

20 January 2020

Mercury Bay South Ratepayers Association  
c/- Graeme Lomas  
PO Box 276  
Whitianga 3542

By e-mail: [gandclomas@xtra.co.nz](mailto:gandclomas@xtra.co.nz)

Dear Graeme,

**Re: Information Regarding Resource Consent Application for Coastal Erosion Protection Works at Flaxmill Bay, Coromandel**

We write on behalf of our client Thames-Coromandel District Council (TCDC), who is in the process of applying for resource consent for coastal erosion protection works at Flaxmill Bay, Coromandel Peninsula.

You may be aware of the proposed erosion protection works at Flaxmill Bay given the public meeting that was held on Friday the 16<sup>th</sup> of August 2019, which gave the public the opportunity to provide feedback on the proposed groyne design and associated excavation work. Feedback received at that time indicated that the public were supportive of groynes over the rock revetment option, as they valued retaining the upper beach for recreation purposes and to maintain amenity.

Below is a summary of what the work involves and copies of the plans for your information, as well as a fact sheet that details key elements of the project.

In summary, the proposed coastal erosion protection works involve the construction of three trial groynes which are proposed to be in place for a period of five years. Sand is proposed to be extracted from the intertidal flats and used to fill the bags which will form the groynes and to infill the area around the groynes to reinstate the beach where it is currently eroding.

The design of the project has been informed by a Coastal Processes and Design Report and an Ecological Assessment, both undertaken by 4Sight Consulting. This approach has been selected as the preferred option to retain the natural character and amenity values of Flaxmill Bay and avoid adverse effects on coastal and ecological processes, whilst providing a buffer to coastal erosion at the site.

Please contact me on 027 3193 256 or email [emilyh@4sight.co.nz](mailto:emilyh@4sight.co.nz) if you have any comments or queries.

Kind Regards,



Emily Hunt  
Planning and Policy Consultant  
4Sight Consulting Ltd

## **FLAXMILL BAY COASTAL EROSION PROTECTION WORKS**

What you need to know regarding the Flaxmill Bay Coastal Erosion Protection Project and frequently asked questions:

### **History:**

The pocket beach of Flaxmill Bay has in recent years suffered coastal erosion, low sand levels and storm events which have seen an increased risk to infrastructure and public amenity. In response to this, TCDC previously obtained resource consent from Waikato Regional Council to construct a rock revetment to protect roading infrastructure. The local community have raised concerns around the loss of amenity values and recreational space associated with a rock revetment mitigation option and have installed ad-hoc groyne structures as an alternative means of increasing sand levels in the problem areas. As such, formally designed groyne structures have been proposed on a 5-year trial basis.

### **Description of Proposed Activity:**

It is proposed to construct three trial groynes in the western portion of Flaxmill Bay for a period of five years (to replace the existing unconsented groyne structures). Two of these groynes will be located in the same position as the existing ad-hoc sandbag groynes, and one further groyne is proposed to the west of these. The objective of the groynes is to support a wider dry beach area in front of the problematic erosion areas and existing coastal protection structures (rock revetment) to reduce risk to public infrastructure (e.g. Purangi Road) and improve amenity values. The groynes will be constructed using geotextile bags and will range in length from 16 to 29 metres, with a base width of 3.6 metres.

It is also proposed to undertake beach nourishment by backfilling the area around the groynes to create a wider dry beach. In order to fill the geotextile bags and to undertake this beach nourishment, sand is proposed to be extracted from the lower beach area. The application also provides for ongoing yearly maintenance of the beach nourishment. This nourishment will also provide some protection for the archaeological site located in the vicinity of the subject site.

After five years, the proposed groyne structures will either be removed, consented for a longer period, or an alternative, more permanent structure, may be consented and implemented in place of the groynes.

### **Timeframes:**

Resource consent for the proposed works will be lodged in early 2020 with both Waikato Regional Council and Thames-Coromandel District Council. This consent will allow for both the construction of the groynes and the beach nourishment.

Notification of the start date and construction period for the works will be provided to relevant parties once consent has been granted and these dates have been confirmed.

### **Frequently Asked Questions:**

#### **What is a groyne?**

A groyne is a barrier built out into the ocean from the beach that interrupts water flow and limits the movement of sediment. In this instance, the groynes will be built using geotextile bags which will be filled with sand in order to achieve a more natural appearance and to allow the structure to be easily removed by splitting the bags and emptying sand onto the beach, should this be required in the future.

