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PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

**DRIFTSANDS COLLECTOR SEWER AUGMENTATION,  
PORT ELIZABETH (NELSON MANDELA BAY  
MUNICIPALITY), EASTERN CAPE, SOUTH AFRICA**

**DATE:** 2010-07-09

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## 1) TERMS OF REFERENCE

The project proponent, the Nelson Mandela Bay Municipality (NMBM), has appointed Stemele Bosch Africa and UWP jointly as Engineering Consultants for the proposed *Driftsands Collector Sewer Augmentation Project*, Port Elizabeth. Aurecon Environmental has been appointed as independent environmental consultant on behalf of the NMBM by Stemele Bosch Africa, to prepare the Environmental Impact Assessment (EIA) for the proposed project. ArchaeoMaps Archaeological Consultancy has been appointed by Aurecon Environmental to conduct the Phase 1 Archaeological Impact Assessment (AIA) as specialist sub-section to the EIA.

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

**PURPOSE OF THE DEVELOPMENT:** The proposed *Driftsands Collector Sewer Augmentation Project* will entail the construction / upgrade of approximately 4.2km of the Driftsands collector sewer line route as well as the *in situ* upgrade of the Driftsands WWTW. At present 3 catchment areas contribute to the Driftsands collector sewer, namely the Upper Baakens, Lower Baakens and Driftsands catchments. Land-use and contributing erven associated with population increase and residential and commercial development results in the amassed effluent that needs to be transported and managed by the sewer and WWTW. Increasing need and 2020 estimates resulted in preliminary investigation and the current proposal to address envisaged capacity (SBA 2009).

**PROJECT LOCALITY:** The NMBM comprises part of the Cacadu District Municipality of the Eastern Cape. The proposed *Driftsands Collector Sewer Augmentation Project* is located in the western quadrant of the Municipal area and will be concentrated in the Walmer area of Port Elizabeth, between the William Moffat Expressway / Buffelsfontein Road and the Driftsands Waste Water Treatment Works (WWTW) (SBA 2009).

**PROJECT DETAILS:** The proposed *Driftsands Collector Sewer Augmentation Project* will commence at the corner of Circular Drive and Willow Road where the rising main from the Woodlands Pump Station discharges and will terminate at the Driftsands WWTW. The project will entail the relaying of more or less 4.2km of collector sewer and / or the lining thereof and the replacement of the siphon with a gravity sewer main. Technical specifications will only be confirmed after a full investigation of the condition of both the pipelines and manholes (SBA 2009).

The new proposed line route will closely follow the existing line route, at all instances being placed literally within the 'impact' corridor thereof. The existing sewer was constructed in 1983. It is a gravity sewer, implying that realignment of the line route will of necessity entail a new project and not a technological upgrade of the existing concept. The importance of gravity in the proposed project denotes the main reason why no development alternatives have been considered to date.

The project is proposed to be implemented in 3 phases (SBA 2009):

1. *Phase 1* – Installation of the 1200mm parallel pipe next to the existing sewer pipe OR replacement of the existing sewer pipe with a 1500mm pipe.
2. *Phase 2* – replacement of the siphon with 1200mm gravity outfall sewer pipe (1500 to 1800mm), and

3. *Phase 3* – Inserting a liner into the existing pipe under dry conditions as the effluent will be bypassed into the line constructed in Phase 1.

In addition to the phased installation / upgrade of the line route the Driftsands WWTW will be subjected to *in situ* upgrading, ensuring that new effluent estimates can be managed.

**DEVELOPMENT IMPACT:** Development impact can be described as localized but total; implying the loss of all surface and sub-surface heritage resources in demarcated areas of development impact and the immediate surrounds.

1. The line route development will not deviate from the existing line by more than approximately 6m, implying that it will be constructed within the already impacted on development corridor. An access road serves to facilitate maintenance and management of the existing route towards the south, the urban road network provides access to the central and northern portions of the existing development.
2. *In situ* upgrade of the existing Driftsands WWTW will be restricted to already impacted portions of the WWTW terrain.



