



PHASE 1

ARCHAEOLOGICAL IMPACT ASSESSMENT

**RELATING TO THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE
REMAINDER OF PORTION 1 OF THE FARM KLOPPERSKRAAL 534 IQ WITHIN
EMFULENI LOCAL MUNICIPALITY OF SEDIBENG, GAUTENG PROVINCE, SOUTH
AFRICA.**



Compiled by: Millennium Heritage Group (PTY) LTD

For: Neospace (PTY)LTD

28 February 2022

i. Technical and Executive Summaries

Property details	
Province	Gauteng
Magisterial District	Sedibeng
Topo-cadastral map	2627
Coordinates	S26.30. 01. 08 and E 27.47.49.07
Closest town	Evaton west
Farm name	Klopperskraal 534 IQ

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	Township establishment and associated infrastructure
Project name	Klopperskraal Township establishment
Developer	Neospace (PTY) LTD
Heritage consultant	Dr. Eric. N. Mathoho, Millennium Heritage (PTY) LTD
Purpose of the study	Heritage Impact Assessment to identify and assess significance of sites (if any) to be impacted by the proposed Township establishment

Land use	
Previous land use	Agricultural Farm holding
Current land use	Agricultural Farm holding

ii. Executive Summary

This report delivers the results of an Archaeological Impact Assessment (AIA) study for the proposed Township Establishment and associated infrastructures on the Remainder of portion 1 of the farm Klopperskraal 534 IQ within Emfuleni Local Municipality of the Sedibeng District, Gauteng Province. The proposed area is positioned 50 kilometers southwest of Johannesburg Central Business District (CBD), located near Orange farm (Drieziek extension 5) alongside the main arterial National tarred road (N1) freeway which connects Gauteng and Free State Provinces. Furthermore the regional tarred road (R28) which connect Randfontein and Sebokeng traverse the study area cutting it into two sections (see Fig 1 for site location). The area is slightly undulating dominated by plains, the extent of the site covers roughly 851 hectares, with the vast area disturbed by sorghum and sunflower cultivation activities. Generally the study area is dominated by (Gh 6) grassland vegetation type, with thick bush concentration dominated by *Acacia sp* at the central part of the site. However, scattered tall trees exist in the property dominated by small *Eucalyptus plantation and Pinus sylvestris* trees. Supplementary exotic trees or plants exist where there is farmhome stead dominated by Jacaranda and Pine trees.

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 investigate 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 Gauteng Department of Agriculture and Rural Development (GDARD). As part of the application process, Itenviromonitoring 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 proposed study 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 extent currently dominated by small farmholding with surface disturbed agricultural zones with seasonal crops such as Sorghum and Sunflower plants. Subsequently the vast area is still covered by indigenous vegetation dominated by Gh 6 grassland.
- Additionally, the survey of the proposed study area identified six (6) heritage resources within the property these includes, delapidating farmhomestead building and associated barn, cement and bricks constructed livestock drinking troughs and water reservoir, Two stone constructed structure, one square with stone outline the second one circular (hut shaped structure) presumed to house livestock or used as farm labourers camp and a cemetery or burial ground.
- These infrastructures dated to the 19th century, and are older than sixty years and qualifies to be protected by the National Heritage Resources Act 25 of 1999. **Section 34 (1)** No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority. These structures are significant heritage resources by virtue of their intrinsic qualities within the context of their local and regional surroundings.

Mitigational measure

- These structures should be avoided (50 meters radius should be observed around the structures) these structures may be incorporated as part of the proposed township establishment as part of the township park. In case where the identified structures or ruins became un avoidable and required to be destroyed to make ways for new infrastructures, these sites should be subjected to investigations. In case of historical structures an application should be lodge with the provincial heritage authority- for the intention to destruct these structures, before the destruction permit is issued, a historical structure report is prepared and approved by the heritage Authority. This process is time consuming as well as costly, the investigation includes:
 1. Recording of the affected historical structures prior destruction , this include, (i)photographic recording with captions foe each elevation in standard architectural terminology(ii) Plan drawing with floor plan, elevation sections and architectural details such as scale(1:100cm) and iii) a compilation of all recordings in a single historical structure report.
 2. Preparation of the report should be in a format acceptable to both Provincial and National Heritage Resources Agency, as well as any Official repository (Archive, Library or Museum).

- The Cemetery is located alongside the main gravel access road leading to the farmhomestead. The area is located roughly 400meters west of the main regional road (R28). More than 40 graves were recorded indicated by packed stones, granite tombstones and granite outlines with headrest as grave dressings. Both Africans and Europeans individuals are well represented. The site will not be affected by the proposed development because of its location. The Cemetery is located outside the proposed development footprint.

Mitigational measure

Burial grounds or Graves can be mitigated by one of the following,

- (i) Construction of a fence with access gate around the cemetery, with 50 meters radius.
- (ii) In case where graves or cemetery are impacted by the proposed development they are exhumed or relocated, the exhumation process is regulated by various legislation and municipality by laws. This task is undertaken by Forensic archaeologist and reputed undertaker who are acquainted with all administrative procedures. This process includes social facilitation process with 60 days statutory notice period for grave older than sixty years. Permission of exhumations should be obtained from the decedents of the deceased, the National Department of Health, Cogsta, Local and District Municipality, South African Police Services and the South African Heritage Resource Agency.

