

**HERITAGE IMPACT ASSESSMENT REPORT FOR THE FORMALISATION OF MORIPE GARDENS
EXT.2 SITUATED ON THE REMAINDER OF PORTION 7 OF KAMEELRIVIER 160 JR FARM,
UNDER DR JS MOROKA LOCAL MUNICIPALITY, MPUMALANGA PROVINCE**



PREPARED BY:



PREPARED FOR:



DATE: OCTOBER 2021

EXECUTIVE SUMMARY

The Great Warthog Environmental Group was appointed by DR JS Moroka Local Municipality to undertake an Environmental Impact Assessment to formalise Ext.2 of Moripe Gardens that is situated on the remainder portion of the Kameelrivier farm 160 JR. The proposed Township formalisation covers a total of 44.20 hectares in extent.

The National Heritage Resources Act, no 25 (1999) (NHRA), protects all heritage resources, which are classified as national estate. The NHRA stipulates that any person who intends to undertake a development, is subjected to the provisions of the Act.

The Great Warthog Environmental group inspected the area on the 08th October 2021. The scope of the survey was to investigate for the presence of heritage or archaeological materials on the proposed Township development formalisation.

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area of proposed development and to assess the significance thereof and to consider alternatives and plans for the mitigation of any adverse impacts.

- As no sites, features, graves or objects of cultural heritage significance were identified in either of the study area, there would be no impact from the proposed Township formalisation development.
- No structures older than 60 years, any paleontological remains were identified.

It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal materials be revealed on the sites during construction activities, such activities should be halted, and a cultural/archaeological heritage specialist notified in order for an investigation and evaluation of the finds to take place.

Therefore, from an archaeological and cultural heritage resources point of view it is recommended that the proposed formalisation of the township be allowed to continue without any further heritage mitigation.

ABBREVIATION OF TERMS

AIA	Archaeological Impact Assessment
ASAPA	South African Archaeological Professional Association
CMP	Conservation Management Plan
EIA	Early Iron Age
EMP	Environmental Management Plan
ESA	Early Stone Age
GPS	Geographical Positioning System
HIA	Heritage Impact Assessment
HMP	Heritage Management Plan
ICOMOS	International Council of Monuments and sites
LIA	Late Iron Age
LSA	Late Stone Age
MIA	Middle Iron Age
MSA	Middle Stone Age
NASA	National Archives of South Africa
NHRA	National Heritage Resources Agency
PRHA	Provincial Heritage Resources Authority
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System

DEFINATION OF TERMS

“Aesthetic value” Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

“Alter” any action affecting the structure, appearance or physical properties of a place or object, whether by a way of structural or other works, by painting plastering or other decoration or any other means;

“Conservation” in relation to heritage resources, includes protection maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance

“Conservation Management Plan” A policy aimed at the management of a heritage resource and that is approved by the Heritage Resources Authority setting out the manner in which the conservation of a site, place or object will be achieved

“Cultural Significance” As defined in the NHRA means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

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

- (a) Construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (b) Carrying out any works on or over or under a place;
- (c) Subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- (d) Construction or putting up for display signs or hoardings;
- (e) Any change to the natural or existing condition or topography of land; and
- (f) Any removal or destruction of trees, or removal of vegetation or topsoil.

“Heritage agreement” means an agreement referred to in section 42,

“Heritage Impact Assessment” A report compiled in response to a proposed development that must meet the minimum requirements set out in the NHRA and should be submitted to a heritage resources authority for consideration.

“Heritage site” means a place declared to be a national heritage site by SAHRA or site declared to be a provincial Heritage site by a PHRA

“Historic value” Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

“Improvement” in relation to heritage resources includes repair, restoration and rehabilitation of a place protected in terms of this Act.

“Interested and Affected Parties” Individuals, organisations or communities that will either be affected and/or have an interest in a development or the resulting impacts of a development.

“Management” in relation to heritage resources includes the conservation, presentation and improvement of a place protected in terms of this Act.

“Scientific value” Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period.

