### **Archaeological Impact Assessment**

1

FOR THE PROPOSED KYA SANDS EXTENSION 104 PROJECT, GAUTENG

## Prepared For

# Terra Pacis Environmental (Pty) Ltd

By



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VERSION 1.0 20 May 2015

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SIGNATURE:

#### **EXECUTIVE SUMMARY**

#### Site name and location:

Kya Sand Extension 104 is a proposed Light Industrial Development located on Holding 4 and 6 of the Trevallyn Agricultural Holdings, Kya Sands, Gauteng.

**Purpose of the study:** Phase 1 Archaeological Impact Assessment to determine the presence of cultural heritage sites and the impact of the proposed project on these resources within the study area.

1:50 000 Topographic map: 2627 BB

Environmental Consultant: Terra Pacis Environmental (Pty) Ltd

Developer: Columbia Falls Properties 121 (Pty) Ltd

Heritage Consultant: Heritage Contracts and Archaeological Consulting CC (HCAC)

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Date of Report: 20 May 2015

#### Findings of the Assessment:

HCAC was appointed to assess the study area in terms of the archaeological component of Section 35 of the NHRA as part of the basic assessment for the project. No raw material suitable for stone tool manufacture occurs in the study area and no ceramics or stone walls attributed to the Iron Age were recorded. Similarly no sites of archaeological significance were recorded by other studies in the area (e.g. Coetzee (2008) and van Schalkwyk (2013). No further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed.

In terms of the built environment of the area (Section 34), no standing structures older than 60 years occur within the study area. From the 1943 topographic map of the study area it is clear that no historical features occurred in the area.

In terms of Section 36 of the Act no burial sites were recorded in the study area. However if any graves are located in future they should ideally be preserved *in-situ* or alternatively relocated according to existing legislation. Due to the subsurface nature of archaeological remains and the fact that graves can occur anywhere on the landscape, it is recommended that a chance find procedure is implemented for the project as part of the EMP

The study area is surrounded by industrial and residential developments and no significant cultural landscapes or viewscapes were noted during the fieldwork.

Due to the lack of significant heritage features in the study area there is from an archaeological point of view no reason why the development cannot commence based on approval from SAHRA.

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#### **ABBREVIATIONS**

AIA: Archaeological Impact Assessment					
ASAPA: Association of South African Professional Archaeologists					
BA: Basic Assessment					
CRM: Cultural Resource Management					
ECO: Environmental Control Officer					
EIA: Environmental Impact Assessment*					
EIA: Early Iron Age*					
ESA: Early Stone Age					
GPS: Global Positioning System					
HIA: Heritage Impact Assessment					
LIA: Late Iron Age					
LSA: Late Stone Age					
MEC: Member of the Executive Council					
MIA: Middle Iron Age					
MSA: Middle Stone Age					
SADC: Southern African Development Community					
SAHRA: South African Heritage Resources Agency					

\*Although EIA refers to both Environmental Impact Assessment and the Early Iron Age both are internationally accepted abbreviations and must be read and interpreted in the context it is used.

#### **GLOSSARY**

Archaeological site (remains of human activity over 100 years old)

Early Stone Age (~ 2.6 million to 250 000 years ago)

Middle Stone Age (~ 250 000 to 40-25 000 years ago)

Later Stone Age (~ 40-25 000, to recently, 100 years ago)

The Iron Age (~ AD 400 to 1840)

Historic (~ AD 1840 to 1950)

Historic building (over 60 years old)

#### **1** BACKGROUND INFORMATION

Kind of study	Archaeological Impact Assessment		
Type of development:	Light industrial development located on Holding 4 and 6 of the		
	Trevallyn Agricultural Holdings, Kya Sands, Gauteng		
Developer:	Columbia Falls Properties 121 (Pty) Ltd		
Consultant:	Terra Pacis Environmental (Pty) Ltd		

The Archaeological Impact Assessment (AIA) report forms part of the Basic Assessment (BA) for the proposed project; Light Industrial Development located on Holding 4 and 6 of the Trevallyn Agricultural Holdings, Kya Sands, Gauteng.

The aim of the study is to identify cultural heritage sites, document, and assess their importance within local, provincial and national context as per the National Heritage Resources Act of 1999 (Act 25 of 1999). It serves to assess the impact of the proposed project on non-renewable heritage resources, and to submit appropriate recommendations with regard to the responsible cultural resources management measures that may be required to assist the developer in managing any discovered heritage resources in a responsible manner.

