

FORT JACKSON CEMETERY EXTENSION, BUFFALO CITY MUNICIPALITY, EASTERN CAPE PROVINCE

Phase 1 Archaeological Impact Assessment Report

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ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE EXTENSION OF THE FORT JACKSON CEMETERY, BUFFALO CITY MUNICIPALITY, EASTERN CAPE PROVINCE

July 2011

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AGES (Pty) promotes the conservation of sensitive archaeological and heritage resources and therefore uncompromisingly adheres to relevant Heritage Legislation (National Heritage Resources Act no. 25 of 1999, Human Tissue Act 65 of 1983 as amended, Removal of Graves and Dead Bodies Ordinance no. 7 of 1925, Excavations Ordinance no. 12 of 1980). In order to ensure best practices and ethics in the examination, conservation and mitigation of archaeological and heritage resources, AGES (Pty) follows the Minimum Standards: Archaeological and Palaeontological Components of Impact Assessment as set out by the South African Heritage Resources Agency (SAHRA) and the CRM section of the Association for South African Professional Archaeologists (ASAPA).

NOTATIONS AND TERMS

Absolute dating:

Absolute dating provides specific dates or range of dates expressed in years.

Archaeology:

The study of the human past through its material remains.

Archaeological record:

The archaeological record minimally includes all the material remains documented by archaeologists. More comprehensive definitions also include the record of culture history and everything written about the past by archaeologists.

Artefact:

Entities whose characteristics result or partially result from human activity. The shape and other characteristics of the artifact are not altered by removal of the surroundings in which they are discovered. In the southern African context examples of artefacts include potsherds, iron objects, stone tools, beads and hut remains.

Assemblage:

A group of artefacts recurring together at a particular time and place, and representing the sum of human activities.

¹⁴C or radiocarbon dating:

The ¹⁴C method determines the absolute age of organic material by studying the radioactivity of carbon. It is reliable for objects not older 70 000 years by means of isotopic enrichment. The method becomes increasingly inaccurate for samples younger than ±250 years.

Ceramic Facies:

In terms of the cultural representation of ceramics, a facies is denoted by a specific branch of a larger ceramic tradition. A number of ceramic facies thus constitute a ceramic tradition.

Ceramic Tradition:

In terms of the cultural representation of ceramics, a series of ceramic units constitutes as ceramic tradition.

Context:

An artefact's context usually consists of its immediate *matrix*, its *provenience* and its *association* with other artefacts. When found in *primary context*, the original artefact or structure was undisturbed by natural or human factors until excavation and if in *secondary context*, disturbance or displacement by later ecological action or human activities occurred.

Culture:

A contested term, "culture" could minimally be defined as the learned and shared things that people have, do and think.

Cultural Heritage Resource:

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of palaeontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

Cultural landscape:

A cultural landscape refers to a distinctive geographic area with cultural significance.

Cultural Resource Management (CRM):

A system of measures for safeguarding the archaeological heritage of a given area, generally applied within the framework of legislation designed to safeguard the past.

Ecofact:

Non artifactual material remains that has cultural relevance which provides information about past human activities. Examples would include remains or evidence of domesticated animals or plant species.

Excavation:

The principal method of data acquisition in archaeology, involving the systematic uncovering of archaeological remains through the removal of the deposits of soil and the other material covering and accompanying it.

Feature:

Non-portable artifacts, in other words artifacts that cannot be removed from their surroundings without destroying or altering their original form. Hearths, roads, and storage pits are examples of archaeological features

GIS:

Geographic Information Systems are computer software that allows layering of various types of data to produce complex maps; useful for predicting site location and for representing the analysis of collected data within sites and across regions.

Historical archaeology:

Primarily that aspect of archaeology which is complementary to history based on the study of written sources. In the South African context it concerns the recovery and interpretation of relics left in the ground in the course of Europe's discovery of South Africa, as well as the movements of the indigenous groups during, and after the "Great Scattering" of Bantu-speaking groups – known as the *mfecane* or *difaqane*.

Iron Age:

Also known as "Farmer Period", the "Iron Age" is an archaeological term used to define a period associated with domesticated livestock and grains, metal working and ceramic manufacture.

Lithic:

Stone tools or waste from stone tool manufacturing found in on archaeological sites.

Matrix:

The material in which an artefact is situated (sediments such as sand, ashy soil, mud, water, etcetera). The matrix may be of natural origin or human-made.

Megalith:

A large stone, often found in association with others and forming an alignment or monument, such as large stone statues.

Midden:

Refuse that accumulates in a concentrated heap.

Microlith:

A small stone tool, typically knapped of flint or chert, usually about three centimetres long or less.

Monolith:

A geological feature such as a large rock, consisting of a single massive stone or rock, or a single piece of rock placed as, or within, a monument or site.

Oral Histories:

The historical narratives, stories and traditions passed from generation to generation by word of mouth.

Pre-Phase 1 CRM Assessment:

An initial pre-assessment (scoping) phase, where the specialist establishes the scope of the project and terms of reference for the developer.

Phase 1 CRM Assessment:

An Impact Assessment which identifies archaeological and heritage sites, assesses their significance and comments on the impact of a given development on the sites. Recommendations for site mitigation or conservation are also made during this phase.

Phase 2 CRM Study:

In-depth studies which could include major archaeological excavations, detailed site surveys and mapping / plans of sites, including

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historical / architectural structures and features. Alternatively, the sampling of sites by collecting material, small test pit excavations or auger sampling is required. Mitigation / Rescue involves planning the protection of significant sites or sampling through excavation or collection (in terms of a permit) at sites that may be lost as a result of a given development.

Phase 3 CRM Measure:

A Heritage Site Management Plan (for heritage conservation), is required in rare cases where the site is so important that development will not be allowed and sometimes developers are encouraged to enhance the value of the sites retained on their properties with appropriate interpretive material or displays.

Prehistoric archaeology:

That aspect of archaeology which concerns itself with the development of humans and their culture before the invention of writing. In South Africa, prehistoric archaeology comprises the study of the Early Stone Age, the Middle Stone Age and the greater part of the Later Stone Age and the Iron Age.

Probabilistic Sampling:

A sampling strategy that is not biased by any person's judgment or opinion. Also known as statistical sampling, it includes systematic, random and stratified sampling strategies.

Provenience

Provenience is the three-dimensional (horizontal and vertical) position in which artefacts are found. Fundamental to ascertaining the provenience of an artefact is *association*, the co-occurrence of an artefact with other archaeological remains; and *superposition*, the principle whereby artefacts in lower levels of a matrix were deposited before the artefacts found in the layers above them, and are therefore older.

Random Sampling:

A probabilistic sampling strategy whereby randomly selected sample blocks in an area are surveyed. These are fixed by drawing coordinates of the sample blocks from a table of random numbers.

Relative dating:

The process whereby the relative antiquity of sites and objects are determined by putting them in sequential order but not assigning specific dates.

