



DEPARTMENT: NGT HERITAGE MANAGEMENT SOLUTIONS

PROJECT TITLE:

BASIC ASSESSMENT REPORT FOR THE PROPOSED DEVELOPMENT OF A SMME TRAINING CENTRE AND YOUTH ENTERPRISE PARK ON ERF 1977 EDENDALE-CC LOCATED IN THE MSUNDUZI LOCAL MUNICIPALITY, PIETERMARITZBURG, KWAZULU-NATAL PROVINCE, SOUTH AFRICA

DATE OF ISSUE:

3 August 2018

SPECIALIST REPORT:

Heritage Impact Assessment report for the proposed development of a SMME Training Centre and Youth Enterprise Park on Erf 1977 Edendale-CC located in the Msunduzi Local Municipality, Pietermaritzburg, KwaZulu-Natal Province, South Africa.

Revision: 01

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DECLARATION OF INDEPENDENCE

Cherene de Bruyn for NGT has compiled this report. The views expressed in this report are entirely those of the author and no other interest was displayed during the decision-making process for the project.

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EXECUTIVE SUMMARY

NGT was appointed by HESQ to conduct an HIA study for the proposed development of a SMME Training Centre and Youth Enterprise Park on Erf 1977 Edendale-CC located in Imbali Township within Msunduzi Local Municipality within Umgungundlovu District in KwaZulu-Natal Province, South Africa.

This HIA report forms part of the Basic Assessment Report (BAR) and it also informs the EMPr report on the management and conservation of cultural heritage resources. This study is conducted independently in terms of Section 38 (3) of the National Heritage Resources Act (NHRA), No. 25 of 1999. The KwaZulu-Natal Heritage Act (KZNHA), Act No. 4 of 2008 (at a provincial level) and the the KwaZulu-Natal Heritage Bill (ZNHB) of 21 February 2008.

The standard NGT HIA study process entailed conducting a detailed background information search of the receiving environment. The search assesses among other forms of data, previous studies conducted in and around the proposed study area or the development area. This also includes conducting an onsite investigation (survey) to identify and map out heritage resources resources on site and assess impacts of the proposed development on the identified heritage resources. Recommendations are then made with regards to how the identified heritage resources should be managed and/or mitigated to avoid being negatively impacted by development activities. Furthermore, recommendations are made on how the positive project benefits can be enhanced, to ensure a long term strategy for the conservation and promotion of heritage resources, if any are found.

The survey of the project area was conducted on Monday the 11th of June 2018. The survey was conducted by Mr. Nkosinathi Tomose (Principal Archaeologist and Heritage Consultant– NGT) and Ms Nosiphiwo Nodada (Environmental and Sustainability Consultant – NGT). The survey was conducted on foot. A vehicle was also used to access the site. No archaeological or heritage sites, graves or burial grounds were identified on site. In terms of the South African Heritage and Resources Agency (SAHRA) Paleontological Sensitivity Layer the area falls within a region defined as moderate, therefore it requires a Paleontological desktop study. In terms of Built Environment Heritage Resources, the survey identified several ruins. These were marked as site complex 1, 2, 3 and 4. These ruins were assessed to be of low heritage significance.

In terms of the NHRA (Act 25 of 1999) the Built Environment is managed in terms of Section 34 of the Act. At a Provincial level the Built Environment is managed in terms of Section 33 of the KZNHA (Act No. 4 of 2008). The Paleontological Desktop study is conducted in terms of Section 35 of the NHRA, and on a provincial level according to Section 36 of the KZNHA (NO. 4 of 2008).

Based on the results of literature review, field survey and the assessment of identified heritage resources the following conclusions and recommendations are made in terms of the National and Provincial Heritage Acts about the proposed development:

Conclusions:

- It is concluded that the ruins of the buildings identified do not hold any heritage or archaeological significance.
- No archaeological artefacts, graves or burial grounds were identified in the project area; based on this it is very unlikely that any will be found. However, some archaeological resources are subterranean in nature and these are regarded as chance finds.
- In terms of SAHRA Paleontological Sensitivity Layer, the area is within a moderate sensitive area.

Recommendations:

- It is recommended that there is not need for further investigation of the buildings on site from a conservation architectural perspective. No Phase II HIA is required, the buildings can be demolished as planned only after the receipt of approval of this HIA by AMAFA.
- However, it should be noted that some archaeological material, including artefacts and graves can be buried underground and as such, may not have been identified during the initial survey and site visits. In the case where the proposed development activities bring these materials to the surface, they should be treated as Chance Finds. Should such resources be unearthed it is recommended that, the development and construction activities be stopped immediately, and an archaeologist be contacted to conduct a site visits and make recommendations on the mitigation of the finds. AMAFA should also be informed immediately.
- It is recommended that a Fossil Finds Monitoring Programme be implemented during the construction phase of the project based on the Fossil Finds Procedure (attached in Appendix). Should scientifically significant fossil material be impacted, work must cease, and a palaeontologist must be contacted to assess the finds and determine a way forward.
- The development may only proceed as planned subject to AMAFA approval.

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LIST OF ABBREVIATIONS

| ACRONYMS | DESCRIPTION |
|--------------------|---|
| AUTHORITIES | |
| ASAPA | Association of South African Professional Archaeologists |
| AMAFA | Amafa KwaZulu-Natali |
| DEA | Department of Environmental Affairs |
| HESQ | HESQ Consultants (PTY) LTD |
| KZN-EDTEA | Department of Economic Development, Tourism and Environmental Affairs |
| MLM | Msunduzi Local Municipality |
| NGT | Nurture, Grow, Treasure |
| SADC | Southern African Developing Community |
| SAHRA | South African Heritage Resources Agency |
| DISCIPLINE | |
| AIA | Archaeological Impact Assessment |
| ARCH | Archaeological |
| BAR | Basic Assessment Report |
| BEL | Built Environment & Landscape |
| CRM | Cultural Resource Management |
| ESA | Early Stone Age |
| EAP | Environmental Assessment Practitioner |
| EIAs | Environmental Impact Assessment |
| EMPr | Environmental Management Programme |
| EIA | Early Iron Age |
| GPS | Global Positioning System |
| HIA | Heritage Impact Assessment |
| LIA | Late Iron Age |
| LSA | Late Stone Age |
| MIA | Middle Iron Age |
| MSA | Middle Stone Age |
| RQC | Review and Quality Control |
| SMME | Small, Medium, Micro Enterprises |
| LEGAL | |
| NEMA | National Environmental Management Act |
| NHRA | National Heritage Resources Act |
| ZNHB | KwaZulu-Natal Heritage Bill |
| KZNHA | KwaZulu-Natal Heritage Act |

TERMS AND DEFINITIONS

Archaeological resources

These include:

- Material remains resulting from human activities which are in a state of disuse and are in or on land and which are older than 100 years including artefacts, human and hominid remains and artificial features and structures;
- Rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- Wrecks, being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act, and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- Features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

Cultural significance

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

Development

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- Construction, alteration, demolition, removal or change in use of a place or a structure at a place;
- Carrying out any works on or over or under a place;
- Subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- Constructing or putting up for display signs or boards; any change to the natural or existing condition or topography of land;
- And any removal or destruction of trees, or removal of vegetation or topsoil.

