

**HERITAGE IMPACT ASSESSMENT: PROPOSED GAS TO POWER
FACILITY ON FARM 1238 (ERF 16001), FARM 1237 (ERF 16000), RE
PORTION 2 OF YZERVARKENSRUG 129 AND PORTION 65 (A PORTION
OF PORTION 13) OF YZERVARKENSRUG 127, SALDANHA, WESTERN
CAPE**

(Assessment conducted under Section 38 (8) of the National Heritage Resources Act (No.
25 of 1999) as part of an Environmental Impact Assessment)

Prepared for

ERM Southern Africa (Pty) Ltd

On behalf of

Frontier Power SA (RF) (Pty) Ltd

January 2021

Version 1.3 - Final



ACO Associates cc
Archaeology and Heritage Specialists

Prepared by

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CONTENTS OF THE SPECIALIST REPORT – CHECKLIST

Regulation GNR 326 of 4 December 2014, as amended 7 April 2017, Appendix 6	Section of Report
(a) details of the specialist who prepared the report; and the expertise of that specialist to compile a specialist report including a <i>curriculum vitae</i> ;	Preface pages and Appendices E and F
(b) a declaration that the specialist is independent in a form as may be specified by the competent authority;	Page 4
(c) an indication of the scope of, and the purpose for which, the report was prepared;	Section 3
(cA) an indication of the quality and age of base data used for the specialist report;	Section 7
(cB) a description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change;	Sections 6, 8 and 9
(d) the duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment;	Section 7.3
(e) a description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used;	Section 7
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(g) an identification of any areas to be avoided, including buffers;	N/A
(h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;	N/A
(i) a description of any assumptions made and any uncertainties or gaps in knowledge;	Section 7.4
(j) a description of the findings and potential implications of such findings on the impact of the proposed activity, including identified alternatives on the environment, or activities;	Sections 8 and 10
(k) any mitigation measures for inclusion in the EMP; ;	Section 9

(l) any conditions for inclusion in the environmental authorisation;	Section 9.1.1
(m) any monitoring requirements for inclusion in the EMPr or environmental authorisation;	Section 9.1.1
<p>(n) a reasoned opinion—</p> <p>i. as to whether the proposed activity, activities or portions thereof should be authorised;</p> <p>iA. Regarding the acceptability of the proposed activity or activities; and</p> <p>ii. if the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr or Environmental Authorization, and where applicable, the closure plan;</p>	Section 10
(o) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and	Section 5
(p) any other information requested by the competent authority	N/A
Where a government notice gazetted by the Minister provides for any protocol or minimum information requirement to be applied to a specialist report, the requirements as indicated in such notice will apply.	N/A

DETAILS OF THE SPECIALIST

This study has been undertaken by John Gribble BA Hons, MA (ASAPA) ACO Associates CC, archaeologists and heritage consultants.

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CONSULTANT DECLARATION OF INDEPENDENCE

I, John Gribble, declare that – general declaration:

- 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 have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- 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;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist:



Name of company (if applicable): ACO Associates CC

Date: 18 January 2021

EXECUTIVE SUMMARY

The integrated Executive Summary conforms to the specific requirements of Heritage Western Cape.

Site Name: Proposed Gas to Power Facility on Farm 1238 (Erf 16001), Farm 1237 (Erf 16000), Remainder of Portion 2 of Farm Yzervarkensrug 129, and Portion 65 (a Portion of Portion 13) of Yzervarkensrug 127, Saldanha, Western Cape.

Location: Logical centre point: -32.994457°S; 18.006743°E

ACO Associates cc was appointed by ERM Southern Africa (Pty) Ltd, on behalf of Frontier Power SA (RF)(Pty) Ltd, to carry out a heritage impact assessment for the construction of a Gas to Power Facility on Farm 1238, Farm 1237 (Erf 16000), Remainder of Portion 2 of Farm Yzervarkensrug 129 and Portion 65 (a Portion of Portion 13) of Yzervarkensrug 127, outside Saldanha Bay in the Western Cape.

Frontier Power wishes to construct and operate a circa 315 MW Gas to Power Facility in the vicinity of Saldanha Bay in the Western Cape Province. The project site falls within the Saldanha Bay Industrial Development Zone, on properties zoned for industrial use. The Facility will have a total operational footprint of approximately 9.5 ha and will consist of up to 24 gas engines housed in up to four powerhouses, exhaust stacks, LPG storage tank/s and admin buildings, and ancillary infrastructure.

The HIA was requested by Heritage Western Cape, the competent heritage authority in the Western Cape in its response, dated 30 November 2020, to a Notice of Intent to Develop (HWC Case No. 20111809SB1120E) with HWC stipulating that the HIA must specifically address potential impacts on palaeontological heritage resources.

The proposed development site is located approximately 5.5 km east of the town of Saldanha Bay, and less than 1 km from the terminus of the Sishen-Saldanha Railway Line at the Saldanha Bay Ore Terminal, at the heart of the Saldanha Bay IDZ.

This assessment included a walkover survey of the proposed development footprint by ACO Associates on 17 November 2020, desktop archaeological and palaeontological impact assessments, and the production of this integrated heritage impact assessment which addresses the impacts of the proposed sand mining on heritage resources. Much of the area surveyed and assessed for this report is situated within the footprint of a historical quarry dug into the northern side of a palaeodune comprised of calcareous aeolianites. The area is thus highly disturbed and transformed land and almost all of the southern half of Farm 1238, as well as the adjacent Farms 1237 and 65/127 have been excavated out to a depth below surface of 8-10 m. Much of the northern half of Farm 1238, although not quarried, appears to have been disturbed by quarrying operations and subject to extensive dumping of discarded rock and sediment from the quarry

Findings: The palaeontological impact assessment indicates that the site is situated on the calcreted Langebaan Formation, beneath a thin cover of Springfontyn Formation Q1 surficial sands. The earthworks will disturb the thin, loose Springfontyn Formation coversands north of the quarried area. The construction earthworks will mainly involve shallow excavation into

the capping calcrete of the Langebaan Formation The foundation platforms will be embedded in or founded on the Langebaan Formation calcrete.

The proposed Facility is situated where marine deposits of the Velddrif Formation are expected at depth but a previous inspection of the lowermost quarry floor prior to the installation of the Sunrise Energy LPG Facility on Farm 1237 did not reveal exposures of shelly marine beds. Therefore, it is not expected that the Velddrif Formation will be affected by the construction earthworks.

The PIA found that without mitigation the significance of the impact of the earthworks associated with the construction of the Facility on the fossil bone content of the Springfontyn Formation Q1 coversands is **low negative** and with mitigation is **low positive**. Without mitigation the significance of the impact of the earthworks on the fossil bone content of the Langebaan Formation is **medium negative**. Notwithstanding a similar medium, but positive significance with mitigation, depending on the scientific significance of the actual finds, the significance of the impact may range from **medium positive** to **high positive**.

The PIA recommends the inclusion of a Fossil Chance Find Protocol in the EMP, to ensure that if fossils are encountered during earthworks, they will be rescued, palaeontologically assessed and a sample collected and retained. Further recommendations are:

- If a significant occurrence of fossil bones or shells is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure and the compilation of the report to Heritage Western Cape and Iziko Museums of South Africa; and
- Exposures of the Langebaan Formation created by the earthworks for the levelling of the site are inspected by a palaeontologist at the stage of their greatest extent, to serve as a final inspection before the insertion of foundations, in order to record the exposures and take samples of the sediments and the ambient fossil content (e.g. land snails, small fossils).

No archaeological sites and materials or graves and cemeteries were identified in the development footprint by this assessment, and no impacts are expected. This finding accords with an assessment by Hart (2014:3) which found that while the broader Saldanha IDZ is one of the most archaeologically assessed and studied areas of the West Coast, it is also one of “the least significant tracts of landscape in the Western Cape in archaeological terms” with archaeological material either absent, or limited to ephemeral scatters of material or isolated artefacts. According to Hart (2014:3) “all studies ... to date on the flatlands/coastal plain to the north of Saldanha Bay report a lack of archaeological sites but high palaeontological sensitivity”.

There are no constraints in the proposed Gas to Power Facility with respect to archaeological sites and materials and graves and cemeteries. Should any human remains be encountered at any stage during the construction or earthworks associated with the project, however, work in the vicinity must cease immediately, the remains must be left *in situ* but made secure, and the project archaeologist and HWC must be notified immediately.

The remains of a number of built structures were noted on Farm 1238 and the adjacent 1239, but these were assessed to be modern, outside the remit of the National Heritage Resources Act and not conservation worthy.

The surroundings of the proposed Gas to Power Facility can be described as a continuing, organically evolving landscape: a previously rural, agricultural landscape that has and continues to evolve, through the establishment of the Saldanha Bay IDZ, into an industrial landscape. The construction of the Gas to Power Facility will add another industrial element into the industrial landscape of the IDZ and continue the well-established trend of landscape evolution in the area to the west of Saldanha Bay.

Conclusion: This assessment has found that the area identified for the Gas to Power Facility is not a sensitive heritage environment and that with the possible exception of palaeontological material, impacts on heritage resources arising from the proposed development are unlikely.

With respect to the cultural landscape, the construction of the Gas to Power Facility will add another industrial element into the industrial landscape of the IDZ and continue the well-established trend of landscape evolution in the area to the west of Saldanha Bay

It is our considered opinion that provided the mitigation measures set out above are implemented, the overall impact of the proposed of the Gas to Power Facility will be of low heritage significance and the proposed activity is acceptable.

Authors

- Heritage Impact Assessment - ACO Associates cc, John Gribble (2020)
- Palaeontological Impact Assessment - Dr John Pether (2020)

GLOSSARY

Archaeology: Remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures.

Cultural landscape: The combined works of people and natural processes as manifested in the form of a landscape

Early Stone Age: The archaeology of the Stone Age between 700 000 and 2 500 000 years ago.

Fossil: Mineralised bones of animals, shellfish, plants and marine animals. A trace fossil is the track or footprint of a fossil animal that is preserved in stone or consolidated sediment.

Heritage: That which is inherited and forms part of the National Estate (Historical places, objects, fossils as defined by the National Heritage Resources Act 25 of 1999.

Holocene: The most recent geological time period which commenced 10 000 years ago.

Hominins: The group consisting of modern humans, extinct human species and all our immediate ancestors (including members of the genera *Homo*, *Australopithecus*, *Paranthropus* and *Ardipithecus*) but excluding all Great Apes and their ancestors.

Late Stone Age: The archaeology of the last 20 000 years associated with fully modern people.

Middle Stone Age: The archaeology of the Stone Age between 20 000-300 000 years ago associated with early modern humans.

National Estate: The collective heritage assets of the Nation.

Palaeontology: Any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace.

Pleistocene: A geological time period (of 3 million – 10 000 years ago).

Quaternary: The geologic time period that encompasses the most recent 2.6 million years. It comprises the Pleistocene (2.6 Ma – 10,000 years ago) and the Holocene (10,000 years ago to the present) and is characterised by a series of global glacial cycles.

SAHRA: South African Heritage Resources Agency – the compliance authority which protects national heritage.

Structure (historic): Any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith. Protected structures are those which are over 60 years old.

ACRONYMS

DEFF	Department of Environment, Forestry & Fisheries
ESA	Early Stone Age
GPS	Global Positioning System
HIA	Heritage Impact Assessment
HWC	Heritage Western Cape
Ka	Thousand years ago
LSA	Late Stone Age
MSA	Middle Stone Age
Ma	Million years ago
NHRA	National Heritage Resources Act
NID	Notice of Intent to Develop
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System

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1 INTRODUCTION

ACO Associates cc (ACO) was appointed by ERM Southern Africa (Pty) Ltd (ERM), on behalf of Frontier Power SA (RF) (Pty) Ltd, to carry out a heritage impact assessment (HIA) for the construction of a Gas to Power Facility on Farm 1238 (Erf 16001), Farm 1237 (Erf 16000), Remainder of Portion 2 of Yzervarkensrug 129 and Portion 65 (a Portion of Portion 13) of Yzervarkensrug 127, outside Saldanha Bay in the Western Cape (Figure 1 and Figure 2)

2 DEVELOPMENT PROPOSAL

Frontier Power wishes to construct and operate a circa 315 MW Gas to Power Facility (the Facility) in the vicinity of Saldanha Bay in the Western Cape Province. The project site falls within the Saldanha Bay Industrial Development Zone (IDZ), on properties zoned for industrial use.

The Facility will be located on an historical quarry site on Farm 1238 (Figure 3) and Portion 65 (a Portion of Portion 13) of Yzervarkensrug No 127, Saldanha Bay, with a LPG pipeline running from the adjacent existing Sunrise Energy LPG Storage Facility, located on Farm 1237, to the power plant. The permanent access road will traverse Farm 1237 and Remainder of Portion 2 of Yzervarkensrug No 129.

The Facility will utilise gas engine technology, with Liquid Petroleum Gas (LPG) as the fuel source. Should Liquid Natural Gas (LNG) become available at Saldanha Bay in the future, the Facility may be converted to run on LNG at that point in time.

The Facility will have a total operational footprint of approximately 9.5 ha and will consist of up to 24 gas engines housed in up to four powerhouses, LPG storage tank/s and LPG vaporisation facilities, admin buildings, control rooms, warehouse and workshop facilities, staff facilities, a facility substation and other ancillary infrastructure (Figure 4).

LPG will be sourced on the open market, arrive by ship and be processed via the existing LPG import and storage facility owned and operated by Sunrise Energy (Pty) Ltd on the site directly adjacent to the Facility (Farm 1237). LPG will be conveyed from the Sunrise Energy storage facility to the Facility via a short pipeline (less than 1000 m in length) (Figure 4).

The Facility will be connected to the Eskom grid by means of a switching station and 132kV overhead powerlines (Interconnection Works) which will be handed over to Eskom once the construction has been completed. The Interconnection Works will be assessed via a separate Environmental Authorisation Application Process and thus will not be evaluated as part of the current application for the Facility.

The site will mainly be accessed from the existing tar road north of the site and will share the Sunrise Energy entrance. A short section of new access road (up to 8m wide and 200m long) will be developed from the shared entrance to the Facility. This section of new access road will traverse the Remainder of portion 2 of Farm Yzervarkensrug No 129 (where the shared entrance is located) and Farm 1237. The secondary access to the site will be at the south of the site, across Portion 65/127 (see Figure 4).



