

## PHASE 1

## ARCHAEOLOGICAL IMPACT ASSESSMENT

RELATING TO THE PROPOSED MURALENI SPORTS ARENA ON PORTION OF THE REMAINDER OF THE FARM SENTIMULAS LOCATION 291LS, MURALENI-HA-MANTSHA, MAKHADO LOCAL MUNICIPALITY OF THE VHEMBE DISTRICT, LIMPOPO PROVINCE, SOUTH AFRICA.



Compiled by: Millennium Heritage Group (PTY) LTD

For: Plantago Lanceolata (PTY) LTD

616 Vuwani, 0952

20 April 2021

# i. <u>Technical and Executive Summaries</u>

Property details	
Province	Limpopo
Magisterial District	Vhembe District
Topo-cadastral map	2329
Coordinates	S23. 03. 16. 02 and E 29.43.28.04
Closest town	Makhado CBD
Farm name	Portion of the remainder of the farm Senthimulas location 291 LS

Development criteria in terms of Section 38 (1) of the NHR Act 25 of 1999	Yes	No
Construction of road, wall, power line, pipeline, canal or other linear form of development or barrier exceeding 300m in length		No
Construction of bridge or similar structure exceeding 50m in length		No
Development exceeding 5000 sqm	Yes	
Development involving three or more existing erven or subdivisions		No
Development involving three or more erven or divisions that have been consolidated within past five years		No
Rezoning of site exceeding 10 000 sqm	yes	
Any other development category, public open space, squares, parks, recreation grounds		No

Development	
Description of development	Establishment of the Sports Arena
Project name	Muraleni Sports Arena
Developer	Makhado Local Municipality
Heritage consultant	Mr. Eric Ndivhuho Mathoho, Millennium Heritage Pty Ltd
Purpose of the study	Heritage Impact Assessment to identity and assess significance of sites (if any) to be impacted by the proposed development

Land use	
Previous land use	Grazing land
Current land use	Vacant land

## ii. Executive Summary

This report provides the results of an Archaeological Impact Assessment (AIA) study for the proposed Sports Arena on portion of the remainder of the farm Senthimulas location 291 LS at Muraleni Village. The proposed are is situated south of the non-perennial stream (Dorp River), just west of the main tarred road which connect the major arterial road (R522) from Vivo to Makhado town. The site is a vacant stretch of land which is located in between the Dorp River which is a non-perennial stream and the existing railway lines. The proposed study area is situated roughly 4.2kilometers East of Ha-Makhitha,5.6 kilometers North of Ha- Ravele within the Makhado Local Municipality of the Vhembe District, Limpopo Province, South Africa.

As part of the application process and good corporate citizenship, archaeological impact assessment study was conducted as part of the broader Basic Assessment (BA) study which investigates the impact of the proposed development on the receiving environment including heritage resources. As part of Basic Assessments (BA), the applicant is required by law to obtain Environmental Authorization (EA) in line with the Environmental Impact Assessment (EIA) Regulation published in Government Notice R 982 of 4 December 2014 under Section 24(5) of the National Environmental Management Act No. 107 of 1998 (NEMA) as amended in 2017. An application for Basic Assessments has been lodged with the Limpopo Department of Economic Development Environment and Tourism. As part of the application process, Plantago Lanceolata Environmental Consultants were appointed to facilitate the process where they requested Millennium Heritage Group (Pty) Ltd, an independent heritage consulting company to assess the heritage sensitivity of the area. A multi-stepped methodology was used to address the terms of reference. To begin with, a desktop study was carried out to identify any known heritage sites and their significance in the surrounding environment. This involved consulting contract archaeology and paleontological reports filed on SAHRIS, research and academic publications. Finally, the study was guided by the National Heritage Resources Act of 1999 and SAHRA Minimum Standards for impact assessment.

Based on this study, the following conclusions were reached:

- The proposed development is scheduled to take place on already disturbed area dominated by borrow pits (areas where gravel materials where extracted for road re-gravel and the construction of gravel road to tarmac. Currently the site is dominated by soil and gravel mounds and uneven surfaces with recuperating vegetation (*Acacia karroo and Acacia tortilis*) and grass layer.
  - Ground truthing of the proposed study area found no important cultural heritage resource, archaeological materials nor graves. However, the Muraleni train and

bus victims' commemorative plaque was noted outside the sports arena development footprint.

- Although no archaeological remains were found, it is possible that some significant features may be buried beneath the ground. Should buried archaeological materials and burials be encountered during the process of development, the following must apply:
- Work must stop immediately
   A professional archaeologist or nearest heritage authority must be contacted.

