



**HERITAGE IMPACT ASSESSMENT FOR THE ESTABLISHMENT OF
A CEMETERY AT PUTFONTEIN, BENONI, CITY OF EKURHULENI
METROPOLITAN MUNICIPALITY, GAUTENG PROVINCE**

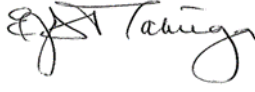
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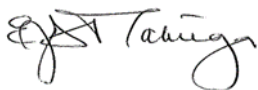
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DECLARATION OF INDEPENDENCE

AHSA (Pty) Ltd is an independent consultancy: We hereby declare that we have no interest, be it business, financial, personal or other vested interest in the undertaking of the proposed activity, other than fair remuneration for work performed, in terms of the National Heritage Resources Act (No 25 of 1999).

DISCLAIMER

All possible care was taken to identify and document heritage resources during the survey in accordance with best practices in archaeology and heritage management. However it is always possible that some hidden or subterranean sites are overlooked during a survey. AHSA will not be held liable for such oversights and additional costs thereof.



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EXECUTIVE SUMMARY

1. This Heritage Impact Assessment report has been prepared in terms of Section 38(8) of the National Heritage Resources Act (No 25/1999) for the establishment of a cemetery at Putfontein in Benoni, City of Ekurhuleni.
2. The following is a summary of observations made during a preliminary ground survey on 3 December 2020.
3. No sites or relics of archaeological or historical significance have been found on the property. The building, industrial and domestic waste dumped on the property has been examined, and none of the material found is of significance.
4. *Significance ranking of findings*

The significance ranking (with a colour scheme) refers to perceived impacts and risk of the proposed development.

	RANKING	SIGNIFICANCE	NO OF SITES
1	High	National and Provincial heritage sites (Section 7 of NHRA). All burials including those protected under Section 36 of NHRA.	1
2	Medium A	Substantial archaeological deposits, buildings protected under Section 34 of NHRA. These may be protected at the recommendations of a heritage expert.	0
3	Medium B	Sites exhibiting archaeological and historical characteristics of the area, but do not warrant further action after they have been documented.	0
4	Low	Heritage sites which have been recorded, but considered of minor importance relative to the proposed development.	0
		TOTAL	0

5. *Conclusions and Recommendations*

There are no archaeological and historical relics which have been found to be directly or indirectly affected by the proposed development. The project may be given a green light to go ahead. As a standard procedure, if such artefacts were discovered during the construction phase, the PHRAG or SAHRA must be immediately notified so that a heritage specialist is called to attend.

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1. INTRODUCTION

A Heritage Impact Study was conducted in support of an application for environmental authorisation for the establishment of a cemetery at Putfontein Benoni, Ekurhuleni. The City of Ekurhuleni is rolling out a strategic plan to address a critical shortage of burial ground in the Municipality.

2. BACKGROUND INFORMATION

2.1. Phase 1 Heritage Impact Assessment

This document is a Phase I Heritage Impact Assessment (HIA) undertaken in terms of 38(8) of the National Heritage Resources Act (No 25 of 1999) to pave way for the proposed development of a cemetery. Phase I is a baseline study to ascertain whether any immovable/immovable, tangible/intangible heritage of important significance will be affected by the proposed development. It entailed a site visit and ground survey for the possible occurrence of archaeological / historical sites or relics that may be so significant that they must be protected. The findings in this report will be applied for decision-making on intervention strategies to protect heritage resources found at the site.

2.2. Type of development

The development falls into the category of urban infrastructure projects in which the physical impacts include:

- Excavations and earth moving
- Opening of roads and pathways for workers, vehicles and equipment
- Excavation of trenches for water and waste reticulation
- Landscaping to improve drainage
- Placement of temporary buildings
- Construction of permanent buildings (offices and storage)

These activities are likely to have detrimental impacts on heritage resources that might occur in the footprint of the development.

2.3. Current and previous land use

At the present to details are available regarding the eucalyptus plantation on the property. This property is on boundary of a built-up low density and high density residential areas (Fairleads and Crystal Park respectively). Beyond the limits of the residential area, the land holdings tend to be larger indicating mixed peri-urban zoning. It is obvious the eucalyptus plantation supplied timber, but could also have been established to scale down the wetland on the southern side.