**Figure 1:** Port Elizabeth, Eastern Cape, South Africa

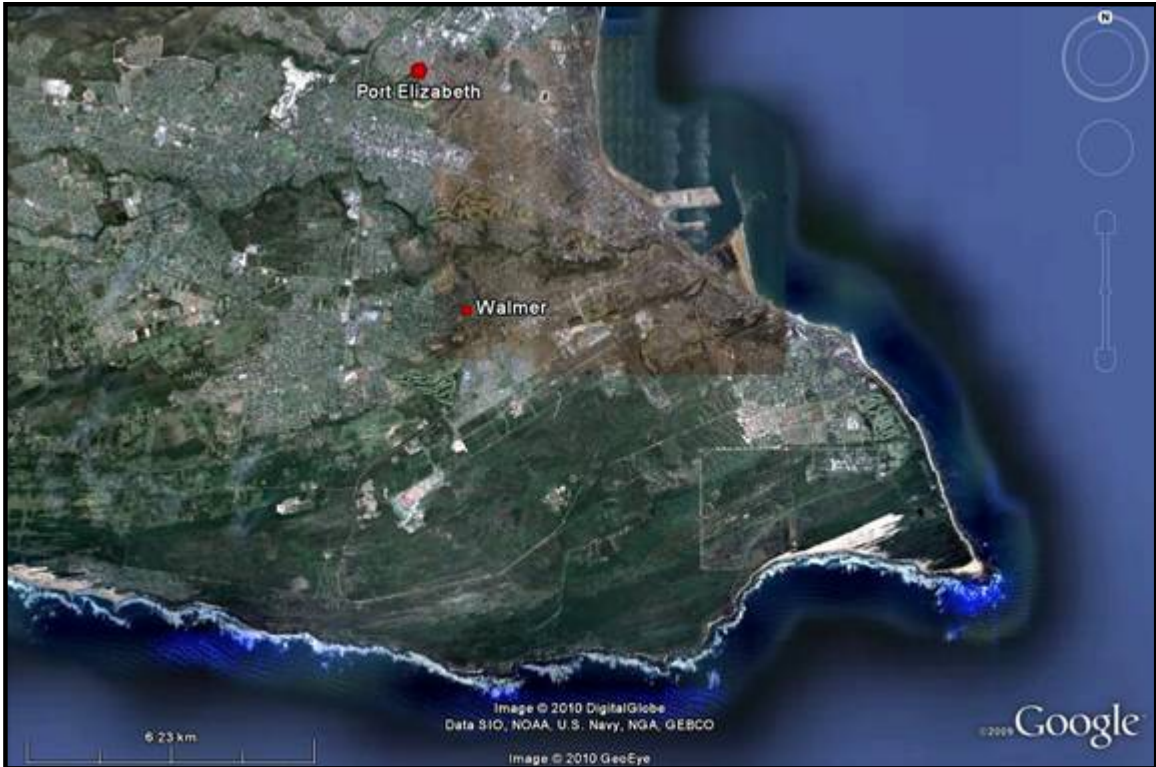


Figure 2: Walmer, Port Elizabeth, Eastern Cape, South Africa

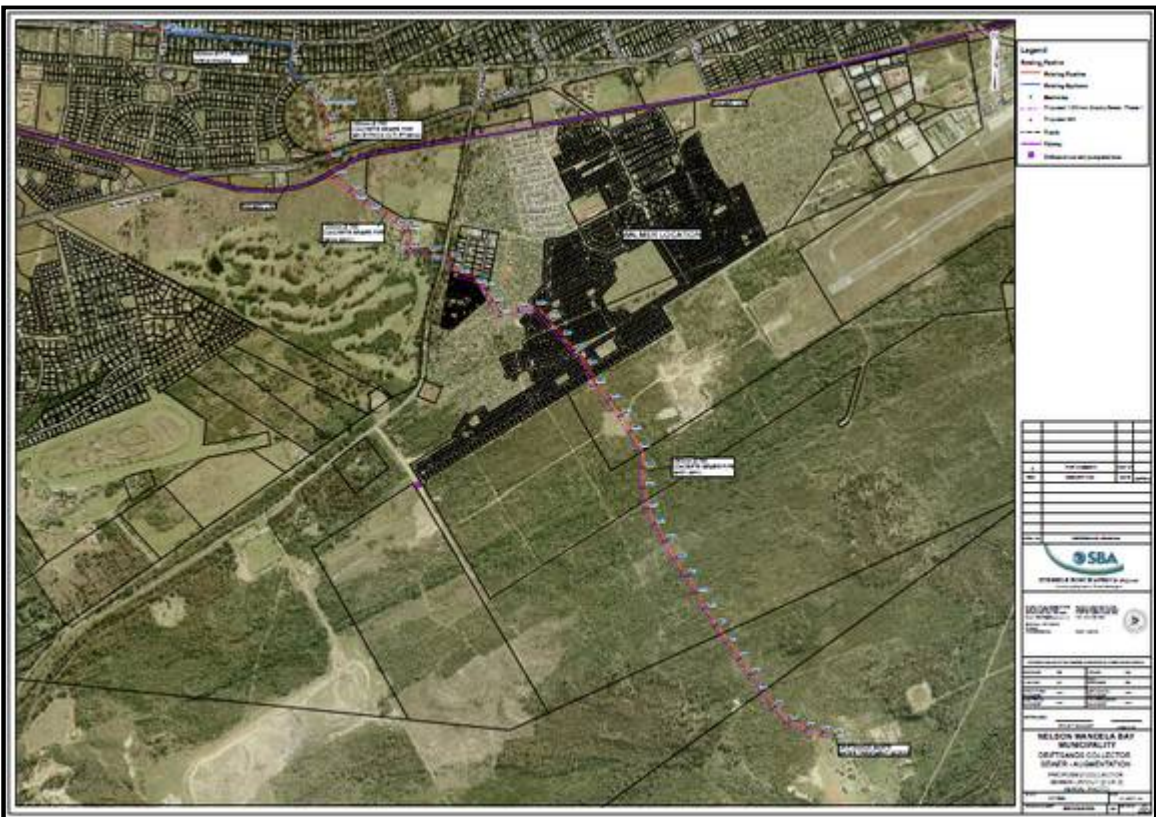


Figure 3: Driftsands Collector Sewer Augmentation, Walmer, Port Elizabeth

## **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 comprises one of three parts of the Heritage Impact Assessment (HIA) for purposes of development compliance to requirements set out in the NHRA 1999, being:

- 1) The Palaeontological Impact Assessment (PIA);
- 2) The Archaeological Impact Assessment (AIA); and
- 3) The Socio-cultural Impact Assessment (SCIA).

The Phase 1 AIA was requested as specialist sub-section to the HIA for the developments' Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) in compliance with requirements of the National Environmental Management Act, No 107 of 1998 (NEMA 1998), the NEMA 2<sup>nd</sup> Amendment Act, No 62 of 2008 (NEMA 2008) and the NEMA Regulations (2006), and the NHRA 1999 and NHRA Regulations (2000 & 2002).

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, 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.
- No socio-cultural consultation was conducted with the aim to identify intangible heritage resources or sites of cultural significance associated with oral histories. Comments on potential socio-cultural aspects are included in the AIA section of the report.

### **2.2) *Methodology***

The Phase 1 AIA was conducted over a 1 day period (2010-06-08) by one archaeologist. The assessment was done by foot and LVD, 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 K20D 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