Based on this assessment which found no archaeological resources in this area we recommend that the heritage authorities approve the project as planned.

## iii. ACKNOWLEDGEMENTS:

**CLIENT NAME:** Plantago Lanceolata

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CONSULTANT: Millennium Heritage Group (PTY) LTD

**REPORT AUTHOR:** Eric Ndivhuho Mathoho

## **Declaration of Independence and CV**

I Eric Ndivhuho Mathoho declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development, application or appeal in respect of which I am appointed other than fair remuneration for work performed about the activity, application or appeal. There are no circumstances that compromise the objectivity of me performing such work.

Signed:

Eric Ndivhuho Mathoho, BA (Hons) in Archaeology (Univen) MPhil. D.Phil. in Archaeology (UCT) ASAPA Member, Archaeologist and Heritage Expert.

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## 1. <u>INTRODUCTION</u>

The Makhado Local municipality in consultation with the local headmen and tribal council identified a vacant land situated north of the railway lines at Muraleni village as the suitable area where a newly proposed Sports Arena will be developed. The proposed project is located on portion of the remainder of the farm Senthimulas location 291 LS at Muraleni village (see Fig 1& 2). The area is situated south of the non-perennial stream (Dorp River), just west of the main tarred road which connect the major arterial road (R522) from Vivo to Makhado Central Business District (CBD). The site is a vacant stretch of land which is located in between the Dorp River which is a non-perennial stream and the existing railway lines. The proposed study area is situated roughly 4.2kilometers East of Ha-Makhitha,5.6 kilometers North of Ha- Ravele within the Makhado Local Municipality of the Vhembe District, Limpopo Province, South Africa.

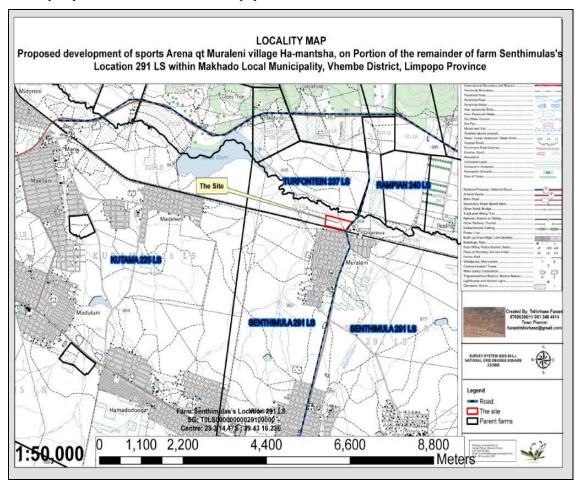


Figure 1:Topographical Map of the study area



Figure 2: Google Earth Maps

The objective behind this development is to provide social services to Muraleni and the surrounding villages and furthermore creating job opportunities to the local people during the construction phase of the proposed project. In terms of EIA Regulations promulgated on 4 December 2014, read with Section 44 of the National Environmental Management Act (Act 107 of 1998), the proposed development falls within listed Activity.

Therefore, pre-development Environmental Impact Assessment is a prerequisite, subject to approval by the Limpopo Department of Economics Development, Environment and Tourism. To ensure that the proposed sports Arena development meets the environmental requirements in line with the National Environmental Management Act 107 of 1998, Makhado local municipality appointed Plantago Lanceolata Environmental Consultants as an Independent Environmental Assessment Practitioner, who then appointed Millennium Heritage Group (PTY) LTD to undertake an Archaeological Impact Assessment (AIA) for the proposed project.

To comply with relevant legislations, the applicant requires information on the heritage resources that occur within or near the proposed site and their heritage significance. The objective of the study is to document the presence of archaeological and historical sites of significance to inform and provide guidance on the proposed development activities. Apart from contributing towards the preservation of the heritage resources, the studies provide information and awareness of the types of archaeological and heritage sites that occur within the proposed study area. The document enables the developer to align their functions and responsibilities to advance proposed activities and at the same time minimizing potential impact on archaeological and heritage sites. This study was conducted in line with the National Heritage Resources Act of 1999 (Act No. 25 of 1999). The Act protects heritage resources through formal and general protection. The Act provide that certain developmental activities require consents from relevant heritage resources authorities such as Limpopo Heritage Resources Authorities (LIHRA) and South African Heritage Resources Agency (SAHRA). In addition to heritage legislations, the South African Heritage Resources Agency has developed minimum standards used in impact assessment, while these local standards, are operational they are strengthened by the International Council of Monuments and Sites (ICOMOS) published guideline for assessing impacts. The Burra Charter of 1999, requires a cautious approach to the management of sites; it sets out firmly that the cultural significance of heritage places must guide all decisions.