This report comprises:

- Phase 1 Desktop Study.
- Phase 2 Physical Survey.
- Phase 3 Reporting on the outcome of Phase 1 and 2.

#### **1.1** Terms of Reference

1.1.1 Phase 1 - Desktop Study

Conducting a brief desktop study where information on the area is collected to provide a background history of the area.

#### 1.1.2 Phase 2 - Physical Survey

Conduct a field study to: a) systematically survey the proposed project site (study area) to locate, identify, record, photograph and describe sites of archaeological, historical or cultural interest; b) record Global Positioning System (GPS) points identified as significant areas; c) determine the levels of significance of the various types of heritage resources recorded in the study area.

#### 1.1.3 Phase 3 - Reporting

Report on the identification of anticipated and cumulative impacts the operational units of the proposed project activity may have on the identified heritage resources for all 3 phases of the project; construction, operation and decommissioning. Consider alternatives, should any significant sites be impacted adversely by the proposed project. Ensure that all studies and results comply with heritage legislation and the code of ethics and guidelines of Association of South African Professional Archaeologists (ASAPA).

To assist the Columbia Falls Properties 121 (Pty) Ltd (the developer) in managing any discovered heritage resources in a responsible manner, and to protect, preserve, and develop such within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

#### **1.2** Archaeological Legislation and Best Practice

Phase 1, an AIA or a Heritage Impact Assessment (HIA) is a pre-requisite for development in South Africa as prescribed by the South African Heritage Resources Agency (SAHRA) and stipulated by the National Heritage Resources Act of 1999 (Act 25 of 1999). The overall purpose of a heritage specialist input is to:

- Identify any heritage resources, which may be affected;
- Assess the nature and degree of significance of such resources;
- Establish heritage informants/constraints to guide the development process through establishing thresholds of impact significance;
- Assess the negative and positive impact of the development on these resources; and
- Make recommendations for the appropriate heritage management of these impacts.

The AIA or HIA, as a specialist sub-section of the Environmental Impact Assessment (EIA), as required under the National Heritage Resources Act of 1999 (Act 25 of 1999) and section 23(2)(b) of the National Environmental Management Act of 1998 (Act 107 of 1998).

The AIA should be submitted, as part of the BA, to the Gauteng Department of Agriculture and Rural Development (GDARD) and the SAHRA. The SAHRA will be ultimately responsible for the professional evaluation of the Phase 1 AIA reportsupon which review comments will be issued. 'Best practice' requires the Phase 1 AIA report and additional development information, as per the BA, to be submitted in duplicate to the SAHRA after completion of the study. The SAHRA will accept the Phase 1 AIA report authored by professional archaeologists, accredited with the ASAPA or with a proven ability to undertake archaeological work.

Minimum accreditation requirements include an Honours degree in archaeology or related discipline and 3 years post-university Cultural Resource Management (CRM) experience (field supervisor level). Minimum standards for reports, site documentation and descriptions are set by ASAPA in collaboration with the SAHRA. The ASAPA is a legal body, based in South Africa, representing professional archaeology in the Southern African Development Community (SADC) region. The ASAPA is primarily involved in the overseeing of ethical practice and standards regarding the archaeological profession. Membership is based on proposal and secondment by other professional members.

Phase 1 AIAs are primarily concerned with the location and identification of sites situated within a proposed study area. Identified sites should be assessed according to their significance. Relevant conservation or Phase 2 mitigation recommendations should be made. Recommendations are subject to evaluation by the SAHRA.

Conservation or Phase 2 mitigation recommendations, as approved by the SAHRA, are to be used as guidelines in the developer's decision making process.

Phase 2 archaeological projects are primarily based on salvage/mitigation excavations preceding development impact on a site. Phase 2 excavations can only be conducted with a permit, issued by the SAHRA to the appointed archaeologist. Permit conditions are prescribed by the SAHRA and include (as minimum requirements) reporting back strategies to the SAHRA and deposition of excavated material at an accredited repository. After mitigation of a site, a destruction permit must be applied for from the SAHRA by the developer before development may proceed.

In the event of a site conservation option being preferred by the developer, a site management plan, prepared by a professional archaeologist and approved by the SAHRA, will suffice as minimum requirement.