Heritage resources: This means any place or object of cultural significance.

1. INTRODUCTION

1.1. Background Information of Project

NGT was appointed by HESQ to undertake an HIA of the proposed development of a Small, Medium, Micro Enterprises (SMME) Training Centre and Youth Enterprise Park. The development is located in the Imbali Township in MLM within UMgungundlovu District in KwaZulu-Natal Province, South Africa (*Figure. 1*). The development forms part of the Greater Edendale Vulindlele Development Initiative and the investment programme of the Precinct Framework plan.

The aim of the project is to develop more opportunities for local value chain businesses. Furthermore, it is also aimed to create a link between established corporate enterprises and existing small and micro enterprises in the region. Through the development of a Youth Enterprise Park the MLM seeks to create a suitable business environment for Township Enterprises, which in turn will stimulate the local economy and allow for economic development and growth in the broader region.

The total size of the Erf proposed for the development is 30854,03 m². The size of the Developmental Footprint is 5526.84 m². The development will include containers, while the rest of the site will be landscaped and used for future development.

1.2. Site Name and location

The project area, located on Erf 1977 Edendale-CC in the Msunduzi Municipality, Pietermaritzburg, is herein referred to as "site" (*Table. 1*).

1.3. Description of the Affected Environment

Description

- The development area is located on Erf 1977 Edendale-CC in the MLM, Pietermaritzburg, KwaZulu-Natal Province, South Africa (*Figure. 1, 2, 4*)
- It is located within the Imbali Mixed Use Investment Precinct which is within the Imbali Area based Management area.
- It is located to the western side of F.J. Sithole road
- Site is covered in vegetation with various plant species.

Access

- From Durban the site can be reached via the N3, travelling west to Pietermaritzburg (*Figure. 3*).
- From the N3 take the off-ramp towards Market Road,
- Turn left onto Washington Road (R103),
- Turn right onto Gladys Manzi Road/Archie Gumede Drive,
- Turn left onto Moses Mabhida Road,
- Keep left to continue on Sutherland Road. Turn right onto F. J. Sithole Road.

Table 1: Site Location and Property Information

| Location of Erf 1977 Edendale-CC | |
|---|---|
| Name of affected property | Edendale-CC |
| Street location | F.J. Sithole Road |
| Erf or farm number/s | Erf 1977 |
| Town | Pietermaritzburg |
| Township | Imbali |
| Responsible Local Authority | Msunduzi Municipality |
| Ward | 19 |
| Magisterial District | UMgungundlovu District Municipality |
| Region | KwaZulu-Natal Province |
| Country | South Africa |
| Site centre GPS coordinates | <ul style="list-style-type: none"> • 29° 39' 7.92" S • 30° 20' 48.84" E |



Figure 1: Photo of boundary wall.



Figure 2: New security gate at the entrance of the property.

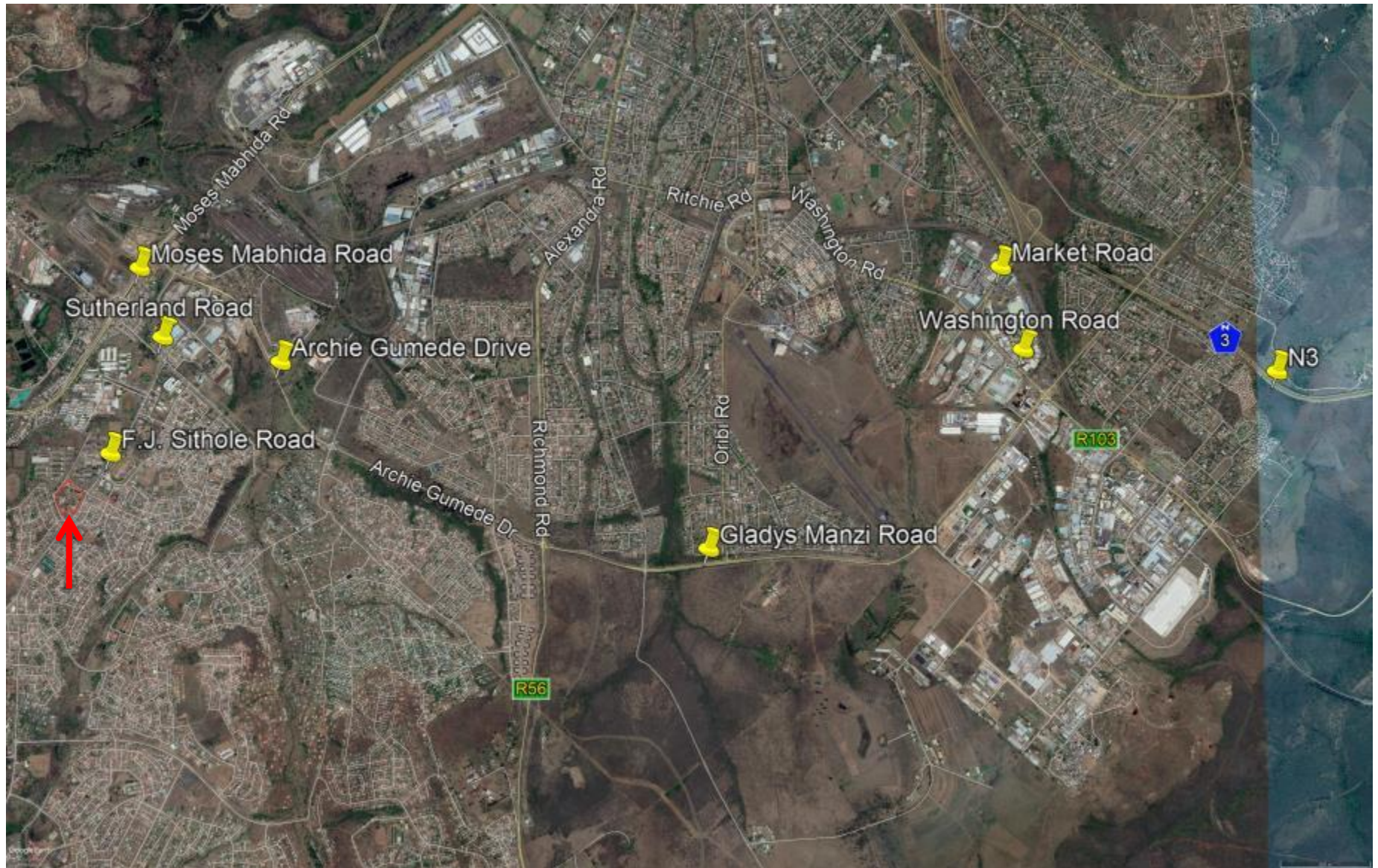


Figure 3: Google Earth images indicating access from the N3 (Red arrow indicating site)

1.4. Locality Map



Figure 4: Google Earth image of the project area (The red indicates the boundary of the Erf, while the blue shape indicates the Development Footprint).

1.5. Terms of Reference for the Appointment of Archaeologist and Heritage Specialist

The HIA is conducted in terms of Section 38 (3) of the NHRA, No. 25 of 1999. This prescript of the Act state that: “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 result 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.”