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 materials (Section 35) and graves and burial sites (Section, 36). To comply with the legislation, the applicant requires information on the heritage resources, that occur in the area proposed for development and their significance. 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. RELEVANT LEGISLATION

Two sets of legislation are relevant for the purposes of this study in as far as they contain provisions for the protection of tangible and intangible heritage resources including burials and burial grounds.

## 2.1. The National Heritage Resource Act (25 of 1999)

This Act established the South African Heritage Resource Agency (SAHRA) as the prime custodian of the heritage resources and makes provision for the undertaking of heritage resources impact assessment for various categories of development as determined by section 38. It also provides for

the grading of heritage resources (Section, 7) and the implementation of a three-tier level of responsibly and functions from heritage resources to be undertaken by the State, Provincial and Local authorities, depending on the grade of heritage resources (Section, 8)

In terms of the National Heritage Resource Act 25, (1999) the following is of relevance:

## **Historical remains**

<u>Section 34 (1)</u> No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant Provincial Heritage Resources Authority.

## **Archaeological remains**

**Section 35(3)** Any person who discovers archaeological and paleontological materials and meteorites during development or agricultural activity must immediately report the find to the responsible heritage resource authority or the nearest local authority or museum.

Section 35(4) No person may, without a permit issued by the responsible heritage resources authority-

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- trade in, sell for private gain, export or attempt to export from republic any category of archaeological or paleontological material or object or any meteorite; or
- bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment which assist with the detection or recovery of metal or archaeological material or object or such equipment for the recovery of meteorites.

Section 35(5) When the responsible heritage resource authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or paleontological site is underway, and where no application for a permit has been submitted and no heritage resource management procedures in terms of section 38 has been followed, it may

- serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order
- carry out an investigation for obtaining information on whether an archaeological or paleontological site exists and whether mitigation is necessary;

- if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
- recover the cost of such investigation from the owner or occupier of the land on which it is believed an archaeological or paleontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.

**Subsection 35(6)** the responsible heritage resource authority may, after consultation with the owner of the land on which an archaeological or paleontological site or meteorite is situated; serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

## **Burial grounds and graves**

**Section 36 (3)** No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

- (i) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (ii) bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.

**Subsection 36 (6)** Subject to the provision of any person who during development or any other activity discover the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resource authority which must, in co-operation with the South African Police service and in accordance with regulation of the responsible heritage resource authority-

(I) carry out an investigation for obtaining information on whether such grave is protected in terms of this act or is of significance to any community; and if such grave is protected or is of significance, assist any person who or community which is a direct descendant to decide for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

#### **Cultural Resource Management**

Section **38(1)** Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development\*...

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

**development** means any physical intervention, excavation, or action, other than those caused by <u>natural forces</u>, which may in the opinion of the 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 well-being, including:

- (i) Construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (ii) Any change to the natural or existing condition or topography of land, and
- (iii) Any removal or destruction of trees, or removal of vegetation or topsoil;

place means a site, area or region, a building or other structure
structure means any building, works, device or other facility made by people and which is fixed to the ground.

## **2.2.** The Human Tissue Act (65 of 1983)

This act protects graves younger than 60 years, these falls under the jurisdiction of the National Department of Health and the Provincial Health Department. Approval for the exhumation and reburial must be obtained from the relevant provincial MEC as well as relevant Local Authorities.

## 3. TERMS OF REFERENCE

The terms of references for the study were to undertake an Archaeological Impact Assessment relating to the proposed Sports Arena and submit a specialist report, which addresses the following:

- Executive summary
- Scope of work undertaken
- Methodology used to obtain supporting information
- Overview of relevant legislation
- Results of all investigations
- Interpretation of information
- Assessment of impact
- Recommendation on effective management measures
- References

#### 4. TERMINOLOGY

The <u>Heritage Impact Assessment</u> (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act,1999(Act No25 of 1999) <u>Heritage resources</u>, (Cultural resources) include all human-made phenomena and intangible products that are result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyle of the people or groups of people of South Africa.

The term 'pre <u>-historical'</u> refers to the time before any historical documents were written or any written language developed in a area or region of the world. The <u>historical period</u> and <u>historical remains</u> refer, for the project area, to the first appearance or use of 'modern' Western writing brought South Africa by the first colonist who settled in the Cape in the early 1652 and brought to the other different part of South Africa in the early 1800.

