

**SAND MINING PERMIT, PARK RYNIE,
KWAZULU-NATAL PROVINCE**

Phase 1 Heritage Impact Assessment

21 September 2020

**FOR: Greenbelt Projects
Steven Whitaker**

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EXECUTIVE SUMMARY

The applicant, C.F Landers and Son (Pty) Ltd, has applied for a sand mining permit for an area situated alongside the R102 road in Park Rynie along KwaZulu-Natal's south coast.

The size of the sand mining site is approximately 5 hectares (50000m²) hence the development triggers section 41 (1) (c)(i) of the KwaZulu-Natal Amafa and Research Institute Act, 2018, which lists developments or activities that require an HIA. The relevant section refers to any development or other activity which will change the character of site- exceeding 5000 m².

The proposed sand mining site is situated adjacent to the R102 road in the small town of Park Rynie which is located along the KwaZulu-Natal south coast. The N2 highway is situated about 395m west of the site.

An inspection of the project site was undertaken on 12 September 202. The site is located in a plantation of eucalyptus trees which have been on the site since the 1960s. There was a thick layer of undergrowth and debris over much of the site.

The proposed sand mining site is situated just east of the old Scottburgh airport which includes the airstrip and two hangers. The one structure is made from cinder blocks and corrugated iron sheeting and the other structure is made from corrugated iron sheeting. The airport is dated around 1959 which means that the structures could be 60 years or older hence protected by section 37 (1)(a) of the KwaZulu-Natal Amafa and Research Institute Act, 2018. It is, however, the understanding that the sand mining will not impact on the structures.

Areas with less debris and undergrowth were inspected as well as some densely overgrown areas where access was possible. The small watercourse that runs through the project site was also inspected. No heritage sites were found during the site inspection.

The South African fossil sensitivity map indicates that the project area falls into an area of high fossil sensitivity. An area of high fossil sensitivity requires that a desktop palaeontological study be undertaken. The desktop study found that proposed site lies on the aeolianite and red and white sands and basal conglomerate of the Umkwelane Formation, Maputaland Group. The surface has loose sands and dense vegetation of eucalyptus trees so the surface will not preserve any fossils. There is a small chance that marine molluscs and shark teeth from the Umkwelane Formation (Maputaland Group) of middle Miocene to Pliocene age might be disturbed from below ground sediments. Therefore, it is recommended that a Fossil Chance Find Protocol should be included in the EMP.

In light of all the studies undertaken, there is no objection from a heritage perspective for the sand mining permit to be issued.

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APPENDIX 1

Desktop palaeontological study

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.

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, C.F Landers and Son (Pty) Ltd, has applied for a sand mining permit for an area situated alongside the R102 road in Park Rynie which is located along KwaZulu-Natal's south coast. The mined sand will be used as plaster sand.

This is the Phase 1 Heritage Impact Assessment (HIA) report for the sand mining project.

2. LEGISLATIVE BACKGROUND

The area to be developed is approximately 5 hectares (50000 m²) 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 require an HIA. The relevant section refers to: "*any development or other activity which will change the character of site- (i) exceeding 5000 m²*".

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.

In terms of section 3 of the National Heritage Resources Act 1999 (Act No 25 of 199), 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 proposed sand mining site is situated adjacent to the R102 road in the small town of Park Rynie (see **Figure 1**) which is situated along the KwaZulu-Natal south coast. The N2 highway is situated about 395m west of the site. The approximate centre point of the area to be mined is 30°18'23.21" S 30°44'15.55" E.

4. TERMS OF REFERENCE

Undertake a Phase 1 HIA in order to determine the possible existence of heritage resources, as listed above, that could be impacted by the proposed sand mining. 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, namely the KwaZulu-Natal Amafa and Research Institute (hereafter referred to as the Institute), for their consideration and comment.



Figure 1: Sand mining area outlined in red

5. METHODOLOGY

A survey of literature, including other heritage impact assessment reports completed for the larger 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.

An inspection of the project site was undertaken on 12 September 202. The site is located in a plantation of eucalyptus trees. The project site and surrounds have been used for forestry purposes since the 1960s (pers. comm with J. Howard 12/09/2020). There was a thick layer of undergrowth and debris over much of the site.

