

**SOUTHERN BORROW PITS PROJECT, ETHEKWINI
MUNICIPALITY, KWAZULU-NATAL**

Phase 1 Heritage Impact Assessment

July 2017

**FOR: ECA CONSULTING
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AUTHOR DETAILS

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

1. INTRODUCTION

The applicant, the KwaZulu-Natal (KZN) Department of Transport, proposes to establish a number of borrow pits over various properties across the northern and southern areas of the eThekweni Municipality. The extent of the proposed borrow-pits varies from less than or equal to 5 hectares on some properties and greater than 5 hectares on other properties

This report is a consolidated heritage impact assessment report for the borrow pits situated in the southern area of the eThekweni Municipality. A Phase 1 Heritage Impact Assessment (HIA) has been undertaken on the borrow pits.

2. LEGISLATIVE BACKGROUND

The borrow pits vary in size and trigger Section 38 (1) (c) (i) of the National Heritage Resources Act, 1999 (Act No 25 of 1999) that states the following:

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

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

(i) exceeding 5 000 m² in extent; or

must notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development. Five hectares is equal to 50 000m².

Even if the borrow pits do not trigger the above section, they could impact graves, structures, archaeological and palaeontological resources that are protected in terms of sections 33, 34, 35, and 36 of the KwaZulu-Natal Heritage Act (No. 4 of 2008) as well as sections 34, 35, and 36 of the National Heritage Resources Act (NHRA).

In terms of Section 3 of the National Heritage Act 25 of 1999, heritage resources are:

- (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;
- (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).

The Phase I HIA was undertaken to assess whether any heritage resources will be impacted by the proposed borrow pits.

3. TERMS OF REFERENCE

Undertake a Phase 1 Heritage Impact Assessment in order to determine the existence of heritage resources that could be impacted by the proposed borrow pits. Provide mitigation measures to limit or avoid the impact of the construction of the project on heritage resources (if any).

Submit the HIA report to the provincial heritage resources authority, Amafa aKwaZulu-Natali (Amafa), for their assessment and comment.

4. METHODOLOGY

Site inspections were undertaken throughout July 2017. Discussions were held with surrounding communities and residents where possible to ascertain the presence of known heritage resources in and around the proposed borrow pits.

5. HISTORICAL BACKGROUND OF THE STUDY AREA

The timeline of human habitation in Durban goes back to long before the advent of recorded history in the region. It is now established that prior to the arrival of the Nguni people and subsequent European colonialists, the area was populated by the original people of Southern Africa called the Khoi/San. Then, several thousand years later, on Christmas day in 1497, Portuguese explorer Vasco da Gama passed the mouth of Durban Bay and named it Rio de Natal (Christmas River). Over the subsequent years, Rio de Natal came to be a popular stop-off point for explorers and traders, mainly because the bay offered one of the few protected anchorages on the southern coast of Africa.

In 1823, the first European settlement arrived on the vessel the Salisbury under the command of Lieutenant James King with the aim of trading up and down the South African coast. King immediately recognised the importance of the bay and returned to England to try and garner support for an English settlement. Despite his efforts he was unsuccessful, and so he returned to Port Natal as it had come to be called by the Europeans. King befriended King Shaka Zulu who granted him land around the bay. At a meeting in 1835, a town was proclaimed, and named after the Governor of the Cape, Sir Benjamin D'Urban.

Although the settlers maintained cordial relations with the powerful founder of the Zulu nation to their north, matters changed for the worse when his successor Dingane took over. Dingane showed open animosity and aggression, while Shaka instructed his citizens to live in peace with the white settlers.

In 1838 the Voortrekkers arrived already having laid claim to the territory, despite the fact that several columns of wagons had been massacred by the Zulus along the way. Later that year at the battle of Ndongakusuka, a number of British traders lost their lives, along with hundreds of Zulus, and were forced to flee. The British sent a force in 1842 to maintain order in the area, and were promptly besieged by the Voortrekkers. It fell to Dick King and his Zulu servant Ndongeni to ride to the British Garrison in Grahamstown to get help.

