cattle ramp*



Figure 18: *Remains of the S1-2 residential structure*



Figure 22: *The Historic Period S1-G grave*



Figure 19: *Remains of the S1-3 residential structure*



Figure 23: *Close-up of the gravesite*

2.4.2) Site 2:  $S29^{\circ}35'52.3''$ ;  $E26^{\circ}40'52.3''$

- Historical Period (kraal / workers residences / grave?)



Figure 24: Spatial setting of Site 2

Site 2, situated in the north western (NW) part of the development area and roughly between  $S29^{\circ}35'51.4''$  –  $S29^{\circ}35'53.0''$  and  $E26^{\circ}40'14.6''$  –  $E26^{\circ}40'16.0''$ , is characterized primarily by a change in vegetation; low vegetation in comparison with the immediate surrounds. No artefacts were uncovered from the surface. Surface features included a single stone feature (S2-1) that may be indicative of a traditional grave and another stacked stone feature (S2-2) interpreted as a more recent demarcation and not of heritage significance. The change in vegetation is indicative of former anthropic use of the landscape. However, in the absence of any related artefacts only assumptions relating to the origin thereof can at this point in time be made:

1. That the area represents a stock enclosure (kraal) area associated with site 1.
2. That the area represents a later stock enclosure and perhaps habitation units associated with much later indigenous use of the environment, but inferred to predate for example the feature recorded in Figure 11. Should feature S2-1 in fact be a grave it is assumed that the gravesite would be associated with such a scenario.

GPS localities associated with the identified features can be described as:

1. S2-1 –  $S29^{\circ}35'52.1''$ ;  $E26^{\circ}40'15.2''$
2. S2-2 –  $S29^{\circ}35'52.5''$ ;  $E26^{\circ}40'15.0''$

Without sub-surface inspection / testing it would be impossible to assign a date to Site 2, implying that at present it is not possible to with surety comment on the legislative protection status of the site.





### **SIGNIFICANCE RATING & RECOMMENDATIONS:**

The date of origin of **Site 2** remains unknown and with the lack of surface artefacts it is impossible to assign a cultural affiliation to the site. Feature S2-1 may represent a grave, indicative of a heritage significance as described in the NHRA 1999. The site is thus preliminary assigned a **SAHRA Low Significance** and a **Generally Protected C** field rating. **It is recommended that the site be either conserved or that development at the site coincide with an archaeological monitoring and if necessary sampling project.**

#### **Minimum recommended conservation measures includes:**

1. That the Site 2 area be fenced with a clearly visible fence and one access gate with a minimum 5m buffer zone surrounding the site. The developer should ensure no development impact within the conservation zone.
2. Conservation measures should be in place prior to commencement of development.

**OR**

#### **Minimum recommended archaeological monitoring and sampling:**

1. On-site archaeological monitoring at the time of (sub-surface) development impact at the Site 2 locality.



**Figure 25:** *General view of Site 2*



**Figure 27:** *Close-up of the S2-1 stone feature (grave?)*



**Figure 26:** *View of the S2-1 stone feature (grave?)*



**Figure 28:** *View of the S2-2 stacked stone feature, inferred to be a contemporary demarcation only*

2.4.3) Site 3: S29°35'50.9"; E26°40'29.2"

- Historical Period / Contemporary (stock related activities)



Figure 29: Spatial setting of Site 3

Site 3 is located in the northern (N) part of the study site and on the southern (S) foot of the hill characterizing the part of the landscape. The site comprises of a rectangular approximate 1x1.5m surface stone outline demarcation. The feature is not associated with any other features or artefacts. The feature is inferred to relate to stock management, particularly calf attendance, and may be associated with the historical use of the landscape as exemplified by Site 1 or more probably with much more recent indigenous stock management but predating practices as evidenced by Figure 8.



#### SIGNIFICANCE RATING & RECOMMENDATIONS:

The date of origin of **Site 3** remains unknown; the site may be of historical or contemporary association. The site is assigned a **SAHRA Low Significance** and a **Generally Protected C** field rating. **It is recommended that the site be destroyed in lieu of the development without the developer having to apply for a SAHRA Site Destruction Permit.**



Figure 30: General view of Site 3



Figure 31: Close-up of the Site 3 feature



2.4.4) Site 4:  $S29^{\circ}36'05.3''$ ;  $E26^{\circ}40'40.4''$

- *Historical Period / Contemporary (property fence)*



Figure 32: Spatial setting of Site 4

Site 4 is located along the south eastern (SE) border of the proposed study site and comprises of a number of sand stone fence posts situated roughly between A ( $S29^{\circ}36'07.3''$ ;  $E26^{\circ}40'38.7''$ ) and B ( $S29^{\circ}36'02.4''$ ;  $E26^{\circ}40'43.0''$ ). Sand stone fence posts, more than often of a Historical Period origin, but where fence lines coincide with a continued contemporary use, is a relatively common feature on the eastern Free State landscape. The Site 4 Historical Period fence posts are associated with Site 1.



