A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE PROPOSED WALMER GQEBERA LOW-COST HOUSING DEVELOPMENT ON ERF 11305, WALMER, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY (NMBM), EASTERN CAPE PROVINCE.

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A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE PROPOSED WALMER GQEBERA LOW-COST HOUSING DEVELOPMENT ON ERF 11305, WALMER, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY (NMBM), EASTERN CAPE PROVINCE.

NOTE: The phase 1 archaeological impact assessment was conducted as a requirement of the National Heritage Resources Act 25 of 1999, Section 38 (1)(c)(i):

- 38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –
- (c) any development or other activity which will change the character of the site -
 - (i) exceeding 5000 m² in extent

This report follows the minimum standard guidelines required by the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) for compiling a Phase 1 Archaeological Impact Assessment (AIA).

1. EXECUTIVE SUMMARY

1.1. Purpose of the Study

The purpose of the study was to conduct a phase 1 archaeological impact assessment (AIA) for the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province. The survey was conducted to establish the range and importance of the exposed and *in situ* archaeological heritage material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimize possible damage to the archaeological heritage.

1.2. Brief Summary of Findings

The proposed area for the low-cost housing development is situated on the boundary of the generally accepted 5 km archaeologically sensitive coastal zone. However, no archaeological heritage remains or expected shell midden sites were observed within the proposed area for development. The ruins of a farmstead, dwelling, and associated infrastructure were documented on the property. The ruins of the buildings may be older than 60 years, however, modifications to the buildings may have been made over time.

1.3. Recommendations

The area is of a low pre-colonial archaeological cultural sensitivity, however, the following recommendations must be considered and implemented in accordance with the various phases of the development activities:

- 1. If it is deemed necessary that the structures be demolished for the proposed development to proceed, it is recommended that a specialist historical archaeologist or historical architect be appointed to assess the significance of the built environment structures.
- 2. If concentrations of historical and pre-colonial archaeological heritage material and/or human remains (including graves and burials) are uncovered during construction, all work must cease immediately and be reported to the Albany Museum and/or the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) so that systematic and professional investigation/excavation can be undertaken. A professional archaeologist should then be appointed to monitor the remaining vegetation clearing activities/excavation of the surface layer in the case that historical and/or precolonial archaeological material may become exposed. Phase 2 mitigation in the form of test-pitting/sampling or systematic excavations and collections of the pre-colonial shell middens and associated artefacts will then be conducted to establish the contextual status of the sites and possibly remove the archaeological deposit before development activities continue.
- 3. Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

2. BACKGROUND INFORMATION

Nelson Mandela Bay Municipality (NMBM) has appointed SRK Consulting to conduct an Environmental Impact Assessment (EIA) process for the proposed development of low-cost housing on Erf 11305, Walmer, as well as a Basic Assessment (BA) for the associated housing development on a 64.2 ha portion of Erf 1948, and connections to services infrastructure to the area. This phase 1 archaeological impact assessment (AIA) focuses on the proposed low-cost housing development to be situated on Erf 11305, Walmer, a separate report (Phase 1 AIA) discusses the assessment conducted for the development of proposed transitional and permanent low-cost housing development to be situated on Erf 1948.

The Phase 1 Archaeological Impact Assessment (AIA) which has been prepared as part of the Environmental Impact Assessment (EIA) process for the proposed project in accordance with the National Heritage Resources Act 25 of 1999, and guidelines by the South African Heritage Resources Agency (SAHRA), and the Eastern Cape Heritage Resources Agency (ECPHRA).

2.1. Developer:

Nelson Mandela Bay Municipality (NMBM)

2.2. Consultant:

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2.3. Terms of reference

The original proposal was to conduct a phase 1 archaeological impact assessment (AIA) for the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Metropolitan Municipality, Eastern Cape Province. The Terms of Reference (ToR) are as follows:

- Conduct a literature review of known archaeological resources within the area with a view to determining which of these resources are likely to occur within the development footprint;
- Comment on potential impacts on these resources resulting from the development;
- Make recommendations regarding the mitigation of any damage to archaeological resources identified, or that may be identified during the construction phase.

3. BRIEF HERITAGE LEGISLATIVE REQUIREMENTS

Parts of sections 3(1)(2)(3), 34(1), 35(4), 36(3) and 38(1)(8) of the National Heritage Resources Act 25 of 1999 apply:

S3. National estate

- 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.
- 3. (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 and 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 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 (Act No. 43 of 1996).
- 3. (3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of -
- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon , rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) sites of significance relating to the history of slavery in South Africa.

S34. Structures

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.

S35. Archaeology, palaeontology and meteorites

- 35 (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;
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

S36. Burial grounds and graves

- 36. (3) (a) 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.

S38. Heritage resources management

- 38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –
- (a) the construction of a road, wall, power line, 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 the site -
 - (i) exceeding 5000 m² in extent, or
 - (ii) involving three or more erven or subdivisions thereof; or

- (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;
- (d) the re-zoning of a site exceeding 10 000 m² in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as 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.

4. BRIEF ARCHAEOLOGICAL BACKGROUND

Little systematic archaeological research has been conducted within the immediate area of the proposed development. However, several relevant archaeological and heritage impact assessments have been conducted within the immediate surrounding vicinity and along the wider coastal region between Kings Beach and Van Stadens River (Binneman 2008, 2009, 2010, 2011, 2012; Binneman & Booth 2010; Booth, 2013a/b; Van Ryneveld 2010, 2013; Webley 2005, 2007). These impact assessments have identified several Early, Middle, and Later Stone Age stone artefacts and sites distributed along the coastline as well as evidence of Khoekhoen pastoralist occupation and/or interaction by the presence of broken earthenware pot sherds. Archaeological sites in the form of shell middens and scatters have also been reported along this coastline and within the 5 km archaeologically sensitive coastal zone.

Historical research on the early settlement in Walmer shows that the area proposed for the development of low-cost housing development and surrounds was situated on the farm Welbedacht and was later divided into several properties.

4.1. Early Stone Age (ESA) - 1.5 million to 250 000 years ago

The oldest evidence of the early inhabitants are large stone tools, called hand axes and cleavers, which may be found amongst river gravels such as the Swartkops River and in old spring deposits within the region. These large stone tools are from a time period called the Earlier Stone Age (ESA) and may date between 1.5 million and 250 000 years old. Large numbers of Early Stone Age stone tools were found at a research excavation at Amanzi Springs, some 10 kilometres north-east of Uitenhage (Deacon 1970). In a series of spring deposits a large number of stone tools were found *in situ* to a depth of 3-4 meters. Wood and seed material preserved remarkably very well within the spring deposits, and possibly date to between 800 000 to 250 000 years old.

Early Stone Age stone artefacts have been documented near Theescombe in the underlying calcrete layers (Binneman 2010).