Human remains older than 60 years are protected by the National Heritage Resources Act of 1999 (Act 25 of 1999). Graves older than 60 years, but younger than 100 years fall under Section 36 of said Act, as well as the Human Tissues Act of 1983 (Act 65 of 1983), and fall under the jurisdiction of the SAHRA. The procedure for Consultation Regarding Burial Grounds and Graves (Section 36[5]) of the National Heritage Resources Act of 1999 (Act 25 of 1999)) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in this age category, located inside a formal cemetery administrated by a local authority, require the same authorisation as set out for graves younger than 60 years, in addition to the SAHRA authorisation. If the grave is not situated inside a formal cemetery, but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws, set by the cemetery authority, must be adhered to.

Human remains that are less than 60 years old are protected under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance of 1925 (Ordinance No. 7 of 1925), as well as the Human Tissues Act of 1983 (Act 65 of 1983), and fall under the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the office of the relevant Provincial Premier. This function is usually delegated to the Provincial Member of the Executive Council (MEC) for Local Government and Planning; or in some cases, the MEC for Housing and Welfare.

Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. To handle and transport human remains, the institution conducting the relocation should be authorised under Section 24 the Human Tissues Act of 1983 (Act 65 of 1983).

#### **1.3 Description of Study area**

#### 1.3.1 Location Data

The study area is situated in the established Kya Sands Industrial Township along Malibongwe Drive, which is a major arterial to Lanseria International Airport and a designated development corridor. The study area is bounded on the west by Malibongwe Drive, on the north by the proposed future PWV5 Highway and on the east and eouth by existing industrial developments. To the west is the Cosmo City development and numerous new factories, shopping centres and businesses are being developed along this corridor. Holding 4 and 6 of Trevallyn Agricultural Holdings will form the proposed Kya Sands Extension 104. The total area of the property is 5,4058 hectares located at 27.9437526142, -26.0251515051 (Figure 1).

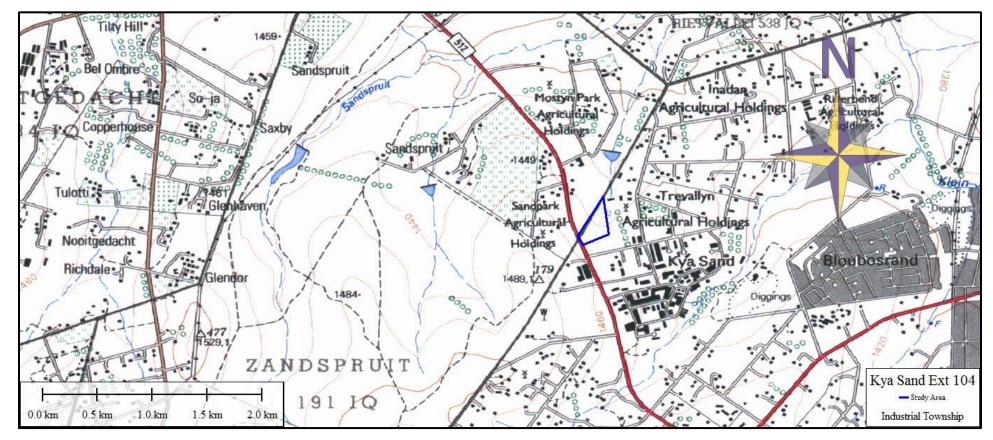


Figure 1: Locality Map indicating the proposed study area.

#### 2 APPROACH AND METHODOLOGY

The aim of the study is to cover archaeological databases and historical sources to compile background history of the study area followed by field verification; this was accomplished by means of the following phases.

#### 2.1 Phase 1 - Desktop Study

The first phase comprised desktop study and gathering of data to compile background history of the study area. It included scanning existing records for archaeological, historical and grave sites.

#### 2.1.1 Literature Search

Utilising data from the archaeological database at Wits and exiting CRM reports information was extracted on the study area, focusing on archaeological sites, historical sites and graves.

#### 2.1.2 Information Collection

The South African Heritage Information System (SAHRIS) was consulted to obtain data from previously conducted CRM reports in the region to provide a comprehensive account of the history of the study area.

#### 2.1.3 Consultation

No public consultation was conducted by Heritage Contracts and Archaeological Consulting CC (HCAC) as no one resides within the study area. Terra Pacis Environmental Pty (Ltd) will undertake public participation as part of the BA process.

