

REDLAND CITY COUNCIL

Norfolk Beach Shoreline Erosion Management Plan (SEMP)

PROJECT BRIEF

Marine Infrastructure Planning
Redland City Council
August 2013

Version 2.0
Released for Proposals

PROJECT BRIEF

NORFOLK BEACH SHORELINE EROSION MANAGEMENT PLAN (SEMP)

August 2013

Council Contact:

Toby Ehram

Redland City Council
PO Box 21
CLEVELAND QLD 4163

Telephone: (07) 3829 8228
E-mail: Toby.Ehram@redland.qld.gov.au

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1.0 INTRODUCTION

This project brief details Redland City Council's (RCC) requirements for a Shoreline Erosion Management Plan (SEMP) for Norfolk Beach on Coochiemudlo Island. This area is located within Moreton Bay, with Victoria Point being the closest point on the mainland as outlined in figure 1.0. Norfolk Beach is located on the south-eastern/eastern side of the island as shown in figure 2.0.

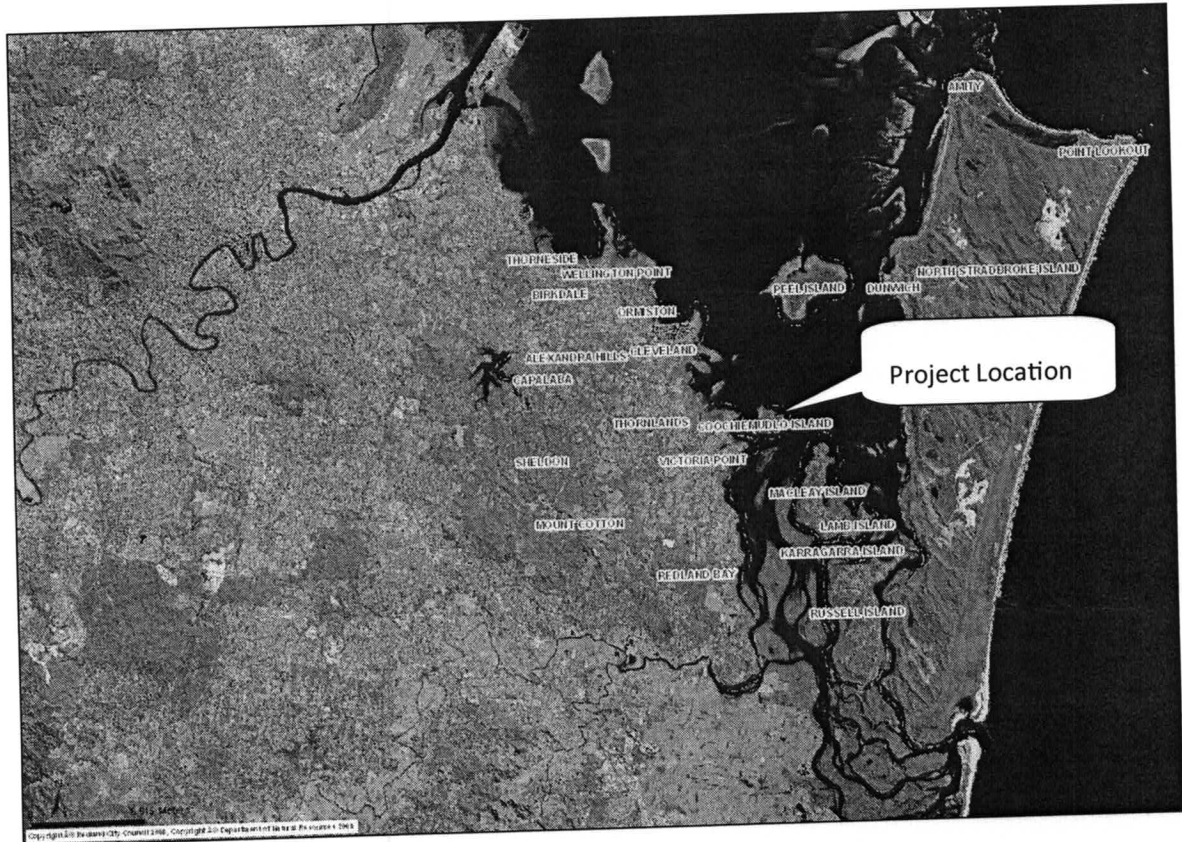


Figure 1.0: Site Overview and Project Location

Image courtesy of Red-e-map

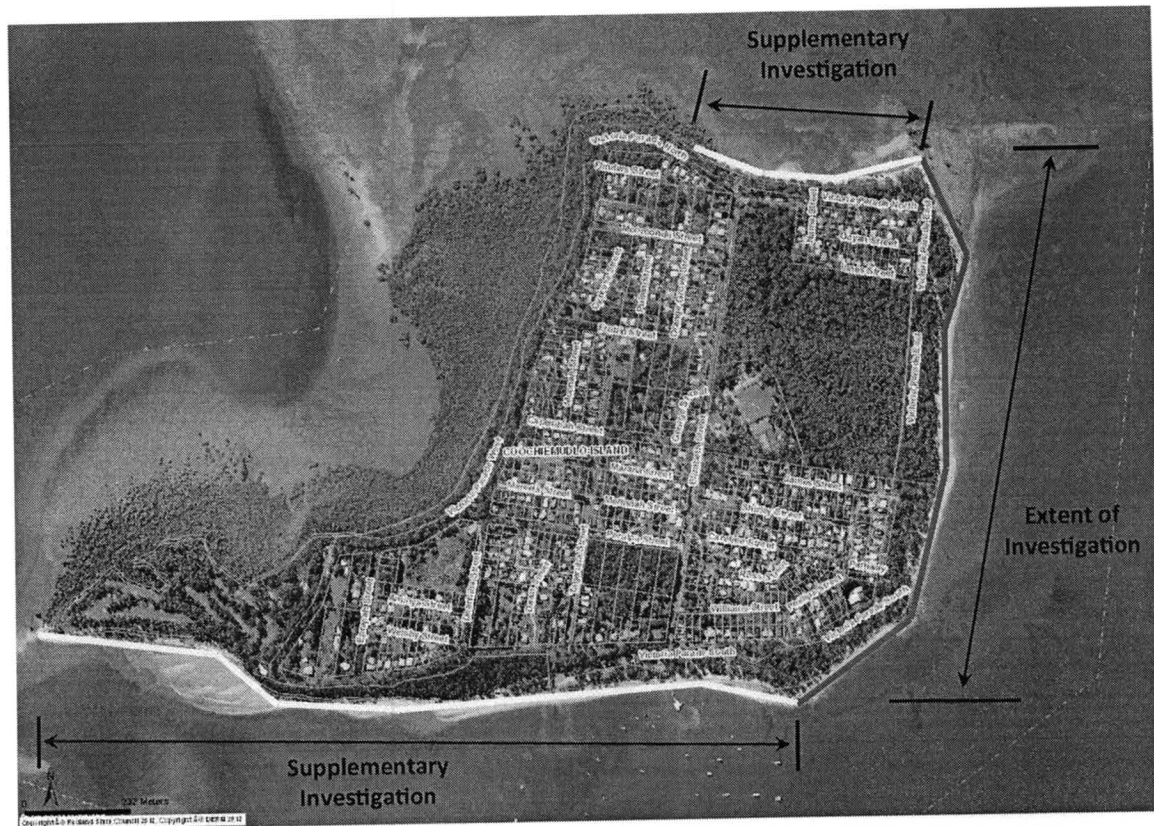


Figure 2.0: Beach Erosion and location on Coochiemudlo Island

Image courtesy of Red-e-map

1.1 BACKGROUND

Visual inspections at this site have shown evidence of erosion along the entire eastern/south-eastern coastline known as Norfolk Beach, Erosion on the beach is not currently at risk of affecting residential property; however it is within close proximity to a gravel roadway along Victoria Parade East as shown in the figures in Appendix A.