The term 'relatively recent past' refers to the 20<sup>th</sup> century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may soon, qualify as heritage resources.

It is not always possible, based on the observation alone, to distinguish clearly between archaeological remains and historical remains or between historical remains and remains from the relatively recent past. Although certain criteria may help to make this distinction possible, these criteria are not always present, or when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floors plan (a historical feature) may serve as a guideline. However circular and square floors may occur together on the same site.

The 'term sensitive remains' is sometimes used to distiquished graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves are not necessarily heritage resources if they date from the recent past and do not have head stones that are older than sixty years. The distinction between 'formal' and 'informal' graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important as different cultural groups may uphold different traditions and values regarding their ancestors. These values should be recognized and honored whenever graveyards are exhumed and relocated.

The term 'Stone Age' refers to the prehistoric past, although Late Stone Age people lived in South Africa well into the historical period. The Stone Age is divided into an Early Stone Age (3Million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years ago to 40 years ago) and the Late Stone Age (40 000 years to 200 years ago).

The term 'Early Iron Age' and Late Iron Age respectively refers to the periods between the first and second millenniums AD.

The 'Late Iron Age' refers to the period between the 17th and the 19th centuries and therefore includes the historical period.

Mining heritage sites refers to old, abandoned mining activities, underground or on the surface, which may date from the pre-historical, historical or relatively recent past.

The term 'study area' or 'project area' refers to the area where the developers wants to focus its development activities (refer to plan)

Phase I studies refer to survey using various sources of data to establish the presence of all possible types of heritage resources in each area.

Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include documenting of rock art, engravings or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavation of archaeological sites; the exhumation of bodies and the relocation of grave yards, etc. Phase II work may require the input of specialist and require the co-operation and the approval of SAHRA.

#### 5. METHODOLOGY

#### Source of information

## i. Desktop studies

A desktop study was performed to gain information on the heritage resources in the area. The region boost its diverse history that stretch back to Stone Age. The fact that this community were present in the region is well confirmed by the occurrence of scattered stone artefacts on the surface as deposits in the caves and rock shelters and rock overhangs. Records shows that some of the earliest rock art paintings has been recorded approximately 10 kilometres east of the proposed study area at Tombo-landou. Another major site which contributed to archaeological knowledge on the existence of early Iron Age community in the interior of southern Africa, exist further 8 kilometers north of the study area at Happy rest farm. In proximity to the proposed study area another major historical site associated with the earliest European settlement in the interior exits 8 kilometers to **16** | Page

the northeast (Schoemansdal). The expectation from this desktop study is that it is highly impossible to identify archaeological sites in this area because of the surface disturbances.

#### ii. Field surveys

To identify sites on the ground and assess their significance, a dedicated field survey was performed to the site for the proposed extension of the proposed development and associated infrastructure development. The fieldwork was performed on the 18 April 2021, the process followed systematic inspections of predetermined linear transects which resulted in the maximum coverage of the entire site. The sampling method selected was the stratified random technique where the study area was taken as strata with random field walking around them. Standard archaeological observation practices were followed; visual inspection was supplemented by relevant written source, and oral traditions with local communities from the surrounding villages. The site was recorded by hand held GPS and plotted on 1:50 000 Topographical and Google Earth maps. The general condition of the terrain was photographed with a Canon 1000D Camera.

#### **Assumption and Limitations**

It must be pointed out that heritage resources can be found in the unexpected places, it must also be borne in mind that survey may not detect all the heritage resources in each project area. While some remains may simply be missed during surveys (observations) under tall grass and vegetational concealment, others may occur below the surface of the earth and may be exposed once development (such as the construction of the proposed facilities) commences.

#### 6. ASSESSMENTS CRITERIA

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The significance of archaeological and heritage sites was determined based on the following criteria:

- The unique nature of a site.
- The amount/depth of the archaeological deposit and the range of features (stone walls, activity areas etc.).
- The wider historic, archaeological and geographic context of the site.
- The preservation condition and integrity of the site.
- The potential to answer present research questions.

## 6.1 Site Significance

The site significance classification standards as prescribed in the guidelines and endorsed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used in determining the site significance for this report.

The classification index is represented in the Table below that show grading and rating systems of heritage resources in South Africa.

FIELD RATING	GRADE SIGNIFICANCE	RECOMMENDED MITIGATION		
National Significance (NS)	Grade 1	-	Conservation; National Site nomination	
Provincial Significance (PS)	Grade 2	-	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)	Grade 4A	High / Medium Significance	Mitigation before destruction	
Generally Protected B (GP.B)	Grade 4B	Medium Significance	Recording before destruction	
Generally Protected C (GP.C)	Grade 4C	Low Significance	Destruction	

## 6.2 Impact Rating

## **VERY HIGH**

These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or cultural) environment, and usually result in severe or very severe effects, or beneficial or very beneficial effects.

