

OIR: 2324/713

23 November 2023

[REDACTED]
[REDACTED]

Tēnā koe [REDACTED]

Request for Information under the Local Government Official Information and Meetings Act 1987 (the Act) (the LGOIMA)

Thank you for your email of **26 October 2023** requesting the following information:

- 1. Please provide a copy of the Terms of Reference documentation and costs for the KCDC project that resulted in the Thomas Consulting report TCEC 16218 dated December 2018, titled “Waikanae Lagoons Drainage and Flooding Issues”.***

Thomas Consulting investigation work provided for detailed investigations for the re-prioritisation of Stormwater projects for inclusion in the Long-Term Plan [and in response to the 2015/16 flood events]. The original contract was to carry out detailed investigations of flooded locations in allocated catchments [6 catchments in Waikanae] and provide reports. The original contract price for this work was \$75,000. It is not possible to break down the costs associated specifically with TCEC 16218 dated December 2018, titled “Waikanae Lagoons Drainage and Flooding Issues”. Appendix A and Attachment 5 of the contract documents are enclosed for your information.

- 2. Please provide a copy of the Terms of Reference documentation and costs for the KCDC project that resulted in the Tonkin+Taylor Consulting report 1019642.0000 dated 20 Jan 23, titled “Waikanae Lagoons - Stormwater Management Assessment Options Summary”***

Tonkin & Taylor investigation work provided for consideration of upgrade options for Waikanae Lagoon. The contract price for this work was \$76,000. The scope of work for this work is enclosed for your information.

Ngā mihi,



Sean Mallon

Group Manager Infrastructure Services
Te Kaihautū Ratonga Pakiaka

Please note that any information provided in response to your request may be published on the Council website, with your personal details removed.

APPENDIX A SCOPE, PURPOSE , PROGRAMME AND COMPLETION DATE FOR THE SERVICES

1 Purpose

Subsequent to the May 2015 flood, Stormwater and Coastal team carried out a flood event review and in late February 2016, presented the findings and a proposed way forward to the council. In this exercise, over 700 flooded locations have been investigated and clustered them in to 139 projects. As the next step of this process, Council approved the following.

- Completion of detailed investigations for the major upgrades and extensions (called category C and Category D projects) by June 2017
- Completion of detailed investigations , designs and construction of some of the minor upgrades and renewals (called category E projects) by June 2017

This engagement is to undertake the detailed investigations and designs of some of the Category E and C projects which are listed in Attachment 5.

2 Scope of work

The proposed consultant's scope of work includes the following.