In 1844, the British annexed the southern portion of Natal to their already existing Cape Colony. The discovery of gold was a major boost to the port, and the discovery of coal in Dundee resulted in many ships using the port for bunkering. By 1900, the town had a sewerage system, hardened roads and water reticulation. In 1935, Durban was granted city status.

In the years after World War II, the history of Durban was defined largely by the implementation of apartheid, and the struggle for equality that ensued. In 1994 South Africa had its first democratic election and in 1996 Durban was further enlarged to become the Durban Metropolitan Region with the inclusion of large areas both north, south and west of the city. Four years later, a further expansion resulted in the inclusive Durban Unicity.

6. BORROW PIT REPORTS

The borrow pits were divided into those situated in the northern section of the eThekweni Municipality and those located in the southern section of the Municipality. This report relates to those situated in the southern section. The location and results of the site inspection of each of the borrow pits is provided below:

ETH/3:

Borrow pit ETH/3 is situated on Portion 3 of ERF 205 of Farm 0667 Sunny Side Park (Adams Mission). The approximate mid-point of borrow pit ETH/3 is at: 30°02'07.42"S; 30°48'44.87"E. It is situated parallel to the M37 road to Adams Mission and close to the intersection of the M37 road with the R603 Umbumbulu road. The size of the proposed borrow pit is 0.94 hectares.

ETH/3 is a greenfields site located on a hilltop which is surrounded by urban development including residential development.

Results of site inspection:

An inspection of the borrow pit was undertaken on 11 July 2017. Visibility was good as the grass cover had been recently burnt. There were a few pockets of thick bush that were impenetrable.

The area is currently undisturbed. The proposed borrow pit site was inspected on foot and no heritage sites were found. A dead rooster with the remains of candles was found in a damaged termite mound which could be indicative of witchcraft practice taking place on the site. No heritage resources were found on the site during the site inspection. No surface evidence of archaeological sites or artefacts were found during the inspection.



Figure 1: Aerial view of ETH/3



Figure 2: Borrow pit site looking east with residential development in background



Figure 3: Section of borrow pit looking west



Figure 4: Section of borrow pit showing thickets of bush

The site of the borrow pit falls into an area of moderate fossil sensitivity as indicated by the green colour in **Figure 5** below. A moderate sensitivity requires a desktop palaeontological study. It is therefore recommended that a desktop assessment is undertaken of the proposed location of the borrow pit as it is undisturbed and there is a potential that fossils could be found and be impacted by the proposed borrow pit.