Figure 1: Location of Farms 1238 (blue), 1237, 65/127 and 2/129 (yellow). Saldanha Bay is on the left of the image and Club Mykonos at bottom right. The area surrounding the development site is the Saldanha IDZ with the Sishen-Saldanha railway line and ore terminal directly adjacent to the site (Source: Google Earth).



Figure 2: Immediate environment of Farms 1238, 1237, 65/127 and 2/129. The proposed development footprint on Farm 1238 is highlighted in purple. The Sunrise Energy LPG facility on Farm 1237 is adjacent to the development site on the right of the image. The shared access road is visible on Farm 2/129 (Source: Google Earth)



Figure 3: Development site and footprint superimposed on the 1:50 000 topographical map and with Google Earth satellite image to show the extent of the historical quarry on Farms 1238 and 1237 (Source: Chief Directorate: National Geo-Spatial Information. Website: www.ngi.gov.za; Google Earth).

Given that the site is an old quarry, earthmoving will be required to create a level platform for the development of the Facility. Surplus spoil may be deposited at the adjacent Sunrise Energy storage facility (Farm 1237). Existing services on site (water pipeline, electrical cable and service road) may need to be relocated on the site to accommodate the requisite earthworks.

The Facility is expected to have an operational lifespan of at least 20 years.

3 TERMS OF REFERENCE

ACO Associates was commissioned to produce a HIA as part of the Environmental Impact Assessment (EIA) process for this project, as required by the National Environmental Management Act (No. 107 of 1998), as amended.

The HIA was requested by Heritage Western Cape (HWC), the competent heritage authority in the Western Cape in its response, dated 30 November 2020, to a Notice of Intent to Develop (HWC Case No. 20111809SB1120E) submitted by ACO Associates (Appendix A).

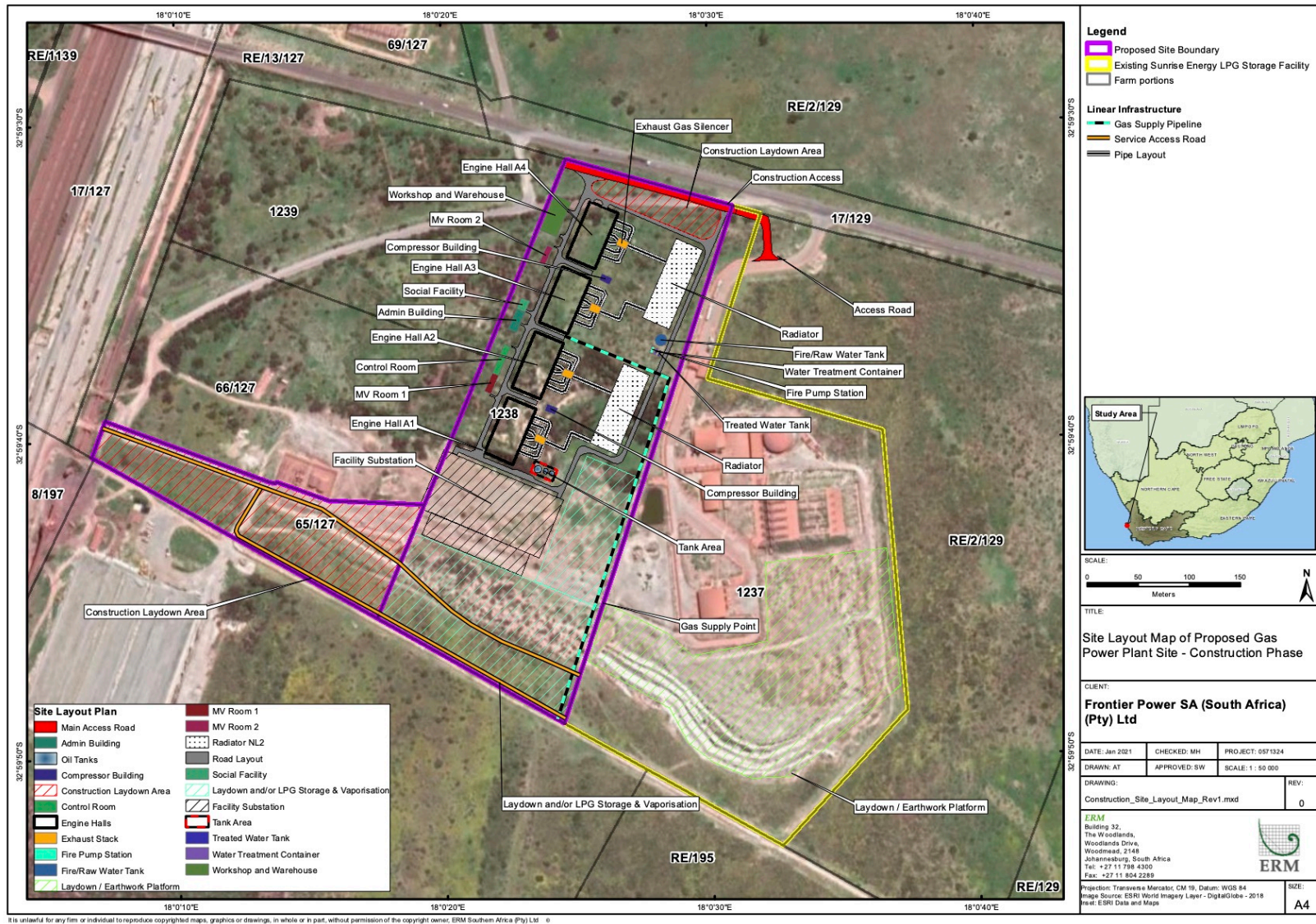


Figure 4: Site construction layout map of the proposed gas to power facility (Source: ERM Southern Africa (Pty) Ltd).

HWC stated that “since there is reason to believe that the proposed sub-construction (sic) of the gas to energy facility on Farm 1238, 1237 and Ptn 65 of Yzervarkensrug Farm 127, Saldahna will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted”.

HWC stipulated that the HIA must specifically address:

- Potential impacts on palaeontological heritage resources.

The aim of this HIA is, therefore, to identify heritage resources (with particular reference to palaeontology) which may be impacted by the proposed construction of the Gas to Energy Facility, assess their significance and provide recommendations to mitigate any impacts.

This document includes the following:

- A desk-top literature review to assess the potential for archaeological, cultural and historic sites within the project footprint and wider area;
- A desk-top palaeontological review to assess the potential for the occurrence of fossil within the project footprint and wider area;
- A heritage field assessment to identify and document (collect GPS coordinates and photograph) heritage resources that may be affected by the project.

The results are integrated in this HIA report along with an assessment of the sensitivity and significance of any identified heritage resources, an evaluation of the potential impacts on these resources of the construction and operation of the Facility, and recommendations for measures to mitigate any negative impacts of the project on them.

This HIA will form part of the EIA and must be submitted for comment to HWC as part of the EIA process.

4 RELEVANT LEGISLATION

4.1 *National Heritage Resources Act (No 25 of 1999)*

The National Heritage Resources Act (NHRA) came into force in 2000 with the establishment of the SAHRA, replacing the National Monuments Act (No. 28 of 1969 as amended) and the National Monuments Council as the national agency responsible for the management of South Africa’s cultural heritage resources.

The NHRA reflects the tripartite (national/provincial/local) nature of public administration under the South African Constitution and makes provision for the devolution of cultural heritage management to the appropriate, competent level of government. In the Western Cape this is Heritage Western Cape.

The NHRA gives legal definition to the range and extent of what are considered to be South Africa’s heritage resources. According to Section 2(xvi) of the Act a heritage resource is “any place or object of cultural significance”. This means that the object or place has aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

In terms of the definitions provided in Section 2 of the NHRA, heritage resources potentially relevant to this assessment are:

- Material remains of human activity which are in a state of disuse and are in or on land [which includes land under water] and which are older than 100 years, including artefacts, human and hominid remains and artificial features;
- Rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years;
- Any fossilised remains or fossil trace of animals or plants which lived in the geological past [other than fossil fuels or fossiliferous rock intended for industrial use] and any site which contains such fossilised remains or trace;
- Any movable property of cultural significance which may be protected in terms of any provisions of the NHRA, including any archaeological artefact or palaeontological specimen; and
- Intangible heritage such as traditional activities, oral histories and places where significant events happened.

As per the definitions provided above, these cultural heritage resources are protected by the NHRA and a permit from HWC is required to destroy, damage, excavate, alter, deface or otherwise disturb any such site or material.

It is also important to be aware that in terms of Section 35(2) of the NHRA, all archaeological objects and palaeontological material is the property of the State and must, where recovered from a site, be lodged with an appropriate museum or other public institution.

Section 38 of the NHRA requires a HIA for certain kinds of development. In relation to this project, the relevant activities are:

- A development which will change the character of a site exceeding 5000 m² in extent (Section 38(1)(c)(i)); and
- The construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length (Section 38(1)(a)).

4.1.1 Grading of Heritage Resources

The South African heritage resources management system is based on grading, which provides for assigning the appropriate level of management responsibility to a heritage resource.

Grading, according to Winter & Oberholzer (2014) is “generally based on the intactness, rarity and representivity of the resource, as well as its role in the larger landscape or cultural context”.

Heritage resources are graded according to criteria specified in Section 3 of the NHRA which suggests the following criteria for assigning heritage significance:

- Importance in the community or pattern in South Africa's history;
- Possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

- Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- Importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- Importance in demonstrating a high degree of creative or technical achievement during a particular period;
- Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- Strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- Significance in relating to the history of slavery in South Africa.

The generally accepted heritage resource grades are shown in Table 1 below.

Table 1: Grading of heritage resources (Source: Baumann & Winter 2005: Box 5).

Grade	Level of significance	Description
1	National	Of high intrinsic, associational and contextual heritage value within a national context, i.e. formally declared or potential Grade 1 heritage resources.
2	Provincial	Of high intrinsic, associational and contextual heritage value within a provincial context, i.e. formally declared or potential Grade 2 heritage resources.
3A	Local	Of high intrinsic, associational and contextual heritage value within a local context, i.e. formally declared or potential Grade 3A heritage resources.
3B	Local	Of moderate to high intrinsic, associational and contextual value within a local context, i.e. potential Grade 3B heritage resources.
3C	Local	Of medium to low intrinsic, associational or contextual heritage value within a national, provincial and local context, i.e. potential Grade 3C heritage resources.

4.2 National Environmental Management Act (No 107 of 1998)

The National Environmental Management Act (NEMA) provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals that are likely to have a negative effect on the environment.

Regulations governing the environmental authorisation process have been promulgated in terms of NEMA and include the EIA Regulations, 2014 as amended (GNR R326/2017) and Listing Notices 1 – 3 (GNR 324, 325 and 327/2017). These regulations were amended in April 2017 by Government Notices 324, 325, 326 and 327.

The proposed Gas to Power Facility triggers a number of activities in the Listing Notices (GNR 327 (Listing Notice 1): Activity 26 & 27; GNR 325 (Listing Notice 2): Activity 2, 4 & 6; and GNR 324 (Listing Notice 3): Activity 2, 4 & 12) and, in terms of GNR 325 therefore, the

project will be subject to an Environmental Impact Assessment process and the developer will be required to obtain a positive Environmental Authorisation from the Department of Environment, Forestry and Fisheries prior to commencement of the proposed activities.

5 PUBLIC PARTICIPATION

In accordance with Annexure 3 of Directions issued by the Minister of DEFF on 5 June 2020, regarding measures to address, prevent and combat the spread of COVID-19 relating to National Environmental Management Permits and Licences, a Public Participation Plan (PPP) must be submitted to DEFF prior to submission of the Application for EA. This PPP must then be agreed to, and approved by, the Competent Authority prior to the application being submitted.

ERM Southern Africa issued a PPP on 9 October 2020 the aim of which was to ensure that Interested and Affected Parties (I&APs) have the chance to raise any concerns with the proposed project, and to see these being addressed by the Applicant, and being integrated in the project reports as required by the applicable EIA Regulations.

According to the PPP, the public participation process on the draft Scoping Report ran from 12 October 2020 to 11 November 2020 (see Appendix B).

In its NID response, HWC required proof that the comments of any registered conservation bodies in the area and the local municipality(s) in relation to the proposed project have been sought and are included in the HIA, where provided and relevant.

Both HWC and SAHRA were included in the I&AP Database for the project, as were the West Coast District and the Saldanha Bay Municipalities. According to the HWC website (<https://www.hwc.org.za/conservation-bodies>) there is no registered conservation body in the vicinity of the Facility.

According to ERM's Comments and Responses Report: Final Scoping Report, the West Coast District Municipality responded on 10 November 2020 indicating that they would "provide comprehensive comments once the Specialist Reports are available" (see Appendix B). None of the other I&APs who commented raised issues related to heritage resources.

6 RECEIVING ENVIRONMENT

The proposed development site is located approximately 5.5 km east of the town of Saldanha Bay, and less than 1 km from the terminus of the Sishen-Saldanha Railway Line at the Saldanha Bay Ore Terminal, at the heart of the Saldanha Bay IDZ.

In keeping with this location, the area surrounding the development site is characterised by heavy industry, a clear sign of which is the red dust from the ore terminal which has stained the development site.

As is clear from Figure 2 to Figure 5, much of the proposed site of the Gas to Power Facility is situated within the footprint of a historical quarry dug into the northern side of a palaeodune comprised of calcareous aeolianites with intercalated calcretes and other palaeosols (Pether 2010).

The area is thus highly disturbed and transformed land and almost all of the southern half of Farm 1238, as well as the adjacent Farms 1237 and 65/127 have been excavated out to a depth below surface of 8-10 m (Plate 1 and Plate 2). Within the quarry footprint, therefore, all of the recent coversands which may have contained archaeological material have been removed, as has a substantial portion of the calcareous and fossiliferous Langebaan Formation aeolianites or dune sandstones.

Much of the northern half of Farm 1238, although not quarried, appears to have been disturbed by quarrying operations and subject to extensive dumping of discarded rock and sediment from the quarry (Plate 3). It is only on the portion of Farm 1238 directly adjacent to the MR559 that the site appears relatively undisturbed (Plate 4).