Recommendations

Based on the assessment, which identified several heritage resources on the property, It is strongly recommended, that the built environment (>60 years) within the proposed township development site, should be avoided by the proposed township establishment and its associated civil engineering services such as water and sewer reticulation pipelines, powerline and access roads. In case where they became unavoidable these structures should be mapped and surveyed for culturally significant and unique structures and features before being demolished to make way for the proposed development.

- 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.

Should the recommendation be followed there are no objections to the proposed Township establishment and we recommend its approvals as planned from the Gauteng Heritage Resources Authority or the South African Heritage Resource Agency.

iii. ACKNOWLEDGEMENTS:

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REPORT AUTHOR: Dr. E. N. Mathoho

Declaration of Independence and CV

I Dr. 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, (D. Phil.in Archaeology) (UCT) M. Phil.in Archaeology (UCT)
ASAPA Member, Archaeologist and Heritage Expert.

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1. INTRODUCTION

The proposed project shoots from persistent challenges of rapid urbanization and in-migration facing the Greater Gauteng city region- and ultimately placing enormous pressure on services delivery and housing, access to land has been a big challenge for Emfuleni local Municipality. The Remainder of portion 1 of the farm Klopperskraal 534 IQ was identified, purchased by Neospace (PTY) LTD and was made available for residential expansion within Orange Farm. The proposed area is positioned 50 kilometers south of Johannesburg Central Business District (CBD), located near Orange farm (Drieziek extension 5) alongside the main arterial National tarred road (N1) which connects Gauteng and Free State Provinces, within Emfuleni local Municipality of the Sedibeng District, Gauteng Province. Additionally the regional road (R28) which connects Randfontein and Sebokeng traverse the study area cutting it into two sections (see Fig 1 for site location). The area is slightly undulating dominated by plains, the extent of the site covers roughly 851 hectares, with the vast area disturbed by sorghum and sunflower cultivation activities. Generally the study area is dominated by (Gh 6) grassland vegetation type, with thick bush concentration dominated by *Acacia sp* at the central part of the site. However, scattered tall trees exist in the property dominated by small *Eucalyptus plantation and Pinus sylvestris* trees. Supplementary exotic trees or plants exist where there is farmhomestead dominated by Jacaranda and Pine trees.

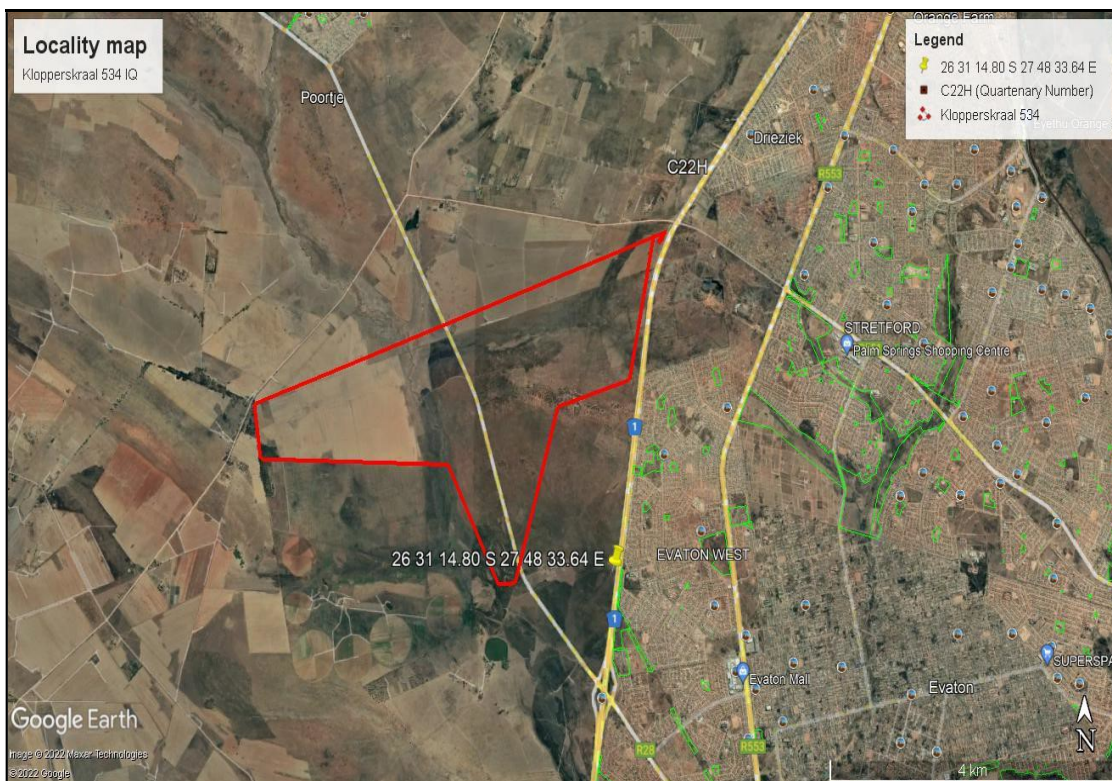


Figure 1: Google Earth Map adapted from Google Earth Program



Figure 2: View of the study area towards the south western section

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, No:

- Activity 15.