#### 2.1.4 Google Earth and Mapping Survey

Google Earth and 1:50 000 mapping of the study area was consulted to identify possible sites of heritage significance.

#### 2.1.5 Genealogical Society of South Africa

The database of the Genealogical Society of South Africa was consulted to collect data on any known grave sites in the study area.

#### 2.2 Phase 2 - Physical Survey

Due to the nature of cultural remains, the majority of which occur below surface, a field survey of the study area was conducted; focussing on drainage lines, hills and outcrops, high lying areas and disturbances in the topography. The study area was surveyed on foot by HCAC on 19 May 2015.

#### 2.3 Assumptions and Limitation

Due to the fact that most cultural remains occur below surface, the possibility exists that some features or artefacts may not have been discovered/ recorded during the field survey. The possible occurrence of unmarked/informal grave sites and other cultural material cannot be excluded. This study did not assess intangible issues.

#### **3 NATURE OF THE DEVELOPMENT**

The proposed development is a light industrial development consisting of seven proposed stands and internal roads with associated infrastructure such as electrical, water, sanitation and storm water services.

#### 4 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA

#### 4.1 Databases Consulted

#### 4.1.1 Wits Archaeological Database

Thirty-two previously recorded sites are on record for the 2627 BB 1: 50 000 sheet in the Wits Archaeological database. These sites consist of Stone Age (Early Stone Age (ESA) and Late Stone Age (LSA)), Late Iron Age (LIA), Anglo Boer War remains and historic mining remains. None of these are located within or close to the study area but provide background to the history of the study area.

#### 4.1.2 South African Heritage Resources Agency Report Mapping Project

Several previous CRM projects were conducted within a radius of 3 km of the study area. Among these are studies by van Schalkwyk (2007 & 2013) who initially did not record any sites of significance however in 2008 recorded cemeteries. Coetzee (2008) recorded graves and the remains of modern structures, but no sites of heritage significance. Matakoma (2001) conducted a survey for the township development of Cosmo City and recorded numerous graves (250), Ndebele initiation sites as well as possible LIA and Anglo Boer War sites.

#### 4.1.3 Genealogical Society and Google Earth Monuments

Neither the Genealogical Society nor the monuments database at Google Earth (Google Earth also include some archaeological sites and historical battlefields) have any recorded sites in the study area.

#### 4.2 Archaeological and Historical Information Available

This section will endeavour to give an account of the history of the study area and also a brief overview of the history of the wider area and district in which the proposed project is located.

#### 4.2.1 Historiography and Methodology

Sources for the history of the area surrounding the study area include secondary source material, maps, electronic sources and archival documents. A brief history of human settlement and black and white interaction in the area is included in this report. The source of J. S. Bergh (1999) will be used to write a short history of the area.

#### 4.2.2 Historical background of the area

J. S. Bergh's historical atlas of the four northern provinces of South Africa provides local and regional history. It appears that the study area is located in the vicinity of the Melville Koppies, which is a Middle Stone Age (MSA) site. (Bergh 1999: 4) This area is also important to Iron Age

communities, since these people smelted and worked iron ore at the Melville Koppies site since the year 1060, by approximation. (Bergh 1999: 7, 87)

The Difaqane (Sotho), or Mfekane ("the crushing" in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820's until the late 1830's. (Bergh 1999: 10) It came about in response to heightened competition for land and trade, and caused population groups like gun-carrying Griquas and Shaka's Zulus to attack other tribes. (Bergh 1999: 14; 116-119) It seems that, in 1827, Mzilikazi's Ndebele started moving through the area where Johannesburg is located today. This group went on raids to various other areas in order to expand their area of influence. (Bergh 1999: 11)

During the time of the Difaqane, a northwards migration of white settlers from the Cape was also taking place. Some travellers, missionaries and adventurers went on expeditions to the northern areas in South Africa, some already as early as the 1720's. It was however only by the late 1820's that a mass-movement of Dutch speaking people in the Cape Colony started advancing into the northern areas. This was due to feelings of mounting dissatisfaction caused by economical and other circumstances in the Cape. This movement later became known as the Great Trek. This migration resulted in a massive increase in the extent of that proportion of modern South Africa dominated by people of European descent. (Ross 2002: 39) By 1939 to 1940, farm boundaries were drawn up in an area that includes the present-day Johannesburg and Krugersdorp. (Bergh 1999: 15)

#### 4.2.3 Johannesburg

The city of Johannesburg was formally established in 1886 with the discovery of gold and the Witwatersrand reef on the farm Langlaagte. This gold discovery set off an influx of people from all over the world into the settlement to find gold. The new settlement was named after two officials of the Zuid-Afrikaansche Republijk (ZAR), Christiaan Johannes Joubert and Johannes Rissik, who both worked in land surveying and mapping.