4.2. Middle Stone Age (MSA) - 250 000 - 30 000 years ago

The large hand axes and cleavers were replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blade industries. Evidence of Middle Stone Age sites occur throughout the region and date between 250 000 and 30 000 years old. Fossil bone may in rare cases be associated with Middle Stone Age occurrences (Gess 1969). These stone artefacts, like the Earlier Stone Age hand axes are usually observed in secondary context with no other associated archaeological material.

Middle Stone Age stone artefacts have been documented near Theescombe and along the Schoenmakerskop - Sardinia Bay coastline (Binneman 2010, Webley 2005). One occurrence of Middle Stone Age artefacts also occurred north of Buffelsfontein Road near the proposed site of development (Van Ryneveld 2013).

4.3. Later Stone Age (LSA) – 30 000 years ago – recent (100 years ago)

The majority of archaeological sites found in the area date from the past 10 000 years (called the Later Stone Age) and are associated with the campsites of San huntergatherers and Khoi pastoralists. These sites are difficult to find because they are in the open veld and often covered by vegetation and sand. Sometimes these sites are only represented by a few stone tools and fragments of bone. The preservation of these sites is poor and it is not always possible to date them (Deacon and Deacon 1999). There are many San hunter-gatherers sites in the nearby Groendal Wilderness Area and adjacent mountains. Here, caves and rock shelters were occupied by the San during the Later Stone Age and contain numerous paintings along the cave walls. The last San/KhoiSan group was killed by Commando's in the Groendal area in the 1880s.

Several Later Stone Age shell midden sites as well as scatters situated on the surface of the loose dune sand with associated stone and other artefacts have been documented along Marine Drive and the Schoenmakerskop – Sardinia Bay coastline and further west, possibly dating between 6 000 – 8 000 years ago and younger than 4 500 years (Binneman 2008, 2010, 2011; Binneman & Booth 2010; Webley 2005).

4.4. Last 2 000 years - Khoenkhoen Pastoralism

Some 2 000 years ago Khoenkhoen pastoralists occupied the region and lived mainly in small settlements. They introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern Africa. Often archaeological sites are found close to the banks of large streams and rivers. Large piles of freshwater mussel shell (called middens) usually mark these sites. Prehistoric groups collected the freshwater mussel from the muddy banks of the rivers as a source of food. Mixed with the shell and other riverine and terrestrial food waste are also cultural materials. Human remains are often found buried in the middens (Deacon and Deacon 1999).

Several shell midden sites as well as scatters situated on the surface of the loose dune sand are associated with the occupation of Khoekhoen pastoralists within the last 2 000 years. These middens and scatters are differentiated from the Later Stone Age sites scatters by the occurrence of earthenware pottery and the faunal remains of domesticated stock such as cattle and sheep. Sites with the occurrence of pottery and other artefacts have been documented along Marine Drive and the Schoenmakerskop – Sardinia Bay coastline and further west (Binneman & Booth 2010).

4.5. Last 500 years - Historical

The history of Walmer dates back to the early 1800's before the mass arrival of British Settlers to Port Elizabeth. During 1815 the farm Welbedacht was granted to AM Muller. The farm was located to the south-west of Port Elizabeth and covered an area of just under 14 square miles. The farm was inherited by Muller's eight sons when he died in 1845, however, the sons could not decide on how to subdivide the property and as a result the farm was sold and the money distributed to the heirs. In 1855 the area was transferred to the municipality of Port Elizabeth and renamed Walmer in honour of the Duke of Wellington. By March 1855 the land was laid out and resolved to sell 400 plots by public auction. A number of stands were reserved for the Dutch Reformed Church and the Anglican Church. The plan of the village included wide streets and a plentiful supply of water. In 1899 Walmer was awarded separate municipal status while its residential character, spacious residential plots and attractive dwellings attracted families with young children and the elderly. In 1967 Walmer became part of the Port Elizabeth Municipality.

The history of the Port Elizabeth-Avontuur railway, which is located north of the proposed development area, shows that its passenger service has never been much of a revenue earner. Passengers were initially carried on scheduled trains. However, with their numbers dwindling over the years due to competition from buses operated by the then South African Railway's Road Motor Service, the railway authorities eventually had to terminate the service. A short suburban branch line to serve the town of Walmer (at that stage on the outskirts of Port Elizabeth!) was brought into operation in 1906. This service showed a loss from the start because of lack of community support and was abandoned in 1928.

The sport of horse racing in South Africa enjoys a long and rich history that can be traced back to 1797, with the first recorded race club meeting taking place in 1802. Unfortunately the date for the establishment for the Arlington Race Course, situated immediately east of the proposed development area, could not be found.

The Walmer Golf Club, or more fondly known as Little Walmer, was founded in 1897 which makes it one of the oldest gold clubs in the country. The Walmer Golf Club borders the proposed development area to the west.

The early population of Port Elizabeth consisted mainly of Europeans, as well as persons of mixed race which the Apartheid system subsequently labelled as 'Coloureds' and 'Cape Malays'. Initially few members of the indigenous population were attracted to the town, and almost from the onset economic status was related to skin colour. Thus segregation was an integral part of early Port Elizabeth, with the industrial areas of South End and North End being predominantly Coloured, while the Central and Western suburbs were mainly White.

A large influx of Xhosa refugees into the Colony occurred after the cattle-killing of 1857 and they were rapidly absorbed into the wage-labour market on account of a labour shortage in towns of the eastern frontier districts. Thus, a rising number of Black workers began to enter Port Elizabeth seeking employment, so then a number of so-called 'locations' began to be established on the outskirts of the White suburbs. The growth of Port Elizabeth's African population led to the overcrowding of the Native Strangers' Location. Many of these new arrivals were accommodated in a number of locations on private property. The largest was Gubb's Location which was situated on the 'Mill Property' (now Mill Park), with others in the Baakens River Valley, Walmer and South End

The pattern of 'locations' was first established in 1834 when the Colonial Government made a grant of land to the London Missionary Society (LMS) to provide a burial ground and residential area for Hottentots and other coloured people who were members of the Church (Baines 1989) located at the crest of Hyman's Kloof (Russel Road). Other workers however chose to erect their homes closer to their places of employment, or where a supply of portable water was available. With few exceptions these Black suburbs were informal in nature and residents there were forced to endure living conditions which contemporary observers described as being squalid and open to exploitation by capitalist landlords. Many Whites considered them to be unhealthy and petitions were reportedly organised demanding that they be removed to the outskirts of the town. These requests were in direct opposition to the needs of the growing commercial and industrial sectors which preferred to locate their labour sources close to the harbour and the inner city area. These conflicting vested interests created political tension within the Port Elizabeth Council which were only resolved in 1885 when the Municipality adopted its first set of markedly segregationist regulations. As a result suburbs for the exclusive use of Black residents who were not housed by employers, and who could not afford to purchase property were established on the outskirts of Port Elizabeth. Most prominent amongst them were including Walmer (1896).