“Social value” Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

“Rarity” Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

“Representivity” Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

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1. INTRODUCTION

DR JS Moroka Local Municipality, intends to formalize ext.2 of Moripe Gardens situated on Remainder of Portion 7 of the Kameelrivier 160 JR Farm, the proposed Township formalisation covers a total of 44.20 hectares in extent.

This report on a heritage impact assessment for the submission of application for Environmental Authorisation for the proposed formalization of Moripe Gardens Ext.2 Township under Dr JS Moroka Local Municipality, follows preliminary desktop surveys, field observations conducted on 8th October 2021.

The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) graves and burial sites (section 36). In order to comply with the legislations, the Applicant requires information on the heritage resources, and their significance that occur in the demarcated area. This will enable the Applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources.

2. TERMS OF REFERENCE

The terms of reference which then translate into a rationale and aims for the undertaking of this formalisation of Township culture and heritage impact assessment are:

- the identification and mapping of all heritage resources in the area affected;
- an assessment of the significance of such resources in terms of heritage assessment criteria set out in regulations;
- an assessment of the impact development on heritage resources;
- to assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, and aesthetic value;
- to review applicable legislative requirements;
- if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- Plans for mitigation of any adverse effects during and after completion of the proposed development.

3. PROJECT DESCRIPTION

DR JS Moroka Local Municipality, intends to formalize ext.2 of Moripe Gardens situated on Remainder of Portion 7 of the farm Kameelrivier 160 JR, the proposed Township formalization covers a total of 44.20 hectares in extent.

The proposed Township formalisation includes the following land uses:

- 315 Residential 1 (Dwelling/Houses)
- 3 Residential 3 (Dwelling Units/Flats)
- 2 Business 1 (Shop and Business Purpose)
- 2 Institutional (Crèche/day care facility)
- 3 Public Open Space (Parks and Open spaces)

4. STUDY AREA

The proposed township is situated at Ext.2 of Moripe Gardens on Remainder of Portion 7 of the farm Kameelrivier 160 JR, under DR JS Moroka Local Municipality of Nkangala District, Mpumalanga Province. The area is located about 15km South West of Siyabuswa town.