**Example:** The loss of a species would be viewed by informed society as being of VERY HIGH significance.

**Example:** The establishment of a large amount of infrastructure in a rural area, which previously had very few services, would be regarded by the affected parties as resulting in benefits with VERY HIGH significance.

#### HIGH

These impacts will usually result in long term effects on the social and /or natural environment. Impacts rated as HIGH will need to be considered by society as constituting an important and usually long-term change to the (natural and/or social) environment. Society would probably view these impacts in a serious light.

**Example:** The loss of a diverse vegetation type, which is common elsewhere, would have a significance rating of HIGH over the long term, as the area could be rehabilitated.

**Example:** The change to soil conditions will impact the natural system, and the impact on affected parties (e.g. farmers) would be HIGH.

#### **MODERATE**

These impacts will usually result in medium- to long-term effects on the social and/or natural environment. Impacts rated as MODERATE will need to be considered by the public or the specialist as constituting a unimportant and usually short-term change to the (natural and/or social) environment. These impacts are real, but not substantial.

**Example:** The loss of a sparse, open vegetation type of low diversity may be regarded as MODERATELY significant.

**Example:** The provision of a clinic in a rural area would result in a benefit of MODERATE significance.

#### LOW

These impacts will usually result in medium to short term effects on the social and/or natural environment. Impacts rated as LOW will need to be considered by society as constituting an important and usually medium-term change to the (natural and/or social) environment. These impacts are not substantial and are likely to have little real effect.

**Example:** The temporary changes in the water table of a wetland habitat, as these systems are adapted to fluctuating water levels.

**Example:** The increased earning potential of people employed because of a development would only result in benefits of LOW significance to people living some distance away.

#### NO SIGNIFICANCE

There are no primary or secondary effects at all that are important to scientists or the public.

**Example:** A change to the geology of a certain formation may be regarded as severe from a geological perspective, but is of NO SIGNIFICANCE in the overall context.

## 6.3 Certainty

DEFINITE: More than 90% sure of a fact. Substantial supportive data exist to verify the

assessment.

PROBABLE: Over 70% sure of a fact, or of the likelihood of an impact occurring.

POSSIBLE: Only over 40% sure of a fact, or of the likelihood of an impact occurring.

UNSURE: Less than 40% sure of a fact, or of the likelihood of an impact occurring.

#### 6.4 Duration

SHORT TERM : 0-5 years

MEDIUM: 6-20 years LONG TERM: more than 20 years

DEMOLISHED: site will be demolished or is already demolished

## 6.5 Mitigation

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be classified as follows:

✓  $\mathbf{A}$  – No further action necessary

✓ **B** – Mapping of the site and controlled sampling required

✓ C – Preserve site, or extensive data collection and mapping required; and

✓ **D** – Preserve site

## 7. Historical background a brief synthesis of the archaeology and heritage of the study area.

#### 7.1.1. The Stone Age Period

Most of the archaeological research in and around the region took place further north and in the Limpopo Valley. Nevertheless, a general account of the nature of the Stone Age can be provided. Conventionally speaking, the Stone Age period has been divided into the Early Stone Age (ESA) **20** | P a g e

(3.5 million and 250 000 BP), the Middle Stone Age (MSA) (250 000 – 25000 BP) and the Later Stone Age (25000 – 2000 BP) (Phillipson 2005). Early Stone Age stone tool assemblages are made up of the earlier Oldwan and later Acheulian types. The Oldowan tools were very crude and were used for chopping and butchering. These were replaced by Acheulian ESA tools dominated by hand axes and cleavers which are remarkably standardized (Wadley, 2007; Sharon, 2009). Evidence presented from Makapansgat caves shows that the first tool making hominids belong to either an early species of the Homo or an immediate ancestor which is yet to be discovered here in South Africa (Phillipson 2005; Esterhuysen, 2007). Both the Oldwan and Acheulian industries are well represented in the archaeology of northern South Africa as shown by studies in the Makapansgat valley (Kuman et al. 2005; Sumner and Kuman 2014).

