
**FIRST PHASE HERITAGE IMPACT ASSESSMENT
OF THE PROPOSED ESTABLISHMENT OF AN
ORGANIC WASTE PROCESSING FACILITY ON
ERF 10 000 (REM OF TOWN LANDS), AT
WORLDS-VIEW PIETERMARITZBURG.**



ACTIVE HERITAGE cc.

FOR: GREEN DOOR ENVIRONMENTAL

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LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1820 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

EXECUTIVE SUMMARY

A First Phase Heritage Impact Assessment of a proposed Composting Facility on Erf 10 000 (Rem of Town Lands), Pietermaritzburg, identified no heritage sites on the footprint. However, a railway line that is older than 60 years occurs approximately 100m to the west of the proposed Composting Facility. This site is protected by provincial heritage legislation and it may therefore not be altered or destroyed. It is suggested that the developer maintain a buffer zone of at least 45m around the railway line. Given the position of the proposed Composting Facility it would be possible to maintain this buffer without compromising the proposed development. Alternatively, the developer may call for mitigation and arrange for a second phase heritage impact assessment by a “build environment specialist.” A permit may be issued by the provincial heritage agency Amafa that may allow for the destruction or alteration of the heritage site. Apart from this intervention there is no known archaeological reason why development may not proceed as planned. However, attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

1 BACKGROUND INFORMATION ON THE PROJECT

Table 1. Background information

Consultant:	Frans Prins (Active Heritage)
Type of development:	The Applicant, uMgungundlovu District Municipality, proposes to establish an Organic Waste Processing Facility. The preferred properties being considered for this facility is Erf 10 000 (Rem of Town Lands). The main focus of this project is directed at the treatment of Municipal solid wastes prior to disposal, in order to reduce the volumes of waste to be transported and disposed of at the landfills in the project area, as well as to reduce the harmful emissions from the organic contents of municipal solid waste. Consequently, recyclable and organic matter in the uMgungundlovu District Municipality waste stream is the main target of the treatment systems.
Rezoning or subdivision:	Rezoning
Terms of reference	To carry out a Heritage Impact Assessment
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008)

1.1. Details of the area surveyed:

The preferred site is situated between Worldsvieiw and Winterskloof – two suburbs situated in the western side of Pietermaritzburg (Fig 1). The area demarcated for development roughly measures 200m x 300m (Fig 2). The site can be accessed from Worlds View or from Valley and Celtis Roads in Winterskloof. The GPS coordinates for the site is given as: 29° 35' 31.72" S 30° 18' 37.84" E.

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Pietermaritzburg area is relatively well covered by archaeological surveys conducted by members of the KwaZulu-Natal Museum. The available evidence, as captured in the Natal Museum heritage site inventories, indicates that the greater Pietermaritzburg area contains mostly Early, Middle, and Later Stone Age material. Most of these sites are situated close to water, such as the Msunduze River, Slangspruit, Foxhill Spruit, and Mkhondeni, as well as in open air context or adjacent to exposed dongas or road cuttings. These tools were most probably made by early hominins such as *Homo erectus* or *Homo ergaster*. Based on typological criteria they most probably date back to between 300 000 and 1.7 million years ago. The presence of the first anatomically modern people (i.e. *Homo sapiens sapiens*) in the area is indicated by the presence of a few Middle Stone Age blades and flakes. These most probably dates back to between 40 000 and 200 000 years ago. The later Stone Age flakes identified in the area are associated with the San (Bushmen) and their direct ancestors. These most probably dates back to between 200 and 20 000 years ago. Most of the Early and Middle Stone Age sites were identified by the late Dr Olivier Davies in the 1950's and 1960's. The majority of Later Stone Age sites were located by Dr Farden in the 1960s and 1970's although some has also been identified by Dr Aron Mazel in the 1980's.

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantu-speaking farmers crossed the Limpopo River and arrived in South Africa. By 1500 years ago these early Bantu-speaking farmers also settled adjacent to the Umngeni River in the greater Camperdown area. Due to the fact that these first farmers introduced metal technology to southern Africa they are designated as the Early Iron Age in archaeological literature. Their distinct ceramic pottery is classified to styles known as "Msuluzi" (AD 500-700), Ndongondwane (AD 700-800) and Ntshekane (AD 800-900). Most of the Early Iron Age sites in the greater Pietermaritzburg area belong to these traditions (Maggs 1989:31; Huffman 2007:325-462). These sites characteristically occur on alluvial or colluvial soil adjacent to large rivers below the 1000m contour. The Early Iron Age farmers originally came from western Africa and brought with them an elaborate initiation complex and a value system centred on the central significance of cattle.

