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## NOTIFICATION OF INTENT TO DEVELOP

**Reference: 10757**

**Date: 30 March 2017**

### **Coastal Engineering Infrastructure Activities – Proclaimed Fishing Harbours Work Package 3: West Coast – Maintenance and Repair of Infrastructure Elements at St Helena Bay Harbour**

#### **INTRODUCTION**

Aurecon South Africa (Pty) Ltd (Aurecon) was requested by Coega Development Corporation (CDC), on behalf of the Department of Public Works (DPW), to undertake the coastal engineering infrastructure activities Work Package 3 of the Proclaimed Fishing Harbours Western Cape Development Programme, also known as the small harbours programme. This work package includes the three west coast harbours at St Helena Bay, Laaiplek and Lambert's Bay.

This document constitutes a Notification of Intent to Develop (NID) in support of the aforementioned works at St Helena Bay Harbour.

#### **PROJECT OVERVIEW**

Part of the overarching Operation Phakisa initiative is the focus on developing and growing the country's Ocean Economy. It has been estimated that South Africa's oceans could contribute between 129 to 177 billion Rand to the GDP by 2033, as well as hundreds of thousands of jobs. An aspect which is critical to realising this potential is the rehabilitation and rejuvenation of the existing small harbours along the coastline.

The small harbours programme aims to drive the rejuvenation and upgrading of the small (fishing) harbours forming part of Operation Phakisa, to promote economic growth within the communities they serve. Currently, there are 13 proclaimed fishing harbours in the Western Cape. Within this programme six main project packages have been identified and DPW has established a Small Harbours Development Unit to implement and facilitate these packages which is already underway.

In order to ensure the efficient rehabilitation of existing infrastructure and reinstatement of the original operational capabilities at each of the proclaimed harbours in the Western Cape, the 13 harbours were split into four packages. Of these four packages, Aurecon was awarded the Proclaimed Fishing Harbours Western Cape Work Package 3, which focuses solely on the three west coast harbours at St Helena Bay, Laaiplek and Lambert's Bay. Each of these harbours play a significant role in the local economy of the west coast, whether that be in the fishing or resource (in particular diamonds) sectors.

Small harbours are often the life source and focal point for the neighbouring communities they serve, and integrated into businesses and communities in and around the towns in which they are located. In many cases, these harbours are the main source of employment in sectors including fishing, tourism and manufacturing industries or personnel of the harbour itself. Over time, a number of the existing small harbours along our coastline have been neglected both from an infrastructure and operations perspective as well as from a governance aspect. This in turn has hindered the growth and development of the harbours and has subsequently had a negative impact on the surrounding communities. The long term potential of the fishing industry, issuing of quotas managed by government, and the interface of the harbour infrastructure with the surrounding town and environment, are all critical aspects to be understood in order to determine future steps for infrastructure related decisions.

The harbour at St Helena Bay was built in 1968. Several smaller jetties were built along the coast for fish factories. St Helena harbour has four jetties and four quays. The harbour basin contains extensive areas of revetments and an undeveloped water's edge.

## PROPOSED HARBOUR MAINTENANCE AND REPAIR

The proposed works will entail the repair and / or maintenance of existing harbour structures within the harbour jurisdiction. No expansion to the existing development footprint will occur as a result of the required works. The maintenance and repair activities required at the harbour will include the following aspects:

- Repair concrete structures including crack sealing and concrete patch repairs:

Concrete repairs will be undertaken on Jetty 2 (maximum 2.5 m<sup>2</sup>), the damage concrete will be removed and the reinforcement will be assessed (repair /pacify reinforcement or replace with new reinforcement). On Jetty 3 there is a crack extending down below an existing bollard. The bollard will be removed and the extent of the crack investigated and the damaged concrete removed. New concrete will be cast and the bollard will be reinstalled. The other concrete infrastructure elements, i.e. the main slipway, Jetties 1 and 4 and the Coastal Quay will possibly need minor repairs. This will include sealing of cracks and patch repairs to the concrete on these structures.

- Repairs to wooden jetties:

The repairs to Timber Quay 1 shall focus on the superstructure, namely the timber deck planks, bollards and fenders. The existing timber support beams may need to be replaced but will be assessed on site. The substructure comprising of concrete piles and pile caps are deemed to be in adequate condition and no repairs are foreseen. The repairs shall entail the pulling up of the deck planks and assessing the condition and severity of the damage to the surface of the planks. Where appropriate existing timber planks will be re-used and turned over so that the previous underside face faces upwards. In the scenario where the existing timber planks are deemed unsatisfactory new planks will be used. Prior to relaying the suitable existing planks, the planks shall be cleaned and sanded. All timber planks, existing or new, shall be appropriately treated before being installed.

Whilst undertaking the repairs to the timber deck the existing steel bollards shall be sandblasted and repainted as part of the routine maintenance of the bollards. Maintenance and repairs of the existing tyre fenders shall be undertaken in conjunction with the above. This will include the checking of the fender supports and integrity of the tyre. If it is found that a tyre fender shows excessive wear then it shall be replaced with a similar fender size and if the fender support/fixity is not satisfactory then this shall be improved.

- Maintenance of the main slipway and recreational boat launch:

Repairs and maintenance of both the main slipway and recreational boat launch shall be undertaken. The mechanical components to be inspect and repaired (if necessary) on the main slipway include the winch, power pack, cable/rope and cradle. With regards to the recreational boat launch the winch and cable/rope shall be inspect and repaired if required. Due to the specialist nature of the mechanical components the planned approach is to provide the specialist contractors the opportunity to inspect the equipment, assess the condition and maintenance requirements of the equipment and then provide detailed method statements for the required works during Tender Stage.

Concrete repairs to the slipway support beams and ramp will also be undertaken where necessary. This will include resealing and grouting of concrete on these structures. An inspection of the main slipway rails will be conducted to assess the current condition of the rails and the extent of the repairs required, if at all necessary. In addition to the above it has been identified that the firefighting system at the main slipway should be assessed and improved due to the potential safety hazard. Therefore the proposed

repair works include the implementation of 2 or 3 additional fire hydrants, a new booster point and a fire tender point/connection.

- Maintenance of the shore crane:

The planned approach for the maintenance of the existing shore crane located on Jetty 2 is to provide the specialist contractors the opportunity to inspect the equipment, assess the condition and maintenance requirements of the crane and then provide detailed method statements for the required works during Tender Stage.

- Routine dredging of the harbour basin:

Dredging of the harbour basin is a standard maintenance requirement for harbour operations, and should occur regularly to ensure the proper functioning of the port activities. This maintenance activity has been neglected in the St Helena Bay Harbour in recent years. It is has been determined that up to 11 500 m<sup>3</sup> of sediment will need to be dredged within the harbour basin to previously charted depths, and future routine dredging activities will be necessary as a standard maintenance practice for the harbour.

Results of a Sediment Specialist Study undertaken in November 2016 by Lwandle Technologies (Pty) Ltd indicated that the mean values for cadmium, chromium, copper, nickel and zinc are above the low action level target values on the National Action List for dredge disposal with cadmium, nickel and zinc values exceeding the respective probable effect concentrations for the Benguela Current Large Marine Ecosystem (BCLME) region. These concentrations are not present at levels that have been deemed to produce acute or chronic effects on human health or on sensitive marine organism's representative of the local marine ecosystem. The study further suggests that the levels recorded are not localised to the harbour and it is likely that the whole bay naturally displays elevated levels. Lwandle recommended that the disposal of dredged material from the harbour only proceed following the formal assessment of sediment toxicity risks. The most suitable location for the dredged sediment to be deposited is yet to be determined, but it is proposed that the dredged sediment be removed and deposited offshore in accordance with requirements of a Dumping at Sea Permit and specific Dredging and Dumping at Sea Maintenance Management Plan.

- Removal of four sunken vessels and one abandoned onshore (on the slipway) vessel:

Four sunken vessels and one abandoned vessel on the main slipway will be removed from the harbour. The South African Heritage Resources Agency (SAHRA) was contacted to provide assistance in determining if the removal of sunken vessels will require permitting in terms of the National Heritage Resources Act (Act no. 25 of 1999) (NHRA). Ms Lesa le Grange of SAHRA confirmed that the sunken vessels are modern therefore would not require a permit in terms of the NHRA for the removal thereof.

An Environmental Management Specification (EM Specification) for the removal of sunken vessels was prepared by Aurecon's Environmental Team, for the Specialist Service Provider that will be removing them. The EM Specification covers the standard requirements for controlling the impact of sunken vessel removal activities on the environment including the coastal environment. Due to the specialist nature of sunken vessel removal works, the planned approach is to request detailed Method Statements from the Specialist Service Providers during the tender process. These Method Statements will be evaluated with particular emphasis placed on compliance to the EM Specification and Safety Management Plans, which will include a plan for reuse, scraping and/or disposal.

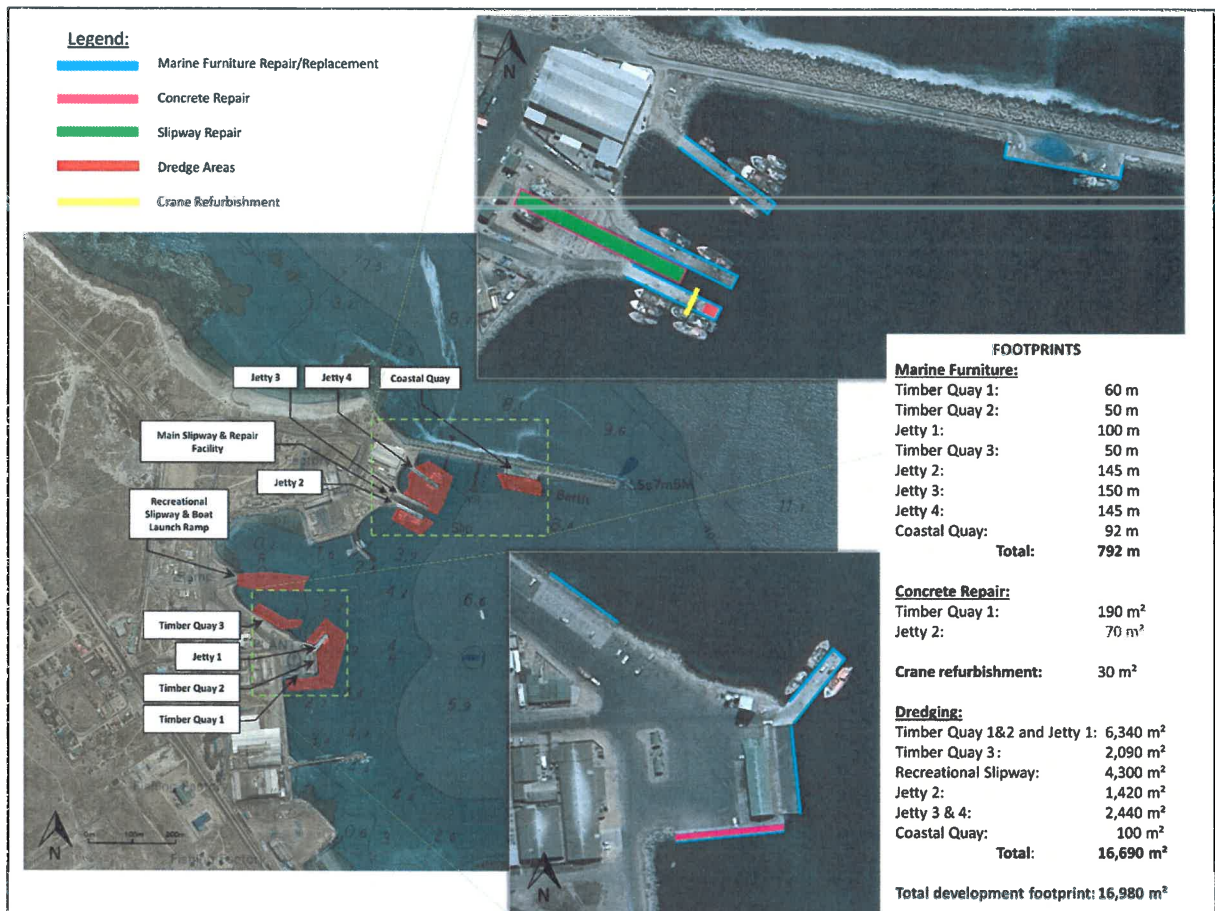


Figure 1: Site map indicating the location of the proposed works

### THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) (NEMA)

The Applicability Checklist of the EIA Regulations, 2014 in terms of Listing Notices as defined in GN No. R.983, R.984 and R.985 of 4 December 2014 based on the project activities was submitted to the Department of Environmental Affairs (DEA).

