



Construction Methodology Statement

Geo-bag wall extension

	Name	Company	Date
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Revised	Darryl Harding	Lockyer Valley Quarry Solutions	18/6/2024
Site Management	Jeremy Holmes	Elements	24/06/2024

Project Summary

This construction methodology has been developed for the extension of the existing geo-bag seawall at Elements of Byron Resort, Belongil. Works are to be constructed as per report & drawings prepared by Gerg Britton c/- Royal Haskoning DHV 29th May 2023

The proposed extension works are required due to the recent severe erosion at Elements of Byron Resort Lot 1 DP215893 & Crown Land Lot 407 DP729057.

Note: *The Development Application (DA) lodged for the proposal to make Temporary Coastal Protection Works (TCPW) permanent at Lots 10 and 11 DP243218 and Lots 16-23 Section 6 DP1623 Bayshore Drive, Belongil. This DA was received by the NSW Coastal Panel on 9 January 2017. (LVQS understand there are No changes to this TCPW).*

Construction Methodology and Staging

Stage 1 – Pre-planning Activities and Install Environmental Controls

- A staging area is to be established, landward of the proposed seawall extension, within Lot 1 DP215893. See Figure 1.
- Flagging, fencing & safety signage to be installed around the perimeter of the works zone.
- Elements of Byron Resort will close the workzone & staging area throughout the period of construction works and this will limit public interaction with the works site.
- Sediment management controls are to be implemented throughout works.
- All excavators that are accessing the site are to be clean prior to reaching site. Spill kits to be kept on site.
- The alignment extension is to be set out prior to construction activities starting and located using RTK GPS.

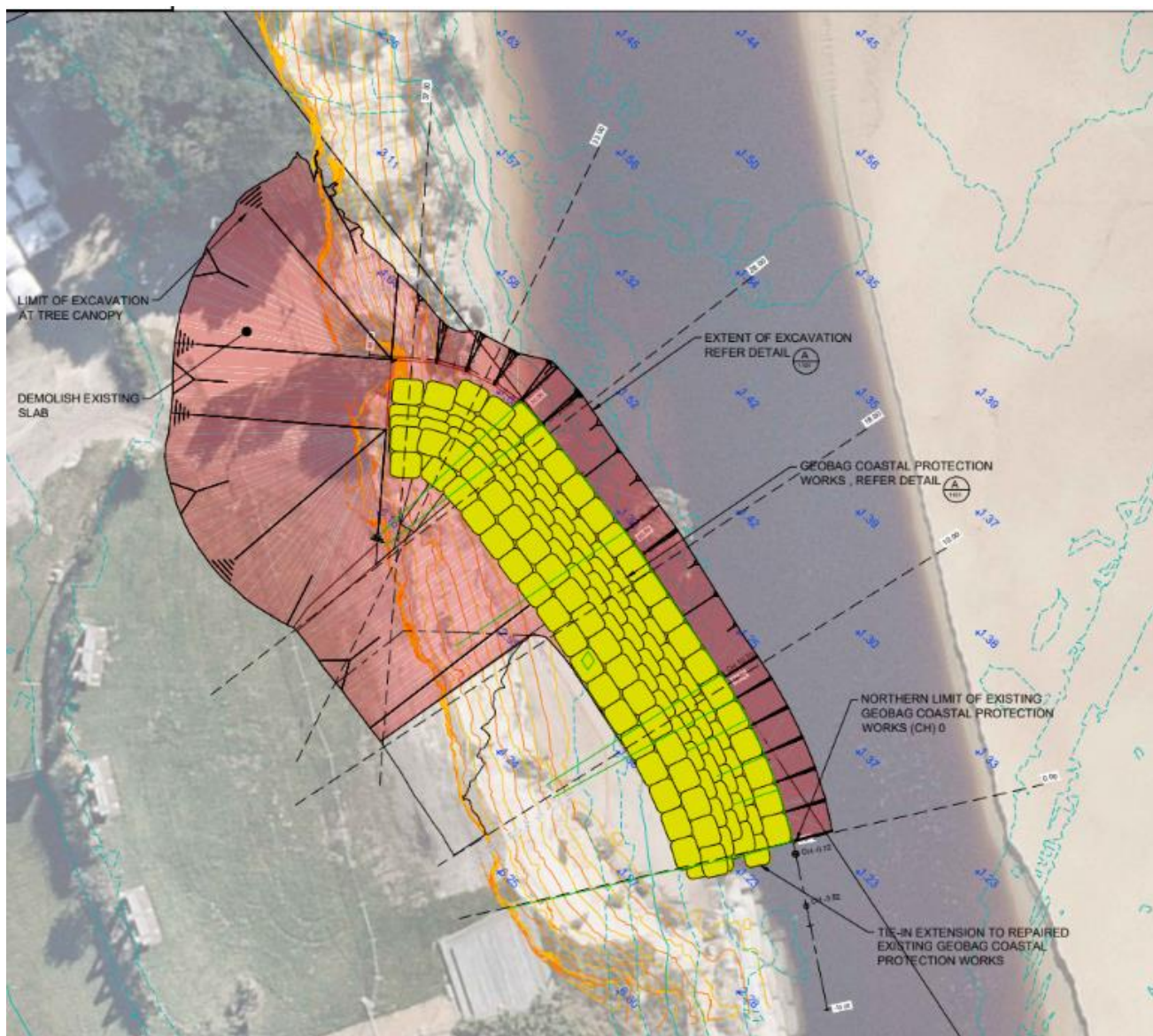


Figure 1. Works Zone constructed from above proposed geobag wall and Staging Area at existing geobag stockpile.

Stage 2 – Excavation of seawall construction batter

- A construction batter area of 1v:2h, or suitable equivalent benching area, is to be prepared for safe work access from behind the seawall. See Figure 1 & Figure 2.
- Excavated sand is to be suitably stockpiled within Lot 1 DP215893
- Working around suitable low tides for installation of toe geo-bags will be used as a means of avoiding dewatering.
- **Note; Royal Hakoning DHV report** dated 29th May 2023 has Greg Britton noting but not limited to some key requirements of the Code of Practice were to adhere to and as snippet follows:
 - *sandbags comprising the works must be placed and maintained in a manner that minimizes the likelihood of the collapse of the escarpment.*
 - *excavation of the escarpment for the placement of the works is not permitted with the exception that, when placing sandbags, limited excavation of the beach (other than the escarpment) may be undertaken to enable the bottom layer of sandbags to be placed approximately horizontally. Any excavated sand is to be placed elsewhere on the beach.*
 - *the height of the works must not exceed 1.5m from the base (or toe) of the escarpment.*

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- 1 DP 215893
- RP BOUNDARY
- 407 DP 729057
- BACKFILL AND RE-PROFILE WITH BEACH SAND. FINAL SLOPE 1V:1.5H.
- ELCOROCK 0.75m3 GEOBAGS TO BE WELL FILLED AND PLACED STRETCHER BOND WITH LONG AXIS PARALLEL TO ALIGNMENT
- APPROX. TEMPORARY EXCAVATION BATTER (IF REQUIRED). EXCAVATOR TO WORK FROM LANDWARD SIDE.
- APPROX. TEMPORARY EXCAVATION BATTER FOR CONSTRUCTION. BENCHING MAY BE ALSO BE USED.
- 1V:2H
- 1V:1.5H
- 1V:1H
- 1V:1H
- RL 2m AHD
- RL -0.75m AHD
- GEOTEXTILE 600R (MINIMUM 1m LAPS)
- BELONGIL CREEK

Stage 3 –Filling of Geo sand bags

- #### Stage 4 – Placement of Geo sand bags.

- ## Stage 5 – Backfill and revegetation.

- LVQS

level. (Figure 3)

- Revegetation of dune areas to be undertaken using suitable plant and dune species as advised by specialist.

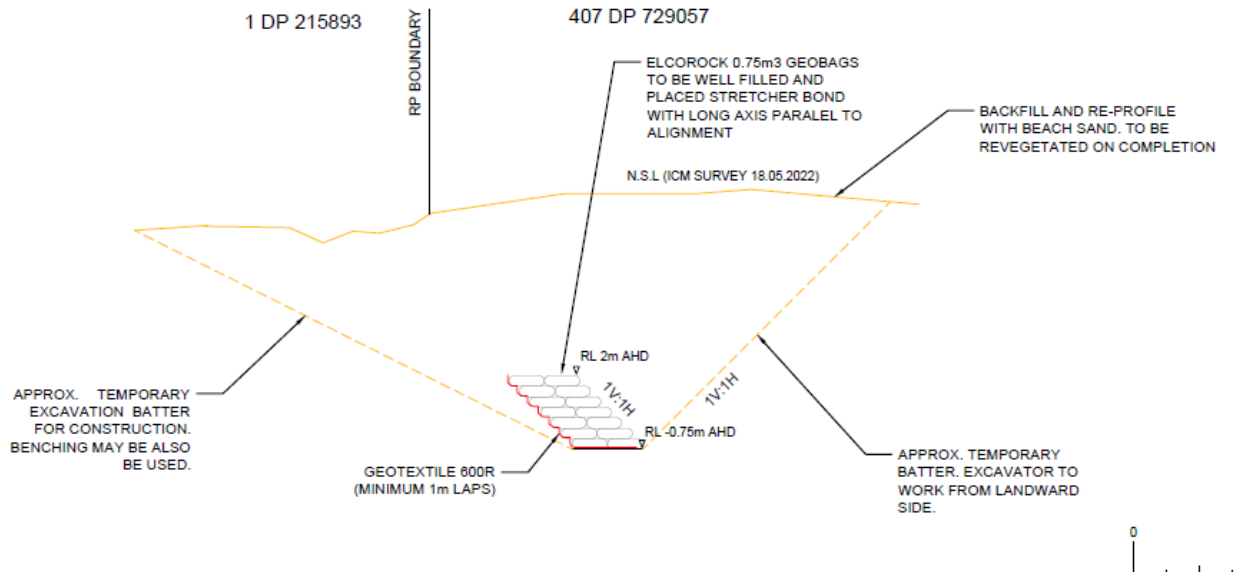


Figure 3. Seawall buried into dune

Stage 6 – End of Job and Site Clean Up.

- Removal and tidy up of work zone back to original condition.

Design Drawings for Extension to Existing Coastal Protection Works