Early as well as Later Iron Age sites have been located by Dr Tim Maggs in the 1970's and 1980's and more recent discoveries have been made by Mr Gavin Whitelaw, Gavin Anderson, and Len van Schalkwyk. The Early Iron Age sites typically occur on the alluvial and colluvial soils in the large river valleys below 700m above sea level. Some have been located along the Msunduzi River as well as in the Ashburton area. Later Iron Age sites occur in similar contexts as well as on ridges or plateaus in the existing grassland. Some impressive Later Iron Age sites occur in the Umngeni River Valley close to Howick as well as in the Ottos Bluff area near Albert Falls Dam.

These sites were occupied by Bantu-speaking agropastoralists who arrived in southern Africa after 1000 years ago via East Africa. Later Iron Age communities in KwaZulu-Natal were the direct ancestors of the Zulu people (Huffman 2007). The larger Umngeni Valley area was inhabited by various Nguni-speaking groups such as the Dlanyawo, Nyavu and Njilo, in the beginning of the 19th century (Bryant 1965; Wright 1988). With the exception of the Nyavu who remained fiercely independent most of these communities were incorporated into the Zulu Kingdom of Shaka in the 1820's. After the Anglo-Zulu war of 1879 and the Bambatha Rebellion of 1911 almost all the African people in the study area adopted a Zulu ethnic identity.

Apart from the prehistoric archaeology Pietermaritzburg is also well known for its colonial heritage. These include buildings and places associated with the first Dutch settlers (Voortrekkers) after 1837 as well as the latter Victorian and Edwardian heritage of the area associated more closely with the British occupancy of Natal after 1845 (Derwent 2006). In fact, Pietermaritzburg has been described as the greatest Victorian city in the southern hemisphere although this statement has not been qualified.

Worldsview was initially called Boesmansrand (i.e. Bushmans hill) by the Voortrekker settlers in the area most probably as Bushmen were encountered here by the first Dutch settlers (Maggs 1988). The original Voortrekker route, later to become the transport route into the interior, passes through Worlds View. The route was originally cut by the Voortrekker leader Piet Retief and his party in 1838. The wagon marks can still be seen etched in the soft sandstone along the path. The site at Worldsview is a well known heritage feature that is protected by Provincial heritage legislation (Derwent 2006). No Later Iron Age settlements are known from Worldsview. However, the area to the immediate west of Worlds View, also known as Swartkop, was inhabited by the Nqondo (Wright 1988) in early colonial times. Other African refugees were settled here by the colonial authorities after 1845.

3 BACKGROUND INFORMATION OF THE SURVEY

3.1 Methodology

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum. The SAHRIS website was consulted. In addition, the available heritage literature covering the greater Pietermaritzburg was also consulted.

A ground survey, following standard and accepted archaeological procedures, was conducted.

3.2 Restrictions encountered during the survey

3.2.1 Visibility

Visibility was compromised by dense vegetation and well established woodlot plantations in the study area.

3.2.2 Disturbance

No disturbance of any potential heritage features was noted.

3.3 Details of equipment used in the survey

GPS: Garmin Etrek

Digital cameras: Canon Powershot A460

All readings were taken using the GPS. Accuracy was to a level of 5 m.

4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

4.1 Locational data

Province: KwaZulu-Natal

Town: Pietermaritzburg

Municipality: uMgungundlovu District Municipality

4.2 Description of the general area surveyed

The footprint is wedged between the suburbs of Worlds View to the west and Winterskloof to the east. Presently the area is covered in Wattle and Bluegum

plantations (Fig 2). Residential and associated outbuildings occur approximately 150m to the east of the proposed development plot. An old railway line, that is older than 60 years, runs approximately 100m to the west of the proposed development plot (Figs 4-6).

5 HERITAGE SITE DESCRIPTION AND STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

No prehistoric archaeological sites occur on the footprint. However, an old railway track runs approximately 100m to the west of the proposed development plot in a north southerly direction (Figs 3 & 7). The GPS coordinates for the track is S 29° 35' 31.58" E 30° 18' 31.43". This track links up with the Winterskloof Station and Hilton Station networks. According to the available literature the Hilton Station, and associated railway tracks were established in 1884 (Martin 1988; Bizley 1988). The railway track in the study area certainly appears to be older than 60 years. It is rated as Generally Protected A (Table 2). In other words it has high to medium significance. It is protected by heritage legislation and may not be altered or destroyed without a permit obtained from Amafa. Mitigation can only be motivated for by a built heritage specialist during a second phase heritage impact assessment. However, mitigation is a drawn out and often expensive exercise. A better option would be to leave the railway line intact by maintaining a strict 45m buffer zone around this heritage feature. Given the proposed location of the development plot it will not be difficult to maintain this buffer zone and the heritage site will not be compromised by the development.