Figure 1: A degraded eucalyptus plantation occupies the property.

2.4. Topography of the area, including landscape qualities

The site of the proposed cemetery is situated at Putfontein in Benoni 10km northeast of the Benoni CBD. The terrain is generally flat at an average altitude of 1650m above mean sea level. This area is a significantly part of the great watershed dividing the Vaal River and the Limpopo River basins. On the south side property is bordered by a wetland. There are several small channels in the broader area.



Figure 2: Flat terrain on which there is acalyptus plantation.

2.5. A brief history of Benoni

To provide a brief history of Benoni, it was surveyed in 1881 by Mr Johan Rissik, then Surveyor General of the South African Republic of the Transvaal. It was declared state land and named Government Farm Benoni, a name adopted from Book of Genesis in the Bible referring to the name by which Rachel's son with Jacob was called. In 1887 gold was discovered in the locality and the Chimes Mine was established, this happening within a year of the epic gold discovery which the stimulus for the birth of Johannesburg. Sir George Farrar Chairman of the main played a leading role in the planning of the town then known as Little Cornwall, and later named Benoni. By 1904 it was a sizeable town. A series of dams were constructed across a river on the northern limits of the town to provide water for the mine and town.

In 1922 white miners on the Witwatersrand went on strike, what became known as the Rand Revolt, believed to have been instigated by the South African Communist Party. The strike quickly degenerated into a violent confrontation, and the government suspecting links with the Russian Communist Revolution in 1917 reacted heavy-handedly deploying the air force to bomb the miners. Benoni was significant as the miners used it as a rear base and much fighting took place in and

around the town. Market Avenue got its name from the farmers' market where the Benoni Plaza was built and was renamed to "Princes Avenue" in honour of Prince George. Benoni has received three British royal visits, as well as several visits from Princess Charlene Wittstock of Monaco who grew up in Benoni. Even as there have been significant demographic shifts over the last 30 years, Benoni cherishes its historical connections with the English founders.

With the decline of important of mining, which was the initial stimulus for growth the town has diversified to industry and services. Located near the OR Tambo International Airport it is on the edge of what is now becoming an aerotropolis (airport city) with industries and services hinged to the airport services and the large volume of international and local travellers. Finally worth noting the famous South Africans from Benoni:

- Oliver Tambo long serving president of the ANC during the liberation struggle; Bryan Habana, Springboks rugby player.
- Mildred Mangxola, of the Mbaqanga outfit, Mahotella Queens.
- Charlize Theron, Oscar-winning actress
- Charlene, Princess of Monaco, (née Charlene Wittstock), swimmer, and wife of Prince Albert II of Monaco.
- ThembaNkosi, better known as Euphonik.

2.6. Associated infrastructure

The project is part of the City of Ekurhuleni's continuous improvement of service delivery infrastructure which include roads, water and waste reticulation.

2.7. Size of the Project area

The foot print of the proposed site is 35,49 ha.

3. LEGISLATION

3.1. Heritage Impact Assessments

Section 38 of the National Heritage Resources Act (No 25 of 1999) specifies the nature and scale of development projects which require a Heritage Impact Assessment as mitigation:

38. (1) *Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—*

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site—

(i) exceeding 5 000m² in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m² in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

3.2. Protection of historic buildings

Section 34 of the NHRA provides for automatic provisional protection of all structures and features older than 60 years unless proof can be furnished that they do not carry heritage value.

3.3. Protection of archaeological and palaeontological sites

Section 35 (4) of the NHRA prohibits the destruction of archaeological, palaeontological and meteorite sites:

No person may, without a permit issued by the responsible heritage resources authority—

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;

(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

(c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or

(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or

archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

3.4. The Burra Charter on Conservation of Places of Cultural Significance

Some generic principles and standards for the protection of heritage resources in South Africa are drawn from international charters and conventions. In particular South Africa has adopted the **Australia Charter for the Conservation of Places of Cultural Significance (the Burra Charter 1999)** as a benchmark best practice in heritage management.