The purpose of these groynes is to protect important Thames-Coromandel District Council assets (Purangi Road, footpath, water supply, stormwater and wastewater pipes etc) from damage by the sea, resulting from coastal erosion.

**Beach Access:**

Beach access during construction will be restricted to areas outside of that required for the groyne construction and beach nourishment. It is estimated that works may take up to 4 weeks to complete. Signage will be provided onsite to direct beach goers to the available beach access points. Following completion of the works, permanent beach access will be restored.

**Will the extraction of sand for the beach nourishment affect the beach?**

No, as the extraction of sand will be from below the high tide mark and upon completion of the sand extraction, natural coastal processes will take over and the sand extraction site will be replenished over time.

**What archaeological feature is located on the site?**

The Thames-Coromandel District Council planning maps identify an archaeological site within the subject site. The District Plan names this as a Midden/Oven and describes it as follows:

*“Two occupation layers exposed along about 100 m of the beach front. The upper layer had midden shell + fish bone in charcoal stained horizon. Lower layer contained degraded shell. Midden, Charcoal, Occupation layer - Indigenous pre-1769”.*

No excavation of the existing bank is proposed (this bank has been eroded to expose these layers). The proposed groynes will be located perpendicular to the bank and the proposed nourishment of the groyne field will result in infilling with sand with the intention to stop any further erosion of the bank which adjoins Purangi Road, essentially protecting the archaeological feature and helping to prevent any further damage. While work will be undertaken in the vicinity of the midden, no modification of the archaeological feature is proposed.

**Will views of the beach change as viewed from adjacent properties?**

No, the grass road reserve area and dry beach area following beach nourishment will not be any higher than it is currently. The groynes will also be below the level of the road.

**What resource consents are required for the works to occur?**

Resource consent is being sought from the Waikato Regional Council and Thames-Coromandel District Council for the proposed works, as the proposal is not entirely consistent with the Waikato Regional Coastal Plan, Waikato Regional Plan and Proposed Thames-Coromandel District Plan – Appeals Version.



- NOTES:
1. Bearings & coordinates are in terms of Geodetic Datum 2000. MT Eden Circuit.
  2. Levels are in terms of Auckland Vertical Datum 1946. Origin of Levels CCS 26A RL = 4.481m.
  3. Source of Origin Coromandel Peninsula Eastern Seaboard Benchmark Booklet Cooks Beach by TCDC & WEC dated June 2008. Contours interval Major = 1.0m, minor = 0.2m.
  4. Survey completed by Coromandel Surveyors LTD August 2019.
  5. Aerial photo taken from drone footage taken on 2019.10.09.

**urbansolutions**  
projects

URBAN SOLUTIONS LIMITED  
201 VICTORIA STREET WEST  
AUCKLAND CENTRAL 1010  
PO BOX 578, WELLSLEY STREET  
AUCKLAND 1141, NEW ZEALAND  
WWW.URBANSOLUTIONS.CO.NZ  
COPYRIGHT - URBAN SOLUTIONS LIMITED

project:  
**Flaxmill Bay Groynes**

sheet:  
**Existing Plan**

client:  
**THAMES COROMANDEL DISTRICT COUNCIL**


A	CONCEPT DESIGN	LDR	2019.11
rev.	description	by	date

design by:	drawn by:	checked:
LJR	LDR	LJR
drawing status:		
<b>RESOURCE CONSENT</b>		
sheet number:	rev.	scale:
US-B301-003	A	1:250
		date:
		2019.11



**LEGEND:**

- Minor Contour (0.2m)
- Major Contour (1.0m)
- MHWS (+0.05m AVD)

- NOTES:**
1. Bearings & coordinates are in terms of Geodetic Datum 2000. MT Eden Circuit.
  2. Levels are in terms of Auckland Vertical Datum 1948. Origin of Levels CCS 20A RL = 4.461m
  3. Source of Origin Coromandel Peninsula Eastern Seaboard Benchmark Booklet Cooks Beach by TCDC & WEC dated June 2008. Contour interval: Major = 1.0m, minor = 0.2m.
  4. Survey completed by: Coromandel Surveyors LTD August 2019.
  5. Survey completed by: Coromandel Surveyors LTD August 2019.
  6. Aerial photo taken from drone footage taken on 2019.10.09.

