A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT FOR A PROPOSED RESIDENTIAL DEVELOPMENT ON ERF 325 IN THEESCOMBE, GQEBERHA (PORT ELIZABETH), NELSON MANDELA BAY MUNICIPALITY, EASTERN CAPE PROVINCE.



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Date: July 2024

CONTENTS

EXECUTIVE SUMMARY	1
PROJECT INFORMATION	2
The type of development	2
Applicant	3
Consultant	3
Purpose of the study	3
Site and location	3
Relevant impact assessments, databases and collections	3
BRIEF ARCHAEOLOGICAL BACKGROUND	5
Literature review	5
HISTORICAL BACKGROUND	6
The Driftsands historical dump	7
References	
ARCHAEOLOGICAL INVESTIGATION	9
Methodology	9
Limitations and assumptions	9
Results	
ASSESSMENT OF THE IMPACTS	9
DISCUSSION1	3
RECOMMENDATIONS1	3
References1	
GENERAL REMARKS AND CONDITIONS1	4
APPENDIX A: brief legislative requirements	5
APPENDIX B: Guidelines and procedures for developers	7
LIST OF TABLES	
Table 1. Impacts on the pre-colonial archaeology	9
LIST OF FIGURES	
Figure 1. General views of of the proposed development area	2
LIST OF MAPS	
Map 1. Map showing early division of farms in Port Elizabeth	7
Map 2. Historical map of the Driftsands area	8
Map 3. 1:50 000 topographic maps indicating the location of the proposed development 1	
Map 4. Aerial images indicating the location of the proposed development	
Map 5. Aerial image indicating the area surveyed	
Map 6. Provisional layout of the proposed development2	0

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Note: This report follows the minimum standard guidelines required by the South African Heritage Resources Agency and the Eastern Cape Heritage Resources Authority for compiling Phase 1 Archaeological Impact Assessment (AIA) reports. The report forms part of a Basic Assessment process in terms of the National Environmental Management Act (Act No. 107 of 1998, NEMA), as amended. The Basic Assessment process is currently within the 90 day Public Participation Phase (PPP) of the application.

EXECUTIVE SUMMARY

Eastern Cape Heritage Consultants cc has been appointed by Engineering Advice & Services (Pty) Ltd to conduct a Phase 1 Archaeological Impact Assessment (AIA) for a proposed residential development on Erf 325 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province.

The proposed site is located approximately 8 kilometers south west (SW) from the city centre and adjacent to Blumberg Road in the suburb of Theescombe. The property is neighboured by residential properties, small holdings and vacant land.

There is a large pocket of Sardina Forest Thicket near the southern boundary of the proposed development area and the rest of the site is also overgrown with dense vegetation consisting of grass, shrubs and trees. The archaeological visibility was therefore poor and the investigation was limited to a couple of footpaths and a single dirt road on the property. No archaeological sites/materials were observed within or in close proximity to the study area but the possibility of finding such sites during vegetation clearing or during the construction phase cannot be excluded. There are no known graves or historical buildings on the proposed site.

The proposed development area is located approximately 4 kilometers from the coast and falls within the sensitive coastal zone where archaeological sites and material such as shell middens may be found. Shell midden material and other artefacts were observed during a previous assessment in Theescombe approximately 1 kilometer south of the proposed development area (Binneman 2008b). An archaeological site dating from the last 2000 years was also recorded approximately 2 kilometers north - northeast of the proposed development area at Beaumonte Estates when a human burial was exposed in 2018/2019 (Mncwabe - Mama 2023). Several other archaeological assessments were conducted in the past in close proximity to where the proposed development will be undertaken (Binneman 2009a, 2010; Booth 2018; Reichert 2022b, 2023c).

During 1893-1909, the area between Summerstrand, Walmer and Schoenmakerskop known as the Driftsands area was covered with a thin distribution of historical rubbish dump material in order to stabilise the shifting sand dunes. This material includes glass bottles, sherds of china from various Port Elizabeth hotels, china dolls, mother of pearl buttons, horseshoes and numerous other artefacts. It is therefore possible that similar historical material may be exposed during the proposed development.

