

Notice is given that an ordinary meeting of the Engineering Services Committee will be held on:

Date: Thursday 29 June 2017
Time: 9.30 am
Meeting Room: Tasman Council Chamber
Venue: 189 Queen Street
Richmond

Engineering Services Committee

AGENDA

MEMBERSHIP

Chairperson	Cr S G Bryant	
Deputy Chairperson	Cr P F Sangster	
Members	Mayor R G Kempthorne	Cr S R Brown
	Cr P L Canton	Cr M J Greening
	Cr P H Hawkes	Cr T B King
	Cr C M Maling	Cr D E McNamara
	Cr D J Ogilvie	Cr T A Tuffnell
	Cr A C Turley	Cr D M Wensley

(Quorum 7 members)

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AGENDA

- 1 OPENING, WELCOME**
- 2 APOLOGIES AND LEAVE OF ABSENCE**

Recommendation

That apologies be accepted.

- 3 PUBLIC FORUM**
- 4 DECLARATIONS OF INTEREST**
- 5 LATE ITEMS**
- 6 CONFIRMATION OF MINUTES**

That the minutes of the Engineering Services Committee meeting held on Thursday, 25 May 2017, be confirmed as a true and correct record of the meeting.

- 7 REPORTS OF COMMITTEE**

Nil

- 8 PRESENTATIONS**

Nil

- 9 REPORTS**

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| 9.1 | Chairman's Report | 5 |
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9 REPORTS

9.1 CHAIRMAN'S REPORT

Information Only - No Decision Required

Report To:	Engineering Services Committee
Meeting Date:	29 June 2017
Report Author:	Stuart Bryant, Chairman, Engineering Services Committee
Report Number:	RESC17-06-01

1 Summary

1.1 This is the Chairman's regular report to the Engineering Services Committee.

2 Draft Resolution

That the Engineering Services Committee receives the Chairman's Report RESC17-06-01.

3 Update

- 3.1 Welcome to today's meeting.
- 3.2 It has been a very busy period over the last six weeks with a number of Engineering Services staff continuing to crunch the numbers and complete the necessary research as they redraft the Activity Management Plans. This three-yearly exercise is a huge challenge for everyone and even moreso with the huge increase in growth in our District over recent times.
- 3.3 The inaugural meeting of the new Joint Landfill Business Unit Committee was held on 15 June 2017. At that meeting, Cr Stuart Walker was elected as Chairperson and I was elected as his Deputy. I look forward to working with Cr Walker and his colleague, Cr Ian Barker and our own Cr Maling on this new committee. We have a lot of work ahead of us over the next few months.
- 3.4 After the meeting, we visited the Eves Valley Landfill and were briefed on the work to be done to close the current landfill site. From 1 July 2017 Tasman District rubbish will be trucked to the Nelson City Council's York Valley landfill. The Committee will tour the York Valley facility after their next meeting in September.
- 3.5 Thank you to those Councillors who took the time to join the Accessibility for All group on our walkabout in Richmond on 9 June. I found the experience quite disconcerting and it certainly gave me a much greater appreciation of how important it is to provide accessibility for those with sight, hearing and mobility issues. A big thank you to Megan Bell for her organisation.
- 3.6 The quarterly state highway liaison meeting with the New Zealand Transport Agency staff was held on 16 June 2017. We are all aware that there are significant changes happening in the Agency's structure. As a result, Mark Owen will no longer be our Agency advocate as this role will be managed from Blenheim. I would like to take this opportunity to thank Mark for his tireless efforts on behalf of the residents and ratepayers of Tasman District. Mark has always made himself available to discuss and try to resolve any issues we have with the state highways in our District – mostly with great success. Thank you Mark.
- 3.7 I was personally disappointed with the negative discussion around the table at the Full Council meeting on 14 June 2017 regarding the Waimea water augmentation issue. I have been involved with discussions about water augmentation for many years and I fully understand the issues in front of us. I urge those of you who voted against continuing the project to talk to staff and ensure you really understand the consequences if we don't build a dam. The future of our residents and ratepayers relies on you making the right decision. I am happy to share my knowledge and the history behind the project with you.

9.2 MAPUA WATER AND WASTEWATER BUSINESS CASE**Decision Required**

Report To:	Engineering Services Committee
Meeting Date:	29 June 2017
Report Author:	Jenna Neame, Senior Activity Planning Advisor
Report Number:	RESC17-06-02

1 Summary

- 1.1 The Council agreed to develop a programme business case to assess the issues that were being experienced on the Mapua water and wastewater networks. These issues included ongoing water pipe breaks, pressure from private developers wanting to connect to a reticulated public water supply and lack of water storage.
- 1.2 The purpose of the business case was to take a holistic view of networks and identify an optimised programme of works to address the issues.
- 1.3 Four problem statements were identified by the business case working group:
 - Poor quality water pipe network has a high risk of failure leading to supply disruptions.
 - Water supply has insufficient capacity to cater for increased usage, constraining the opportunity for Mapua to grow.
 - Capacity in the wastewater network is inadequate under wet weather flows leading to frequent pump station high level alarms and occasional overflows.
 - The current water and wastewater network configuration lacks redundancy and resilience with some particularly vulnerable locations leading to disruption to continuity of service.
- 1.4 The business case identified a recommended programme of works which includes the following key critical projects:
 - a) Aranui Road / Stafford Drive Water Main Renewal
 - b) Waimea Treatment Plant to Mapua Water Trunk Main Renewal – between Best Island and Mapua Channel
 - c) Stafford Drive New Wastewater Pump Station and Rising Main
 - d) Mapua and Ruby Bay Wastewater Pump Station Storage Upgrades
- 1.5 Throughout the development of the business case the issues have increased in frequency and significance, increasingly making the renewals a matter of urgency. Staff recommend undertaking design and land acquisition for projects a), b) and c) above in the 2017/18 financial year. This will reduce the waiting time from four years to three years until construction is complete for key elements of the programme (assuming the works come forward, as is proposed for the Long Term Plan 2018-2028).

