

**LIBERTY MIDLANDS MALL PHASE 4 DEVELOPMENT  
(MIDLANDS PARK RUN AND BIKE TRACK),  
MSUNDUSI LOCAL MUNICIPALITY, KWAZULU-NATAL**

**Phase 1 Heritage Impact Assessment**

**27 January 2020**

**FOR: Afzelia Environmental Consultants  
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## EXECUTIVE SUMMARY

The development of the Liberty Park Run and Bike Track proposes to include two residential blocks as well as a bike track, trail running routes, archery, put-put / golf and paintball activities. Associated infrastructure will include parking, ablutions, seating areas, an amphitheatre, eating areas and open-air events area. The development will include the construction of a vehicular bridge over the Town Bush River.

The proposed development area is 15 878m<sup>2</sup> hence it triggers section 41 (1) (c)(i) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that may require an HIA. The relevant section refers to any development or other activity which will change the character of site- (i) exceeding 5000 m<sup>2</sup>.

The proposed development is planned for vacant land opposite the existing Liberty Midlands Mall and across the Town Bush River. The site is approximately 1.9km away from the centre of Pietermaritzburg and lies on the western boundary of the Woodlands residential area.

An inspection of the developable area was undertaken on 09 January 2020. Visibility was poor as the project area had a very thick grass layer as well as tall stands of grass and weeds throughout the area which made visibility difficult especially for low-lying heritage resources. In addition, there were dense stands of mainly invasive trees and bushes which were inaccessible.

Most of the site was inspected on foot. The area is thickly overgrown and there is steep topography in some places. The remains of a number of quarries or one large quarry are still visible. The area of the Midlands Mall used to be the Coronation / Corobrik brick yard. The area of the quarries/quarry was strewn with both broken and intact clay bricks. No remains of structures were noted during the site inspection apart from several sewage manholes and pipeline markers which are located on the eastern boundary of the site. No heritage resources were found during the site inspection of the project area.

The South African fossil sensitivity map indicates that the project area falls into an area of moderate fossil sensitivity. An area of moderate fossil sensitivity requires a desktop palaeontological study. The desktop study indicated that the project site lies entirely on the shales and mudstones of the Pietermaritzburg Formation. Fossils recorded from this formation are traces of bioturbation in the muds from invertebrate burrows, but also microbioturbation, making any structures very poorly preserved. Rare plant fragments have been mentioned in some texts but not identified. The Jurassic dolerite does not preserve fossils because it is an intrusive volcanic rock. The very young Quaternary sands along the stream are also very

unlikely to preserve fossils as they have been moved by river floods and fossils would have been destroyed during this process.

Surface activities may impact upon the fossil heritage if such fossils have been preserved in the development footprint. The geological structures suggest that the rocks are not of the correct environmental setting to contain fossils, except for some invertebrate trace fossils. Since there is an extremely small chance that trace fossils from the Pietermaritzburg Formation may be disturbed when excavations into the underlying rocks commence, a Fossil Chance Find Protocol, as provided in the desktop report, must be included in the Environmental Management Programme.

Due to the dense grass layer and dense vegetation, there is a possibility that heritage resources were missed during the site inspection. However, sections of the project area have been disturbed through quarrying and the development of associated roads which would have destroyed any heritage resources in these areas and the areas of steep topography would also mitigate against the possibility of finding heritage resources in those areas.

If the project is authorised, it is recommended that the Environmental Control Officer or Project Manager (someone with a clear understanding of the variety of heritage resources that could be found) must be on site when clearing of vegetation takes place (prior to excavation) to ensure that heritage sites are not damaged or destroyed. If such sites are found then a heritage specialist must be called to site to evaluate the find and recommend the way forward.

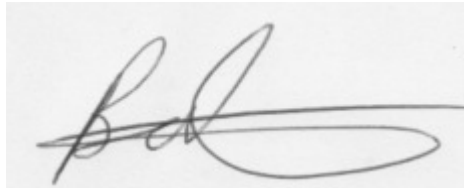
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I, **Jean Lois Beater**, act as an independent specialist for this project and I do not have any vested interest either business, financial, personal or other, in the proposed activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014.