5.1 Field Rating

The field rating criteria as formulated by SAHRA (Table1) is generally protected A.

Table 2. Field rating and recommended grading of sites (SAHRA 2005)

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

6 RECOMMENDATIONS

The proposed organic waste processing facility development may proceed in terms of heritage values. However, the following recommendations must be adhered to:

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- Maintain a strict buffer zone of 45m around the railway track that is situated to the immediate west of the footprint.
 - No alteration of any structures, dumping of materials, construction work, making of paths or access roads, or any excavation is allowed within this buffer zone.
 - Should the developer have a need to alter or destroy a section of the railway track then a second phase heritage assessment, by a built and/or industrial heritage specialist, must be called for. Depending on the recommendations of this second phase assessment the provincial heritage agency Amafa may issue a permit for the limited destruction of the heritage feature.
 - It should also be pointed out that the KwaZulu-Natal Heritage Act requires that all operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities.

7 MAPS AND FIGURES

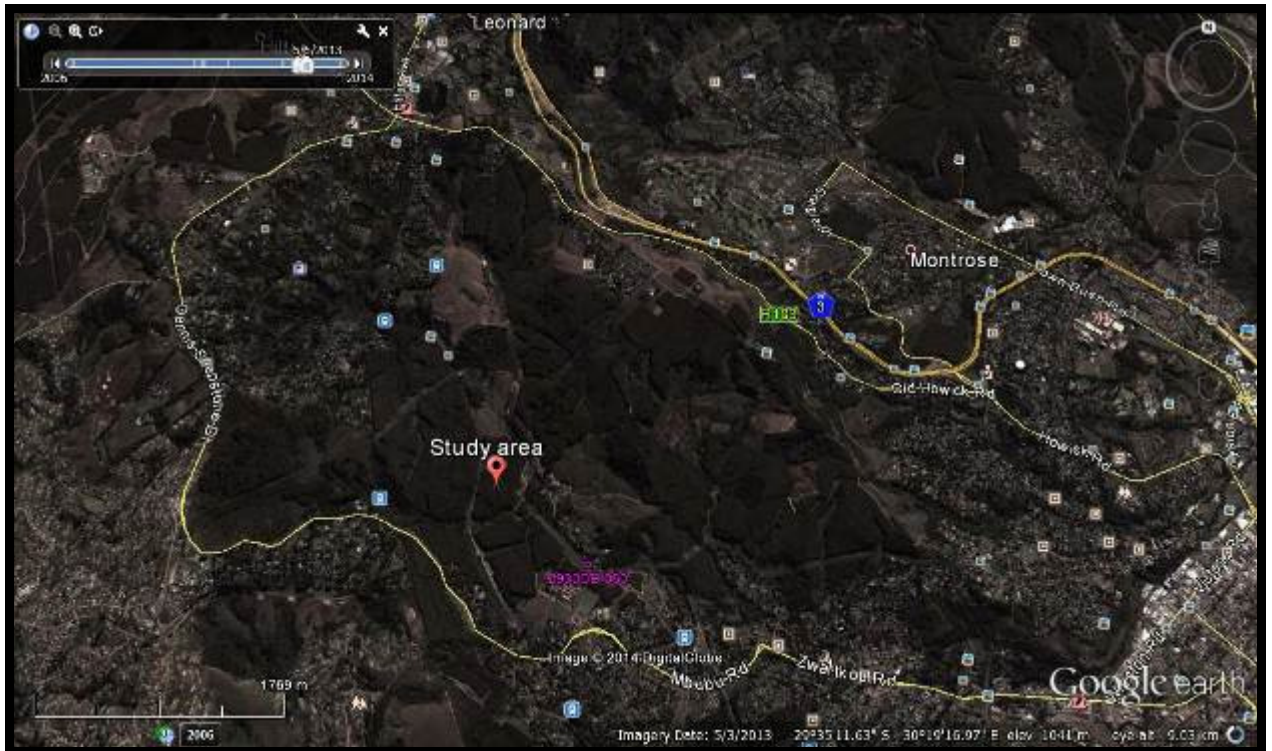


Figure 1. Google aerial photograph showing the location of the study area relative to the greater Pietermaritzburg.



Figure 1. Aerial map showing the location of the preferred site for the proposed composting facility (Source: Green Door).



Figure 3. Google aerial photograph showing the location of the old railway track relative to the proposed development.



Figure 4. The study area is covered by exotic plantations



Figure 5. Old railway line situated approximately 100m to the west of the proposed development zone.

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