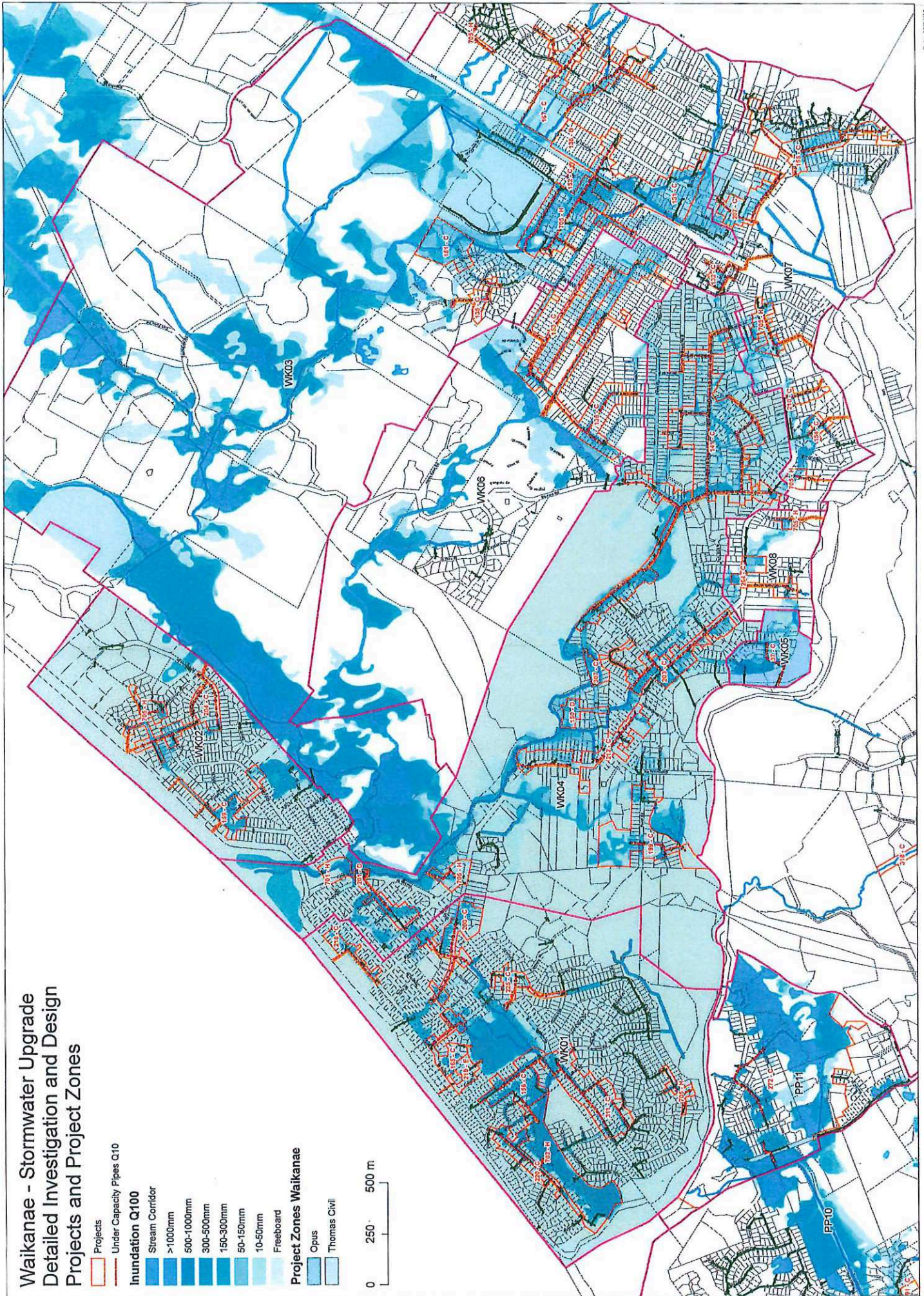
- Detailed investigations – For Category C&E projects
- Concept designs and option analysis - For Category C&E projects
- Detailed designs of the selected option – Only for Category E projects
- Assisting Council on gaining the affected party approvals - Only for Category E projects
- Assisting Council on the preparation of physical works tenders Only for Category E projects
- Assisting Council on the physical works tender evaluation Only for Category E projects

Scope of work also includes: Health and Safety management during the entire contract duration and compliance with all statutory requirements, including monthly reporting.

WORK PROGRAMME

The key milestones for this contract are as follows:

Contract commencement	1 April 2016
Contract Completion	30 September 2016



Kapiti Coast District Council
175 Rimu Road,
Paraparaumu
5032

Attention: Monique Engelen

Dear Monique

Letter of Engagement
Waikanae Lagoons
Stormwater Management Assessment - Stage 1

Following our recent communications, and as you requested by email on 14 March 2022, we are pleased to confirm the basis on which Tonkin & Taylor Ltd (T+T) will carry out a high-level assessment of flooding issues and a feasibility study of potential stormwater management improvements within the Waikanae Lagoons catchment for Kapiti Coast District Council (KCDC) as our client. The Waikanae Lagoons comprise of the Waimanu Lagoons and the Waimeha Lagoon that are situated in the low laying coastal area of Waikanae Beach, between Waimeha Stream and Waikanae River. Refer Figure 1.1 for the project location.

We understand that KCDC's key objectives for this project are flood attenuation, flood diversion, and water quality improvement. KCDC therefore wishes to improve the performance of the existing drainage system within the Lagoons catchment and to minimise the potential for flood effects on nearby properties. To do this, you would like us to assess the suite of stormwater management improvement options that have previously been recommended¹. You would also like us to assess the feasibility of developing a constructed wetland to provide flood attenuation and water quality improvement within the catchment. We understand that KCDC's preference is to commence the project as soon as practicable with the priority being the constructed wetland feasibility assessment.

¹ Waikanae Lagoons Drainage and Flooding Issues, Detailed Investigations and Recommendations, Thomas Consultants Ltd, December 2018.