Should the remains of build structures that are older than 60 years or concentrations of historical material be uncovered after vegetation clearing or during the construction phase, a historian / heritage practitioner must be appointed to evaluate the find and to determine if a destruction permit needs to be obtained from the Eastern Cape Heritage Resources Authority (ECPHRA) in terms of Section 34 of the National Heritage Resources Act, No. 25 of 1999.

If any dense concentrations of historical dump material are exposed during the development, work must stop immediately and reported to the appointed historian (who will determine if a collecting strategy is required) or to the Eastern Cape Provincial Heritage Resources Authority (043 492 1370).

The main impact on possible archaeological sites/remains will be the physical disturbance of the material and its context. Should such material be exposed then work must cease in the immediate area and it must be reported to the archaeologist at the Albany Museum in Makhanda (Grahamstown) (Tel: 046 622 2312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 492 1370), so that a systematic and professional investigation can be undertaken.

Construction managers/foremen should be informed before clearing/construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

It is further recommended that an archaeologist/heritage practitioner should conduct a walkthrough of the proposed development area after vegetation clearing before the start of any construction activities. An archaeologist must also monitor all levelling and trenching activities that forms part of the development.

In general, the proposed area for development appears to be of **low archaeological sensitivity** and the development may proceed as planned. It must however be taken into account that the proposed development is located in an archaeological sensitive zone close to areas where archaeological material has been recorded in the past. Archaeological sites/materials (including human burials) may therefore be covered by sand and vegetation and may only be exposed during the development.

PROJECT INFORMATION

Type of development

The proposed development will entail the following activities:

- Clearing of vegetation from the proposed site for development. All no-go areas will be clearly indicated and will not be disturbed at any stage during the development or operational phase of the project.
- Levelling and landscaping the site for roads, residential units and related infrastructure and on-site parking,
- The construction of a boundary fence/wall spanning the boundary of the property,
- Construction of internal roads to provide access to the buildings and on-site parking,
- Construction of walkways,
- Construction of residential units, gatehouse and other related infrastructure,
- Installation of stormwater infrastructure,
- Installation of sewer reticulation,
- Irrigation network installation (if required),
- Connections to existing municipal services,
- Construction activity related to access to the site, and
- Landscaping of the site to provide private open space between the buildings.

The proposed residential development will consist of different villages that will accommodate different types of housing typologies. The size of the property is approximately 17 hectares and access to the property will be from Blumberg Road.

Applicant

CGS Properties Trust

Consultant

Engineering Advice & Services (Pty) Ltd. P.O. Box 13876 Humewood Port Elizabeth 6013

Tel: 041 581 2421

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Purpose of the study

The purpose of the study was to conduct a Phase 1 Archaeological Impact Assessment (AIA) for the proposed project and the associated activities, to describe and evaluate:

- the importance of possible archaeological sites, features and materials,
- the potential impact of the development on these resources and,
- to propose recommendations to minimize possible damage to these resources.

Site and Location

The property is located within the 1:50 000 topographic reference map 3325DC & DD and 3425BA Port Elizabeth (Map 1). The proposed site is located approximately 8 kilometers south west (SW) from the city centre and adjacent to Blumberg Road in the suburb of Theescombe. The property is neighboured by residential properties, small holdings and vacant land. There is a large pocket of Sardinia Forest Thicket near the southern boundary of the proposed development area and the rest of the site is also overgrown with dense vegetation consisting of grass, shrubs and trees (Fig. 1). There are a couple of footpaths on the property as well as a single dirt road that appears to be used for the dumping of sand and other building rubble within the eastern section of the property. General GPS reading: 33. 0.339S, 25.32.421.

Relevant Archaeological Impact Assessments

Binneman, J. 2012. A letter of recommendation (with conditions) for the exemption from a full phase 1 archaeological heritage impact assessment for a proposed residential development on Portion 62 of Farm No. 10, Little Chelsea, Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for: Public Process Consultants. Greenacres. Eastern Cape Heritage Consultants cc. Jeffreys Bay.