Therefore, pre-development Environmental Impact Assessment is a prerequisite, subject to approval by the Gauteng Department of Agriculture and Rural Development (GDARD). To ensure that the proposed township establishment and associated infrastructures meets the environmental requirements in line with the National Environmental Management Act 107 of 1998, Neospace (PTY)LTD appointed Itenviromonitoring 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 Neospace (PTY) LTD 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 Gauteng Provincial Heritage Resources Authorities (GPHRA) 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

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

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 natural forces, 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 township establishment and associated Infrastructures 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 Heritage Impact Assessment (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 No 25 of 1999). Heritage resources, (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-historical’ refers to the time before any historical documents were written or any written language developed in a area or region of the world. The historical period and historical remains 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 20th 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 distinguished 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. DATA SOURCES AND METHODOLOGY

The study relied on published and unpublished sources of information including online databases such as Google Earth and Google Scholar. Previous impact assessment reports were also consulted together with academic literature. Subsequent to the desktop study, fieldwalking was performed on the properties where the proposed township establishment has been earmarked, resulting in total coverage by checking sites, distribution maps and features that were observable against written descriptions from various reports. This process resulted in the confirmation of sites and an understanding of their significance based on density of material culture, period, and the nature of the context of the materials. Photography formed an important part of the documentation together with the mapping of the distribution of sites within the study area in relation to proposed development activities. In summary, the study adopted a mixed approach that combined desktop studies with field observations and interviews.

i. Desktop studies

A desktop study was performed to gain information on the heritage resources in the area. The Province boasts its diverse history that stretches back to the Stone Age. The fact that this community was present in the region is well confirmed by the occurrence of scattered stone artefacts on the surface as well as deposits in the caves and rock shelters and rock overhangs. Records show that some of the earliest rock art paintings have been recorded in association with stone tools deposits within the Magaliesberg. The historical period of the area is well represented by historical structures and their associated cemeteries. Most of the historical houses are dominated by floors and house foundations and delapidated walls, however several historical houses still exist. The expectation from this desktop study is that it is highly possible to identify historical buildings and burial grounds within the property.

ii. Field surveys

To identify sites on the ground and assess their significance, a dedicated field survey was performed on the property. The fieldwork was aided by a 4X4 and was performed on the 28 February 2022, 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 sources, and oral traditions with local communities from the surrounding Orange Farm. The site was recorded by hand-held GPS (Garmin Montana 650) 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 unexpected places, it must also be borne in mind that a 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:

- ✓ **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

Very little is known about the Stone Age archaeology of the study area. 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) (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 Oldwan 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). Many sites recorded with stone tools around the Gauteng Province were recorded dominated mostly of open sites with few scatters of stone tools and manufacturing debris dominated by flakes and core tools these sites were documented along the flanks of the Magaliesberg. Several acheulean bifaces stone tools were also identified on the mountain ranges such as those close to Boschpoort dam (van Schalkwyk 2012: 10). MSA sites occur on flood plains, but are also associated with caves and rock shelters (overhangs) that are known in the Magaliesberg. LSA rock shelters with rock art have also been reported in the Magaliesberg (Bergh 1999: 4; Coetzee 2008). With regards to Annandale area, the LSA in its entirety is under represented in the literature and scholars only make reference to isolated lithic scatters. The earliest example of stone tools in association with hominids ever presented came from Makapansgat cave, and it reflects 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).

Generally, the Middle Stone Age dates to between 250 000 ago and 25 000 years ago. Overall, 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 spear 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. Iron Age sites

No Early Iron Age sites has been reported within the Orange Farm region, perhaps this is due to the lack of dedicated regional studies on this type of archaeology. Most of the Gauteng sections were occupied on an increasingly extensive scale from the fifteen centuries onwards (Mason 1986, Maggs 1986). This occupation owes much to the latter part of the Iron Age community which is related to the Socio- Political complexity, higher pupolation, environmental degradation, intensive hunting, overgrazing and extensive use of stone as construction materials (Maggs, 1976; Badenhorst, 2009). Culture historically most of the documented archaeological sites are related to the occupational phase connected to the presence of ancestors of the Sotho- Tswana and Southern Ndebele (Nguni-speakers) who established themselves within the Magaliesberg area (Huffman 2007). Generally, these sites are characterised by a very impressive and large clusterd villages scattered in the region built constructed out of stones. Furthermore, these settlements are believed to have been in existence until the 19th century when they were raided by Mzilikazi army at the start of Difeqane. Synonymous evidence was documented by Sadr at Suikerbosrand and at Kliperiverberg which was abandoned at about 1823 when Mzilikazi entered the area. Generally, the regional LIA is represented by settlements with multichrome Moloko pottery commonly attributed to the Sotho-Tswana. These settlements can in many instances be correlated with Tswana oral traditions. These sites ussaly occur as single settlement on kopjes or are clustered along the lower foot slopes of the mountains (Ibid, 2007).