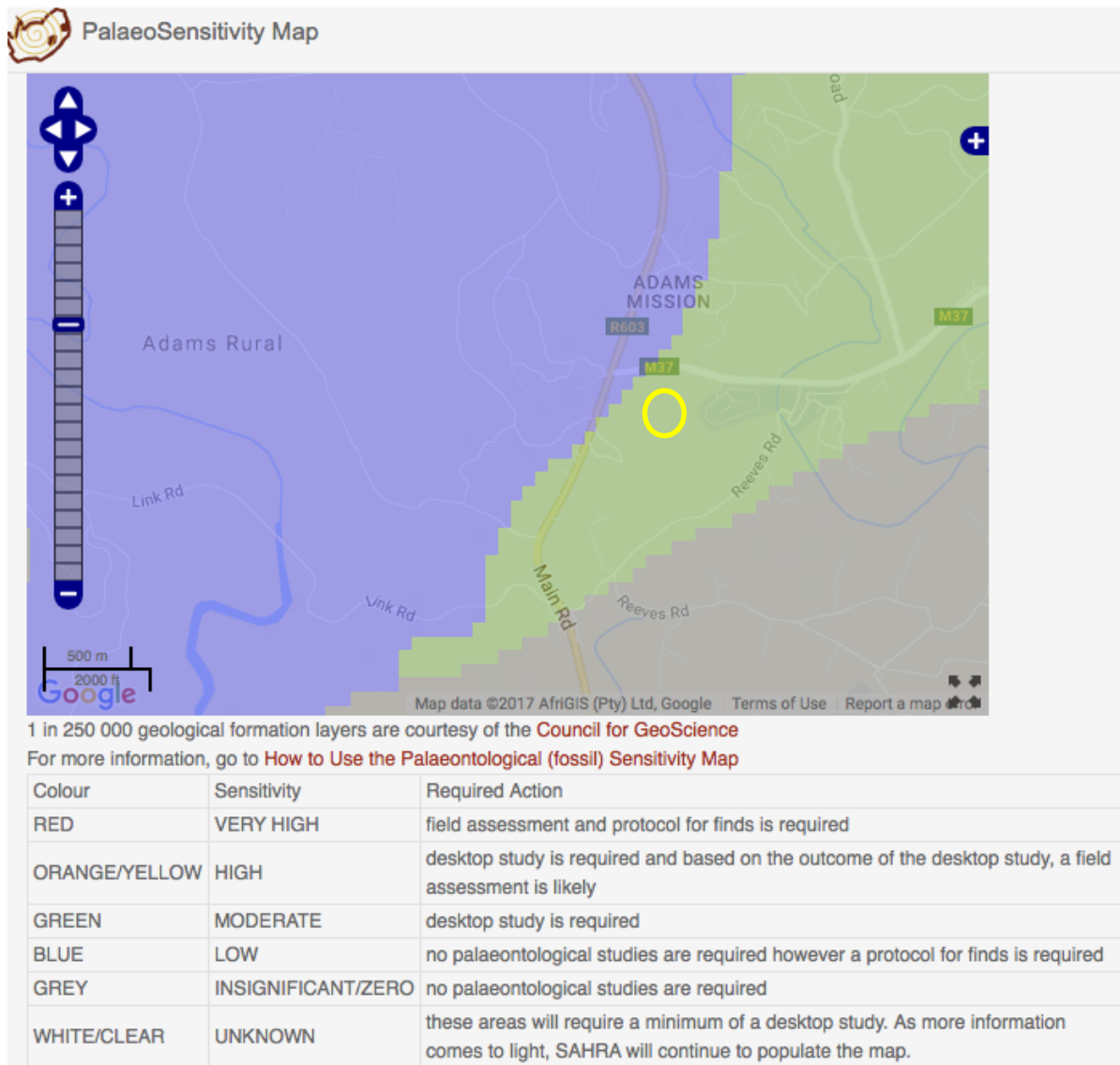


Figure 5: Fossil sensitivity of borrow pit indicated with yellow circle

Recommendation/s and conclusion: ETH/3:

The use of borrow pit ETH/3 can only proceed once the desktop paleontological assessment has been undertaken and the findings of that assessment are taken into consideration. If the desktop assessment indicates that the use of the proposed borrow pit can proceed this must be done with the provision that the mitigation measures provided below and in the desktop assessment are adhered to.

ETH/9:

The proposed borrow pit is situated on Portion 2198 of Farm 4676 Umlazi (Sgubudwini). The approximate mid-point of borrow pit ETH/9 is at: 29°53'09.20"S; 30°45'00.41"E. It is situated in a rural area. The size of the borrow pit is 7.74 hectares.



Figure 6: Aerial view of ETH/9

Results of site inspection:

An inspection of the borrow pit was undertaken on 11 July 2017. Visibility was good although some sections were overgrown with vegetation.

The centre of the proposed borrow pit has been used for farming activities many years ago and is therefore disturbed. The outer areas are undisturbed. The area further down the hill is disturbed by human activity where there are some abandoned and dilapidated houses and fields which fall outside the proposed borrow pit. A discussion was held with some residents who live below the hill. Messrs Simon Mnzemela and Falakhe Cele indicated that there were no graves associated with the abandoned houses.