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, for the development of two residential nodes, lodge and nature reserve. Prepared for: CEN Integrated Environmental Management Unit. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.

Binneman, J. 2009a. 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. Prepared for: CEN Integrated Environmental Management Unit. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.

- Binneman, J. 2009b. A phase 1 archaeological heritage impact assessment for the proposed subdivision of Portion 12 of the Farm Kragga Kamma No. 23, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province, for the development of an Agri Village and the necessary infrastructure. Prepared for: CEN Integrated Environmental Management Unit. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Binneman, J. 2008a. A phase 1 archaeological heritage impact assessment for the proposed residential development on the remainder of Erf 1226, Fairview, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape. Prepared for: CEN Integrated Environmental Management Unit. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Binneman, J. 2008b. A phase 1 archaeological heritage impact assessment of the proposed development of a sand quarry on Erf 429, Theescombe, Port Elizabeth, Nelson Mandela Bay Metropolitan, Eastern Cape Province. Prepared for: Mr. J. du Plessis. Sydenham. Albany Museum. Grahamstown.
- Binneman, J. and Reichert, K. 2020. A phase 1 archaeological heritage impact assessment for the proposed development of Erf 11667 for business purposes in Walmer, Port Elizabeth, Nelson Mandela Bay Municipality of the Eastern Cape Province. Prepared for Engineering Advice & Services (Pty) Ltd. Humewood. Eastern Cape Heritage Consultants cc.
- Binneman, J. and Reichert, K. 2019. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological impact assessment for the proposed residential development (River Oaks) on Erf 738, in Fairview, Port Elizabeth, Nelson Mandela Bay Municipality of the Eastern Cape Province. Prepared for CEN Integrated Environmental Management Unit. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
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- Booth, C. 2018. Phase 1 archaeological impact assessment for the proposed mining right application on several erven in the Driftsands area, Port Elizabeth, Nelson Mandela Bay Municipality (NMBM), Eastern Cape Province. Prepared for: Algoa Consulting Mining Engineers. Port Elizabeth. Booth Heritage Consulting. Grahamstown.
- Booth, C. 2014. A phase 1 archaeological impact assessment for the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Bay Municipality (NMBM), Eastern Cape Province. Prepared for: SRK Consulting. Port Elizabeth. Booth Heritage Consulting. Grahamstown.
- 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. Prepared for: SRK Consulting. Albany Museum. Grahamstown.
- Reichert, K. 2023a. A phase 1 archaeological heritage impact assessment for a proposed business (1) development on Erf 7005 Portion of Erf 1935 in Walmer, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for Digital Soils Africa (Pty) Ltd. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Reichert, K. 2023b. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological heritage impact assessment for a proposed business (1) development on Erf 4033 in Fairview, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for Digital Soils Africa (Pty) Ltd. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.

- Reichert, K. 2023c. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological heritage impact assessment for the proposed extension of the existing Snowcap Mushroom Farm on Erf 413 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for: Digital Soils Africa (Pty) Ltd. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Reichert, K. 2023d. A phase 1 archaeological impact assessment for a proposed mixed-use development on Portions 98, 99 and 102 (portions of Portion 14) of the Farm Little Chelsea No. 10 in Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for: Engineering Advice & Services (Pty) Ltd. Humewood. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Reichert, K. 2022a. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological heritage impact assessment for the proposed mixed residential development and associated infrastructure on Erven 256 259, Fairview, Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for JG Afrika (Pty) Ltd. Greenacres. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Reichert, K. 2022b. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological impact assessment for a proposed housing development and associated infrastructure on a portion of Erf 4087 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for BlueLeaf Environmental Consulting (Pty) Ltd. Gqeberha. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- 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. Prepared for BKS Environmental Management Department. Port Elizabeth. ArchaeoMaps Archaeological Consultancy. Beacon Bay.