In 1898 white business owners and white households wanted their black workers to remain close to their property so work could be more convenient. Although the area of the Gqebera Township was intended to be a white suburb, South African indigenous populations (blacks and coloureds) began to move into the area.

In 1901 an outbreak of Bubonic plague struck the town. This was a direct result of Argentinian fodder and horses being imported into South African by the British military during the Anglo-Boer conflict (now referred to as the South African War). These cargos also carried plague-infected rats and although many members of the White and Coloured communities were also affected, the Black population bore the brunt of the Plague Health Regulations. During this time most of Port Elizabeth's old locations were demolished (with the exception of Walmer), their resident belongings were arbitrarily destroyed and restrictions were imposed upon inter-town travel.

Gqebera, as Walmer Township is called in the Xhosa language that most of its residents speak, was designated to be in the 'whites only' area under the Apartheid Group Area Act 1955, and therefore the regime tried to remove the Township. Due to the strong resistance of the township's residents and support from the citizens in the nearby Walmer suburbs resident area, Gqebera was never destroyed. But the price was high; apartheid authorities would deny Walmer Township the most basic infrastructure.

The Driftsands, situated south-east of the proposed development area towards the coast became a dump site during the late 1800's to stabilise the shifting dune sands. People began settling behind the dune sands from the latter part of the 1800's. Three previous heritage impact assessments have identified the scatter of historical artefacts that is associated with the distribution of the Driftsands Historical Dump Site towards the village of Schoenmakerskop below the World War II fortified observation post, about 5 km south of the proposed site for the low-cost housing development as well as along the Sardinia Bay Road.

Previous surveys in the Driftsands area have revealed extensive historical dump material dating to the Victorian period. After European settlement of the area, the Driftsands threatened the harbour development of Port Elizabeth and it was decided in 1893 to stabilise the dunes by spreading the town garbage in a swathe from Happy Valley to Sardinia Bay. The rubbish was taken to the dunes, and the seeds of Australian acacias (Rooikrantz, Port Jackson, and long leaf wattles) planted in the garbage compost. This job was started in 1893 and completed in 1909.

4.6. Human Remains

It difficult to detect the presence of archaeological human remains on the landscape as these burials, in most cases, are not marked at the surface. Human remains are usually observed when they are exposed through erosion or construction activities for development. In some instances packed stones or rocks may indicate the presence of informal pre-colonial burials.

5. DESCRIPTION OF THE PROPERTY

5.1. Location data

The proposed area for the low-cost housing development is situated about 5 km from the nearest coastline, therefore falling on the boundary of the generally considered 5 km archaeologically sensitive coastal zone. The site is situated between the Arlington Race Track to the west, Beaumont Estates residential area to the north and the Walmer Golf Club to the east. The village of Schoenmakerskop is situated about 5 km south along Victoria Drive. The site can be accessed off Victoria Drive.

5.2. Map

1:50 000 Map: 3325DC & DD 3425BA PORT ELIZABETH (Figure 1).

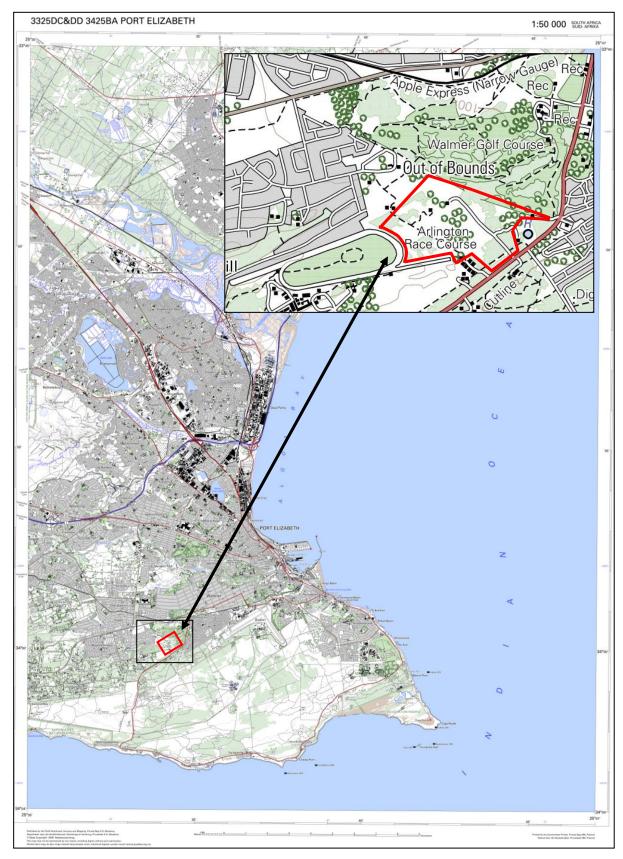


Figure 1. 1:50 000 topographic map 3325DC & DD 3425BA PORT ELIZABETH showing the location of the proposed area for the proposed low-cost housing development.

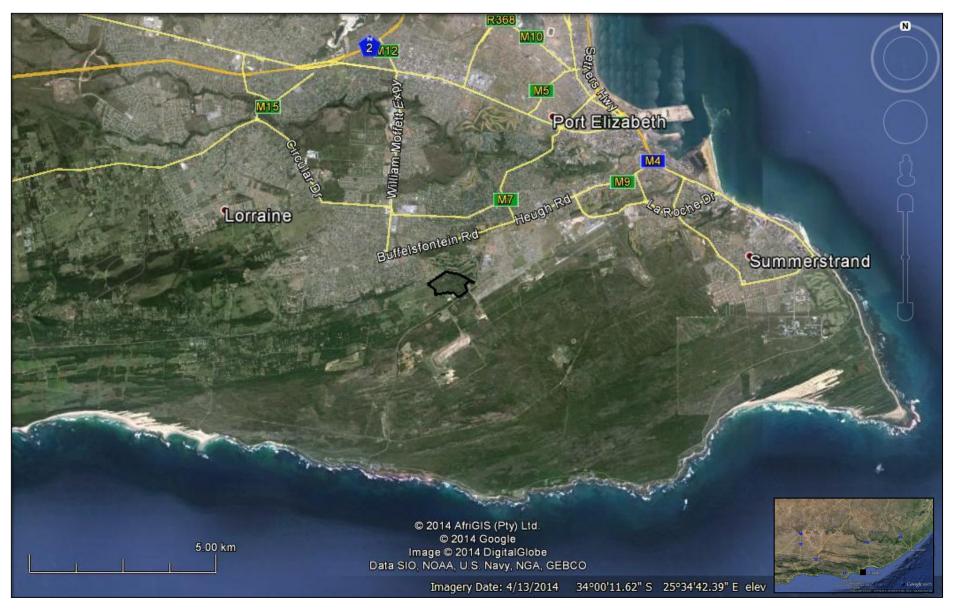


Figure 2. Aerial view of the location of the proposed low-cost housing development on Erf 11305, Gqebera, Walmer, Port Elizabeth (black boundary).