Figure 1.1: Waikanae Lagoons location plan

As agreed with you, we propose to undertake the work in two stages which are based on the level of complexity of the recommended improvement options. The Thomas report recommends eleven improvement options. However, it does not specifically state the complexity of each option. We therefore propose to group the options into Stage 1 and Stage 2 works after our assessment.

Stage 1, the scope of work in this letter of engagement, will comprise a high-level desktop assessment of each of the less complex stormwater management improvement options recommended in the Thomas report. We will evaluate the effectiveness of these options, discuss our findings with you, and agree a definitive set of options to put forward for implementation. Once the Stage 1 set of options is agreed with KCDC, KCDC will confirm whether they wish to pursue the Stage 2 works. Stage 2, which is not part of this proposal, will comprise a separate desktop assessment for the more complex stormwater management improvement options recommended in the Thomas report.

1 Scope of work – Stage 1

We propose to carry out the following scope of work for the Stage 1 assessment:

1.1 Project management

We will complete internal project management tasks including, invoicing, internal resourcing, and producing and updating a high-level project schedule monthly (assumes a 4-month programme for Stage 1). We have allowed for sending a progress report to KCDC via email on a fortnightly basis and have allowed for a one-hour progress meeting attended by a maximum of two T+T staff monthly.

1.2 Constructed Wetland Feasibility Assessment

We will investigate the feasibility of installing a constructed wetland system within the existing grassed area of Victor Weggery Reserve. The investigation will consider feasibility of the system for providing flood attenuation and water quality treatment functions. We will undertake the following desktop activities to inform our understanding of wetland feasibility:

- Review the existing stormwater network to understand pipe, channel, and ground levels, contributing catchment areas, and catchment imperviousness.
- Estimate wetland size requirements in line with local design guidelines, and evaluate these with respect to the available space, existing ground levels, and stormwater network conditions.
- Investigate opportunities for redirecting parts of the network to maximise stormwater flows that are routed into the wetland if the available space can support this.

The findings of the desktop assessment will be considered in light of the planning and ecological assessments that are proposed as part of the wider Stage 1 activities, and how the wetland might relate to the other Stage 1 options being investigated.

The outcome of the feasibility study will be a recommendation as to whether or not a viable constructed wetland could be progressed to a concept design phase. Options for the most appropriate type of system will also be presented, e.g. water quality treatment only, flood attenuation only, or integrated water quality wetland with attenuation function.

1.3 Desktop Assessments

We will undertake desktop assessments across the following disciplines to inform our understanding of the feasibility and effectiveness of the recommended stormwater management options.

The assessments will draw on existing information, including the Thomas report, geotechnical data, ecological assessments, reports or datasets, any existing resource consents held, and any other information we may source from KCDC. During this stage of the project, we will also consider and provide a high-level assessment of any additional stormwater management options not listed in the Thomas report that we believe may also contribute to improved stormwater outcomes.

Note, to inform this letter of engagement, we completed an initial site visit on 31 January 2022 at KCDC's request, attended by a stormwater engineer, ecologist, and planner from T+T, and representatives from KCDC.

1.3.1 Stormwater

- Review the Thomas report to fully understand the stormwater management issues within the Waikanae Lagoons catchment.
- Review each of the improvement options recommended in the Thomas report and classify their intended functions, i.e. flood attenuation, flood diversion, or water quality improvement.
- Group the eleven options into Stages 1 and 2 on the basis of their complexity.
- Liaise with Awa Environmental to obtain the flood model outputs and the existing stormwater network assessment for each Stage 1 option.
- Prepare a summary of how effective each option is anticipated to be. This will include high-level hydraulic calculations. We do not propose to undertake any hydrological or hydraulic modelling to support this summary.
- Using the findings of the geotechnical, ecological, and planning assessments (tasks below), define risks, constraints, and opportunities associated with each of the Stage 1 options.

1.3.2 Geotechnical

The following scope only refers to Stage 1 works.

- Review existing information in the area including published geological information, the New Zealand Geotechnical Database (NZGD), aerial imagery, ground level information (i.e. LiDAR), and T+T reports completed for nearby projects.
- Site walkover by an engineering geologist to observe local geomorphology and material exposures (expected to be beach / dune sand).
- Assess any geotechnical hazards or issues which may affect any improvement option and the proposed wetland.