DEA examined the information provided on the checklist and concluded that the proposed development does not constitute any listed activities defined in terms of the NEMA Environmental Impact Assessment Regulations, 2014. However, the dredging and disposal of dredged material triggers the exclusion clause as per Activity 19 of GN R. 983, which states that a Maintenance Management Plan (MMP) must be submitted to DEA for approval before commencement of the proposed maintenance and repair works for St Helena Bay Harbour. Additionally, no listed activities were triggered for the removal of sunken vessels.

### THE NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT NO. 25 OF 1999) (NHRA)

In terms of Section 38(1e) the dredging operations trigger the need for NID as during these operations material of archaeological value might be encountered and this material, if found, would require correct handling and management.

The table below summarises the project activities that may trigger the need for a NID as per the NHRA:

National Heritage Resources Act 25 of 1999	Description of project activity/aspect that may trigger the need for NID
<p><i>Part 2: General protections</i></p> <p><i>35. Archaeology, palaeontology and meteorites</i></p> <p>...</p> <p><i>(4) No person may, without a permit issued by the responsible heritage resources authority -</i></p> <p><i>(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;</i></p> <p><i>(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;</i></p>	<p>Approximately 11 500 m<sup>3</sup> of sediment will be dredged from St Helena Bay Harbour basin down to previously chartered depths, forming part of a standard maintenance requirement for harbour operations. The dredged material will most likely be disposed of in the sea (either within the harbour limits or offshore) however disposal sites have not been identified or evaluated as yet.</p> <p>No known archaeological or palaeontological site or material is present within the harbour basin.</p>
<p><i>Part 2: General protections</i></p> <p><i>38. Heritage resources management</i></p> <p><i>(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as -</i></p>	
<p><i>(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;</i></p>	<p>Repair and/or maintenance work on existing harbour structures will take place however these repair works will be reinstating the original state of the structures due to the safety and operational risk they currently impose.</p>
<p><i>(b) the construction of a bridge or similar structure exceeding 50 m in length;</i></p>	<p>Repair and/or maintenance work on existing harbour structures will take place however these repair works will be reinstating the original state of the structures due to the safety and operational risk they currently impose.</p>
<p><i>(c) any development or other activity which will change the character of a site -</i></p> <p><i>(i) exceeding 5 000 m<sup>2</sup> in extent; or</i></p>	<p>Individual sections of the harbour requiring maintenance and repair work will not exceed 5 000 m<sup>2</sup> in extent although, collectively it may but these areas are spread across the harbour. The structures in its current state is a safety and operational risk and would need to be repaired in order to ensure the safety of the users and the functionality of the harbour. The repairs will be done in such a way as to reinstate the original state of the structures.</p>
<p><i>(ii) involving three or more existing erven or subdivisions thereof; or</i></p>	<p>Not applicable</p>

<p><i>(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or</i></p>	<p>Not applicable</p>
<p><i>(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;</i></p>	<p>Clarification from SAHRA required in terms of the applicability hereof.</p>
<p><i>(d) the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or</i></p>	<p>Not applicable</p>
<p><i>(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.</i></p>	<p>Clarification from SAHRA required in terms of the applicability hereof.</p>

## CONCLUSION

St Helena Bay is largely established around the fishing harbour. In its current state, the harbour is considered a safety risk and without the repair and/or maintenance work being undertaken on existing structures, its functionality is limited and constrained.

Routine maintenance dredging is also required because currently, sediment build-up in the harbour basin is hindering access of larger fishing vessels to dock in the harbour.

According with the information provided in this letter, Aurecon issues this Notification of Intent to Develop to SAHRA in terms of the requirements set out in the National Heritage Resources Act, 1999 Regulations.

Should you have any queries please do not hesitate to contact the undersigned.

Yours sincerely  
AURECON



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