Remote Sensing:

The small or large-scale acquisition of information of an object or phenomenon, by the use of either recording or real-time sensing device(s) that is not in physical or intimate contact with the object (such as by way of aircraft, spacecraft or satellite). Here, ground-based geophysical methods such as Ground Penetrating Radar and Magnetometry are often used for archaeological imaging.

Rock Art Research:

Rock art can be "decoded" in order to inform about cultural attributes of prehistoric societies, such as dress-code, hunting and food gathering, social behaviour, religious practice, gender issues and political issues.

Sensitive:

Often refers to graves and burial sites although not necessarily a heritage place, as well as ideologically significant sites such as ritual / religious places. Sensitive may also refer to an entire landscape / area known for its significant heritage remains.

Site (Archaeological):

A distinct spatial clustering of artefacts, features, structures, and organic and environmental remains, as the residue of human activity. These include surface sites, caves and rock shelters, larger open-air sites, sealed sites (deposits) and river deposits. Common functions of archaeological sites include living or habitation sites, kill sites, ceremonial sites, burial sites, trading, quarry, and art sites,

Slag:

The material residue of smelting processes from metalworking.

Stone Age:

An archaeological term used to define a period of stone tool use and manufacture.

Stratigraphy:

This principle examines and describes the observable layers of sediments and the arrangement of strata in deposits

Stratified Sampling:

A probabilistic sampling strategy whereby a study area is divided into appropriate zones – often based on the probable location of archaeological areas, after which each zone is sampled at random.

Systematic Sampling:

A probabilistic sampling strategy whereby a grid of sample blocks is set up over the survey area and each of these blocks is equally spaced and searched.

Tradition:

Artefact types, assemblages of tools, architectural styles, economic practices or art styles that last longer than a phase and even a horizon are describe by the term *tradition*. A common example of this is the early Iron Age tradition of Southern Africa that originated ± 200 AD and came to an end at about 900 AD.

Tuyère:

A ceramic blow-tube used in the process of iron smelting / reduction.

LIST OF ABBREVIATIONS

Abbreviation	Description
ASAPA	Association for South African Professional Archaeologists
AIA	Archaeological Impact Assessment
BP	Before Present
BCE	Before Common Era
EIA	Early Iron Age (also Early Farmer Period)
EIA	Environnemental Impact Assessment
EFP	Early Farmer Period (also Early Iron Age)
ESA	Earlier Stone Age
GIS	Geographic Information Systems
HIA	Heritage Impact Assessment
K2/Map	K2/Mapungubwe Period
LFP	Later Farmer Period (also Later Iron Age)
LIA	Later Iron Age (also Later Farmer Period)
LSA	Later Stone Age
MIA	Middle Iron Age (also Early later Farmer Period)
MRA	Mining Rights Application
MSA	Middle Stone Age
NHRA	National Heritage Resources Act No.25 of 1999, Section 35
SAHRA	South African Heritage Resources Association
YCE	Years before Common Era (Present)

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1 EXECUTIVE SUMMARY



This report details the results of an Archaeological Impact Assessment (AIA) study of surface portions in an industrial extension of Fort Jackson, subject to the planned expansion of the Fort Jackson cemetery in Mdantasane, Eastern Cape Province. The report includes background information on the area's archaeology, its representation in southern Africa, and the history of the larger area under investigation, survey methodology and results as well as heritage legislation and conservation policies. A copy of the report will be supplied to the South African Heritage Resources Agency (SAHRA) and recommendations contained in this document will be reviewed in order to consider the conservation priority of sites located in the area.

Previous palaeontological, archaeological and historical studies conducted on the Eastern Cape coastal areas of South Africa area suggest a rich and diverse archaeological landscape. At the Fort Jackson site, no palaeontological or archaeological sites were observed during the pedestrian survey of a total surface area of more or less 20ha. However, the foundation structures and wall remains of house as well as a stone and concrete lined water cistern and two dams, possibly dating to the Historical Period were documented. Local male initiation activities were observed in the surrounding area, the remnants of which are visible in the study area.

Palaeontological Remains

No paleontological occurrences were observed in the survey area.

Stone Age Remains:

No Stone Age occurrences were observed in the survey area.

Iron Age (Farmer Period) Remains

No Iron Age (Farmer Period) occurrences were observed in the survey area.

Historical /Recent Remains

The ruined remains of a house, including stone foundation structures and brick walling were located in the study area. A large water cistern and two small catchment dams constructed out of stone and concrete were also noted. The age of the structures could not be established but the site might date to the Historical Period in the Eastern Cape.

Graves

No graves / burial places were identified in the survey area.

Other areas

Current male initiation activities were observed in areas surrounding the study area. The remains of burnt down initiation shelters, as well as intact temporary initiation huts currently in use were documented.

Recommendations

As the coastal landscape of the Eastern Cape is rich in heritage resources, a careful watching brief monitoring process is recommended for any developments at the Fort Jackson site. Should any subsurface paleontological / archaeological material be exposed during construction activities, all activities should be suspended and the archaeological specialist should be notified immediately. In addition, the close vicinity of the existing Fort Jackson cemetery should be regarded and care should be taken to avoid impact on existing graves / burial places. The

scientific value of the house remains, the water cistern and catchment dams have been greatly compromised by the poor preservation of these features. However, as the age of the site could not be established, it is recommended that the sites be thoroughly documented and attempts be made to establish a temporal and historical context for the structures by means of a desktop study. In addition, a destruction permit should be obtained from the relevant resources authority, should the structures be directly impacted by development activities of the cemetery. The intrinsic heritage and social value of the initiation site and structures at Fort Jackson requires special consideration, as the deeper cultural and symbolic meaning of these rites are of great local importance. It is therefore recommended that a Social Impact Assessment (SIA) establish the sentiments, relationships and associations of local communities to these initiation areas.

This report details the methodology, limitations and recommendations relevant to these heritage areas, as well as areas of proposed development. It should be noted that mitigation measures are valid for the duration of the development process, and mitigation measures might have to be implemented on additional features of heritage importance not detected during this Phase 1 assessment (e.g. uncovered during the construction process).

2 BACKGROUND

2.1 Scope and Motivation

AGES Eastern Cape was appointed to complete an Archaeological Impact Assessment (AIA) Study of demarcated areas at Fort Jackson in Mdantsane where the expansion of the existing Fort Jackson cemetery is planned. The rationale of the AIA study was to determine the presence of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance; to consider the impact of the proposed project on such heritage resources, and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at affected sites / features.

2.2 Project Direction

AGES's expertise ensures that all projects be conducted to the highest ethical and professional standards and as archaeological specialist for AGES, Mr. Neels Kruger acted as field director for the AIA study. Mr Kruger is an accredited archaeologist and CRM Practitioner with the Association of South African Professional Archaeologists (ASAPA) and a Master's Degree candidate in archaeology at the University of Pretoria.

2.3 Terms of Reference

Environmental Impact Assessments (EIA's) should, in all cases, include the assessment of Heritage Resources. The heritage component of the EIA is provided for in the **National Environmental Management Act, (Act 107 of 1998)** and endorsed by section 38 of the **National Heritage Resources Act (NHRA - Act 25 of 1999)**. In addition, the NHRA protects all structures and features older than 60 years (see Section 34), archaeological sites and material (see Section 35) and graves as well as burial sites (see Section 36). The objective of this legislation is to enable and to facilitate developers to employ measures to limit the potentially negative effects that the development could have on heritage resources.