4. LOCATION OF THE STUDY AREA (MAP)

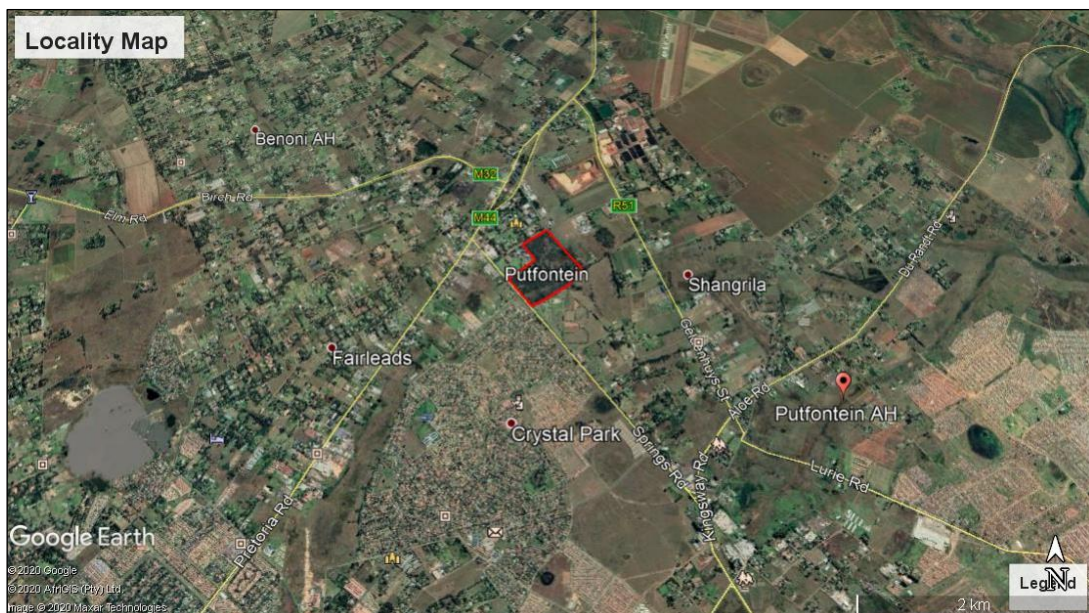


Figure 3; Google Earth map shows the location of Putfontein in Benoni.

5. AIMS OF THE STUDY

A Heritage Impact Assessment is a screening exercise to identify heritage resources in an area that has been earmarked for development so as to pre-empt damage or disturbance, and where these cannot be avoided a mitigation plan is prescribed in order to minimise impact or alternative placement of the project is recommended where the risk on the identified heritage is considered to be very high in relationship to its value. An HIA is therefore based on an understanding of heritage and its significance, and if heritage is found in the area of the proposed development mitigation options are considered and recommendations made on a conservation

strategy that best conserves the resource(s) within the context of the proposed development.

6. AREA DESCRIPTION

A eucalyptus plantation occupies the property which is bounded by Springs Rd to the west, Nooderlig High School to the north, Lala Ngxolo Cemetery to the south and to small holdings to the east. It is apparent that the eucalyptus plantation is no longer being maintained as there is unregulated harvesting for timber and firewood. Other trees species both native and exotic have also established in the plantation. The property is an illegal dumping site for building, domestic and industrial waste. Recycling agents have set up camp using it for stockpile and sorting. This has contributed significantly to the environmental degradation.



Figure 4: View southeast from the centre of the property shows that it is part of an extensive treeless veld.



Figure 5: The centre of the property has been extensively mined for sand and gravel.

7. APPROACH AND METHODOLOGY

7.1. Desktop Research

Documentary analysis is the examination of current and historical documents. Published historical and geographical information consulted and relevant background material provided by the Client. The internet is an important portal for searching reports of previous research in the area. The documentary analysis allowed a good understanding of the heritage potential of the study area.

7.2. Ground Survey

A heritage specialist and assistant visit the property carried out a preliminary ground survey on 4 December 2020 for the possible occurrence of heritage sites or relics.

7.3. Public Participation

Public participation for the heritage component of the project was integrated with the broader environmental impact assessment process of engaging key stakeholders.

8. LIMITATIONS EXPERIENCED

The boundary fencing around the area has been destroyed, the clear-view steel fencing and posts have been removed for scrap material. It is quite possible that the forest is used as a hideout by criminals. As a precaution, we sought escort from a security guard at Lala Ngoxolo Cemetery.