7.1.3. Historical Sites

Historical archaeology refers to the last 500 years when European settlers and colonialism was introduced to South Africa. The process involved movement of the Europeans into the interior which was closely linked with the change from cultivating agriculture into stock farming which was triggered by search of livestock pastures. The movement of Boer into the interior got underway when Wilhelm Adrien van der Stel began to issue free grazing permits in 1703. The exodus went

hand in hand with hunting expeditions into the interior which not only provided the farmers with meat, but also enable them to learn more about the existing resources of the hinterland. British government made its laws which undermine the freedom of the Boers. This led to the general dissatisfaction and a feeling of insecurity among the Afrikaner. The frontier wars of 1834/35 caused the frontier farmers to suffer heavy losses. To aggravate matters, land prices rose sharply during the 1820 and 1830 and drought was a serious problem. These conditions threatened the pastoral lifestyle. There was no land for the younger generations. They opted to migrate in search of grazing land in the interior. They were already acquainted with conditions of the interior and decided to move into the interior following existing hunting and trade network routes which were used by early travelers, hunters and missionaries. The 18th century's period is marked by the presence of white, where land was taken from African chiefdoms and redistributed to the Boers; this was followed by demarcation of portions of land into farms. The first white farms were established along the rivers and tributaries, close to springs. Many of these farms have been in the ownership of European families for generations. These developments brought with it the establishment of roads connecting major towns. As a result, they possess a large corpus of information with regards to the regional history. A significant number of battles and skirmishes took place in the region (Van Schalkwyk, 2011).

8. SITE LOCATION AND PROJECT DESCRIPTION

The Remainder of Portion 1 of the farm Klopperskraal 534 IQ is located near Orange Farm (Drieziek extension 5). Generally, the site is situated 2 kilometres of Evaton west, 3 kilometres west of Stretford and 9 kilometres south of Annerdale extension 8, within the Emfuleni Local Municipality of the Sedibeng District, Gauteng Province. The site is positioned 50 Kilometres south of Johannesburg Central Business District, situated alongside the major arterial National road (N1). The current land use is largely subdivided by the national road, with the land use character principally dominated by urban and Peri-Urban with complex residential density to the north and northeast of the study area. Subsequently to the west of the N1 road the land use character is dominated by small scale agricultural farmholding that encompasses cultivation of Sorghum and Sunflowers as seasonal crops, whilst the other portion of the farm is currently used as livestock grazing area. In addition the regional road (R28) which connect Randfontein and Sebokeng traverse the study area cutting it into two sections. Generally, the study area covers 851 hectares characterized by variable landscape, slightly undulating plains dominated by (GH6) Central Free State grassland this vegetation category stretches from Gauteng on the north towards Free State to the south, this type of vegetation often support short grass (*Themeda triandra*, while *Eragrostis curvula* and *E.chloromelas* are dominant in degraded habitats). High concentration of Karoo

bushes dominated by *Acacia sp* exist in the central part of the site. Dominant plant taxa include *Ziziphus mucronata*, *Rhus lancea*, *Oputia ficus indica*. However, few isolated tall trees exist in the property and its surroundings dominated by small *Eucalyptus plantation and Pinus sylvestris* trees. Other exotic plants such as *Jakaranda* exist near farmhomestead. A perennial stream trasverse the site forming the south western and northeastern boundary. A wet land exist on the nothren section of the proposed study area, it also discharge water into the nearby perennial stream which flows from the south western secto towards the northe eastern part of the area. A powerlines traverse the northern section of the study area. The general geology and soils of the study area falls within the sedimentary mudstones and sandstone mainly of the Adelaide subgroup (Beaufort Group, Karoo Supergroup) as well as those of the Ecca Group (Karoo Supergroup) found in the extreme northern section of the grass land (Acocks 1975, Mucina & Rutherford, 2003). Finally, the proposed development entails demarcation of residential, business, educational facialities which encampasseses primary and secondary schools, industrial, shopping complex, public space and access roads.



Figure 3: View of the study area, note access gravel road through the site



Figure 4: Isolated *Pinus sylvestris* tree northeastern section of the study area, the tree is located near the N1 from Gauteng To Free State Province.



Figure 5: View of the site dominated by short grasscover



Figure 6: View of a wetland encircled in solid black outline

9. ASSESSMENT OF SITES AND FINDS

This section contains the results of the archaeological impact assessment which was conducted as required in terms of the Section 38 of the National Heritage Resource Act (Act 25 of 1999) done for the proposed Klopperskraal Township establishment and associated infrastructures. The survey for heritage sites during the impact assessment process identified heritage sites that fall within the development footprint and outside the development corridors. The significance assessment revealed that most of these heritage sites - historical structures falls within the Generally Protected (GP.B) with medium significance. These include delapidating farmhomestead building, cement and bricks constructed livestock drinking troughs and reservoirs, stone constructed livestock and farm labourers camp in the property, a cemetery was also geo-referenced however the cemetery is located outside the proposed development footprint.