The total size of the Erf proposed for the development is 30854.03 m². The size of the Developmental footprint is 5526.84 m². The size of the development footprint is more than 5000m² and triggers and HIA. Due to fact that there were existing buildings on site, it was anticipated that some might be older than 60 years based on the relative dating of the township where the site is situated. The Imbali Township was established in 1958 and built in the mid-1960s as a result of people migrating from the rural areas to find work in the city of Pietermaritzburg (Denis 2006). Because the total size of the Erf is more than 5000 m², NGT conducted an HIA, in terms of Section 38 (3) of the NHRA, No. 25 of 1999 and Section 33 of the KZNHA (No. 4 of 2008).

HESQ appointed NGT as the lead cultural resources management (CRM) consultant to conduct and manage the HIA process. Cherene de Bruyn, Archaeologist and Heritage Consultant for NGT, conducted the HIA study for the proposed development. The appointment of NGT as an independent CRM firm is in terms of the NHRA, No. 25 of 1999 and the KZNHA (No. 4 of 2008).

1.6. Legal Requirements for Completion of the Study

The NHRA, No. 25 of 1999 sets norms and standards for the management of heritage resources in South Africa. Section 38 (3) of the NHRA, No. 25 of 1999 informs the current HIA study.

At the provincial level, the KZNHA, No. 10 of 1997 and legislations and bills such as the KZNHB of 21 February 2008 are applicable. Table 2 below gives a summary of all the relevant legislations that informed the current study.

Table 2-Legislation and relevance to this HIA Study

| Legislation (incl. Policies, Bills and Framework) | |
|--|---|
| <i>Heritage</i> | <ul style="list-style-type: none"> • Heritage resources in South Africa are managed through the NHRA, No. 25 of 1999. This Act sets guidelines and principles for the management of the <i>nation estate</i>. • Section 34 and 38 of the Act becomes relevant in terms of nature of the proposed project in terms of developing the heritage impact assessment study. • While Section 35 becomes relevant in terms of archaeology and palaeontology • The KZNHA, No. 10 of 1997 is developed to manage heritage resources at a provincial level. • The other applicable legal document is the KwaZulu-Natal Heritage Bill of 21 February 2008. |
| <i>Environmental</i> | <ul style="list-style-type: none"> • The National Environmental Management Act (NEMA), No. 107 of 1998. • The cultural environment in South Africa is managed through Section 24 of the NEMA, No. 107 of 1998. |

The following chapter outline the methodology used to assess the current site impacts and cumulative impacts that will result from the proposed project on the identified historic or archaeological sites.

2. METHODOLOGY

2.1. Approach to the Study

Cherene de Bruyn, the Archaeologist and Heritage Consultant for NGT, is responsible for the compilation of the current HIA report. The Review and Quality Control (RQC) process involved reviewing the First Draft HIA (Revision 01) and revising the Second Draft (Revision 02); the RQC was completed by Mr Nkosinathi Tomose, Principal Archaeologist and Heritage Consultant for NGT. The RQC is a standard process at NGT; in the case that the director and principal Consultant is responsible for the report – another consultant must undertake the RQC process.

2.2. Step I – Literature Review (Desktop Phase)

Background information search for the proposed development took place following the receipt of appointment letter from the client. Sources used included, but not limited to published HIA studies, academic books, academic journal articles and the internet about the site and the broader area in which it is located. Interpretation of legislation (the NHRA, No. 25 of 1999) and local by-laws forms, form the backbone for the study.

2.3. Step II – Physical Survey

The physical survey of the project area (footprint) was conducted on Monday the 11th of June 2018. The survey was conducted by Mr. Nkosinathi Tomose (Principal Archaeologist and Heritage Consultant–NGT) and Ms Nosiphiwo Nodada (Environmental and Sustainability Consultant – NGT). During the survey several buildings were identified. These findings are discussed in details in this HIA report.

The aim of the survey was to identify archaeological and heritage sites and resources within the area proposed for development activities as well as within the 500m radius

- The survey of the line was conducted on foot and the site was access using a bakkie;
- The aim of the surveys was to identify archaeological, burial grounds and graves, and built environment heritage sites and resources in and around the area proposed for development;
- To record and document the sites using applicable tools and technology;

The following technological tools were used for documenting and recording identified resources on site:

- Garmin GPS (i.e. Garmin 62s) – to take Latitude and Longitude coordinates of the identified sites and to track the site.
- Canon SLR – to take photos of the affected environment and the identified sites.
- The locality map and KML file from the client was used to identify the proposed development footprint.

2.4. Step III – Report Writing and Site Rating

The final step involves compilation of the report using desktop research as well as the physical survey results. Archaeological resources, graves and sites found in the project area is rated according to the site significance classification standards as prescribed by SAHRA. The first draft of this report was produced in 2018.

2.5. Site Significance Rating

The following site significance classification minimum standards as prescribed by the SAHRA (2006) and approved by ASAPA for the Southern African Developing Community (SADC) region were used to grade the identified heritage resources or sites (*Table. 3*). Impact Significance Rating in will be completed and is guided by the requirements of the NEMA EIA Regulations (2014) (*Table. 4 -6*).

Table 3-Site significance classification standards as prescribed by SAHRA

| FIELD RATING | GRADE | SIGNIFICANCE | RECOMMENDED MITIGATION |
|-------------------------------|----------|----------------------------|--|
| National Significance (NS) | Grade 1 | High Significance | Conservation; National Site nomination |
| Provincial Significance (PS) | Grade 2 | High Significance | Conservation; Provincial Site nomination |
| Local Significance (LS) | Grade 3A | High Significance | Conservation; Mitigation not advised |
| Local Significance (LS) | Grade 3B | High Significance | Mitigation (Part of site should be retained) |
| Generally Protected A (GP. A) | - | High / Medium Significance | Mitigation before destruction |
| Generally Protected B (GP. B) | - | Medium Significance | Recording before destruction |
| Generally Protected C (GP. A) | - | Low Significance | Destruction |

Table 4– Table indicating the impact significance rating.

| Alternative No | List Alternative Names | |
|-------------------------|------------------------|--|
| Proposal | Development | |
| Alternative 1 | Development Area 01 | |
| Alternative 2 | Development Area 02 | |
| Nature | -1 | Negative |
| | 1 | Positive |
| Extent | 1 | Activity (i.e. limited to the area applicable to the specific activity) |
| | 2 | Site (i.e. within the development property boundary), |
| | 3 | Local (i.e. the area within 5 km of the site), |
| | 4 | Regional (i.e. extends between 5 and 50 km from the site) |
| | 5 | Provincial / National (i.e. extends beyond 50 km from the site) |
| Duration | 1 | Immediate (<1 year) |
| | 2 | Short term (1-5 years), |
| | 3 | Medium term (6-15 years), |
| | 4 | Long term (the impact will cease after the operational life span of the project), |
| | 5 | Permanent (no mitigation measure of natural process will reduce the impact after construction). |
| Magnitude/ Intensity | 1 | Minor (where the impact affects the environment in such a way that natural, cultural and social functions and processes are not affected), |
| | 2 | Low (where the impact affects the environment in such a way that natural, cultural and social functions and processes are slightly affected), |
| | 3 | Moderate (where the affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way), |
| | 4 | High (where natural, cultural or social functions or processes are altered to the extent that it will temporarily cease), or |
| | 5 | Very high / don't know (where natural, cultural or social functions or processes are altered to the extent that it will permanently cease). |
| Reversibility | 1 | Impact is reversible without any time and cost. |
| | 2 | Impact is reversible without incurring significant time and cost. |
| | 3 | Impact is reversible only by incurring significant time and cost. |
| | 4 | Impact is reversible only by incurring prohibitively high time and cost. |
| | 5 | Irreversible Impact |
| Probability | 1 | Improbable (the possibility of the impact materialising is very low as a result of design, historic experience, or implementation of adequate corrective actions; <25%), |
| | 2 | Low probability (there is a possibility that the impact will occur; >25% and <50%), |
| | 3 | Medium probability (the impact may occur; >50% and <75%), |