- 1.6 The design and land acquisition will require a capital budget of \$200,000 from water, and \$560,000 from wastewater. Staff expect to be able to accommodate some of this within existing budgets by reducing scope for other water projects and using the wastewater growth allowance budget, but will need additional funding of \$454,000 for wastewater. This increase can be absorbed as the wastewater account is expected to post a \$2.2m surplus for 2016/2017.

2 Draft Resolution

That the Engineering Services Committee:

- 1. receives the Mapua Water and Wastewater Business Case report, RESC17-06-02; and**
- 2. recommends to the Full Council that it approves capital budgets in 2017/2018 of \$200,000 for water, and \$560,000 for wastewater to undertake design and land acquisition needed to enable the renewal of the Mapua water and wastewater network; and**
- 3. recommends to the Full Council that the budget sought in Resolution 2 for water be funded by:**
 - a. offsetting \$80,978 against the budget for the Church Street Water Main Replacement project and \$80,000 against the budget for the McGlashen Avenue Re-Zoning project; and**
 - b. reallocating \$15,949 from Mapua Growth Facilitation Works and \$23,073 from Waimea Water Treatment Plant Upgrade; and**
- 4. recommends to the Full Council that the budget sought in Resolution 2 for wastewater be funded by:**
 - a. offsetting \$106,000 against the Growth Allowance for Pipeline Upgrades budget; and**
 - b. granting additional capital funds of \$454,000.**
- 5. recommends to the Full Council that consultation on the above changes is not needed.**

3 Purpose of the Report

- 3.1 This report discusses the development and outcomes of the Mapua Water and Wastewater Programme Business Case and recommends that the Council advances design work to the 2017/18 financial year.

4 Background

Background

- 4.1 During 2016, staff advised the Council that there was a need to better understand the issues that were occurring within the Mapua water and wastewater networks. These issues included ongoing water pipe breaks, pressure from private developers wanting to connect to a reticulated public water supply and a lack of water storage. The Council agreed to this work being undertaken and staff engaged MWH (now Stantec) to assist with the development of a programme business case (refer previous reports, RESC16-04-03 and RESC 16-08-08).
- 4.2 This programme business case is the first of its kind for the Council. The Council is using this business case to test the merits of the NZ Treasury's Better Business Case process. Staff will report to the Council at a later date on the findings of this pilot business case.
- 4.3 The purpose of the business case was to take a holistic view of the infrastructure networks to identify key problems and prepare an optimised programme of works to address those problems. The programme of works will be used to update the Council's Water and Wastewater activity management plans, and the Long Term Plan 2018-2028.
- 4.4 The business case has been developed by a core working group that included:
- Councillors Bryant, King and McNamara
 - Council's water operations staff
 - Council's wastewater operations staff
 - Council's activity planning staff
 - MWH/Stantec NZ Ltd (Engineering Consultants)
- 4.5 The working group also sought input from Downer (the Council's utilities maintenance contractor), and Council's Reserves and Facilities and Transportation staff.
- 4.6 The key phases of the business case development were:
- Pre-workshop between staff and maintenance contractors to identify operational and maintenance issues.
 - Workshop 1 – Identify problems, benefits, and investment objectives.
 - Workshop 2 – Identify long list options, and discuss the risks and dependencies of each option.
 - Workshop 3 – Review potential programmes and select a preferred programme.

Problem Statements

- 4.7 The four problem statements identified in the business case, along with the causes and consequences, are summarised below.

“Problem 1: Poor quality water pipe network has a high risk of failure leading to supply disruptions.”

- 4.8 The Mapua water supply network features mostly ‘blue brute’ PVC pipes that were installed in 1989. At the time of installation, the pipes were expected to have a useful life of 50-80 years depending on the rate of growth. Blue brute is now known to perform poorly in terms of life expectancy and often prematurely deteriorates. This is true for the Mapua network where the pipes have shown they cannot handle the design operating pressures without risk of bursting.
- 4.9 The main spine of the network between the Waimea Water Treatment Plant and the Pomona Road Reservoir is largely linear. This means that if a break occurs within this section there is no alternative supply route and the scheme can only rely on the water available in the reservoirs at the time. In October 2016, following a burst on the trunk main between the water treatment plant and Mapua, the reservoir was reduced to approximately one to two hours supply of water. A similar situation occurred in May 2017. In both of these instances, staff consider it was good fortune that the pipe was repaired in time before the reservoir ran dry.
- 4.10 The inability of the pipes to handle higher operating pressures means that it is not possible to lift the operating pressure of the pumps to fill the reservoirs quicker after a break has occurred or to provide more water for additional users.
- 4.11 The duration and response to these bursts can vary, depending on the location and extent of breakage. Burst water pipes along sections of Rabbit Island and Best Island can be difficult to isolate as pipes traverse mostly rural and forestry areas and are unlikely to be reported. Generally, these bursts are only found after telemetry data indicates an issue with reservoir water levels and the maintenance contractor then goes in search of the cause. A broken pipe within the Mapua Estuary could take days to repair as maintenance crews can only work at low tide, resulting in significant supply disruptions.
- 4.12 In the case of major disruptions, a conserve water notice is placed on the scheme, the rural-restricted part of the network is turned off, and water tankers are used to try to maintain minimum levels in the reservoir or supply water to key locations. As the pipes continue to age and deteriorate, the frequency of these types of events is expected to increase.
- “Problem 2: Water supply has insufficient capacity to cater for increased usage constraining the opportunity for Mapua to grow.”**
- 4.13 Since 2001, there has been rapid residential growth in Mapua and the current market is still strong. The Council’s growth supply and demand model indicates that there will be sustained demand for residential development in Mapua over the long term.
- 4.14 The existing water supply network was built almost 30 years ago and was designed to cater for limited growth based on forecasting knowledge and judgements made at the time. This growth has consumed the available water supply capacity for the area. The poor condition of the pipes and their inability to handle higher operating pressures exacerbates this issue. The existing network cannot supply any further development.