Site Central Coordinates: **25° 08' 35, 22"S 28° 56' 00, 57"E**

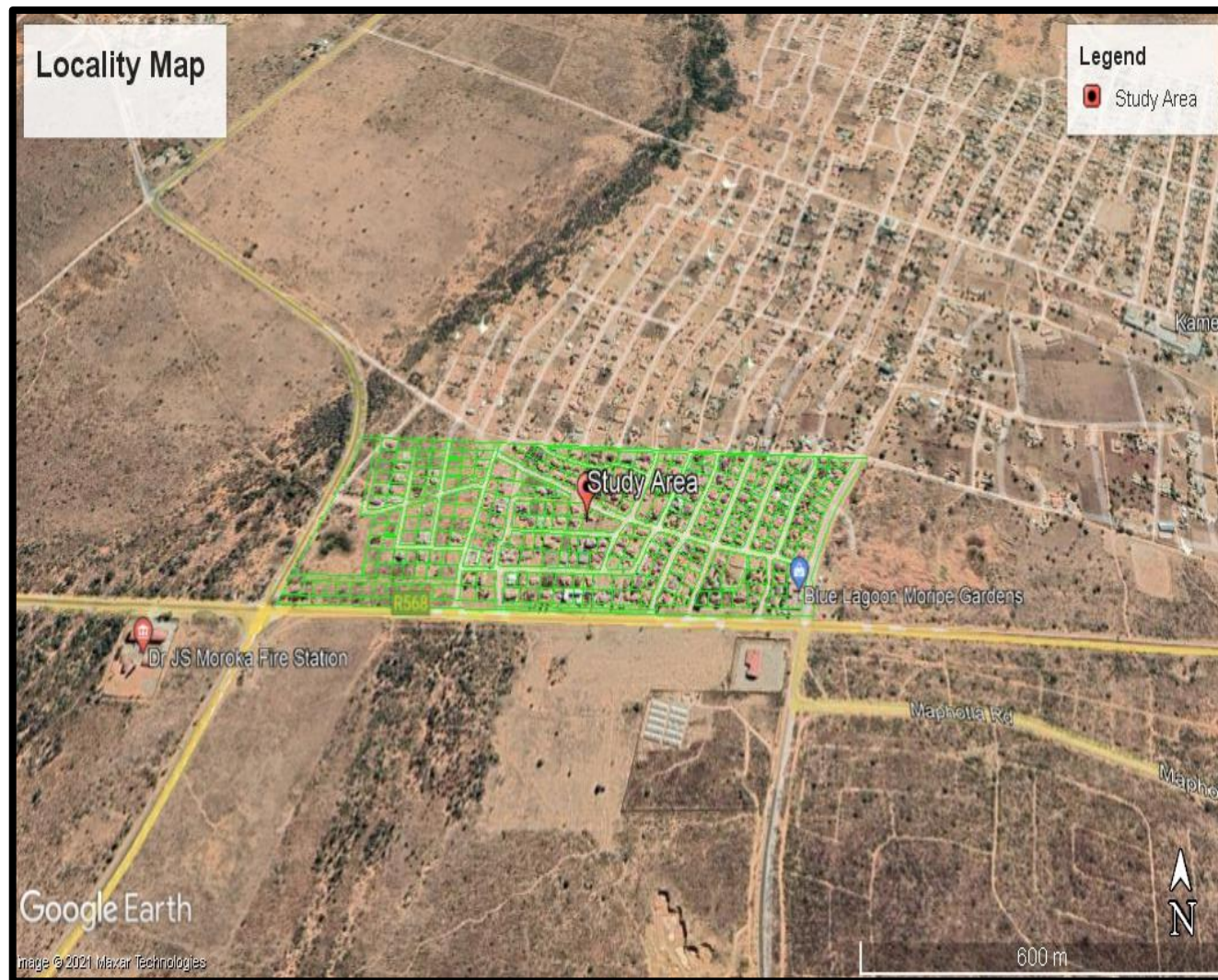


Figure 1: Locality Map

5. LEGISLATIVE REQUIREMENTS

Section 3 of the National Heritage Resource Act (25 of 1999) lists a wide range of national resources that qualify as part of South Africa national estate. When conducting a Heritage Impact Assessment (HIA) the following heritage resources have to be identified:

5.1 National Heritage Resource Act (Act No.25 of 1999)

5.1.1 National Protected and Cultural Heritage Resources

According to the above-mentioned NHRA the following is protected as cultural heritage resources:

- Archaeological artifacts, structures and sites older than 100 years
- Ethnographic art objects (e.g. Prehistoric rock art) and ethnography
- Objects of decorative and visual arts
- Military objects, structures and sites older than 75 years
- Historical objects, structures and sites older than 60 years
- Proclaimed heritage sites
- Grave yards and graves older than 60 years
- Meteorites and fossils
- Objects, structures and sites of scientific or technological value.

5.2 National Estate

The National Estate includes the following:

- Places, buildings, structures and equipment of cultural significance
- Places to which oral traditions are attached or which are associated with living heritage
- Historical settlements and townscapes
- Landscapes and features of cultural significance
- Geological sites of scientific or cultural importance
- Sites of Archaeological and paleontological importance
- Graves and burial grounds
- Sites of significance relating to the history of slavery
- Movable objects (e.g. Archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

5.3 South African Heritage Resource Agency (SAHRA)

The National Heritage Resources act established the South African Heritage Resource Agency (SAHRA) and makes provision for the establishment of Provincial Heritage Resources Authorities (PHRA). The Act makes provision for the undertaking of heritage resources impact assessments for various categories of development as determined by Section 38. It also provides for the grading of heritage resources and the implementation of a three tier level of responsibilities and functions for heritage resources to be undertaken by the State, Provincial authorities and Local authorities, depending on the grade of the Heritage resources. The Act defines cultural significance, archaeological and paleontological sites and material (Section 35), historical sites and structures (Section 34), graves and burial sites (Section 36) which falls under its jurisdiction. Archaeological sites and material are generally those resources older than a hundred years, while structures and cultural landscapes older than 60 years, including gravestones, are also protected by Section 34. Procedures for managing grave and burial grounds are clearly set out in Section 36 of the NHRA. Graves older than 100 years are legislated as archaeological sites and must be dealt with accordingly.