| | | |
|---------------------------------|----------------|---|
| | 4 | High probability (it is most likely that the impact will occur- > 75% probability), or |
| | 5 | Definite (the impact will occur), |
| Public feedback | 1 | Low: Issue not raised in public responses |
| | 2 | Medium: Issue has received a meaningful and justifiable public response |
| | 3 | High: Issue has received an intense meaningful and justifiable public response |
| Cumulative Impact | 1 | Low: Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change. |
| | 2 | Medium: Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is probable that the impact will result in spatial and temporal cumulative change. |
| | 3 | High: Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is highly probable/definite that the impact will result in spatial and temporal cumulative change. |
| Irreplaceable loss of resources | 1 | Low: Where the impact is unlikely to result in irreplaceable loss of resources. |
| | 2 | Medium: Where the impact may result in the irreplaceable loss (cannot be replaced or substituted) of resources but the value (services and/or functions) of these resources is limited. |
| | 3 | High: Where the impact may result in the irreplaceable loss of resources of high value (services and/or functions). |
| Degree of Confidence | Low | <30% certain of impact prediction |
| | Medium | >30 and < 60% certain of impact prediction |
| | High | >60% certain of impact prediction |
| | | |
| Priority | Ranking | Prioritisation Factor |
| 3 | Low | 1,00 |
| 4 | Medium | 1,17 |
| 5 | Medium | 1,33 |
| 6 | Medium | 1,50 |
| 7 | Medium | 1,67 |
| 8 | Medium | 1,83 |
| 9 | High | 2,00 |
| Phase | | |
| | | |
| Planning | | |
| Construction | | |
| Operation | | |
| Decommissioning | | |
| Rehab and closure | | |

Table 5-Impact Rating table with impact mitigation

| IMPACT DESCRIPTION | | PRE – MITIGATION | | | | | | | POST – MITIGATION | | | | | | | IMPACT PRIORITISATION | | | |
|----------------------------|----------|------------------|--------|----------|-----------|---------------|-------------|-------------------|-------------------|--------|----------|-----------|---------------|-------------|--------------------|-----------------------|-----------------|-------------------|--------------------|
| Impact | Phase | Nature | Extent | Duration | Magnitude | Reversibility | Probability | Pre-mitigation ER | Nature | Extent | Duration | Magnitude | Reversibility | Probability | Post-mitigation ER | Confidence | Public response | Cumulative Impact | Irreplaceable loss |
| 1. Heritage Impact Ratings | Planning | -1 | 3 | 2 | 2 | 2 | 5 | - | -1 | 3 | 1 | 2 | 2 | 4 | -8 | High | 1 | 2 | 1 |
| | | | | | | | | 0 | -1 | | | | | | 0 | | | | |
| | | | | | | | | 0 | | | | | | | 0 | | | | |

Table 6-Risk assessment

| | | | | | | |
|---|--|--|-----------------------|------------------------|-------------------------|--------|
| 1. Select Impact from Dropdown List (C2:H2) | A. 1. Transformation of cultural/heritage resource – Proposal | | | | | |
| 2. (C4:H24) | Impact Name Heritage Impact Assessment | | | | | |
| | Alternative Proposal | | | | | |
| | Phase Planning | | | | | |
| | Environmental Risk | | | | | |
| | Attribute | | Pre-mitigation | Post-mitigation | Attribute | |
| | Nature of Impact | | -1 | -1 | Magnitude of Impact | |
| | Extent of Impact | | 3 | 3 | Reversibility of Impact | |
| | Duration of Impact | | 2 | 1 | Probability | |
| | Environmental Risk (Pre-mitigation) | | | | | -11,25 |
| | Mitigation Measures | | | | | |
| | Heritage Risks | | | | | |
| | Heritage Risk (Post-mitigation) | | | | | -8,00 |
| | Degree of confidence in impact prediction: | | | | | High |
| | Impact Prioritisation | | | | | |
| | Public Response | | | | | 1 |
| | <i>Low: Issue not raised in public responses</i> | | | | | |
| | Cumulative Impacts | | | | | 2 |
| | <i>Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is probable that the impact will result in spatial and temporal cumulative change.</i> | | | | | |
| Degree of potential irreplaceable loss of resources | | | | | 1 | |
| <i>The impact is unlikely to result in irreplaceable loss of resources.</i> | | | | | | |
| Prioritisation Factor | | | | | 1,17 | |
| Final Significance | | | | | -9,33 | |

3. LITERATURE REVIEW

3.1. The history of Pietermaritzburg

The greater Pietermaritzburg area and surroundings regions have a long history of occupation by Stone Age hunter gather groups, Iron Age Farming communities and Colonial settlers (Maggs 1989). Voortrekkers who moved away from the Cape Colony, settled in Pietermaritzburg in 1838 after a victory over the Zulus of King Dingane at the Battle of Blood River on bank of the Ncome River near Dundee (Brain 1985; Grobler 2011). The Voortrekkers named the town 'Pieter Maritz Burg', to honour their dead leaders Piet Retief and Gerrit Maritz (Haswell 1980). In 1843 the British took control of the Natal Colony and Pietermaritzburg. Edendale, a Township established in 1850's located on the Farm Welverdiend that was once home to Andries Pretorius, plays an important role in the Colonial and Apartheid history of Pietermaritzburg. Several buildings and monuments of this period can be found in the broader Pietermaritzburg area.

3.2. Archaeology

3.2.1. The Stone Age

In South Africa the Stone Age is divided into three periods, the Early Stone Age (ESA) (2 million to 250 000 years ago), the Middle Stone Age (MSA) (250 000 – 22 000 years ago) and the Later Stone Age (LSA) (25 000 to 200 years ago). The ESA is comprised of the Oldowan stone tool complex (2 and 1.7-1.5 million years ago), and is characterised by small flakes, flaked cobbles and percussive tools (Klein 2000; Mitchell 2002; Diez-Martín *et al.*, 2015; De La Torre 2016). The Acheulean stone tool complex included large hand axes and cleavers (1.7-1.5 million years ago and 250-200 thousand years ago) (Klein 2000; Mitchell 2002; Diez-Martín *et al.*, 2015; De La Torre 2016).