9.1. Results of The Survey

Of the cultural remains that were recorded within the property, the farm homestead and livestock enclosures are presumed to be the remnants remains of pioneer farmstead buildings that qualifies to be protected in terms of the National Heritage Resources Act (Act 25 of 1999).

No	Description	Location
1.	Delapidated farm homestead building and associated barn: Facebrick constructed building, Original identifiable fabric of heritage value, which define the building character have been removed or stolen. Deferent types of wall tiles have been notice from various rooms. This building elements qualify the building to be over 60 years.	S26.30. 02. 02 and E 27.47.52.09
2	Stonewalled square structure. The structure is characterised by 3 metres high free standing wall, and delapidated stones nearby. The area is located rougly 200metres northeast of an earthern dam.	S26.30. 59. 00 and E 27.47.38.07
3.	Circular parked stone structure: 1 meters high granite circular parked stone structure, in association with Eucalyptus plantation.	S26.30. 57. 04 and E 27.47.32.09
4	Reservoir and Livestock drinking trough. Bricks and cement contracture structures in association with Eucalptus plantation.	S26.30. 58. 07 and E 27.47.30.04
5	Bricks and cement Livestock drinking trough.	S26.29. 27. 03 and E 27.48.39.09
6	Cemetery With graves indicated by parked stones, granite tombstones, granite outline with hedrest as grave dressings	S26.31. 23. 07 and E 27.47.46.03



Figure 7: Cement and bricks constructed animal drinking troughs



Figure 8: Farm homestead building



Figure 9: Cemetery, which is located outside the proposed development foot print



Figure 10: Stone constructed structure



Figure 11: Cicular stone structure

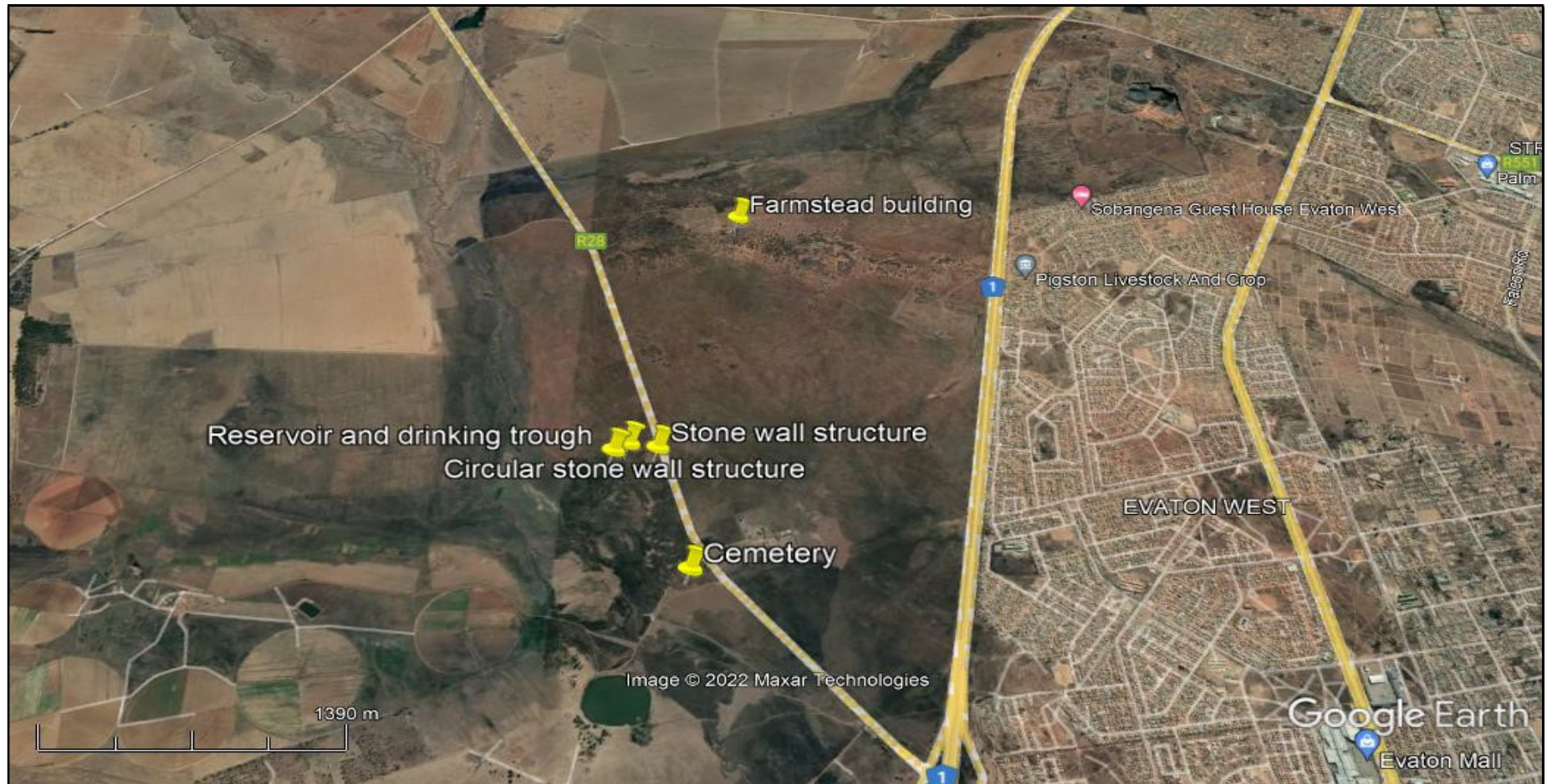


Figure 12: Identified sites adpted from Google Earth Program

10. HISTORICAL STRUCTURE ASSESSMENTS CRITERIA

Region reflect a wide range of reason for which heritage buildings and places are valued by communities, including historical and social significance, cultural and spiritual significance as well as architectural merit.