#### SIGNIFICANCE RATING & RECOMMENDATIONS:

Site 4 is inferred to date to the Historical Period. The site is assigned a **SAHRA Low Significance** and a **Generally Protected C** field rating. **It is recommended that the site be destroyed in lieu of the development without the developer having to apply for a SAHRA Site Destruction Permit.**



Figure 33: Site 4 fence posts



Figure 34: General view of Site 4

2.4.5) Site 5:  $S29^{\circ}36'05.2''$ ;  $E26^{\circ}40'35.7''$

- *Historical Period / Contemporary (stock related activities)*

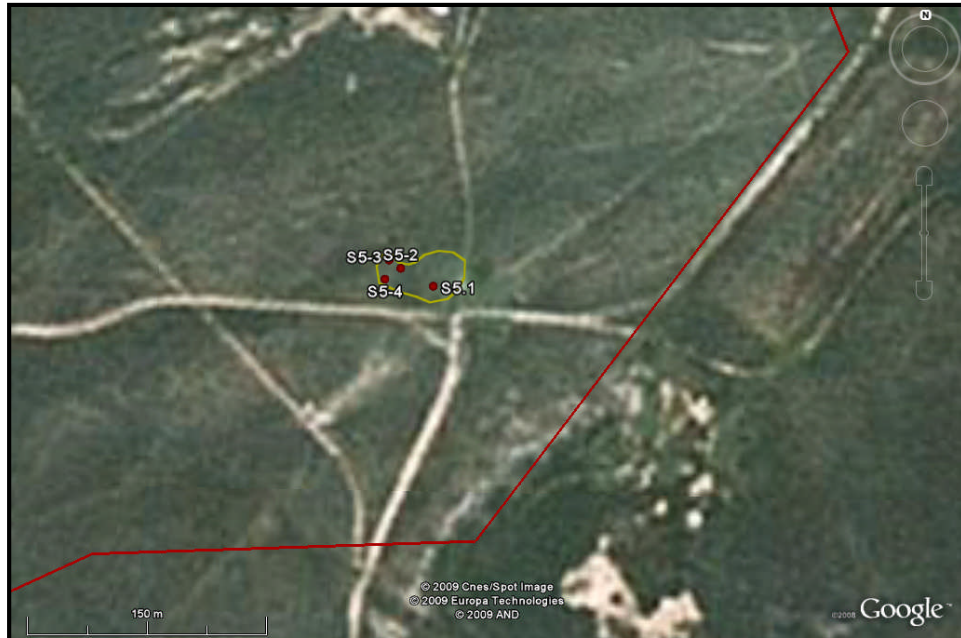


Figure 35: *Spatial setting of Site 5*

Site 5 is located in the south eastern (SE) part of the study site and roughly between  $S29^{\circ}36'04.5''$  –  $S29^{\circ}36'05.7''$  and  $E26^{\circ}40'34.6''$  –  $E26^{\circ}40'36.8''$ . The site is characterized by a change in vegetation displaying much lower vegetation that the surrounds. The change in vegetation is indicative of former anthropic use of the area, and may represent an earlier stock enclosure (kraal) in appearance very similar to Site 2. Surface features include 4 rectangular surface stone outlines (S5-1, S5-2, S5-3 and S5-4) of approximately 1x1.5m in size each, associated more particularly with calf management within the kraal. Localities of the stone features can be summarized as:

1. S5-1 –  $S29^{\circ}36'05.3''$ ;  $E26^{\circ}40'36.0''$
2. S5-2 –  $S29^{\circ}36'04.9''$ ;  $E26^{\circ}40'35.2''$
3. S5-3 –  $S29^{\circ}36'04.8''$ ;  $E26^{\circ}40'34.9''$
4. S5-4 –  $S29^{\circ}36'05.2''$ ;  $E26^{\circ}40'34.8''$

The 4 stone features are very similar in appearance to the Site 3 feature. The site may be related with historic use of the landscape but is again more closely associated with more recent indigenous stock management but predating practices as evidenced by Figure 8.