The transition from the Early to Middle Stone Age includes a change in technology from large stone tools to smaller blades and flakes. In KwaZulu-Natal MSA sites occur around the greater Durban and Pietermaritzburg areas and are often located in rock shelters. The MSA stone tool assemblage include blades, flakes, scrapers and pointed tools that could have been hafted and used as spears or arrowheads and is associated with anatomically modern humans (Wadley, 2007). Four MSA sites are located in KwaZulu-Natal, they are Sibudu Cave which is located about 40 km from Durban (Wadley & Jacobs 2004), Umhlatuzana Rock Shelter located 35 km west of Durban (Kaplan 1990; Mohapi 2013), Border Cave located in the Lebombo Mountains (Cooke *et al.*, 1945; Butzer *et al.*, 1978; Bird *et al.*, 2003), and Umbeli Belli Rock Shelter located near Scottburgh in KwaZulu-Natal (Badar *et al.*, 2016; Bader & Will 2017).

At Sibudu Cave, Umhlatuzana Rock Shelter, Border Cave and Umbeli Belli Rock Shelter LSA occupation has also been noted (Beaumont *et al.*, 1978; Kaplan 1990; Mitchell 1998; Badar *et al.*, 2016). Stone tools of the LSA, are often associated with the San, and are smaller and more diverse than the previous

periods. During the LSA the first Khoi herders and Nguni-speaking agro-pastoralists started to immigrate into southern Africa from the north. These groups had contact with the Later Stone Age people, which often led to them migrating to the Kalahari Desert or being assimilated into the Nguni speaking cultural groups. Several LSA sites have been located in the Tugela River Basin to the North of Pietermaritzburg, including Mgede Shelter (Mazel 1986), Sikhanyisweni Shelter (Mazel 1988), KwaThwaleyakhe Shelter (Mazel 1993), iNkolimahashi Shelter (Mazel 1999; Badenhorst 2003) and Driel Shelter (Maggs 1980b). Rock art dating to the LSA have also been found in several rock shelters in the Drakensberg Mountains (Willcox 1990), including the rock art site of Game Pass Shelter in the Kamberg Nature Reserve (Hœrlé & Salomon 2004) and Storm Shelter a San rock art site located in the southern Drakensberg (Blundell & Lewis-Williams 2001).

In Southern Africa the arrival Nguni speaking farming communities from Western Africa during the first half of the 1st millennium AD marks the end of the Stone Age (Badenhorst 2010).

3.2.2. The Iron Age

Several Iron Age sites have been excavated in the wider region of KwaZulu-Natal. The Iron Age, according to Huffman (2007) can be divided into the Early Iron Age (200 – 900 A.D.); the Middle Iron Age (900 – 1300 A.D.); and the Late Iron Age (1300 – 1840 A.D.). The Iron Age is characterized by the farming communities who domesticated animals, produced various ceramic vessels as well as smelted iron for weapons and tools.

The Early Iron Age communities throughout eastern and southern Africa share a similar Iron Age culture called the Chifumbaze complex (Huffman 2007; Phillipson 1994). The Chifumbaze complex contains evidence of the first farmers who settled in areas, cultivated crops, herded domestic animals, used iron, and who made pots (Phillipson 1994). It can furthermore, be divided into the Kalundu and Urewe Traditions (Huffman 2007). These Early Iron Age farming communities originated in the Great Lakes region of East Africa where Urewe ceramics are the earliest form of the Chifumbaze complex (Phillipson 1994; Mitchell 2002). Part of the Urewe tradition was the Kwale branch, which settlements were restricted to relatively well-watered hilly country and can be found along the coast from Kenya to KwaZulu-Natal (Phillipson 1994; Mitchell 2002). Around the second century AD there took place a swift migration of Iron Age farmers of the Chifumbaze complex (Phillipson 1994). This spread is known as the Nkope branch of the Urewe tradition, which spread through a wide area extending southwards towards Tanzania and Mozambique, through Malawi, eastern Zambia and Zimbabwe into the northern parts of South Africa, Swaziland and into KwaZulu-Natal (Phillipson 1994; Mitchell 2002).

During the Early Iron Age, settlements were situated on the valley floors and right next to rivers (Maggs & Ward 1984; Badenhorst 2010). Early Iron Age sites which are located near the Lower Thukela Basin in KwaZulu-Natal are Mamba (Van Schalkwyk 1994a), Wosi (Van Schalkwyk 1994b), and Ndongondwane (Loubser 1993). Other Early Iron Age sites include Mpambanyoni (Mitchell 2002) and Nanda (Whitelaw 1993). Ceramic pottery styles of the Early Iron Age, including Msuluzi (AD 500-700), Ndongondwane (AD 700-800), and Ntshekane (AD 800-900) are found in the broader areas around Durban and Richards Bay

and are specifically located near the Tugela River (Stoffberg & Loubser 1984; Maggs 1989; Huffman 2007). Apart from Early Iron Age ceramics Ndongondwana, Msuluzi, Mamba and Wosi, found in the Tugela basin, evidence of iron production was also found at these sites (Maggs 1980a; Stabbins 1982; Stoffberg & Loubser 1984; Whitelaw 1991; Maggs 1992; van Schalkwyk 1994a and 1994b).

Apart from changes in the ceramic sequence the Later Iron Age is also characterised by stone walled settlements. The oldest form of the Central Cattle Pattern, a means of social organisation in Iron Age settlements, where relationships between people were constructed through the layout of the settlement (Huffman 2000), was found at a site called Moor Park in the midlands of KwaZulu-Natal (Mitchell 2002; Huffman 2007). Moor Park walling dates to the fourteenth and sixteenth century and is located on a hilltop in a defensive position and is characterised by rough stone walling that encloses various cattle kraals and areas in the site (Mitchell 2002). Moor Park walling is associated with Nguni speaking people (Huffman 2007).

The Later Iron Age communities in KwaZulu-Natal were the direct ancestors of the present-day Zulu people (Middleton 1997; Huffman 2007).

3.2.3. Historical Period

During the historical period the KwaZulu-Natal region was often left in turmoil due to wars and conflict between the different cultural groups that settled in the area. In the beginning of the 19th century various Nguni-speaking settled on the larger Umngeni Valley area which is located to the north of Pietermaritzburg (Bryant 1965; Wright 1988; Prins & Hall 2015). During the Mfecane/Difaqane at the end of the 18th and beginning of the 19th centuries, communities who had settled in KwaZulu-Natal were displaced and forced to move by wars between the Zulu chiefdoms (Huffman 2007; Ndlovu-Gatsheni 2009; Shillington 2013). Due to the political and climate conditions in the 19th century Mzilikazi, one of the generals of King Shaka and his Transvaal Ndebele migrated from KwaZulu-Natal in 1820 and later settled in Zimbabwe (Van Warmelo 1930; Huffman 2007). King Shaka was assassinated by his two half-brothers, King Dingane and Mhlangana in 1828, with King Dingane becoming ruler of the Zulu Kingdom (Wright & Hamilton 1989; Laband 1995; Greaves 2013).

