

Business Case/Procurement Plan – Contract 925 Hakaru Leachate Treatment Upgrade

PROJECT MANAGER	Mark Bell	TITLE	Infrastructure Delivery Manager
Budget Holder	Donna Powell	TITLE	Waste Minimisation Lead
Business Owner	Donnick Mugutso	TITLE	Water s and Waste Manager
PROJECT SPONSOR	Jim Sephton	TITLE	GM Infrastructure

PREPARED BY	Mark Bell/Donna Powell	TITLE	IDM	DATE	24/08/20
APPROVED BY	Jim Sephton	TITLE	GMI	DATE	

This business case is required to be reviewed & approved by the Portfolio Oversight Group (POG). Please submit to PMO@Kaipara.govt.nz

VERSION HISTORY				
VERSION	APPROVED BY	REVISION DATE	DESCRIPTION OF CHANGE	AUTHOR
Draft	Mark Bell	24/08/20	Draft 1 st Issue	Mark Bell
Rev 1	Mark Bell	11/09/20	Included revisions from budget holder	Donna Powell

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Executive Summary

Kaipara District Council (Council) operated a landfill at Hakaru between 1997 and 2005. In 2007 a refuse transfer station was established following closure of the landfill. Council has been investigating options to achieve a viable and long-term solution for leachate treatment and disposal at the Hakaru closed landfill. The current situation of offsite disposal is not cost-effective for ratepayers and the risk to the environment due to consent exceedances is too great to ignore. During and following high rainfall events, the leachate generation rate increases, which can result in overtopping of the leachate storage pond and uncontrolled flow of leachate through the planted area before discharging to a stormwater drain and ultimately the wetland and unnamed tributary of the Hakaru River. This discharge when over 6m³p/day was in breach of the Resource Consent. The physical works were originally programmed for Year one of the 2018/28 LTP (a budget of \$800,000 was approved during the LTP process) however the first design presented by PDP (Pattle Delamore Associates) was excessive and too expensive, this had partly occurred due to the lack of accurate data from the site, so, a decision was made to defer the project and complete a trial that would identify if a lower cost option would be suitable for the treatment required and upgrade the telemetry so true and accurate data could be gathered re the quantity of leachate; this has paved the way for a considerably cheaper option to be designed, this design has now been received and approved by staff.

The detailed design/solution includes the following with associated cost estimates:

Works to be completed	Cost Estimate
Construction of Trickling Filter and Assoc works	\$294,163.06
Construction of Wood Chip Bed	\$125,880
MSQA and Contract management – PDP & KDC	\$ 62,600
Contingency Sum –	\$67,356.94
TOTAL Cost of Project	\$550,000.00

Project Overview

Vision

Briefly describe the intended benefits of the project

Discharged Leachate will comply with the NRC consent, and only clean, treated water makes its way into the Hakaru river.

A major reduction in operational costs is expected with the current \$150,000 - \$220,000 expenditure for trucking leachate offsite being reduced to approx. \$32,000 for maintenance of the new treatment facility. This is a long term, low cost solution to the leachate treatment issue.

Background

Briefly describe any background context to the project. Offer an explanation here as to why this project is taking place (i.e. Compliance, Sustaining, Maintenance, Improvement, Growth (Compliance), Growth.)

The Hakaru Closed Landfill is located approximately 6 km north east of Kaiwaka. It was operated as a general refuse landfill by KDC between 1997 and 2005. The landfill has been capped; however, it continues to generate high leachate volumes. KDC holds Northland Regional Council (NRC) Resource Consent 7562, for the irrigation of leachate from the landfill to land, however, due to the high volume of leachate being in excess of the consent limit, and exceeding the infiltration capacity of the soils, leachate is presently being managed by trucking off-site for disposal at the Wellsford Municipal Wastewater Treatment Plant, at significant ongoing cost to KDC (\$150,000 - \$220,000 per year)

In order to reduce ongoing operating costs associated with trucking the leachate and to meet consent conditions, KDC engaged MWH New Zealand Limited (MWH – now Stantec) to conduct an options assessment for the long term management of leachate from the Hakaru Closed Landfill, PDP was then engaged to provide a peer review of the options assessment. This work has identified treatment of leachate to allow a discharge to an unnamed tributary of the Hakaru River to be the most suitable option. The discharge to the unnamed tributary is proposed to occur via the existing constructed wetland at the site.

Historical sampling of leachate from the Hakaru Closed Landfill indicates that the primary contaminant of concern (for surface water discharge) is ammoniacal nitrogen. To minimise potential effects on the receiving surface water environment, it is necessary that ammoniacal nitrogen is reduced to suitable levels. Pattle Delamore Partners Ltd (PDP) were engaged to complete a Design and gain Resource Consent

Project Deliverables

Briefly describe the expected project outcomes and deliverables.