6. HISTORICAL BACKGROUND OF AREA

Lithic (stone) technology in the Middle Stone Age (MSA) of southern Africa is key to reconstructing human daily life, people's interaction with their environment and technological and cultural change through time. There are ongoing discussions about the evolution of technology in the MSA and the causes of lithic variability within and between different assemblages across southern Africa. There are well-known MSA sites such as Blombos Cave, Klasies River, Diepkloof and Sibudu as well as less known sites including the Umbeli Belli site near Scottburgh. It is a small rock shelter situated about 7 km inland from Scottburgh within the Mpambanyoni river valley. This site (and surrounds, including the project site), are located within an environment that supplied the prehistoric hunter gatherers with many key resources including water, food, lithic raw material, and protection against rain, sun and wind. Also, the close proximity to the ocean as well as the resources of the valley likely attracted people to the shelter and surrounding area (Bader, *et al* 2016: 608-622). It is likely that the project area was crossed and possibly used by hunter gatherers because of its close proximity to the coast as well as the water supplied by the watercourse running through the project area.

The family owning the property on which the sand mining is proposed come from Byrne settler stock. Joseph Landers and family arrived at the settlement of D'Urban on the ship Henrietta on 4 July 1850 (Hocking 1992:19). He initially settled in the Byrne Valley but then moved to the Scottburgh/Park Rynie area in 1858 where he settled on a piece of land, he called Renishaw located north of the Mpambanyoni River where he farmed with sugar cane. In 1895, Landers sold Renishaw to Samuel Crookes (of Crookes Brothers) and eventually moved to the property called

Monte Video located south of the Mpambanyoni River (Hocking 1992:83). The site for the sand mining is situated east of the original house on Monte Video.

An old undated map (3030BC) of the area shows the old R102 road, the project site and brickworks west of the site as well as a racecourse to the south of the project site, the golf course to the north of the project site and the beginnings of the settlement of Park Rynie.