### **2.3) Coverage and Gap Analysis**

The Phase 1 AIA was focused on the proposed development area with an approximate 15m development corridor for line routes. Assessment was however extended particularly in the southern part of the development area, where good visibility allowed a much wider interpretation. Throughout the Walmer location visibility was largely restricted by contemporary development. Across the general area of Greenshields Park and Walmer, access proved to be very good, with visibility and assessment corridors the result of contemporary land use, being very good in areas of ‘open-space’ development but more restricted throughout areas where urban development characterize the current line routing.

### **2.4) Phase 1 AIA Assessment findings**

For purposes of this report the Phase 1 AIA findings are described in 3 sections according to proposed development, namely:

- The Driftsands WWTW area and the line route running from co-ordinate 1 to between co-ordinates 3 and 4 where the line route intersects the Walmer township (The Driftsands WWTW and Driftsands area);
- The Walmer Township, located roughly between co-ordinates 3 and 4 and co-ordinates 5 and 6 (Walmer Township); and
- The line route portion running through the suburb of Walmer (Walmer).

The Driftsands WWTW and Driftsands area proved to be, from a heritage point of view, the most sensitive. Despite the fact that no archaeological or cultural heritage resources, as defined and protected under the NHRA 1999, were identified, resources may well be expected sub-surface once development starts. Tangible evidence of known pre-historic and historic use of the area may well be revealed in time.

No archaeological or cultural heritage resources were identified during assessment of the Walmer township and Walmer areas – these areas can be described as not sensitive. However, the possibility of sub-surface resources cannot be excluded.