Based hereon, this proposed project draws on the following terms of reference:

- Provide a detailed description of all archaeological artefacts, structures (including graves) and settlements, if any.
- Estimate the level of significance/importance of the archaeological remains within the area.
- Assess any possible impact on the archaeological and historical remains within the area emanating from the proposed development activities.
- Propose possible mitigation measures provided that such action is necessitated by the development.
- Liaise and consult with the South African Heritage Resources Agency (SAHRA).

2.4 CRM: Legislation, Conservation and Heritage Management

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of palaeontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

2.4.1 Legislation regarding archaeology and heritage sites

The South African Heritage Resources Agency (SAHRA) and their provincial offices aim to conserve and control the management, research, alteration and destruction of cultural resources of South Africa. It is therefore vitally important to adhere to heritage resource legislation at all times.

- National Heritage Resources Act No 25 of 1999, section 35

According to the National Heritage Resources Act of 1999 a historical site is "any identifiable building or part thereof, marker, milestone, gravestone, landmark or tell older than 60 years." This clause is commonly known as the "60-years clause". Buildings are amongst the most enduring features of human occupation, and this definition therefore includes all buildings older than 60 years, modern architecture as well as ruins, fortifications and Iron Age settlements. "Tell" refers to the evidence of human existence which is no longer above ground level, such as building foundations and buried remains of settlements (including artefacts).

The Act identifies heritage objects as:

- objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects, meteorites and rare geological specimens
- visual art objects
- military objects
- numismatic objects
- objects of cultural and historical significance
- objects to which oral traditions are attached and which are associated with living heritage
- objects of scientific or technological interest
- any other prescribed category

With regards to activities and work on archaeological and heritage sites this Act states that:

"No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit by the relevant provincial heritage resources authority." (34. [1] 1999:58)

and

"No person may, without a permit issued by the responsible heritage resources authority-

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites. (35. [4] 1999:58)."

And:

"No person may, without a permit issued by SAHRA or a provincial heritage resources agency-

- (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;
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) and excavation equipment, or any equipment which assists in the detection or recovery of metals (36. [3] 1999:60)."
- Human Tissue Act of 1983 and Ordinance on the Removal of Graves and Dead Bodies of 1925

Graves 60 years or older are heritage resources and fall under the jurisdiction of both the National Heritage Resources Act and the Human Tissues Act of 1983. However, graves younger than 60 years are specifically protected by the Human Tissues Act (Act 65 of 1983) and the Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925) as well as any local and regional provisions, laws and by-laws protect. Such burial places also fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities.

2.4.2 Background to HIA and AIA Studies

South Africa's unique and non-renewable archaeological and palaeontological heritage sites are 'Generally' protected in terms of the National Heritage Resources Act (Act No 25 of 1999, section 35) and may not be disturbed at all without a permit from the relevant heritage resources authority. Heritage sites are frequently threatened by development projects and both the environmental and heritage legislation require impact assessments (HIA's & AIA's) that identify all heritage resources in areas to be developed. Particularly, these assessments are required to make recommendations for protection or mitigation of the impact of the sites. HIA's and AIA's should be done by qualified professionals with adequate knowledge to (a) identify all heritage resources including archaeological and palaeontological sites that might occur in areas of developed and (b) make recommendations for protection or the sites.

The National Heritage Resources Act (Act No. 25 of 1999, section 38) provides guidelines for Cultural Resources Management and prospective developments:

"38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as:

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50 m in length;

(c) any development or other activity which will change the character of a site:

(i) exceeding 5 000 m² in extent; or

(ii) involving three or more existing 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 heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m^2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

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

"The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

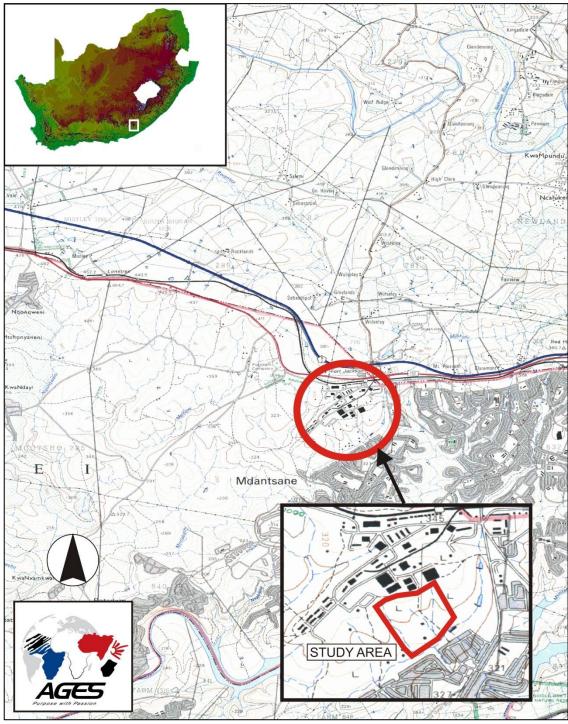
- (a) The identification and mapping of all heritage resources in the area affected;
- (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
- (c) an assessment of the impact of the development on such heritage resources;
- (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- (f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- (g) plans for mitigation of any adverse effects during and after the completion of the proposed development (38. [3] 1999:64)."

Consequently, section 35 of the Act requires Heritage Impact Assessments (HIA's) or Archaeological Impact Assessments (AIA's) to be done for such developments in order for all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual, linguistic or technological value or significance to be 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.

3 REGIONAL CONTEXT

3.1 Area Location

The Fort Jackson Study Area is located on a northern industrial extension of the Mdantsane Township in the Buffalo City Municipal District, Eastern Cape Province. Mdantsane is situated more or less 25km west of East London in the former Ciskei Region, with the N2 freeway passing directly north of the site and the R102 providing direct access to the area.



3.2 Area Description: Receiving Environment

The Mdantsane region is situated on inland plains of the Eastern Cape grasslands in the former Ciskei homeland area at altitudes between 0 - 200m above sea level. The ecological landscape is defined as a combination of mixed grasslands and forest / scrub forest, typically dominated by mixed grassveld and forests at differing altitudes. A number of pioneering plant species occur in the area. The annual rainfall ranges between 1150 to over 1300mm per annum. The geology of the larger region is constituted by mudstones and sandstones and towards the coast, shales, mudstones and sandstones of the Ecca group, with exposures of dolerite intrusions mostly in the higher lying areas are found.



Figure 3-2: General surroundings of the Survey Area, looking east at Mdantsane.



Figure 3-3: General surroundings of the Survey Area, looking south with the existing Fort Jackson cemetery visible in the distance.