#### 4.2.4 Archaeology of the Area

Although there are no well-known Stone Age sites located on or around the study area there is evidence of the use of the larger area by Stone Age communities for example along the Kliprivier where ESA and MSA tools where recorded. LSA material is recorded along ridges to the south of the current study area (Huffman 2008). Petroglyphs (also called rock engravings) occur at Redan as well as along the Vaal River (Berg 1999).

Regarding the Iron Age, the well-known Smelting Site at Melville Koppies requires further mention. The site was excavated by Professor Mason from the Department of Archaeology of Wits in the 1980's. Extensive stone walled sites are also recorded at Klipriviers Berg Nature reserve belonging to the LIA period. A large body of research is available on this area. These sites (Taylor's Type N, Mason's Class 2 & 5) are now collectively referred to as Klipriviersberg (Huffman 2007). These settlements are complex in that aggregated settlements are common, the outer wall sometimes includes scallops to mark back courtyards, there are more small stock kraals, and straight walls separate households in the residential zone. These sites dates to the 18<sup>th</sup> and 19<sup>th</sup> centuries and were built by people in the Fokeng cluster.

In this area the Klipriviersberg walling would have ended in about AD 1823, when Mzilikazi entered the area (Rasmussen 1978). This settlement type may have lasted longer in other areas because of the positive interaction between Fokeng and Mzilikazi.

Graves can be expected anywhere on the landscape.

#### 5 HERITAGE SITE SIGNIFICANCE AND MITIGATION MEASURES

The presence and distribution of heritage resources define a 'heritage landscape'. In this landscape, every site is relevant. In addition, because heritage resources are non-renewable, heritage surveys need to investigate an entire study area, or a representative sample, depending on the nature of the project. In the case of the proposed development the local extent of its impact necessitates a representative sample and only the footprint of the areas demarcated for development were surveyed. In all initial investigations, however, the specialists are responsible only for the identification of resources visible on the surface.

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The following criteria were used to establish site significance:

- The unique nature of a site;
- The integrity of the archaeological/cultural heritage deposits;
- The wider historic, archaeological and geographic context of the site;
- The location of the site in relation to other similar sites or features;
- The depth of the archaeological deposit (when it can be determined/is known);
- The preservation condition of the sites; and
- Potential to answer present research questions.

Furthermore, the National Heritage Resources Act of 1999 (Act No 25 of 1999, Section 3) 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:

- Its importance in/to the community, or pattern of South Africa's history;
- Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- Sites of significance relating to the history of slavery in South Africa.

#### 5.1 Field Rating of Sites

Site significance classification standards prescribed by the SAHRA (2006), and approved by the ASAPA for the SADC region, were used for the purpose of this report. The recommendations for each site should be read in conjunction with Section 7 of this report.

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)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

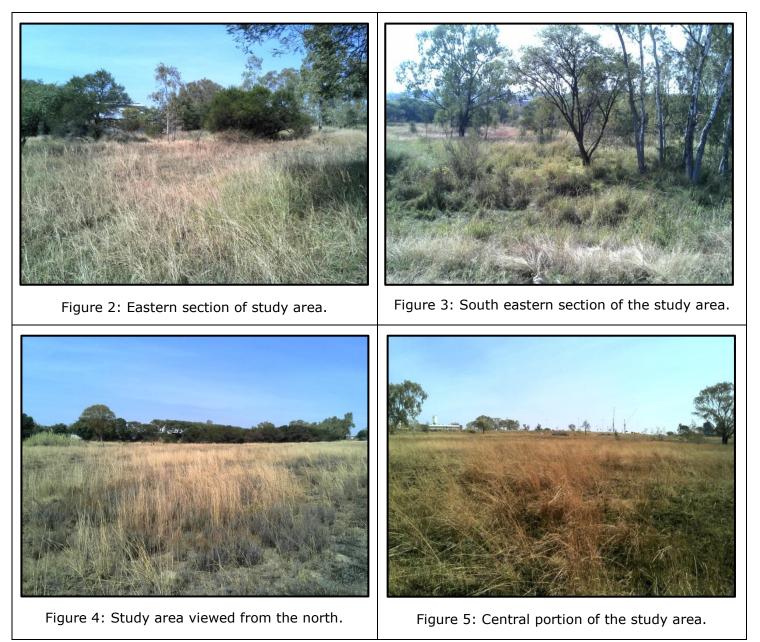
#### **6 BASELINE STUDY-DESCRIPTION OF SITES**

