

**PROPOSED MAHLUBI HARD ROCK QUARRY,
UMUZIWABANTU & UMZIMKHULU LOCAL
MUNICIPALITIES, KWAZULU-NATAL**

Phase 1 Heritage Impact Assessment

23 August 2021

**FOR: ENVIROPRO
Dustin Bell**

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EXECUTIVE SUMMARY

The applicant, SSR Security T/A Mahlubi Transport and Plant Hire proposes to mine hard rock from land located within the uMuziwabantu and uMzimkhulu Local Municipalities which form part of the Ugu and Harry Gwala District Municipalities respectively.

The proposed quarry is 5 hectares (50000 m²) in size therefore it triggers section 41 (1) (c)(i) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018), the relevant sub-section of which refers to any development or other activity which will change the character of a site- (i) exceeding 5000 m².

The quarry is located mainly on a portion of Erven 416 Farm Rietvlei No. 173ES and on a small section of Remainder of Farm Frontier No. 14111ES. The centre point of the quarry is 30°30'41.26" S 29°47'06.62" E and it is situated south of the R56 road and approximately 12 km north west of the town of Harding. An additional 50m around the quarry was inspected. There is an existing gravel road to the quarry from the R56 road and an existing timber yard located very close to the proposed quarry site.

A site inspection of the quarry took place on 11 August 2021. The area was inspected on foot and visibility was good.

The wider project area has been used previously for quarrying purposes and a third area in the eastern area of Mahlubi quarry has also been mined in the past and filled with over-burden. This third area is visible on the 2003 Google Earth image included in the main body of this report. The project area for the proposed Mahlubi quarry is therefore very disturbed and there are several existing roads through the area adding to this disturbance. Commercial plantations of gum trees are located to the west of the proposed quarry.

During the inspection, the specialist spoke to Mr. Sibonelo Ndlovu who works in the area. He said that to his knowledge there are no graves in the quarry area. The specialist also spoke to Mr. Mark Gallagher owner of the timber yard and of Farm Frontier on which a small part of the proposed quarry will be situated. He too was unaware of heritage sites on the project site. There are a lot of stands of wattle trees on the site. A weigh station is located on the north-western boundary of the quarry. It is used by the timber yard to weigh trucks delivering and leaving the yard. At the weigh station the specialist spoke to Mr. Eric Mdinga who works at the timber yard. He said that the graves he knew about were located over 2km north-east of the quarry and that there were graves across the R56 road in the Machunwini community.

The specialist went to the home of iNkosi Bheki Duze who is the iNkosi of the area where the quarry is proposed. He stated that the area proposed for the quarry is suitable as there are no graves in the area. Part of the area also falls within the ambit of iNkosi Mchunu. He was not at home when the specialist went to speak to him so the specialist spoke to him telephonically. He confirmed what iNkosi Duze had told the specialist. The Sandile Traditional Council, on which iNkosi Duze and iNkosi Mchunu serve, have also given the Applicant consent to quarry in the proposed area.

The fossil sensitivity map of the South Africa indicates that the proposed quarry falls into a zone of insignificant fossil sensitivity. No palaeontological studies are therefore required.

No heritage sites were found during the site inspection. The area is highly disturbed by previous quarrying of the immediate and surrounding area. Several roads contribute to the disturbed nature of the project site. The specialist spoke to several people regarding possible heritage sites in the project area and all of them including the iNkosi who are responsible for the project area stated that there were no graves and other heritage sites in the area.

It is therefore recommended that the Mahlubi quarry proceed from a heritage perspective as long as the mitigation measures provided below are adhered to.

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I, Jean 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.

SPECIALIST DETAILS

Name	Qualification	Professional Registration
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, SSR Security T/A Mahlubi Transport and Plant Hire proposes to mine hard rock from land located within the uMuziwabantu and uMzimkhulu Local Municipalities which form part of the Ugu and Harry Gwala District Municipalities respectively. The mining area is 5 hectares in extent. In terms of the mining method, overburden will be cleared using an excavator and soft material will be cut back. Work benches will be cut into the mining area and material removed by controlled blasts. Loosened material will be then removed to a stockpile area using excavators. Mined material may be screened on site. Slopes will be cut to a 1:3 gradient and will be shaped to follow the surrounding topography (Enviropro 2021:1).