During King Dingane's rule, Cape merchants moved into the region to colonize Natal, while the Voortrekkers, who became dissatisfied with British rule, also started to move into the area (McKenna 2011). In 1837 Piet Retief led the Voortrekkers into Natal, where he met with King Dingane to arrange for permission to settle in Natal (Stapleton 2017). The old wagon road the Voortrekkers used in 1838 when they were making their way down the slopes of the Drakensberg mountains and into Pietermaritzburg can still be seen today (Oberholser 1972). The Worldview site is located in Pietermaritzburg and is a well-known provincial landmark as well as a national monument.

In 1838 King Dingane ordered the massacre of Piet Retief and the remaining Voortrekkers (Knight 1998). This later resulted in the Battle of Blood River, in December of 1838, where the Zulus fought the Voortrekkers under the command of Andries Pretorius (Stapleton 2017). After the Battle of Blood River,

the Voortrekker leader Andries Pretorius received the farm Welverdiend (Demissie 2016). In order to commemorate their victory at Blood River the Voortrekkers built Church of the Vow in Pietersburg, in 1840 (Voortrekker/Msunduzi Museum 2018). In 1840 King Dingane was overthrown by King Mpane and the Voortrekkers (Greaves 2013; Meredith 2014). He fled to the Lebombo mountains in Swaziland where he died (Greaves 2013; Meredith 2014). Natal became a British Colony in 1843, and Pietermaritzburg became the Colony's seat of administration (Robson 2011). In 1843 the British built a permanent British garrison in Pietermaritzburg. Fort Napier was used by the British from 1843 until 1914 (Laband 2009).

Reverent James Allison bought the farm Welverdiend from J. D. O. Landsberg, the son-in-law of Andries Pretorius (Leverton 1968). Edendale was established as a settlement in 1851 by Reverent James Allison along with Zulu, Sotho and Griquas speaking members of the Methodist Church on the farm Welverdiend (Msimang 1975; Msimang 1977; Roberts 2013; Epprecht 2016). The mission was renamed Georgetown after a visit from Sir George Grey, the Governor of the Cape Colony (Roberts 2013). A chapel was constructed at Edendale, in 1869 and still stands, with a new mission house (known as Edendale House) being built in 1878 (Leverton 1968). A schoolroom was later added in 1880 (Leverton 1968). From 1877 Edendale became the main residential area for African communities who were working in Pietermaritzburg (Goebel 2015).

In front of the Methodist Church, which was built during the 1860s is a memorial stone, which was erected to commemorate the Edendale residents' who fought alongside the British troops in the Anglo-Zulu War of 1879 (Mkhize 2015). The residents of Edendale were actively involved in Battles alongside the British, which includes the Langalibalele rebellion of 1873, the South African War of 1899-1902 and the Bhambatha Uprising of 1906 (Mkhize 2015). By 1937 Edendale had developed into a Township, with the Imbali Municipal Township being established in 1965 (Msimang 1975; Msimang 1977; Goebel 2015). One of South Africa monumental landmarks, the Manaye Hall (also known as Plessislaer Hall) are also located in Imbali. It is significant as in 1961 it was the venue for the All-In-Africa Conference as well as the location of Nelson Mandela's last speech before his imprisonment.

3.3. Conclusions on Literature Review

In conclusion the background information search has shown that the KwaZulu-Natal region has a long history with many different people migrating and settling in the area. Pietermaritzburg and the surrounding areas are rich in archaeology and history which played a role in documenting the lives of the Voortrekkers and the Zulu people. Several buildings and monuments associated with the Voortrekkers and British form part of Pietermaritzburg's rich colonial heritage. More recently the area has significant meaning to the people of South Africa as several sites, including Edendale, played an important role in the Apartheid struggle. The areas surrounding Pietermaritzburg document the Stone Age, Iron Age and Historical Period of the South African human population. As such there are several archaeological and heritage sites located in the KwaZulu-Natal Province that provides evidence of past

people's daily activities and the interactions and relationships they had with the people around them. These sites are of historical and cultural importance to the South African people.

4. STUDY RESULTS

The background information search yielded information about known archaeological and heritage resources in the greater Pietermaritzburg area as well as known archaeological and heritage resources in the KwaZulu-Natal Province of South Africa. It also yielded information about the history about the settlement of the Voortrekkers in the region as well as their interaction with the Zulu Kingdom under the leadership of King Dingane. Several buildings in Pietermaritzburg are related to the period when the town was under British rule. Edendale, a township near Pietermaritzburg was established in the early 1850's. It has a rich history starting in colonial times when a mission was founded there Reverent James Allison, up until more recently when it played an important role in the Apartheid years.

The physical survey focused on the area proposed for the development of the SMME Training Centre and Youth Enterprise Park. The area proposed for the development did not result to any archaeological or heritage resources. Therefore, the proposed development footprint is devoid of any archaeological or heritage resources. The study then assessed the 500m radius from the proposed development footprint, which also did not yield any archaeological or heritage resources.

4.1. Built Environment and Landscape Features

The ruins of several pre-existing buildings, a reservoir was identified during the survey of the site (*Figure. 5-7*). The proposed project area is also surrounded by a boundary wall which was constructed from cement bricks. On site ruins and currently utilised buildings were found. The ruins and the buildings are defined in terms of Site Complexes 1, 2, 3 and 4 (*Figure. 8*).



Figure 5: Images of the general site condition



Figure 6: Picture on one of the internal roads. The picture show the ruins and the western boundary wall



Figure 7: Photo of the ruins in site complex 1- picture taken north facing south



Figure 8: Google Earth image with the location of the site complexes identified.

Below is the description of the affected built environment ruins and impact assessment of the proposed development activities on them.

Table 7: Site Complex- 01

| | |
|--|--|
| Site Name: | Site Complex - 01 |
| Type: | Built environment |
| Density: | Low Density |
| Location/GPS Coordinates: | 29°39'11.12" S 30°20'47.77" E |
| Approximate Age: | 60 years and below |
| Applicable Sections of the Relevant Acts: | <ul style="list-style-type: none"> • Section 34 of the NHRA, No. 25 of 1999 • Section 33 of the KZNHA, No. 4 of 2008 |
| Description: | <p>The site complex consists of 5 interlinked buildings that form a U-shape. Inside the U-shape is a courtyard. All buildings in the site complex have been stripped off their roofs, windows, doors, while trees have grown inside some of the ruin buildings (<i>Figure. 9-13</i>). The buildings are built using red clay bricks. The bricks have the potential to be reclaimed and reused elsewhere.</p> |



Figure 9: Euphorbia tree that has grown inside site complex 1 ruins.



Figure 10: Building forming part of Site Complex 1.



Figure 11: Courtyard area of Site Complex 1.



Figure 12: Site Complex 1 facing north.