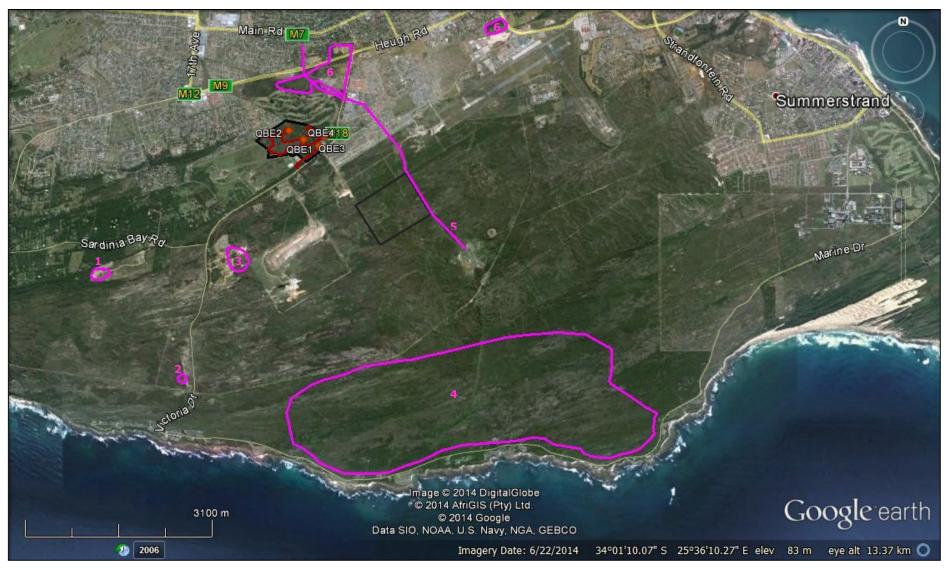


Figure 3: Aerial view of the proposed area for the low-cost housing development showing previous archaeological and heritage impact assessment conducted within the immediate vicinity (1. Webley 2005; 2. Webley 2007; 3. Booth 2013; 4. Binneman & Booth 2010; 5. Van Ryneveld 2010; Van Ryneveld 2013).



Figure 4. Close-up aerial view of the proposed area for the low-cost housing development showing the location of the related Gqebera housing development on Erf 1948, the Arlington Race Course, and the Walmer Golf Course.



Figure 5. Close-up aerial view of the proposed area for the low-cost housing development showing the development boundary, the survey track, and built environment structures on Erf 11305.

6. ARCHAEOLOGICAL INVESTIGATION

6.1. Methodology

The survey was conducted on foot by investigating the exposed and less densely vegetated areas. GPS readings and photographs were taken using a Garmin Oregon 550 (Table 1). The GPS readings have been plotted on Figures 3-5.

6.2. Results of the Archaeological Investigation

The proposed area for development was mostly covered in dense thicket and grass vegetation that obscured archaeological visibility over most of the area. Very few exposed areas allowed for the possibility of investigating for pre-colonial archaeological material and sites (Figures 6-8). The existing road, footpaths, and surface eroded areas were investigated for possible archaeological and other heritage remains.

The site is currently being used by the local community for various informal recreational, agricultural and other activities. A small group of cattle grazing was encountered in the western half of the site during the survey (Figure 9). The cattle most probably belong to members of the Gqebera Township. A makeshift soccer field is situated near the reservoir just north of the possible farmstead ruins (QBE3) on the south-western boundary of the site (Figure 10). Relatively recent but unused cultivated lands were identified near the northern boundary of the site (Figure 10). Fresh crops of recently planted cabbages and maize occur adjacent to the unused cultivated lands near the ruins of the built environment structure (QBE2).

Several informal dumping areas were encountered during the survey, some of these areas have been completely overgrown with the dense grass vegetation (Figure 12).

During the survey members of the local community (Gqebera Township) were chopping up trees for wood.



Figure 6. View of the general landscape showing the dense thicket vegetation.



Figure 7. View of the general landscape showing the dense grass vegetation.



Figure 8. View of one of the surface exposed areas investigated for archaeological heritage remains.

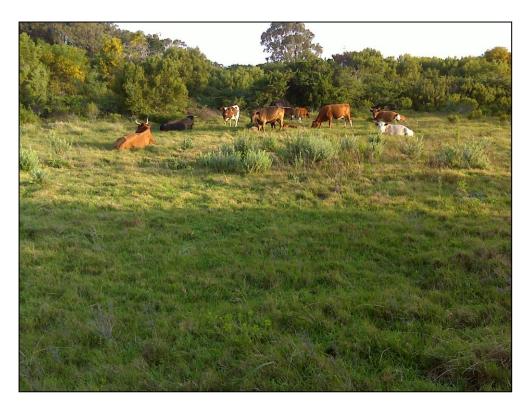


Figure 9. Cattle grazing on Erf 11305.



Figure 10. View of a makeshift soccer field situated on Erf 11305.



Figure 11. View of previously cultivated lands adjacent to cabbage and maize crops.



Figure 12. View of an area previously used for informal dumping.

No pre-colonial archaeological heritage remains or sites were identified during the survey. However, it is possible that archaeological shell midden sites and artefacts may be uncovered during the development activities.

Two building ruins (QBE2 AND QBE3) and one dipping tank (QBE1) were encountered during the survey. The two building ruins have been recorded on the 1:50 000 topographic map (Sixth Edition, 2002) (Figure 1). One other building / ruin has also been recorded on the 1:50 000 topographic map (Sixth Edition, 2002) (Figure 1), however, it is not recorded on previous editions of the 1:50 000 topographic maps (Second Edition, 1965 and Forth Edition, 1983), therefore, establishing that the building / ruin is younger than 60 years (co-ordinate has been provided in Table 1). This latter building / ruin was not encountered during the survey.

The dipping tank (QBE1) that would most probably have been used when the area was still used for farming or as a small holding is located in the eastern half of the area and is overgrown with vegetation growth (Figure 13).

The building ruin (QBE2) is located near the northern boundary of the site. The ruin has also been overgrown with dense vegetation growth. The dense vegetation around the ruin made it difficult to investigate whether any historical artefacts or more recent items were associated with the possible dwelling. The artefacts would have assisted in establishing a relative date for the ruin. Only two walls of the ruin remain standing, the rest of the building has collapsed (Figures 14-15). The ruin is older than 60 years as it is visible on the 1939 aerial photograph (aerial photograph provided by Mr Bryan

Wintermeyer). However, the structure may have been modified over time. An unidentified subsurface concrete feature is located within the immediate vicinity of the ruin (Figure 16). At first it resembled a shallow built up grave, however, no human remains were noted.