Plate 1: View northwards across the former quarry on Farms 1238 (centre) and 1237 (right). The Sunrise Energy LPG Storage Facility is visible on Farm 1237 beyond the fence on the right of the image (Photo: J Gribble).



Plate 2: View southwards across the former quarry on Farm 1238. The ore terminal is visible in distance on the right. The partly vegetated quarry face in the centre left of the image indicates the depth of deposit removed by previous quarrying activities (Photo: J Gribble).



Plate 3: Area of Farm 1238 north of quarry pit showing dumps of discarded rock and thick alien vegetation. Sunrise Energy is visible on the right of the image and the MR559 and Saldanha Steel on the left (Photo: J Gribble).



Plate 4: View of the relatively undisturbed northernmost portion of Farm 1238 adjacent to the MR559 (Photo: J Gribble).

7 METHODOLOGY

This study was commissioned as a heritage impact assessment and attempts to assess the impacts of the proposed Facility on heritage resources in the area.

7.1 *Palaeontological Desktop Review*

Dr John Pether was commissioned by ERM Southern Africa to undertake a desktop palaeontological impact assessment (PIA) for the development site (Pether 2020). The PIA is attached below as Appendix C. No field assessment was carried out by Pether as the proposed development site had already been surveyed by him in 2010 as part of the PIA for the development of the Sunrise Energy Facility (see Pether 2010).

The PIA draws on Pether's professional familiarity with the scientific literature pertaining to the geology and palaeontology of the coastal plains, together with his own observations on this and other sites in the area. He refers to the considerable body of scientific literature (several hundred published articles) that has been generated by the fossil finds made in the South Western Cape - most famously from finds in the old Langebaanweg phosphate mine that is now the West Coast Fossil Park – but indicates that the important information for the PIA comes from those articles dealing with the broader stratigraphy, palaeoenvironments, fossils and ages of the formations found in the vicinity of the development site. These include, Visser & Schoch (1972, 1973), Tankard (1974, 1975a, b, 1976), Dingle et al. (1979), Rogers (1980, 1982, 1983), Hendey (1981a,b), Dingle et al. (1983), Hendey (1983a,b,c), Hendey & Dingle (1990), Pether et al. (2000), Roberts & Brink (2002), Roberts et al. (2006), Roberts et al. (2011) and Roberts & Siegfried (2014).

7.2 *Archaeological Desktop Review*

The area surrounding the proposed development site has been subject to numerous heritage assessments over the years and previous archaeological impact assessments (for example, ACO Associates 2006, 2007, 2008, 2009, 2011, 2012a-c, Hart 2014, Kaplan 2007) in the vicinity of the proposed Gas to Power Facility, available on the SAHRIS online platform (<https://sahris.sahra.org.za/>) or in ACO's project archive, were reviewed as part this assessment.

7.3 *Archaeological Field Assessment*

A physical survey Farms 1238 and 62/127 was undertaken by John Gribble and Gail Euston-Brown of ACO Associates on 17 November 2020.

Both members of the field team carried hand-held GPS receivers (using the WGS84 datum), pre-loaded with the footprint of the Facility and other data such as the farm boundaries, and these were used to log the survey tracks (Figure 5) and record the position of any identified heritage resources.

The field team was suitably qualified and experienced to date and characterise heritage resources encountered during the survey.

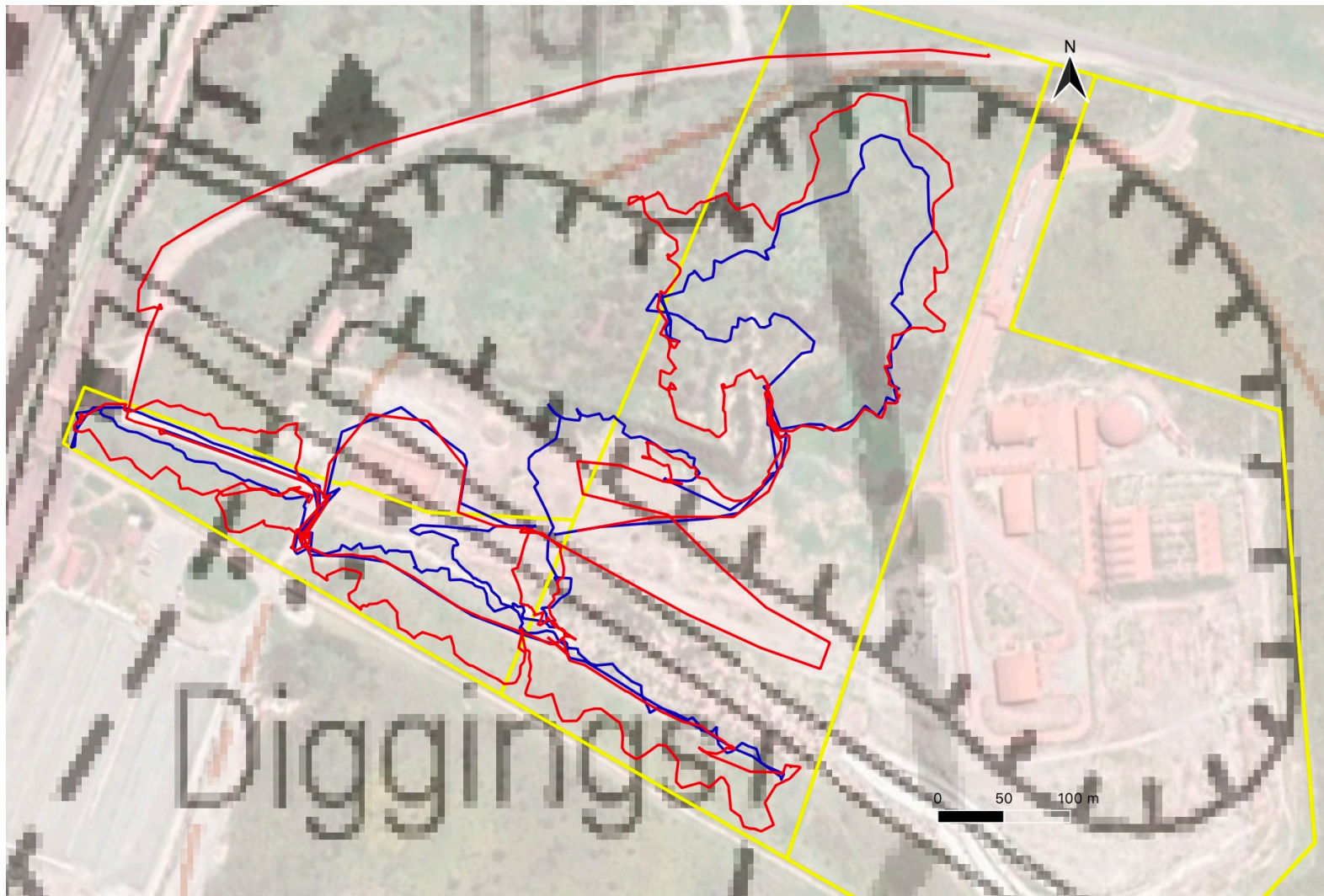


Figure 5: ACO survey track plots (red and blue lines). The property boundaries are shown in yellow. Note the extent of historical quarry as shown on the 1:50 000 topographical map (Source: Chief Directorate: National Geo-Spatial Information. Website: www.ngi.gov.za; Google Earth).

No trial holes were dug and all observations were based on visible surface material. No material was removed from the site.

7.4 *Restrictions and Assumptions*

The proposed footprint of the Gas to Power Facility was readily accessible for the heritage survey and much of the site was either devoid of vegetation (within the former quarry) (see Plate 1 and Plate 2 above) or covered with indigenous vegetation and surface visibility was generally good enough (Plate 4 above) in these areas for the purposes of the field survey. Some areas of the site were, however, thickly infested with alien hackea and rooikrans and access to and visibility within these areas was less than optimal (Plate 3 above).

In respect of palaeontological resources, the PIA assumes that the fossil potential of a formation in the Facility area “will be typical of that found in the region and more specifically, similar to that already observed in the surrounds of the [Facility] area”. A limitation on predictive capacity exists in that it is not possible to predict the buried fossil content of an area or formation other than in general terms. In many cases the information on fossil content is limited to the basics, such as in the case of geological mapping when the fossils are not the immediate focus. Scientifically important fossil shell and bone material is expected to be sparsely scattered in these coastal-plain deposits, but unless large and obvious, is not generally seen, under-estimating the fossil prevalence. Much depends on careful scrutiny of exposures and on spotting fossils as they are uncovered during digging (i.e., by monitoring excavations).

Lastly, although we believe that most of the relevant archaeological assessments and HIAs from the area have been located and reviewed, it is acknowledged that, particularly recent heritage reports from the Western Cape do not always appear on the SAHRIS database and that may mean that some recent reports may not have been identified for review.

8 *FINDINGS OF THE ASSESSMENT*

8.1 *Palaeontological Assessment*

According to the desktop palaeontological assessment conducted by Dr Pether (see Appendix C) the proposed Facility is situated on the calcreted Langebaan Formation, beneath a thin cover of Springfontyn Formation Q1 surficial sands (Figure 6). Close to the coast the Witzand Formation dunes (Figure 6) are underlain by the older aeolianite of the Langebaan Formation and the interbedded beach deposits of the Velddrif Formation.



Figure 6: Surface geology of the Saldanha Bay area showing the location of the project site. Note that the powerline options shown in the figure above form part of a separate application (After: Pether 2020).

Deposits of the Velddrif Formation. fringe the inner shores of Saldanha Bay (Figure 7), where the Last Interglacial (LIG) raised beach (~125 ka) overlies eroded, calcreted Langebaan Formation aeolianites. The deposits of the older Marine Isotope Stage 11 (~400 ka) (MIS) raised beach extend further inland for approximately 1.5 km to a maximum level of about 12-15 m above sea level. (Figure 7). Further inland the Langebaan Formation is underlain at depth by the late Pliocene Uyekraal Formation (Figure 7). Coastal exposures correlated with the Uyekraal Formation occur on Hoedjiespunt, Elandspunt and inland in the Lower Quarry near Prospect Hill.

The earthworks will disturb the thin, loose Springfontyn Formation coversands north of the quarried area. The construction earthworks will mainly involve shallow excavation into the capping calcrete of the Langebaan Formation. The foundation platforms will be embedded in or founded on the Langebaan Fm. calcrete.

The proposed Power Plant site is situated where marine deposits of the Velddrif Formation are expected at depth. However, an inspection of the lowermost quarry floor prior to the installation of the Sunrise Energy LPG Facility did not reveal exposures of shelly marine

beds (Pether 2010). Therefore, it is not expected that the Velddrif Formation will be affected by the construction earthworks.

In aeolianites such as the Langebaan Formation the fossil material most commonly seen is the ambient fossil content of dune sands: land snails, tortoise shells and mole bones (Plate 5A). Other small bones, such as bird and small mammal bones, occur very sparsely.

The fossil content is more abundant in association with old, buried land surfaces (palaeosurfaces) and their soils (palaeosols), formed during periods of dune stabilization and which define aeolian packages and larger formations. Importantly, the bones of larger animals (e.g. antelopes) (Plate 5B) are more persistently present along palaeosurfaces formed on top of marine deposits and the palaeosurfaces which separate the major aeolianite units.

Blowout or deflation erosional palaeosurfaces carry fossils concentrated by the removal of sand by the wind, such as land snails and tiny rodent fossils which reflect the palaeoenvironment such as the vegetation type.

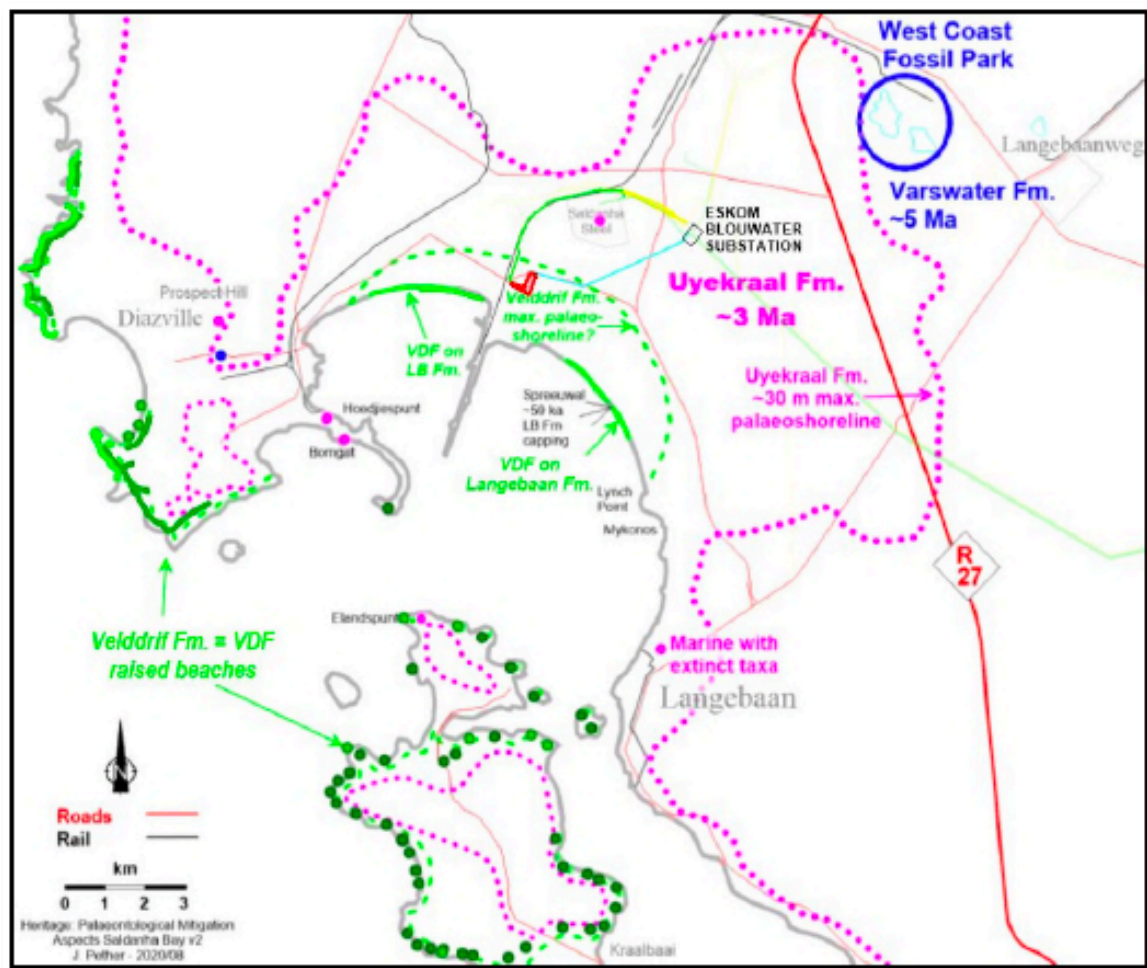


Figure 7: Schematic marine geology of the Saldanha area, showing approximate subsurface extents of the late Pliocene Uyekraal Formation and the Velddrif Formation raised beaches. The Gas to Power Facility site is indicated by the red polygon in the upper centre of the image (After: Pether 2020).