Section 38 of the NHRA makes provision for developers to apply for a permit before any heritage resource may be damaged or destroyed.

5.4 The Human Tissue Act (65 of 1983)

This Act protects graves younger than 60 years. These 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 Heritage Authorities.

Graves 60 years or older fall under the jurisdiction of the National Heritage Resources Act as well as the Human Tissues Act, 1983.

5.5 Graves and Burial Grounds

Section 36 of the NHRA gives priority for the protection of Graves and Burial Grounds of victims of conflict and graves and burial grounds more than 60 years old. Within this frame cautious approaches are considered including managed exhumations and re-interment to pave way for development.

6. METHODOLOGY AND LIMITATIONS

- The methodological approach used for the study is aimed at meeting the requirements of the relevant heritage legislation. As such a desktop study was undertaken followed by a survey of the impact areas. Most of the information was obtained through the site visit made on the 08th October 2021.
- A physical survey of the proposed development site was conducted on the 08th October 2021. The photographs of the observations from the proposed site were captured.
- During a visit to the site on the 08th October 2021, the area of proposed development site was examined. The survey entailed a detailed foot survey of the proposed site through acceptable standards.
- There were no limitations to the survey of the proposed development site.

6.1 Limitations

There are no limitations uncouneted in undertaking of this study.

6.2 Data Collection

All features identified were documented according to the general minimum standards accepted by the archaeological / heritage profession. Co-ordinates of individual neighborhoods are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

6.3 Site observations

The proposed Development Township is characterized by Marula trees, cactus plants, a dry wet land, nature grasses on the site, dumping of waste materials and a side view along Barolo road. The site entails of contemporary houses designs, the survey was undertaken by doing a physical survey via off-road vehicle and on foot and covered as much as possible of the study area.

7. BACKGROUND TO ARCHEOLOGY AND HISTORY OF THE STUDY AREA

6.1 Cultural Sequence in South Africa

The purpose of giving an outline of the Cultural Sequence is to provide a framework for the identification of heritage resources.

6.1.1 The Early Stone Age (2 million – 250 000 years BP)

The story of mankind begins about 4 million years ago with the appearance of proto-humans called hominids for which a source closest to the development area is the Makapansgat Valley ca50km south of Polokwane.¹ The Stone Age which dates back more than 2 million years marks a more diagnostic appearance of the cultural sequence divided into three epochs, the Early, Middle and Late Stone Ages. Stone and bone implements manifest the technology of the period and fall into distinct typologies indicating chronological development. Material evidence of human activities has been found in caves, rock-shelters and riverside sites, and very rarely seen in open country. Early Stone Age technology was based on core tools which resulted in shapes such as the pear-shaped hand axe, and cleavers (Deacon & Deacon, 1999).

These tools, which have been called Acheulian after a site in France, were probably used to butcher large animals such as elephants, rhinoceros and hippopotamus. Acheulian artefacts are usually found near sites where they were manufactured and thus in close proximity to the raw material or at butchering sites.

Tools dating to the Early Stone Age period are mostly found in the vicinity of larger watercourses, e.g. the Vaal River, or in sheltered areas. The absence of habitation sites may suggest mobile communities using temporary camps.

6.2.1 Middle Stone Age (MSA) [250 000 yrs – 30 000 yrs BP]

The Middle Stone Age (MSA), which appeared 250 000 years ago, is marked by the introduction of a new tool kit which included prepared cores, parallel-sided blades and triangular points hafted to make spears. Flakes and flake-blades with faceted platforms were produced from prepared cores. Open sites were still preferred near watercourses. By then humans had become skillful hunters, especially of large grazers such as wildebeest, hartebeest and eland. It is also believed that by then, humans had evolved significantly to become anatomically modern. Caves were used for shelter suggesting permanent or semi-permanent settlement. Furthermore there is archaeological evidence from some of the caves indicating the making of fire (e.g. at Blombos Cave, Wonderwerk, Makapansgat, Cave of Hearths). These were two remarkable steps in human cultural progress.