The Albany Museum in Makhanda (Grahamstown) and the Bayworld Museum houses collections and information from the wider region

BRIEF ARCHAEOLOGICAL BACKGROUND

Literature review

Pre-colonial archaeology

The archaeology of the immediate Theescombe area is largely unknown, mainly because little systematic research has been conducted there. The oldest evidence of the early inhabitants in the Gqeberha (Port Elizabeth) area are large stone tools, called handaxes and cleavers, which can be found amongst river gravels and in old spring deposits in the region (Deacon 1970). 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. In a series of spring deposits at Amanzi Spring near Addo, a large number of stone tools were found *in situ* to a depth of 3-4 metres. Remarkably, wood and seed material preserved in the spring deposits, possibly dating to between 250 000 to 800 000 years old (Inskeep 1965; Deacon 1970).

The large handaxes and cleavers were replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blade industries. Evidence of MSA sites occur throughout the Gqeberha (Port Elizabeth) region and date between 200 000 and 30 000 years old. Fossil bone may in rare cases be associated with MSA occurrences (Deacon & Deacon 1999). One such occurrence of fossil bone remains and Middle Stone Age stone tools was reported south of Coega Kop (Gess 1969). During excavations the remains were found in the surface limestone, but the bulk of the bone remains were found some 1-1,5 metres below the surface. The excavations exposed a large number and variety of bones, teeth and horn corns. The bone remains included warthog, leopard,

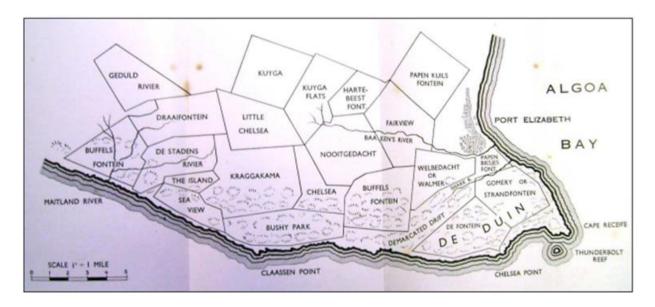
hyena, rhinoceros and ten different antelope species. A radiocarbon date of greater than 37 000 years was obtained for the site.

The majority of archaeological sites found in the Gqeberha (Port Elizabeth) area date from the past 10 000 years (called the Later Stone Age) and are associated with the campsites of San hunter-gatherers 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 & Deacon 1999). There are many San hunter-gatherers sites in the nearby Elandsberg and Groot Winterhoekberg Mountains. Here caves and rock shelters were occupied by the San during the Later Stone Age and contain paintings along the walls. The last San/KhoiSan group was killed by Commando's in the Groendal area in the 1880s. Some 2 000 years ago Khoi pastoralists occupied the region and lived mainly in small settlements. They were the first food producers in South Africa and introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern Africa.

The most common archaeological sites along the nearby coast are shell middens (relatively large piles of marine shell) found usually concentrated opposite rocky coasts, but also along sandy beaches (Rudner 1968). These were campsites of San hunter-gatherers, Khoi herders and KhoiSan peoples who lived along the immediate coast (up to 5 km inland) and collected marine foods. Mixed with the shell are other food remains, cultural material and often human remains are found in the middens. In general shell middens in the open found along the wider Port Elizabeth coast, date from the past 6 000 years. Also associated with middens are large stone floors which were probably used as cooking platforms (Binneman 2001, 2005).

HISTORICAL BACKGROUND

Port Elizabeth was established in 1820 as a British settlement around Fort Frederick and was incorporated as a town in 1861. It was named by Sir Rufane Donkin after his deceased wife while he was the acting governor of the Cape Colony (Britannica 2023). Port Elizabeth became a city in 1913, after completion of the Kimberley Railroad (1873) spurred development of the port (Britannica 2023). Theescombe is a suburb in Gqeberha (Port Elizabeth) that was originally known as "Nooitgedacht" (Bennie 2008). It was a loan farm that was granted to Gerrit Holtshausen in the early 1800's. William Brookes Frames purchased half of the farm in 1840 and he named it: "Theescombe" after his family's home in Gloucestershire. A "combe" is a name used in England to describe a moorland valley (McCleland 2017). It has also been suggested that Theescombe is derived from the words: "Thieves Combe" referring to a valley in England haunted by thieves (www.amberley.org.uk). By 1845, John and Mary Niblett settled on the farm and by 1849 the other half of the farm belonged to J.S Reed (McCleland 2017).