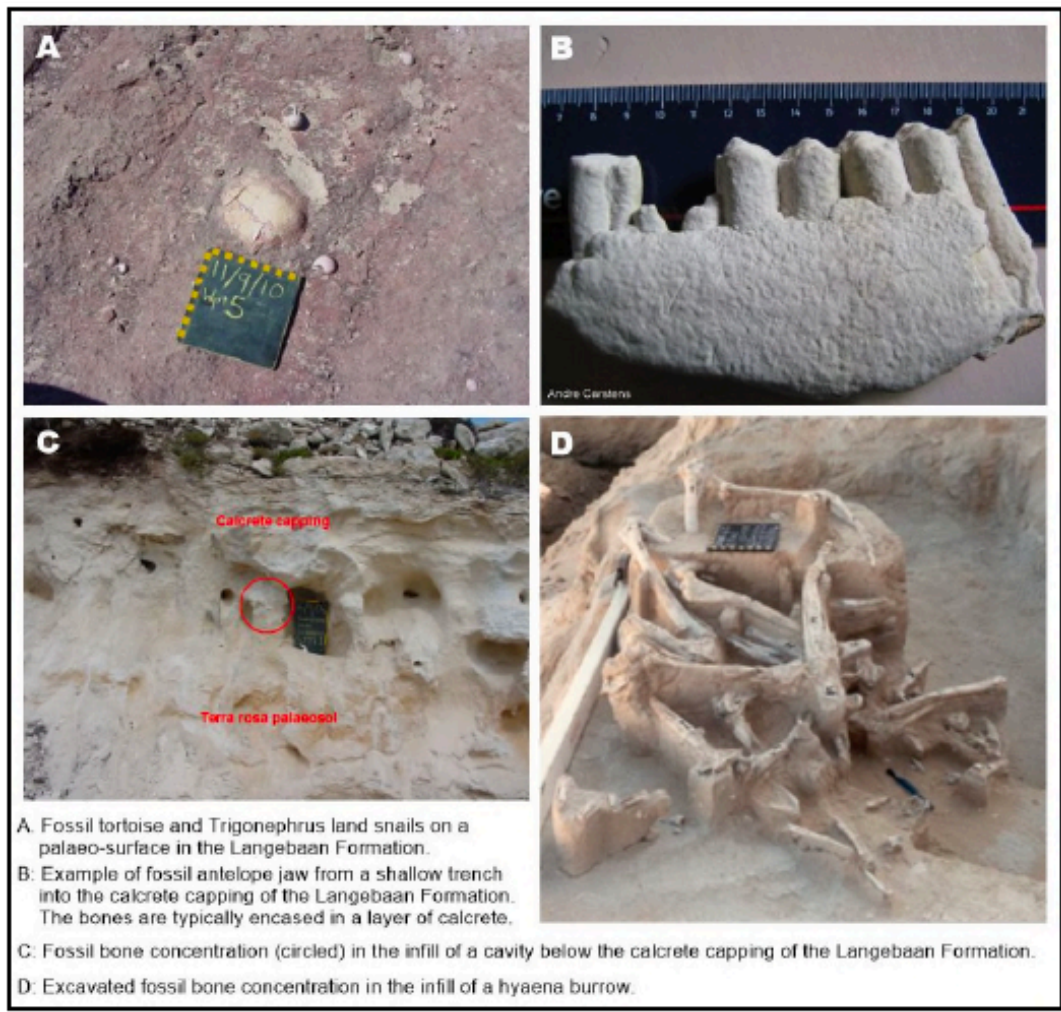


Plate 5: Examples of fossils typical of the project area (After Pether 2020).

8.2 Archaeological Assessment

8.2.1 Archaeological Baseline Data

The West coast of South Africa and, in the context of this report, Saldanha Bay and the Vredenburg Peninsula, has been used by modern humans and our hominin ancestors since the Early Stone Age (ESA). The presence of the so-called Saldanha skull fragment, and the frequent and widespread occurrence of distinctive ESA artefacts such as handaxes, points to an ancient use of the region, although, climate and coastline might have been very different at that time (Halkett and Webley 2017).

Middle Stone Age (MSA) shell middens dating to within the last 100 000 years have been widely along the West coast (see for example, Halkett and Hart 1993, Halkett et al 2003, Klein et al. 2004) and in the Saldanha Bay area (Berger and Parkington 2005a,b). Associated with these middens are MSA stone artefacts and occasionally, fragments of anatomically modern human remains e.g. a tooth from the Sea Harvest site (Grine & Klein

1993), and other anatomically modern post-cranial remains from Hoedjiespunt, all clearly older than 50 000 years.

Later Stone Age hunter-gatherers living on the West coast during the latter part of the Holocene made regular, and concerted use of the coastal resources. Archaeological excavations at sites such as Duyker Eiland on the coast near Britannia Bay (Robertshaw 1979) and at Club Mykonos (Hart 2001) south of the proposed Facility, confirm the importance of shellfish such as mussels and limpets as dependable and easily accessible protein resource during these times.

Within the last 2000 years pastoralist groups (with cattle, sheep and pottery) entered southern Africa via the West Coast (Smith 2006) and a number of very important pastoralist archaeological sites are located on the Vredenburg peninsula. The Kasteelberg site complex, comprises at least 36 discrete sites and occupation areas, and there are more than 100 grinding grooves on bedrock in and around a prominent granite batholith on the farm Rooiheuvel. The site of Heuningklip, an open shell midden site on a granite hill to the east of Vredenburg, also contains a number of bedrock grooves similar to Kasteelberg.

Other important archaeological sites on the Vredenburg peninsula include Witklip, a small shelter below a granite boulder situated on the western outskirts of the town of Vredenburg and excavations here by Smith et al (1991) suggest that this was a hunter-gather settlement dating to between 3000 and 500 BP.

The sites around Kasteelberg on the Vredenburg Peninsula date largely to the Later Stone Age, although earlier material dating to the mid - late mid Holocene is found in the area and probably represent the debris of early San hunter gatherers. The survey of the Vredenburg Peninsula by Sadr et al (1992) and Sadr (2009) has identified at least 99 archaeological sites concentrated predominantly around granite koppies, although in recent years, additional sites have been found in open wheat fields during archaeological impact assessment surveys (Webley & Orton 2010).

Historical research shows that during the 18th century, the Vredenburg peninsula formed part of the traditional grazing lands of the Cochoqua, a Khoekhoen pastoralist group. Smith (2006) has postulated a seasonal transhumant cycle between the coast and the interior which was disrupted by Dutch settlement.

The Saldanha Bay area with its good natural harbour was the focus of intense competition between French and Dutch interests during the 17th and 18th centuries, with a number of military outposts established in the area to provide protection for fishing and sealing interests (see Schrire 1995 and Sleight 1993). During the 18th and 19th centuries the area was divided into farms.

As part of the heritage assessment of the Oil and Gas Offshore Service Complex proposed within the Saldanha IDZ, Hart (2014) provided a literature review of the area along the northern shore of Saldanha Bay and south of the hills of the Vredenburg peninsula, which includes the proposed Gas to Power Facility site. Referring to a number of reports, as well as a variety of observations documented on the SAHRIS database (<https://sahris.sahra.org.za>), Hart (2014:3) found that while the broader Saldanha IDZ is one of the most archaeologically assessed and studied areas of the West Coast, it is also one of “the least significant tracts of landscape in the Western Cape in archaeological terms” with

archaeological material either absent, or limited to ephemeral scatters of material or isolated artefacts. According to Hart (2014:3) “all studies ... to date on the flatlands/coastal plain to the north of Saldanha Bay report a lack of archaeological sites but high palaeontological sensitivity”.

The reports reviewed for this report (ACO Associates 2006, 2007, 2008, 2009, 2011, 2012a-c, Kaplan 2007) confirm Hart’s assessment and indicate a very low density of Stone Age archaeological sites and material, with only sporadic historical or colonial period remains present in the area surrounding the proposed development site.

Later Stone Age sites and material are more common in the vicinity of and south of Club Mykonos, towards Langebaan, and also to the west around the town of Saldanha Bay itself and along the west coast of the Vredenburg peninsula. This is probably a factor of the rocky shorelines in these areas which were exploited by pre-colonial people for the shellfish that formed an important element of their diet. The sandy shores in the vicinity of the proposed Facility probably contain fewer archaeological sites because they were less attractive as a resource base than the rocky coastlines to the south and west.

8.2.2 Survey Results

The walkover survey of the proposed footprint of the Facility (see Figure 5) found no evidence of either pre-colonial or historical archaeological sites or material.

8.3 Built Environment

Modern debris and evidence of built structures related to the recent use of the site as a quarry were encountered during the walkover survey of the site and on the adjacent farm (see Figure 8 and Plate 6).

A roughly built stone and tar-pole structure and set of concrete stairs was noted at Waypoint 026, in association with at least one concrete apron which we suggest formed the base for a pre-fabricated building associated with the quarry.

About 120 m to the north, just outside the boundary of Farm 1238 on Farm 1239, a further set of large, raised concrete and breeze block plinths were noted, which again appear to have formed the bases for pre-fabricated buildings serving the quarry (Plate 7).

The remains of these structures all appear to be modern (i.e. less than 60 years of age), are not conservation-worthy and are thus not considered any further in this assessment.

8.4 Cemeteries and Graves

No cemeteries or graves were found during the ACO walkover survey of the proposed development site.

8.5 Sense Of Place / Cultural Landscape

The concept of “cultural landscapes” finds expression in Article 1 of the World Heritage Convention 1972 where it is defined as a category of cultural heritage site which is representative of the “combined works of nature and of man”.

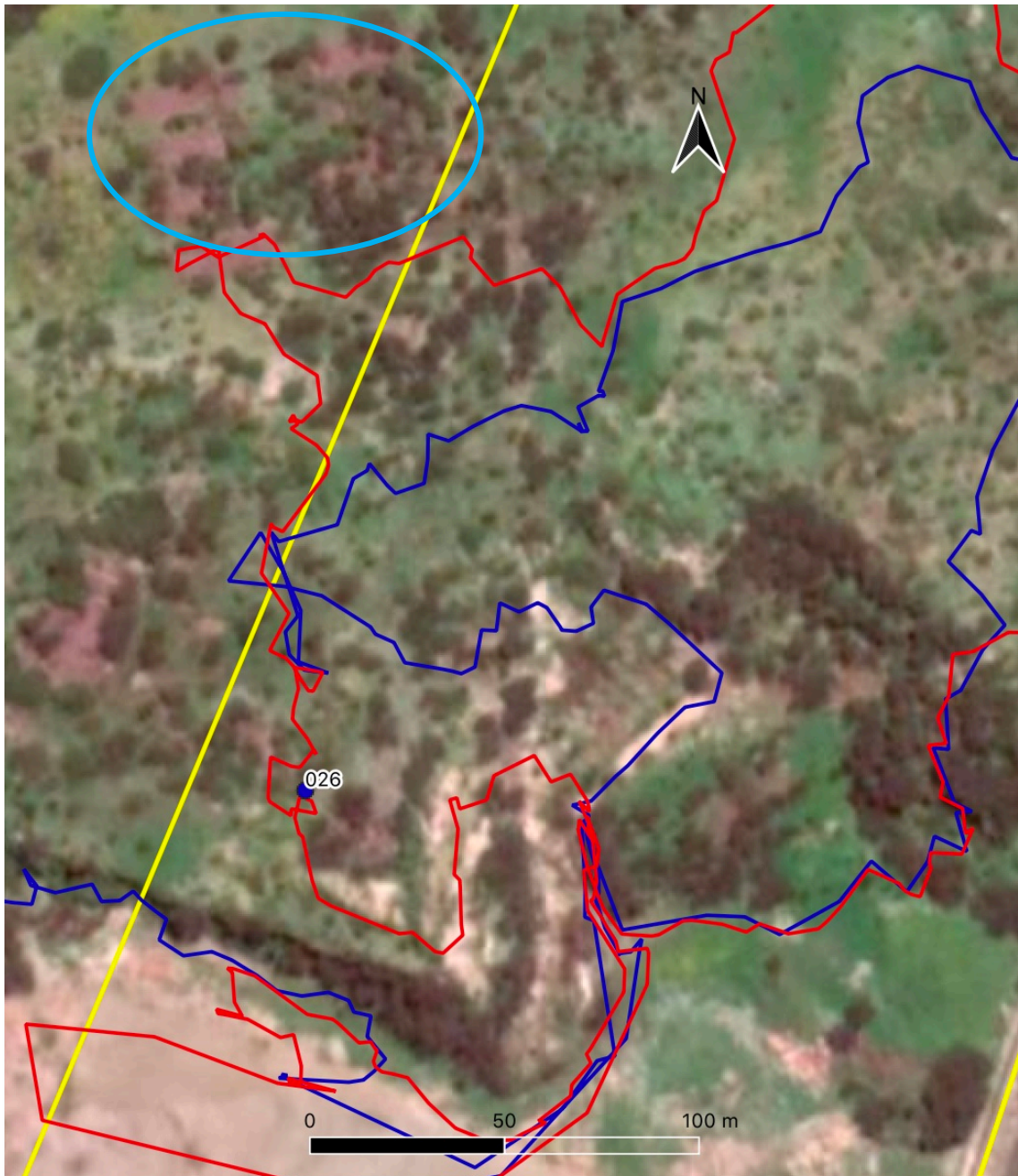


Figure 8: Location of Waypoint 026, the stone and tar-pole structure. The location of the concrete plinths on the adjoining farm is circled (blue) (Source: Google Earth).