3.3 Site Description

The Study Area, which extends over more or less 20ha, is situated directly east of the existing Fort Jackson cemetery in an industrial extension of the Mdantsane Township. The area is transacted by two drainage lines which have caused erosion in places along the drainage lines. However, extensive surface disturbances across the larger landscape do not occur and, except for degradation as a result of natural agents such as erosion and animal burrowing, subsurface portions of the majority of the area seem to be intact.

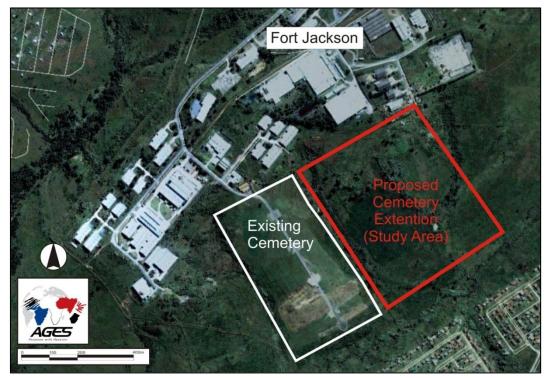


Figure 3-4: Regional setting of the Study Area, indicating the location of the existing Fort Jackson cemetery and the area where the extension of the cemetery is planned.

4 METHOD OF ENQUIRY

4.1 Sources of Information

4.1.1 Desktop Study

A desktop study was prepared in order to contextualize the proposed project within a larger historical milieu. The study focused on relevant previous studies, archaeological and archival sources, aerial photographs, historical maps and local histories, all pertaining to the larger East London area and the larger landscape of this section of the Eastern Cape Province.

4.1.2 Aerial Representations and Survey

Aerial photography is often employed to locate and study archaeological sites, particularly where larger scale area surveys are performed. This method was applied to aid the pedestrian survey of the Fort Jackson site, where contour lines of elevations, depressions, variation in vegetation, soil marks and landmarks were examined. Specific attention was given to shadow sites (shadows of walls or earthworks which are visible early or late in the day), crop mark sites (crop mark sites are visible because disturbances beneath crops cause variations in their

height, vigour and type) and soil marks (e.g. differently coloured or textured soil (soil marks) might indicate ploughed-out burial mounds). Attention was also given to moisture differences, as prolonged dampening of soil as a result of precipitation frequently occurs over walls or embankments. By superimposing high frequency aerial photographs with images generated with Google Earth, potential sensitive areas were subsequently identified (see Figure 4-1). These areas served as referenced points from where further transect surveys were carried out.



Figure 4-1: Aerial representation indicating areas identified as possible archaeological sites / disturbances prior to site survey.

4.1.3 Field Survey

Archaeological survey implies the systematic procedure of the identification of archaeological sites. An archaeological survey of the site of the Fort Jackson cemetery expansion was done by means of a systematic pedestrian survey in accordance with standard archaeological practise by which heritage resources are observed and documented. In order to sample surface areas systematically and to ensure a high probability of site recording, transect grids in a frequency of more or less 20m were digitally superimposed on maps of the area. These transect lines were applied as guide for the pedestrian survey which focused around potentially sensitive areas identified during the aerial survey (see Figure 4-1). Walking along the transect system with a Garmin E-trex Legend GPS, objects and structures of archaeological material occur in single or multiple stratified layers beneath the soil surface, special attention was given to disturbances, both man-made such as roads and clearings, as well as those made by natural agents such as burrowing animals and erosion.

4.2 Limitations

4.2.1 Access

No access control applies to the area under study adjacent to the existing Fort Jackson cemetery and no restrictions in terms of site access were encountered. On site, a smaller service road provided access to the

western portion of the study area.

4.2.2 Visibility

The surrounding vegetation at Fort Jackson is mostly comprised out of mixed grasslands and scattered trees. The general visibility at the time of the survey (July 2011) was moderate as a result of dense surface vegetation cover in places. In single cases during the survey sub-surface inspection was possible, particularly in excavation trenches and erosion gullies. Where applied, this revealed no substantial archaeological deposits.



Figure 4-2: View of the general surroundings and access road to the north of the Study Area.



Figure 4-3: View of the general surroundings, looking east.

4.2.3 Constraints

Generally, dense surface vegetation proved to constrain the site survey in areas. In addition, free movement on site was somewhat restricted by the author's cognisance of on-going initiation activities in the immediate surroundings. Maintaining due cognisance of the integrity and accuracy of the archaeological survey, it should be stated that the heritage resources identified during the study do not necessarily represent *all* the heritage resources present on the property. The subterranean nature of some archaeological sites, dense vegetation cover and visibility constraints sometimes distort heritage representations and any additional heritage resources located during consequent development phases must be reported to the Heritage Resources Authority or an archaeological specialist.

5 ARCHAE0-HISTORICAL CONTEXT

5.1 The archaeology of Southern Africa

Archaeology in southern Africa is typically divided into two main fields of study, the **Stone Age** and the **Iron Age** or **Farmer Period**. The following table gives a concise outline of the chronological sequence of periods in Southern African history:

Period	Epoch	Associated cultural groups	Typical Material Expressions
Early Stone Age 2.5m – 250 000 YCE	Pleistocene	Early Hominins: Australopithecines Homo habilis Homo erectus	Typically large stone tools such as hand axes, choppers and cleavers.
Middle Stone Age 250 000 – 25 000 YCE	Pleistocene	First Homo sapiens species	Typically smaller stone tools such as scrapers, blades and points.
Late Stone Age 20 000 BC – present	Pleistocene / Holocene	Homo sapiens sapiens including San people	Typically small to minute stone tools such as arrow heads, points and bladelets.
Early Iron Age / Early Farmer Period 300 – 900 AD	Holocene	First Bantu-speaking groups	Typically distinct ceramics, bead ware, iron objects, grinding stones.
Middle Iron Age (Mapungubwe / K2) / early Later Farmer Period 900 – 1350 AD	Holocene	Bantu-speaking groups, ancestors of present-day groups	Typically distinct ceramics, bead ware and iron / gold / copper objects, trade goods and grinding stones.
Late Iron Age / Later Farmer Period 1400 AD -1850 AD	Holocene	Various Bantu-speaking groups including Venda, Thonga, Sotho-Tswana and Zulu	Distinct ceramics, grinding stones, iron objects, trade objects, remains of iron smelting activities including iron smelting furnace, iron slag and residue as well as iron ore.
Historical / Colonial Period ±1850 AD – present	Holocene	Various Bantu-speaking groups as well as European farmers, settlers and explorers	Remains of historical structures e.g. homestead, missionary schools etc. as well as, glass, porcelain, metal and ceramics.

5.1.1 The Stone Ages

- The Earlier Stone Age (ESA)

Earlier Stone Age deposits typically occur on the flood-plains of perennial rivers and may date to between 2 million and 250 000 years ago. These ESA open sites sometimes contain stone tool scatters and manufacturing debris ranging from pebble tool choppers to core tools such as handaxes and cleavers. These stone tools were made by the earliest hominins. These groups seldom actively hunted and relied heavily on the opportunistic scavenging of meat from carnivore fill sites.