The building ruin (QBE3) is situated immediately outside the south-eastern corner of the proposed area for development, near the reservoir (Figures 17-18). The ruin is made up of what once was a stone walled dwelling. The only identifiable area of the dwelling is the sunken kitchen indicated by the remaining fireplace feature. Most of the walls have collapsed except for one of the stone walling structures that remains intact. The stone walling structure is attached to what once may have been the kitchen area and may have been the chimney. This stone walling structure remains standing at a height of about four metres. The remains of the side wall attached to this structure indicates that the general height of the dwelling may have been significantly lower than the remaining stone walling structure. Additional buildings, constructed from brick and cement, adjacent to the stone walling dwelling remain relatively intact as well as the possible underground reservoir used to store water. It is likely that the farmstead is associated with the early settlement in the area. However, it is possible that modern additions may have been made to the structure. It is unknown when these dwellings were abandoned. A built-up path leads north down the slight gradient. The dense vegetation around the ruin made it difficult to investigate whether any historical artefacts or more recent items were associated with the possible dwelling. The artefacts would have assisted in establishing a relative date for the ruin.

A substation (QBE4) is located within the south-eastern corner of the proposed development.



Figure 13. An unused dipping tank situated at QBE1.



Figure 14. View of the ruin of a building situated at QBE2.



Figure 15. Alternative view of the building ruin situated at QBE2.



Figure 16. Subsurface feature associated with the ruins situated at QBE2.



Figure 17. View of the ruins of a farmstead situated at the area marked QBE3.



Figure 18. Alterative view of the ruins of a farmstead situated at QBE3.

7. DESCRIPTION OF SITES

7.1. Built Environment

BE1: An unused dipping tank overgrown with vegetation.

BE2: Ruin of a dwelling and associated infrastructure.

BE3: Ruin of a farmstead.

BE4: Contemporary substation.

The ruins of the built environment are considered as having a low-medium cultural significance and have been allocated a heritage grading of:

'General' Protection B (Field Rating IV B): These sites should be recorded before destruction (usually Medium significance).

(See Table 1. for short descriptions and co-ordinates)

8. COORDINATES AND SITES FOR THE PROPOSED WALMER GQEBERA LOW-COST HOUSING DEVELOPMENT ON ERF 11305, WALMER, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY (NMBM), EASTERN CAPE PROVINCE.

Table 1. Coordinates and sites for the the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Bay Municipality (NMBM), Eastern Cape Province.

REFERENCE	DESCRIPTION	COORDINATE	HERITAGE GRADING
BE1	Unused dipping tank	33°59′52.60″S; 25°34′20.60″E	`General' Protection B (Field Rating IV B)
BE2	Ruin of dwelling	33°59′48.10″S; 25°34′11.00″E	`General' Protection B (Field Rating IV B)
BE3	Ruin of farmstead	33°59′56.70″S; 25°34′30.30″E	`General' Protection B (Field Rating IV B)
BE4	Substation	33°59′51.00″S; 25°34′34.15″E	`General' Protection B (Field Rating IV B)
Other building / ruin	Recorded on 1:50 000 topographic map (Sixth Edition, 2002) (Fig. 1)	33°59′52.93″S; 25°34′04.85″E	N/A

9. CULTURAL LANDSCAPE

Cultural landscapes are increasingly becoming a significant considering factor when conducting various archaeological and heritage impact assessments for proposed developments. The proposed development area, Erf 11305, is considered as having a low-medium cultural heritage significance. This significance attests to the ruins of the built environment related to earlier occupation in the area.

This section gives a brief introduction to the concept of cultural landscape and its relation to various aspects of the dynamic interaction of humans as cultural agents and the landscape as a medium. A description of the interwoven relationships of humans with the landscape over time will be given including the archaeological, historical, and contemporary connections. Lastly, the living heritage makes up a small part of the study undertaken, its significance will be highlighted in relation to the communities who still identify with the area and retain a sense of identity to the landscape.

9.1. Concept of Cultural Landscape

Cultural landscapes can be interpreted as complex and rich extended historical records conceptualised as organisations of space, time, meaning, and communication moulded through cultural process. The connections between landscape and identity and, hence, memory are fundamental to the understanding of landscape and human sense of place. Cultural landscapes are the interface of culture and nature, tangible and intangible

heritage, and biological and cultural diversity. They represent a closely woven net of relationships, the essence of culture and people's identity. They are symbolic of the growing recognition of the fundamental links between local communities and their heritage, human kind, and its natural environment. In contemporary society, particular landscapes can be understood by taking into consideration the way in which they have been settled and modified including overall spatial organisation, settlement patterns, land uses, circulation networks, field layout, fencing, buildings, topography, vegetation, and structures. The dynamics and complex nature of cultural landscapes can be regarded as text, written and read by individuals and groups for very different purposes and with very many interpretations. The messages embedded in the landscape can be read as signs about values, beliefs, and practices from various perspectives. Most cultural landscapes are living landscapes where changes over time result in a montage effect or series of layers, each layer able to tell the human story and relationships between people and the natural processes.

The impact of human action of the landscape occurs over time so that a cultural landscape is the result of a complex history and creates the significance of place in shaping historical identities by examining a community's presence or sense of place. The deeply social nature of relationships to place has always mediated people's understanding of their environment and their movements within it, and is a process which continues to inform the construction of people's social identity today. Social and spatial relationships are dialectically interactive and interdependent. Cultural landscape reflects social relations and institutions and they shape subsequent social relations.

Cultural landscapes tell the story of people, events, and places through time, offering a sense of continuity, a sense of the stream of time. Landscapes reflect human activity and are imbued with cultural values. They combine elements of space and time, and represent political as well as social and cultural constructs. Culture shapes the landscape through day-to-day routine and these practices become traditions incorporated with a collective memory the ultimate embodiments of memorial consciousness', examples such as monuments, annual events and, archives. As they have evolved over time, and as human activity has changed, they have acquired many layers of meaning that can be analysed through archaeological, historical, geographical, and sociological study.

Indigenous people, European explorers, missionaries, pastoralists, international and domestic travellers all looked or look at similar landscapes and experience different versions of reality. Regardless of the power of different cultural groups, however, all groups create cultural landscape and interpret them from their own perspectives. This gives rise to tensions and contradictions between groups, invariably expressed in landscape forms as well.

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many interpretations. The messages embedded in the landscape can be read as signs about values, beliefs, and practices from various perspectives.