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**AUTHOR DETAILS**

Name	Qualification	Professional Registration
Jean Beater (JLB Consulting)	MA (Heritage Studies)  MSc (Environmental Management)	Member of Association of South African Professional Archaeologists (No. 349)  Member of IAIAAsa (No. 1538)

## 1. INTRODUCTION

The idea of the proposed development is to merge the environment with a recreational area to provide a fun and recreation space for locals and visitors to enjoy. The addition of residential blocks will see the creation of an eco-estate type living space. The development of the Liberty Park Run and Bike Track proposes to include two residential blocks as well as a bike track, trail running routes, archery, put-put / golf and paintball activities. Associated infrastructure will include parking, ablutions, seating areas, an amphitheatre, eating areas and open-air events area. The development will include the construction of a vehicular bridge over the Town Bush River (Afzelia 2020:1).

This report serves as a Phase 1 Heritage Impact Assessment (HIA) for the proposed Midlands Mall Phase 4 development.

## 2. LEGISLATIVE BACKGROUND

The proposed development area is 15 878m<sup>2</sup> hence it triggers section 41 (1) (c)(i) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that may require an HIA. The relevant section refers to: “*any development or other activity which will change the character of site- (i) exceeding 5000 m<sup>2</sup>”.*

The project may also impact graves, structures, archaeological and palaeontological resources that are protected in terms of sections 37, 38, 39, and 40 of the KwaZulu-Natal Amafa and Research Institute Act, 2018.

Section 3 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) lists heritage resources as follows:

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds, including—
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders;

- (iii) graves of victims 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 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; and
- (i) movable objects, including:
- (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological 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) objects of scientific or technological interest; and
  - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

In addition, the KwaZulu-Natal Amafa and Research Institute Act, 2018, also refers to the intangible aspects of culture that should be kept in mind including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships.

The Phase I HIA was undertaken to assess whether heritage resources will be impacted by the proposed Liberty Midlands Mall (Phase 4) development.

### **3. LOCATION**

The proposed development is planned for vacant land opposite the existing Liberty Midlands Mall and across the Town Bush River. The site is approximately 1.9km away from the centre of Pietermaritzburg and lies on the western boundary of the Woodlands residential area. The coordinates of the approximate centre of the development are 29°34'58.61" S | 30°22'52.42" E. See **Figure 1** below.



**Figure 1: Proposed site outlined in green**



#### **4. TERMS OF REFERENCE**

Undertake a Phase 1 HIA in order to determine the possible existence of heritage resources, as listed above in Chapter 2, that could be impacted by the proposed development. Provide mitigation measures to limit or avoid the impact of the development on heritage resources (if any).

The heritage specialist will submit the HIA report to the provincial heritage resources authority, namely the KwaZulu-Natal Amafa and Research Institute (hereafter referred to as the Institute), for their consideration and comment.

#### **5. METHODOLOGY AND CONSTRAINTS**

A survey of literature, including other heritage impact assessment (HIA) reports completed for the surrounding area, was undertaken in order to ascertain the history of the area and what type of heritage resources have or may be found in the area.

An inspection of the developable area was undertaken on 09 January 2020. Visibility was poor as the project area had a very thick grass layer as well as tall stands of grass and weeds throughout the area which made visibility difficult especially for low-lying heritage resources such as graves. In addition, there were dense stands of mainly invasive trees and bush (including lantana) which could not be accessed.

#### **6. HISTORICAL BACKGROUND OF THE STUDY AREA**

Pietermaritzburg, the urban centre, was founded in 1838 but archaeological remains show that people have been living in the city area for a quarter or even half a million years. Evidence shows that the Acheulians (Stone Age people) lived along river valleys due to the abundance of artefacts found in these areas. Locally such sites have been found on both sides of the Msunduzi in the Scottsville and central town areas. Acheulian material has also been found in relatively flat areas such as Scottsville-Pelham and the Ashburton ridge or beside smaller streams such as the Slangspruit, Foxhill Spruit and Mkhondeni (eThembeni 2013:31).

The Iron Age way of life developed in equatorial Africa and spread rapidly southwards reaching the KwaZulu-Natal coastal plain around AD250. By AD500 Iron Age villages were established throughout the coastal and savannah areas and along river valleys, as the broad flat areas of good soil beside rivers were preferred as village sites. Several collections of iron artefacts have been dug up in recent years in the wider Pietermaritzburg including a batch of hoes that was found at the SOMTA Factory at Plessislaer (eThembeni:33). Later Iron Age sites occur in similar contexts as well as on ridges or plateaus in existing grassland. Some Later Iron Age sites occur in the Umngeni River Valley close to Howick as well as in the Otto's Bluff area near Albert Falls Dam (Prins 2014:3).

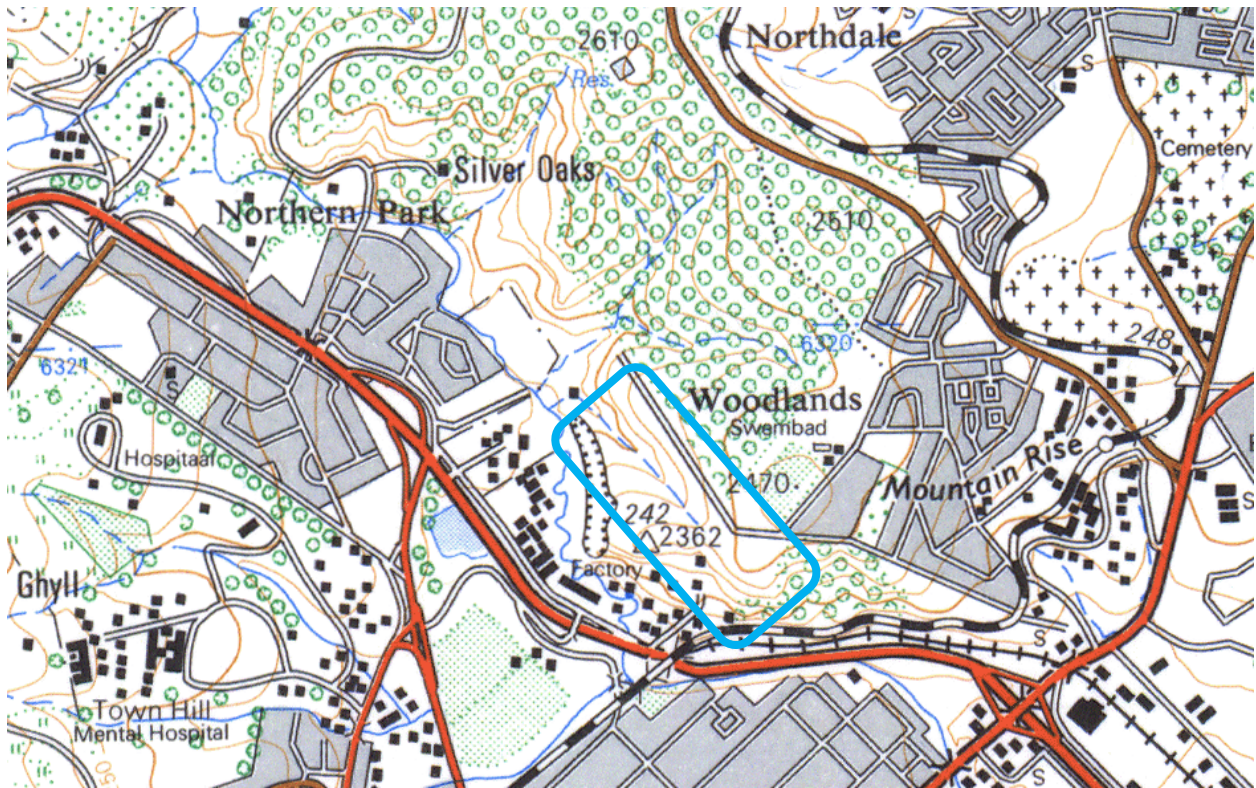
In 1838, the foundations for the town of Pietermaritzburg were laid along the uMsunduzi River and Dorpspruit Stream by the Voortrekkers. The Voortrekker presence in Natal was perceived by the British Governor of the Cape Colony both as an encroachment on Zulu territory and a threat to the independence of Port Natal (Durban). Conflict between British and Voortrekkers continued as did the conflict between the Zulu and Voortrekkers which eventually led to British annexation of Natal in 1843 (Derwent 2006:57).

Coronation Brick and Tile Works (Coronation) was located where the Liberty Midlands Mall now stands along the N3 highway. Coronation acquired a brick factory in Pietermaritzburg on auction in 1933 (South African Builder 2018:2). The Pietermaritzburg yard was closed and cleared in the mid-1990s and the land sold off and the brickyard done away with. This occurred because Corobrik (as Coronation became to be known) started to cut back on being the only distributor. Rather, whilst still making bricks, it supplied bricks to agents who instead had their own yards. Corobrik also stopped their delivery so the transport section they had disappeared (Buitegieg 2015:2-3).

## **7. RESULTS OF SITE INSPECTION**

Most of the site was inspected on foot shortly after a shower of rain. The area is thickly overgrown and there is steep topography in some places. The remains of a number of quarries or one large quarry are still visible. The area of the Midlands Mall used to be the Coronation / Corobrik brick yard. The area of the quarries/quarry was strewn with both broken and intact clay bricks. It is assumed that the quarries are related to the brick yard and possibly to road construction. No remains of structures were noted during the site inspection apart from several sewage manholes and pipeline markers on the eastern boundary of the site (as shown in **Figure 3** below).

The 1968 1:50000 topographical (2930CB), a section of which is included below, shows the quarry area, steep topography as well as several structures where the Midlands Mall is currently located which were presumably related to the brickmaking works.



**Figure 2: Project area indicated with turquoise rectangle**

The road leading from the quarry/quarries to the factory is still partially visible (see **Figure 6** below) but is overgrown with grass and bushes. It also runs along the edge of the hill, the side of which was also quarried for rock and other material. The area immediately opposite the Mall was heavily overgrown with grass but remains of bricks could still be seen.

No heritage resources were found during the site inspection of the project area.



**Figure 3: Pipeline servitude**



**Figure 4: Area of dense vegetation**



**Figure 5: Quarry**



**Figure 6: Remains of road**

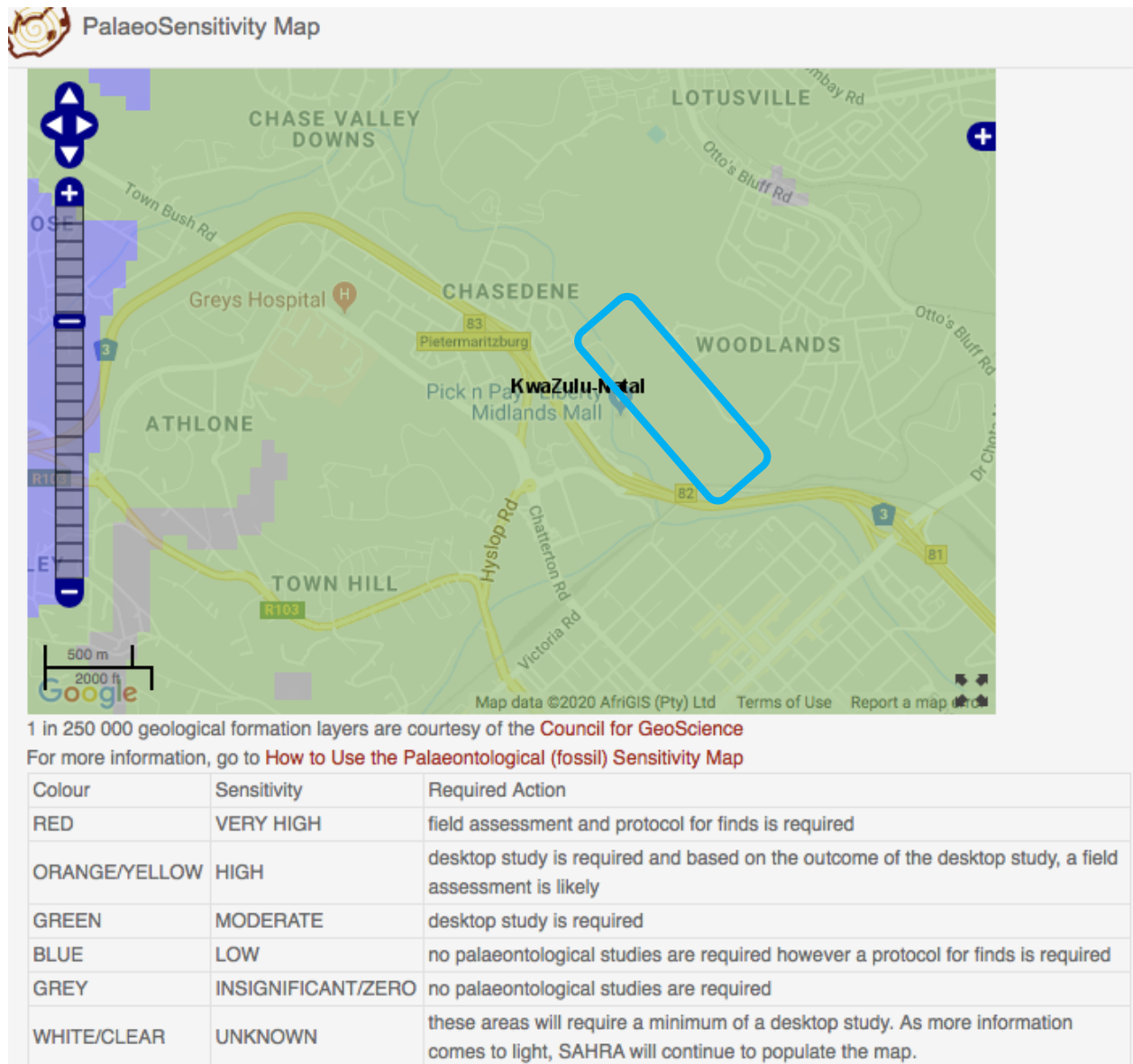


**Figure 7: Area with thick grass cover with Midlands Mall in background**



**Figure 8: Bricks found throughout quarry areas**

The South African fossil sensitivity map indicates that the project area falls into an area of moderate fossil sensitivity as indicated by the green colour in **Figure 9** below. An area of moderate fossil sensitivity requires that a desktop palaeontological study is undertaken.



**Figure 9: Fossil sensitivity map with project area indicated with turquoise outline**

The desktop study (**Appendix 1**), indicated that the project site lies entirely on the shales and mudstones of the Pietermaritzburg Formation. There is a small exposure of Quaternary sands adjacent to the stream. The Pietermaritzburg Formation was deposited as a major post-glacial transgression as the Karoo sag-basin filled with meltwaters from the receding glaciers and ice sheets. The overlying Vryheid Formation is not exposed in this area but the subsequent formation, the Volksrust Formation, is exposed to the northwest of the site (Bamford 2020:7).

The site for development is, according to Bamford (2020:7), in the shallow to deeper water Pietermaritzburg Formation. Fossils recorded from this formation are traces of bioturbation in the muds from invertebrate burrows, but also microbioturbation, making any structures very poorly preserved. Rare plant fragments have been mentioned in some texts but not identified. This data is based on borehole material, not surface collections. The Jurassic dolerite does not preserve fossils because it is an intrusive volcanic rock. The very young Quaternary sands along the stream are also very unlikely to preserve fossils as they have been moved by river floods and fossils would have been destroyed during this process, if present in the first place.