No heritage resources were found during the site inspection nor was any surface evidence of archaeological sites or artefacts found during the inspection.



Figure 7: View across borrow pit



Figure 8: Abandoned structures situated outside borrow pit

The site of the borrow pit falls into an area of low fossil sensitivity as indicated by the blue colour in **Figure 9** below. A low fossil sensitivity requires no further palaeontological studies but a protocol for chance fossil finds is required which is included in the mitigation measures provided in Chapter 8 of this report.

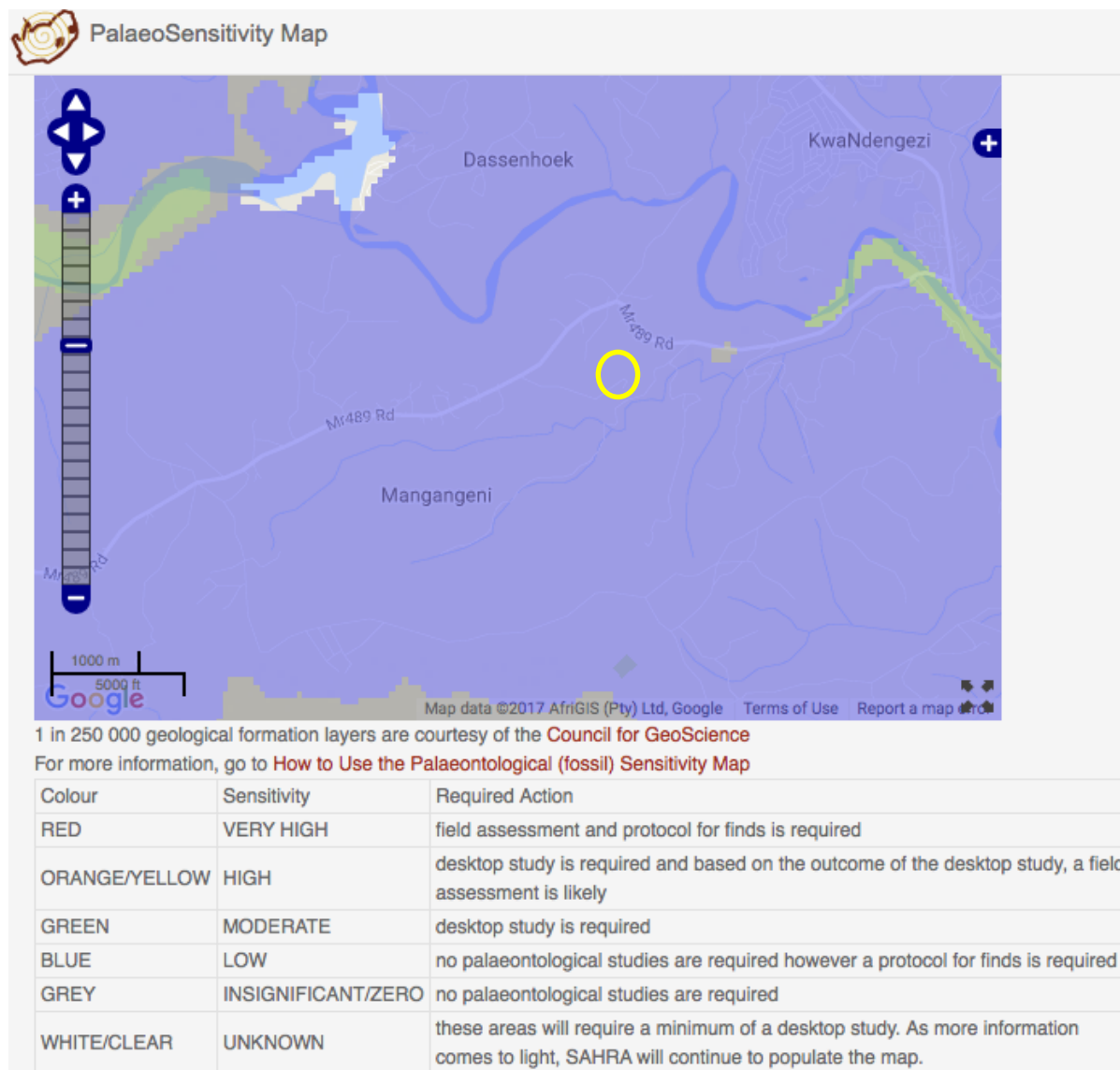


Figure 9: Fossil sensitivity of ETH/9 indicated with yellow circle

Recommendation/s and conclusion: ETH/9:

The use of the proposed borrow pit can proceed as long as the mitigation measures provided in Chapter 8 of this report are implemented where necessary and adhered to.

ETH/32

The borrow pit is located on Portion 2197 of Farm 4676, Umlazi (Zwelibomvu). The approximate mid-point of borrow pit ETH/3 is 29°55'12.48"S; 30°42'31.08"E. The proposed borrow pit is situated off the M30 gravel road and is partially a greenfields site located on a hill in a rural area. The eastern section of the proposed borrow pit has been used as a quarry whereas the rest of the site is unused and undeveloped. The proposed size of the new borrow pit is 5.78 hectares.



Figure 10: Aerial view of ETH/32

Results of site inspection:

An inspection of the borrow pit by foot was undertaken on 11 July 2017. Visibility was good as the grass cover was low having recently been burnt. The topography of the undisturbed area is steep. There were a few pockets of thick bush that were difficult to access.

The eastern section has been used previously to quarry for soil and is therefore highly disturbed.



Figure 11: Quarried area of borrow pit

The area above the disturbed section and to the west is undisturbed by any activity. A drainage line runs to the east of the borrow pit. No heritage resources were found during the site inspection nor was any surface evidence of archaeological sites or artefacts found. The dense stands of bush revealed no sites.



Figure 12: View of grass cover and topography



Figure 13: Dense stand of bush looking in a south-westerly direction

The borrow pit falls into an area of low fossil sensitivity as indicated by the blue colour in **Figure 14** below. A low fossil sensitivity requires no further palaeontological studies but a protocol for

chance fossil finds is required which is included in the mitigation measures provided in Chapter 8 of this report.