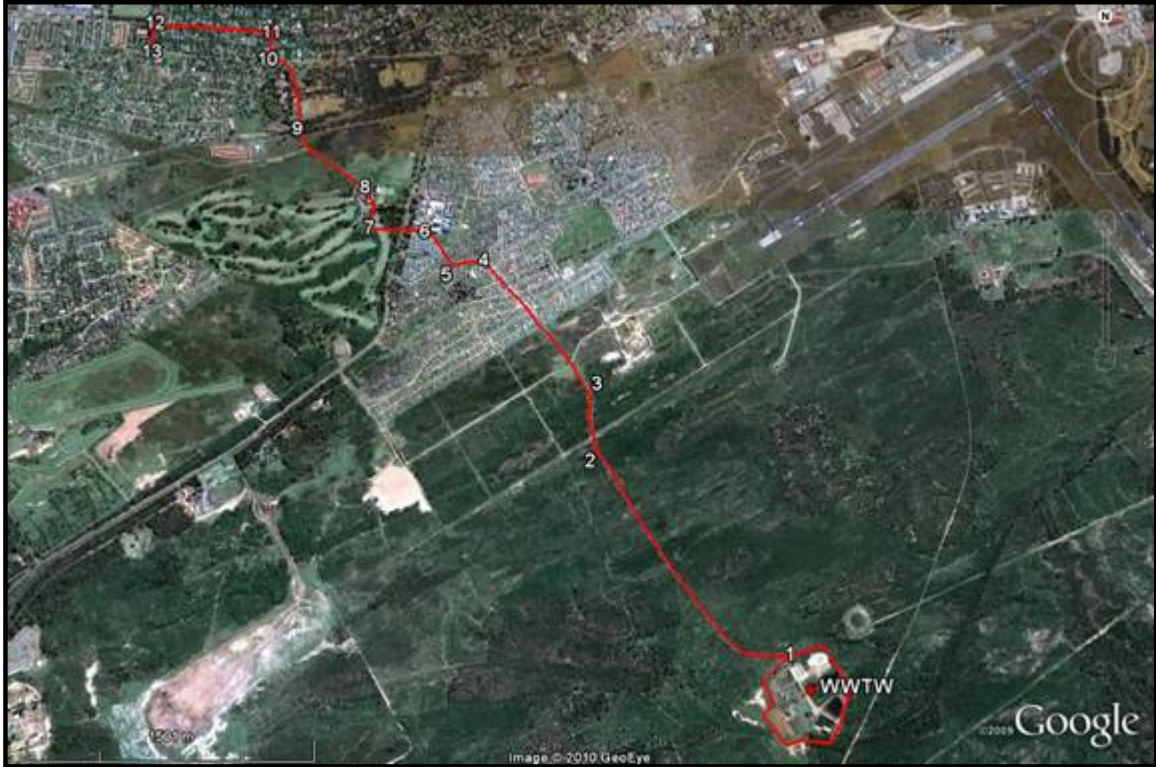


Figure 4: The Driftsands Collector Sewer Augmentation Project co-ordinates

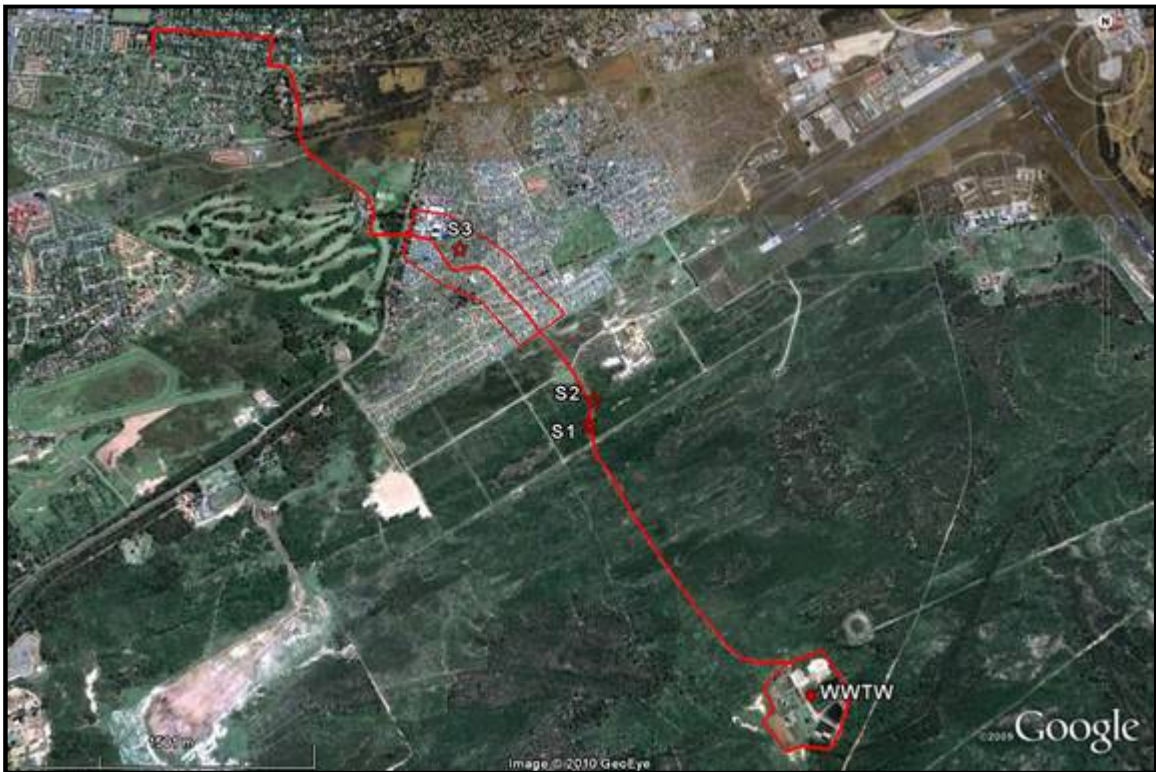


Figure 5: Phase 1 AIA findings



### 2.4.1.) THE DRIFTSANDS WWTW AND DRIFTSANDS AREA

**BRIEF INTRODUCTION TO PORT ELIZABETH:** Port Elizabeth was officially founded in 1820 to accommodate British settlers, also as a means to strengthen the border region between the Cape Colony and the Xhosa. The general Port Elizabeth area formed part of the Cape Colony and its turbulent history from the time of its founding in 1652 to the formation of the Union of South Africa in 1910 (<http://www.southafrica.travelnet/eastcape.epelizab.htm>).