Plate 6: Rock and tar-pole structure (left) and concrete aprons (right) at Waypoint 026 (Photo: J Gribble)



Plate 7: Concrete pre-fab building bases on farm adjacent to the Facility site (Photos: J Gribble).

Although not referenced in the NHRA, a consideration of any proposed development within the context of the cultural landscape within which it is proposed has become a standard requirement of HIA's in South Africa.

The term "cultural landscape" embraces a diversity of manifestations of the interaction between humankind and its natural environment. Cultural landscapes are thus illustrative of 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 external and internal (<https://whc.unesco.org/en/culturallandscape/#1>).

The Operational Guidelines (2008) of the World Heritage Convention define **three main categories** of cultural landscape, namely:

- **Clearly defined landscapes designed and created intentionally by people.** This embraces garden and parkland landscapes constructed for aesthetic reasons which are often (but not always) associated with religious or other monumental buildings and ensembles.
- **Organically evolved landscapes.** These result from an initial social, economic, administrative, and/or religious imperative and have developed their present form by association with and in response to their natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub-categories:
 - **a relict (or fossil) landscape** in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are, however, still visible in material form.
 - **a continuing landscape**, which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.
- **Associative cultural landscapes.** The inclusion of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent.

The surroundings of the proposed Gas to Power Facility can be described as a continuing, organically evolving landscape: a previously rural, agricultural landscape that has and continues to evolve, through the establishment of the Saldanha Bay IDZ, into an industrial landscape.

The construction of the Gas to Power Facility will add another industrial element into the industrial landscape of the IDZ and continue the well-established trend of landscape evolution in the area to the west of Saldanha Bay.

8.6 Sustainable Social and Economic Benefits

Section 38 (3) (d) of the NHRA requires that a heritage impact assessment “evaluate the impact of [a] development on heritage resources relative to the sustainable social and economic benefits to be derived from the development”.

In the respect of the proposed Gas to Power Facility, with the exception of palaeontological resources, which may be impacted by the construction of the Facility no other heritage resources have been identified within the development footprint.

If and where the construction of the Facility impacts the underlying the fossiliferous Langebaan Formation, the mitigation measures proposed in this HIA will mitigate such impacts.

Based on the above, it is likely that the sustainable social and economic benefits arising from the construction and operation of the Facility will outweigh any possible impacts to heritage resources.

9 IMPACTS AND RISKS

9.1 *Palaeontology*

For the evaluation of the palaeontological impact, it is the extent/scale of the deeper excavations to be made during the Construction Phase that are the main concern. Considerations of palaeontological heritage do not usually influence the Design Phase when there are no known or designated fossil sites in the Project Area. However, in general, designs which involve the least subsurface disturbance (excavation volumes) are favoured. Palaeontological impacts do not occur during the Operational Phase or the Decommissioning Phase.

In the Springfontyn Formation Q1 coversands fossil material is usually in an archaeological context, generally very sparse and the overall palaeontological sensitivity in this area may be classified as low.

The calcreted Langebaan Formation is classified to be of very high sensitivity (Figure 6, inset, red), due to previous fossil finds of significant scientific value. However, the excavation depths into the Langebaan Fm. are shallow relative to quarrying/mining excavations and disturb only the uppermost part of the calcreted Langebaan Formation. Together with the overall sparse distribution of fossil bones in the uppermost calcretes observed in the area, the limited depths serve to lessen the associated intensity of impact on the fossil content of the Langebaan Formation

For heavy load foundations, the likely installation of arrays of piling columns to depths of 5-6 m by predrilling and ramming will probably intersect fossils in a few places but is very unlikely to produce any useful fossil material due to its destruction during boring into the hard calcrete. This impact cannot feasibly be mitigated.

Overall, the relatively limited depths of disturbance, together with the sparse distribution of fossil bones in the uppermost part of the calcrete, serve to ameliorate the associated intensity of impact on the fossil content of the Langebaan Formation to a moderate level.

There is some possibility that the fossil shell beds of the Velddrif Formation could be intersected close to the coast but based on previous observations of the quarry floor this seems unlikely.

The following impact rating tables refer to the expected fossil bone content of the formations which will be affected by the earthworks associated with the construction of the proposed power plant.

See Appendix C for the Impact Assessment rating criteria used in the tables below.

Table 2: Assessment of impacts on Springfontyn Formation Q1 Coversands

Loss of fossil bones and archaeological material from excavations in the Springfontyn Formation loose coversands.							
	Extent	Duration	Intensity	Status	Probability	Significance	Confidence
Without mitigation	Local	Permanent	Low	Negative	Improbable	Low	M
	1	5	4		2	20	
Essential mitigation measures							
<ul style="list-style-type: none"> Construction personnel to be alert for rare fossil bones and follow "Fossil Finds Procedure". Cease construction on (chance) discovery of fossil bones and protect fossils from further damage. Contact appointed palaeontologist providing information and images. Palaeontologist will assess information and establish suitable response, such as the importance of the find and measures for preservation and collection. 							
With mitigation	Local	Permanent	Low	Positive	Improbable	Low	M
	1	5	4		2	20	

Table 3: Assessment of impacts on Langebaan Formation capping calcrete

Loss of fossil bones from excavations in the Langebaan Formation calcrete.							
	Extent	Duration	Intensity	Status	Probability	Significance	Confidence
Without mitigation	Local	Permanent	High	Negative	Highly probable	Medium	M-H
	1	5	6		4	48	
Essential mitigation measures							
<ul style="list-style-type: none"> Construction personnel to be alert for rare fossil bones and follow "Fossil Finds Procedure". Cease construction on (chance) discovery of fossil bones and protect fossils from further damage. Contact appointed palaeontologist providing information and images. Palaeontologist will assess information and establish suitable response, such as the importance of the find and recommendations for preservation, collection and record keeping. Exposed fossiliferous sections in earthworks recorded and sampled by appointed palaeontologist. 							
With mitigation	Local	Permanent	High	Positive	Highly probable	Medium	M-H
	1	5	6		4	48	

Without mitigation the significance of the impact of the earthworks on the fossil bone content of the Springfontyn Formation Q1 coversands is **low negative** and with mitigation is **low positive**.

Without mitigation the significance of the impact of the earthworks on the fossil bone content of the Langebaan Formation is **medium negative**. Notwithstanding a similar medium, but positive significance with mitigation, depending on the scientific significance of the actual finds, the significance of the impact may range from **medium positive** to **high positive**.

9.1.1 Mitigation Measures

The presence of fossils in the subsurface does not have an a priori influence on the decision to proceed with the installation. However, mitigation measures are essential.

The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the Construction Phase of the foundations for the power plant and infrastructure and the LPG pipeline trenches.

The rescue of fossils during earthworks critically depends on spotting this material as it is uncovered during digging, i.e., by monitoring excavation activity. As it is not feasible for a specialist monitor to be continuously present the earth works personnel must be involved in mitigation by watching for fossils.

It is recommended that:

- A requirement to be alert for possible fossils and archaeological material be included in the EMP for the Construction Phase, with a Fossil Finds Procedure in place. The Fossil Finds Procedure included as Appendix D provides guidelines to be followed in the event of fossil finds in the excavations, upon which the ECO must contact the palaeontologist or archaeologist contracted to be on standby in the case of finds. The latter will liaise with Heritage Western Cape on the nature of the find and suitable consequent actions such as an immediate site inspection, application for a palaeontological collection permit and the drafting of a work plan for the collection of the find;
- If a significant occurrence of fossil bones or shells is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure and the compilation of the report to Heritage Western Cape and Iziko Museums of South Africa; and
- Exposures of the Langebaan Formation created by the earthworks for the levelling of the site are inspected by a palaeontologist at the stage of their greatest extent, to serve as a final inspection before the insertion of foundations, in order to record the exposures and take samples of the sediments and the ambient fossil content (e.g. land snails, small fossils).

The Environmental Control Officer (ECO), or the Project Manager/Site Agent, is welcome to contact the author with queries and for clarifications.

Table 4: Mitigation Summary for the Construction Phase EMP

OBJECTIVE: To see and rescue fossil material that will be exposed in the excavations made for construction of the foundations of the power plant, transmission pylons and LPG pipelines.		
Project components	Excavations and the spoil from excavations.	
Potential impact	Loss of fossils by their being unnoticed and/ or destroyed.	
Activity/ risk source	All bulk earthworks.	
Mitigation: target/ objective	To facilitate the likelihood of noticing fossils and ensure appropriate actions in terms of the relevant legislation.	
Mitigation: Action/ control	Responsibility	Timeframe
Inform staff of the need to watch for potential fossil occurrences.	The Client, the EAP, the ECO & contractors.	Pre-construction
Inform staff of the procedures to be followed in the event of fossil occurrences.	ECO & contractor's EO	Pre-construction
Monitor for presence of fossils, especially fossil bones	Contractor's EO, Contracted personnel and ECO.	Construction.
Liaise on nature of potential finds and appropriate responses.	Contractor's EO, ECO and specialist.	Construction.
Excavate main finds, inspect pits & record and sample excavations.	Specialist.	Construction.
Obtain permit from HWC for collection of fossil finds (if any finds are made).	Specialist.	Construction.
Performance Indicator	Reporting of and liaison about possible fossil finds. Fossils noticed and rescued. Scientific record of fossil contexts and temporary exposures in earthworks. Input to HWC heritage inventory through submission of permit report to HWC.	

9.2 Other Heritage Resources

No archaeological sites and materials, or historical built environment and graves and cemeteries protected by the NHRA were found on the proposed development site. The sensitivity of the site in respect of these classes of heritage resource is thus very low. There are no constraints from these categories of heritage resources on the development of the Facility, and no impacts are expected.

9.2.1 Mitigation Measures

Should any human remains be encountered at any stage during the construction or earthworks associated with the project, activities in the vicinity must cease immediately, the

remains must be left *in situ* but made secure and the project archaeologist and HWC must be notified immediately.

9.3 *The No-Go Alternative*

Not implementing the proposal will result in no impacts to heritage resources.

10 CONCLUSION

This assessment has found that the area identified for the proposed Gas to Power Facility on Farms 1238 (Erf 16001), 1237 (Erf 16000), Remainder of Portion 2 of Yzervarkensrug 129 and Portion 65 (a Portion of Portion 13) of Yzervarkensrug 127 is a sensitive heritage environment in respect of palaeontological resources, but not in respect of archaeology or other heritage resources.

It is our considered opinion that provided the mitigation measures set out above are implemented, the overall impact of the proposed construction of the Facility will be of low heritage significance and the proposed activity is acceptable.

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11.1 Online Resources

- South African Heritage Resources Information System (Accessed online on 14 January 2021). <http://www.sahra.org.za/sahris>.
- SAHRA Palaeo-sensitivity Map (Accessed online on 14 January 2021) <https://sahris.sahra.org.za/map/palaeo>.

APPENDIX A: HERITAGE WESTERN CAPE NID RESPONSE

Our Ref: HM/WEST COAST/ SALDAHNA BAY / FARM 1238, 1237 AND PTN 65/127
Case No.: 20111809SB1120E
Enquiries: Stephanie-Anne Barnardt
E-mail: stephanie.barnardt@westerncape.gov.za
Tel: 021 483 5959
Date: 30 November 2020



Pieter Coetzee
Vineyards Square North, Vineyards Office Estate, 99 Jip De Jager, Bellville, 7530
pieter@sunrise-energy.co.za

RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: HIA REQUIRED
In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape
Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: PROPOSED SUB-CONSTRUCTION OF THE GAS TO ENERGY FACILITY ON FARM 1238, 1237 AND PTN 65 OF YZERVARKENS RUG FARM 127, SALDAHNA, SUBMITTED IN TERMS OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

CASE NUMBER: 20111809SB1120E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received on 20 November 2020. This matter was discussed at the Heritage Officers meeting held on 30 November 2020.

You are hereby notified that, since there is reason to believe that the proposed sub-construction of the gas to energy facility on Farm 1238, 1237 and Ptn 65 of Yzervarkensrug Farm 127, Saldanha will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted. This HIA must have specific reference to the following:

- Impacts to palaeontological resource.

The required HIA must have an integrated set of recommendations.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case by case Basis.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.

HWC reserves the right to request additional information as required.

Applicants are strongly advised to review and adhere to the time limits contained in the Standard Operational Procedure (SOP) between DEADP and HWC. The SOP can be found using the following link <http://www.hwc.org.za/node/293>

Should you have any further queries, please contact the official above and quote the case number.

pp.

.....
Dr. Mxolisi Dlamuka
Chief Executive Officer, Heritage Western Cape

www.westerncape.gov.za/cas

Street Address: Protea Assurance Building, Green Market Square, Cape Town, 8000 • **Postal Address:** P.O. Box 1665, Cape Town, 8000
• **Tel:** +27 (0)21 483 5959 • **E-mail:** ceoheritage@westerncape.gov.za

Straatadres: Protea Assuransie-gebou, Groentemarkplein, Kaapstad, 8000 • **Posadres:** Posbus 1665, Kaapstad, 8000
• **Tel:** +27 (0)21 483 5959 • **E-pos:** ceoheritage@westerncape.gov.za

Idilesi yendawo: kumgangatho 3, kwisakhiwo lprotea Assurance, Greenmarket Square, ekapa, 8000 • **Idilesi yeposi:** Inombolo yebhokisi yeposi 1665, eKapa, 8000 • **linombolo zomxebe:** +27 (0)21 483 5959 • **Idilesi ye-imeyile:** ceoheritage@westerncape.gov.za

APPENDIX B: EVIDENCE OF PUBLIC PARTICIPATION

8 Oktober 2020

GEKCLASSIFIEERD CLASSIFIEDS Weslander 17

KENNISGEWINGS & POSTE

FAMPAK
PACKAGING DISTRIBUTORS
West Coast FTY B&B

DRYWERSPOS
tans beskikbaar vir 'n gewillige en betroubare man of vrou wat beskik oor Geldige Kode 10 (C) en PDP lisensie.
Fampak se bukskoot is operasioneel vanuit St Helenabaai van waar die suksesvolle kandidaat sal werk.
Indien kandidaat woonagtig is in St Helenabaai, sal dit in hul guns tel. Diensaanvaarding so gou moontlik.
Aansoek kan gestuur word na die volgende e-pos adres:
fampakaccounts@bzgroup.co.za
Aansoek sluit: Sondag 11 Oktober 2020

PANEELKLOPPER

Weskaap Bakwerke in Vredenburg benodig die dienste van 'n Gekwalifiseerde / Semi-Gekwalifiseerde Paneelklopper.