The assessment of cultural significance was aligned with section 3(3) of the National Heritage Resources Act, under the following:

- Social and cultural significance
- Historical significance
- Architectural significance
- Aesthetic significance
- Scientific and technological significance
- Group and relationship significance
- Landmark significance

Significance criteria in terms of Sub-section 3(3)

1.	The importance of the cultural heritage in the community or pattern of South Africa's history (Historic and political significance)	Yes
2.	Possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage (Scientific significance).	No
3.	Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage (Research/scientific significance)	Yes
4.	Importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects (Scientific significance)	No
5.	Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group (Aesthetic significance)	Yes
6.	Importance in demonstrating a high degree of creative or technical achievement at a particular period (Scientific significance)	Yes
7.	Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (Social significance)	Yes
8.	Strong or special association with the life and work of a person,	No

	group or organization of importance in the history of South Africa (Historic significance)	
9.	The significance of the site relating to the history of slavery in South Africa.	No

Significance criteria in terms of historical, artefactual and spatial significance

As the criteria set out in the National Heritage Resources Act tend to approach heritage from the level of ‘national’ significance and few heritage sites and features fall within this category, a second set of criteria are used to determine the regional and local significance of heritage sites. Three sub-categories were used to determine this significance:

- (a) Historical significance – this category determines the social context in which a heritage site and resource need to be assessed. These criteria focus on the history of the ‘place’ in terms of its significance in time and the role they played in a particular community (human context).
- (b) Architectural significance – The objective of this set of criteria was used to assess the artefactual significance of the heritage resource, its physical condition and meaning as an ‘object’.
- (c) Spatial significance – focuses on the context in which the object and place exists and contributed to the landscape, the region and neighborhood.

Historical significance

1.	Is the site or building associated with a historical person or group?	No
2.	Is the site or building associated with a historical event?	Yes
3.	Is the site or building associated with a religious, economic social or political or educational activity?	No
4.	Is the site or building of Heritage significance?	Yes
5.	Are any of the buildings or structures on the site older than 60 years?	Yes

Architectural significance (artefactual significance)

1.	Are any of the buildings or structures an important example of a building type?	Yes
2.	Do any of the buildings outstanding examples of a particular style or period	Yes

3.	Do any of the buildings contain fine architectural details and reflect exceptional craftsmanship?	Yes
4.	Are any of the buildings an example of an industrial, engineering, or technological development?	No
5.	What is the state of the architectural and structural integrity of the building?	Very bad
6.	Is the building's current and future use in sympathy with its original use (for which the building was designed)?	No
7.	Were the alterations done in sympathy with the original design?	N/A
8.	Were the additions and extensions done in sympathy with the original design?	N/A
9.	Are any of the buildings or structures the work of a major architect, engineer or builder?	N/A

Spatial significance

1.	Can the building or structure be considered a landmark in the town or city?	No
2.	Do any of the buildings contribute to the character of the neighborhood?	No
3.	Do any of the buildings contribute to the character of the square or streetscape?	No
4.	Do any of the buildings form part of an important group of buildings?	No

11. CONCLUSION AND RECOMMENDATIONS

Based on this study, the following conclusions were reached:

- The proposed development is scheduled to take place on extent currently dominated by small farmholding with surface disturbed agricultural zones with seasonal crops such as Sorghum and Sunflower plants. Subsequently the vast area is still covered by indigenous vegetation dominated by Gh 6 grassland.
- Additionally, the survey of the proposed study area identified six (6) heritage resources within the property these includes, delapidating farmhomestead building and associated barn, cement and bricks constructed livestock drinking troughs and water reservoir, Two stone constructed

structure, one square with stone outline the second one circular (hut shaped structure) presumed to house livestock or used as farm labourers camp and a cemetery or burial ground.

- These infrastructures dated to the 19th century, and are older than sixty years and qualifies to be protected by the National Heritage Resources Act 25 of 1999. **Section 34 (1)** No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority. These structures are significant heritage resources by virtue of their intrinsic qualities within the context of their local and regional surroundings.