The Phase I Heritage Impact Assessment (HIA) was undertaken to assess whether the proposed quarry will impact heritage resources.

2. LEGISLATIVE BACKGROUND

The proposed quarry is 5 hectares (50000 m²) in size therefore it triggers section 41 (1) (c)(i) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018), the relevant sub-section of which refers to “*any development or other activity which will change the character of a site- (i) exceeding 5000 m²*”.

The quarry 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.

In terms of section 3 of the NHRA, 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) 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).

3. LOCATION

The quarry is located mainly on a portion of Erven 416 Farm Rietvlei No. 173ES and on a small section of Remainder of Farm Frontier No. 14111ES (see **Figure 1**). The centre point of the quarry is 30°30'41.26" S 29°47'06.62" E and it is situated south of the R56 road (**Figure 2**) and approximately 12 km north west of the town of Harding.

Figure 3 indicates the boundary of the quarry and the additional 50m around the quarry that were inspected. There is an existing gravel road to the quarry from the R56 road and a timber yard very close to the proposed quarry site.

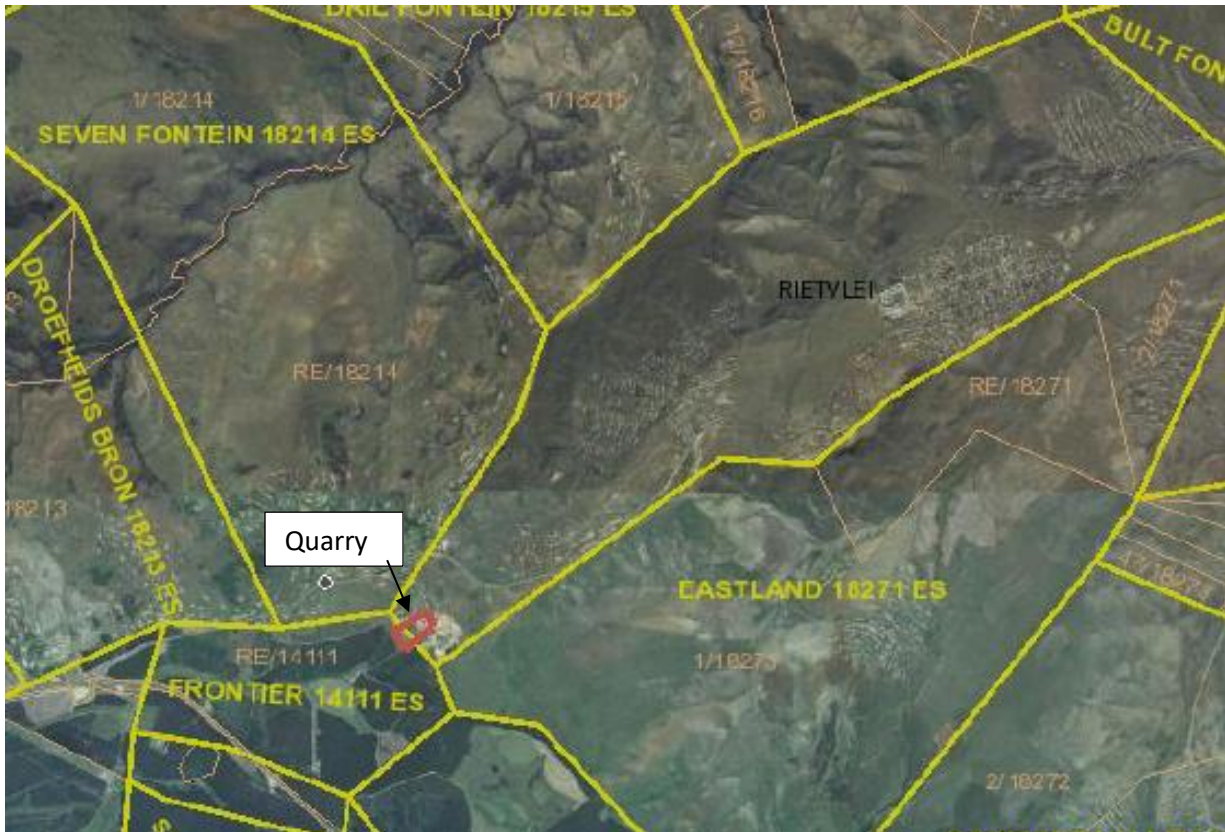


Figure 1: Location of quarry in relation to farms

4. TERMS OF REFERENCE

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

Submit the HIA report to the provincial heritage resources authority, the KwaZulu-Natal Amafa and Research Institute (hereafter referred to as the Institute), for their assessment and comment.