Kontakbare Verwysings noodsaaklik.

Kontak Jimmy Green @ 022 715 1624

EFFECTIVE PUBLICITY

ADVERTISE IN WESLANDER

Contact one of our advertising representatives
Chantel Christa Madeline
Tel. 022 713 1251

ESTATE NOTICE

In the Estate late **Richard Henry Moors, ID No. 3909025024083**, a widower of 48 Church Street, Hopefield, 7355, who died on 3 February 2020.

Estate number: 005969/2020.

All Creditors and Debtors in the above estate are required to lodge their claim and or pay their debts within thirty (30) days after date of publication of this notice to the Executor.

Brand & Partners
1 Van Zyl Street
PO Box 1040
Vredenburg, 7380
Tel: (022) 71-51671
Faks: (022) 71-35772
Refr: C7852HB

BOEDELKENNISGEWING

Boedel wyle **ALBERTUS JOHANNES VAN ROOYEN**, identiteitsnommer: 590705 5021 08 4, ongetroud van Albatrosstraat 20, Langebaan, 7357 en wie oorlede is op 24 Oktober 2019.

Boedelnommer: 020534/2019

Die Eerste en Finale Likwidisie- en Distribusierekening in bogenoemde boedel sal vir 'n tydperk van 21 dae vanaf datum hiervan ter insae lê in die kantore van die Meester van die Hoë Hof te Kaapstad en by die Landdroskantoor te Hopefield.

SCHOEMAN & HAMMAN INC
Prokureurs vir Boedel
Posbus 710, Markstraat 13
VREDENBURG 7380
F. HAMMAN/Jackie/B1787

FORM JJJ LOST OR DESTROYED DEED

Notice is hereby given in terms of regulation 68 of the Deeds Registries Act, 1937, of the intention to apply for the issue of a certified copy of TS8645/2005 passed by ILE PLAISANCE INVESTMENTS PROPRIETARY LIMITED, No. 1996022767/07 in favour of THE TRUSTEES FOR THE TIME BEING OF LISA JEAN PIERRE TRUST, No. IT4352/99 in respect of certain Erf 3502 LAALP, IN THE BERGRIVIER MUNICIPALITY, DIVISION PIKETBERG, WESTERN CAPE PROVINCE, which has been lost or destroyed.

All persons having objection to the issue of such copy are hereby required to lodge the same in writing with the REGISTRAR OF DEEDS at ROOM 1216, 12TH FLOOR, 90 PLEIN STREET, CAPE TOWN / email: cpteed@drdir.gov.za, within two weeks after the date of the first publication of this notice.

Dated at VREDENBURG this 8 October 2020.

APPLICANT
MADELYN MC ATTORNEYS
6 MAIN STREET, VREDENBURG, 7380
REFERENCE NO. JM/MAT42585
E-MAIL: janneke@madeilyn.co.za
Contact No. 022-715 1114

EUSA

Eusa benodig die dienste van 'n

IT Tegnikus

- Minimum graad 12 • Afrikaans & Engels magtig
- IT Kennis (Netwerke) • Sageware Installasies
- Eie vervoer

Belangstellendes kan hul CV stuur na: info@eusa.co.za
Indien geen terugvoering ontvang word na 2 weke nie, aanvaar die aansoek as onsuksesvol.

Creative Minds sage

HUIS WITTEKRUIN

ALGEMENE ASSISTENT

INSTANDHOUDING: 1 Pos

Verleë vir Algemene Assistent:

- Kennis van algemene instandhouding & herstelwerk:
- Verf- & Tuinwerk
- Hulp verleen tydens fondsinisieringsprojekte & ander projekte
- Matrieksertifikaat
- Tweetalig wees
- Goeie gesondheid
- Geldige bestuurderslisensie
- Polisie Vrywagings Sertifikaat
- Moet in 'n spanverband kan saamwerk
- Goeie menseverhouding
- Liefde, geduld & deernis vir bejaardes
- Verantwoordelike & gemotiveerde persoon wees

Voordele:
Vergoeding is volgens Badias salarisskaal, aangevul deur 'n mediese- en voorsorgfonds, asook ruim verlof voordele.

Diensaanvaarding: So spoedig moontlik

Sluitingsdatum: 17 Oktober 2020

Rig 'n volledige CV, bewyse van kwalifikasies aan:
Die Bestuurder
Huis Wittekruijn
Uranusstraat
VREDENBURG 7380
bestuurder@wittekruijn.co.za

Indien u na 2 weke na sluiting van aansoek, geen terugvoering gekry het nie, was u aansoek ongelukkig onsuksesvol.

MUNICIPALITY BERGRIVIER MUNISIPALITEIT

KENNISGEWING NR MK174/2020

AANSOKE VIR DIE VERLENGING VAN DRANKHANDELSURE

Kennisgewing geskied hiermee ooreenkomstig Artikel 9(5) van die Bergrivier Munisipaliteit Verordening Insake Beheer Oor Ondernemings Wat Drank Aan Die Publiek Verkoop dat Bergrivier Munisipaliteit geen aansoek om verlenging van drankhandelsure sal oorweeg of verwerk tussen 1 Desember 2020 en 15 Januarie 2021.

Kerkstraat 13
Posbus 60
Piketberg 7320
Tel No: (022) 913-6000
Faks No: (022) 913-1406
E-Pos: bergmun@telkomsa.net

ADV. HANLIE LINDE
MUNISIPALE BESTUURDER

8 Oktober 2020

CORRECTION NOTICE NO MN174/2020

APPLICATIONS FOR THE EXTENSION OF LIQUOR TRADING HOURS

Notice is hereby given in terms of Section 9(5) of the Bergrivier Municipality By-Law Relating To Control Of Undertakings That Sell Liquor To The Public that Bergrivier Municipality will not consider or process any applications for extension of liquor trading hours from 1 December 2020 to 15 January 2021.

13 Church Street
P.O. Box 60
PIKETBERG 7320
Tel No (022) 913 6000
Fax No (022) 913 1406
E-Mail bergmun@telkomsa.net

ADV. HANLIE LINDE
MUNICIPAL MANAGER

8 October 2020

DRIVE SOBER

Spertyd

ADVERTENSIES SLUIT WEEKLIKS OM

11:00 DINSDAG

Skakel
022 713 1251
vir enige advertensie-navrae

Weslander

SMALLads
0861 76255 237
Reagan.Gabriel@paarlpost.co.za

ERM Verwysingsnommer: 0222371

Omvangbepaling vir die Voorgestelde Vloeibare Petroleumgas na Kragstasie, Saldanha, Wes-Kaap

Uitnodiging vir Registrasie en Kommentaar op die Omvangbetalingsverslag

Projek Beskrywing

Die Projek behels die ontwikkeling van 'n 315 MW gas-engin kragstasie geleë in die Saldanhaabaai omgewing, Wes-Kaap Provinsie. Die fasiliteit sal verbind word met die Eskom netwerk en die 132kV oorhoofse kraglyne sal aan Eskom oorhandig word sodra konstruksie voltooi is.

Die voorgestelde sal kragstasie sal bestaan uit 24 gas enjins en die uitlaatgasse van 6 enjins sal gegroeper word in 'n enkele stapel. Die stapels sal ongeveer 30 meter hoog wees met 'n diameter van 3.92 meter.

Die voorgestelde kragstasie sal geleë word op Plaas 1238 en Gedeelte 65 van Yzervarkensrug 127, Saldanhaabaai, Wes-Kaap Provinsie.

Projek Magtigings Proses

Kennis geskied hiermee van die Omvangbepaling- en Omgewingsimpakverslaggewing (OB&OIV - ook die Omgewings-impakbepalingsproses [OIB] genoem) ingevolge Artikel 24 (5) en 44 van die Wet op Nasionale Omgewingsbestuur, Wet 107 van 1998 (NEMA), soos gewysig, en die OIB-regulasies van 2014 vereis word. Die voorgestelde projek val onder die volgende gelyste aktiwiteite in terme van die OIB-regulasies van 2014 (soos verwysig).

	Projekaktiwiteite
GN R 325	Aktiwiteit 2 en 6
GN R 327	Aktiwiteit 14

Die bevoegde owerheid vir die Projek is die Nasionale Departement van Omgewing, Bosbou en Visserie. Environmental Resources Management (ERM) is aangestel as die Omgewings Assesserings Praktisyn wat die omgewingsimpakstudie en publieke deelname sal lei.

Geleentheid om deel te neem

As deel van die omgewingsbepaling proses, is ge-ïntereseerde en/of ge-Affekteerde Partye (IAP) en lede van die publiek uitgenooi om te registreer en deel te neem aan die proses. Geregistreerde IAPs sal in kennis gehou word deur die verloop van die projek en sal ook in kennis gestel word wanneer verslae beskikbaar gestel word vir publieke deelname. Om te registreer as 'n IAP, stuur asseblief in skrif u volledige kontak besonderhede; u belangstelling in die voorgestelde projek (direkte besigheid, finansiële, persoonlik en so meer); asook u kommentaar en/of kwessies aan die onderstaande ERM kontak.

Beskikbaarheid van die Omvangbepalingsverslag

Die Omvangbepalingsverslag is beskikbaar vir kommentaar vanaf 12 Oktober 2020 tot 11 November 2020 (m.a.w. 'n 30-dae periode) en kan afgelaai word vanaf die Projek webblad: ERM.EA.PowerStation@erm.com, of 'n versoek kan gerig word na ERM (vir e-pos verspreiding). Alternatiewelik, is die verslag beskikbaar vir insae by die volgende publieke areas:

- Toegang na die Projekterrein (Sunrise Energy Fasiliteit - Grondeienaar)
- Langebaan Publieke Biblioteek
- Saldanha Publieke Biblioteek
- Vredenburg Publieke Biblioteek

Amy Barclay
E-Pos: ERM.EA.PowerStation@erm.com
Tel: 021 681 5400 Faks na e-pos: 086 540 4072
Posadres: Postnet Suite 90, Private Sak X12, Tokai, 7966
Webblad: www.erm.com/ea-powerstation

ERM

P. & E.K. Philip

GEREGTELIKE VEILING **Strandfontein**

IN DIE HOOGGEREGSHOF VAN SUID-AFRIKA (WES-KAAPSE AFDELING, KAAPSTAD), Saaknr. 12806/2018. In die saak tussen: ABSA BANK BEPERK (Eiser) en PALATA PHILIP (Eerste Verweerder) en EUNICE KENELWE PHILIP (voorheen MOROKA) (Tweede Verweerder). Ter uitvoering van 'n vonnis van die bogenoemde agbare hof gedateer 26 Junie 2017, sal die ondervermelde onroerende eiendom op Woensdag, 21 Oktober 2020 om 09:00 by die baljuukantoor te Kerkweg 48, Strandfontein in eksklusie verkoop word aan die hoogste bieder sonder reserwe, onderhewig aan die hierna vermelde en sodanige verdere voorwaardes as wat deur die balju by die veiling uitgelees sal word: Erf 50896 Mitchells Plain, in die Stad Kaapstad, Afdeling Kaap, Wes-Kaap Provinsie geleë Tswalwalelaan 19, Tafelberg, Mitchells Plain, groot 200 vierkante meter; gebou kragtens Transportakte-nr. T76837/2001. Beskrywing: Die volgende inligting word verstrekk, maar nie gewaarborg nie: Woonhuis met 3 slaapkamers, bad en toilet, kombuis en sitkamer (openplan). Betaalvoorwaardes: Tien persent (10%) van die koopprijs moet onmiddellik na die veiling tesame met die balju se kommissie betaal word. Die balanskooprijs is betaalbaar teen oordrag en moet versker word deur 'n bankwaarborg wat binne 21 dae na die verkoop vir goedkeuring aan Eiser se prokureurs voorgeleë moet word. Verkoopvoorwaardes: Die volledige verkoopvoorwaardes lê ter insae by die kantoor van die balju vir die Hooggeregshof, Mitchells Plain-Suid. (Verw. H McHelm; tel. 021 393 3717). Gedateer te Tygervallei hierdie 9de dag van Oktober 2020.