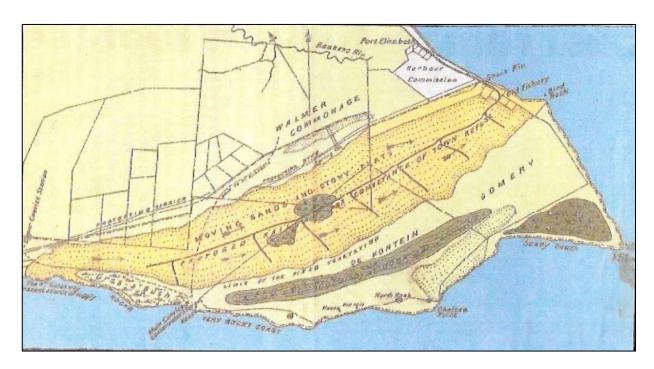
Map 1. Map showing the earliest subdivision of farms in Port Elizabeth (Redgrave 1947)

<u>Driftsands historical dump</u>

A large part of the Driftsands area which stretches from west of Schoenmakerskop to the borders of Walmer and Summerstrand, was covered by a thin distribution of historical rubbish dump material (dating to the Victorian period) between 1893 and 1909. Theescombe is located within this area.

According to historical records, the sand killed all vegetation and posed a threat to the harbour. In 1893 Joseph Storr Lister of the Cape Forestry Department was appointed to solve the drifting sand problem. Lister proposed stabilising the dunes by dumping household rubbish on the dunes. He constructed a railway line nine miles into the dunes and a train (called the 'Driftsands Special') dumped some 80 tons of town rubbish a day on the shifting sand dunes. The rubbish was spread in a relatively thin layer on the dunes, and the seeds of Australian *acacias* (Rooikranz, Port Jackson and Long-leaf wattles) planted into the garbage. In total some 91 000 metric tons of refuse was dumped on the dunes between 1893 and 1909 (Bennie 1993).

Between 1960 and 1970 amateur bottle collectors illegally mined the old dump extensively (Lastovica & Lastovica 1982). Bayworld Museum houses a large collection of material which includes glass bottles, sherds of china from various Port Elizabeth hotels, china dolls, mother of pearl buttons, horse shoes and numerous other artefacts made by Dr Mike Raath. He did most of his collecting in the Summerstrand area and beyond the Nelson Mandela Metropolitan University (Bennie 1993).



Map 2. Historical map of the driftsands area (McCleland 2016)

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ARCHAEOLOGICAL INVESTIGATION

Methodology

Google aerial images, historical aerial photographs as well as previous heritage reports related to the study area were studied prior to the investigation. The investigation was conducted on foot by an archaeologist. GPS readings were taken with a Garmin eTREX 22x and all important features were digitally recorded. Access to the study area was easy but the archaeological visibility was poor due to the dense grass, shrubs and trees on the property. The visibility was better within the single dirt road and along several footpaths on the property. Molehills in the proposed development area were also checked for signs of archaeological material.

Limitations and assumptions

It was not possible to do a comprehensive survey of the property due dense thicket vegetation on the property which made it difficult to identify *in situ* archaeological sites / material (Fig. 1). The property is vacant land along the edge of the suburb and the only access in the dense vegetation is a dirt road used for dumping sand and other building rubble as well as several footpaths. There were signs of vagrants living in the bush and labourers were observed using the footpaths to their place of work. In general the area cannot be regarded as safe which made it difficult to survey the entire property.

Regardless of the restrictions imposed by the natural environmental and safety issues, the experiences and knowledge gained from other investigations in adjacent and the wider surrounding region, provided background information to make assumption and predictions on the incidences and the significance of possible pre-colonial archaeological sites/material which may be located in the area, or which may be covered by soil and vegetation.