Figure 2: Location of proposed quarry in pink

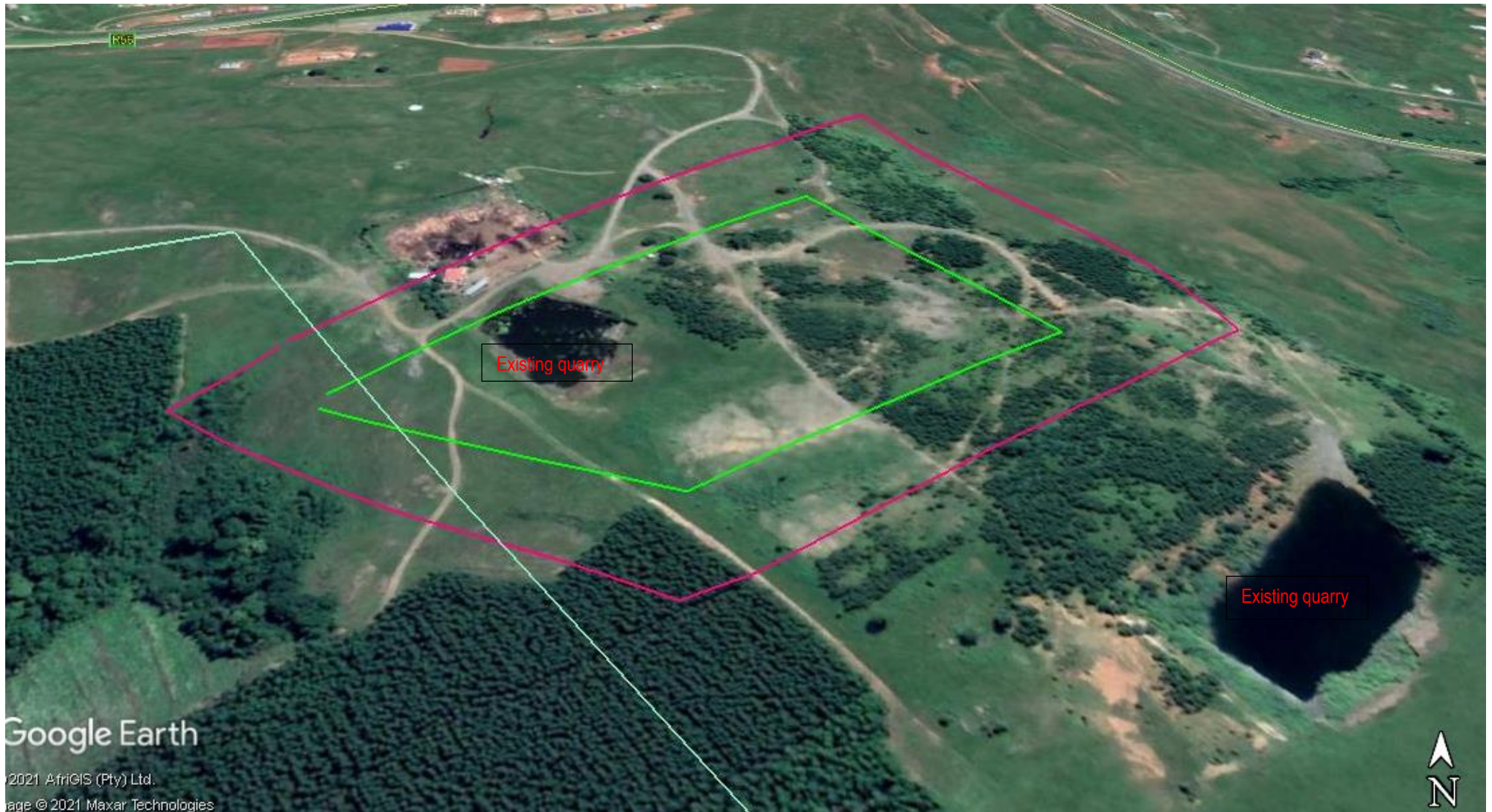


Figure 3: Green outline is of Mahlubi quarry, pink outline additional 50m inspected

5. METHODOLOGY AND CONSTRAINTS

A survey of literature, including other heritage impact assessment 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 of development.

A site inspection of the quarry took place on 11 August 2021. An additional 50 m beyond the boundary of the quarry was inspected as well. The area was inspected on foot and visibility was good.

Historical aerial images and topographic maps of the area were consulted that were retrieved from the Department of Rural Development and Land Reform's CDNGI Geospatial Portal (www.cdngiportal.co.za).

6. HISTORICAL BACKGROUND OF PROJECT AND SURROUNDING AREA

According to Prins (2013:3), the available evidence indicates that the area to the immediate east of Harding contains a wide spectrum of archaeological sites covering different time-periods and cultural traditions. These include Early, Middle and later Stone Age sites, Early Iron Age (EIA) sites, Later Iron Age sites, and some historical sites.

Stone Age sites of all the main periods and cultural traditions occur along the coastal cordon in the immediate vicinity of Port Shepstone closer towards the coast. Most of these occur in open air contexts. The occurrence of Early Stone Age tools in the near vicinity of permanent water resources is typical of this tradition. Later Iron Age sites also occur in the greater Port Shepstone area to the east of Harding. These were agro-pastoralists who arrived in southern Africa a 1000 years ago via East