RCC would like to determine the following:

- the cause of the erosion
- the extent of the erosion on the coastline
- the ability of the coastline to contend with natural processes and storm events
- the necessary works needed to ensure the management and protection of the coastline into the future

In addition to the beach erosion investigations, RCC would also like to determine the erosion effect on Norfolk Beach and the surrounding area arising from the gravel road located adjacent to the beach and Victoria Parade East.

At present, vehicle access has been restricted on this road. The SEMP should investigate the effects of reopening the access road to vehicular traffic.

2.0 SCOPE OF WORKS

Redland City Council requires the selected contractor to compile a report providing details on the following key objectives:

Results of a site investigation determining the existing condition of the shoreline and provide a benchmark for further monitoring and maintenance.

Development of shoreline erosion management plan (SEMP) to assess the existing condition, environmental and marine park considerations and to provide advice and recommendations for the ongoing management of the area.

- Purpose (to obtain an overall plan for shoreline erosion mitigation and management):
- Minimising the threat to permanent development and infrastructure, in particular residential, road and footpath areas.
- Minimising adverse impacts on coastal process in an area of 'priority environmental significance'
- Maintaining and enhancing foreshore buffer zones for residential and commercial developments
- Maintain and mitigate existing erosion for access and usability of the area
- Enhance the visual amenity of the area for community and tourism purposes (boating, fishing, swimming)

The work requested by Redland City Council would likely include as a minimum:

Stage 1- Shoreline Erosion Management Process Study

1. 1D and 2D modelling of shoreline, coastal processes, hydrodynamic regimes, vegetation and existing infrastructure.
2. Development of Shoreline Erosion Management Plan, including supporting plans, modelling and mapping.
3. Evaluation of threats from coastal hazards (storm tide), natural hazards (flood), climate change and sea level rise. Review existing reporting documents affecting coastal erosion at Norfolk Beach, including Climate Change and Storm Tide reporting. Provide prediction of ongoing beach response/trends, including identification of hazards. Cross sections are to be provided noting shoreline erosion and/or other issues identified during the works.

Stage 2- Management Options

1. Evaluation of threats and provision of Mitigation and risk management actions, including recommendations and prioritisation based on quadruple bottom line RCC prioritisation model, material sources, costs and proposed capital and operational works project scopes in RCC format.
2. Develop coastal asset management plan(s) for inclusion in management of council owned assets and infrastructure along foreshore zone.

Stage 3- Recommendations and Implementation Options

1. Provide summary of findings and recommendations for council and community consultation.
2. Review Planning Scheme provision for coastal management and provide recommendations consistent with current legislative and guideline requirements.

Consultants are requested to include a minimum of three meetings and one workshop session in the overall scope. All data, modelling and GIS mapping is to be provided to RCC upon project completion with working documents, summaries, list of assumptions and input parameters. RCC will supply data acceptance guidelines and parameters and will be available for consultation prior to project finalisation to discuss requirements.

The consultant shall include a provision and quote for an extension to the assessment area to include the northern and southern coastlines as depicted in figure 2 (titled supplementary investigation). This shall include all works as outlined for the Norfolk Beach Investigation.

The scope of work for this engagement is outlined in the following table. The order of the tasks indicates the general sequence. However, instances where the task may be undertaken concurrently or interchanged for improved scheduling is acceptable.

TASK NO.	DESCRIPTION	DELIVERABLES	TIMELINE
1.0	Site Inspection/Familiarisation		
	<ul style="list-style-type: none"> As per contractors requirements 	Identification and assessment of beach and marine process issues to be provided in report	
2.0	Inspection and assessment of adjacent roadway effects on beach		
	<ul style="list-style-type: none"> As per contractors requirements 	Results and analysis of results to be provided in report	
3.0	1D and 2D modelling of shoreline, coastal processes, hydrodynamic regimes, vegetation and existing infrastructure		
	<ul style="list-style-type: none"> As per contractors requirements 	Details to be provided in report	
4.0	SEMP Report		
	<ul style="list-style-type: none"> Compile Testing/Investigation results into a report to be handed over to Redland City Council Analysis of results Provide assessment of integrity of beach and foreshore area Identify effects of road adjacent to foreshore area Identify remediation work required to achieve structural stability Prioritise remediation work by level of urgency 	Draft and final report to be provided to RCC	Stage 1 Draft due by: 04/10/13. Stage 2 Draft due by: 18/10/13. Stage 3/Final report to be provided to RCC by the 01/11/13.