Results

No archaeological sites/materials were observed within or in close proximity to the study area. In general, the area for the proposed development appears to be of low archaeological sensitivity and it is unlikely that any archaeological remains of significance will be found *in situ* or exposed during these activities. It must however be taken into account that the proposed development is located close to areas where archaeological material has been recorded in the past and where Phase 2 mitigation was required. Archaeological sites/materials may therefore be covered by dune sand and vegetation and may only be exposed during the development. There are no known graves or historical buildings on the proposed site.

ASSESSMENT OF THE IMPACTS

Direct impacts

Table 1. The potential physical disturbance and destruction of surface and buried precolonial archaeology sites/remains during all developments (rating based on the surface visibility of archaeological remains).

Nature of the Impact	Possible loss of non-renewable heritage resources: The main impact on
	archaeological sites/remains (if any) will be the physical disturbance of the
	material and its context. The clearing of the vegetation may expose, disturb
	and displace archaeological sites/material. However, from the investigation
	it would appear that the proposed areas earmarked for development are of
	low archaeological sensitivity. There are no known graves or buildings older
	than 60 years on the area surveyed.

Extent	Site specific - The impact will be limited to the development footprint.
Duration	Permanent - Disturbance to archaeological material will be permanent.
Intensity	Medium
Probability	Probable – the archaeological material within the proposed development footprint will be disturbed, displaced or destroyed.
Reversibility	Irreversible – Once the archaeological material has been removed or destroyed this impact cannot be reversed.
Degree of Confidence	Medium / High
Status and Significance of Impact (no mitigation) Mitigation	 Construction managers/foremen should also 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. An archaeologist must conduct a walkthrough of the proposed development area after vegetation clearing. An archaeologist must also monitor all levelling and trenching activities that forms part of the development. A historian must be appointed if any concentrations of historical material or the remains of build structures that are older than 60 years are uncovered after vegetation clearing or during the construction phase, to evaluate the find. If any human remains (or any other concentrations of archaeological heritage material) are exposed during construction, all work must cease in the immediate area of the finds and must be reported immediately to the archaeologist at the Albany Museum in Makhanda (Tel.: 046 622 2312) or to the Eastern Cape Provincial Heritage Resources Authority (043 492 1370). Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations will follow from the investigation and may include: Consultation with the local communities regarding the conditions for
	 the possible removal, storage and reburial (in the case of human remains) of heritage material. If the local communities agree to the removal of human remains and heritage, an archaeologist must apply for permits from the Eastern Cape Province Heritage Resources Authority to collect and/or excavate sites/materials from archaeological sites impacted by the development.
	Consultation with the Albany Museum (repository for archaeological material in the Eastern Cape) regarding permit(s) to remove the heritage material, the storing, curating and costs involved.

	A Phase 2 Mitigation process to systematically excavate and to remove the archaeological deposits before construction of the development continues. Note: All costs must be financed by the applicants. This may include: All monitoring and mitigation expenses regarding the excavations/collecting of material, travel, accommodation and subsistence, analysis of the material, radiocarbon date(s) of the site(s) and a once-off curation/storage fee payable to the Department of Archaeology at the Albany Museum.
Significance and Status (with mitigation)	Neutral (0)
Residual Impact	The cumulative impacts on above and below ground heritage will increase when further developments take place in adjoining areas. There are no other developments planned for the adjoining area and the cumulative impact of the development therefore does not change the overall impact rating. Low Negative (-)



Figure 1. General views of the proposed area for residential development on Erf 325 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province.

DISCUSSION

The proposed development area is located approximately 4 kilometers from the coast and falls within the sensitive coastal zone where archaeological sites and material such as shell middens may be found. Shell midden material and other artefacts were observed during a previous assessment in Theescombe approximately 1 kilometer south of the proposed development area (Binneman 2008b). An archaeological site dating from the last 2000 years was also recorded approximately 2 kilometers north - northeast of the proposed development area at Beaumonte Estates when a human burial was exposed in 2018/2019 (Mncwabe - Mama 2023). Several other archaeological assessments were conducted in the past in close proximity to where the proposed development will be undertaken (Binneman 2008b, 2009a, 2010; Booth 2018; Reichert 2022b, 2023c).