(This section should outline how we will measure project success and who is accountable for achieving the project outcomes. Where possible, describe outcomes as tangible items, services, or processes)

Milestones:

Council approval achieved: Donna Powell

Construction tender closed: Mark Bell, Matt Williams and PDP

Tender award: Mark Bell, Matt Williams

Construction of physical works completed: Matt Williams and PDP for MSQA

Project Scope

In Scope

Briefly describe what will be considered within the scope of the project

The construction works are divided into two separable portions, as follows:

- **Separable Portion 1: Trickling Filter System**

The trickling filter system (including recirculation system) is to be constructed initially, connecting into the existing leachate pipe, to enable the leachate to be biologically treated in the trickling filter, with a frequent recirculation system. The treated leachate is then to be piped to the wetland.

- **Separable Portion 2: Woodchip Bed System (Provisional Item).**

Following a 6-month proving period, the Principal may require a wood chip bed to be constructed to assist with denitrification of the treated leachate. This would include an earthen bund, wood chip bed, connected into the plant constructed under Separable Portion 1 (the trickling filter). It is expected that the decision on whether Separable Portion 2 is to be implemented will be within 8 months of the system constructed under Separable Portion 1 being commissioned.

Out of Scope

Briefly describe what will be considered Out of scope of the project

Any unexpected upgrades or changes required to the Leachate Pump Station and the constructed wetland, there has been some contingency planned for minor works if identified.

Constraints and Assumptions

Detail key assumptions, such as expected funding, and constraints, such as the need for special equipment or technical resources.

Key assumptions and constraints:

The current Leachate Pump Station will be sufficient to supply the trickling filter

The current Constructed Wetland will be sufficient to provide the final treatment provided prior to treated leachate being released to the environment.

Approval of funding by elected members.

Response from construction tender.

Status quo or de-escalation of Covid 19 conditions.

Dependencies

Consider any dependencies this project may have (e.g. does it require another projects completion before it can begin?)

Key dependencies:

Approval of funding by elected members.
 Response from construction tender.
 Status quo or de-escalation of Covid 19 conditions.

Risk Analysis

Consider and document here any risks to the project known at this time

Risk Description	Impact	Mitigating Actions	Risk Level (high, medium, low)
Lack of funding	Significant	Large contingency in estimates	medium
Negative publicity	Significant	Involve comms team	medium
Low availability of contractors	Significant	Circulate project details pre tender	low
Project goes over time	Significant	Include liquidated damages in tender	low

Links with other projects

Consider and document here how other projects may be affected by, or in turn may affect, this project

There is no direct link with other projects except for the possible limited availability of contractors because of limits on resources due to work commitments or pandemic restrictions.

Alternative Analysis

Provide an overview of options other than the proposed solution considered to address the business problem

No Project (status Quo)	Reason for not selecting alternative
Don't do the work	Potential of being non-compliant with NRC consent, abatement notices likely. Continue to pay high cost of trucking leachate offsite
Alternative Option	Reason for not selecting alternative

Alternative treatment design

Will take longer and remain non-compliant with NRC consent, abatement notices likely.

Major Project Milestones

List the major project milestones and their target completion dates.
(If you have one, attach the project schedule)

Milestone/ Deliverable	Target Date
KDC Council sign off	30 Sept 20
Place contract on tenderlink	7 October 20
Evaluate Tenders and Award contract	11 November 20
Finish Seperable Portion 1	18 December 20
Finish Seperable portion 2	26 February 20
Closeout/Project Completion	

Resource Requirements

Describe what resources the project will require (include items such as equipment where this is a limited resource)

Name	Role	Company/Council	Duration (estimate)	Hours per week (estimate)
Daryl Irvine	PM	PDP	Oct to Feb	
Matt Williams	PM during construction	KDC	Sept to Feb	2
Mark Bell	Principals PM	KDC	Sept to Feb	2
Donna Powell	Budget holder	KDC	Sept to Feb	1

Cost

Funding Request

Detail below what funding is required for the project

Internal Funding Required	OPEX:	CAPEX: 550k	TOTAL:550k
Budgeted in LTP	NO(was budgeted in year one of 2018/28 LTP but deferred)		
Planned Budget (where budgeted in LTP)	OPEX:	CAPEX:	TOTAL:
Externally Funded?	NO		

External Funding Source		\$ AMOUNT:
TOTAL COST	OPEX:	CAPEX:550K TOTAL:550K

Funding History

Detail below any previous funding requests which have been approved (where applicable)

Previous Request/s				
FR#X	Comment	Opex	Capex	Total
Existing Approved Spend		\$0	\$0	\$0
Current Request				
FR#Y				
Total Current Requests				
Requested Approved Cost Budget		\$	\$	\$

Health and Safety

Outline any specific Health & Safety risks/issues associated with this project and how they will be managed. These may be referenced in supporting documentation such as the Risk Register.

