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| <b>Community Facilities<br/>Project Delivery<br/>General One Off Concept and Investigation</b> |  |
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**(PSS) PROFESSIONAL SERVICES SCOPE – February 2017**

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| <b>Project Title:</b> | Orakei Basin – Review and next steps for the access road and car park | <b>Date:</b> 27 February 2017 |
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| <b>Project Description:</b> | The engagement of a multi-disciplined consultant to impartially review key aspects of the access road project, recommend options and develop design proposals for improvements. |                     |            |
| <b>Project Leader:</b>      | Pippa Sommerville<br>Greer O'Donnell  | <b>Tel:/Ext No.</b> | 021 923374 |

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**Project Scope – Overview**

The site is located within the Orakei Basin at 191-215 Orakei Road, Remuera, Auckland. It is designated as Lot 1-13, Lot 24-31 and Part Lot 33, DP 24664 Allotment 286 SECT 16 SBRS OF Auckland, 4894474 Pt Bed Harbour of Auckland Survey Office Plan 67456

The Orakei Basin Access Road access road renewal project was completed in 2015, and is in its defects liability period. There are aspects of the project that did not meet priorities from the Orakei Basin Management Plan and SKM 2011 report and there are a number of elements of the delivered project that regular users of the basin are extremely disappointed with.

Key elements identified, which this review and recommended next steps are to focus on:

- a) The effectiveness and appropriateness of the recently constructed rock rip rap wall. The rip rap rock wall that has been installed to protect the car park (including the jetty and pontoon) edge from erosion is inhibiting water access and has covered what was a small dry high tide beach area. Water access in this area is important for all regular user groups at the basin, including the Orakei Yacht Club, Akarana Young Mariners, Youthtown and the Orakei Sea Scouts. It is also a key access area for casual recreational users of the basin. Options to improve safe pedestrian access over this structure to reach the water and assist in the launch/retrieval of model boats is required.
- b) The presence of rock rip rap near the scout boat ramp is also inhibiting water access. Solutions to improve water access in this area are to be included in the review document.
- c) Bubble-up chambers that have been installed along the coastal edge as stormwater filtration solutions appear 'over engineered'. Issues with these structures, including functionality and negative visual impacts have been raised, and as such investigations into outfall structure alternatives are to be included in the wider review.

The review of the access road project should be solutions focussed, and present options for improvements on the above areas outlined in a-c as key objectives. Attachments to this scope

submitted by OBAG members are also to be considered in this review.

Orakei Basin is an area of significance to Ngati Whatua Orakei, with scheduled archaeological sites along the Orakei Basin Access Road. Any design options and proposed solutions should be cognisant of this.

**Key outcomes:**

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| A review of key aspects and elements of the project as highlighted above (a-c). |  |
| Site investigations as appropriate  |  |
| Meet with representatives to communicate findings and discuss next steps        |  |
| Report on project outcomes and recommend remedial works                         |  |

**Process and outputs**

**Determining Project Success**

Review the physical works undertaken on the coastal edge elements identified in the above (a-c) and consider the priorities of the Management Plan and SKM report (as listed below) that have not been met through their delivery.

**Identifying Remedial Measures**

Recommend remedial options to improve the elements outlined above (a-c) that deliver on the actions and priorities outlined within the SKM and Management Plan. Solutions and mitigation initially discussed, which are to be further explored, include (but should not be limited to):

- i) Extension of the timber jetty to form a continuous access structure along the seaward edge of the rock rip rap seawall, linking to the path at the car park edge. This could potentially be a fixed or floating structure.
- ii) Possible modification of the rock rip rap along the car park edge to integrate 'vertical elements' to reduce the structures footprint and improve water access. This could potentially comprise a combined rock/timber solution. Any design considerations intended to improve the status quo should consider the structures primary purpose; to provide protection and retention of the carpark area, with reference to the related effects of climate change and sea level rise, and ensure minimal extension of the sea wall (or related structures) into the Coastal Marine Area.
- iii) Opportunities to restore dry (all tide) sandy beach areas towards the scout jetty and directly adjacent to the timber retaining wall. This response should consider the related requirement(s) for groynes, the importation of sand and enduring maintenance requirements for sand loss recharges.
- iv) Consideration of alternative stormwater discharge structures, essentially replacing the bubble up chambers with response(s) more sympathetic to the surrounding environs with an ability to be better integrated within the rock rip rap structure.

Once the review findings have been completed and design options are at the draft/sketch stage, they are to be presented to OBAG and council for consideration and feedback.

Remedial measures identified are to be refined taking into account the feedback, and the preferred option worked further to the developed design stage.

## Contacts and consideration

### Stakeholders:

- Orakei Basin Advisory Group (OBAG)
- The Auckland Water Ski Club (AWSC)
- The Orakei Sea Scouts
- The Orakei Yacht Club
- The Young Mariners
- Youthtown
- Auckland Transport
- Ngati Whatua Orakei (NWO) – NWO has been involved with the renewal of the access road. A representative from NWO sits on OBAG, which should be consulted as the review progresses

### Other Linked Projects:

- The Orakei Basin rip rap project
- The Orakei Basin track upgrades and stormwater improvement project
- The Auckland Transport led Orakei Basin boardwalk widening project
- Ecological Restoration in bush and natural areas (2010-2016)

### Constraints:

- The Orakei Basin is a no-spray area. Any maintenance recommendations need to be cognisant of this.
- The Orakei Basin has geotechnical constraints
- The Orakei Basin has contamination constraints
- Some user groups have Leases or encumbrances over areas of the Orakei Basin

## Project Phasing

### Investigation phase

The consultant is to visit the site and make themselves aware of all site conditions that may affect the successful outcome of the project. In some instances it will be important to also be aware of the wider context within which the project is being developed.

### Desktop review

#### 1.) Project review:

Review of relevant parts of supplementary information:

- Orakei Basin Management Plan 2010 – in particular:
  - chapter 3: Water Access
  - chapter 9; Recreational values
  - chapter 17: Water quality
  - chapter 23: Water access
  - chapter 25: Erosion
- SKM – Orakei Basin Walkway Stability Scoping Study – August 2011
- Riley Consultants Ltd – Orakei Basin Access Road Consented Plans and Amendments
- Orakei Basin Advisory Group attachments and PowerPoint presentation
- Greenscene – Consented Arborist Report
- LA4 Landscape Consultants – Consented Planting Mitigation Plan

Liaison with OBAG and associated stakeholders for further context as required

## Reporting phase

2) Provision of a report describing:

- Brief written review of project elements in areas indicated in a-c above; as to their response to objectives of the Orakei Basin Management Plan (water access and enhancement of recreational use priorities) and SKM recommendations.

3) Recommend remedial measures and proposed options for review. These can be in the form of sketches, diagrams and supporting text/rational for presentation.

- The development of these options and sketches to be presented to Council and OBAG

4) The further interrogation and development of preferred options to be worked through to developed design stage.

5) Report to be submitted to OBAG and council staff in draft form for final feedback before report is and recommendations are finalised.

- A final report will be presented to the Orakei Local Board, and a decision on funding allocation for projects as recommended in the report will be sought.