6.2.2 Late Stone Age (LSA) [30 000 yrs to ca2000 yrs BP]

Late Stone Age (LSA) people had even more advanced technology than the MSA people and were able to exploit more diverse habitats. By the time humans were classified as *Homo sapiens*, which refer to the

modern physical form and thinking capabilities. Several behavioural traits are exhibited, such as rock art and purposeful burials with ornaments, became a regular practice. The practitioners of the Rock Art are definitely the ancestors of the San and Khoikhoi, and sites abound in the whole of Southern Africa. LSA technology is characterized by microlithic scrapers and segments made from very fine-grained rock. Spear hunting continued, but LSA people also hunted small game with bows and poisoned arrows.

Because of poor preservation, open sites are less visible compared to rock shelters. Cultural materials other than stone tools begin to make an appearance. Ostrich eggshell beads, ground bone arrowheads, small bored stones and wood fragments with incised markings are traditionally linked with the LSA.

6.2.3 Early Iron Age / Early Farming Communities

About 2500 years ago, the introduction of farming brought about fundamentally new technologies and lifestyles replacing the stone tool cultures which had existed for thousands of years. A synchronised appearance of crops such as sorghum / millet and cow peas, domestic animals such as cattle, sheep/goats, metals – iron and copper - and pottery has been postulated and linked with migration of Bantu speakers from a source in the north of the subcontinent. However the notion of migration as general theory breaks down recognising that these people were in any case indigenous to the continent. Indeed there were population shifts, expansion and spread of settlement and assimilation with between the Bantu and the Khoisan.

6.2.4 The Later Iron Age

The transition from the Early Iron Age (EIA) to the Later Iron Age is much clearer in the Limpopo-Shashi Basin where archaeological research has been concentrated and pottery classifications refined. The EIA Zhizo Tradition gives way to Leopard's Kopje Tradition around 900AD.

The area around Siyabuswa has been occupied by the Southern Ndebele in historical times. In areas occupied by the Northern Nguni, EIA pottery was replaced by Blackburn pottery marking the transition to the Later Iron Age, although the relationship between the two pottery traditions is yet uncertain (Huffman 2007: 443).

6.2.5 Historical context of the area

The Ndebele of Ndzundza are a major population group of the area. Historically, the Ndzundza were an amalgamation of various groups of people of Nguni stock who arrived on the Highveld in the 18th-19th

century. They established a fortified capital at Erholweni. At the time of the arrival of the Afrikaners, some of the Ndebele had rallied under Chief Mabhogo. The Afrikaners often became embroiled in feuds between African chiefdoms. In 1864 they instigated the Swazi to attack the Ndebele. In the 1880s Mampuru, an exile in a succession struggle among Sekhukhune's Pedi sought refuge among the Ndzundza Ndebele.

Both British and Boers sought to take advantage of the situation to depose the incumbent Ndzundza chief, Nyabele Mahlangu (Fig 4). In 1882 when Afrikaner demands that Nyabele hands over Mampuru were spurned, they declared war on the Ndzundza storming their strongholds with dynamite. Nyabele and Mampuru were captured and taken to Pretoria where the latter was hanged. The brutal assault by the Boers has been remembered in Ndebele legends. Ndebele cultures has earned world acclaim for the ornate painting schema on houses, yard walls and attire (Delius 2007).

7. SITE SIGNIFICANCE

The following guidelines for determining site significance were developed by SAHRA in 2003. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

a) Historical Value

- Is it important in the community, or pattern of history?
- Does it have strong or special association with the life or work of a person, group or organization of importance in history?
- Does it have significance relating to the history of slavery?

b) Aesthetic Value

- Is it important in exhibiting particular aesthetic characteristics valued by a community or cultural group?

c) Scientific Value

- Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage?
- Is it important in demonstrating a high degree of creative or technical achievement at a particular period?

d) Social value

- Does it have strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?

(e) Rarity

- Does it possess uncommon, rare or endangered aspects of natural or cultural heritage?

(f) Representivity

- Is it important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects?

- What is the importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class?
- Is it important in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province, region or locality?