Africa. Later Iron Age communities in KwaZulu-Natal were the direct ancestors of the Zulu-speaking people. Many African groups moved through the Harding area due to the period of turmoil as caused by the expansionistic policies of King Shaka Zulu in the 1820's (Prins 2013:4-5).

Harding was founded as a military outpost in 1877 and proclaimed a township in 1911. The town was named after Sir Walter Harding (c 1812-1874) who in 1858 became the first Chief Justice in Natal (Raper undated:198).

Stafford's Post is located approximately 2km south-west of the quarry. Stafford's Post was one of the staging posts for the post cart route from uMzimkhulu to Kokstad. It began as a trading station established in 1866 by Edward Sparrow Stafford (Strachan & Snell 2001:32).

7. RESULT OF SITE INSPECTION

The wider project area has been used previously for quarrying purposes (see **Figure 3** above). A third area in the eastern area of Mahlubi quarry has also been mined in the past and the quarry filled with over-burden (pers. comm with Mark Gallagher 11/08/2021). This third area is visible on the 2003 Google Earth image below. The project area or site for the proposed Mahlubi quarry is therefore very disturbed and there are several existing roads through the area adding to this disturbance. Commercial plantations of gum trees are located to the west of the proposed quarry.



Figure 4: Third quarry area

A 1955 aerial image of the quarry (**Figure 5**) shows the existing gravel road to the area where the first quarry has begun operations. There are no residences in the area of the quarry. Residences are visible north of the R56 road.