Mitigational measure

- These structures should be avoided (50 meters radius should be observed around the structures) these structures may be incorporated as part of the proposed township establishment as part of the township park. In case where the identified structures or ruins became unavoidable and required to be destroyed to make way for new infrastructures, these sites should be subjected to investigations. In case of historical structures an application should be lodged with the provincial heritage authority- for the intention to destruct these structures, before the destruction permit is issued, a historical structure report is prepared and approved by the heritage Authority. This process is time consuming as well as costly, the investigation includes:
 3. Recording of the affected historical structures prior destruction, this includes:
 - (i) photographic recording with captions for each elevation in standard architectural terminology
 - (ii) Plan drawing with floor plan, elevation sections and architectural details such as scale(1:100cm) and
 - (iii) a compilation of all recordings in a single historical structure report.
 4. Preparation of the report should be in a format acceptable to both Provincial and National Heritage Resources Agency, as well as any Official repository (Archive, Library or Museum).
- The Cemetery is located alongside the main gravel access road leading to the farmhomestead. The area is located roughly 400meters west of the main regional road (R28). More than 40 graves were recorded indicated by packed stones, granite tombstones and granite outlines with headrest as grave dressings. Both Africans and Europeans individuals are well represented. The site will not be affected by the proposed development because of its location. The Cemetery is located outside the proposed development footprint.

Mitigational measure

Burial grounds or Graves can be mitigated by one of the following,

- (i) Construction of a fence with access gate around the cemetery, with 50 meters radius.
- (ii) In case where graves or cemetery are impacted by the proposed development they are exhumed or relocated, the exhumation process is regulated by various legislation and municipality by laws. This task is undertaken by Forensic archaeologist and reputed undertaker who are acquainted with all administrative procedures. This process includes social facilitation process with 60 days statutory notice period for grave older than sixty years. Permission of exhumations should be obtained from the decedents of the deceased, the National Department of Health, Cogsta, Local and District Municipality, South African Police Services and the South African Heritage Resource Agency.

Recommendations

Based on the assessment, which identified several heritage resources on the property, It is strongly recommended, that the built environment (>60 years) within the proposed township development site, should be avoided by the proposed township establishment and its associated civil engineering services such as water and sewer reticulation pipelines, powerline and access roads. In case where they became unavoidable these structures should be mapped and surveyed for culturally significant and unique structures and features before being demolished to make way for the proposed development.

- 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.

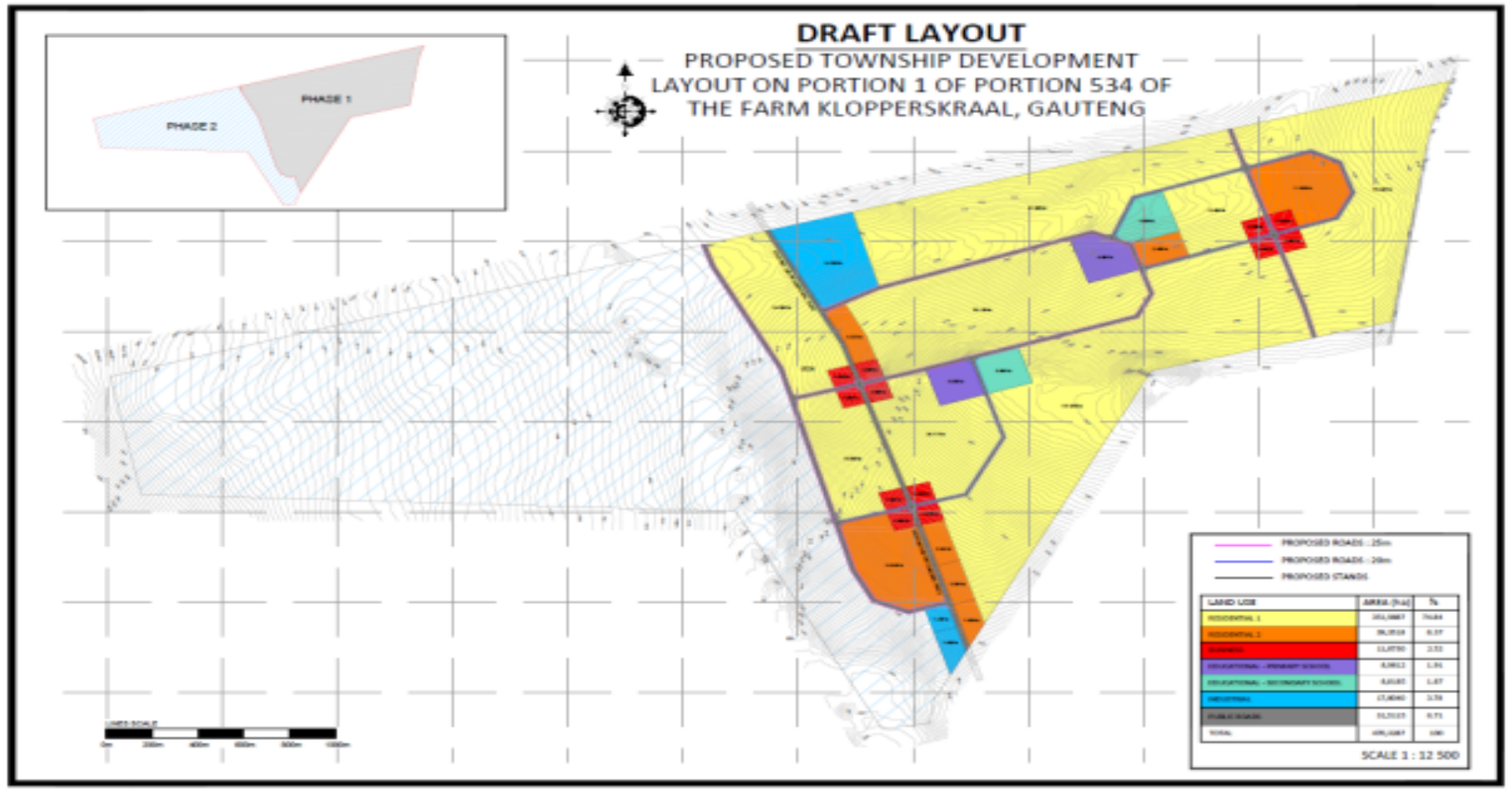
Should the recommendation be followed there are no objections to the proposed Township establishment and we recommend its approvals as planned from the Gauteng Heritage Resources Authority or the South African Heritage Resource Agency.