- 4.15 The existing storage capacity of 1,700m³ equates to approximately 24 hours supply for the current population, which complies with the Council's minimum level of service performance measure target. However, storage capacity will need to be increased in order to provide the target level of service for the future community.

“Problem 3: Capacity in the wastewater network is inadequate under wet weather flows leading to frequent pump station high level alarms and occasional overflows.”

- 4.16 Under normal dry weather conditions, the wastewater system has sufficient capacity to meet current demand. Following large rainfall events, the wastewater system often experiences stormwater inflow that causes high level alarms and/or overflows.
- 4.17 Between 2012 and 2016 there were 175 high level alarm incidents at the six pump station sites. If staff consider that the high level alarm incident is likely to result in an overflow, they will instigate tankering from the pump stations. Despite this, there were still four overflows in this period. In addition, over the past eight months, two overflow incidents affected the Mapua School, requiring its closure for the day.
- 4.18 The frequency of these high level alarm incidents shows that there is insufficient storage at the existing pump stations.
- 4.19 The existing configuration of the wastewater network in Mapua can be described as a 'daisy-chain' because the pumps pump on to each other in series, meaning that the wastewater is double-handled in the system. This causes a delay in conveying the effluent through the system, which exacerbates the wet weather issues and increases the risk of odour during dry weather.

“Problem 4: The current water and wastewater network configuration lacks redundancy and resilience with some particularly vulnerable locations leading to disruption to continuity of service.”

- 4.20 As discussed above, the water and wastewater networks are configured lineally and there are very limited alternative routes or back-up systems in place to cope with pipe failures. Sections of the network are located in areas that are difficult to access due to their tidal nature e.g. the Mapua Channel and the crossings between Best Island and Rabbit Island. This means the network is vulnerable in the event of a failure, especially in tidal areas.

Option Identification and Selection

- 4.21 The working group identified a long list of options that included all potential solutions to address the above problem statements. Each option was then assessed for; how well it addressed the problem statements, feasibility, community acceptability, ability to support growth, and the ability to enhance network resilience in order to determine if it would be considered further. Options that were considered appropriate were compiled into six work programmes for further evaluation. Each programme contained a different combination of options and timing. The focus and timing of the different programme combinations varied from upfront expenditure to delayed expenditure, and from a focus on renewal for the current community to a focus on future-proofed upgrades for the future community.

Recommended Programme

- 4.22 Critical analysis determined the optimised programme included as **Attachment 1**. This programme improves the level of service for the current community at the same time as providing capacity for the future.
- 4.23 The following is a list of the key projects included in the preferred programme:

- a) Aranui Road / Stafford Drive Water Main Renewal
- b) Waimea Treatment Plant to Mapua Water Trunk Main Renewal – between Best Island and Mapua Channel
- c) Stafford Drive New Wastewater Pump Station and Rising Main
- d) Mapua and Ruby Bay Wastewater Pump Station Storage Upgrades

4.24 **Attachments 4 and 5** provides a schematic overview of these projects.

5 Discussion

- 5.1 In 2016, in light of the recent pipe breaks and increasing development demands, staff were contemplating the need to advance the existing project budgets through the 2018-28 Long Term Plan process. Staff initially thought that the works may need to be brought into the first three years of the 2018-28 Long Term Plan without any further work being undertaken prior to this.
- 5.2 The issues that concerned staff at the time have since been confirmed by the business case and have increased in frequency and significance. Examples include:
- a) Pipe breaks have been occurring at an increasing rate and the Mapua community has experienced critical water shortages. In May 2017, the scheme very nearly ran dry and staff consider it a matter of good fortune that the pipe was repaired in time.
 - b) Tasman District is experiencing a shortage of supply of residential sections during a time of high demand; and Mapua is one of the three main settlements experiencing the highest growth demands across the District.
 - c) Overflows from the wastewater network have continued to occur during wet weather events and have resulted in the closure of the Mapua School on two occasions.
- 5.3 There are two critical parts to the programme in the business case which are the renewal of the Aranui Road/Stafford Drive water main, and the renewal of the trunk main between Best Island and the Mapua Channel. Completion of these works will address the frequent pipe bursts and restore the agreed level of service to the community. The upgrade of the Stafford Drive wastewater rising main is to be programmed at the same time as the water main replacement so that the pipes can be placed in a shared trench to minimise costs.
- 5.4 The preferred programme identified in the business case has design for these works being undertaken in 2018/19 and construction completed by 2020/21. Based on this timing, staff expect that the Mapua community will need to prepare for and accept the increasing risk of pipe breaks and water outages for the next four years.
- 5.5 Over this time, staff are concerned Mapua's water supply reliability will fall below reasonable service levels. The importance of a reliable water supply should not be underestimated. Water is critical to maintaining a community's economy, sanitation and well-being. Community feedback indicates that the Mapua community is fast running out of patience with frequent water breaks and wastewater overflows.
- 5.6 Staff therefore recommend that the design work be advanced to 2017/18 to reduce the waiting time from four years to three years until construction is complete. A programme with amendments to reflect this strategy has been included as **Attachment 2**.

- 5.7 For comparison, the timing and budgets of the corresponding projects from the 2015 Activity Management Plan have been included as **Attachment 3**.