During the inspection, the specialist spoke to Mr. Sibonelo Ndlovu who works in the area. He said that to his knowledge there are no graves in the quarry area. The specialist also spoke to Mr. Mark Gallagher owner of the timber yard and of Farm Frontier on which a small part of the proposed quarry will be situated. He too was unaware of heritage sites on the project site.

The proposed quarry area and additional area was inspected on foot. There are a lot of stands of wattle trees on the site and the area is disturbed as can be seen in the photographs below.



Figure 5: Larger quarry area as indicated by orange outline



Figure 6: Stand of wattles



Figure 7: Looking north across quarry



Figure 8: Looking in a south-westerly direction



Figure 9: View from western boundary of quarry looking south



Figure 10: Existing quarry that falls within the Mahlubi quarry boundary

A weigh station is located on the north-western boundary of the quarry. It is used by the timber yard to weigh trucks delivering and leaving the yard. It was built in 1989 (pers.comm Mark Gallagher 11/08/2021).



Figure 11: Weigh station

At the weigh station the specialist spoke to Mr. Eric Mdinga who works at the timber yard. He said that the graves he knew about were located over 2km north-east of the quarry and that there were graves across the R56 road in the Machunwini community.



Figure 12: View of Mahlubi quarry

The specialist went to the home of iNkosi Bheki Duze who is the iNkosi of the area where the quarry is proposed. He stated that the area proposed for the quarry is suitable as there are no graves in the area. Part of the area also falls within the ambit of iNkosi Mchunu. He was not at home when the specialist went to speak to him so the specialist spoke to him telephonically on 19 August 2021. He confirmed what iNkosi Duze had told the specialist. The Sandile Traditional Council, on which iNkosi Duze and iNkosi Mchunu serve, have given the Applicant consent to quarry in the proposed area.

The fossil sensitivity map of the South Africa indicates that the proposed quarry falls into a zone of insignificant fossil sensitivity as indicated by the grey colour in **Figure 13** below. No palaeontological studies are therefore required.