FOURIE BASSON & VELDTHAN
TIGERVALEI, UIT WELKE VAN SONDER BETAAL, TYGERVALEI 7530

(Verw. J C FOURIE/NH/A4705; tel 021 929 2600) 274939 O.K. 9-085123

GEREGTELIKE VEILING **Veldrif**

IN DIE HOOGGEREGSHOF VAN SUID-AFRIKA (AFDELING WES-KAAP, KAAPSTAD), Saaknr. 12806/2018. In die saak tussen: STANDARD BANK OF SOUTH AFRICA BEPERK (Registrasiesnr. 1962/000738/06), Eiser, en RUHON COETZEE (D-nr. 7912075186 08 9), Verweerder. Ter uitvoering van 'n uitspraak in die Wes-Kaapse Hooggeregshof in bogenoemde saak, wat ter insae lê by die kantoor van die Balju van die Hooggeregshof, Pletberg, sal die volgende eiendom onderhewig aan 'n reserweprijs van R222 293,33 op Maandag 19 Oktober 2020 om 10:00 op die perseel by Meestraat 27, Veldrif, geregtelik verkoop word. Sekere: Erf 885 Veldrif in die Begriper Munisipaliteit, Afdeling Pletberg, Provinsie Wes-Kaap. Grootte: 782 (sewe honderd twee en tagtig) vierkante meters gebou deur Transportakten, T49502/2005, geleë by Meestraat 27, Veldrif. Die eiendom is gesooner Algemeen Residensiële (niks gewaarborg nie). Die volgende inligting in verband met verbeterings word verstrekk, maar is nie gewaarborg nie: Baksteentjapleisel, voorafgelegte mure, teëls, sitkamer, eetkamer, kombuis, 3 x slaapkamers, 2 x badkamers, 1 x motorhuis & 2 x motorafstakke. Algemene bepaling: 1. Die veiling geskied ingevolge die bepaling van die Verbruikersbeskermswet 68 van 2008. 2. Registrasie as 'n koper is 'n voorvereiste ingevolge: (a) TICA-wetgewing - bewys van ID en verbyl; (b) Registrasiefooi; (c) registrasievoorwaardes. Bepaling: 10% (tien persent) van die koopprijs in kontant op die dag van die veiling, onmiddellike internetoedrag na die Balju se trustrekening of 'n bankwaarborge titek, die balans betaalbaar met registrasie van oordrag, versker deur 'n bank of bouvereniging of ander aanvaarbare waarborg wat binne een en twintig (21) dae vanaf die verkoopdatum versker moet word. 2. Afslaan se kommissie betaalbaar op die dag van die veiling en soos volg bereken: 6% (ses persent) op die opbrengs van die veiling tot 'n prys van R100 000,00 (een honderd duisend rand) en daarna 3,5% (drie en 'n halwe persent) op R100 000,00 tot R400 000,00 en 1,5 persent op die balans daarvan, van die opbrengs van die veiling, onderhewig aan 'n maksimum totale kommissie van R40 000,00 (veertig duisend rand) en 'n minimum van R3 000,00 (drie duisend rand) (insluitend van die balju se bankfooi en ander uitgawes aangegaan deur die opbrengs in sy of haar trustrekening in te betaal), welke kommissie deur die koper betaal sal word. 3. Die eiendom mag in besit geneem word na tekening van die voorwaardes van verkoop, betaling van deposito en die sekuring van die koopprijs. 4. Indien die koper besit neem van die eiendom, sal die koper verantwoordelik wees vir okkupasiehuur teen 1% van die koopprijs per maand. Pro-rata okkupasiehuur sal deur die koper betaal word op die datum van besitting en daarna op of voor die 1ste van elke maand tot die datum van oordrag. Gedagtekem in Kaapstad.

STRAUSS DALY INC., Prokureur vir die Eiser, K. Barnes, 13de Vloer Touchstone-huis, Breststraat 7, Kaapstad, Tel. 021 410 2200, Faks 086 5100 157. Verw: STA801/0957. O.K. 9-1380



Kennissgewing van Algemene Jaarvergadering (AJV)

Die Claremont Improvement District Company NPC (CIDC) en die Claremont Road Bypass Company NPC hou 'n AJV. Alle belanghebbende persone word genooi na 'n oorsig van die jaar se bedryfswydte en beplanning vir 2021/22.

Weens Covid-19 en die moontlikheid van veranderinge in vlak, raadpleeg asseblief die webtuiste vir verdere inligting oor die prosedure vir die algemene jaarvergadering.

Datum: Donderdag, 5 November 2020
Tyd: 17h00
Plek: Park Inn by Radisson Hotel, Hemlock Straat 10, Nuweland

Slegs bona fide-lede van die CIDC kan stem by 'n AJV. Alle eienaars van nie-residensiële eiendom wat binne die CIDC val, kan lede word sonder enige koste daaraan verbode, maar moet registreer voor 29 Oktober 2020.

Vir meer besonderhede oor registrasie en dokumentasie gaan na www.cidc.co.za, stuur 'n epos aan info@cidc.co.za of skakel 021 674 0639



HANTAM MUNISIPALITEIT **HANTAM MUNICIPALITY**

Herewith Hantam Municipality would like to inform prospective bidders that the following tenders are being advertised:

1. **NC065/T07/2020: MIG PROJECT: ROADS AND STORMWATER: PHASE 3: HANTAM MUNICIPALITY;**
2. **NC065/T08/2020: SUPPLY, DELIVERY AND ADMINISTRATIVE SUPPORT SERVICES OF A FINE COLLECTION SYSTEM AND CAMERA EQUIPMENT WITH THE RELATED OPERATIONAL SUPPORT FOR A PERIOD OF 36 MONTHS;**
3. **NC065/T17/2020: SUPPLY, DELIVERY AND MAINTENANCE OF THE MUNICIPAL ELECTRICAL NETWORK AND EQUIPMENT FOR A PERIOD OF 36 MONTHS.**

The full advertisement can be found on the website of Hantam Municipality at www.hantam.gov.za and on the e-portal website www.etenders.gov.za.

Mr. J. I. Swartz
MUNICIPAL MANAGER

ERM Reference Number: 0571324

Environmental Impact Assessment for the Liquid Petroleum Gas (LPG) to Power Facility, Saldanha, Western Cape

Invitation to Register and Comment on the Draft Scoping Report

Project Background

The development of a circa 315 MW gas engine power plant ("Facility") is located in the vicinity of Saldanha Bay in the Western Cape Province. The Facility will be connected to the Eskom grid by means of a switching station and 132kV overhead powerlines ("Interconnection Works") which will be handed over to Eskom once built.

The proposed gas engine power plant will have 24 engines and the exhaust from six engines will be grouped together into a stack. Hence there will be 4 stacks, each 30m high, and each with an equivalent diameter of 3.92m.

The facility will be located on Farm 1238 and Portion 65 of Zsvarkensrus 127 located in the vicinity of Saldanha Bay in the Western Cape Province.

Environmental Impact Assessment Process

Notice is hereby given of the public participation process required as part of the Environmental Impact Assessment process (EIA) in terms of the National Environmental Management Act (NEMA) (No. 107 of 1998). The proposed Project triggers the following Listed Activities in terms of the EIA Regulations of 2014 (as amended):

	Project Activities
GN R 327	Activity 14
GN R 325	Activity 2 and 6

The competent authority for this Project is the Department of Environment, Forestry & Fisheries (DEFF). Environmental Resources Management (ERM) has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake the EIA and associated public participation process.

Registration of Stakeholders

As part of the EIA Process, stakeholders and members of the general public are invited to register as Interested and Affected Parties (I&APs) and participate in the EIA process. Registered I&APs will be kept informed through the EIA process and will be notified of the availability of opportunities to provide comment. To register as an I&AP, submit comments, and to obtain more information, please contact ERM on the details provided below.

Availability of the Draft Scoping Report

The Draft Scoping Report is available for comment from the **12 October 2020 to 11 November 2020** (i.e. a 30-day comment period) and can be obtained from the Project website: ERM.EA.PowerStation@erm.com, or requested from ERM (for email transmission). Additionally, the report is available at the following public locations:

- Entrance to Project Site (Sunrise Energy Facility – Property Owner) and
- Langebaan Public Library
- Saldanha Public Library
- Vredenburg Public Library



Kennissgewing van Algemene Jaarvergadering (AJV)

Die Stikland Industrial City Improvement District NPC (SIDC) hou 'n AJV. Alle belanghebbende persone word genooi na 'n oorsig van die jaar se bedryfswydte en beplanning vir 2021/22.

Weens Covid-19 en die moontlikheid van veranderinge in vlak, raadpleeg asseblief die webtuiste vir verdere inligting oor die prosedure vir die algemene jaarvergadering.

Datum: 03 November 2020
Tyd: 16h00
Plek: Konferensiesaal, Andrag-Agrico Kantore, Hoek van Labelweg en Du Paarweg, Stikland, Bellville, 7535

Slegs bona fide-lede van die SIDC kan stem by 'n AJV. Alle eienaars van nie-residensiële eiendom wat binne die SIDC val, kan lede word sonder enige koste daaraan verbode, maar moet registreer voor 27 Oktober 2020

Vir meer besonderhede oor registrasie en dokumentasie gaan na www.stiklandcid.co.za, stuur 'n epos aan info@stiklandcid.co.za of skakel 021 565 0901



Kennissgewing van Algemene Jaarvergadering (AJV)

Die Strand Business Improvement District NPC (SBID) hou 'n AJV. Alle belanghebbende persone word genooi na 'n oorsig van die jaar se bedryfswydte en beplanning vir 2021/22.

Weens Covid-19 en die moontlikheid van veranderinge in vlak, raadpleeg asseblief die webtuiste vir verdere inligting oor die prosedure vir die algemene jaarvergadering.

Datum: 04 November 2020
Tyd: 15h00
Plek: Friedman and Cohen, Hoek van Hooftweg en Vreysstraat, Strand, 7140

Slegs bona fide-lede van die SBID kan stem by 'n AJV. Alle eienaars van nie-residensiële eiendom wat binne die SBID val, kan lede word sonder enige koste daaraan verbode, maar moet registreer voor 28 Oktober 2020.

Vir meer besonderhede oor registrasie en dokumentasie gaan na www.strandbid.co.za, stuur 'n epos aan info@strandbid.co.za of skakel 021 565 0901



Kennissgewing van Algemene Jaarvergadering (AJV)

Die Somerset West City Improvement District NPC (SWCID) hou 'n AJV. Alle belanghebbende persone word genooi na 'n oorsig van die jaar se bedryfswydte en beplanning vir 2021/22.

Weens Covid-19 en die moontlikheid van veranderinge in vlak, raadpleeg asseblief die webtuiste vir verdere inligting oor die prosedure vir die algemene jaarvergadering.

Datum: 05 November 2020
Tyd: 16h00
Plek: The Farm House Coffee Shop Restaurant, The Trading Post Sentrum, Caledon Straat 53, Hoek van Caledon en Myburghstraat, Somerset West, 7130

Slegs bona fide-lede van die SWCID kan stem by 'n AJV. Alle eienaars van nie-residensiële eiendom wat binne die SWCID val, kan lede word sonder enige koste daaraan verbode, maar moet registreer voor 29 Oktober 2020.

Vir meer besonderhede oor registrasie en dokumentasie gaan na www.swcid.co.za, stuur 'n epos aan info@swcid.co.za of skakel 021 565 0901



Kennissgewing van Algemene Jaarvergadering (AJV)

Die Glosderry City Improvement District NPC (GIDC) hou 'n AJV. Alle belanghebbende persone word genooi na 'n oorsig van die jaar se bedryfswydte en beplanning vir 2021/22.

Weens Covid-19 en die moontlikheid van veranderinge in vlak, raadpleeg asseblief die webtuiste vir verdere inligting oor die prosedure vir die algemene jaarvergadering.

Datum: 02 November 2020
Tyd: 11h00
Plek: Konferensiesaal, Pres Les House, Wilgerstraat 3, Claremont, 7708

Slegs bona fide-lede van die GIDC kan stem by 'n AJV. Alle eienaars van nie-residensiële eiendom wat binne die GIDC val, kan lede word sonder enige koste daaraan verbode, maar moet registreer voor 26 Oktober 2020.

Vir meer besonderhede oor registrasie en dokumentasie gaan na www.glosderrycid.co.za, stuur 'n epos aan info@glosderrycid.co.za of skakel 021 565 0901

Khosi Dlamini

From: Doretha Kotze <dkotze@wcdm.co.za>
Sent: Tuesday, 10 November 2020 08:31
To: ERM South Africa EA Power Station
Cc: WCDM Correspondence
Subject: RE: Notification to Stakeholders: Draft Scoping Report for the Proposed Gas to Power Facility, Saldanha, Western Cape

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ref: 13/2/12/3/1

ATTENTION: MICHELLE HERBERT

Madam

DRAFT SCOPING REPORT: PROPOSED GAS TO POWER FACILITY ON FAM 1238 AND PORTION 65 OF FARM 127, DIVISION MALMESBURY, SALDANHA BAY MUNICIPALITY

1. Your letter dated 12 October 2020 and the Draft Scoping Report for the proposal refer.
2. The West Coast District Municipality notes the information contained in the Draft Scoping Report and will provide comprehensive comments once the Specialist Reports are available.
3. Kindly sent information to:

The Municipal Manager
and/or
Records

Email: mm@wcdm.co.za

Email: mun@wcdm.co.za

Regards

Doretha Kotze
Stads- en Streekbeplanner/Town and Regional Planner
Weskus Distriksmunisipaliteit
Langstraat 58 Long Street
Posbus 242 PO Box
MOORREESBURG 7310
Tel: 022 433 8523
West Coast District Municipality



APPENDIX C: PALAEONTOLOGICAL IMPACT ASSESSMENT

(Separate File)

APPENDIX D: FOSSIL CHANCE FIND PROTOCOL

Monitoring

A constant monitoring presence over the period during which excavations for developments are made, by either an archaeologist or palaeontologist, is generally not practical.

The field supervisor/foreman and workers involved in digging excavations must be encouraged and informed of the need to watch for potential fossil and buried archaeological material. Workers seeing potential objects are to report to the field supervisor who, in turn, will report to the ECO. The ECO will inform the archaeologist and/or palaeontologist contracted to be on standby in the case of fossil finds.

To this end, responsible persons must be designated. This will include hierarchically:

- The field supervisor/foreman, who is going to be most often in the field.
- The Environmental Control Officer (ECO) for the project.
- The Project Manager/Site Agent.

If the monitoring of the excavations is a stipulation in the Archaeological Impact Assessment, the contracted Monitoring Archaeologist (MA) can also monitor for the presence of fossils and make a field assessment of any material brought to attention. The MA is sufficiently informed to identify potential fossil material and liaise with the palaeontologist.

Response By Personnel In The Event Of Fossil Finds

In the process of digging the excavations fossils may be spotted in the excavation sides or bottom, or as they appear in excavated material on the spoil heap.

- Stop work at fossil find. The site foreman and ECO must be informed.
- Protect the find site from further disturbance and safeguard all fossil material in danger of being lost such as in the excavator bucket and scattered in the spoil heap.
- The ECO or site agent must immediately inform the standby palaeontologist and/or Heritage Western Cape (HWC) and provide via email the information about the find, as detailed below:
 - Date
 - Position of the excavation (GPS) and depth.
 - A description of the nature of the find.
 - Digital images of the excavation showing vertical sections (sides) and the position of the find showing its depth/location in the excavation.
 - A reference scale must be included in the images (tape measure, ranging rod, or object of recorded dimensions).
 - Close-up, detailed images of the find (with scale included).

Heritage Western Cape and/or the contracted standby palaeontologist will assess the information and a suitable response will be established which will be reported to the developer and the ECO, such as whether rescue excavation or rescue collection by a palaeontologist is necessary or not.

The response time/scheduling of the rescue fieldwork is to be decided in consultation with developer/owner and the ECO. It will probably be feasible to “leapfrog” the find and continue excavation farther along, so that the work schedule and machine time is minimally disrupted. The strategy is to rescue the material as quickly as possible.