It is important to note that the entire farm was not surveyed but only the development footprint located on Holding 4 and 6 of Trevallyn Agricultural Holdings (Figure 6). The topography of the study area is flat gently sloping eastwards, the study area is covered by veld grass and clusters of exotic trees (wattle, eucalyptus and blue gum) occur sporadically over the study area, especially at the western boundary (Figure 2 - 5).

The study area falls within the bioregion described by Mucina *et al* (2006) as Mesic Highveld Grassland Bioregion with the vegetation described as Egoli Granite Grassland. The study area is underlain by granite and is characterised by hill wash. The study area falls in a densely developed urban area and construction activities in the area specifically of Malibongwe Drive would have impacted on surface indications of archaeological material in this area. Archival maps (1943) of the area (Figure 7) indicated no huts or roads within the study area apart from a single structure in the southern corner of the study area next to where Malibongwe Drive is now located. No standing structure occurs in this area today. No Stone Age sites associated with caves, outcrops/hills and river courses are known to exist or to have been recorded in the study area possibly due to the lack of raw material suitable for knapping. Possible LIA material was recorded to the east of the study area (Matakoma 2001) however none was identified in the study area or on any of the other area in the immediate vicinity of the study area (van Schalkwyk 2007, 2008 and Coetzee 2008). Most of these studies recorded informal graves. The possible presence of grave sites within the study area should be confirmed during the public participation process undertaken for the BA.

No traces of any archaeological remains were identified in the study area during the site survey or via the archaeological databases. In addition no heritage significant sites were identified in the desktop study.

According the paleontological sensitivity map on SAHRIS the study area is located in an area of insignificant/zero paleontological sensitivity.



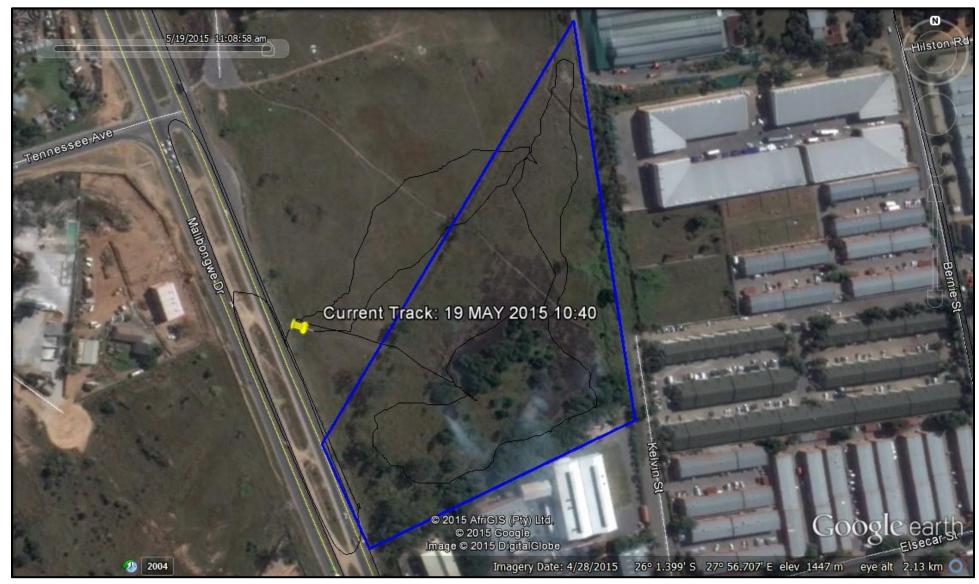


Figure 6: Google image of the deviation that was surveyed marked in blue with track logs in black.