The Middle Stone Age (MSA)

-

The majority of Middle Stone Age (MSA) sites occur on flood plains and sometimes in caves and rock shelters. Sites usually consist of large concentrations of knapped stone flakes such as scrapers, points and blades and associated manufacturing debris. Tools may have been hafted but organic materials, such as those used in hafting, seldom remain preserved in the archaeological record. Limited drive-hunting activities are also associated with the MSA.

- The Later Stone Age (LSA)

Sites dating to the Later Stone Age (LSA) are better preserved in rock shelters, although open sites with scatters of mainly stone tools can occur. Well-protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich eggshell beads and even bedding material. By using San (Bushman) ethnographic data a better understanding of this period is possible. South African rock art is also associated with the LSA.

5.1.2 The Iron Age (Farmer Period)

- Early Iron Age (Early Farming Communities)

The Early Iron Age (also Early Farmer Period) marks the movement of Bantu speaking farming communities into South Africa at around 200 A.D. These groups were agro-pastoralists that settled in the vicinity of water in order to provide subsistence for their cattle and crops. Artefact evidence from Early Farmer Period sites is mostly found in the form of ceramic assemblages and the origins and archaeological identities of this period are largely based upon ceramic typologies and sequences, where diagnostic pottery assemblages can be used to infer group identities and to trace movements across the landscape. Early Farmer Period ceramic traditions are classified by some scholars into different "streams" or trends in pot types and decoration that, over time emerged in southern Africa. These "streams" are identified as the Kwale Branch (east), the Nkope Branch (central) and the Kalundu Branch (west). More specifically, in the northern regions of South Africa at least three settlement phases have been distinguished for prehistoric Bantu-speaking agropastoralists. The first phase of the Early Iron Age, known as Happy Rest (named after the site where the ceramics were first identified), is representative of the Western Stream of migrations, and dates to AD 400 - AD 600. The second phase of Diamant is dated to AD 600 - AD 900 and was first recognized at the eponymous site of Diamant in the western Waterberg. The third phase, characterised by herringbone-decorated pottery of the Eiland tradition, is regarded as the final expression of the Early Iron Age (EIA) and occurs over large parts of the North West Province, Northern Province, Gauteng and Mpumalanga. This phase has been dated to about AD 900 - AD 1200. Early Farmer Period ceramics typically display features such as large and prominent inverted rims, large neck areas and fine elaborate decorations. The Early Iron Age continued up to the end of the first millennium AD.

- Middle Iron Age / K2 Mapungubwe Period (early Later Farming Communities)

The onset of the middle Iron Age dates back to ±900 AD, a period more commonly known as the Mapungubwe / K2 phase. These names refer to the well known archaeological sites that are today the pinnacle of South Africa's Iron Age heritage. The inhabitants of K2 and Mapungubwe, situated on the banks of the Limpopo, were agriculturalists and pastoralists and were engaged in extensive trade activities with local and foreign traders. Although the identity of this Bantu-speaking group remains a point of contestation, the Mapungubwe people were the first state-organized society southern Africa has known. A considerable amount of golden objects, ivory, beads (glass and gold), trade goods and clay figurines as well as large amounts of potsherds were found at these sites and also appear in sites dating back to this phase of the Iron Age. Ceramics of this tradition take the form of beakers with upright sides and decorations around the base (K2) and shallow-shouldered bowls with decorations as well as globular pots with long necks. (Mapungubwe). The site of Mapungubwe was deserted at

around 1250 AD and this also marks the relative conclusion of this phase of the Iron Age.

- Later Iron Age (Later Farming Communities)

The late Iron Age of southern Africa marks the grouping of Bantu speaking groups into different cultural units. It also signals one of the most influential events of the second millennium AD in southern Africa, the difaqane. The difaqane (also known as "the scattering") brought about a dramatic and sudden ending to centuries of stable society in southern Africa. Reasons for this change was essentially the first penetration of the southern African interior by Portuguese traders, military conquests by various Bantu speaking groups primarily the ambitious Zulu King Shaka and the beginning of industrial developments in South Africa. Different cultural groups were scattered over large areas of the interior. These groups conveyed with them their customs that in the archaeological record manifest in ceramics, beads and other artefacts. This means that distinct pottery typologies can be found in the different late Iron Age groups of South Africa.

5.1.3 Historical and Colonial Times and Recent History:

The Historical period in southern Africa encompass the course of Europe's discovery of South Africa and the spreading of European settlements along the East Coast and subsequently into the interior. In addition, the formation stages of this period are marked by the large scale movements of various Bantu-speaking groups in the interior of South Africa, which profoundly influenced the course of European settlement. Finally, the final retreat of the San and Khoekhoen groups into their present-day living areas also occurred in the Historical period in southern Africa.

6 RESULTS: ARCHAEOLOGICAL SURVEY

Figure 6-1: Map of the Fort Jackson Study Area indicating the locations of sites of interest discussed in the text.

6.1 Palaeontology

No palaeontological occurrences were observed in the survey area.

6.2 The Stone Age

No Stone Age occurrences were observed in the survey area.

6.3 The Iron Age (Farmer Period)

No Iron Age (Farmer Period) occurrences were observed in the survey area.

6.4 Historical / Colonial Period and recent times

The ruined remains of a house, possibly a historical period farmstead were located in the north western portion of the study area at **S32°55'50.71" E27°41'40.79"**. The remains include a stone foundation structure, brick walling and concrete column posts - typically employed to support and decorate roof structures. A large open water cistern, constructed out of stone and concrete were also recorded. Two small catchment dams with walls built out of stone and concrete occur south of the house remains along the two draining lines transecting the area. The age of the structures could not be established but material culture such as glass, metal, enamel, plastic and wood found in the area might indicate a more recent age for the structures, provided that the material and the structures are contemporaneous. Yet, the site might also date to the Historical Period in the Eastern Cape, prior to the establishment of the Mdantsane Township in 1961.



Figure 6-2: House ruins: remains of brick walling.



Figure 6-3: House ruins: remains of brick walling and decorated plaster cover.



Figure 6-4: Remains of a stone and concrete water cistern.



Figure 6-5: Small catchment dam with stone and cement dam wall.

6.5 Graves

No graves / burial places were noted in the survey area.

6.6 Other areas of significance

A male initiation site, consisting of a number of temporary initiation shelters, was noted along the eastern periphery of the study area. In addition, on-going initiation activities were observed at the time of the survey of the study area. The remains of burnt down initiation huts and associated material culture were also documented.



Figure 6-6: Temporary initiation shelters in the Study Area.



Figure 6-7: Incinerated remains of an initiation shelter.

6.7 Archaeology and History: Discussion

6.7.1 Palaeontology

A large number of paleontological sites occur to the north towards Lesotho and surrounding areas. Material found in and around Lesotho, the Eastern Cape Highlands and in the Karoo of South Africa is significant as it documents the late Triassic to early Jurassic transition, which is the period for the evolution of true dinosaurs, crocodile ancestors, bird ancestors and early mammals.