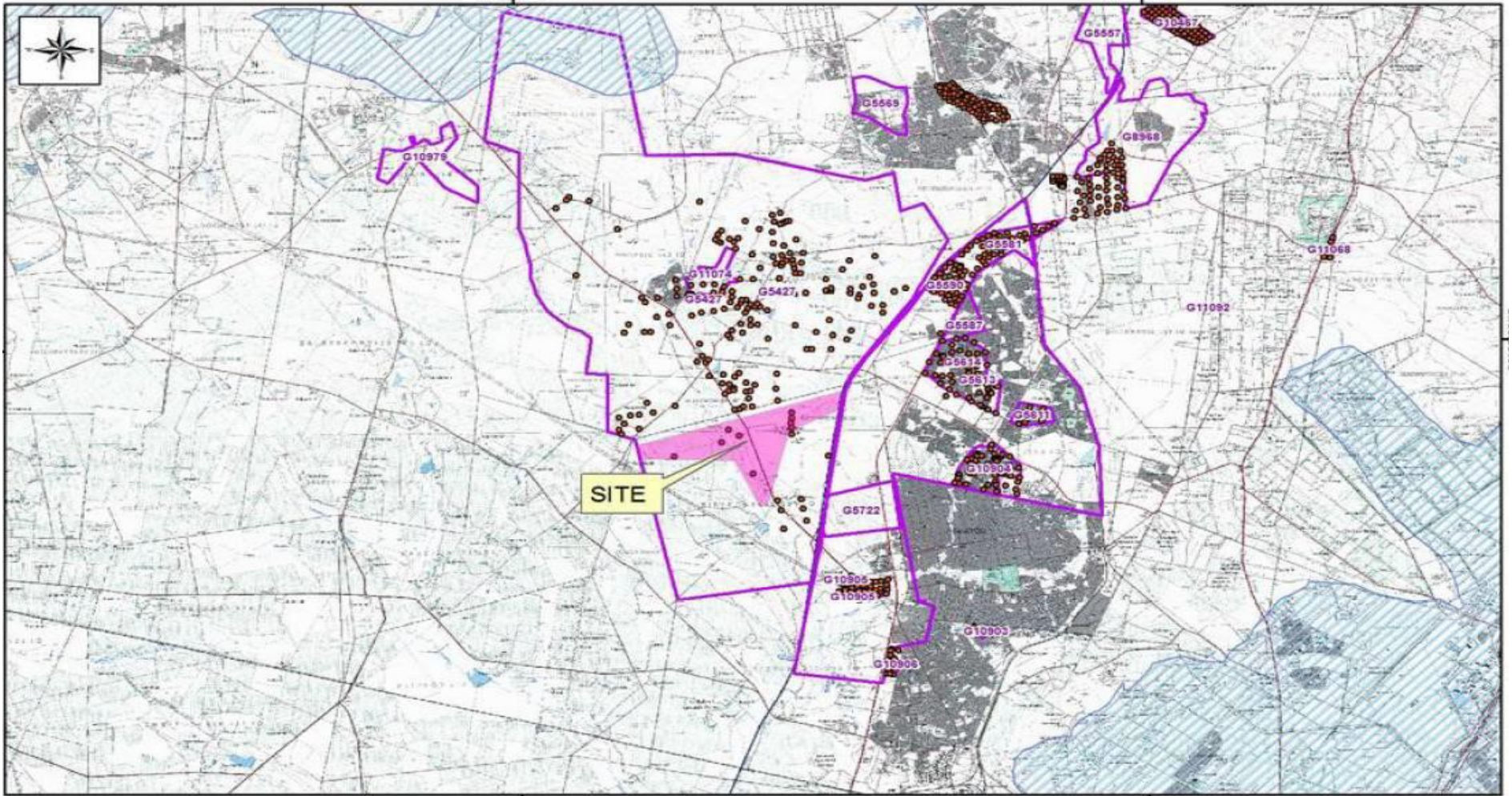
Snapshot



Figure 13: Transects snapshot

12. TOWNSHIP LAYOUT AND TOPOGRAPHICAL MAP





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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.

Acronyms:

AIA	Archaeological Impact Assessment
EIA	Environmental Impact Assessment
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 cultural 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.