Most cultural landscapes are living landscapes where changes over time result in a montage effect or series of layers, each layer able to tell the human story and relationships between people and the natural processes. A common theme underpinning the concept of ideology of landscape itself and the setting for everything we do is that of the landscape as a repository of intangible values and human meaning that nurture our very existence. Intangible elements are the foundation of the existence of cultural landscapes, and that are still occupied by contemporary communities, Landscape, culture and collective memory of a social group are intertwined and that this binds the individuals to their community. Culture shapes their everyday life, the values bind gradually, change slowly, and transfer from generation to generation - culture is a form of memory. We see landscapes as a result of our shared system of beliefs and ideologies. In this way landscape is a cultural construct, a mirror of our memories and myths encoded with meanings which can be read and interpreted. Pivotal to the significance of cultural landscapes and the ideas of the ordinarily sacred is the realisation that it is the places, traditions, and activities of ordinary people that create a rich cultural tapestry of life, particularly through our recognition of the values people attach to their everyday places and concomitant sense of place and identity.

Living heritage means cultural expressions and practices that form a body of knowledge and provide for continuity, dynamism, and meaning of social life to generations of people as individuals, social groups, and communities. It also allows for identity and sense of belonging for people as well as an accumulation of intellectual capital current and future generation in the context of mutual respect for human, social and cultural rights.

Protection of these cultural landscapes involves some management issues such as successful conservation is based on the continuing vital link between people and their landscapes. This link can be disrupted or affected by for instance economical reasons. Other threats can also be attributed to urban expansion and development, tourism, war and looting and something beyond our human intervention: natural disasters and climate change. Cultural landscape management and conservation processes bring people together in caring for their collective identity and heritage, and provide a shared local vision within a global context. Local communities need, therefore, to be involved in every aspect of identification, planning and management of the areas as they are the most effective quardians of landscape heritage.

Most elements of living heritage are under threat of extinction due to neglect, modernisation, urbanisation, globalisation, and environmental degradation. Living heritage is at the centre of people's culture and identity, it is importance to provide space for its continued existence. Living heritage must not be seen as merely safeguarding the past, but it must be seen as safeguarding the logic of continuity of

what all communities or social groups regard as their valuable heritage, shared or exclusive.

In some instances, villages may capitalise on local landscape assets in order to promote tourism. Travel and tourism activities are built around the quest for experience, and the experience of place and landscape is a core element of that quest. It is a constant desire for new experiences that drives tourism, rather than a quest for authenticity. It is, therefore, important to engage actively with the tourism industry so that aspects of life and landscape important to cultural identity, including connection with place are maintained.

9.2. Archaeological Landscape

Although no archaeological heritage remains have been documented within the proposed development area, the area was once part of an ancient landscape inhabited by various families of genus *Homo*. Various studies recording archaeological sites and occurrences within the wider region stretching along Port Elizabeth's western coastline have reported on the evidence of the presence of *Homo erectus* (Early Stone Age), *Homo sapiens* (Middle Stone Age), and *Homo sapiens sapiens* (Later Stone Age). The only remains dating to the Early and Middle Stone Ages are stone artefacts as the organic evidence and sites have not been preserved. The influence of climatic conditions and the rising and falling of the sea levels may also attribute to much archaeological site information being lost.

The preservation of archaeological sites in the form of marine shell middens, marine shell scatters and associated cultural materials remains shows that the natural and edible resources of the area made the area an attraction over the last 10 000 years. This region would have been attractive to those hunter-gatherer communities who visited the area to harvest shellfish along the rocky coastline.

The pastoralists were driven by locating enough food to feed their domestic stock herds. The area was also attractive to later Khoekhoen pastoralists who also occupied and moved along this coastline. Their archaeological signature is evident in the remains of pottery sherds that are distributed on the dunes along the coast showing their presence on the landscape. This evidence also unlocks a potentially dynamic social landscape with possible interaction between the hunter-gathers and pastoralists.

Pre-colonial human remains are mostly unmarked and invisible on the landscape, however, in some instances, they may be marked by organised piles of stones.

9.3. Historical Landscape

The archaeological interpretation of the cultural landscape relies solely on the presence and surface visibility of artefacts left behind on the landscape by the populations who occupied and migrated through the proposed development area. A more comprehensive historical layer is able to be fitted onto the cultural landscape owing to the availability of written documents and the continuing existence of the traces left behind by European Settlers and the moulding of these traces used to shape the contemporary communities that occupies and regards itself attached to its present cultural landscape.

The proposed development area fits into a greater cultural landscape and the moulding of an historical townscape that developed into contemporary Port Elizabeth. The greater area was made up of four farms, the existing area is situated on the farm Welbedacht, Buffelsfontein (west), Papenbiesiesfontein (east), and Strandfontein (south-east) were granted during the early and mid-1800's. The dune area towards the coast has always been moving Driftsands.

Walmer's historical landscape encompassed much change over the last 200 years, yet also never losing its cultural character. Walmer has always been considered as being a demographically 'grey area' owing to the racial co-existence of the economically more "well-to-do" Whites in the suburbs and economically exploited indigenous and Black populations in the Gqebera Township. The eventual layout of Walmer was based on this continued co-existence despite several attempts to relocate members of the Gqebera Town community to the extreme outskirts of Port Elizabeth which was met with protest from both the White and Black members of the area. Walmer and Gqebera Township is very much the same today as it was historically, albeit different.

9.4. Contemporary Landscape

The contemporary cultural landscape is the product of centuries of human interaction, more so when the European Settlers entered the area. The contemporary townscape of Walmer and Gqebera Township has been shaped over the last 200 years. As previously mentioned Walmer and Gqebera Township is very much the same as it was historically, albeit different.

The similarities are vast. The demographic make-up of the Walmer suburbs are still mainly inhabited by the more "well-to-do" White people, although the more "well-to-do" Black and Coloured populations are slowly beginning to settle in the area. Gqebera Township, on the other hand, remains a popular area to migrate to as it still close to the city centre and places of employment. However, the increasing pressure and infiltration of locals from other Port Elizabeth townships and foreigners, such as Zimbabweans, Nigerians, and Somalis has put increased pressure on the townships space for occupation and ailing infrastructure. Gqebera Township is 'landlocked'. The only way to

expand the township is if the municipality decides to purchase private land around the boundaries of the township. The residents of the township continue to protest, however, not against forced removals but because of lack of service delivery and maintenance of existing infrastructure.

Traditions live on by the use of adjacent empty space and resources for the grazing of cattle.

Conditions in Gqebera giving rise to such high alcohol use and high HIV prevalence and thus presenting challenges to prevention, should be seen in the historical and political context. Gqebera is a congested township of about 65 000 to 70 000 people and is described as one of the most impoverished areas in the EC province. Diverse problems such as deep poverty; lack of education; both gender and crime related violence; unprotected sex; teenage pregnancies; and alcohol and other drug abuse, are among the factors related to and driving the HIV/AIDS epidemic in the township. Impoverished residents rely mainly on government grants and the informal sector to survive.

Despite the problems facing Gqebera Township, several projects have been established in the township that encourages the members of the community to inspire each other.