During 1893-1909 the area between Summerstrand, Walmer and Schoenmakerskop known as the Driftsands area was covered with a thin distribution of historical rubbish dump material in order to stabilise the shifting sand dunes. This material includes glass bottles, sherds of china from various Port Elizabeth hotels, china dolls, mother of pearl buttons, horseshoes and numerous other artefacts. It is therefore possible that similar historical material may be exposed during the proposed development.

There are no known graves or historical buildings on the proposed site. No archaeological sites/materials were observed within or in close proximity to the proposed development area but the possibility cannot be excluded that archaeological sites/material (including human remains) will be found *in situ*. In general, the proposed area for the development appears to be of **low archaeological sensitivity** and the development may proceed as planned.

RECOMMENDATIONS

The main impact on possible archaeological sites/remains will be the physical disturbance of the material and its context. Should such material be exposed then work must cease in the immediate area and it must be reported to the archaeologist at the Albany Museum in Makhanda (Grahamstown) (Tel: 046 622 2312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 492 1370), so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See Appendix B for a list of possible archaeological sites that maybe found in the area). The developer must finance the costs should additional investigations be required.

It is further recommended that:

- 1. Construction managers/foreman should be informed before clearing/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. An archaeologist/heritage practitioner should conduct a walkthrough of the proposed development area after vegetation clearing before the start of any construction activities. An archaeologist must also monitor all levelling and trenching activities that forms part of the development.
- 3. An archaeologist must monitor all levelling and trenching activities that forms part of the development.
- 4. Should the remains of build structures that are older than 60 years or concentrations of historical material be uncovered after vegetation clearing or during the construction phase, a historian / heritage practitioner must be appointed to evaluate the find and to determine if a

destruction permit needs to be obtained from the Eastern Cape Heritage Resources Authority (ECPHRA) in terms of Section 34 of the National Heritage Resources Act, No. 25 of 1999.

5. If any dense concentrations of historical dump material are exposed during the development, work must stop immediately and reported to the appointed historian (who will determine if a collecting strategy is required) or to the Eastern Cape Provincial Heritage Resources Authority (043 492 1370).

References

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- 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, for the development of two residential nodes, lodge and nature reserve. Prepared for: CEN Integrated Environmental Management Unit. Port Elizabeth. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
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- Mncwabe Mama, A. 2023. E-mail correspondence between the Eastern Cape Provincial Heritage Resources Authority (ECPHRA) and Digital Soils Africa (Pty) Ltd.
- Reichert, K. 2022b. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological impact assessment for a proposed housing development and associated infrastructure on a portion of Erf 4087 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for BlueLeaf Environmental Consulting (Pty) Ltd. Gqeberha. Eastern Cape Heritage Consultants cc. Jeffreys Bay.
- Reichert, K. 2023c. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological heritage impact assessment for the proposed extension of the existing Snowcap Mushroom Farm on Erf 413 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for: Digital Soils Africa (Pty) Ltd. Eastern Cape Heritage Consultants cc. Jeffreys Bay.

GENERAL REMARKS AND CONDITIONS

Note: This is an Archaeological Impact Assessment (AIA) report compiled for the Eastern Cape Provincial Heritage Resources Authority (ECPHRA) to enable them to make informed decisions regarding the heritage resources assessed in this report and only they have the authority to revise the report. This Report must be reviewed by the ECPHRA where after they will issue their Review Comments to the EAP/developer. The final decision rests with the ECPHRA who must grant permits if there will be any impact on cultural sites/materials as a result of the development.