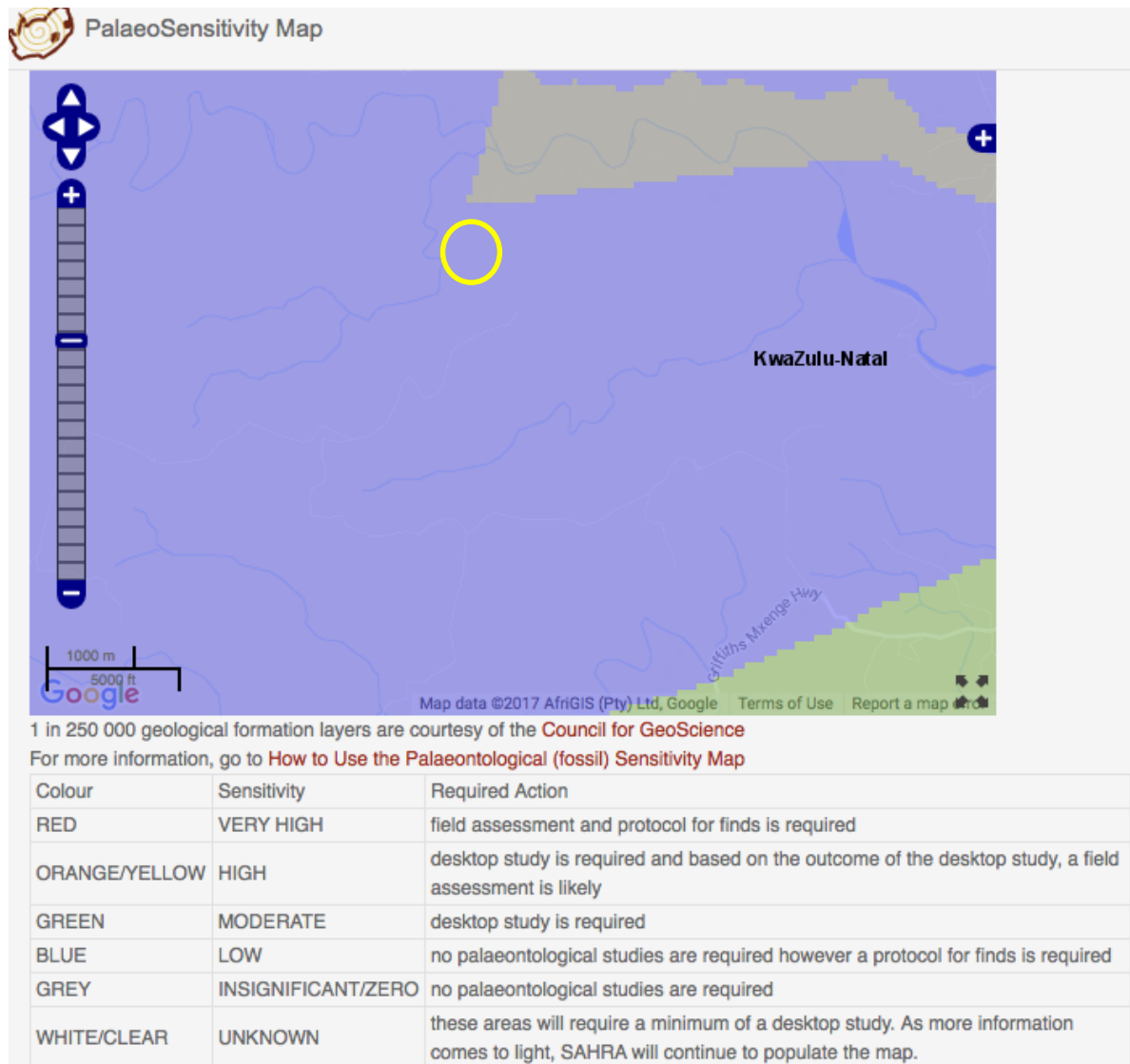


Figure 14: Fossil sensitivity of ETH/32 with approximate position indicated with yellow circle

Recommendation/s and conclusion: ETH/32:

The use of the proposed borrow pit can proceed with the provision that the mitigation measures provided in Chapter 8 of this report are implemented where necessary and adhered to.

ETH/37

This borrow pit is located on Portions 0, 28, 35 and 36 of Farm 8318, Amanzimtoti Mission Reserve (Enkanyisweni Shoji). The approximate mid-point of borrow pit ETH/37 is at: 30°02'51.50"S; 30°48'18.11"E. It is situated approximately 150 m west of the R603 that links Umbumbulu to the N2 highway. The proposed extent of the borrow pit is 1.00 hectare.

ETH/37 is an existing borrow pit that will be re-used. The borrow pit is surrounded by urban development including residential development.



Figure 15: Aerial view of ETH/37

Results of site inspection

An inspection of the borrow pit was undertaken on 11 July 2017. Visibility was good apart from a very few areas where there was dense vegetation.

The area is highly disturbed by previous excavation activities. There is an existing gravel road that runs through the site and residents walk through the site to access the R603. Pools of water were found scattered throughout the site. Thick bush was found on the southern boundary of the site. The site was inspected on foot and no heritage resources, including archaeological material, was found during the site inspection.

The site of the borrow pit falls into an area of moderate fossil sensitivity as indicated by the green colour in **Figure 19** below. A moderate sensitivity requires a desktop palaeontological study. However, due to the highly disturbed nature of the borrow pit, it is highly unlikely that intact fossil finds will be discovered therefore it is recommended that no further studies are required.