Prior to formal Colonial period settlement the general area around today's Algoa Bay was settled by hunting and gathering people ancestral to the San, at least 100,000 years ago. A little over 2,000 years ago, agriculturalist populations ancestral to the Xhosa migrated into the region from the north, eventually displacing or assimilating the region's indigenous population (<http://en.wikipedia.org/wiki/PortElizabeth>).

The first European to have visited the area was the Portuguese explorer Bartolomeu Dias, who landed on St Croix Island in Algoa Bay in 1488. Shortly thereafter, in 1497, Vasco da Gama noted the nearby Bird Island. But for centuries thereafter the area was simply known as 'a landing place with fresh water' to seafarers (<http://en.wikipedia.org/wiki/PortElizabeth>).

In 1799 (the time of the first British occupation of the Colony, during the Napoleonic Wars), Fort Frederick was built to protect Britons against a possible landing of French troops and to gain better control over rebellious Boers from the hinterland (<http://en.wikipedia.org/wiki/PortElizabeth>; <http://www.southafrica.travelnet/eastcape.epelizab.htm>). From 1814 to 1821 the Strandfontein farm, today known as the Summerstrand suburb, was in possession of Piet Retief, who later became a Voortrekker leader, killed in 1837 by the Zulu king Dingane. After Retief the Strandfontein farm was owned by Frederik Korsten. In 1820 a party of 4,000 British settlers arrived by sea, encouraged by the government of the Cape Colony and the devastating living circumstances in England at the time. The settlement was encouraged by the Cape Colony mainly to strengthen the border region between the Cape Colony and the Xhosa people. At this time the seaport town was founded by Sir Rufane Shaw Donkin, Acting Governor of the Cape Colony, who named it after his late wife, Elizabeth. The town expanded, building a diverse community comprising European, Cape Malay and other immigrants, and particularly rapidly so after 1873 when the railway to Kimberley was built. In 1861 the town was granted the status of autonomous municipality (<http://en.wikipedia.org/wiki/PortElizabeth>).

During the Second Boer War, the port of Port Elizabeth formed an important transit point for soldiers, horses and materials headed to the front by railway. Despite the fact that the city itself did not see any conflict, many refugees from the war flocked into the city; including Boer women and children interned by the British in a concentration camp. Following the war, the Horse Memorial was erected to honor the tens of thousands of horses and mules that died during the conflict (<http://en.wikipedia.org/wiki/PortElizabeth>).

Outcomes of the apartheid regime were not lost on Port Elizabeth; forced relocation of the non-white populations under the Group Areas Act began in 1962, causing various townships to rise. The whole of the South End district, being a prime real estate location, was forcibly depopulated and flattened in 1965; relocations continued until 1975. In 1977 Steve Biko, renowned black anti-apartheid activist, was interrogated and tortured by the security police in Port Elizabeth, before being transported to Pretoria where he died (<http://en.wikipedia.org/wiki/PortElizabeth>).

**THE DRIFTSANDS WWTW AND DRIFTSANDS AREA:**

- **DRIFTSANDS WWTW** - The Driftsands WWTW area is located at S34°00'53.7"; E25°36'11.4" and comprises an already developed approximate 500x400m area. **No archaeological or cultural heritage resources as defined and protected under the NHRA 1999 were identified on the property.** *In situ* upgrades at the treatment works will not impact negatively on any heritage resources.



Figure 6: View of the existing Driftsands WWTW - 1



Figure 7: View of the existing Driftsands WWTW - 2

- **DRIFTSANDS AREA** – The line route portion through the Driftsands area commences at the WWTW at co-ordinate 1 and ends between co-ordinates 3 and 4. Two resources were identified during the assessment. However neither of these comprise of archaeological or cultural heritage resources as defined and protected under the NHRA 1999. The resources can briefly be described as:

i. **S1 - Non-anthropoc Shell Midden (S34°00'07.7"; E25°35'25.4")**

Site S1 was encountered more or less 7-10m to the west of the existing line route and the service road immediately adjacent thereto in a section exposed when linear development cut through the transecting dune. Two shell middens were found *in situ* section, both being between 4-6m in width and approximately 50-70cm in depth. Middens comprised solely of small *Achatina sp.* type shells, without any anthropic material associated therewith. The site by implication does not comprise of an archaeological or cultural heritage site as defined and protected by the NHRA 1999. The proposed development will closely follow the existing line route impact corridor, for technological, management and maintenance purposes: Exposed non-anthropoc shell midden deposits will not be impacted on. Dune environments are as a norm environmentally sensitive, based thereon no formal conservation is recommended. The developer may consider a temporary demarcation (pole and plastic danger tape) at the bottom of the dune to demarcate the area a no-go zone during the construction phase.

