



iLifa leMveli leNtshona Koloni
Erfenis Wes-Kaap
Heritage Western Cape

**NOTIFICATION
 OF
 INTENT
 TO
 DEVELOP**

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38(1) & (8) of the National Heritage Resources Act.

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience.

A. BASIC DETAILS

PROPERTY DETAILS:

Name of property: Port of Saldanha	
Street address or location (eg: off R44): Existing General Maintenance Quay (GMQ) and Rock Quay in the Port of Saldanha.	
Erf or farm number/s: 1185	Coordinates: 33° 00' 06.77"S 17° 59' 45.62"E (A logical centre point. Format based on WGS84.)
Town or District: Saldanha Bay / Vredenburg	Responsible Municipality: Saldanha Bay Local Municipality
Extent of property: 110 ha	Current use: Port activities
Predominant land use/s of surrounding properties: Industrial (Iron-ore handling facility, port activities, smelter, steel processing and railway line) agricultural (small stock farming) and residential (Bluewater Bay).	

REGISTERED OWNER OF PROPERTY:

Name Transnet National Ports Authority of South Africa (contact: Gary James)		
Address Port of Saldanha, Private Bag X1, Saldanha, 7395		
Telephone (022) 703 5460	Cell 083 4133 884	E-mail Gary.James@transnet.net
By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed.		
I confirm that I enclose with this form four hardcopies of all material submitted together with a CD ROM containing digital versions of all of the same.		

Signature of owner or authorised agent
 (Agents must attach copy of power of attorney to this form.)

Date / / 20

DEVELOPMENT DETAILS:

Please indicate below which of the following Sections of the National Heritage Resources Act, or other legislation has triggered the need for notification of intent to develop.

<input checked="" type="checkbox"/> S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.	S38(1)(c) Any development or activity that will change the character of a site -
<input type="checkbox"/> S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	<input type="checkbox"/> (i) exceeding 5 000m ² in extent;
<input type="checkbox"/> S38(1)(d) Rezoning of a site exceeding 10 000m ² in extent.	<input type="checkbox"/> (ii) involving three or more existing erven or subdivisions thereof;
<p>Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details: GN 544 (16): The construction or earthmoving activities in the sea, an estuary, or within the littoral active zone or a distance of 100m inland of the high-water mark of the sea or an estuary, whichever is greater, in respect of (i) Fixed or floating jetties and slipways; (ii) Tidal pools; (iii) Embankments; (iv) Rock revetments or stabilising structures including stabilising walls; (v) Buildings of 50 square meters or more; or (vi) Infrastructure covering 50 square metres or more.</p> <input checked="" type="checkbox"/> GN 544 (43): The expansion of structures in the coastal public property where the development footprint will be increased by more than 50 m2, excluding such expansions within existing ports or harbours where there would be no increase in the development footprint or throughput capacity of the port or harbour. <p>GN 544 (45): The expansion of facilities in the sea, an estuary, or within the littoral active zone or a distance of 100m inland of the high-water mark of the sea or an estuary for infrastructure by more than 50m2 within existing ports and harbours where there will be an increase in the development footprint.</p> <p>GN 544 (54): The expansion of an island, anchored platform or any other permanent structure on or along the seabed, where the</p>	<input type="checkbox"/> (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.

If you have checked any of the three boxes above, describe how the proposed development will change the character of the site:

expansion will constitute an increased development footprint.

If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:

Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: Department of Environmental Affairs (Environmental Authorisation).

Present phase at which the process with that authority stands: Draft Basic Assessment Report

Provide a full description of the nature and extent of the proposed development or activity including its potential impacts (eg: changes in land use, envisaged timeframes, provision of additional bulk services, excavations, landscaping, total floor area, height of development, etc. etc.): The Transnet National Ports Authority (TNPA) is proposing to upgrade the existing General Maintenance Quay (GMQ) and Rock Quay in the Port of Saldanha (see Appendix C: Figure 1) in order to accommodate off shore supply vessels to the West African Oil and Gas industry at the quay, thereby creating a new business opportunity supporting the oil and gas industry.

The existing GMQ was constructed in the early 1970's and consists of I-shaped precast concrete blocks stacked on top of each other to form the quay wall. The toe of the wall is founded at -11.70 m Chart Datum (CD) and the top of the quay level is at +3.80 m CD, resulting in an overall wall height of 15.50 m. The current overall length of the wall is 147.90 m, with the last 20 m on each end of the wall tapering down to foundation level. This, in effect, results in the usable surface only extending over 107.90 m of the quay wall.

The existing Rock Quay is situated approximately 50 m north of the existing GMQ and was constructed with steel sheet piles in the early 1970's. The existing sheet piles are in a state of disrepair and need to be replaced. In addition, the berth pocket has filled up with sediment over time and it is therefore unusable.

The 50 m gap between the GMQ and Rock Quay structures creates an embayment landwards of the existing quay.

TNPA's intention is to create a single length of continuous quay, approximately 300 m long, by joining the two structures. The proposed upgrades to the GMQ and Rock Quay include various components as described below.

Construction of New Quay Walls

The existing GMQ will be extended by 20 m on either end, a total of 40 m, by building up the tapered wing wall up to the existing capping level (see Appendix C: Figure 1 Section A and Figure 2). This will increase the usable quay surface to 147.90 m. In addition 150 m of new sheet piles will be installed. Of the 150 m, 100 m is required to replace the existing sheet piles at the Rock Quay (see Appendix C: Figure 1 Section C and Figure 4). The remaining 50 m is required to close the gap that exists between the two existing quay walls (see Appendix C: Figure 1 Section B and Figure 3). The area behind the 50 m of new quay wall will be reclaimed. The proposed upgrades will create one continuous length of quay wall approximately 300 m in length.

For the upgrades to the Rock Quay wall, a number of alternative quay wall options were considered (see Section A2c), and the sheet pile option was selected as the preferred solution for this project. Note that Contractors, in tendering, may propose alternative construction methods, although the parameters of these are not yet know.

As a result of the dredging required to reinstate the berth pocket at the Rock Quay (see below), it is possible that sediment from the beach between the Moss gas quay and GMQ will be eroded as sediment is deposited in the dredged berth pocket. Further, the existing revetment north of the existing Rock Quay (see Appendix C: Figure 1) will be disturbed during construction and will be rehabilitated to ensure the stability of the embankment north of the Rock Quay. To avoid any potential coastal erosion along the shoreline west of the Rock Quay, TNPA will monitor the beach profile and, if necessary, undertake the required corrective action to stabilise the shoreline.

The upgraded quay will collectively be referred to as the GMQ.

Refurbishing the Existing GMQ and Rock Quay and Services

The area behind the GMQ and Rock Quay will be reprofiled to slope away from quay. Electrical and water services will be supplied, and new bollards and fenders will be installed. Stormwater runoff from the GMQ will enter the Port's existing stormwater system. The TNPA is currently upgrading the stormwater system. The new system will be geared to prevent contaminated stormwater runoff flowing into the sea adjacent to the quay, although a limited amount of run-off may occur from the quay wall. The new stormwater system will direct stormwater away from the quay towards land as surface runoff, thereby limiting the amount of runoff entering the sea.

Dredging

Dredging is required to reinstate the berth pocket at the Rock Quay. The proposed dredging works include the removal of 15 000 m³ of sediment in a ~5 000 m² footprint, as shown in Appendix C: Figure 1. Dredging will be to -6.5 m CD for construction and initial operations (see below). The proposed dredging works extend into the active transport zone.

The dredged methodology will depend on the characteristics of the sediment to be dredged.

Alternatives currently under consideration are discussed in Section 2c below. It is not anticipated that any blasting will be required.

Reclamation

Dredge material from the (initial) dredging will be deposited in the gap between the existing GMQ and Rock Quay (see Appendix C: Figure 1- Reclamation), to be used as fill material to reclaim this area. A new sheet pile wall will be installed between the existing GMQ and the Rock Quay, to act as a control weir allowing suspended materials to settle out once reclamation starts. Rubble and debris will then be removed from the reclamation area and disposed of at a registered landfill site. Dredging will then take place (including sampling and grading of dredge material). Dredge material that is suitable for reclamation will be deposited directly into reclamation area. Unsuitable dredge material (material that is too fine) will be stockpiled and blended with small volumes of imported fill prior to being used for reclamation. Following reclamation, a capping layer will be installed.

Excess dredge material, or material not suitable for reclamation, will be disposed of at a licenced landfill site.

Operational Phase

The upgraded GMQ will be leased to a third party user.

The upgrade of the GMQ, as proposed by the TNPA, is key to the development of the proposed Saldanha Bay Integrated Development Zone (IDZ). While it has not yet been confirmed, it is likely that the GMQ will be leased to a supplier of logistical services to the oil and gas industry. It is therefore expected that activities at the GMQ will be associated with logistical services (the supply and offloading of cargo) to vessels servicing this industry off the west coast of Africa – such as the resupply of industrial equipment and perishables.

The potential tenant's vessels are self-sustaining, twin deck, multipurpose vessels with bow-thrusters and heavy lift cranes with approximate capacity of 120 tons and an average deadweight capacity of 7000 metric tons. The vessels can access smaller coastal and river ports with shallow drafts. With the

proposed lengthening of the quay and associated works, the quay will be able to accommodate all of the potential tenant's vessels. Berth functionality (including dredge depths) has been designed to accommodate vessels of this nature. Quay walls have been designed in such a way that further / deeper dredging to -8.5 CD in future will allow for larger vessels to be accommodated at the GMQ in future.

The following assumptions relate to the operational phase:

- The quay will operate 24 hours a day, 365 days a year;
- ~ 25 vessels will use the quay annually; and
- No more than two ships will use the GMQ in a calendar week.

If specific activities associated with the tenants' operations require authorisation in terms of any South African legislation (for example, waste management), this will be applied for separately.

The conservative estimate of annual trapping potential of the proposed dredged area at the GMQ is estimated to be ~10 000 m³/year. Maintenance dredging will be required during operations but is excluded from this application.

B. HERITAGE RESOURCES AND IMPACTS THEREUPON

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

(The assistance of relevant heritage professionals is particularly relevant in completing this section.)

Provide a short history of the site and its environs (Include sources where available): Saldanha Bay is an ancient landform that has responded to the meandering of the ancient Berg River as well as the variations in sea level that have occurred with various earth cooling and warming events that have characterized the Pliocene and Miocene. Even within the bay itself are fossilized shellfish beds of species that were present during different climatic periods, while the Varswater and Langebaan formations which extend under the bay are known to contain fossilized remains of marine and terrestrial life forms. At Spreeuwalle, a fossilised archaeological site which extends below existing sea level points to a time within the last major glacial period when the Bay was dry mainland. This means that the maritime heritage not only includes shipwrecks but also has the potential to include fossils and archaeological sites.

It is well recorded in history that Saldanha Bay has been as an anchorage for more than five hundred years. According to the SAHRA maritime shipwreck database, there are more than 40 known wrecks in Saldanha Bay. Many of these were recorded events that took place in the 19th and 20th centuries but also includes records of Dutch East Indiamen that were lost in the bay. Where the VOC was able, it accounted for every detail of company property lost, hence all witnessed shipwrecks were recorded. There are no recorded shipwrecks in the area of the ore jetty; however information available on this topic is limited in any published and archival records. A comprehensive marine geo-physical survey has already been undertaken for a previous EIA.

In recent years the area has become famous for its fossil wealth – just inland of Langebaan is the largest Pliocene-Miocene (5-6 million years old) Fossil deposit in the world, parts of which are on display at Langebaanweg Fossil Park. This material was deposited in sandbar sediments at the mouth of the proto-Berg River (an ancient river and estuary that was the precursor to the Berg River), the course of which changed over the millennia in response sea level changes. Close to Hopefield, further

inland, are the Pleistocene fossil beds at Elandsfontein (last million years) famous for the discovery of the early human species *Homo ergaster* (Saldanha man). On the edges of the lagoon Dr Dave Roberts and Dr Lee Berger discovered the 200 000 year old footprints of an early modern human fossilized in calcrete sediments. At Hoedjiespunt Prof. John Parkington has excavated on the site of an ancient hyena lair where skull fragments and teeth of an early human were found showing that parts of the body of this unfortunate person were consumed by hyenas more than 300 years ago. Nearby, fossilized within the calcretes and aeoleanites are shell fish, animal bone, ashy hearths of people who lived in the area more than 100 000 years ago. A further find at Spreeuwalle between Paradise Beach and the ore terminal has been investigated by Dr Graham Avery and Mr Dave Halkett, but unfortunately most of the material lies below sea level as the site dates to a time when sea levels were lower than that of today. A plethora of Late Stone Age sites dating to within the last 5000 years has been excavated on Club Mykonos and surrounding land firmly demonstrating the hunter gatherers, and later Khoekhoen pastoralists where camping on those parts of the bay where there were rocky shorelines that could provide them with shellfish and other marine foods. Thus it can be seen, like most places in South Africa, Saldanha Bay has a past which spans millions of years.

The GMQ was part of the Port of Saldanha bulk terminal construction to accommodate large bulk carriers in the 1970's. The bulk of the portside development lies on reclaimed land and is of no heritage significance. The GMQ is located to the west of the iron ore handling facility. This facility and the ore jetty is the shipping end of the Sishen-Saldanha iron ore export corridor. It is at this point that ore trains from Sishen are offloaded, the ore stockpiled and then loaded on bulk carriers that are berthed at the ore jetty.

Source: Heritage Impact Assessment for the Phase 2 Expansion of the Sishen-Saldanha Iron Ore Export Corridor, Saldanha Bay, Western Cape (Archaeology Contracts Office).

Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them:

<input type="checkbox"/>	<p>Places, buildings, structures and equipment of cultural significance</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Places to which oral traditions are attached or which are associated with living heritage</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Historical settlements and townscapes</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Landscapes and natural features of cultural significance</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Geological resources of scientific or cultural importance</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p>Archaeological resources (Including archaeological sites and material, rock art, battlefields & wrecks):</p> <p>Description of resource: The larger region is known for a number of archaeological findings.</p> <p>Description of impact on heritage resource: The terrestrial and marine portions of the site have been significantly disturbed by previous development, and dredging operations, and it is thus extremely unlikely that any material of archaeological value would be encountered. Allowance</p>

	is however made in the Environmental Management Programme (EMPr) for the correct handling and management in the case of chance finds of archaeological material.
<input checked="" type="checkbox"/>	<p>Palaeontological resources (ie: fossils):</p> <p>Description of resource: The larger region is known for its palaeontological sensitivity.</p> <p>Description of impact on heritage resource: The terrestrial and marine portions of the site have been significantly disturbed by previous development, and dredging operations, and it is thus extremely unlikely that any material of palaeontological value would be encountered.</p> <p>Allowance is however made in the EMPr for the correct handling and management in the case of chance finds of palaeontological material.</p> <p>Conversely, construction excavations furnish the “windows” into the coastal plain depository that would not otherwise exist and thereby provide access to the hidden fossils. The impact would be positive for palaeontology, provided that monitoring of construction phase excavations, documentation and removal of fossil finds are undertaken by a suitably qualified palaeontologist. However, it is probable that sparse, valuable bone fossils will go undetected, even with the most diligent mitigation practicable</p>
<input type="checkbox"/>	<p>Graves and burial grounds (eg: ancestral graves, graves of victims of conflict, historical graves & cemeteries):</p> <p>Description of Resource:</p> <p>Description of Impact on Heritage Resource:</p>
<input type="checkbox"/>	<p>Other human remains:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Sites of significance relating to the history of slavery in South Africa:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Other heritage resources:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>

Describe elements in the environs of the site that could be deemed to be heritage resources: N/A

Description of impacts on heritage resources in the environs of the site: N/A

Summary of anticipated impacts on heritage resources: An extensive Heritage Impact Assessment was undertaken by the Archaeology Contracts Office for the Phase 2 Expansion of the Sishen-Saldanha Iron Ore Export Corridor. No significant terrestrial and/or marine archaeological, palaeontological or cultural resources were identified during this study.

The only potential heritage resources which may be affected by the proposed project are archaeological and palaeontological resources during excavation activities for laying of water and electrical services. However, the site is located in a highly disturbed area and the services will be laid adjacent to an existing road and railway line.

Any archaeological and paleontological resources that are encountered during construction activities can be suitably managed through the implementation of the EMPr, and suitable Method Statements, where required.

The setting and context of the proposed development is industrial dominated – the proposed activity will not constitute a cultural landscape impact.

ILLUSTRATIVE MATERIAL (This form will not be processed unless the following are included):

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.

Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.

Please provide all graphic material on paper of appropriate size and on CD ROM in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.

C. RECOMMENDATION

In your opinion do you believe that a heritage impact assessment is required? Yes No

Recommendation made by:

Name Sharon Jones

Capacity Principal Environmental Consultant, CEAPSA

PLEASE NOTE: No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.

D. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA)

If it is recommended that an HIA is required please complete this section of the form.

DETAILS OF HERITAGE PRACTITIONERS AND SPECIALISTS INTENDING TO CONDUCT THE HIA:

	Name of individual:	Name of Practice:	Area of specialisation:
1.	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:

2.	Name of individual:	Name of Practice:	Area of specialisation:
	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:
3.	Name of individual:	Name of Practice:	Area of specialisation:
	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:
4.	Name of individual:	Name of Practice:	Area of specialisation:
	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:
5.	Name of individual:	Name of Practice:	Area of specialisation:
	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:
If this submission is made in terms of Section 38(8) of the National Heritage Resources Act indicate below the particulars of the principle environmental consultant on the project.			
Name of individual:			
Name of Practice:			
Area of specialisation:			
E-mail Address:			
Telephone:			
Cell:			
Postal Address:			

DETAILS OF STUDIES TO BE CONDUCTED IN THE INTENDED HIA

In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:	
<input type="checkbox"/>	Heritage resource-related guidelines and policies.
<input type="checkbox"/>	Local authority planning and other laws and policies.
<input type="checkbox"/>	Details of parties, communities, etc. to be consulted.

<input type="checkbox"/>	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details:
<input type="checkbox"/>	Other. Provide details:
PLEASE NOTE: Any further studies which Heritage Western Cape may resolve should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto.	