Figure 13: Interior of Site Complex 1

Table 8: Impact and risk assessment rating for project Planning, Construction and Operational phases in relation to the identified site (Site Complex 1)

| | | | | | | |
|--|---|--|------------------------|-------------------------|-----------------------|------------------------|
| 1. Select Impact From Dropdown List (C2:H2) | A. 1. Heritage Impact Assessment - Proposal | | | | | |
| 2. Copy and Paste Impact Table into Report (C4:H24) | Impact Name | 1. Heritage Impact Assessment | | | | |
| | Alternative | | | | | |
| | Phase | Planning, Construction and Operational | | | | |
| | Environmental Risk | | | | | |
| | Attribute | Pre-mitigation | Post-mitigation | Attribute | Pre-mitigation | Post-mitigation |
| | Nature of Impact | -1 | 1 | Magnitude of Impact | 1 | 1 |
| | Extent of Impact | 2 | 2 | Reversibility of Impact | 5 | 1 |
| | Duration of Impact | 1 | 1 | Probability | 5 | 5 |
| | Environmental Risk (Pre-mitigation) | | | | | -11,25 |
| | Mitigation Measures | | | | | |
| | <p><i>The Built Environment found in Site Complex 1 is of low significance and have low heritage value. It is recommended that the pre-existing infrastructure in this site complex be destroyed.</i></p> | | | | | |
| | Environmental Risk (Post-mitigation) | | | | | 6,25 |
| | Degree of confidence in impact prediction: | | | | | High |
| | Impact Prioritisation | | | | | |
| | Public Response | | | | | 1 |
| | <p><i>Low: Issue not raised in public responses</i></p> | | | | | |
| | Cumulative Impacts | | | | | 1 |
| | <p><i>Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change.</i></p> | | | | | |
| | Degree of potential irreplaceable loss of resources | | | | | 1 |
| | <p><i>The impact is unlikely to result in irreplaceable loss of resources.</i></p> | | | | | |
| Prioritisation Factor | | | | | 1,00 | |
| Final Significance | | | | | 6,25 | |

Table 9: Site Complex- 02

| | |
|---|--|
| Site Name: | Site Complex - 02 |
| Type: | Built environment |
| Density: | Low Density |
| Location/GPS Coordinates: | 29°39'12.77"S 30°20'50.61"E |
| Approximate Age: | 60 years and below |
| Applicable Sections of the Relevant Acts: | <ul style="list-style-type: none"> • Section 34 of the NHRA, No. 25 of 1999 • Section 33 of the KZNHA, No. 4 of 2008 |
| Description: | |
| The site consists of 2 buildings. All buildings in the site complex have been stripped off their roofs, windows, doors, while trees have grown inside some of the ruin buildings (<i>Figure, 14-16</i>). The buildings are built using red clay bricks. The bricks have the potential to be reclaimed and reused elsewhere. | |



Figure 14: Ruins of Site Complex 2. Note that the buildings do not have any windows or roofs.



Figure 15: Interior of Site Complex 2.



Figure 16: Exterior of Site Complex 2.

Table 10: Impact and risk assessment rating for project Planning, Construction and Operational phases in relation to the identified site (Site Complex 2)

| | | | | | | |
|---|--|---|------------------------|-------------------------|-----------------------|------------------------|
| 1. Select Impact From Dropdown List (C2:H2) | A. 1. Heritage Impact Assessment - Proposal | | | | | |
| 2. Copy and Paste Impact Table into Report (C4:H24) | Impact Name | 1. Heritage Impact Assessment | | | | |
| | Alternative | | | | | |
| | Phase | Planning, Construction and Operational | | | | |
| | Environmental Risk | | | | | |
| | Attribute | Pre-mitigation | Post-mitigation | Attribute | Pre-mitigation | Post-mitigation |
| | Nature of Impact | -1 | 1 | Magnitude of Impact | 1 | 1 |
| | Extent of Impact | 2 | 2 | Reversibility of Impact | 5 | 1 |
| | Duration of Impact | 1 | 1 | Probability | 5 | 5 |
| | Environmental Risk (Pre-mitigation) | | | | | -11,25 |
| | Mitigation Measures | | | | | |
| | <i>The Built Environment found in Site Complex 2 is of low significance and have low heritage value. It is recommended that the pre-existing infrastructure in this site complex be destroyed.</i> | | | | | |
| | Environmental Risk (Post-mitigation) | | | | | 6,25 |
| | Degree of confidence in impact prediction: | | | | | High |
| | Impact Prioritisation | | | | | |
| | Public Response | | | | | 1 |
| | <i>Low: Issue not raised in public responses</i> | | | | | |
| | Cumulative Impacts | | | | | 1 |
| | <i>Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change.</i> | | | | | |
| Degree of potential irreplaceable loss of resources | | | | | 1 | |
| <i>The impact is unlikely to result in irreplaceable loss of resources.</i> | | | | | | |
| Prioritisation Factor | | | | | 1,00 | |
| Final Significance | | | | | 6,25 | |

Table 11: Site Complex- 03

| | |
|--|--|
| Site Name: | Site Complex - 03 |
| Type: | Built environment |
| Density: | Low Density |
| Location/GPS Coordinates: | 29°39'10.83"S 30°20'49.53"E |
| Approximate Age: | 60 years and below |
| Applicable Sections of the Relevant Acts: | <ul style="list-style-type: none"> • Section 34 of the NHRA, No. 25 of 1999 • Section 33 of the KZNHA, No. 4 of 2008 |
| Description: | |
| <p>Site complex 3 consists of an interconnected building. The building in the site complex have been stripped off their roofs, windows, doors, while trees have grown inside some of the ruin buildings (<i>Figure, 17-19</i>). The buildings are built using red clay bricks. The bricks have the potential to be reclaimed and reused elsewhere.</p> | |



Figure 17: Exterior of Site Complex 3.



Figure 18: Roof stripped of buildings in Site Complex 3.



Figure 19: Interior of Site Complex 3.

Table 12: Impact and risk assessment rating for project Planning, Construction and Operational phases in relation to the identified site (Site Complex 3)

| | | | | | | |
|---|--|-----------------------|---|-------------------------|-----------------------|------------------------|
| 1. Select Impact From Dropdown List (C2:H2) | A. 1. Heritage Impact Assessment - Proposal | | | | | |
| 2. Copy and Paste Impact Table into Report (C4:H24) | Impact Name | | 1. Heritage Impact Assessment | | | |
| | Alternative | | | | | |
| | Phase | | Planning, Construction and Operational | | | |
| | Environmental Risk | | | | | |
| | Attribute | Pre-mitigation | Post-mitigation | Attribute | Pre-mitigation | Post-mitigation |
| | Nature of Impact | -1 | 1 | Magnitude of Impact | 1 | 1 |
| | Extent of Impact | 2 | 2 | Reversibility of Impact | 5 | 1 |
| | Duration of Impact | 1 | 1 | Probability | 5 | 5 |
| | Environmental Risk (Pre-mitigation) | | | | | -11,25 |
| | Mitigation Measures | | | | | |
| | <i>The Built Environment found in Site Complex 3 is of low significance and have low heritage value. It is recommended that the pre-existing infrastructure in this site complex be destroyed.</i> | | | | | |
| | Environmental Risk (Post-mitigation) | | | | | 6,25 |
| | Degree of confidence in impact prediction: | | | | | High |
| | Impact Prioritisation | | | | | |
| | Public Response | | | | | 1 |
| | <i>Low: Issue not raised in public responses</i> | | | | | |
| | Cumulative Impacts | | | | | 1 |
| | <i>Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change.</i> | | | | | |
| Degree of potential irreplaceable loss of resources | | | | | 1 | |
| <i>The impact is unlikely to result in irreplaceable loss of resources.</i> | | | | | | |
| Prioritisation Factor | | | | | 1,00 | |
| Final Significance | | | | | 6,25 | |