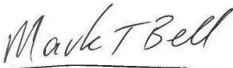

Contract documents to require submission of SSSP which needs to fully take into account the active use of the transfer station and the public access to this in a safe manner especially during construction activities. A risk register will be developed.

Procurement Plan (> \$500,000) (Contract 925 Hakaru Leachate Treatment Upgrade)

This document seeks approval from <insert name>, as delegated financial authority holder to:

Undertake procurement processes for goods or services to an estimated value of <\$550,000>.

Once fully approved the project manager or business owner may procure goods and services according to the plan. Any material deviations from the plan must be reapproved by those who have endorsed and approved the plan.




Signed: 	Signed:
Name: Mark Bell	Name: John Burt
Role: Project Manager	Role: Head of Procurement
Statement: This procurement plan has incorporated objectives of the business owner and is designed to deliver best "whole of life" cost solution for TP and its customers.	Statement: This procurement plan meets all procurement policy requirements and approved procurement strategies.
Date:	Date:
Signed: 	Signed:
Name: Donna Powell	Name: Jim Sephton
Role: Waste Minimisation Lead	Role: General Manager
Statement: This procurement plan has an approved business case and budget to cover this procurement.	Statement: I approve/recommend the CEO approve this procurement plan.
Date:	Date:
Signed:	
Name: Louise Miller	
Role: CEO (DFA Holder)	
Statement: I approve this procurement plan.	
Date:	

No Conflict of Interest Declaration

If you feel that you may have a conflict of interest then please email a Procurement representative immediately to formalise your declaration.

By signing below I hereby declare that to the best of my knowledge I do not have:

- any financial (shareholding or pecuniary) or other related interest in the supply of goods and services for the project named below;
- any relatives or friends with a financial interest in the goods and services to be supplied for the project named below; or,
- any personal obligation which would in any way affect my decisions in relation to the process I have been asked to undertake for Kaipara District Council.

Name	Role	Signature
Mark Bell	Infrastructure Delivery Manager	
Jim Sefton	GM Infrastructure	
John Burt	Head of Procurement	
Donna Powell	Waste Minimisation Lead	
Matt Williams	Infrastructure Project Manager	

Project Related Information

2.1 Project Name	Con 925 Hakaru Leachate treatment Upgrade
2.2 Total Project Budget	\$550.000
2.3 Total Estimated Procurement Cost (BC1)	\$550.000
2.4 Briefly describe the project this procurement relates to?	Installation and project management (MSQA) of Treatment plant.

Procurement Streams

A procurement stream is an individual procurement. For example, a project may involve the procurement of an asset and the installation of that asset. This would typically involve two streams; one for the procurement of the asset and one for the procurement of the installation services. (Insert new rows for additional streams if necessary)

Name	Estimated Procurement Cost
3.1 – Physical Works (incl contingency sum)	\$487,400
3.2 – Project Management (MSQA)	\$62,600

Procurement Stream ONE - <Physical Works>

If your project has multiple procurement streams replicate this section for each stream

4.1 What is being procured?

The installation of a Trickling filter and Woodchip bed & associated components

4.2 Is this procurement subject to previously approved procurement strategy?

Yes, as per the adopted procurement strategy.

4.3 Is there an established panel of suppliers that can be used for this procurement?

No

4.4 What suppliers are capable of providing the goods or services required for this procurement stream?

4.5 What type of tender is being recommended? (if applicable)

Competitive (Open)	Yes
Competitive but closed (Closed/Selective)	No
Non-Competitive (Direct/Selective)	No

4.6 What is the nominated procurement approach and why this is the best procurement approach?

Open tender using Tenderlink.

This is the best approach because it gives the open market the opportunity to competitively bid for the work, and this is the method that we have proposed with the contractors federation.

4.7 What are the procurement/logistics risks related to this procurement stream, proposed mitigation measures and/or risk allowances?

There is a risk of limited contractor availability to do this work.

The mitigation for this is to brief industry that this work is coming up for tender.

There is a risk that the pandemic alert levels will rise regionally and interfere with this work due to movement constraints.

The mitigation for this is to appoint locally based contractors that do not need to traverse regional boundaries or request that key personnel remain in the district.

4.8 What is the Procurement Policy exemption being proposed (if an Open Tender (Competitive) is not being utilised) and what is the justification for this exemption?

N/A

4.9 Are there any specific contract terms applying to this procurement?

No

Procurement Stream TWO - <Project Management - MSQA>

If your project has multiple procurement streams replicate this section for each stream

5.1 What is being procured?

Project management throughout the tender period and physical works, including Engineer to contract.