Recommendation/s and conclusion: ETH/32:

It is recommended that the use of ETH/32 can proceed and that the mitigation measures provided in Chapter 8 of this report are implemented where necessary and adhered to.



Figure 16: View of road that passes through site and pools of water



Figure 17: Excavated area



Figure 18: Excavated area with dense vegetation

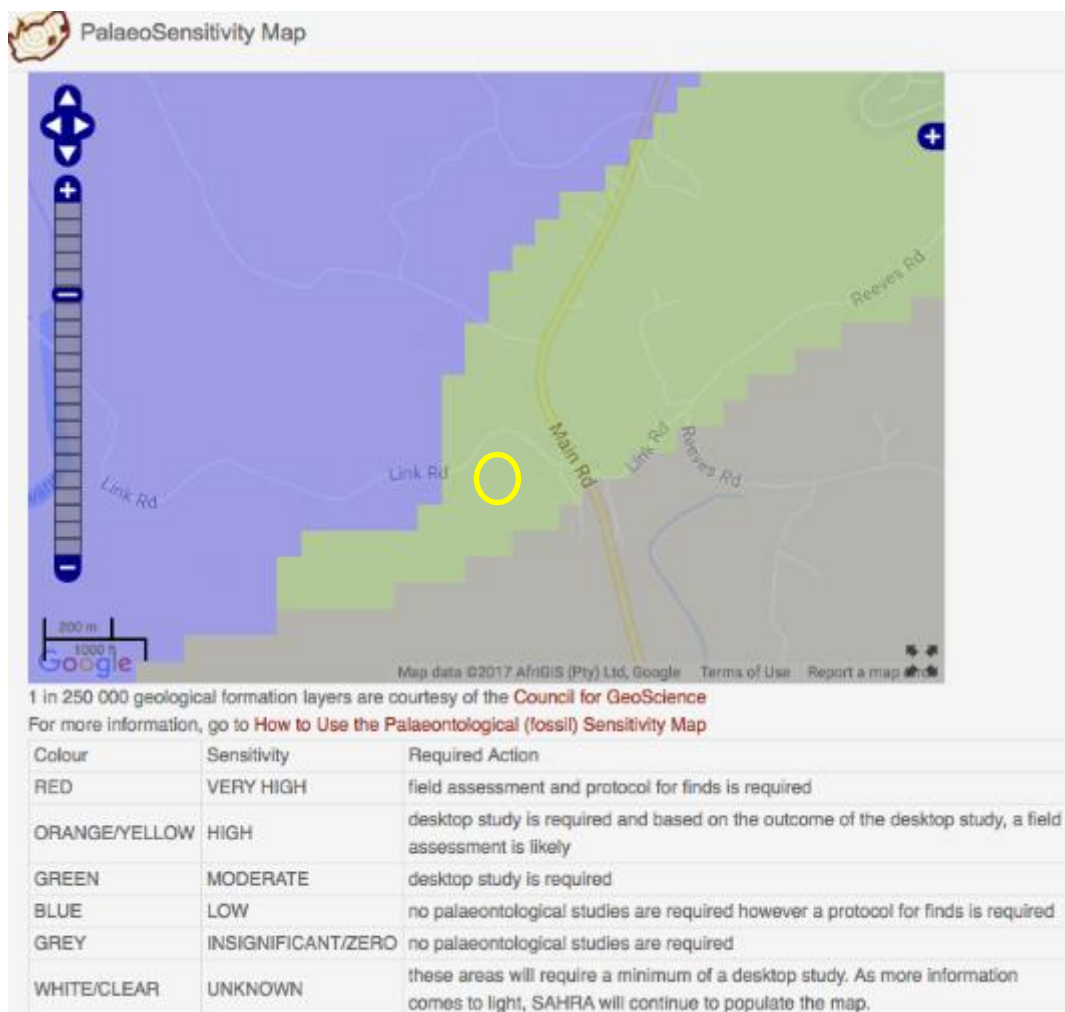


Figure 19: Fossil sensitivity of ETH/37 with yellow circle indicating site

7. LEGAL REQUIREMENTS REGARDING REMOVAL OF GRAVES

It is strongly recommended that the graves identified are not moved. Graves are highly significant to many people and there are many traditional, cultural and personal sensitivities concerning the removal of graves. It is recommended that the graves should be fenced off and left *in situ*.