The Middle Stone Age dates to between 250 000 ago and 25 000 years ago. In general, Middle Stone Age tools are characterized by a size reduction in tools such as hand axes, cleavers, and flake and blade industries. The period is marked by the emergence of modern humans and was accompanied by change in technology, behavior, physical appearance, art, and symbolism (Phillipson 2005). A variety of MSA tools includes blades, flakes, scraper and pointed tools that may have been hafted onto shafts or handles and used as pear heads. Surface scatters of these flake and blade industries occur widespread across southern Africa (Klein 2000; Thompson & Marean, 2008). Residue analyses on some of the stone tools indicate that these tools were certainly used as spear heads (Wadley, 2007). From about 25 000 BP, stone tool assemblages generally attributed to the Later Stone Age emerged. This period is marked by a reduction in stone tool sizes. Typical stone tools include microliths and bladelets. Later Stone Age stone tools were recovered in the Soutpansberg and well known sites of the Mapungubwe National Park. This period is also associated with the development of rock art whose distribution is known across southern Africa (Deacon and Deacon 1999; Phillipson 2005).

## 7.1.2. FARMING COMMUNITIES AND RECENT HISTORIES

Studies conducted in the early 1941(De Vaal,1941) and 1974(Prinsloo,1974) shed light on the understanding of pre- history of the Soutpansberg. The regional aerial photographic survey which incorporate the reflect scattered concentration of early Iron Age and historical settlements within the Soutpansberg, furthermore very few scattered iron production sites have been documented in cultivated floodplains of the main rivers. Recent studies classified these settlements and activity areas mainly comprised of four basic units, namely: homesteads, terraces, livestock enclosure and Iron production sites.

The general archaeology within the study area took place during the Iron Age period, where these communities moved into southern Africa by c. AD 200, entering the area either by moving down the coastal plains, or by using a more central route. It seems more likely that the first option was what brought people into the study area. From the coast, they followed various rivers inland. Being cultivators, they preferred the rich alluvial soils to settle on. One of the earliest dated sites is located near Tzaneen (Silver Leaves). This sequence owes much to the work undertaken by Menno Klapwijk, in the Tzaneen area, specifically at the site referred to as the earliest component of the Iron Age period i.e. Silver Leaves site. The site was occupied in the third century, being dated by radiocarbon to circa 280 AD. Similar dates also came from Eiland sites discovered few kilometres south east of Tzaneen in the then Northern Transvaal. On both sites, direct evidence of cultivation was extremely limited, but impressions of Pennisetum millet seeds were discovered. This was the principal evidence of the earliest Iron Age penetration with the then dominant crop being brought in and introduced to the area (Klapwijk 1974). Silver Leaves sites chronology was then followed by Happy Rest, with sites dating between AD 450 and 750 (Eiland Salt Works-AD 390-435, Pta 1524, Pta 1608, Pta 1607, Wits 764, Happy Rest-AD 430-555, Pta 2421-Klein Africa 415-535, Pta 1168) (Huffman, 2007). Happy Rest and Klein Africa are archaeological sites which were identified near the Soutpansberg (Prinsloo, 1974; Huffman, 2007). Another piece of archaeological evidence of great significance located outside the Limpopo Province was the discovery of an archaeological site near the present town of Lydenburg in the Mpumalanga Province. The Lydenburg archaeological assemblage consists of the remains of the well-known seven terracotta heads (Lydenburg Heads). The site was radiocarbon dated AD 470, becoming the oldest African Iron Age artwork ever found below the equator (Inskeep and Maggs, 1975). However, Whitelaw and Mitchell (2005) argue that the site may date to the 10<sup>th</sup> century AD.

The last period of pre-colonial occupation consisted of Vhavenda who settled on stone-walled, sites at the foot and top sections of the Soutpansberg. At present, it is not clear, but, judged on the pottery found here; these sites might even date to early historic times. As this was a period of population movement, conflict and change, in large part set the scene for the current population situation within the study area. Vhavenda of today are descendants of various groups and previous studies coupled with old traditions agrees that there was at one stage an aboriginal population in the region called Vha-Ngona whether this group had chief or tribal cohesion it is not recorded in the history; it was previously rare for a person prepared to admit that they are descendent of this despised race.

The historic period of the region started c. 1836s, with the arrival of the first white settlers led by Louis Trichardt. However, historical documents suggest that the first European to settle in the

region is Coenraad Buys, who settled at Buysdorp, located several kilometers to the west of the proposed study area. Louis Trichardt group settled near the Soutpansberg (The area is known as Schoemansdal). While the second Voortrekker movement, acknowledged to have been led by Andries Hendrik Potgieter arrived in 1848, however other historical sources suggest that Andries Hendrik Potgieter established Ohringstad in 1845. Later in 1848 he led a group that settled on the site Trichardt's group had abandoned, just outside present day Louis Trichardt and established a town Soutpansberg Dorp.