**urbansolutions**  
projects

URBAN SOLUTIONS LIMITED  
201 VICTORIA STREET WEST  
AUCKLAND CENTRAL 1010  
PO BOX 5706, WELLESLEY STREET,  
AUCKLAND 1141, NEW ZEALAND  
WWW.URBANSOLUTIONS.CO.NZ

COPYRIGHT - URBAN SOLUTIONS LIMITED

project:  
**Flaxmill Bay Groynes**

sheet:  
**Demolition Plan**

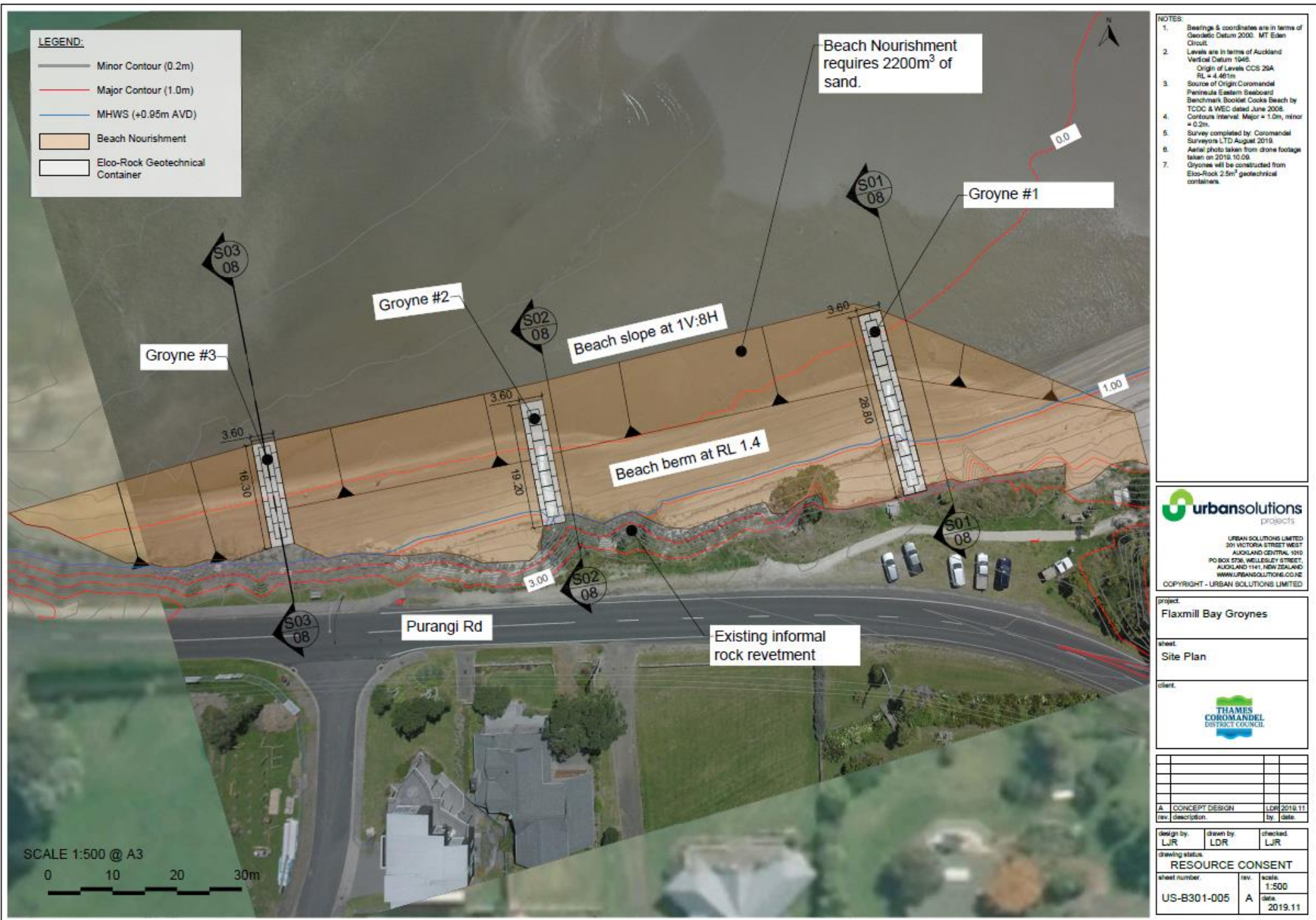
client:

rev.	description	by	date
A	CONCEPT DESIGN	LDR	2019.11

design by: LJR  
drawn by: LDR  
checked: LJR

drawing status:  
**RESOURCE CONSENT**

sheet number:	rev.:	scale:
US-B301-004	A	1:250
		date:
		2019.11





NOTES:


**urbansolutions**  
projects

URBAN SOLUTIONS LIMITED  
201 VICTORIA STREET WEST  
AUCKLAND CENTRAL 1010  
PO BOX 8736, WELLESLEY STREET 1,  
AUCKLAND 1141, NEW ZEALAND  
WWW.URBANSOLUTIONS.CO.NZ

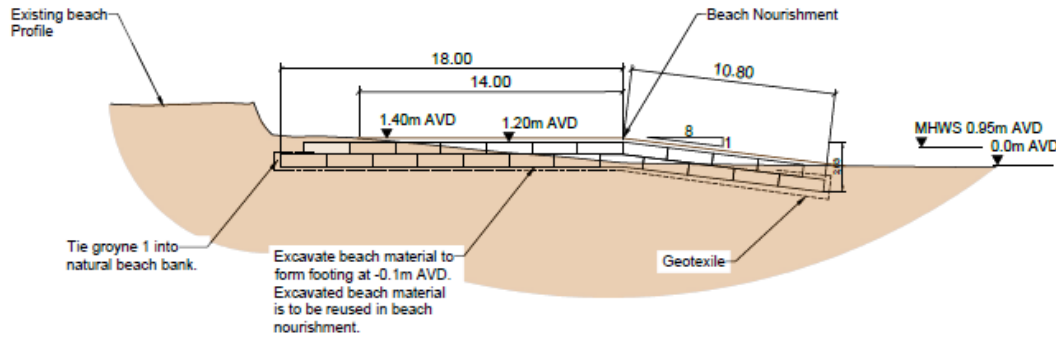
COPYRIGHT - URBAN SOLUTIONS LIMITED

project: Flaxmill Bay Groynes

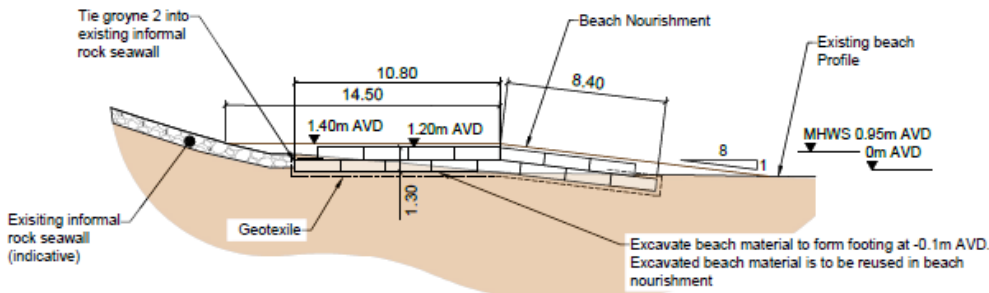
sheet: Sections

client: 

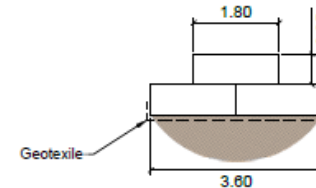
A	CONCEPT DESIGN	LDR 2019.11
rev.	description	by date
design by:	drawn by:	checked:
LJR	LDR	LDR
drawing status:		
RESOURCE CONSENT		
sheet number:	rev:	scale:
US-B301-008	A	VARIOUS
	date:	2019.11



**S01**  
**008** GROYNE 1 LONG SECTION  
1:250 (A3)

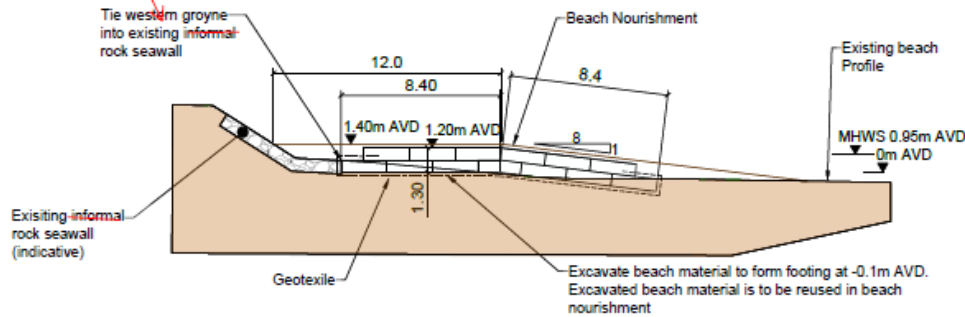


**S02**  
**008** GROYNE 2 LONG SECTION  
1:250 (A3)



**S04**  
**008** GROYNE - TYPICAL CROSS SECTION  
1:100 (A3)

**groyne 3**



**S03**  
**008** GROYNE 3 LONG SECTION  
1:250 (A3)