If it is decided that the graves are to be moved, the following should be noted: graves are well protected by South African heritage legislation. According to section 35 of the KwaZulu-Natal Heritage Act, which refers to general protection of traditional graves, the following is stated:

(1) No grave –

(a) not otherwise protected by this Act; and

(b) not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original position, or otherwise disturbed without the prior written approval of the Amafa Council having been obtained on written application to the Council.

(2) The Council may only issue written approval once the Council is satisfied that –

(a) the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and

(b) the applicant and the relevant communities or individuals have reached agreement regarding the grave.

According to section 3 of the KwaZulu-Natal Heritage Regulations of 2012 (GNR 40 of 2012), which refers to the damage, alteration, exhumation, or removal of graves, an application has to be made to the Amafa Council prior to the above actions taking place. The written application must contain the following information according to subsection (2):

(a) the names and qualifications of the applicant;

(b) the identification of the grave or cemetery to be damaged, altered, exhumed, or removed from its original position;

(c) the purpose of such damage, alteration, exhumation or removal from its original position;

(d) the location of such grave or cemetery;

(e) the municipal area within which the location of such grave or cemetery is situated; and

(f) particulars of bodies or interest groups consulted by the applicant.

In terms of subsection (5) (1) of regulation 3, the Council must ensure that the applicant has instituted a process of consultation with the relevant community or municipality; and in terms of sub-section (6), if the Council decides to grant the approval, notice of approval must be made in the Gazette. It should be noted that the gazetting of the notice is at the cost of the Applicant.

In terms of subsection (13), approval may only be granted -

- (a) where the work to be carried out is to be done under the supervision of a qualified archaeologist or person approved by the Council;
- (b) with due respect for any human remains and the customs and beliefs of any person or community concerned with such grave or burial ground; and
- (c) after arrangements have been made for the re-interment, if necessary, of any human remains and the re-interment or curation of any other contents of such grave or burial ground, to the satisfaction of the Council and the community involved.

8. MITIGATION MEASURES

- For any chance finds, all work will cease in the area affected and the Contractor will immediately inform the Project Manager/Contractor. A registered heritage specialist must be called to site to inspect the finding/s. The relevant heritage resource agency (Amafa) 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 Amafa if heritage resources are to be removed, destroyed or altered.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- Should any remains be found on site that could potentially be human remains, the South African Police Service as well as Amafa must be contacted. No SAPS official may remove remains (recent or not) until the correct permit/s have been obtained.
- If there are chance finds of fossils during construction, a palaeontologist must be called to the site in order to assess the fossils and rescue them if necessary (with an Amafa permit). The fossils must then be housed in a suitable, recognized institute

9. REFERENCES

eThekweni Municipality 2011. *Introduction to History of Durban* (http://www.durban.gov.za/Discover_Durban/History_Communities/Durban_History/Pages/Introduction_to_the_History_of_Durban.aspx)

I, **Jean Beater**, declare that –

General declaration:

- I will comply with the requirements for Specialists as stipulated in Regulation 13 of the EIA Regulations, 2014 (as amended in 2017);
- I act as the independent specialist in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware that a person is guilty of an offence in terms of Regulation 48 (1) of the EIA Regulations, 2014 (as amended in 2017), if that person provides incorrect or misleading information. A person who is convicted of an offence in terms of sub-regulation 48(1) (a)-(e) is liable to the penalties as contemplated in section 49B(1) of the National Environmental Management Act, 1998 (Act 107 of 1998)

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014;

Signature of the Specialist:



Name of company:

JLB Consulting

Date: