



LORNAY

ENVIRONMENTAL CONSULTING

**SITE SENSITIVITY VERIFICATION REPORT
FOR
PROPOSED EXPANSION OF ROMANSBAAI ABALONE FARM
PORTION 2 OF THE FARM 711, GANSBAAI, CALEDON RD**

May 2025

Compiled by:

Lornay Environmental Consulting

Compiled for:

Aqunion (Pty) Ltd



AQUNION

INTRODUCTION

The proposed development involves the expansion of the existing Romansbaai Abalone Farm, located on Portion 2 of Farm 712. This expansion aims to enhance production capacity of the farm by expanding operational facilities to meet these needs. The key components of the development include the expansion of the production area of grow-out tanks, the expansion of the existing pumphouse, the installation of new pipelines, and the construction of a lined seawater reservoir. Additionally, a solar power array will be integrated into the project, generating approximately 4 MW of electricity to support sustainable operations. The location for the expansion project is located approximately 500 m inland from the highwater mark, behind (northeast) of the existing operations.

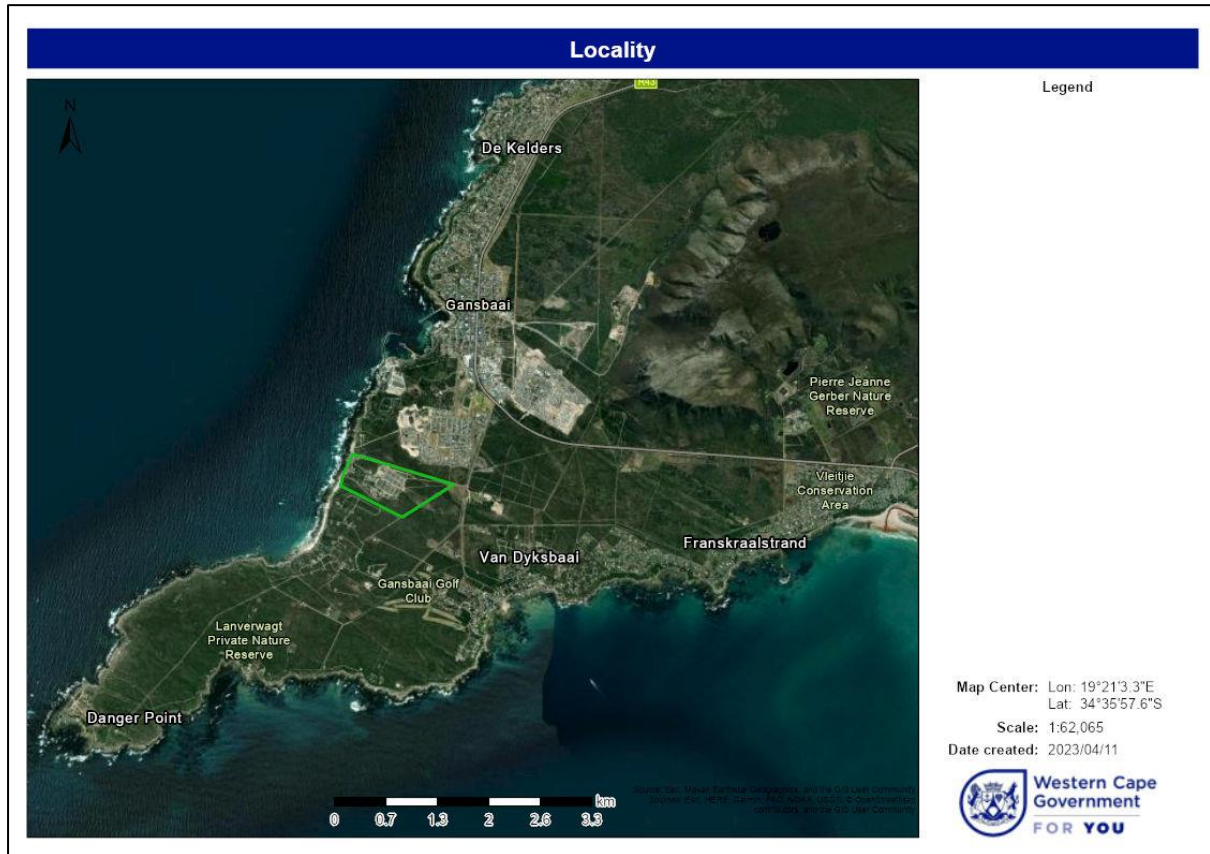


Figure 1. Locality of subject property

The preliminary layout alternative is as follows and will be assessed by the relevant specialists in due course.

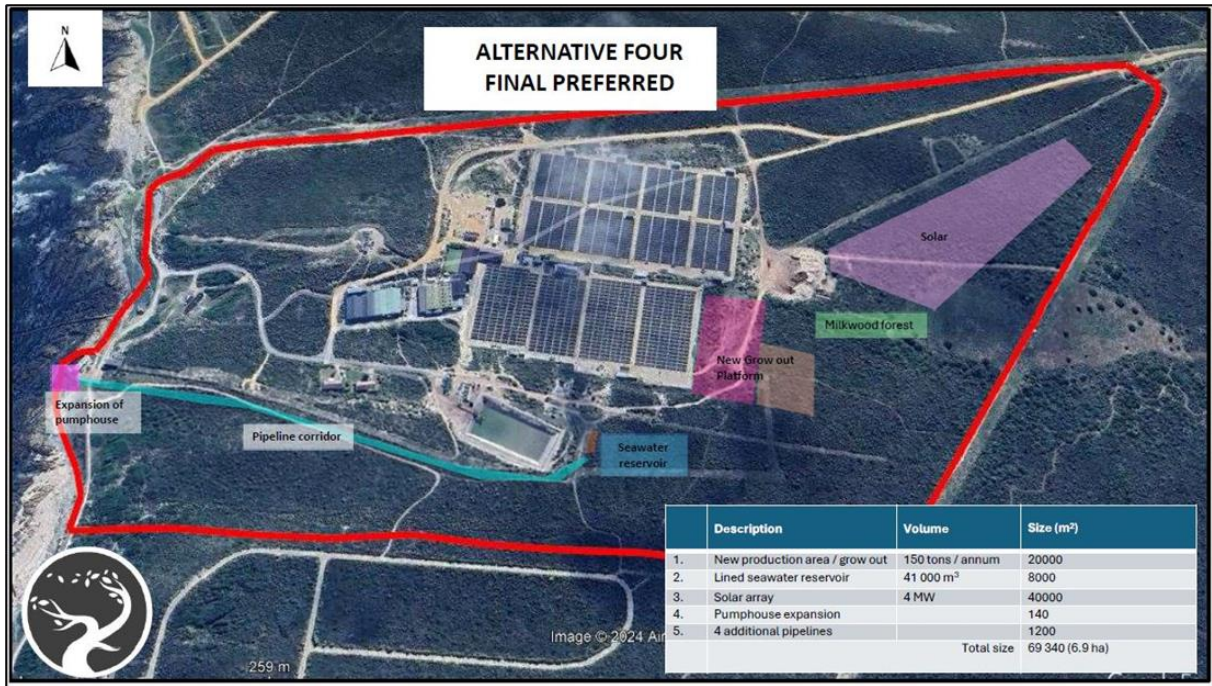


Figure 2. Preferred alternative two – Expansion of existing abalone farm, additional of solar and seawater reservoir.

PURPOSE OF THE REPORT

Lornay Environmental Consulting (Pty) Ltd was appointed to undertake the required Environmental Authorisation (EA) application process in terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) promulgated under the National Environmental Management Act, 1998 (No. 107 of 1998; NEMA), for the proposed project.

Based on the classification selected and the known impacts with the proposed development, the Screening Tool lists the following specialist assessments to be included in the BAR process and / or motivation as to why these specialists are not applicable to the site

- Landscape / Visual Impact Assessment
- Archaeological and Cultural Heritage Impact Assessment
- Palaeontology impact assessment
- Terrestrial Impact Assessment
- Aquatic Biodiversity Impact Assessment
- Socio-Economic Impact Assessment
- Plant Species Assessment
- Animal species assessment

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme	X			
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme	X			
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

Agricultural Theme – High Sensitivity – The activity involves the expansion of an existing agricultural facility, specifically an Abalone Farm. The activity is in line with the agricultural theme and therefore no further assessment is required.

Animal Species Theme – High Sensitivity — Terrestrial Animal Species Compliance has been undertaken by Jan Venter of Wildlife Conservation Decision Support. A total of seven animal species of concern was identified by the screening tool. One additional species, Cape dwarf chameleon, *Bradypodion pumilum*, was identified and added during the desktop study. The expansion is situated within an area already impacted by the day-to-day operations of the existing Abalone Farm. The adjacent property has been artificially stocked with various species of small antelope which access the land, these will not be impacted by the expansion. The areas proposed for the expansion link directly to the existing operations and have been impacted by fringe activities. Based on the findings of the site survey, none of the identified species of concern were observed within the proposed development footprint. Therefore, the proposed expansion will not affect potential breeding sites or foraging habitats of the animal species identified in the assessment.

Aquatic Biodiversity Theme – Very High Sensitivity – There are no freshwater indicators on site, this has been verified through on-site sensitivity verification by the EAP as well as findings by the Terrestrial / Botanical specialist, where no wetland indicator species are identified. The expansion of the pumphouse will take place below the high-water mark of the sea but is a small-scale expansion to existing disturbed zone. No further assessment required under this theme.

Archaeological and Cultural Heritage Theme – Very high sensitivity – in line with the requirements of the National Heritage Resources Act, a Notice of Intent to Develop was submitted to Heritage Western Cape as part of the BAR process. HWC confirmed that a Heritage Impact Assessment with AIA, PIA, VIA and comments from SAHRA Maritime Underwater Culture Unite, is required. These assessments have been completed and are included herein. Mitigation measures have been incorporated in the EMP.

Civil Aviation Theme – High sensitivity – the proposed development is the expansion of existing activities and therefore no additional impacts are expected to this theme. No further assessment required.

Defence Theme – Low. No impacts envisaged. No further assessment required

Palaeontology – Very-High - PIA completed and findings outlined herein. Mitigation measures have been incorporated into the EMP.

Plant Species Theme – Medium – A Terrestrial Biodiversity Assessment covering the Plant Species Theme has been completed for the site.

Terrestrial Biodiversity Theme – Very high – Assessment completed. The proposed expansion occurs next to the existing operation facilities of the farm and some areas are already disturbed by day-to-day operations. The assessment incorporated the plant species theme under this theme. About 14ha of the 50ha property surveyed is of High botanical sensitivity, and the underlying vegetation type (Overberg Dune Strandveld) is gazetted as Endangered on a national basis. Approximately 40% of this High sensitivity area will be lost or disturbed by the proposed development. At least five plant Species of Conservation Concern (SoCC) were recorded in four of the five footprint areas, but viable populations of all SoCC will remain on undeveloped parts of the property, and most of them should survive in the PV area if the vegetation in this area is brushcut to about 1m tall. Search and Rescue of all translocatable bulbs (geophytes) should be undertaken from the approved development footprints for production area and the new dam prior to construction. This should be done at the end of the flowering season for the relevant species (ranges from April to October). Material should be translocated to other parts of the property where it will not be disturbed in future, and which is ecologically similar. No large-scale soil disturbance or site clearing should happen in the proposed PV area, and instead vegetation can be trimmed to a maximum height of 1m, maintaining the bulk of the plant cover, whilst allowing for the solar panels to be positioned at a minimum of 1m above ground level. If the vegetation grows above the panels, it may be trimmed on a regular basis, as needed, but should never be cut below 300mm above the ground. Cut material can be used as mulch to stabilise and cover any loose sand nearby. All these mitigation measures, amongst others are incorporated in the EMP.

IDENTIFIED SPECIALIST ASSESSMENT

The following specialists were identified in the Screening Tool Report and motivation regarding the appointment of such specialists, or not, is outlined below:

Landscape/ Visual Impact Assessment – A Visual Impact Assessment was conducted in line with the requirements stipulated in the letter from Heritage Western Cape.

Archaeological and Cultural Impact Assessment - In line with the requirements of the National Heritage Resources Act, a Notice of Intent to Develop was submitted to Heritage Western Cape as part of the BAR process. HWC confirmed that a Heritage Impact Assessment with AIA, PIA, VIA and comments from SAHRA Maritime Underwater Culture Unite, is required. These assessments have been completed and are included herein.

Palaeontological Impact Assessment – In line with the requirements of the National Heritage Resources Act, a Notice of Intent to Develop was submitted to Heritage Western Cape as part of the BAR process. HWC confirmed that a Heritage Impact Assessment with AIA, PIA, VIA and comments from SAHRA Maritime Underwater Culture Unite, is required. These assessments have been completed and are included herein.

Terrestrial Biodiversity Impact Assessment – This assessment was undertaken and included plant species theme.

Aquatic Biodiversity Impact Assessment – There are no wetland or watercourses mapped on the area proposed for expansion.

Socio-economic Assessment – The proposed expansion of the abalone farm aligns with the existing infrastructure development on property, mainly for abalone farming.

Plant Species Assessment – The assessment is integrated into the Terrestrial Biodiversity Assessment.

Animal Species Assessment – An animal species assessment conducted and observed the faunal species during the site survey on the study area. The survey consisted of meandering visual, acoustic surveys and point surveys performed at and between the various proposed development sites. During the analysis, the animal species assessment highlighted and tabulated faunal species of conservation concern (SoCC) that could be present on or close to the development footprint. However, no species of conservation concern observed on site.

PRELIMINARY SITE ASSESSMENT

The expansion of the existing Romansbaai Abalone Farm is proposed.



Figure 3: The study's vegetation cover is Overberg Dune Strandveld.



Figure 4: The northeastern part of the property falls on the edge of the CBA.



Photo 1: Current conditions on the area proposed for the Solar Array.



Photo 2: Current conditions on the area proposed for Phase 1 and Phase 2



Photo 3: Current conditions of the site proposed for expansion. The sites are located directly alongside the existing farm and therefore

CONCLUSION

The following specialists have been appointed as part of the project team.

- Faunal / Animal Specialist
- Heritage Impact Assessment
- Archaeological Impact Assessment
- Palaeontological Impact Assessment
- Visual Impact Assessment
- Marine and Coastal
- Terrestrial Biodiversity Impacts Assessment