6 Options

- 6.1 The Council has the following options:

Option	Description	Discussion
1	Advance design and land acquisition, bringing these into the 2017/18 financial year.	<ul style="list-style-type: none"> The risk of pipe breaks and critical water shortages is expected to increase. Will allow the Council to achieve the programme set out in Attachment 2, completing the most important works within three years. The Council will need to consider either deferring projects that are less urgent, or providing additional funding.
2	Not advance any work into the 2017/2018 financial year.	<ul style="list-style-type: none"> Mapua Community patience with increasing water disruption and wastewater overflows likely to evaporate without proactive action by the Council. The work is likely to be completed within four years instead of three years, assuming the work still comes forward as proposed in the LTP 2018-2028. Not undertaking design in 2017/18 will mean that other projects do not need to be re-prioritised.

- 6.2 Staff recommend Option 1.

7 Strategy and Risks

- 7.1 The risks associated with each problem statement and the options set out in this report are discussed in Sections 4 and 6 respectively.

8 Policy / Legal Requirements / Plan

- 8.1 Design and land acquisition for the proposed programme is not currently part of the Annual Plan 2017/2018. The decision sought in this report effectively seeks an amendment to this Annual Plan.
- 8.2 The longer-term programme of works will be input into the updated Activity Management Plans as part of the 2018-2028 Long Term Plan process.

9 Consideration of Financial or Budgetary Implications

- 9.1 The proposed budgets are included in **Attachments 1 and 2**. The value of the design and land acquisition work that staff recommend advancing is \$200,000 for Water and \$560,000 for Wastewater.

- 9.2 Staff have identified project budgets in 2017/2018 that could be re-prioritised or partially re-allocated, but are also seeking some additional funding for wastewater.

Water budgets

- 9.3 To meet the water related design costs above, staff recommend partially reallocating budgets from projects a) and b), and fully reallocating budgets from projects c) and d) below:
- a) Funding of \$80,978 from Church Street Water Main Replacement (total budget \$337,554). This project has been combined with other stormwater works which has resulted in a scope change and expected cost savings due to consolidating works.
 - b) Funding of \$80,000 from McGlashen Avenue Re-Zoning (total budget \$326,062). The length of this project has reduced resulting in expected cost savings.
 - c) Funding of \$15,949 from Mapua Growth Facilitation Works. This is directly related to the water trunk main renewal.
 - d) Funding of \$23,073 from Waimea Water Treatment Plant Upgrade. Staff propose that this project is deferred as it is dependent on other works. Consequently, the detailed design phase will not need to be undertaken in 2017/18.

Wastewater budgets

- 9.4 To meet the wastewater related design and land acquisition costs, staff recommend:
- a) Re-prioritising the full \$106,000 budget for Growth Allowance for Pipeline Upgrades. This is largely a reactive budget that enables the Council to take advantage of opportunities that individual developments may present to upsize reticulation. Staff are not aware of any development projects where this budget will be needed in 2017/2018. There remains a risk that such a project could eventuate through the year. Staff consider this risk low.
 - b) The Council approving additional funding of \$454,000. This increase can be absorbed by the wastewater account, as the surplus in this account by the end of 2016/2017 is expected to be \$2.2m. The Council will be considering a report on 22 June 2017 proposing that \$1.6m of this surplus be used to retire debt (with the rest held in reserve). The net impact of a decision to fund the additional \$454,000 sought in this report, is that debt in the wastewater account will be reduced by approximately \$1.1m, instead of \$1.6m.
- 9.5 The net operating impact in 2017/2018 is small and manageable given the overall size of the interest costs (around \$12,000 in 2017/2018) compared to the size of the activity, or the account balance.

10 Significance and Engagement

- 10.1 Staff consider the design to be of medium significance as outlined in the table below. Staff believe the Mapua community is likely to support the proposal. The financial impact of the proposed expenditure (discussed above) has a material impact on the 2017/2018 capital programme for wastewater, but not on the overall account. The substantive programme and its timing will be consulted on as part of the Long Term Plan process next year.
- 10.2 For these reasons, staff do not recommend consulting with the community on the proposals in this report. Should the Council instead elect to consult, it will diminish the value of bringing

the work forward, as it will erode time and staff resources that could otherwise be used to progress the design.

Issue	Level of Significance	Explanation of Assessment
Is there a high level of public interest, or is decision likely to be controversial?	Medium	The decisions included in this report relate only to the design stage of the project. Staff expect that the Mapua Community will have a high level of interest in the short-term future of the water supply.
Is there a significant impact arising from duration of the effects from the decision?	Low	Decision relates to advancing design fees by 12 months.
Does the decision relate to a strategic asset? (refer Significance and Engagement Policy for list of strategic assets)	Low	This decision relates to part of the water supply network. The full network is considered a strategic asset.
Does the decision create a substantial change in the level of service provided by Council?	Medium	Undertaking this work early enables the Council to restore the agreed levels of service sooner.
Does the proposal, activity or decision substantially affect debt, rates or Council finances in any one year or more of the LTP?	Low	The work will be debt funded as it is considered capital expenditure.

11 Conclusion

- 11.1 The Mapua water supply network is currently facing critical level of service failures due to pipe bursts and water shortages.
- 11.2 The wastewater network has insufficient capacity during significant wet weather events.
- 11.3 The business case has identified a programme of works that will rectify the current issues and enable future development.
- 11.4 Staff recommend commencing design and land acquisition work in 2017/18 to enable the renewal works to be completed as soon as possible.
- 11.5 This requires \$200,000 for water and \$560,000 for wastewater. Staff expect that the 2017/18 water budget will accommodate the water portion of the works. Part of the wastewater works can be accommodated within the 2017/18 wastewater budget but the balance of \$454,000 will require additional funding.

12 Next Steps / Timeline

- 12.1 Staff are working with Stantec to finalise the business case in June and July 2017.

- 12.2 The recommended programme of works will be included in the Water Supply Activity Management Plan and Wastewater Activity Management Plan.
- 12.3 With approval from the Engineering Services Committee, staff will report to Full Council recommending that the works be advanced to 2017/18.
- 12.4 Staff will report at a later date on the merits of the business case approach.