Based on the nature of the project, surface activities may impact upon the fossil heritage if preserved in the development footprint. The geological structures suggest that the rocks are not of the correct environmental setting to contain fossils, except for some invertebrate trace fossils. Furthermore, the rocks are covered with soils and modern vegetation that would not preserve fossils. Since there is an extremely small chance that trace fossils from the Pietermaritzburg Formation may be disturbed when excavations into the underlying rocks commence, a Fossil Chance Find Protocol, provided in the desktop report, must be included in the Environmental Management Programme (EMPr). The impact assessment included in the desktop report concluded that the potential impact of the project to fossil heritage resources is extremely low (Bamford 2020:9).

## **8. DISCUSSION AND RECOMMENDATIONS**

Due to the dense grass layer and dense vegetation, there is a possibility that heritage resources were missed during the site inspection. However, sections of the project area have been disturbed through quarrying and the development of associated roads which would have destroyed any heritage resources in these areas and the areas of steep topography would also mitigate against the possibility of finding heritage resources in those areas.

If the project is authorised, it is recommended that the Environmental Control Officer or Project Manager (someone with a clear understanding of the variety of heritage resources that could be found) must be on site when clearing of vegetation takes place (prior to excavation) to ensure that heritage sites (if any), especially in thickets of dense bush and trees, are not damaged or destroyed. If such sites are found then a heritage specialist must be called to site to evaluate the find and recommend the way forward.



The Fossil Chance Find Protocol provided in the desktop palaeontological report must be included in the EMPr and implemented if chance fossil finds are made during excavations for the proposed development.

## **9. MITIGATION MEASURES**

- For any chance heritage finds (such as graves), all work must cease in the area affected and the Contractor must immediately inform the Project Manager. A heritage specialist must be called to site to inspect the finding/s. The provincial heritage resource agency, the Institute, must be informed about the finding/s.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Permits must be obtained from the Institute if heritage resources are to be removed, destroyed or altered.
- All heritage resources found in close proximity to the construction area must be protected by a 5 m buffer in which no construction can take place. The buffer material (danger tape, fencing, etc.) must be highly visible to construction crews.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- Should any recent remains be found on site that could potentially be human remains, the South African Police Service (SAPS) as well as the Institute must be informed. No SAPS official may remove remains until the correct permit/s have been obtained.

## 10. REFERENCES

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