9. TERMINOLOGY USED

Archaeology: The study of the human past through its material remains.

Archaeological material: remains resulting from human activity left as evidence of their presence which, as proscribed by South African heritage legislation, are older than 100 years, which are in the form of artefacts, food remains and other traces such as rock paintings or engravings, burials, fireplaces and structures.

Artefact/Ecofact: Any movable object that has been used, modified or manufactured by humans.

Catalogue: An inventory or register of artefacts and/or sites.

Conservation: All the processes of looking after a site/heritage place or landscape including maintenance, preservation, restoration, reconstruction and adaptation.

Culture: A contested term, “culture” could minimally be defined as the learned and shared things that people have, do and think.

Cultural landscape: Refers to a distinctive geographic area with cultural significance.

Cultural Heritage Resources: refers to physical cultural properties such as archaeological sites, palaeontological sites, historic and prehistorical places, buildings, structures and material remains, cultural sites such as places of rituals, burial sites or graves and their associated materials, geological or natural features of cultural importance or scientific significance. This include intangible resources such religion practices, ritual ceremonies, oral histories, memories indigenous knowledge.

Cultural landscape: “the combined works of nature and man” and demonstrate “the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both internal and external”.

Cultural Significance: is the aesthetic, historical, scientific and social value for past, present and future generations.

Early Stone Age: Predominantly the Oldowan and Acheulean hand axe industry complex dating to + 1Myr yrs – 250 000 yrs. before present.

Early Iron Age: Refers cultural period of the first millennium AD associated with the introduction of metallurgy and agriculture in Eastern and Southern Africa

Later Iron Age: Refers to the period after 1000AD marked by increasing social and political complexity. Evidence of economic wealth through trade and livestock keeping especially cattle

Excavation: A method in which archaeological materials are extracted, involving systematic recovery of archaeological remains and their context by removing soil and any other material covering them.

Grave: a place of burial which include materials such as tombstone or other marker such as cross etc.

Historic material: means remains resulting from human activities, which are younger than 100 years and no longer in use, which include artefacts, human remains and artificial features and structures.

Intangible heritage: Something of cultural value that is not primarily expressed in a material form e.g. rituals, knowledge systems, oral traditions, transmitted between people and within communities.

Historical archaeology: the study of material remains from both the remote and recent past in relationship to documentary history and the stratigraphy of the ground in which they are found; or archaeological investigation on sites of the historic period. In South Africa it refers to the immediate pre-colonial period, contact with European colonists and the modern industrial period.

In situ material: means material culture and surrounding deposits in their original location and context, for instance archaeological remains that have not been disturbed.

Later Iron Age: The period from the beginning of the 2nd millennium AD marked by the emergence of complex state society and long-distance trade contacts.

Late Stone Age: The period from ± 30 000-yr. to the introduction of metals and farming technology

Middle Stone Age: Various stone using industries dating from ± 250 000 yr. - 30 000 yrs. ago

Monuments: architectural works, buildings, sites, sculpture, elements or structures of an archaeological nature, inscriptions, cave dwellings which are outstanding from the point of view of history, art and science.

Place: means site, area, building or other work, group of buildings or other works, together with pertinent contents, surroundings and historical and archaeological deposits.

Preservation: means protecting and maintaining the fabric of a place in its existing state and retarding deterioration or change, and may include stabilization where necessary.

Sherd: ceramic fragment.

Significance grading: Grading of sites or artefacts according to their historical, cultural or scientific value.

Site: a spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

Site Recoding Template: Site recording form.

10. CONDITIONS AND ASSUMPTIONS

All possible care was taken to identify and document heritage resources during the survey in accordance with best practices in archaeology and heritage management. However, it is always possible that some hidden or subterranean sites are overlooked during a survey.

11. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

An outline of the cultural sequence in South Africa is given here to set the context for the identification of heritage resources in the study area.

11.1. Cultural sequence summary

PERIOD	EPOCH	ASSOCIATED CULTURAL GROUPS	TYPICAL MATERIAL EXPRESSIONS
Early Stone Age 2.5m – 250 000 YCE	Pleistocene	Early Hominids: <i>Australopithecines</i> <i>Homo habilis</i> <i>Homo erectus</i>	Typically large stone tools such as hand axes, choppers and cleavers.
Middle Stone Age 250 000 – 25 000 YCE	Pleistocene	First <i>Homo sapiens</i> species	Typically smaller stone tools such as scrapers, blades and points.
Late Stone Age 20 000 BC – present	Pleistocene / Holocene	<i>Homo sapiens</i> including San people	Typically small to minute stone tools such as arrow heads, points and bladelets.
Early Iron Age / Early Farmer Period c300 – 900 AD (or earlier)	Holocene	Iron Age Farmers	Typically distinct ceramics, bead ware, iron objects, grinding stones.
Later Iron Age 900ADff	Holocene	Iron Age Farmers, emergence of complex state systems	Typically distinct ceramics, evidence of long distance trade and contacts

(ii) Mapungubwe (K2)	1350AD		Metals incl gold, long distance exchanges
(ii) Historical period	Nguni / Sotho/Venda people	Iron Age Farmers	Mfecance / Difaqane
(iii) Colonial period	19 th Century	European settlers / farmers / missionaries/ industrialisation	Buildings, Missions, Mines, metals, glass, ceramics

11.2. Appearance of Hominids

Important fossil evidence of hominids occurs in South Africa dating to 3million years ago. The hominid site at Sterkfontein (Cradle of Humankind) 60km northwest of Boksburg is one of the most famous hominids sites in the world featuring more than one hominid genus including *Australopithecus africanus*. The site has been inscribed on the UNESCO World Heritage list as a serial nomination together with Taung in the northwest Province and Makapansgat in Limpopo Province.

11.3. The Stone Age

The Early Stone Age [2 million – 250 000 yrs BP]

The Early Stone Age marks the earliest appearance of stone artefacts c. 2 million years ago. Such tools bore a consistent shape such as the pear-shaped handaxe, cleavers and core tools (Deacon & Deacon, 1999). These tools, which have been called Acheulian after a site in France, were probably used to butcher large animals such as elephant, rhinoceros and hippopotamus. Acheulian artefacts are usually found near sites where they were manufactured and thus in close proximity to the raw material or at butchering sites. The early hunters are classified as hominids or proto-humans, meaning that they had not evolved to the present human form.

Middle Stone Age (MSA) [250 000 yrs – 40 000 yrs BP]

The Middle Stone Age (MSA), which appeared 250 000 years ago, is marked by the introduction of a new tool kit which included prepared cores, parallel-sided blades and triangular points hafted to make spears. By then humans had become skilful hunters, especially of large grazers such as wildebeest, hartebeest and eland. It is

also believed that by then, humans had evolved significantly to become anatomically modern. Caves were used for shelter suggesting permanent or semi-permanent settlement. Furthermore there is archaeological evidence from some of the caves indicating that people had mastered the art of making fire. These were two remarkable steps in human cultural advancement.¹

The recent discovery of hominid fossils near Sterkfontein Caves assigned to the genus *Homo Naledi* and dated to between 335 000 and 236 000 MYA overlap between the EIA and MSA (The Star, 10 May 2017, p1 & 12).

Later Stone Age (LSA)[40 000 yrs to ca 2000 yrs BP]

By the beginning of the LSA, humans are classified as *Homo sapiens* which refer to the man's modern physical form and thinking capabilities. Several behavioural traits are exhibited, such as rock art and purposeful burials with ornaments, became a regular practice. The practitioners of rock art are definitely the ancestors of the San and sites abound in the whole of Southern Africa. LSA technology is characterised by microlithic scrapers and segments made from very fine-grained rock. Spear hunting continued, but LSA people also hunted small game with bows and poisoned arrows. Because of poor preservation, open sites become of less value compared to rock shelters.

11.4. The Iron Age Culture [ca. 2000 years BP]

11.4.1. *The Early Iron Age*

The Iron Age culture supplanted the Stone Age more than 2000 years ago, associated with the introduction of farming and the use of several metals and pottery. The Early Iron Age (EIA) is seen as a sudden and simultaneous appearance of these technologies in South Africa and the whole region of Eastern and Southern Africa suggesting a fairly rapid spread of people.² This is associated with speakers of the many languages spoken in the region collectively referred to as Bantu. There was no Bantu migration as such since these people are indigenous to the African continent anyway. Instead there was a gradual expansion of settlement as would inevitably have happened as population increased over time. In the southern part of the

¹Deacon, J&H. Deacon. 1999.*Human Beginnings in South Africa*. Cape Town: David Philip.