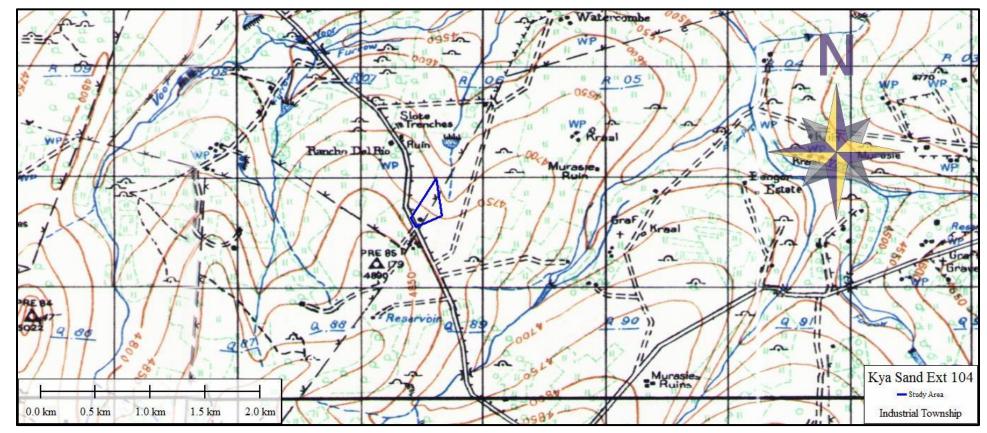


Figure 7: Enlarged section of the 2627 BB sheet drawn in 1943.

#### 7 CONCLUSIONS AND RECOMMENDATIONS

HCAC was appointed to assess the study area in terms of the archaeological component of Section 35 of the NHRA as part of the basic assessment for the project. No raw material suitable for stone tool manufacture occurs in the study area and no ceramics or stone walls attributed to the Iron Age were recorded. Similarly no sites of archaeological significance were recorded by other studies in the area (e.g. Coetzee (2008) and van Schalkwyk (2013). No further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed.

In terms of the built environment of the area (Section 34), no standing structures older than 60 years occur within the study area. From the 1943 topographic map of the study area it is clear that no historical features occurred in the area.

In terms of Section 36 of the Act no burial sites were recorded in the study area, but the area is known to contain numerous informal grave sites and the possibility of unidentified graves in the study area cannot be excluded. It is recommended that possible presence of grave sites within the study area should be confirmed during the public participation process undertaken for the BA. If any graves are indicated it is recommended that a qualified archaeologist is contacted for an assessment of the graves and the impact of the proposed development thereon.

According the paleontological sensitivity map on SAHRIS the project area is located in an area of insignificant/zero paleontological sensitivity.

The study area is surrounded by industrial and residential developments and no significant cultural landscapes or viewscapes were noted during the fieldwork.

If the recommendations made in this report are adhered to there is from an archaeological point of view no reason why the development cannot commence based on approval from SAHRA.

#### 7.1 . Chance find procedure

In the unlikely event that during construction any possible finds such as stone tool scatters, possible graves or fossil remains are made, the construction operations must stop and a qualified archaeologist contacted for an assessment of the find.

It is recommended that chance find procedure be put in place during the construction period as described below.

This procedure applies to the developer's permanent employees, its subsidiaries, contractors and subcontractors, and service providers. The aim of this procedure is to establish monitoring and reporting procedures. Personnel must be inducted to ensure they are fully aware of the procedures regarding a chance find as discussed below.

• If during the construction, operations or decommissioning phases of the proposed project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.

- It is the responsibility of the senior on-site manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area.
- The senior on-site manager will inform the Environmental Control Officer (ECO) of the chance find and its immediate impact on operations. The ECO will then contact a professional archaeologist for an assessment of the find and required reporting of such.

#### 8 PROJECT TEAM

Jaco van der Walt, Project Manager and Archaeologist Liesl Bester, Archival Study

#### 9 STATEMENT OF COMPETENCY

I (Jaco van der Walt) am a member of ASAPA (no 159), and accredited in the following fields of the CRM Section of the association: Iron Age Archaeology, Colonial Period Archaeology, Stone Age Archaeology and Grave Relocation. This accreditation is also valid for/acknowledged by SAHRA and AMAFA. I have been involved in research and contract work in South Africa, Botswana, Zimbabwe, Mozambique and Tanzania; having conducted more than 400 AIAs since 2000.

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