7.1 Degrees of significance

This category requires a broad, but detailed knowledge of the various disciplines that might be involved. Large sites, for example, may not be very important, but a small site, on the other hand, may have great significance as it is unique for the region.

7.2 Significance of rating sites

(i) Low (ii) Medium (iii) High

This category relates to the actual artefact or site in terms of its actual value as it is found today, and refers more specifically to the condition that the item is in. For example, an archaeological site may be the only one of its kind in the region, thus its regional significance is high, but there is heavy erosion of the greater part of the site, therefore its significance rating would be medium to low. Generally speaking the following are guidelines for the nature of the mitigation that must take place as Phase 2 of the project.

i) High

This is a do not touch situation, alternative must be sought for the project, examples would be natural and cultural landscapes like the Mapungubwe Cultural Landscape World Heritage Site, or the house in which John Langalibalele lived in.

Certain sites, or features may be exceptionally important, but do not warrant leaving entirely alone. In such cases, detailed mapping of the site and all its features is imperative, as is the collection of diagnostic art factual material on the surface of the site. Extensive excavations must be done to retrieve as much information as possible before destruction. Such excavations might cover more than half the site and would be mandatory; it would also be advisable to negotiate with the client to see what mutual agreement in writing could be reached, whereby part of the site is left for future research.

ii) Medium

Sites of medium significance require detailed mapping of all the features and the collection of diagnostic artefactual material from the surface of the site. A series of test trenches and test pits should be excavated to retrieve basic information before destruction.

iii) Low

These sites require minimum or no mitigation. Minimum mitigation recommended could be a collection of all surface materials and/ or detailed site mapping and documentation. No excavations would be considered to be necessary.

In all the above scenarios permits will be required from the National Heritage Resources Agency (SAHRA) as per the relevant law, namely the National Heritage Resources Act (Act 25 of 1999) destruction of any heritage site may only take place when a permit has been issued by SAHRA or its provincial equivalent should this exist.

8. FINDINGS

8.1 Observations from Site Survey

8.1.1 Existing Residential Development

It was discovered during the site survey that majority of the township has been developed. The majority of development within the study area is residential development. All the demarcated stands by the Local Municipality have been developed and vacant stand have been marked or fenced. There are no signs of residential development within any artifacts of heritage or archeological significance.



Figure 2: Housing type within the Township

8.1.2 Open Spaces/Undeveloped Areas

The findings of the field survey conducted found that the area which is open or undeveloped makes very low percentage of the entire township. Only the West Part of the Study area has majority of patches of land which is not developed. The undeveloped area are mostly used for illegal dumping of waste.



Figure 3: Open Area within the Study Area (West of the Study Area)

8.2 Summary assessment of potential impacts of the proposed development

The assessment is guided by Section 38(3) of the National Heritage Resources Act (No 25 of 1999) which provides a checklist of things that must be done in an HIA process:

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:

- i. The identification and mapping of all heritage resources in the area affected:

Within the Study Area, no archaeological or other heritage sites were found. All buildings are less than 60 years and are not protected in terms of Section 34 of NHRA.

- ii. 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:

A ranking system uses a four-colour code to highlight sites that need attention before or during the construction phase of the project. No sites of heritage value were found.

- iii. An assessment of the impact of the development on such heritage resources:

N/A.

- iv. 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:

N/A.

- v. If heritage resources will be adversely affected by the proposed development, the consideration of alternatives:

N/A.

- vi. Plans for mitigation of any adverse effects during and after the completion of the proposed development:

A heritage expert may periodically inspect the sites of proposed new developments during site preparation.

8. CONCLUSION AND RECOMMENDATIONS

- No structures older than 60 years, graves or any paleontological remains were identified.
- No archaeological, cultural, or heritage resources as described under Section 3 of the National Heritage Resource Act (25 of 1999) were identified.
- Development can go ahead without any further mitigation. It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal materials be revealed on the sites during construction activities, such activities should be halted, and a cultural/archaeological heritage specialist notified in order for an investigation and evaluation of the finds to take place.
- From an archaeological and cultural heritage resources perspective, we recommend to the Provincial Heritage Resource Agency, South African Heritage Resource Agency to approve the project as planned.

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