²Phillipson, D. W. 2005. *African Archaeology*. Cambridge: University of Cambridge Press: 249.

continent Iron Age people would have coexisted and intermingled with Khoi-San communities over several thousand years, and the hybrid languages spoken in this area is a footprint of such cultural encounters.

11.4.2. *The Later Iron Age*

The Later Iron Age in South Africa evolved from the Early Iron Age around the beginning of the second millennium AD. It is often associated with the development of complex state systems such as Mapungubwe and later Great Zimbabwe. In historical terms, the Later Iron Age is prelude to the emergence of historical Sotho-Tswana communities who inhabited this area before the entry of Europeans in the 19th century.

11.5. Precolonial Period

Before the founding of Johannesburg in 1886 the Witwatersrand area was inhabited by Sotho-Tswana speaking people. Regrettably little research has focussed on these pre-urban communities. To the north in the region of Pretoria the Southern Ndebele settled in the 16th-17th centuries. On-going studies are unravelling a nucleated Tswana settlement in the Suikerbosrand area south of Johannesburg, images of which have been accentuated by LiDAR technology (LiDAR - Light Detection and Ranging). It speculated that these settlements which represent Tswana city states collapsed in the 1820 at the Difaqane onslaughts.³ Some had never been documented in writing and their oral histories had gone unrecorded.

³Long-lost ancient Tswana city found south of Joburg. Found at <https://citizen.co.za/news/south-africa/1862267/long-lost-ancient-tswana-city-found-south-of-joburg/> Consulted Nov 2019.

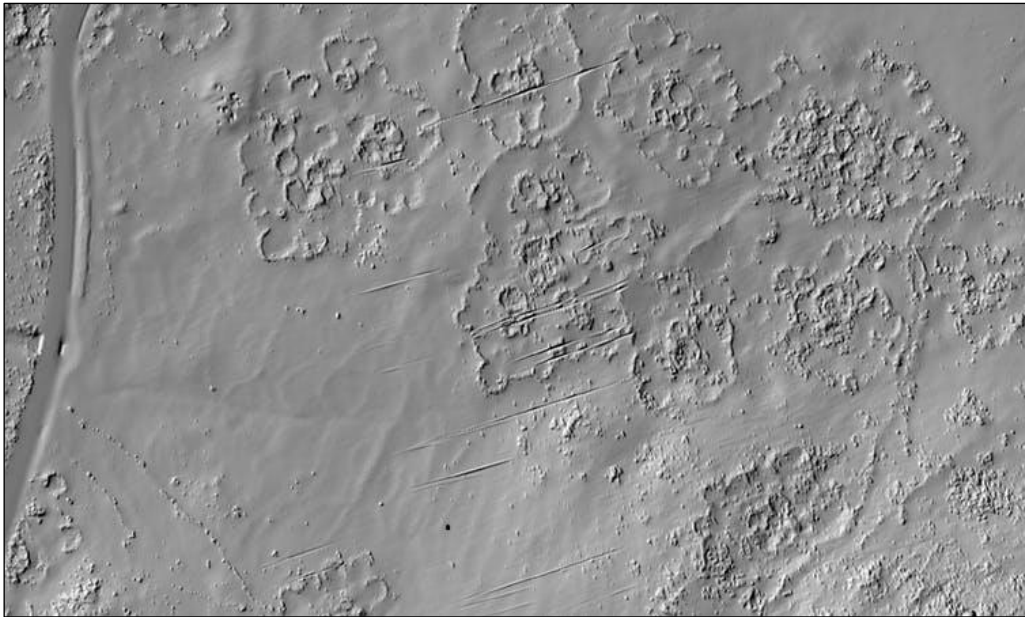


Figure 6: LiDAR (Light Detection and Ranging) redrawn remains of a Tswana city, along the lower western slopes of the Suikerbosrand hills near Johannesburg.