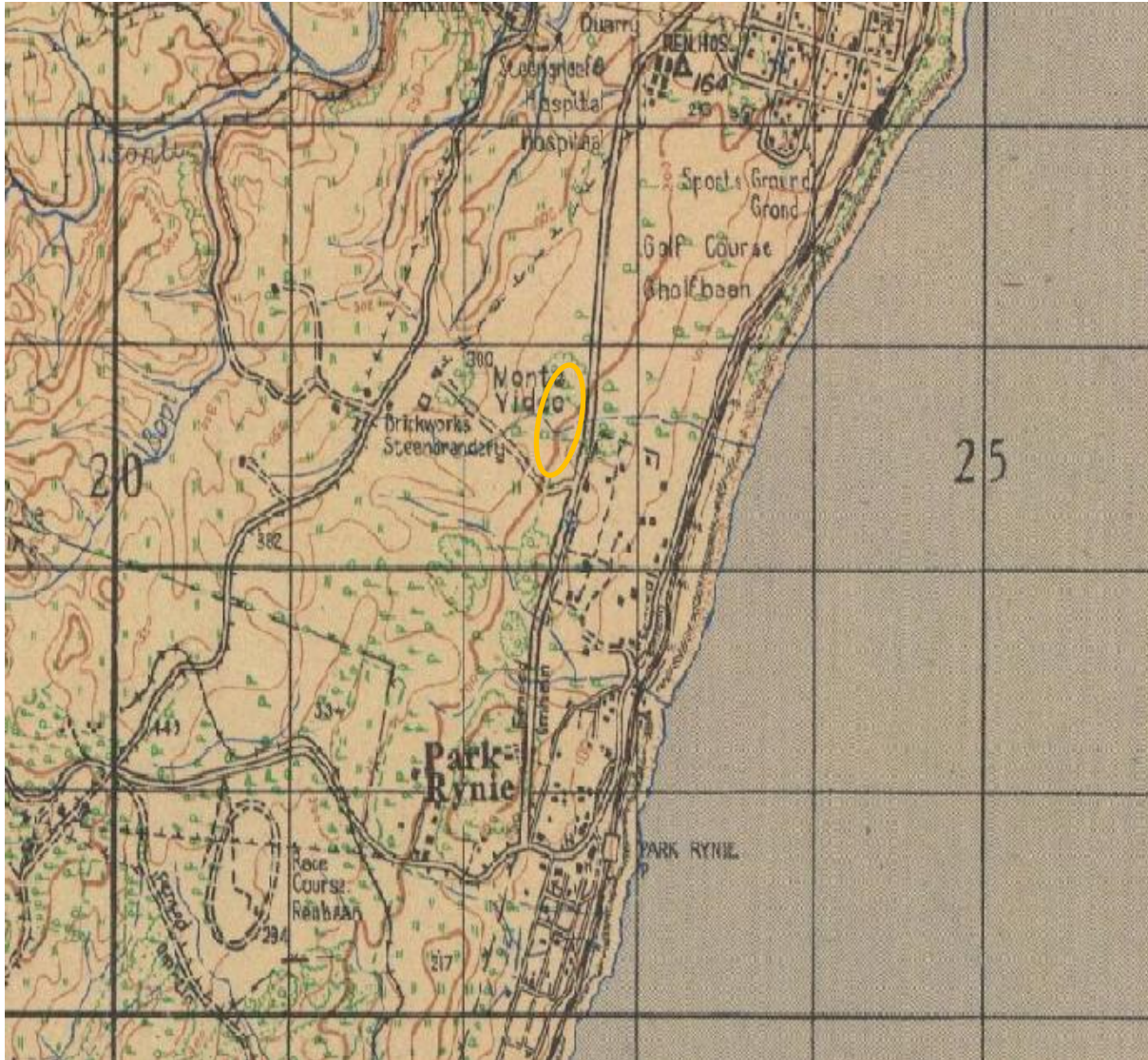


Figure 2: Old map with approximate location of project site outlined in yellow

In 1857, the land on which the town of Park Rynie developed was acquired by the firm of Norsworthy & Co. A partner in the firm was a Mr. Hoffman whose wife, Catherine Renetta, was nicknamed Rynie and consequently the settlement was named after her. During World War 1, a whaling station was created at Park Rynie and a breakwater and land ramp were built (Bulpin1986:422).

7. RESULT OF SITE INSPECTION

The site was inspected on foot. There is a dense layer of scrub and forest debris across much of the site, however, there are roads going through the site that made access easier and some open areas that provided more visibility.

The proposed sand mining site is situated just east of the Scottburgh airport which includes the airstrip and two hangers. The closest structure is made from cinder blocks and corrugated iron sheeting and the second structure is made from corrugated iron sheeting. An article in the South Coast Herald Mail of 10 December 2014 refers to the airport's 'rich history dating back to 1959'. This means that the structures could be 60 years or older which would mean that they are protected by section 37 (1)(a) of the KwaZulu-Natal Amafa and Research Institute Act, 2018, which states that no structure which is, or which may reasonably be expected to be older than 60 years may be demolished, altered or added to without the prior approval of the Institute. It is the specialist's understanding that these structures will not be impacted by the proposed sand mining activities.



Figure 3: Structures at Scottburgh airport

A number of test pits were found across the project site during the inspection as seen in **Figure 4** below.



Figure 4: Test pit

Areas with less debris and undergrowth were inspected as well as areas densely overgrown where access was possible. The small watercourse that runs through the project site was also inspected. No heritage sites were found during the site inspection.



Figure 5: Stands of eucalyptus trees



Figure 6: Open areas



Figure 7: Dense undergrowth and debris



Figure 8: Access road through plantation

An area within the project site that is located closer to the R102 is being used as a living area by a person or persons. There is waste lying around as well as a small area where cooking takes place. No-one living there were encountered during the site inspection.



Figure 9: Habitation of small area within project site

The South African fossil sensitivity map indicates that the project area falls into an area of high fossil sensitivity as indicated by the orange colour on **Figure 10** below. An area of high fossil sensitivity requires that a desktop palaeontological study be undertaken. The desktop study is appended as **Appendix 1** to this report.