1.3.3 Planning

The following scope only refers to Stage 1 works.

- Review the Operative Kapiti Coast District Plan 2021, confirm what works (if any) are permitted under the Plan, and confirm the potential resource consent requirements.
- Review the Greater Wellington Regional Council Proposed Natural Resources Plan, the relevant operative Regional Plans, and the National Environmental Standard for Freshwater, and confirm the potential resource consent requirements.

1.3.4 Ecology

The following scope only refers to Stage 1 works.

- Review existing literature including the ecological report prepared by Boffa Miskell (1999). Query relevant national and regional ecological datasets including the NZ Freshwater Fish Database and Fish Passage Assessment tool database.
- Based on existing information, identify any potential ecological constraints associated with each of the proposed options in consultation with the T+T planner.
- Identify any critical data gaps that will need to be filled to progress with the implementation of each option (including potential resource consent applications).

1.4 Stage 1 Management Options Review

Once the desktop assessments are completed, we will summarise the findings of the respective disciplines. This information will form the basis of our evaluation of the Stage 1 stormwater management improvement options so that the options can be assessed against KCDC's desired outcomes, effectiveness, and constraints, and ranked for potential implementation or further consideration.

This assessment will include the following tasks:

- Define the criteria by which we will evaluate the desired outcomes of each Stage 1 option, and assign provisional weighting to these criteria. Evaluation criteria will span, for example, the effectiveness of flood attenuation, flood diversion, and water quality improvement functions, as well as constraints and order of magnitude costs. Co-benefits, such as biodiversity enhancement, will also be considered.
- Liaise with KCDC to finalise and agree the evaluation criteria and weighting ahead of the evaluation process.
- Evaluate each option within a multi-criteria analysis (MCA) framework to generate a score that reflects the overall effectiveness of each option. The MCA will provide a semi-quantitative basis for making our overall project recommendations in accordance with KCDC's objectives.

- Meet with KCDC to discuss the findings of the MCA and to determine KCDC's requirement for the Stage 2 works. During the meeting we will incorporate any input from KCDC to refine our findings and agree a definitive set of options for Stage 1 works to put forward for implementation or further consideration.

To complete this work we intend to use relevant existing information in published databases. The terms of use of these databases often require that we upload equivalent data that we collect for your project. By accepting this proposal you agree to us uploading the relevant data collected from your project.

2 Deliverables

We will summarise our findings and recommendations for the Stage 1 management options, as agreed with KCDC, in a letter report. The report will rank the options in terms of their effectiveness, as calculated through the MCA process, and include simple sketches of recommended options where appropriate.

2.1 Inputs required from others

To do this work we intend to use relevant existing information provided by you and information available in published databases including:

- Outputs from Awa's flood model and stormwater network assessment (in ArcGIS compatible format).
- KCDC Subdivision and Development Principles and Requirements, 2012.
- Access to the latest available KCDC LiDAR data covering the Waikanae Lagoons catchment.
- Access to any existing outfall consents or other relevant consents within the Waikanae Lagoons catchment held by KCDC.
- Results from the topographic survey being prepared by others.

2.2 Assumptions and exclusions

- We assume no additional topographical survey is required beyond that referred to above, and that the Awa's flood model contains the required level information.
- We assume that we will be granted access to all relevant GIS stormwater records including asset IDs, pipe and manhole invert levels, cover levels, asset material, size, condition, and type of asset. We assume the existing data will be provided in an exported digital format which is compatible with ArcGIS and 12d.
- We will use Awa's flood model outputs to inform our assessment of the Stage 1 options. We will not provide a technical review of the model and will not accept design responsibility or liability for the accuracy of the outputs.
- We intend to use Awa's flood model outputs, however, we realise that this arrangement may cause inefficiencies (outside of our control) and may cause delays in providing the final output to you. We will inform you once we notice these issues and work with you on the next steps.
- Stormwater management improvement options identified as Stage 2 works fall outside the scope of this letter of engagement. Following consultation with KCDC on Stage 1 options, if required, we will submit a separate offer of service for the assessment of Stage 2 stormwater management improvement options.