Cultural overlay is evidenced by the scatter of metal and tin rubble on site and an approximate 2x0.5m feature with a metal and cement marker associated with the sub-surface water pipe infrastructure on the property.



**SIGNIFICANCE RATING & RECOMMENDATIONS:**

The date of origin of **Site 5** remains unknown; the site may be of historical or contemporary association. The site is assigned a **SAHRA Low Significance** and a **Generally Protected C** field rating. **It is recommended that the site be destroyed *in lieu* of the development without the developer having to apply for a SAHRA Site Destruction Permit.**



Figure 36: Feature S5-1



Figure 38: Feature S5-4



Figure 37: Feature S5-3



Figure 39: Water pipe related evidence on site



## 2.5) *Conclusion and Recommendations*

Surface assessment of the approximate 65ha study site to accommodate the proposed 44ha Morojaneng Ext 8 Residential and associated linear development, located adjacent to the existing Morojaneng residential area on a portion of the property 'Dew Five' near Dewetsdorp, Free State, yielded 5 archaeological and cultural heritage sites. Site 1 is located immediately adjacent to the proposed development area and will, due to proximity be indirectly impacted on by the development. Sites 2, 3, 4 and 5 are located within the development area and will be directly impacted on by the proposed development. All identified cultural heritage sites can be assigned to the Historical or Historical / contemporary Period.



### *Recommendations:*

It is recommended that, with reference to cultural heritage compliance as per the requirements of the NHRA 1999, the proposed Morojaneng Ext 8 Residential Development proceeds as applied provided the developer complies with the following requirements:

1. Of the identified resources **Site 1** (S29°36'07.4"; E26°40'08.7") is the most significant. The site is located immediately adjacent to the proposed development area. The site comprises of a Historical Period farmstead with 3 identified residential structures, a cattle ramp and a grave. Extremely low density midden material are directly associated with the surface structures. Site 1 is ascribed a SAHRA *Medium Significance* and a *Generally Protected B* field rating. It is recommended that the site be either formally conserved or mitigated (Phase 2 Archaeological excavations) prior to development.
2. **Site 2** (S29°35'52.3"; E26°40'52.3") is inferred to constitute a Historical Period cattle enclosure (kraal) / workers residences and is most probably associated with Site 1. Two surface features were identified at the site of which feature S2-1 may be a grave. Site 2 is ascribed a SAHRA *Low Significance* and *Generally Protected C* field rating. It is recommended that the site be either conserved (no development in the demarcated area) or that development coincide with an archaeological monitoring and if necessary sampling project (on-site archaeological monitoring at the time of sub-surface development / construction impact at the site).
3. **Site 3** (S29°35'50.9"; E26°40'29.2") comprises of a small rectangular surface stone feature of a Historical Period or more contemporary origin, associated with stock management, particularly calf attendance. Site 3 is assigned a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is recommended that the site be destroyed *in lieu* of the development (site destruction), without the developer having to apply for a SAHRA *Site Destruction Permit*.
4. **Site 4** (S29°36'05.3"; E26°40'40.4") represents a portion of the former property fence. The site is inferred to be of Historical origin and associated with Site 1. Historical Period fence posts are a relatively common feature on the eastern Free State landscape and often, where relevant still in use. Site 4 is ascribed a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is recommended that the site be destroyed *in lieu* of the development (site destruction) without the developer having to apply for a SAHRA *Site Destruction Permit*.
5. **Site 5** (S29°36'05.2"; E26°40'35.7") demarcates the locality of a Historical Period or more contemporary stock enclosure. Four cultural heritage related surface features all comprise of rectangular surface stone outlines. Cultural overlay is evidenced by contemporary rubble on site and surface disturbance directly associated with the sub-surface water infrastructure on the property. Site 5 is ascribed a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is



recommended that the site be destroyed *in lieu* of the development (site destruction) without the developer having to apply for a SAHRA Site Destruction Permit.

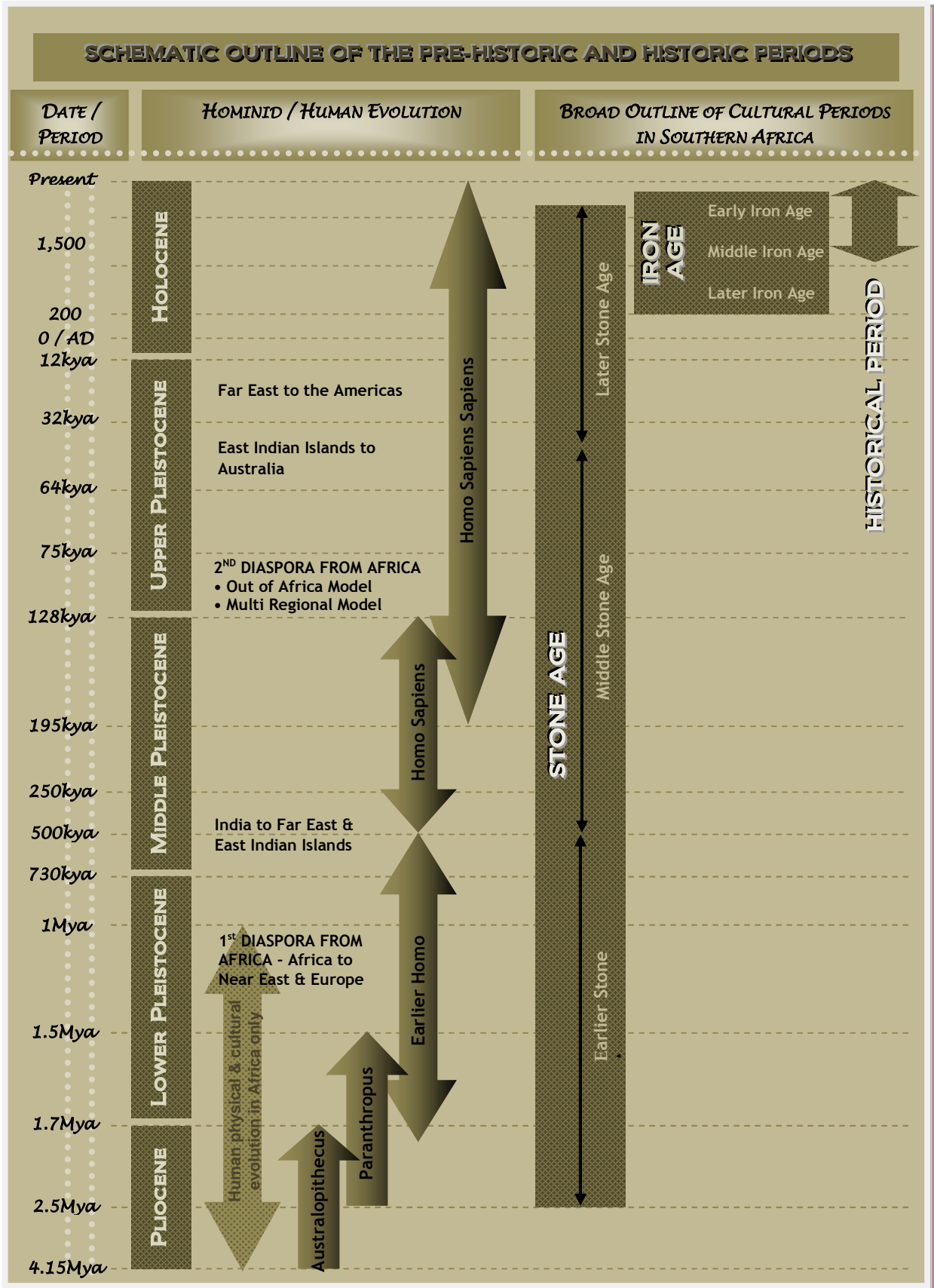
MOROJANENG EXT 8 RESIDENTIAL DEVELOPMENT, DEWETSORP, FREE STATE, SOUTH AFRICA					
PORTION OF 'DEW FIVE'					
MAP CODE	SITE	TYPE / PERIOD	DESCRIPTION	CO-ORDINATES	PRELIMINARY RECOMMENDATIONS
<b>DEVELOPMENT AREA</b>					
1	-	-	-	S29°35'41.6"; E26°40'26.9"	N/A
2	-	-	-	S29°35'39.7"; E26°40'37.9"	N/A
3	-	-	-	S29°36'00.1"; E26°40'46.3"	N/A
4	-	-	-	S29°36'10.6"; E26°40'37.2"	N/A
5	-	-	-	S29°36'10.9"; E26°40'28.2"	N/A
6	-	-	-	S29°36'13.5"; E26°40'22.6"	N/A
7	-	-	-	S29°36'05.9"; E26°40'12.2"	N/A
8	-	-	-	S29°36'04.7"; E26°40'06.8"	N/A
9	-	-	-	S29°35'58.8"; E26°40'00.9"	N/A
10	-	-	-	S29°35'57.6"; E26°40'04.3"	N/A
11	-	-	-	S29°35'51.3"; E26°40'10.4"	N/A
12	-	-	-	S29°35'48.9"; E26°40'14.7"	N/A
13	-	-	-	S29°35'49.9"; E26°40'21.5"	N/A
14	-	-	-	S29°35'48.6"; E26°40'25.6"	N/A
15	-	-	-	S29°35'44.9"; E26°40'27.4"	N/A
<b>Five (5) archaeological and cultural heritage sites were discovered during the Phase 1 AIA located either within or in the immediate vicinity of the study site. All located sites will be directly or indirectly impacted on by the proposed development.</b>					
<b>Site 1</b>	Site 1	Historical	Farmstead	S29°36'07.4"; E26°40'08.7"	<b>Formal Conservation:</b>
S1-1	Feature S1-1	-	Residential	S29°36'08.0"; E26°40'07.3"	Site to be fenced with one access gate prior to development
S1-2	Feature S1-2	-	Residential	S29°36'05.3"; E26°40'06.5"	
S1-3	Feature S1-3	-	Residential	S29°36'06.8"; E26°40'08.0"	<b>OR</b>
S1-4	Feature S1-4	-	Cattle ramp	S29°36'09.1"; E26°40'09.1"	<b>Phase 2 Archaeological Mitigation:</b>
S1-G	Feature S1-G	-	Grave	S29°36'07.1"; E26°40'10.9"	Phase 2 AM excavations prior to / coinciding with development
<b>Site 2</b>	Site 2	Historical	Kraal, residences & grave(?)	S29°35'52.3"; E26°40'52.3"	<b>Formal Conservation:</b>
S2-1	Feature S2-1	-	Grave (?)	S29°35'52.1"; E26°40'15.2"	Site to be fenced with one access gate prior to development
S2-2	Feature S2-2	-	Marker (?)	S29°35'52.5"; E26°40'15.0"	<b>OR</b>
					<b>Archaeological Monitoring:</b>
					On site archaeological monitoring at the time of development
<b>Site 3</b>	Site 3	Historical / Contemporary	Stock related	S29°35'50.9"; E26°40'29.2"	<b>Site Destruction:</b>
Site 4	Site 4	Historical	Fence	S29°36'05.3"; E26°40'40.4"	Without a SAHRA Site Destruction Permit
Site 5	Site 5	Historical / Contemporary	Stock related	S29°36'05.2"; E26°40'35.7"	<b>Site Destruction:</b>
S5-1	Feature S5-1	-	Stock related	S29°36'05.3"; E26°40'36.0"	Without a SAHRA Site Destruction Permit
S5-2	Feature S5-2	-	Stock related	S29°36'04.9"; E26°40'35.2"	
S5-3	Feature S5-3	-	Stock related	S29°36'04.8"; E26°40'34.9"	
S5-4	Feature S5-4	-	Stock related	S29°36'05.2"; E26°40'34.8"	

**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;
  - e) any change to the natural or existing condition or topography of land; and
  - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- 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;
  - g) 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 trace;
- 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*

- 1) 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;
  - c) historical settlements and townscapes;
  - d) landscapes and natural features of cultural significance;
  - e) geological sites of scientific or cultural importance
  - f) archaeological and palaeontological sites;
  - g) graves and burial grounds, including –
    - i. ancestral graves;
    - ii. royal graves and graves of traditional leaders;
    - iii. graves of victims of conflict
    - iv. graves of individuals designated by the Minister by notice in the Gazette;
    - v. historical graves and cemeteries; and
    - vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
  - h) sites of significance relating to the history of slavery in South Africa;
  - i) movable objects, including –
    - i. objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
    - ii. objects to which oral traditions are attached or which are associated with living heritage;
    - iii. ethnographic art and objects;
    - iv. military objects;
    - v. objects of decorative or fine art;
    - vi. objects of scientific or technological interest; and
    - vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).



## **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, PALAEOLOGY 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;
  - 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 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;
  - b) 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.
- 6) 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 –
  - 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 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 –
  - a) 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-interment 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;
  - b) 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 years; or
    - iv. 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) –
  - a) 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
  - b) 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) ...
- 4) 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.
- 9) 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 –
  - a) 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;
  - b) 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.