10. CONCLUSION

The phase 1 archaeological impact assessment (AIA) was conducted as requirement of the National Heritage Resources Act (NHRA 25 of 1999) triggered by Section 38(1)(c)(i). A literature review was conducted focusing on the archaeological literature resources available. Historical research was conducted to establish the significance of the historical settlement of the area. The survey was conducted to establish the range and importance of the exposed and *in situ* archaeological material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimise the possible damage to the archaeological heritage. The report follows the minimum standards guidelines required by the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA).

Very little systematic archaeological research has been conducted within the area proposed for the low-cost housing development. Several relevant archaeological and heritage impact assessments have been conducted within the immediate vicinity and the wider region along the coastline between Kings Beach and Van Stadens River. These reports have identified several Early, Middle, and Late Stone Age stone and other artefacts distributed along the coastline as well as evidence of Khoekhoen pastoralist occupation and / or interaction by the presence of broken earthenware pot sherds. Archaeological sites such as marine shell middens and surface scatters have been reported within this 5 km archaeologically sensitive coastal zone. Historical research on

Walmer and Gqebera Township points the area's unique establishment and the reason for the layout and shaping of Port Elizabeth as a city over the last 200 years.

The proposed development area is situated on the boundary of the 5 km archaeological sensitive coastal zone. No archaeological heritage remains were observed during the survey. However, the survey was limited to surface and exposed area observations and does no eliminate the possibility that archaeological heritage remains may occur below the surface. It is possible that stone artefact may occur below the dense vegetation cover between the surface and 50 – 80 cm below the ground. Ruins of buildings were encountered that should be specially assessed to determine the significance. The potential impact of the development activities on the archaeological heritage remains, sites, and features is regarded as low-medium; however, the recommendations and mitigation measures must be taken into consideration and implemented before the commencement of the proposed development activities.

The proposed development area does not evoke the pre-colonial / archaeological cultural landscape as any archaeological heritage materials, sites or features were documented within the area. However the area falls into a greater cultural landscape that shows evidence of occupation and interactive relationships within other communities and the natural resources over a possible 1.5 million years. The colonial / historical cultural landscape describes the process of the development of Port Elizabeth as city and functional harbour port over 200 years.

11. RECOMMENDATIONS

The area is of a low pre-colonial archaeological cultural sensitivity, however, the following recommendations must be considered and implemented in accordance with the various phases of the development activities:

- If it is deemed necessary that these structures be demolished for the proposed development to proceed, it is recommended that a specialist historical archaeologist or historical architect be appointed to assess the significance of the built environment structures.
- 2. If concentrations of historical and pre-colonial archaeological heritage material and/or human remains are uncovered during construction, all work must cease immediately and be reported to the Albany Museum and/or the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) so that systematic and professional investigation/excavation can be undertaken. A professional archaeologist should then be appointed to monitor the remaining vegetation clearing activities/excavation of the surface layer in the case that pre-colonial shell middens may become exposed. Phase 2 mitigation in the form of test-pitting/sampling or systematic excavations and collections of the pre-colonial shell middens and associated artefacts will then be

- conducted to establish the contextual status of the sites and possibly remove the archaeological deposit before development activities continue.
- 3. Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

12. REFERENCES

- About Walmer Township. www.izizweprojects.co.za.
- Appel, A. 2009. Demografiese en Sosiale Tendense in Vroeg Industriële Port Elizabeth, ca. 1870-1914. *South African Historical Journal*, 23:1.
- Arlington Racecourse. www.travelground.com.
- Baines, G. 1989. The control and administration of Port Elizabeth's population, c. 1834-1923. *CONTREE* 26.
- Beinart, W. 2003. The rise of conservation in South Africa. Oxford University Press.
- Chief, M.R. 2006. World Heritage cultural landscapes: A UNESCO flagship programme 1992 2006. *Landscape Research*, 31:4, 333-353.
- Cultural Arts (in Ggebera Township). www.ewemasenze.
- Christopher, A. J. 1987. Apartheid Planning in South Africa: The Case of Port Elizabeth. *The Geographical Journal*, Vol. 153, No. 2, pp195-204.
- Christopher, A.J. 1955. Segregation and Cemeteries in Port Elizabeth, South Africa. The Geographical Journal, Vol. 161, No.1, pp 38-46.
- Deacon, H.J. 1970. The Acheulian occupation at Amanzi Springs, Uitenhage District, Cape Province. *Annals of the Cape Provincial Museums*. 8:89-189.
- Deacon, H.J. & Deacon, J. 1999. *Human beginnings in South Africa*. Cape Town: David Phillips Publishers.
- De Moss, T.L. 2012. Building Houses or Creating Homes: Housing Development Programs and Quality of Life in Port Elizabeth, South Africa (Doctor of Philosophy Thesis: Anthropology).
- Douglas-Jones, I.S. 2014. The willingness of tavern and shebeen owners in Gqebera, Port Elizabeth to implement or strengthen existing HIV prevention efforts and measures in their establishments. (MPhil Thesis: HIV/AIDS Management).
- Elder, G. 1990. The Grey Dawn of South African Racial Residential Integration. *GeoJournal* 22.3 261-266.6
- Gess, W.H.R. 1969. Excavations of a Pleistocene bone deposit at Aloes near Port Elizabeth. *South African Archaeological Bulletin* 24:31-32.
- Hertling, U.M. & Lubke, R.A. 1999. Dune stabilization in South Africa. *Environmental Management* 24(4):467-482.
- Lutshaba, U. 2011. The role of the Nelson Mandela Bay Municipality in alleviating poverty in the Walmer Township. Guided Research Report No. 1. Nelson Mandela Metropolitan University (NMMU).

Metro Minutes. www.nmbbusinesschamber.co.za.

National Heritage Resources Act 25 of 1999.

PE.ORG.ZA

Phillips, A. 1998. The nature of cultural landscapes – a nature conservation perspective. Landscape Research 23:1, 21-38.

Phumelela struggles to sell race course. www.moneyweb.co.za.

Port Elizabeth History Timeline. South African History Online (SAHO). www.sahistory.org.za.

Port Elizabeth Main Library.

Rapoport, A. 1992. On cultural landscapes. TDSR 3:3, 33-47.

Selman, P. 2004. Community participation in the planning and management of cultural landscapes. *Journal of Environmental Planning and Management*, 47:3, 365-392.

Snodgrass, L. and Heleta, S. 2009. Teachers' Experiences of Conflict and Violence in Township Schools: A case study of Walmer-Gqebera, South Africa. Commonwealth Youth and Development Vol 7 No. 2, pp 41-54.

South African Heritage Resources Agency (SAHRA): Minimum Standards for Archaeological Impact Assessments.

Taylor, K. 2008. Landscape and Memory: cultural landscapes, intangible values and some thoughts on Asia. In: 16th ICOMOS General Assembly and International Symposium: 'Finding the spirit of place between the tangible and intangible', 29 September – 4 October 2008, Quebec, Canada.