Negotiations between the trekkers and Vhavenda resulted in certain areas south of the Soutpansberg becoming the border between cultural groups as influenced by the early trade routes system via Mozambique. Later, tension developed between these cultural groups, giving rise to armed conflict. For example, on 15 July 1867 Schoemansdal was evacuated following a protracted conflict with the Vhavenda. For two years, the ZAR government tried to subdue the Vha-Venda by diplomatic and military means but abandoned their attempt at the end of 1869, the Boers were forced to assemble in laagers for their own protection, especially during the hunting season when many men were away in quest of ivory. One visitor reported that the number of white population within the Soutpansberg region being 1800 between 1855-1856, with 260 families, but archaeological findings show that no more than 100 families, this show that the number decreases due to African resistance and conflict. Some of the African Chief such as Madzhie, a Venda chief whose capital was situated in the mountains above Schoemansdal, was reported to have been a regular supplier of labor to the white community. After the death of the Venda chief, Ramabulana, whites were involved in the succession dispute between his sons, Makhado and Davhana which caused conflict that spread to other part of the Soutpansberg (Boeyens,1994).

#### 8. SITE LOCATION AND PROJECT DESCRIPTION

The proposed study area is located on the remainder of the farm Senthimulas location 291 LS at Muraleni Village (see below fig 3). The site is situated south of the non-perennial stream, just west of the main tarred road, forming a vacant, open stretch of land between the non-perennial stream and the railway lines. The area is situated at GPS S23. 03. 16. 02 and E 29.43.28.04, roughly 4.2 kilometers East of Ha-Makhitha,5.6 km North of Ha- Ravele within the Makhado Local Municipality of the Vhembe District, Limpopo Province South Africa.

The area is dominated by undulating plains with evidence of gravel material extractions activities. Part of the site adjacent to the main tarred road which connect villages and the main tarred road (R522) from Vivo to Makhado CBD has been badly disturbed. This disturbance covers roughly 4

hectors of land dominated by soils and gravel mounds. The proposed area stretch from the Dorp River bridge, with the main tarred road forming the north-eastern border while the railway line from the southern boundary. The site covers roughly 13 hectors of land dominated by the geology and soils of the Soutpansberg group. Miscellaneous soils which including acidic dystrophic to mesotrophic sandy to loam soil occurs in rocky areas towards the Soutpansberg. The vegetation of the study area has been largely influenced by the geology and falls within the Soutpansberg Mountain Bushveld complex. Its distribution stretch from the Blouberg to the Soutpansberg covering the lower lying areas with complex mosaic of sharply contrasting kinds of vegetation within limited areas, however subtropical moist thickets (dense bush) and poorly developed grass layer could be found in disturbed areas. The overall dominant plan taxa include Acacia *Karoo*, *Acacia tortilis and Dichrostachys cineria* (Mucina & Rutherford, 2006, Acocks, 1975).



Figure 3: View of the study area dominated by Acacia tortilis and A. Karroo



Figure 4: The gravel road alongside the Railway line



Figure 5: View of the study area

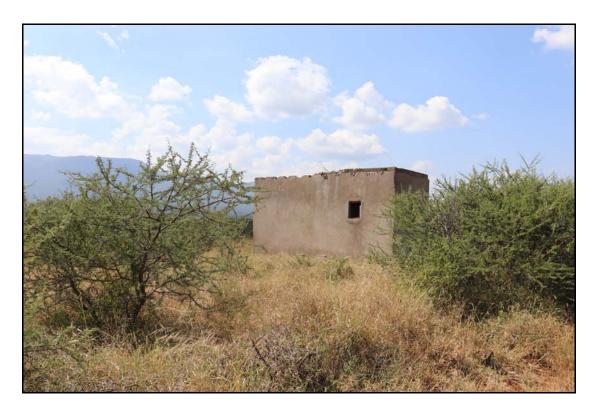


Figure 6: Recent past house remains in the area.