13 Attachments

1.	Initial Preferred Programme	17
2.	Advanced Programme	19
3.	2015 Activity Management Plan Programme	21
4.	Schematic - Wastewater	23
5.	Schematic - Water Supply	25

Water and Wastewater Capital Works Programme

Programme One: Initial Business Case Programme

Item	Project Name	Description	Activity	Total Project Estimate	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028+	Notes
1	Replace Aranui Road and Stafford Drive water main	Replacement of the main from Mapua Wharf to Pomona Road.	Water	\$ 2,620,027	\$ -	\$ 300,000	\$ 2,320,027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Project budget has factored in cost savings for laying the Stafford Drive rising main in the same trench.
2	Replace Mapua Trunk Water Main	Replacement of the trunk main between Best Island and the Mapua Channel.	Water	\$ 3,017,500	\$ -	\$ -	\$ 250,000	\$ 2,767,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3	Waimea Water Treatment Plant Upgrade	Storage reconfiguration to provide capacity for growth, add UV treatment, strength building to improve resilience.	Water	\$ 1,597,039	\$ -	\$ -	\$ -	\$ 65,000	\$ 65,000	\$ 1,467,039	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	The new bores and raw water main must be installed first to enable the tanks to be decommissioned for upgrade.
4	Waimea New Bores and Raw Water Main	Install new bores and raw watermain to enable raw water to be provided directly to the Richmond Water Treatment Plant.	Water	\$ 1,303,633	\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 1,103,633	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	To be completed prior to upgrade of the Waimea Water Treatment Plant.
5	Pomona Road Reservoir Upgrade	Replace timber reservoir and add storage capacity.	Water	\$ 1,314,171	\$ -	\$ -	\$ -	\$ 70,000	\$ 1,244,171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
6	Stagecoach Road Reservoir Upgrade	Relocate reservoir site and add storage capacity.	Water	\$ 612,544	\$ -	\$ -	\$ -	\$ 75,000	\$ 537,544	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7	New Loop Mains	New loop mains to increase resilience.	Water	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ -	
8	Mapua Channel New Water Main	New pipe crossing for additional crossing capacity.	Water	\$ 743,993	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 743,993	
9	New Stafford Drive Pump Station and Rising Main	New pump station with storage, odour control and new pumps, as well as new rising main to Mapua Wharf.	Wastewater	\$ 2,801,718	\$ -	\$ 560,000	\$ 2,241,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10	Ruby Bay Pump Station and Rising Main Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 596,511	\$ -	\$ 376,285	\$ 220,226	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
11	Aranui-Higgs Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 256,799	\$ -	\$ -	\$ 55,907	\$ 200,892	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
12	Aranui Road Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 329,328	\$ -	\$ -	\$ 66,321	\$ 263,007	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13	Higgs Road No. 1 Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 217,249	\$ -	\$ -	\$ -	\$ -	\$ 31,209	\$ 186,040	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14	Toru Street Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 235,234	\$ -	\$ -	\$ -	\$ -	\$ 35,694	\$ 199,540	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15	Mapua Channel New Wastewater Main	New pipe crossing for additional crossing capacity.	Wastewater	\$ 564,521	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 564,521	
				\$ 17,210,267	\$ -	\$ 1,236,285	\$ 5,254,199	\$ 3,541,399	\$ 3,017,251	\$ 1,852,619	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,308,514	

Note: The figures and timing in the table above are draft. They may be amended during the development of the 2018-2028 Long Term Plan.

Water and Wastewater Capital Works Programme

Programme Two: Advanced Business Case Programme

Item	Project Name	Description	Activity	Total Project Estimate	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028+	Notes
1	Replace Aranui Road and Stafford Drive water main	Replacement of the main from Mapua Wharf to Pomona Road.	Water	\$ 2,620,027	\$ 300,000	\$ 2,320,027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Project budget has factored in cost savings for laying the Stafford Drive rising main in the same trench.
2	Replace Mapua Trunk Water Main	Replacement of the trunk main between Best Island and the Mapua Channel.	Water	\$ 3,017,500	\$ -	\$ 250,000	\$ 2,767,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3	Waimea Water Treatment Plant Upgrade	Storage reconfiguration to provide capacity for growth, add UV treatment, strength building to improve resilience.	Water	\$ 1,597,039	\$ -	\$ -	\$ -	\$ 65,000	\$ 65,000	\$ 1,467,039	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	The new bores and raw water main must be installed first to enable the tanks to be decommissioned for upgrade.
4	Waimea New Bores and Raw Water Main	Install new bores and raw watermain to enable raw water to be provided directly to the Richmond Water Treatment Plant.	Water	\$ 1,303,633	\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 1,103,633	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	To be completed prior to upgrade of the Waimea Water Treatment Plant.
5	Pomona Road Reservoir Upgrade	Replace timber reservoir and add storage capacity.	Water	\$ 1,314,171	\$ -	\$ -	\$ -	\$ 70,000	\$ 1,244,171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
6	Stagecoach Road Reservoir Upgrade	Relocate reservoir site and add storage capacity.	Water	\$ 612,544	\$ -	\$ -	\$ -	\$ 75,000	\$ 537,544	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7	New Loop Mains	New loop mains to increase resilience.	Water	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ -	
8	Mapua Channel New Water Main	New pipe crossing for additional crossing capacity.	Water	\$ 743,993	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 743,993	
9	New Stafford Drive Pump Station and Rising Main	New pump station with storage, odour control and new pumps, as well as new rising main to Mapua Wharf.	Wastewater	\$ 2,801,718	\$ 560,000	\$ 2,241,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10	Ruby Bay Pump Station and Rising Main Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 596,511	\$ -	\$ 376,285	\$ 220,226	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
11	Aranui-Higgs Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 256,799	\$ -	\$ -	\$ 55,907	\$ 200,892	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
12	Aranui Road Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 329,328	\$ -	\$ -	\$ 66,321	\$ 263,007	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13	Higgs Road No. 1 Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 217,249	\$ -	\$ -	\$ -	\$ -	\$ 31,209	\$ 186,040	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14	Toru Street Pump Station Upgrade	Upgrade pumps, new storage and odour control.	Wastewater	\$ 235,234	\$ -	\$ -	\$ -	\$ -	\$ 35,694	\$ 199,540	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15	Mapua Channel New Wastewater Main	New pipe crossing for additional crossing capacity.	Wastewater	\$ 564,521	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 564,521	
				\$ 17,210,267	\$ 860,000	\$ 5,188,030	\$ 3,209,954	\$ 773,899	\$ 3,017,251	\$ 1,852,619	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,308,514	

Note: The figures and timing in the table above are draft. They may be amended during the development of the 2018-2028 Long Term Plan.

Water and Wastewater Capital Works Programme
 Programme Three: 2015 Activity Management Plan

Item	Project Name	Description	Activity	Total Project Estimate	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028+	Notes
1	Replace Aranui Road Water Main	Replacement of the main from Mapua Wharf to Mapua Drive.	Water	\$ 955,569	\$ -	\$ 95,557	\$ 860,012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2	Growth Facilitation Works	Replacement of the trunk main between Best Island and the Mapua Channel.	Water	\$ 4,000,000	\$ 15,000	\$ 285,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ 3,000,000	\$ 600,000	\$ -	
3	Waimea Water Treatment Plant Renewal and Upgrade	Storage reconfiguration to provide capacity for growth, add UV treatment, strength building to improve resilience.	Water	\$ 586,867	\$ 21,700	\$ 565,167	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
4	New Stafford Drive Pump Station and Rising Main	New pump station, storage and rising main.	Wastewater	\$ 3,165,441	\$ -	\$ 300,723	\$ 310,209	\$ 2,554,509	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
5	Ruby Bay Pump Station and Rising Main Upgrade	Pump station and storage upgrade.	Wastewater	\$ 185,000	\$ -	\$ -	\$ -	\$ -	\$ 37,000	\$ 148,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
6	Aranui-Higgs Pump Station Upgrade	New pumps, storage and odour control.	Wastewater	\$ 86,300	\$ -	\$ -	\$ -	\$ -	\$ 8,630	\$ 77,670	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7	Aranui Road Pump Station Upgrade	New pump station and storage.	Wastewater	\$ 1,011,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 101,150	\$ 202,300	\$ 708,050	
8	Higgs Road No. 1 Pump Station Upgrade	Upgrade pump station and new storage.	Wastewater	\$ 414,900	\$ -	\$ -	\$ 41,490	\$ 373,410	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Toru Street Pump Station Upgrade	New pumps, storage and odour control.	Wastewater	\$ 177,806	\$ -	\$ -	\$ -	\$ 17,786	\$ 160,020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10	Mapua Channel New Wastewater Main	Pipeline upgrade.	Wastewater	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 450,000	\$ -	
				\$ 11,083,383	\$ 36,700	\$ 1,246,447	\$ 1,211,711	\$ 2,945,705	\$ 205,650	\$ 225,670	\$ -	\$ -	\$ 100,000	\$ 3,151,150	\$ 1,252,300	\$ 708,050	

Note: The figures in the table above are based on the uninflated figures from the 2015-45 Water and Wastewater Activity Management Plans.

Business Case Overview

Mapua - Wastewater

Date: 19/06/2017



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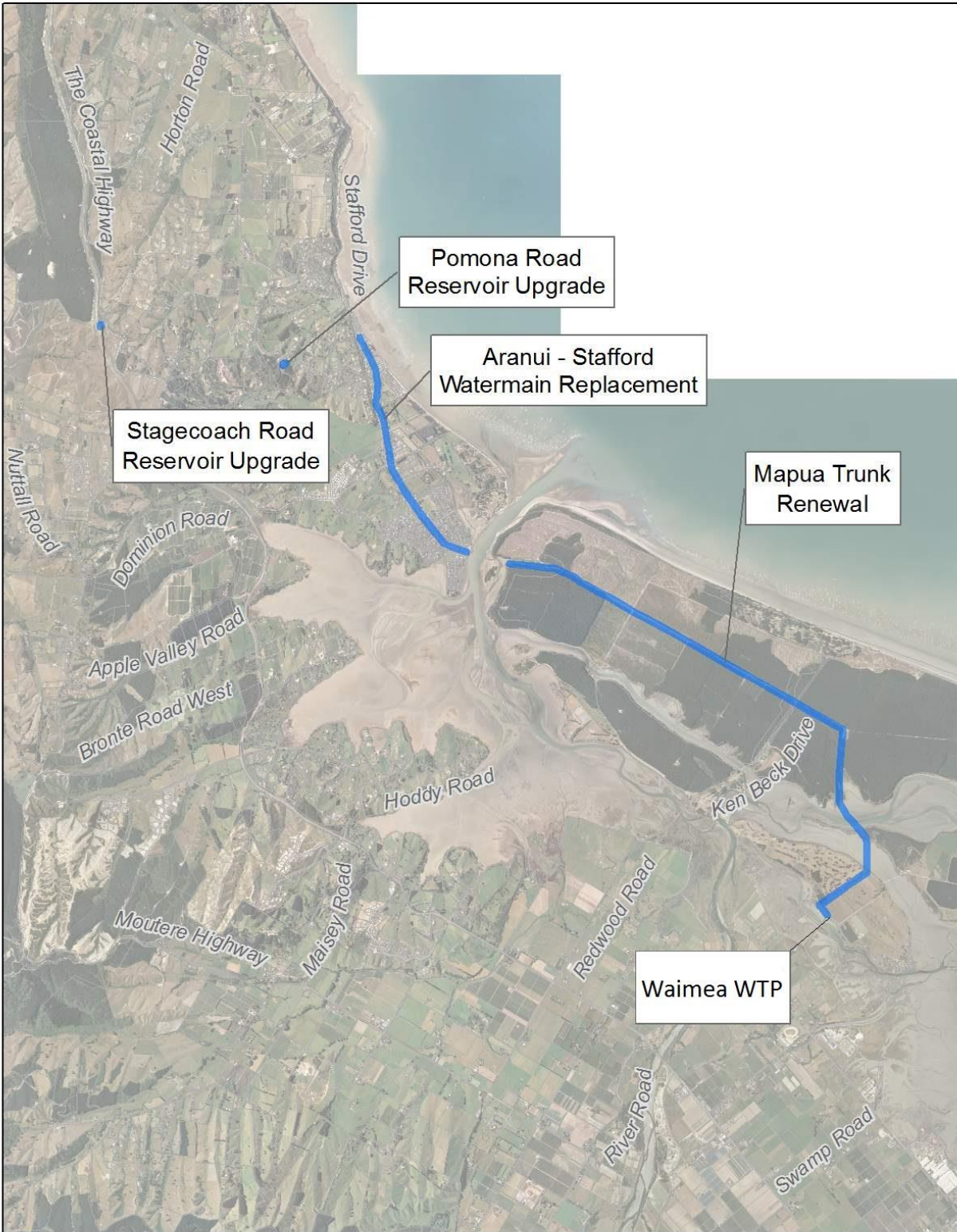