Application For A Permit To Collect Fossils

A permit from HWC and a Work Plan is required to excavate fossils. The applicant should be the qualified specialist responsible for assessment, collection and reporting (palaeontologist).

Should fossils be found that require rapid collecting, application for a palaeontological permit must be made to HWC immediately.

In addition to the information and images of the find, the application requires details of the registered owners of the sites, their permission and a site-plan map. All fossils must be deposited at a HWC approved institution.

APPENDIX E: CURRICULUM VITAE: JOHN GRIBBLE

Name: John Gribble
Profession: Archaeologist (Maritime)
Date of Birth: 15 November 1965
Parent Firm: ACO Associates cc
Position in Firm: Senior Archaeologist
Years with Firm: 2.5
Years of experience: 29
Nationality: South African
HDI Status: n/a

Education:

1979-1983 Wynberg Boys' High School
1986 BA (Archaeology), University of Cape Town
1987 BA (Hons) (Archaeology), University of Cape Town
1990 Master of Arts, (Archaeology) University of Cape Town

Employment:

- September 2017 – present: ACO Associates, Senior Archaeologist and Consultant
- 2014-2017: South African Heritage Resources Agency, Manager: Maritime and Underwater Cultural Heritage Unit
- 2012-2018: Sea Change Heritage Consultants Limited, Director
- 2011-2012: TUV SUD PMSS (Romsey, United Kingdom), Principal Consultant: Maritime Archaeology
- 2009-2011: EMU Limited (Southampton, United Kingdom), Principal Consultant: Maritime Archaeology
- 2005-2009: Wessex Archaeology (Salisbury, United Kingdom), Project Manager: Coastal and Marine
- 1996-2005: National Monuments Council / South African Heritage Resources Agency, Maritime Archaeologist
- 1994-1996: National Monuments Council, Professional Officer: Boland and West Coast, Western Cape Office

Professional Qualifications and Accreditation:

- Member: Association of Southern African Professional Archaeologists (ASAPA) (No. 043)
- Principal Investigator: Maritime and Colonial Archaeology, ASAPA CRM Section
- Field Director: Stone Age Archaeology, ASAPA CRM Section
- Class III Diver (Surface Supply), Department of Labour (South Africa) / UK (HSE III)

Experience:

I have more than 30 years of professional archaeological and heritage management experience. After completing my postgraduate studies and a period of freelance archaeological work in South Africa and abroad, I joined the National Monuments Council (NMC) (now the South African Heritage Resources Agency (SAHRA)) in 1994. In 1996 I became the NMC's first full-time maritime archaeologist and in this regulatory role was responsible for the management and protection of underwater cultural heritage in South Africa under the National Monuments Act, and subsequently under the National Heritage Resources Act.

In 2005 I moved to the UK to join Wessex Archaeology, one of the UK's biggest archaeological consultancies, as a project manager in its Coastal and Marine Section. In 2009 I joined Fugro EMU Limited, a marine geosurvey company to set up their maritime archaeological section. I then spent a year at TUV SUD PMSS, an international renewable energy consultancy, where I again provided maritime archaeological consultancy services to principally the offshore renewable and marine aggregate industries.

In August 2012 I established Sea Change Heritage Consultants Limited, a maritime archaeological consultancy. Sea Change traded until 2018, providing archaeological services to a range of UK maritime sectors, including marine aggregates and offshore renewable energy. Relevant experience includes specialist archaeological consultancy for more than two dozen offshore renewable energy projects and aggregate extraction licence areas in UK waters including:

- Lynn and Inner Dowsing OWF;
- Humber Gateway OWF;
- Sheringham Shoal OWF;
- Race Bank OWF;
- Docking Shoal OWF;
- Triton Knoll OWF;
- Neart na Gaoithe OWF;
- Dogger Bank OWF;
- Hornsea OWF;
- Navitus Bay OWF;
- Aggregate Area 392/393, Hilbre Swash;
- Area 478, East English Channel;
- Area 372/1, North Nab;
- Areas 401 & 2;
- Area 466, North West Rough; and

- Area 447, Outline.

In the UK I was also involved in strategic projects which developed guidance and best practice for the UK offshore industry with respect to the marine historic environment. This included the principal authorship of two historic environment guidance documents for COWRIE and the UK renewable energy sector (*Historical Environment Guidance for the Offshore Renewable Energy Sector* (2007) and *Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector* (2010)). I was also manager and lead author in the development of the archaeological elements of the first Regional Environmental Assessments for the UK marine aggregates industry, and in the 2009 *UK Continental Shelf Offshore Oil and Gas and Wind Energy Strategic Environmental Assessment* for Department of Energy and Climate Change. More recently I undertook a review of the potential impacts of marine mining on South Africa's palaeontological and archaeological heritage resources for the Council for Geoscience, on behalf of the Department of Mineral Resources. In 2013-14 I was lead author and project co-ordinator on *The UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001: An Impact Review for the United Kingdom* and in 2016 I was co-author of a Historic England / Crown Estate / British Marine Aggregate Producers Association funded review of marine historic environment best practice guidance for the UK offshore aggregate industry.

I returned to South African in mid-2014 where I was re-appointed to my earlier post at SAHRA: Manager of the Maritime and Underwater Cultural Heritage Unit. In July 2016 I was appointed as Acting Manager of SAHRA's Archaeology, Palaeontology and Meteorites Unit.

I left SAHRA in September 2017 to join ACO Associates as Senior Archaeologist and Consultant. Since being at ACO I have carried out a number of offshore impact assessments (see list of recent projects below) and authored a review of the potential impacts of marine mining on South Africa's palaeontological and archaeological heritage for the Council for Geoscience, on behalf of the Department of Mineral Resources.

I have been a member of the Association of Southern African Professional Archaeologists (No. 043) for more than twenty years and am accredited by ASAPA's Cultural Resource Management section.

I have been a member of the ICOMOS International Committee for Underwater Cultural Heritage since 2000 and served as a member of its Bureau between 2009 and 2018.

Since 2010 I have been a member of the UK's Joint Nautical Archaeology Policy Committee.

I am a member of the Advisory Board of the George Washington University / Iziko Museums of South Africa / South African Heritage Resources Agency / Smithsonian Institution 'Southern African Slave Wrecks Project' and serve on the Heritage Western Cape Archaeology, Palaeontology and Meteorites Committee.

Selected Project Reports:

Gribble, J. 2017. *Archaeological Assessment of Farm No 8/851, Drakenstein*. Unpublished report prepared for Balwin Properties Pty Ltd. ACO Associates.

- Gribble, J. 2017. *Archaeological Assessment of Bosjes Phase 2, Farm 218 Witzenberg*. Unpublished report prepared for Farmprops 53 (Pty) Ltd. ACO Associates.
- Gribble, J. 2017. *Canal Precinct, V&A Waterfront: Heritage Impact Assessment*. Unpublished report prepared for Nicolas Baumann Urban Conservation and Planning. ACO Associates.
- Gribble, J. 2017. *Archaeological Assessment of the proposed dam on the farm Constantia Uitsig, Erven 13029 and 13030, Cape Town*. Unpublished report prepared for SLR Consulting (South Africa) (Pty) Ltd. ACO Associates.
- Gribble, J. 2017. *Archaeological Assessment of Erf 4722 Blouvillei, Wellington*. Unpublished report prepared for Urban Dynamics Western Cape (Pty) Ltd. ACO Associates.
- Hart, T.G., Gribble, J. & Robinson, J. 2017 *Heritage Impact Assessment for the Proposed Phezukomoya Wind Energy Facility to be Situated in the Northern Cape*. Unpublished report prepared for Arcus Consulting. ACO Associates.
- Hart, T.G., Gribble, J. & Robinson, J. 2017 *Heritage Impact Assessment for the Proposed San Kraal Wind Energy Facility to be Situated in the Northern Cape*. Unpublished report prepared for Arcus Consulting. ACO Associates.
- Gribble, J. 2018. *Integrated Heritage Impact Assessment of the Peter Falke Winery on Farm 1558 Groenvlei, Stellenbosch*. Unpublished report prepared for Werner Nel Environmental Consulting Services. ACO Associates.
- Gribble, J. & Halkett, D. 2018. *Heritage Impact Assessment for a Proposed Extension of the Kaolin Mine on Portion 1 of the Farm Rondawel 638, Namaqualand District, Northern Cape*. Unpublished report prepared for Rondawel Kaolien (Pty) Ltd. ACO Associates.
- Gribble, J. 2019. *Archaeological Impact Assessment for Proposed Sand Mining on Portion 2 of Farm Kleinfontein 312, Klawer District, Western Cape*. Unpublished report prepared for Green Direction Sustainability Consulting (Pty) Ltd. ACO Associates.
- Halkett, D. & Gribble, J. 2018. *Archaeological/Heritage Report for the Expansion of the Current Granite Mining at Oeranoep and Ghaams, Northern Cape Province*. Unpublished report prepared for Klaas Van Zyl. ACO Associates.
- Gribble, J. 2018. *Potential Impacts of Marine Mining on South Africa's Palaeontological and Archaeological Heritage*. Report prepared for Council for Geoscience. ACO Associates.
- Gribble, J. 2018. *Maritime Heritage Impact Assessment: Block ER236, Proposed Exploration Well Drilling*. Unpublished report prepared for ERM Southern Africa (Pty) Ltd. ACO Associates.
- Gribble, J. 2018. *Maritime Heritage Impact Assessment: IOX Cable Route*. Unpublished report prepared for ERM Southern Africa. ACO Associates.
- Gribble, J. 2018. *Archaeological Assessment of the Terrestrial Portion of the IOX Cable Route*. Unpublished report prepared for ERM Southern Africa. ACO Associates.

- Gribble, J. 2018. *Archaeological Assessment: Erven 11122, 11123, 11124, 11125, 11126, 11127 and Re 11128, Corner Frere Street and Albert Road, Woodstock, Cape Town*. Unpublished report prepared for Johan Cornelius. ACO Associates.
- Gribble, J. 2018. *Maritime Heritage Impact Assessment: Expansion of Diamond Coast Aquaculture Farm on Farm 654, Portion 1, Kleinsee, Northern Cape*. Unpublished report prepared for ACRM. ACO Associates.
- Gribble, J. 2018. *Heritage Impact Assessment: Ship Repair Facility, Port of Mossel Bay*. Unpublished report prepared for Nema Consulting. ACO Associates.
- Gribble, J. 2018. *Archaeological Assessment: Sites B and C, Portwood Ridge Precinct, V&A Waterfront*. Unpublished report prepared for Urban Conservation. ACO Associates.
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APPENDIX F: CURRICULUM VITAE: JOHN PETHER (M.Sc., Pr. Sci. Nat. (Earth Sci.))

Independent Consultant/Researcher recognized as an authority with 37 years' experience in the field of coastal plain and continental shelf palaeoenvironments, fossils and stratigraphy, mainly involving the West Coast/Shelf of southern Africa. Has been previously employed in academia (South African Museum) and industry (Trans Hex, De Beers Marine). At present an important involvement is in Palaeontological Impact Assessments (PIAs) and mitigation projects in terms of the National Heritage Resources Act 25 (1999) (~300 PIA reports to date) and is an accredited member of the Association of Professional Heritage Practitioners (APHP). Continues to be involved as consultant to offshore and onshore marine diamond exploration ventures.

Expertise includes:

- Coastal plain and shelf stratigraphy (interpretation of open-pit exposures, on/offshore cores and exploration drilling).
- Sedimentology and palaeoenvironmental interpretation of shallow marine, aeolian and other terrestrial surficial deposits.
- Marine macrofossil taxonomy (molluscs, barnacles, brachiopods) and biostratigraphy.
- Marine macrofossil taphonomy.
- Sedimentological and palaeontological field techniques in open-cast mines (including finding and excavation of vertebrate fossils (bones)).

Membership of Professional Bodies

- South African Council of Natural Scientific Professions. Earth Science. Reg. No. 400094/95.
- Geological Society of South Africa.
- Palaeontological Society of Southern Africa.
- Southern African Society for Quaternary Research.
- Association of Professional Heritage Practitioners (APHP), Western Cape. Accredited Member No. 48.

Past Clients Palaeontological Assessments

- AECOM SA (Pty) Ltd. Guillaume Nel Environmental Management Consultants.
- Agency for Cultural Resource Management (ACRM). Klomp Group.
- AMATHEMBA Environmental. Megan Anderson, Landscape Architect.
- Anél Blignaut Environmental Consultants. Ninham Shand (Pty) Ltd.
- Arcus Gibb (Pty) Ltd. PD Naidoo & Associates (Pty) Ltd.
- ASHA Consulting (Pty) Ltd. Perception Environmental Planning.
- Aurecon SA (Pty) Ltd. PHS Consulting.
- BKS (Pty) Ltd. Engineering and Management. Resource Management Services.
- Bridgette O'Donoghue Heritage Consultant. Robin Ellis, Heritage Impact Assessor.
- Cape Archaeology, Dr Mary Patrick. Savannah Environmental (Pty) Ltd.

- Cape EAPrac (Cape Environmental Assessment Practitioners). Sharples Environmental Services cc
- CCA Environmental (Pty) Ltd. Site Plan Consulting (Pty) Ltd.
- Centre for Heritage & Archaeological Resource Management (CHARM).
- SRK Consulting (South Africa) (Pty) Ltd.
- Chand Environmental Consultants. Strategic Environmental Focus (Pty) Ltd.
- CK Rumboll & Partners. UCT Archaeology Contracts Office (ACO).
- CNdV Africa UCT Environmental Evaluation Unit
- CSIR - Environmental Management Services. Urban Dynamics.
- Digby Wells & Associates (Pty) Ltd. Van Zyl Environmental Consultants
- Enviro Logic Western Cape Environmental Consultants (Pty) Ltd, t/a
- ENVIRO DINAMIK.
- Environmental Resources Management SA (ERM). Wethu Investment Group Ltd.
- Greenmined Environmental Withers Environmental Consultants.
- Stratigraphic consulting including palaeontology
- Afri-Can Marine Minerals Corp Council for Geoscience
- De Beers Marine (SA) Pty Ltd. De Beers Namaqualand Mines.
- Geological Survey Namibia IZIKO South African Museum.
- Namakwa Sands (Pty) Ltd NAMDEB