ii. **S2 – Contemporary Initiation Structure (S34°00'03.3"; E25°35'26.9")**

Site S2 is situated approximately 30m to the east of the proposed line route. Site S2 constitutes a typical contemporary Xhosa initiation / circumcision hut. Similar type structures are sparsely scattered across the general open landscape, but remains non-stationary contemporary heritage resources. The temporary, light, sail and pole structures serves present day Xhosa cultural concerns, in itself tangible evidence of continuing, albeit adapted, Iron Age tradition, and with the structures itself thus having an intangible rather than a tangible cultural significance. The temporary structures and transient positioning thereof on the landscape does not warrant formal conservation. Despite the fact that these type of structures are not formally protected under the NHRA 1999, it is recommended that should similar type sites be encountered during the course of construction, impact on them be avoided or relocation thereof negotiated with practitioners prior to impact.

**Despite the fact that no archaeological or cultural heritage resources, as defined and protected under the NHRA 1999 were encountered during the course of the Phase 1 AIA assessment, the general Driftsands area remains archaeologically quite sensitive.** A Later Stone Age (LSA) grave with associated artefactual remains was encountered sub-surfacely during the 1983 development. The site was mitigated by the Archaeological Department of the Albany Museum, Grahamstown (Pers. Comm.: SBA Personnel). In addition, attempts to rehabilitate and stabilize the Driftsands area dates to Historic times – the general area is today characterized by alien plants imported primarily to stabilize the dunes. The method was complimented by introducing grinded glass pieces to the sand to accelerate vegetation (Pers. Comm.: SBA and Aurecon Personnel). Historic Period glass bottles were finely grinded; remains thereof may well be encountered, including large glass splinters and complete bottles. Collections of Historic Period glass in the vicinity may thus well be interpreted as primarily *ex-situ* deposits. The area was also used as a horse cemetery, where old and badly injured horses were put down during the Second

Boer War (Pers. Comm.: SBA Personnel). Historic Period artefacts and regalia may well be expected to accompany some of the horse 'graves'. Prior to rehabilitation the Driftsands area was renowned as a harsh, callous and inhospitable landscape, with many reputed to have gone lost in the area; a reality that may well extend to pre-historic times.

The above serves to emphasize the general heritage sensitivity of the Driftsands area; with a range of temporal and cultural type sites having been reported to have been identified sub-surfacely in the area or can well be expected. Proximity of the central and northern part of the line route does not exclude the possibility that similar type sites may be encountered there, despite more contemporary development across these areas.



**Figure 8:** General view of the S1 non-anthropogenic shell midden



**Figure 9:** Close-up of the S1 shell midden



**Figure 10:** View of the S2 temporary initiation / circumcision structure



**Figure 11:** General view of the proposed line route development area through the Driftsands area - 1



**Figure 12:** General view of the proposed line route development area through the Driftsands area - 1

#### 2.4.2.) WALMER TOWNSHIP

**WALMER TOWNSHIP:** The Walmer Township portion of the line route starts between co-ordinates 3 and 4 and ends between co-ordinates 6 and 7. The township started as an informal settlement shortly after the 1983 installation of the sewage infrastructure. In time it was formalized by the then municipality, but without cognizance to management and maintenance requirements of the route portion, aside from manholes. The Walmer Township thus established across the route portion, with formal erven and residences established thereon. With emphasis of the development on gravity it would be difficult to re-align the route through Walmer Township. Despite the fact that **no archaeological or cultural heritage resources, as defined and protected under the NHRA 1999, were identified during Phase 1 AIA assessment**, development within the township will pose primarily a Social Impact Assessment (SIA) concern, specifically regarding relocation of residents. With respect thereto the general S3 area was assessed in an attempt to accommodate slight alignment of the line route, if necessary. With regard to establishment of the township it can be concluded that none of the residences pre-dates 60 years of age. Residences are by implication not formally protected under the NHRA 1999. Heritage concerns need not be taken into account during the SIA process for relocation.