This report is a Phase 1 Archaeological Impact Assessment and does not exempt the developer from any other relevant heritage impact assessments as specified below:

In terms of the National Heritage Resources Act, No. 25 of 1999 (section 38) ECPHRA may

require a full Heritage Impact Assessment (HIA) to assess all heritage resources, that includes *inter alia*, all places or objects of aesthetical, architectural, historic, scientific, social, spiritual, linguistic, or technological significance that may be present on a site earmarked for development. A full Heritage Impact Assessment (HIA) should assess all these heritage components, and the assessment may include 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 this Phase 1 AIA is based on the visibility of archaeological sites/material and may not therefore reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered during construction activities, ECPHRA or an archaeologist must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed (see attached list of possible archaeological sites and material). The *onus* is on the developer to ensure that the provisions of the National Heritage Resources Act No. 25 of 1999 and any instructions from ECPHRA are followed. The EAP/developer must forward this report to ECPHRA in order to obtain their review comments, unless alternative arrangements have been made with the heritage specialist to submit the report.

APPENDIX A: brief legislative requirements

Parts of sections 34, 35(4), 36(3) and 38(1) (8) of the National Heritage Resources Act, No. 25 of 1999 apply:

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.

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.

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.

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, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of the site
 - (i) exceeding 5000m² 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 $10\ 000m^2$ 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.

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

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 m² in extent, should be reported to an archaeologist.

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.

Fossil bone

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

Stone artefacts

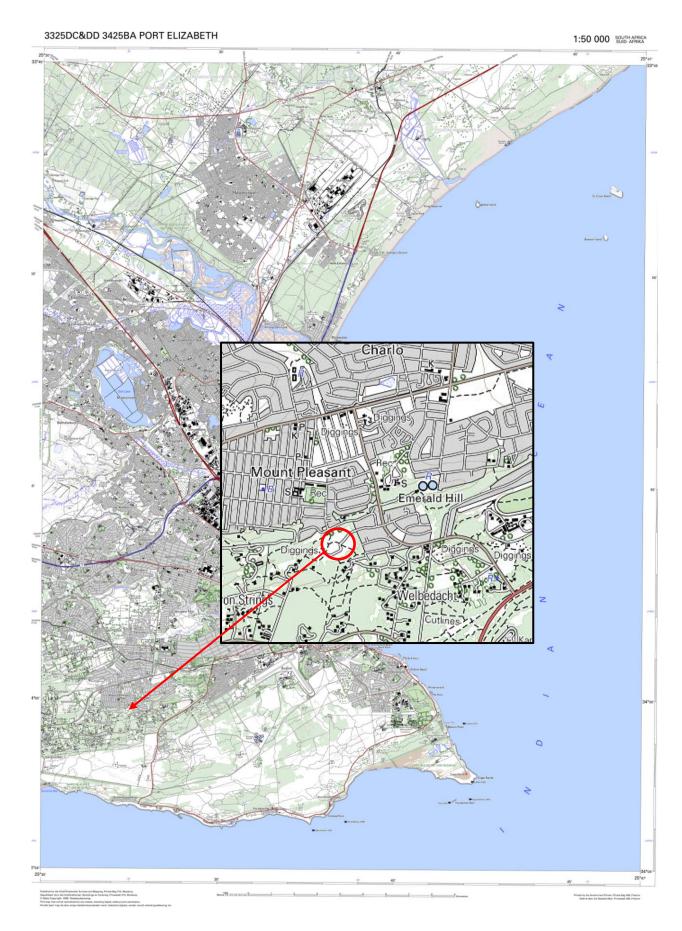
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately, and archaeologists notified.

Stone features and platforms

These occur in different forms and sizes, but easily identifiable. 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 for shellfish. Others may resemble circular single row cobble stone markers. These occur in different sizes and may be the remains of windbreaks or cooking shelters.

Historical artefacts or features

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



Map 3. 1:50 000 Topographic maps indicating the approximate location of the proposed residential development on Erf 325 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality (indicated with the red circle).



Map 4. Aerial views of the location of the proposed area for the residential development on Erf 325 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality The proposed development area is outlined in red.



Map 5. Aerial view of the proposed development area indicating survey tracks in yellow.



Map 6. Provisional layout of the proposed development on Erf 325 in Theescombe, Gqeberha (Port Elizabeth), Nelson Mandela Bay Municipality, Eastern Cape Province (map courtesy of RK architects)