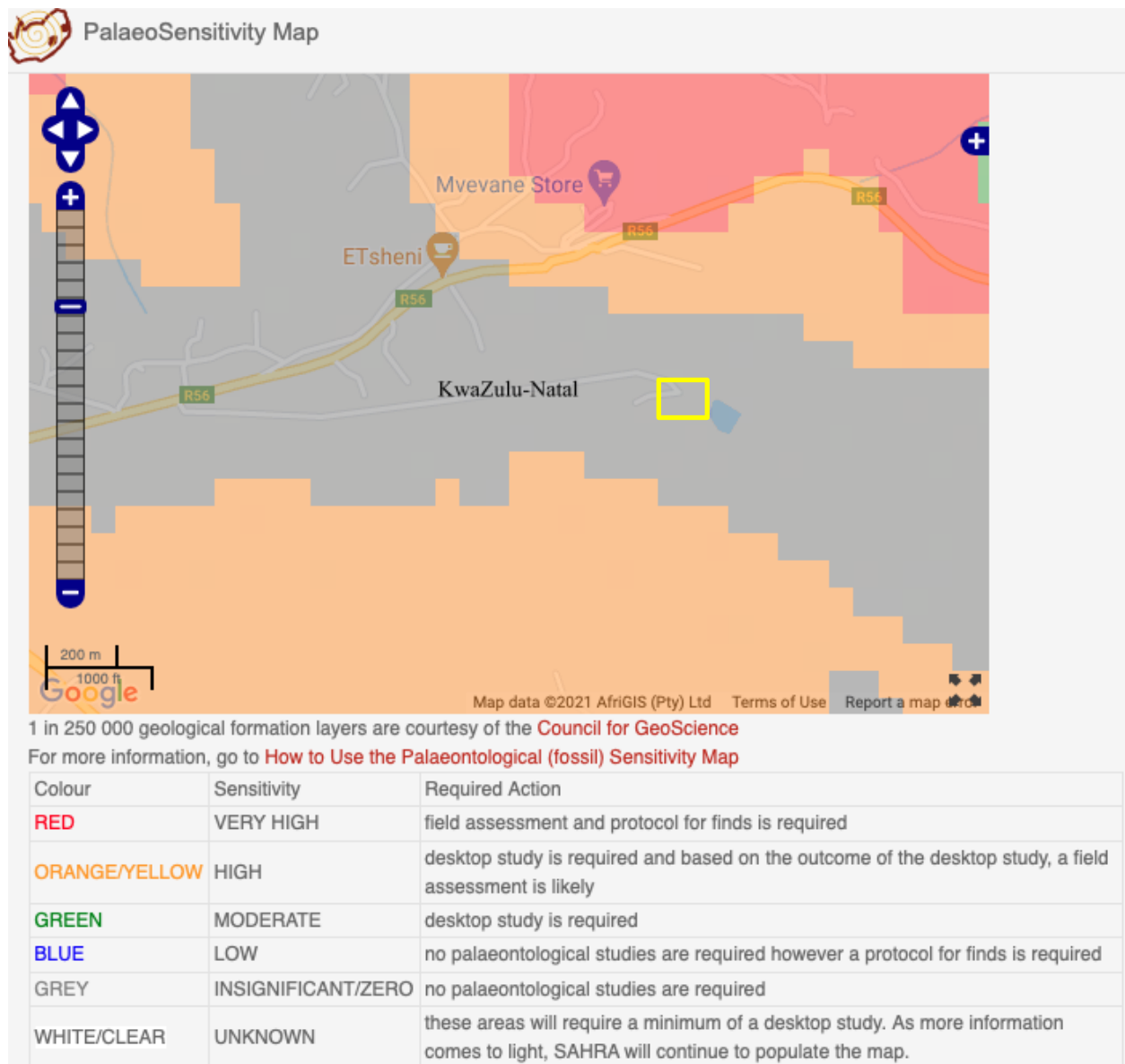


Figure 13: Fossil sensitivity of project area indicated with yellow outlined area

7.1 SOCIO-ECONOMIC IMPACTS OF DEVELOPMENT

The socio-economic impacts of the proposed Mahlubi quarry include:

- The quarry may result in a number of local employment activities for the life-span of the quarry.
- The quarry will provide hard rock for the construction of roads and buildings within KwaZulu-Natal and possibly in other provinces.

8. DISCUSSION AND CONCLUSION

No heritage sites were found during the site inspection. The area is highly disturbed by previous mining / quarrying of the immediate and surrounding area. Several roads contribute to the disturbed nature of the project site. The specialist spoke to several people regarding possible heritage sites in the project area and all of them including the iNkosis who are responsible for the project area stated that there were no graves and other heritage sites in the area.

It is therefore recommended that the Mahlubi quarry proceed from a heritage perspective as long as the mitigation measures provided below are adhered to.

9. MITIGATION MEASURES

- For any chance heritage finds, all work must cease in the area affected and the Applicant / Contractor must be immediately informed. A registered heritage specialist must be called to site to inspect the finding/s. The relevant 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.
- 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 as well as the Institute must be contacted. No SAPS official may remove remains (recent or not) until the correct permit/s have been obtained.

10. REFERENCES

Department of Rural Development and Land Reform's CDNGI Geospatial Portal (www.cdngiportal.co.za)

Enviropro. 2021. *Notice of application for a mining permit, environmental authorisation and water use authorisation. Mahlubi hard rock quarry. 10741MP.*

Prins, F. 2017. Phase One Heritage Impact Assessment of the proposed Harding water supply scheme, Umuziwabantu and Ray Nkonyeni Local Municipalities, KwaZulu-Natal

Raper, P.E. Undated. *Dictionary of Southern African Place Names*. Pretoria: HSRC

Strachan, K. & Snell, M. Post Carts in Southern Natal and East Griqualand in *Natalia 31 (2001)* (<http://natalia.org.za/Files/31/Natalia%20v31%20article%20p30-33%20C.pdf>). Retrieved 22/08/2021