Tyala, S. 2010. Towards Expediting Land Claims: A Case Study of Fairview, Port Elizabeth (Masters Thesis: Developmental Studies).

Van der Mescht, J. 2003. Moving People and Goods in the Gamtoos Valley: A Revealing Case Study. Proceedings of the 22nd Southern African Transport Conference (SATC2003).

Vogeler, I. ND. Landscapes of North America. University of Wisconsin.

Walmer Township. 2012/2013. Mandela Bay Development Agency Annual Report.

Walmer Township Community. www.pe-oratory.org.za

www.sa-venues.com.

www.walmergolfestate.co.za

13. RELEVANT ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENTS

- Binneman, J. 2008. A phase 1 archaeological heritage impact assessment of the proposed development of a sand quarry on Erf 429, Theescombe, Port Elizabeth, Nelson Mandela Bay Municipality, Extern Cape Province.
- Binneman, J. 2009. A phase 1 archaeological heritage impact assessment for the proposed subdivision and rezoning of Portion 1070, 409, and the Remainder of Erf 385, Theescombe, Port Elizabeth, Eastern Cape for the establishing of a residential development.
- Binneman, J. 2010. A phase 1 archaeological heritage impact assessment for the proposed rezoning and subdivision of farm 36 and 37, Theescombe, Port

- Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape province for the development of 2 residential nodes, lodge, and nature reserve.
- Binneman, J. 2011. A Phase 1 Archaeological Impact Assessment of the proposed rezoning and possible subdivision of Portion 72 (Portion of Portion 1) of the Farm Stadens River No. 485 in the Division of Uitenhage, Eastern Cape Province, for residential purposes.
- Binneman. J. 2012. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological impact assessment for the proposed phase 2 redevelopment and landscaping of the southern portion of the King's Beach node of the Nelson Mandela Bat Southern Beachfront (Erf 1031, Erf 576, and the Remainder of Erf 575, Humewood).
- Binneman, J. & Booth, C. 2010. A phase 1 archaeological impact assessment for the proposed 20MW wind farm on three alternative sites: Erf 121, Driftsands (Site Alternative 1), Bushy Park Farm, Remainder of Erf 26, as well as Portions 5, 6, and 7 thereof (Site Alternative 2), and Rietfontein far, (Site Alternative 3), Nelson Mandela Metropolitan Municipality, Eastern Cape Province.
- Booth, C. 2013. A phase 1 archaeological impact assessment (AIA) for the Airports Company of South Africa (ACSA) proposed Port Elizabeth airport stormwater upgrade, Walmer, Nelson Mandela Bay Municipality, Eastern Cape Province.
- Booth, C. 2013. A phase 1 archaeological impact assessment (AIA) for the proposed mining permit application on Erf 118, Schoenmakerskop, Port Elizabeth, Nelson Mandela Metropolitan Municipality, Eastern Cape Province.
- Van Ryneveld, K. 2010. Phase 1 archaeological impact assessment: Driftsands collector sewer augmentation, Port Elizabeth (Nelson Mandela Bay Municipality), Eastern Cape, South Africa.
- Van Ryneveld, K. 2013. Phase 1 archaeological impact assessment: Walmer stormwater detention ponds and associated infrastructure, Erven 1935 and 7006, Walmer, Nelson Mandela Bay Municipality, Eastern Cape Province, South Africa.
- Webley, L. 2009. Phase 1 heritage impact assessment: Caravan park development at Van Stadens River Mouth, Cacadu District, Eastern Cape.
- Webley, L. 2007. Phase 1 heritage impact assessment for the establishment of the Sardinia Bay Golf Estate (Erf 278 Theescombe), Port Elizabeth.
- Webley, L. 2005. Phase 1 heritage impact assessment of a proposed water reservoir site near Schoenmakerskop, Port Elizabeth.

14. GENERAL REMARKS AND CONDITIONS

NOTE: This report is a phase 1 archaeological impact assessment (AIA) only and does not include or exempt other required specialist assessments as part of the heritage impact assessments (HIAs).

The National Heritage Resources Act (Act No. 25 of 1999, Section 35 [Brief Legislative Requirements]) requires a full Heritage Impact Assessment (HIA) in order that all

heritage resources including all places or objects of aesthetics, architectural, historic, scientific, social, spiritual, linguistic, or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasized that the conclusions and recommendations expressed in this phase 1 archaeological impact assessment (AIA) are based on the visibility of archaeological remains, features and, sites and may not reflect the true state of affairs. Many archaeological remains, features and, sites may be covered by soil and vegetation and will only be located once this has been removed. In the event of such archaeological heritage being uncovered (such as during any phase of construction activities), archaeologists or the relevant heritage authority must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Resources Act No. 25 of 1999 (NHRA 25 of 1999).

Archaeological Specialist Reports (desktops and AIA's) will be assessed by the relevant heritage resources authority. The final comment/decision rests with the heritage resources authority that may confirm the recommendations in the archaeological specialist report and grant a permit or a formal letter of permission for the destruction of any cultural sites.

APPENDIX A: GRADING SYSTEM

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

- National: This site is suggested to be considered of Grade 1 significance and should be nominated as such. Heritage resources with qualities so exceptional that they are of special national significance.
- Provincial: This site is suggested to be considered of Grade II significance and should be nominated as such. Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region
- Local: This site is suggested to be Grade IIIA significance. This site should be retained as a heritage register site (High significance) and so mitigation as part of the development process is not advised.
- Local: This site is suggested to be Grade IIIB significance. It could be mitigated and (part) retained as a heritage register site (High significance).
- 'General' Protection A (Field Rating IV A): This site should be mitigated before destruction (usually High/Medium significance).
- 'General' Protection B (Field Rating IV B): This site should be recorded before destruction (usually Medium significance).
- 'General Protection C (Field Rating IV C): This site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (usually Low significance).

APPENDIX B: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM COASTAL AREAS: guidelines and procedures for developers

1. Shell middens

Shell middens can be defined as an accumulation of marine shell deposited by human agents rather than the result of marine activity. The shells are concentrated in a specific locality above the high-water mark and frequently contain stone tools, pottery, bone and occasionally also human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds $1 \, \text{m}^2$ in extent, should be reported to an archaeologist.

2. Human skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

3. Fossil bone

Fossil bones or any other concentrations of bones, whether fossilized or not, should be reported.

4. Stone artefacts

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

5. Stone features and platforms

They come in different forms and sizes, but are easy to identify. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and filled in with charcoal and marine shell. They are usually 1-2 metres in diameter and may represent cooking platforms. Others may resemble circular single row cobble stone markers. These are different sizes and may be the remains of wind breaks or cooking shelters.

6. Historical artefacts or features

These are easy to identified and include foundations of buildings or other construction features and items from domestic and military activities.