**Figure 13:** General view of the existing development at Walmer Township



**Figure 14:** General view of Walmer Township



**Figure 15:** Existing development at the location where the line route between the Driftsands area and Walmer Township will connect



**Figure 16:** General view of Walmer Township erven and residences that will be impacted on by the proposed development - 1



**Figure 17:** General view of Walmer Township erven and residences that will be impacted on by the proposed development - 2

### 2.4.3.) WALMER

**WALMER:** The Walmer portion of the line route extents from roughly between co-ordinates 6 and 7 to co-ordinate 13 and cross cuts the golf course, adjacent vacant land, the Walmer club and portions of the suburb of Walmer. **No archaeological or cultural heritage resources, as defined and protected under the NHRA 1999, were identified during assessment of the line route portion.** Visibility in general proved to be good, although radically altered vegetation at the golf course, the Walmer club and sidewalks of Walmer may well have obscured heritage resources. Assessment of the vacant land portion echoed surface anthropic sterility of the general area. Sub-surface inspection at a stream, yielding sections of approximately 1m in depth, proved to be anthropically sterile.

Evidence of Historic Period occupation of Port Elizabeth was present in the area where signage is still preserved on the sidewalks of Walmer. Signage however, does not constitute a heritage site as defined and protected under the NHRA 1999, but merely evidence of temporal depth of settlement. The Historic Period Signage, located on the sidewalk adjacent to the golf course will not be impacted on by the proposed development.



Figure 18: Historic Period signage in the vicinity of the golf course



Figure 19: General view of the development corridor through the golf course





**Figure 20:** View of the development corridor through the vacant land area



**Figure 21:** View of the development corridor through Walmer - 1



**Figure 22:** View of the development corridor through Walmer - 2

### 3) CONCLUSION AND RECOMMENDATIONS

No archaeological or cultural heritage resources, as defined and protected under the NHRA 1999, were identified during assessment of the proposed *Driftsands Collector Sewer Augmentation Project*, Port Elizabeth, including the approximate 4.2km line route development and *in situ* upgrading at the existing Driftsands WWTW site. Two heritage sites were identified, neither of which permits formal conservation as an archaeological or cultural resource. In addition the general Driftsands area proved to be a culturally sensitive zone:

1. **Site S1** (S34°00'07.7"; E25°35'25.9") comprises of 2 non-anthropogenic shell middens, composed of *Achatina* sp. type shells, both approximately 6-8m in width with depths varying between 50-70cm. The deposits were identified to the east of the proposed line route and will not be impacted on by development. Formal conservation of the site is not recommended based on the environmental sensitivity of the sand dune as primary context to the site. Temporary fencing, with pole and danger tape may be erected at the bottom of the dune to declare the dune a no-go area. (The site may well be of palaeontological significance / conservation value.)
2. **Site S2** (S34°00'03.3"; E25°35'26.9") constitutes a temporary Xhosa initiation / circumcision structure, a non-stationary contemporary cultural heritage resource. Similar type structures are sparsely scattered across the landscape. Structures are in technology and use quite transient. Presence of the site in proximity to the line route should serve as a cautionary note. Should any such structures be encountered, impacting on the development corridor, it is recommended that the developer negotiates relocation with the practitioner.
3. The general **Driftsands area** demarcates a culturally sensitive zone. Despite the fact that no archaeological or cultural heritage resources were identified during the surface assessment a variety of type sites, of pre-historic or historic archaeological value, may well be encountered sub-surfacely. Should any such resources be encountered during the course of construction, the developer should immediately cease operation in the vicinity of the find and report the site to the SAHRA APM Unit and an ASAPA accredited archaeologist.

**It is recommended that development proceeds as applied for provided the developer complies with recommendations as stated above.**