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Business Case Overview

Mapua - Water Supply

Date: 19/06/2017



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9.3 POOLE STREET, MOTUEKA - STORMWATER UPGRADE**Decision Required**

Report To:	Engineering Services Committee
Meeting Date:	29 June 2017
Report Author:	Robert Workman, Asset Engineer - Stormwater
Report Number:	RESC17-06-03

1 Summary

- 1.1 The Poole Street Stormwater Upgrade is programmed in the 2015-2025 Long Term Plan to be undertaken in 2018/2019.
- 1.2 The Poole Street Stormwater Upgrade was considered by the Council to be of lower priority as no house floor levels were reported as being flooded up to that time. Since that decision, the rain events of March 2016, May 2016 and January 2017 did not result in houses being flooded in this area.
- 1.3 To bring the completion date of the Poole Street Stormwater Upgrade project forward to 2017-2018 would put extra pressure on the Council's resources, which potentially could affect the delivery of the programme.
- 1.4 The Engineering Services Department has recently increased its in-house capacity and capability. Therefore, this project could be constructed in 2017/18 if the Council wanted to reprioritise it.

2 Draft Resolution

That the Engineering Services Committee

- 1. receives the Poole Street, Motueka - Stormwater Upgrade report, RESC17-06-03; and**
- 2. recommends to Full Council to bring forward the Poole Street stormwater upgrade construction works at an estimated cost of \$600,000 to the 2017/2018 financial year.**

3 Purpose of the Report

3.1 This report is in response to a resolution at the 11 May 2017 Full Council meeting:

CN17-05-3

That the Full Council request a report from staff to the 29 June 2017 Engineering Services Committee on the feasibility of bringing the Poole Street project forward, taking into consideration the matters raised in the discussion of the Notice of Motion.

4 Background and Discussion

4.1 The Engineering Services Activity Update report on 18 August 2016 commented on the Poole Street Stormwater Upgrade work as follows:

“The Poole and Wilkie Streets upgrade is already programmed with design in the next financial year and construction following in the first year of the next LTP (2018/2019). There are no works planned for Saxon Street in the AMP. I would recommend that these projects not be brought forward until the Motueka Catchment Management Plan, programmed for this year, is completed to determine how the overall stormwater issues in the catchment can be resolved and what the priorities are. There are areas of Motueka that should be a higher priority due to flooding of residential floor levels whereas flooding in this area is generally limited to surface flooding and one garage. The stormwater capital upgrade projects fund for this year is already committed and the Council has many stormwater priorities throughout the district.”

4.2 A proposal to bring forward the Poole Street Stormwater Upgrade project was discussed at the Full Council meeting on 11 May 2017. The Council resolved not to confirm this proposal until the feasibility was outlined in more detail. The following resolution was passed:

CN17-05-3

That the Full Council request a report from staff to the 29 June 2017 Engineering Services Committee on the feasibility of bringing the Poole Street project forward, taking into consideration the matters raised in the discussion of the Notice of Motion.

4.3 The Poole Street Stormwater Upgrade is programmed in the 2015-2025 Long Term Plan as follows:

- 2017/2018 \$45,000 (design)
- 2018/2019 \$382,500 (construction), and
- 2019/2020 \$22,500 (completion)

4.4 The Poole Street Stormwater Upgrade was considered by the Council to be of lower priority as no house floor levels were reported as being flooded up to that time. Reports of property damage have not been received from this area. Since that decision, the rain events of March 2016, May 2016 and January 2017 did not result in houses being flooded in this area.

4.5 The frequency and impact of flooding events will be reduced but not fully eliminated from installation of this stormwater pipework. The pipe upgrade will bring the service level of the primary piped system up to a 5% Annual Exceedance Probability (or a 1-in-20 year return period). Rainfall intensities above the 5% Annual Exceedance Probability will still cause surface flooding similar to that being presently experienced in the area of Wilkie Street.

- 4.6 The initial design, drawings and tender documents were prepared for the Poole Street Stormwater Upgrade work in March 2012 to upgrade from High Street to Michael Myers Street. Work did not proceed at the time and the Poole Street Stormwater Upgrade work was reprogrammed in the 2015-2025 Long Term Plan; the estimate for this was around \$450,000.
- 4.7 This scope and estimate did not include extending the reticulation from Michael Myers Street to Jocelyn Avenue. Including this additional work would add an extra \$150,000 to the project costs, including scope and price risk.
- 4.8 It is expected the work will take five to seven months to complete. Approximately two months to complete the design and prepare the contract documentation, one month for the tender process and three months for the construction phase. It is expected that the project management time required from the Programme Delivery team will be 120 to 160 hours to manage the delivery of these works through consultants and contractors.