6.7.2 Stone Age Occurrences

Earlier Stone Age material is relatively rare in the Eastern Cape with sites occurring mostly in major river valleys. Artefacts are usually made of quartzite, and are characterized by medium-sized hand-axes and/or large flakes averaging 7-10 cm in maximum length. Middle Stone Age material, typically made from quartzite, dolerite, or hornfels, occurs at sites throughout the Eastern Cape Highlands along minor and major river courses. Tools for this industry, which were commonly about 3-5 cm in maximum length, usually included unifacial points, Levallois-like removals, blades/knives, and flakes retouched as scrapers. Data obtained from the Middle Stone Age deposits in the Eastern, Western, and Southern Cape have provided detailed palaeoenvironmental records with long occupation sequences providing evidence of occupation for much of the Late Pleistocene. The Later Stone Age is abundantly represented with LSA material found across the Eastern Cape. Also, the existence of an early Later Stone Age phase at some sites (predating the Oakhurst and Wilton) is represented in the Southern and Eastern Cape by the Robberg Industry, named after the Robberg Peninsula on which Nelson Bay Cave is located and where this industry was first recognised). Artefacts associated with this industry are commonly heterogeneous in raw material and in form.

6.7.3 Hunters-gatherers, Herders and Shell Middens

Hunter-gatherer and herder sites occur widely in the Eastern Cape. It is sometimes difficult to distinguish

between hunter-gatherer and herder sites, because the former may have acquired stock through theft or herder clientship and the latter largely relied on hunting and gathering to supplement pastoral resources. Both groups collected shellfish and used other food sources from the sea, and both groups hunted and gathered plant food. Excavations at sites indicate that shellfish and marine animals, and in particular seals, formed a major part of people's diet.

The intensive utilization of shellfish manifests in the archaeological record through hundreds of shell middens dating to the terminal Pleistocene and Holocene that litter the coastal areas of southern Africa (see Figure 6-8). Mega-middens which accumulated in coastal and inland areas probably represent alternative seasonal food resources and the shellfish species from middens reflect the species available in the immediate vicinity and also provide information on the environment. Inland shell middens are also found in the Eastern Cape and these shell accumulations date to the last 3000 years. The existence of these features implies the use of alternative food sources as a result of the spread of pastoralists and Iron Age people (Deacon 1984b). Various researchers have observed that the occurrence of seasonally restricted food remains in archaeological deposits could be linked to historically known seasonal movements by the early Khoisan and Khoekhoen hunters and herders of the Cape.



Figure 6-8: Large shell midden off the coast of southern Africa.

6.7.4 Iron Age / Farmer Period Sites

The beginnings of the Iron Age (Farmer Period) in southern Africa are associated with the arrival of a new Bantu speaking population group in the third century AD. These newcomers introduced a new way of life into areas that were occupied by Later Stone Age hunter-gatherers and Khoekhoe herders. The distinctive features of the Iron Age are a settled village life, food production (agriculture and animal husbandry), metallurgy (the mining, smelting and working of iron, copper and gold) and the manufacture of pottery. According to Huffman (2007) an eastern migration stream, known as the Chifumbaze Complex spread southwards from East Africa south into southern Africa during the period of about AD 200—300 where several KwaZulu-Natal and north-Eastern Cape sites were occupied. Although no evidence of Early Iron Age (EIA) sites or material have been documented in the area surrounding Fort Jackson, it is possible that such settlements may be present in the wider region (Maggs 1973, Feely 1987). Evidence in the form of thick-walled well-decorated pot sherds are present along other parts

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of the Transkei coast as is evident from sites that were excavated at Mpame River Mouth (Cronin 1982) and just west of East London (Nongwaza 1994). Research in the adjacent Kei River Valley area indicates that the first mixed farmers were already settled in the Eastern Cape region between A.D. 600 -700 (Binneman 1994).

Later Iron Age (Farmer Period) communities gradually expanded into the grasslands of the KwaZulu-Natal and north Eastern Cape interior. An early phase of the Late Iron Age has been uncovered in KwaZulu-Natal which transpired in a ceramic style known as "Blackburn". This ceramic style represents a break with that of the Early Iron Age. Since there is a resemblance between Blackburn pottery and Nguni pottery, Huffman (1989) postulates that Blackburn reflects the migration of the Nguni to KwaZulu-Natal and later to the Transkei. Consequently, sites belonging to the final phase of the Late Iron Age can often be linked with historically known Nguni groups.

6.7.5 Historical Period / Recent Sites

The oral and written history of the Eastern Cape is relatively abundant resulting from an assimilation of local and missionary sources and the Historical period for this area is commonly divided into three periods of habitation, as described in these abundant oral traditions. First in the area were the pioneers, arriving between the nineteenth century and early twentieth century, depending on the region. They may have lived in caves at first (sometimes in association with San), or had compounds in places not occupied today. Second, the main population established villages on the high shoulders of the mountains and hills when areas were formally allocated to chiefs. This period lasted until the 1940s or 1950 when the chieftaincies were transformed by the paramount chief. The older villages in many areas were abandoned, were combined and/or moved to more accessible locations at lower elevations. Villages of this final phase are often still occupied today.

At the time of white settlement of the Cape, Xhosa groups were living far inland, into the area between Bushman's River and the Kei River. Since around 1770, they had been confronted with the Afrikaner Trek Boers who approached from the west. Both the Boers and the Xhosa were stock-farmers. The competition for grazing land led first to quarrels between the two groups, and eventually it came to a number of wars known as the Grensoorlöe ("border wars" in Afrikaans). The politics of the colonial government attempted to enforce the separation of white and black settlement areas with the Fish River as the border. But the more the colony developed into a modern state with a strong military organization, the more the whites tended towards a policy of land annexing and the subjugation of the black population. In the middle of the 19th century, all the land formerly inhabited by Xhosa was in the hands of white settlers. With the founding of the South African Union in 1910, the British colony and the independent Boer Republics were united.

Other types of Historical sites found in the Eastern Cape include early schools and Missions which are part of the cultural transformations between the mid-19th and mid-20th centuries. These sites are often valuable sources of oral histories and written documents and they present a later regional social development in the area where European expansion brought about dramatic changes in social and cultural land tenure on the Eastern Cape frontier.

The township of Mdantsane was established in in 1961. In 1963, communities from Mekeni and New Brighton, currently, were forcibly relocated to Mdantsane and the township soon expanded to become the second largest township in South Africa, after Soweto in Gauteng. The township currently has 17 residence sections.