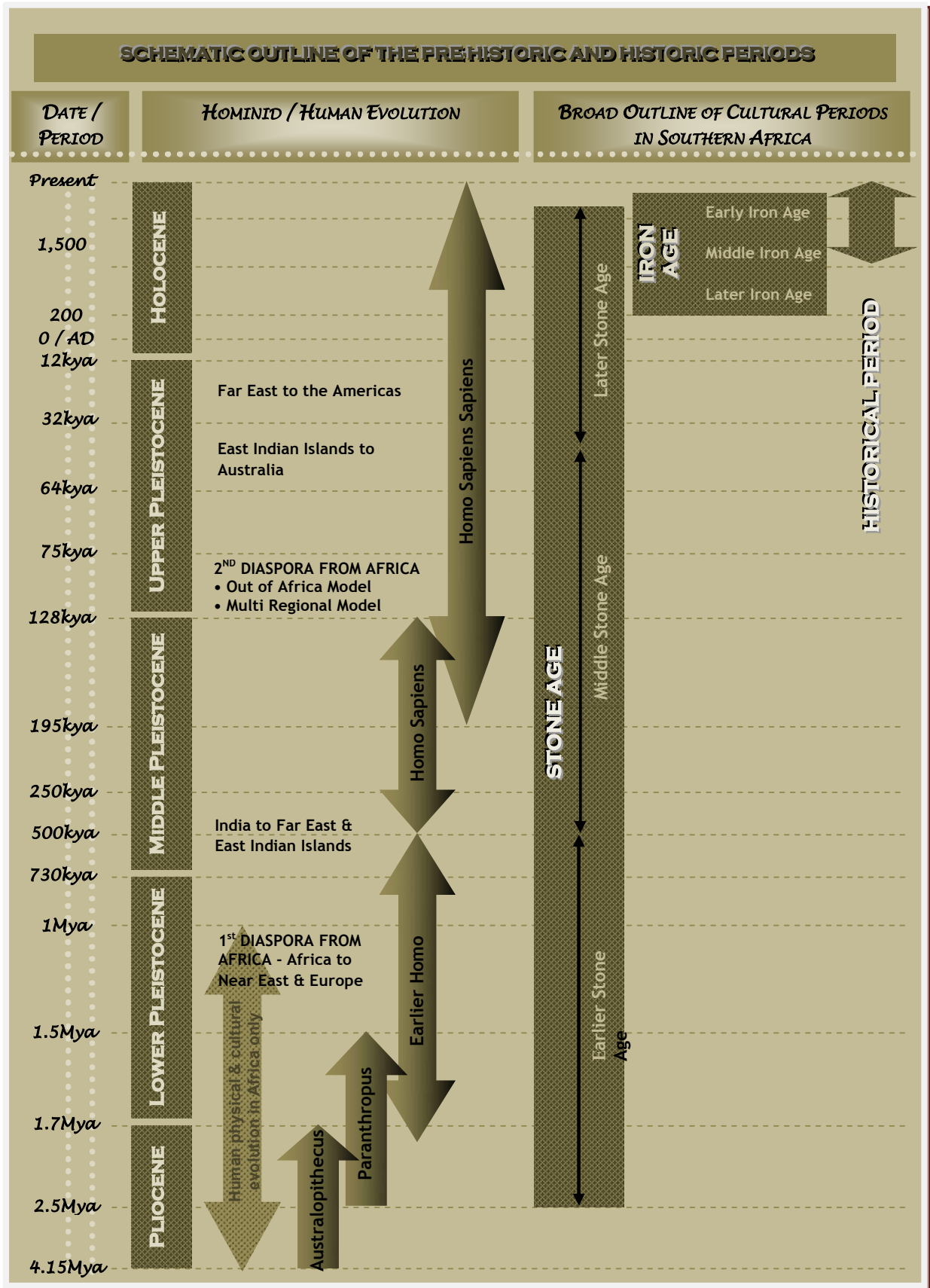
DRIFTSANDS COLLECTOR SEWER AUGMENTATION					
WALMER, PORT ELIZABETH					
MAP CODE	SITE	TYPE / PERIOD	DESCRIPTION	CO-ORDINATES	PRELIMINARY RECOMMENDATIONS
<b>DEVELOPMENT AREA</b>					
WWTW	WWTW	-	-	S34°00'53.7"; E25°36'11.4"	N/A
1	Line route	-	-	S34°00'47.8"; E25°36'07.3"	N/A
2	Line route	-	-	S34°00'12.7"; E25°35'27.5"	N/A
3	Line route	-	-	S34°00'03.7"; E25°35'26.4"	N/A
4	Line route	-	-	S33°59'39.1"; E25°35'02.9"	N/A
5	Line route	-	-	S33°59'39.5"; E25°34'56.3"	N/A
6	Line route	-	-	S33°59'33.9"; E25°34'50.4"	N/A
7	Line route	-	-	S33°59'33.2"; E25°34'38.3"	N/A
8	Line route	-	-	S33°59'25.7"; E25°34'37.2"	N/A
9	Line route	-	-	S33°59'14.8"; E25°34'22.1"	N/A
10	Line route	-	-	S33°59'01.6"; E25°34'14.9"	N/A
11	Line route	-	-	S33°58'56.3"; E25°34'15.5"	N/A
12	Line route	-	-	S33°58'54.6"; E25°33'49.7"	N/A
13	Line route	-	-	S33°59'00.1"; E25°33'49.2"	N/A
S1	Site S1	Shell midden	Non-anthropic	S34°00'07.7"; E25°35'25.9"	N/A (Conservation)
S2	Sire S2	Structure	Contemporary	S34°00'03.3"; E25°35'26.9"	N/A (Conservation)
S3	Walmer Township	-	-	S33°59'36.5"; E25°35'00.3"	N/A

**Table 2:** Development c o-ordinates and Phase 1 AIA assessment findings

**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 / ASAPA accredited CRM archaeologist.

**4) REFERENCES CITED**

1. <http://en.wikipedia.org/wiki/PortElizabeth>
2. <http://www.southafrica.travelnet/eastcape.epelizab.htm>
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*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 trances;
- 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.