Table 13: Site Complex- 04

| | |
|---|--|
| Site Name: | Site Complex - 04 |
| Type: | Built environment |
| Density: | Low Density |
| Location/GPS Coordinates: | 29°39'10.30"S 30°20'51.54"E |
| Approximate Age: | 60 years and below |
| Applicable Sections of the Relevant Acts: | <ul style="list-style-type: none"> • Section 34 of the NHRA, No. 25 of 1999 • Section 33 of the KZNHA, No. 4 of 2008 |
| Description: | |
| <p>The site consists of 3 buildings near the entrance gates (<i>Figure. 20-24</i>). These buildings have asbestos roofs. Two of the buildings in the site complex have been stripped off their windows, and doors. A third building, with the words ‘Sekunjalo Project’ painted on it, was found in the project area and is currently being used. The Sekonjao project is a community-based, non-profit organisation based in Pietermaritzburg, that functions as crèche and care centre for orphans, vulnerable children and children between the ages of 6 to 18. Currently the Sekunjalo Project is located in Imbali.</p> <p>The buildings are built using red clay bricks. The bricks have the potential to be reclaimed and reused elsewhere.</p> | |



Figure 21: Photo of 3 pre-existing buildings at the entrance of the proposed development area. Photo taken from the west, facing east, indicates the new security gate as well as the elevation of the buildings Site Complex 4.



Figure 20: Exterior of one of the buildings in Site Complex 4.



Figure 22: Another building in Site Complex 4.



Figure 23: Exterior of Site Complex 4. Note the broken windows



Figure 24: Buildings currently being used by the Sekunjalo Project, in Site Complex 4.

Table 14: Impact and risk assessment rating for project Planning, Construction and Operational phases in relation to the identified site (Site Complex 4)

| | | | | | | |
|--|--|---|------------------------|-------------------------|-----------------------|------------------------|
| 1. Select Impact From Dropdown List (C2:H2) | A. 1. Heritage Impact Assessment - Proposal | | | | | |
| 2. Copy and Paste Impact Table into Report (C4:H24) | Impact Name | 1. Heritage Impact Assessment | | | | |
| | Alternative | | | | | |
| | Phase | Planning, Construction and Operational | | | | |
| | Environmental Risk | | | | | |
| | Attribute | Pre-mitigation | Post-mitigation | Attribute | Pre-mitigation | Post-mitigation |
| | Nature of Impact | -1 | 1 | Magnitude of Impact | 1 | 1 |
| | Extent of Impact | 2 | 2 | Reversibility of Impact | 5 | 1 |
| | Duration of Impact | 1 | 1 | Probability | 5 | 5 |
| | Environmental Risk (Pre-mitigation) | | | | | -11,25 |
| | Mitigation Measures | | | | | |
| | <i>The Built Environment found in Site Complex 4 is of low significance and have low heritage value. It is recommended that the pre-existing infrastructure in this site complex be destroyed.</i> | | | | | |
| | Environmental Risk (Post-mitigation) | | | | | 6,25 |
| | Degree of confidence in impact prediction: | | | | | High |
| | Impact Prioritisation | | | | | |
| | Public Response | | | | | 1 |
| | <i>Low: Issue not raised in public responses</i> | | | | | |
| | Cumulative Impacts | | | | | 1 |
| <i>Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change.</i> | | | | | | |
| Degree of potential irreplaceable loss of resources | | | | | 1 | |
| <i>The impact is unlikely to result in irreplaceable loss of resources.</i> | | | | | | |
| Prioritisation Factor | | | | | 1,00 | |
| Final Significance | | | | | 6,25 | |

4.2. Archaeological Sites

No archaeological sites were identified during the survey and site visit.

4.3. Burial Grounds and Graves

No archaeological sites were identified during the survey and site visit.

4.4. Paleontological Sensitivity

The SAHRA Palaeo-Sensitivity Layer (*Figure. 25*) shows that the project area is in a moderate sensitivity area. As such as desktop study of the area is required.



Figure 25: Palaeo-Sensitivity layer of Erf 1977 in the **UMgungundlovu** District Municipality, which shows a desktop study is required (red arrow)

4.5. Site Ratings of pre-existing infrastructure identified

Table 15: Site significance classification and ratings for the buildings located in the project area

| INFRASTRUCTURE | FIELD RATING | GRADE | SIGNIFICANCE | RECOMMENDED MITIGATION |
|----------------|-------------------------------|-------|------------------|------------------------|
| Site complex 1 | Generally Protected C (GP. A) | - | Low Significance | Destruction |
| Site complex 2 | Generally Protected C (GP. A) | - | Low Significance | Destruction |
| Site complex 3 | Generally Protected C (GP. A) | - | Low Significance | Destruction |
| Site complex 4 | Generally Protected C (GP. A) | - | Low Significance | Destruction |

5. CONCLUSION AND RECOMMENDATIONS

Based on the results of literature review and the survey results the following conclusions are made:

- It is concluded that the ruins of the buildings identified do not hold any heritage or archaeological significance.
- No archaeological artefacts, graves or burial grounds were identified in the project area; based on this it is very unlikely that any will be found. However, some archaeological resources are subterranean in nature and these are regarded as chance finds.
- In terms of SAHRA Paleontological Sensitivity Layer, the area is within a moderate sensitive area.

Recommendations:

- It is recommended that there is not need for further investigation of the buildings on site from a conservation architectural perspective. No Phase II HIA is required, the buildings can be demolished as planned only after the receipt of approval of this HIA by AMAFA.
- However, it should be noted that some archaeological material, including artefacts and graves can be buried underground and as such, may not have been identified during the initial survey and site visits. In the case where the proposed development activities bring these materials to the surface, they should be treated as Chance Finds. Should such resources be unearthed it is recommended that, the development and construction activities be stopped immediately, and an archaeologist be contacted to conduct a site visits and make recommendations on the mitigation of the finds. AMAFA should also be informed immediately.
- It is recommended that a Fossil Finds Monitoring Programme be implemented during the construction phase of the project based on the Fossil Finds Procedure (attached in Appendix). Should scientifically significant fossil material be impacted, work must cease, and a palaeontologist must be contacted to assess the finds and determine a way forward.
- The development may only proceed as planned subject to AMAFA approval.

It is recommended that this project may proceed with the recommended development of the SMME Training Centre and Youth Enterprise Park on Erf 1977 Edendale-CC located to the west of F. J. Sithole road in the MLM, Pietermaritzburg, subject to AMAFA approval. There is no heritage or archaeological resources that will be disturbed during the proposed development activities. The proposed development will have not impact on the heritage and archaeological resources in the broader Pietermaritzburg area.

However, it should be noted that some archaeological material, including artefacts and graves can be buried underground and as such, may not have been identified during the initial survey and site visits. In the case where the proposed development activities bring these materials to the surface, they should be treated as Chance Finds. Should such resources be unearthed it is recommended that, the development

and construction activities be stopped immediately and an archaeologist be contacted to conduct a site visits and make recommendations on the mitigation of the finds.

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