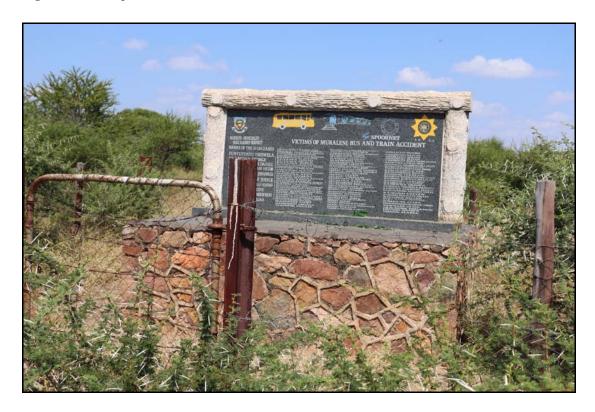


Figure 7: Commemoration Plague outside the proposed development footprint

## 9. ASSESSMENT OF SITES AND FINDS

This section contains the results of the heritage sites/finds assessment. The phase 1 heritage scoping assessment program as required in terms of the Section 38 of the National Heritage Resource Act (Act 25 of 1999) was done for the proposed development. No sites were found during the desktop study and the subsequent field survey. There are no primary or secondary effect at all that are important to scientist or the public that will be impacted by the proposed project activities.

Heritage Significance: No significance

Impact: Negative

Impact Significance:HighCertainty:ProbableDuration:Permanent

Mitigation: A

## 10. CONCLUSION AND RECOMMENDATIONS

Based on this study, the following conclusions were reached:

- The proposed development is scheduled to take place on already disturbed area dominated by borrow pits (areas where gravel materials where extracted for road re-gravel and the construction of gravel road to tarmac. Currently the site is dominated by soil and gravel mounds and uneven surfaces with recuperating vegetation (*Acacia karroo and Acacia tortilis*) and grass layer.
  - Ground truthing of the proposed study area found no important cultural heritage resource, archaeological materials nor graves. However, the Muraleni train and bus victims' commemorative plaque was noted outside the sports arena development footprint.
  - Although no archaeological remains were found, it is possible that some significant features may be buried beneath the ground. Should buried archaeological materials and burials be encountered during the process of development, the following must apply:
  - Work must stop immediately
     A professional archaeologist or nearest heritage authority must be contacted.

Based on this assessment which found no archaeological resources in this area we recommend that the heritage authorities approve the project as planned.

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#### Addendums

## **Addendum 1: Definitions and Acronyms**

**Archaeological** 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.

Chance Finds Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural

heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources Same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and paleontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

**Grave** A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

**Historic** Material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

*In Situ* material *Material culture* and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

**Late Iron Age** this period is associated with the development of complex societies and state systems in southern Africa.

**Material culture** Buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

**Site** A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

AIA	Archaeological Impact Assesment	
EIA	Environmental Impact Assesment	
EIA	Early Iron Age	
EMP	Environmental Management Plan	
MHG	Millenium Heritage Group (PTY)LTD	
NEMA	National Environmental Management Act, 1998 (Act No.107 of 1998)	
NHRA	National Heritage Resources Act, 1999 (Act No.25 of 1999)	
SAHRA	South African Heritage Resources Agency	
ESA	Early Stone Age	
MSA	Middle Stone Age	
LSA	Late Stone Age	
IA	Iron Age	
LIA	Late Iron Age	
UNESCO	United Nations Educational, Scientific and culturural Organization	
WHC	World Heritage Conventions of 1972	

# ADDENDUM 2: Types and ranges as outlined by the National Heritage Resource Act (Act 25 of 1999)

The National Heritage Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of the heritage resources that qualify as part of the national estate, namely:

- (a) Places, buildings structures and equipment of cultural significance;
- (b) Places to which oral tradition are attached or which are associated with living heritage;
- (c) Historical settlement and townscapes
- (d) Landscape and natural features of cultural significance;
- (e) Geological sites of scientific or cultural importance
- (f) Archaeological and paleontological sites
- (g) Graves and burial ground including-
  - (I) Ancestral graves
  - (II) Royal graves and graves of traditional leaders
  - (III) Graves of victim of conflict
  - (IV) Graves of individuals designated by the minister by notice in the gazette;
  - (V) Historical graves and cemeteries; and
  - (VI) Other human remains which are not covered by in terms of the Human Tissue Act,1983(Act No 65 of 1983)
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including-
  - (I) object recovered from soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
  - (II) objects to which oral traditions are attached or which are associated with living heritage
  - (III) ethnographic art and objects;
  - (IV) military objects;
  - (V) objects of decorative or fine art;
  - (VI) object of scientific or technological interest; and
  - (VII) books, records, documents, photographs, positive and negatives, graphic, film or video material or sound recording, excluding those that are public records as defined in section1(xiv) of the National Archives of South Africa Act,1996(Act No 43 of 1996).

The National Heritage Resource Act (Act No 25 of 1999,Art 3)also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value... these criteria are the following:

- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons
- (h) Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa
- (i) Sites of significance relating to the history of slavery in South Africa.