6.7.6 Present day ethnicity: Initiation

Historically, rural African communities organized the formal education of the young around rites of initiation into adulthood. These ceremonies, which lasted for several months, taught boys and girls the disciplines and knowledge of manhood and womanhood. Before a Xhosa male was recognised as an adult with the right to marry, he first had to go through the initiation process and be circumcised. Initiation rites differ markedly between the various African peoples; with increasing urbanization many groups have abandoned circumcision altogether. Amongst the Xhosa, initiation ceremonies usually took place when the corn ripened, during the month of May. Initiation is characterized by three stages: preparation for seclusion, seclusion and finally the initiate's emergence as a man. During the period of seclusion, the initiates stay in an initiation hut, traditionally built of sticks and grass, the men setting up the frame and the women doing the thatching. In seclusion, there are several restrictions imposed upon the initiate: it is a time of ritual purification, characterized by prescribed diets, sexual taboos, and prescribed behaviors. During this time, the boys waited in a secluded spot for arrival of the surgeon who would perform the circumcision. After the wounds had healed, the boys undertook excursions into the bush where they hunted. Sometimes they would be joined by one of the senior and respected men from the village, who would teach them how to behave like responsible adults. This teaching included the rules of etiquette, the laws of respect and how to honour the ancestral spirits.



Figure 6-9: Xhosa initiates photographed in the Mthatha area of the Eastern Cape by Anders Ryman (source: http://www.culture24.org.uk)

At the end of the isolation period, the initiates were marched down to the river to wash themselves. Upon returning, their guide then placed a piece of fat on their heads and smeared it straight down their bodies and across their shoulders. After this ritual, the boys wrapped themselves in brand new blankets and turned away from the hut, covering their faces. All their possessions were thrown into the hut and then set alight, to prevent "witches" from taking possession of these objects. They were also forbidden to look back. The amakrwala, as these boy-men were called, were then marched back to their parental homes where they were showered with gifts and a feast was prepared in their honour. When the male initiates emerged from their isolation, the girls were recognised as being of marriageable age.

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7 STATEMENTS OF SIGNIFICANCE

7.1 Heritage resources management and conservation

Archaeological sites, as previously defined in the National Heritage Resources Act (Act 25 of 1999) are places in the landscape where people have lived in the past – generally more than 60 years ago – and have left traces of their presence behind. In South Africa, archaeological sites include hominid fossil sites, places where people of the Earlier, Middle and Later Stone Age lived in open sites, river gravels, rock shelters and caves, Iron Age sites, graves, and a variety of historical sites and structures in rural areas, towns and cities. Palaeontological sites are those with fossil remains of plants and animals where people were not involved in the accumulation of the deposits. The basic principle of cultural heritage conservation is that archaeological and other heritage sites are valuable, scarce and *non-renewable*. Many such sites are unfortunately lost on a daily basis through development for housing, roads and infrastructure and once archaeological sites are damaged, they cannot be re-created as site integrity and authenticity is permanently lost. Archaeological sites have the potential to contribute to our understanding of the history of the region and of our country and continent. By preserving links with our past, we may not be able to revive lost cultural traditions, but it enables us to appreciate the role they have played in the history of our country.

7.2 Categories of significance

Rating the significance of archaeological sites, and consequently grading the potential impact on the resources is linked to the significance of the site itself. The significance of an archaeological site is based on the amount of deposit, the integrity of the context, the kind of deposit and the potential to help answer present research questions. Historical structures are defined by Section 34 of the National Heritage Resources Act, 1999, while other historical and cultural significant sites, places and features, are generally determined by community preferences. The guidelines as provided by the NHRA (Act No. 25 of 1999) in Section 3, with special reference to subsection 3 are used when determining the cultural significance or other special value of archaeological or historical sites. In addition, ICOMOS (the Australian Committee of the International Council on Monuments and Sites) highlights four cultural attributes, which are valuable to any given culture:

- Aesthetic value:

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria include consideration of the form, scale, colour, texture and material of the fabric, the general atmosphere associated with the place and its uses and also the aesthetic values commonly assessed in the analysis of landscapes and townscape.

- Historic value:

Historic value encompasses the history of aesthetics, science and society and therefore to a large extent underlies all of the attributes discussed here. Usually a place has historical value because of some kind of influence by an event, person, phase or activity.

- Scientific value:

The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality and on the degree to which the place may contribute further substantial information.

- Social value:

Social value includes the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a certain group.

With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise and if the significance of the site is rated high, the significance of the impact will also result in a high rating. The same rule applies if the significance rating of the site is low.

The significance of archaeological sites is generally ranked into the following categories.

Significance	Rating Action
No significance: sites that do not require mitigation.	None
Low significance: sites, which may require mitigation.	2a. Recording and documentation (Phase 1) of site; no further action required 2b. Controlled sampling (shovel test pits, augering), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction
Medium significance: sites, which require mitigation.	3. Excavation of representative sample, C14 dating, mapping and documentation (Phase 2 investigation); permit required for sampling and destruction [including 2a & 2b]
High significance: sites, where disturbance should be avoided.	4a. Nomination for listing on Heritage Register (National, Provincial or Local) (Phase 2 & 3 investigation); site management plan; permit required if utilised for education or tourism
High significance: Graves and burial places	4b. Locate demonstrable descendants through social consulting; obtain permits from applicable legislation, ordinances and regional by-laws; exhumation and reinterment [including 2a, 2b & 3]

A fundamental aspect in assessing the significance and protection status of a heritage resource is often whether or not the sustainable social and economic benefits of a proposed development outweigh the conservation issues at stake. When, for whatever reason the protection of a heritage site is not deemed necessary or practical, its research potential must be assessed and mitigated in order to gain data / information, which would otherwise be lost. Such sites must be adequately recorded and sampled before being destroyed. These are generally sites graded as of low or medium significance.

7.3 Evaluation of Results

The scientific value of the house remains, the water cistern and catchment dams (possible Historical Period features) have unfortunately been compromised by the poor preservation of these features. The significance of the features is therefore rated as medium to low. However, cognisance should be taken of the fact that human remains and/or other archaeological and historical material may be uncovered during as the development of the cemetery progresses.

The initiation site at Fort Jackson and its function as place of "Living Heritage" necessitates further discussion in evaluating the heritage landscape. Here, "Living Heritage" can broadly refer to a place of cultural heritage and sacred nature; with cultural attributions that are not generally physically manifested. Initiation sites are generally regarded as places of ritual seclusion as a result of the classified nature of initiation activities. As such, knowledge of the initiation lodges and practises is sacred and therefore the physical places in which they manifest are regarded as strictly reserved social spaces. In addition, the incinerated remains of initiation shelters are sometimes regarded as ceremonial "graves", containing the last remnants of the initiates' childhood after they have emerged from initiation as adults. Initiation practises and the material residues thereof therefore convey an intangible cultural significance beyond the initiation site, shelter or object, where the meaning of the initiation area speaks directly of a sense of place and lived experience.