5.2 Is this procurement subject to previously approved procurement strategy?

Yes, as per the adopted procurement strategy.

5.3 Is there an established panel of suppliers that can be used for this procurement?

Yes, there professional services panel could potentially be utilised although the best fit for this work is PDP.

5.4 What suppliers are capable of providing the goods or services required for this procurement stream?

There are limited consultancy companies with Closed Landfill management expertise, KDC has traditionally utilised Pattle Delamore Partners Ltd or MWH for this work

5.5 What type of tender is being recommended? (if applicable)

Competitive (Open)	No
Competitive but closed (Closed/Selective)	No
Non-Competitive (Direct/Selective)	Yes

5.6 What is the nominated procurement approach and why this is the best procurement approach?

Direct appoint – Pattle Delamore Partners Ltd have completed the design work and all the previous investigations, trials etc and are very familiar with the intricacies of the project. They will be appointed as engineer's representative to the contract by KDCs default engineer to the contract Curt Martin.

5.7 What are the procurement/logistics risks related to this procurement stream, proposed mitigation measures and/or risk allowances?

There is a risk that PDP designer may put design defects back on the contractor or principal.

The mitigation for this is to have an independent engineer to the contract (Curt Martin) who will appoint PDP as engineers representative, and the Engineer to the Contract will remain independent in the case of a dispute.

5.8 What is the Procurement Policy exemption being proposed (if an Open Tender (Competitive) is not being utilised) and what is the justification for this exemption?

KDC Procurement Manual 9.2.4.3 Selective Procurement for greater than \$50k if approved by GM infrastructure.

5.9 Are there any specific contract terms applying to this procurement?

No specific terms.

APPENDIX A – Tendering, Contracting and Cost Details for Each Procurement Stream

Procurement Stream ONE – <Physical Works>

If your project has multiple procurement streams replicate this section for each stream

6.1 Procurement Timelines

Include high-level activities for the procurement stream. This should consider the tender activities. Refer to the Procurement Guidelines for examples.

	Milestone Name	Milestone Date	
1	Place tender on Tenderlink	7 October 20	
2	Evaluate and award tender	11 November 20	
3	Finish separable portion 1	18 December	
4	Finish separable portion 2	26 February 20	

6.2 Evaluation Team (for Physical Works)

Role	Name	Group
Project Manager	Mark Bell	Infrastructure

Evaluation Team Member	Donna Powell Matt Williams	Infrastructure Infrastructure
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6.3 Evaluation Criteria and Scoring (See Guidelines for an example)

NON-PRICE CRITERIA	WEIGHTING
Track Record	Pass/Fail
Resources	Pass/Fail
Relevant experience	15%
Relevant Skills	15%
Methodology	30%
NON-PRICE TOTAL	60%
Price Total	40%
TOTAL	100%

6.4 Identify the form of contract to be utilised for this procurement

NZS3910

6.5 Where is the contract located in P: drive

P:\4. - Community Assets\41. - Roading & Water Services\4107. - Contracts\4107.925 - Hakaru
Leachate Treatment upgrade

6.6 Estimated Costs (modify to suit relevant costs)

Description	Cost
Total procurement cost	\$487,400

Procurement Stream TWO – <Project Management - MSQA>

If your project has multiple procurement streams replicate this section for each stream

7.1 Procurement Timelines

Include high-level activities for the procurement stream. This should consider the tender activities. Refer to the Procurement Guidelines for examples.

	Milestone Name	Milestone Date	
1	Engage PDP via SFA	5 October 20	
2	Achieve practical completion of physical works	March 21	

7.2 Evaluation Team (for both tenders and non-competitive procurement)

Role	Name	Group
Project Manager	Mark Bell	Infrastructure
Evaluation Team Member	Donna Powell	Infrastructure

7.3 Evaluation Criteria and Scoring (See Guidelines for an example)

NON-PRICE CRITERIA	WEIGHTING
N/A direct source	N/A direct source
NON-PRICE TOTAL	
TOTAL	100%

7.4 Identify the form of contract to be utilised for this procurement

Short Form ACENZ Agreement

7.5 Where is the contract located in P: drive

P:\4. - Community Assets\41. - Roading & Water Services\4107. - Contracts\4107.925 - Hakaru Leachate Treatment upgrade

7.6 Estimated Costs (modify to suit relevant costs)

Description	Cost
Total procurement cost	\$62,600

Relevant Reference Documentation

Provide the document name and hyperlink to the document. Documents may also be attached as an appendix to this plan.

Source Name	Brief Description	Hyperlink/Location
925 Business Case		To be provided
925 Council Paper		To be provided