The Highveld area of Gauteng was affected by the 19th century Mfecane/Difaqane, a series of upheavals triggered by the rise of the Zulu Kingdom under Shaka. Significantly the Ndebele of MzilikaziKhumalobriefly settled aroundPretoria from 1829 until their departure in 1837 after a bloody confrontation with the Voortrekkers (Rasmussen, K. 1978).

11.6. Colonial occupation

The events leading to Great Trek and the occupation of the Gauteng region in the 1840s are summaries in the following table (adapted from Gaigher 2015: p15).

DATE	DESCRIPTION
1840's	Arrival of white farmers and establishment of commercial farms.
1880 - 1890's	Gold and coal were discovered in the area and subsequently the ground prices soared.
1880 - 1900's	Coal mining started on a small scale, until the Great Eastern Mine was established. In 1904 the Grootvlei Proprietary Mines were registered and shafts were sunk.
1880's	The first railways were built after the discovery of coal to carry it to the gold mines on the Witwatersrand.
1887	Benoni was established in 1887, a year after the discovery of gold and the founding of Johannesburg.
1922	The Rand (Miners) Revolt started March 1922 was an armed uprising of white miner in the Witwatersrand region, epicentre of revolt in the East Rand.
1940s -	During the apartheids era, Benoni was reserved for whites Indians

1960s	relocated to Actonville and the black people were relocated to Brakpan Old Location and later to Tsakane
1963	Blacks and Asians are moved from Stirtonville under the Group Areas Act, the former to found Vosloorus, and the latter Actonville. Stirtonville which is renamed Rieger Park is reserved for Coloureds.
1999	As part of the restructuring of municipalities, local governments of the East Rand were merged into a single municipality, named the Ekurhuleni Metropolitan Municipality

12. DETAILED INDIVIDUAL DESCRIPTION OF IDENTIFIED CULTURAL RESOURCES

No sites or relics of archaeological or historical significance have been found on the property. The building, industrial and domestic waste dumped on the property has been examined, and none of the material found is of significance.

12.1. Significance ranking of findings

The significance ranking (with a colour scheme) refers to perceived impacts and risk of the proposed development.

	RANKING	SIGNIFICANCE	NO OF SITES
1	High	National and Provincial heritage sites (Section 7 of NHRA). All burials including those protected under Section 36 of NHRA.	1
2	Medium A	Substantial archaeological deposits, buildings protected under Section 34 of NHRA. These may be protected at the recommendations of a heritage expert.	0
3	Medium B	Sites exhibiting archaeological and historical characteristics of the area, but do not warrant further action after they have been documented.	0
4	Low	Heritage sites which have been recorded, but considered of minor importance relative to the proposed development.	0
		TOTAL	0

12.2. Evaluation of the heritage potential of the area and associated impacts

Section 38(3) requires that:

(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

(a) The identification and mapping of all heritage resources in the area affected

No sites or relics of cultural significance were found.

(b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7

N/A

(c) an assessment of the impact of the development on such heritage resources

N/A

(d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development

The Municipalities in Gauteng Province are facing a critical shortage of burial space.

(e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;

N/A

(f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives

N/A

(g) plans for mitigation of any adverse effects during and after the completion of the proposed development

Periodic monitoring of physical works.

6. RISK ASSESSMENT OF FINDINGS

EVALUATION CRITERIA	RISK ASSESSMENT
Description of potential impact	Disturbance of archaeological relics buried underground during the construction phase
Legal Requirements	Sections 34, 35 36 and 38 of the National Heritage Resources Act
Nature of Impact	Physical impacts
Extent of Impact	-
Duration of Impact	Disturbance of archaeological relics / sites is not reversible
Probability of occurrence	Low
Confidence of assessment	High
Level of significance of impacts before mitigation	High
Mitigation measures	Monitoring of construction works
Level of significance of impacts after mitigation	Low
Cumulative Impacts	None
Mitigation of cumulative impacts	N/A
Comments or Discussion	-

7. CONCLUSIONS AND RECOMMENDATIONS

There are no archaeological and historical relics which have been found to be directly or indirectly affected by the proposed development. The project may be given a green light to go ahead. As a standard procedure, if such artefacts were discovered during the construction phase, the PHRAG or SAHRA must be immediately notified so that a heritage specialist is called to attend.

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