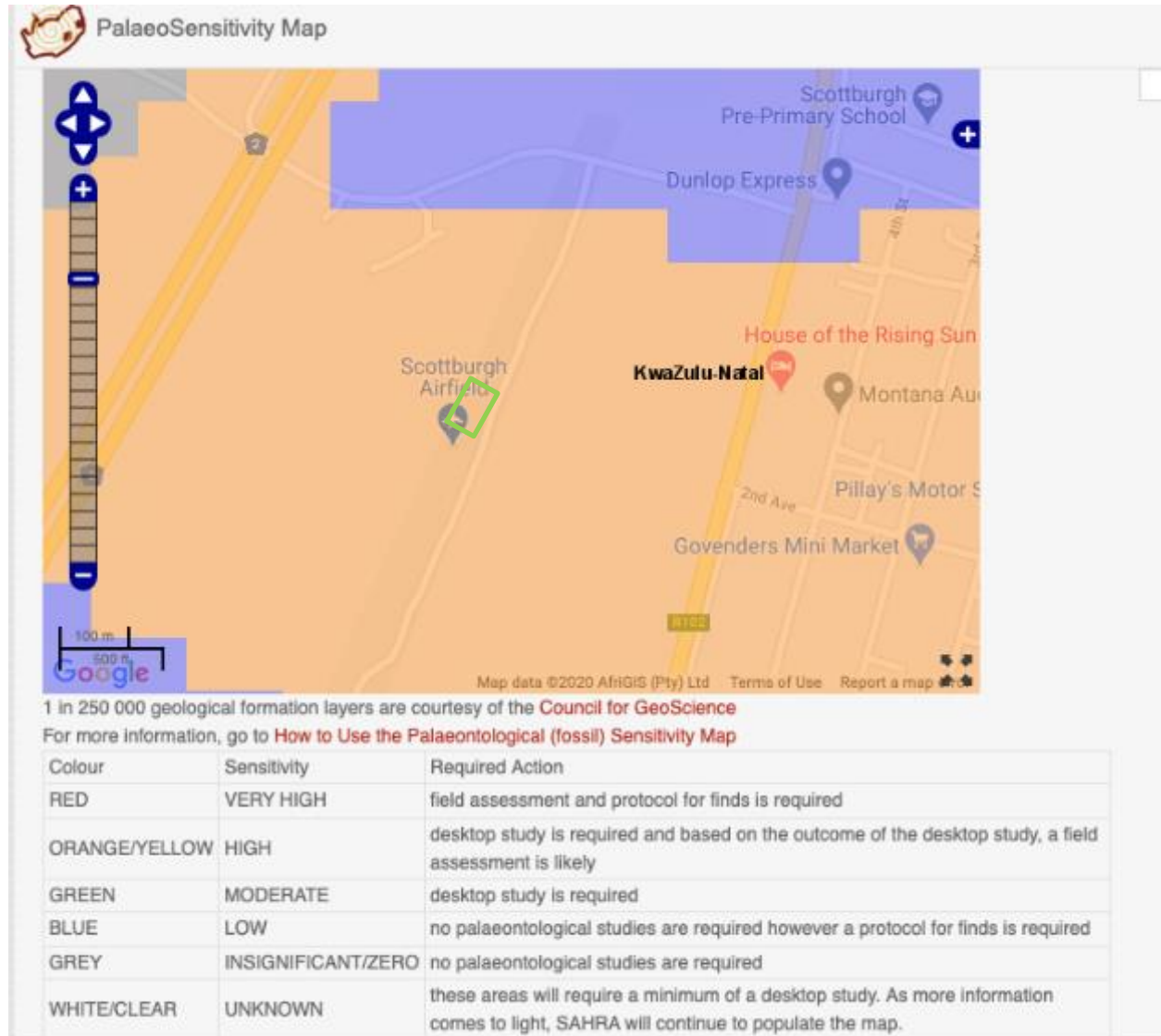


Figure 10: Fossil sensitivity of project area outlined in green

The desktop study (Bamford 2020:2) found that proposed site lies on the aeolianite and red and white sands and basal conglomerate of the Umkwelane Formation (formerly Berea Formation), Maputaland Group. The surface has loose sands and dense vegetation of eucalyptus trees so the surface will not preserve any fossils. There is a small chance that marine molluscs and shark teeth from the Umkwelane Formation (Maputaland Group) of middle Miocene to Pliocene age might be disturbed from below ground sediments. Therefore, it is recommended that a Fossil Chance Find Protocol must be included in the project's Environmental Management Programme

(EMPr). Based on this information it is recommended that no palaeontological site visit is required unless fossils are found when mining operations commence.

8. DISCUSSION AND CONCLUSION

During the site inspection no heritage sites or resources were found. The sand mining site is located in a eucalyptus tree plantation. The site has been used for forestry since the 1960s. The Chance Find Protocol, included in Chapter 8 of the desktop palaeontological study, must be included in the EMPr and the mitigation measures provided below must be implemented where necessary.

In light of the above, there is no objection from a heritage perspective for the sand mining permit to be issued.

9. ADDITIONAL MITIGATION MEASURES

- For any chance heritage finds, including fossil finds 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 relevant heritage resource agency (the Institute) must be informed about the finding/s.
- The specialist will assess the significance of the resource/s 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 the project 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

Bamford, M. 2020. *Palaeontological Impact Assessment for the proposed Park Rynie sand mining application, South Coast, KwaZulu Natal Province. Desktop study (Phase 1).*

Bulpin, T.V. 1986. *Discovering Southern Africa.* Treasury of Travel: Muizenberg

Hocking, A. 1992. Renishaw. *The story of Crookes Brothers.* Rustica Press (Pty) Ltd: Cape Town

South Coast Herald Mail. 2014. *Chocks away.* (<https://southcoastherald.co.za/68048/chocks-away/>). Downloaded 17 September 2020