3.0 ENGAGEMENT OF CONSULTANT

The following sections provide details on the engagement of the consultant.

3.1 EVALUATION CRITERIA

Council's objective in preparing this Project Brief is to select consultancy team that will bring a high level of knowledge and expertise to this project. Consequently, the focus of Marine Infrastructure Planning Team in the process of selecting the Consultant will be on experience of the team, the methodology that the team will employ and the overall value for money in undertaking the investigation.

Quotes must be submitted using the Redland City Council form for the provision of Professional Services which shall be provided with this Project Brief. The Consultant will be engaged in accordance with the Conditions of Quotation of Professional Services at the back of that form.

Supporting documentation is expected to be submitted separately that addresses the selection criteria described in this section.

The following evaluation criteria will be taken into consideration when assessing quotations from short-listed Consultants:

1. Price (35%)

The Consultant shall submit a formal quote on the Redland City Council Written Quotation Form Professional Services. A schedule of costed tasks against the methodology outlined in the Project Brief – Norfolk Beach SEMP Investigation shall be provided. The schedule will be used for calculating progress payments and the assessment of the adequacy of the Consultant's proposal.

2. Experience and Personnel (20%)

The Consultant shall provide an overview of relevant experience of their organisation and provide a brief CV and description of the anticipated role for each of the personnel to be employed in this project. The amount of time that key staff are expected to contribute to the project shall be integrated into a schedule of costed tasks.

3. Methodology and Understanding of the Project (20%)

The Consultant shall demonstrate their understanding of this project including the scope, project objectives, methodology and outcomes in accordance with the Project Brief – Norfolk Beach SEMP Investigation.

4. Schedule (20%)

The Consultant shall provide a preliminary project schedule at major task level to demonstrate how the project will be undertaken. The proposal shall also provide an estimate of resources to be provided by Council to achieve the desired outcomes and completion date.

5. Referees (5%)

The Consultant shall provide contact details for a minimum of two referees that would be able to confirm claims with respect to experience and achievements in undertaking similar consultancies.

3.2 PROGRESS REPORTS

It is the responsibility of the selected contractor to provide the Marine Infrastructure Planning team with regular updates either via phone or email for the following:

- Schedule for Investigation/Testing
- Changes or delays to Schedule for Investigation/Testing
- Matters identified by the contractor as urgent or priority for action by Redland City Council

Draft Reports due:

- Stage 1: Friday, 4th of October, 2013.
- Stage 2: Friday, 18th of October, 2013.
- Stage 3/Final: Friday, 1th of November, 2013.

3.3 INTELLECTUAL PROPERTY

All information (i.e. drawings, computer files etc.) compiled or obtained for the purpose of this investigation shall remain the property of Redland City Council and shall be made available to the Project Officer within five (5) working days of a written request for the information.

Access to GIS layers (if required) can only be provided after the Consultant has signed an access agreement.

3.4 PROJECT OFFICER

Redland City Council's Marine Infrastructure Planning Team contact details are provided below:

Toby Ehram

Advisor Coastal and Waterway Infrastructure

Phone: (07) 3829 8228

E-mail: Toby.Ehram@redland.qld.gov.au

Rodney Powell

Senior Advisor Infrastructure Projects

Phone: (07) 3829 8582

E-mail: Rodney.Powell@redland.qld.gov.au

Redland City Council

PO Box 21

Cleveland QLD 4163

Fax: (07) 3829 8765

3.5 SUBMISSION DATE

The proposal is to be received by Redland City Council's Project Officer before 5:00pm on Friday, 23th of August. E-mailed submissions are preferred; however the proposal may be posted to the address listed above or placed in the Tender Submission box in the foyer of the Redland City Council Administration building at Cleveland. Late submissions will not be accepted.