7.3.1 Site Rating: House ruins, cistern and dams

1. SITE DES	CRIPT	ION :										
1.1 General			on									
		-		ern and	dams							
Ruined stone and brick walling structures, stone cistern and dams 1.2 Site features / artefacts / Other												
Site Location	uresr	anciaci										
Province / District Eastern Cape Province Map Number 3227DC												
Form Name Fort Jackson Industrial Area Co-ordinates S32°55'50.71"								"	E27°41'4	1 79"		
Site Type		Tortoat		lieu		00-ordinates		052 55 50.11			5.15	
Surface sites			X			Caves and rock	shelte	rs				
Larger open-air s	ites			<u>^</u>			Sealed sites (deposits					
River deposits						Other	000110					
Site Function									1			
Living / habitatio	n		X			Kill						
Ceremonial						Burial						
						Art						
Trading / Barter Quarry / Mining / Smelting						Other						
Site Placement			·									
Valley floor			Hill top			Vlei/swamp			River M	louth		
Dam			River Bank			Slope	X		Plains			
Other / Comment	ts					Ciope	~		Tiunio			
Vegetation												
Riverine forest	X		Bushveld			Savannah			Mounta	in forest		
Thornveld			Grassland	I X		Cultivated X			Other			
Age Classification									<u>I</u>			
Stone Age			Early Iron Age			Middle Iron Age			Later Ir	on Age		
Historical	X?		Other	X – R	lecent ?							
Material Culture												
Midden			House Remains		X	Stone Walling			Stone S	Structures	X	
Granary			Grinding Stone (I	L)		Grinding Stone (U)		Granar	y Stand		
Metal			Ceramics (Potter	y)		Ceramics (Porce	lain)		Stone (non-lithic)	X	
Metal slag			Tuyere			Fauna			Bead (Glass)		
Bead (OES / She	ell)		Glass		X	Lithics			Smelting Residues			
Other: X - Plastic	6					Other: X – Brick	Struc	ctures				
1.3 Site Cor	ndition											
Preservation of	the site i	s poor, wh	ere structures hav	ve collap	osed and d	ilapidated.						
2. SITE EVA	LUAT	ION										
2.1 HERITA	GE VA	LUE (N	HRA, Sectior	n 2 [3])			Hig	h	Medium	Low	
It has importance	to the co	ommunity o	r pattern of South A	frica's hi	story or pre	e-colonial history.					X	
It possesses unic	It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.					age.			X			
	-		at will contribute to a	an under	standing of	South Africa's				x	x	
natural and cultural heritage.								^	^			
It is of importance or cultural places		-	e principle characte	eristics o	f a particula	ar class of South Afric	ca's n	atural			x	
It has importance	in exhibi	ting particu	lar aesthetic charac	teristics	valued by a	a particular communi	ty or				X	

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Fort Jackson	Cemetery	AIA	Study
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Fort Jackson Cemetery Al	A Study		in the second	
cultural group.			and the second	
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.		x		
It has marked or special association with a particular community or cultural group for social, cu spiritual reasons (sense of place).	Iltural or		x	1
It has strong or special association with the life or work of a person, group or organisation of in the history of South Africa.	nportance in		X	
It has significance through contributing towards the promotion of a local sociocultural identity a developed as a tourist destination.	and can be		X	
It has significance relating to the history of slavery in South Africa.			X	
It has importance to the wider understanding of temporal changes within cultural landscapes, patterns and human occupation.	settlement		X	
FIELD REGISTER RATING				
National/Grade 1 [should be registered, retained]				
Provincial/Grade 2 [should be registered, retained]				
Local/Grade 3A [should be registered, mitigation not advised]				
Local/Grade 3B [High significance; mitigation, partly retained]				
Generally Protected A [High/Medium significance, mitigation]				
Generally protected B [Medium significance, to be recorded]			X	
Generally Protected C [Low significance, no further action]			X*	
C. SPHERE OF SIGNIFICANCE	High	Medium	Low	
International				
National				
Provincial				
Local		X	X*	
Specific community				
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low			X	
Medium				
High				
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT				
None				
Peripheral				
Destruction			X	
Uncertain				
G. RECOMMENDED MITIGATION				
If further impact is envisaged: - Survey and mapping.				
 Desktop study Permit from SAHRA for destruction. 				
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS				
- National Heritage Resources Act (Act no. 25 of 1999)				
* - Provided that the sites or of recent age and not historical.				

8 RECOMMENDATIONS

The author of this report proposes the following recommendations, based on findings contained in this Phase 1 AIA Report:

- A careful watch and brief monitoring process is recommended for all stages of development as the larger landscape is rich in heritage remains. Should any subsurface paleontological / archaeological material be exposed during construction activities, all activities should be suspended and the archaeological specialist should be notified immediately
- The close vicinity of the existing Fort Jackson cemetery should be regarded and impact on existing graves / burial places should be avoided at all times.
- The scientific value of house remains, the water cistern and catchment dams occurring in the study area have been greatly compromised by the poor preservation of these features. However, as the age of the site could not be established, it is recommended that the sites be thoroughly documented and attempts be made to establish a temporal and historical context for the structures by means of a desktop study. In addition, a destruction permit should be obtained from the relevant resources authority, should the structures be directly impacted by development activities of the cemetery.
- A Social Impact Assessment (SIA) is strongly recommended for the initiation site at Fort Jackson in order to establish the sentiments, relationships and associations of local communities to these initiation areas. The extent of impacts of the cemetery development on the intrinsic value attached to the initiation site should also be assessed.
- It should be noted that mitigation measures are valid for the duration of the development process, and mitigation measures might have to be implemented on additional features of heritage importance not detected during this Phase 1 assessment (e.g. uncovered during the construction process).

9 GENERAL COMMENTS AND CONDITIONS

This Phase 1 AIA report serves to confirm the extent and importance of areas of heritage importance at Fort Jackson. As mentioned earlier, the Eastern Cape encompasses a rich and diverse archaeological landscape and cognisance should be taken of archaeological material that might be present in surface and sub-surface deposits in the area.

Such material might include Stone Age remains:

- Formal Earlier Stone Age stone tools such as handaxes, choppers and cleavers.
- Formal Middle Stone Age stone tools such as points, blades and scrapers.
- Formal Later Stone Age stone tools such a microlithic blades, points and scrapers.
- Lithic residues and debris such as stone cores and flakes.
- Shell middens.

Considering the presence of Iron Age farmer sites along the Eastern Cape coast and interior, the occurrence of further archaeological remains associated with this period should be anticipated. These remains could include:

- Decorated and undecorated potsherds.
- Iron objects such as spear heads, hoes and bangles.
- Beads made from ostrich eggshell and glass.
- Ash middens and cattle dung deposits and accumulations.
- Elaborate stone walling and site demarcation by means of stone structures, usually round and irregular.
- Copper, iron and gold objects.

- Animal bones and faunal remains.
- Circular stone foundation structures for houses.
- Smaller stone structures such as fireplaces or granary stands.
- Upper and lower grindstones.
- House floors and rubble from hut wall structures.

If such site were to be encountered or impacted by any proposed developments, recommendations contained in this report, as well as endorsement of mitigation measures as set out by SAHRA, the National Resources Act and the CRM section of ASAPA will be required. Please note that this report is a Phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments.

It must be emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, represent the area's complete archaeological legacy. Many sites/features may be covered by soil and vegetation and might only be located during sub-surface investigations. If subsurface archaeological deposits, artefacts or skeletal material were to be recovered in the area during construction activities, all activities should be suspended and the archaeological specialist should be notified immediately (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).

It must also be clear that Archaeological Specialist Reports (AIA's) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should give a permit or a formal letter of permission for the destruction of any cultural sites.

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