5 Options

- 5.1 There are two options for the timing of the project work for the Poole Street Stormwater Upgrade.
- 5.1.1 **Option 1** - Bring the Poole Street Stormwater Upgrade project forward and complete the work in 2017/2018.
- 5.1.2 **Option 2** – Retain the present Poole Street Stormwater Upgrade programme of works as outlined for 2018/2019 in the Long Term Plan.

Discussion

Option 1 - Bring the Poole Street Stormwater Upgrade project forward and complete in 2017/2018

- 5.2 The advantage of Option 1 would be that the stormwater pipe upgrade would be installed a year earlier than presently programmed.
- 5.3 Bringing the completion date of the Poole Street Stormwater Upgrade project forward to 2017-2018 will affect the timing of other project works. It will put additional strain on resources to both manage and deliver the project within an earlier timeframe.
- 5.4 The Programme Delivery team currently has 45 projects and 14 more being added into the programme for the 2017-2018 year.
- 5.5 To give the Councillors some context, the stormwater projects planned for the next three years of the current Long Term Plan are shown in **Attachment 1**. These projects were rated with a High, Medium or Low priority subjectively based on risk. The Poole Street Stormwater Upgrade project was rated “Low” as there were no house floor levels reported as flooding. Flooding of garages has not been reported following the recent high intensity rainfall events. Many of the other projects are rated higher as they reduce the risk of flooding to house floor levels or require compliance with legislation, government guidelines or similar, such as obtaining discharge consents and improving freshwater quality.
- 5.6 The Council does have other priorities, some of which are not in the current programme. For example, the Council is also being asked to consider funding for the investigation and design of the Mapua Water Supply and Wastewater upgrade project in the 2017-2018 works programme. The project is critical because of infrastructure capacity or failure causing poor

levels of service delivery. Properties presently have an unreliable water supply and there are wastewater overflows occurring during rain events so this project, therefore, has a high priority. This is the subject of a separate report to this meeting.

- 5.7 The Engineering Department, Programme Delivery team has recently increased its in-house capacity and capability. It now has two additional project managers and provided additional funding is made available for this project we believe this project could be done.

Option 2 – Retain the present Poole Street Stormwater Upgrade programme of works as outlined for 2018/2019 in the Long Term Plan.

- 5.8 Option 2 delivers the project as planned. The timing of the project would proceed as detailed in the current Long Term Plan.
- 5.9 The increased capacity and capability within the Project Delivery team will give an opportunity to consider implementing **Option 1**.

6 Strategy and Risks

- 6.1 Any changes to the works programme can affect the delivery of other projects and interrupt the priorities agreed by the Council.
- 6.2 There is an increased risk that adding this project to the 2017/2018 capital works programme could constrain the effective delivery of the already prioritised and programme projects.

7 Policy / Legal Requirements / Plan

- 7.1 The Long Term Plan is reviewed and updated every three years and sets the programme for the following three years until it is again reviewed and consulted on. However, the Council can, if it so wishes, alters its priorities and work programme as it sees fit.

8 Consideration of Financial or Budgetary Implications

- 8.1 There is little impact to financial and budgetary requirements other than paying for the work one year earlier than planned.
- 8.2 The contract price market is presently unfavourable and may improve with time if the work is tendered prior to the construction season of 2018-2019.

9 Significance and Engagement

- 9.1 This decision is of low significance based on the table below:

Issue	Level of Significance	Explanation of Assessment
Is there a high level of public interest, or is decision likely to be controversial?	Low	Some local interest.
Is there a significant impact arising from duration of the effects from the decision?	Low	If the upgrade is not done, the risks are similar during a high intensity rainfall event where surface flows will still occur once the pipe capacity is full or blocked.
Does the decision relate to a strategic asset? (refer Significance and Engagement Policy for list of strategic assets)	Low	Upgrade improves upper catchment stormwater pipe system only.
Does the decision create a substantial change in the level of service provided by Council?	Med	This could affect the delivery of more critical project work.
Does the proposal, activity or decision substantially affect debt, rates or Council finances in any one year or more of the LTP?	Low	Minimal impact on rates increases.

10 Conclusion

- 10.1 Bringing the completion date of the Poole Street Stormwater Upgrade project forward to 2017-2018 will affect the timing of other project works. It will put additional strain on resources to both manage and deliver the project within an earlier timeframe.
- 10.2 The Programme Delivery team has recently increased its in-house capacity and capability. It now has two additional project managers arriving this year and provided additional funding is made available for this project we believe this project could be done

11 Next Steps / Timeline

- 11.1 The present programme in the Long Term Plan is to construct the Poole Street Stormwater Upgrade work in 2018-2019.

4 Attachments

1. Stormwater Capital Projects for the next three years

33

Stormwater	Rating	2017/2018 (\$)	2018/2019 (\$)	2019/2020 (\$)
06146216014. Richmond central improvements	H	2,950,860	2,820,207	0
0601610502G. Stormwater Land Purchase	H	2,550,000	0	0
06146216003. Lower Queen Street Pipework Upgrade	H	1,708,500	0	1,136,930
06146216047. Poutama Drain Upgrade	H	510,000	0	0
0601621637. Washbourn Gardens Stormwater Bypass	H	408,000	1,300,000	0
0601621634. Richmond - Deviation Bund Drainage	H	153,000	788,000	0
0601621633. Secondary Flow Management Initiatives	H	148,302	377,559	0
06146216046. Borck Creek/Poutama Drain Widening 16/17	M	1,062,840	0	0
06316216001. Pohara Main Settlement flood works	M	357,000	0	0
06146216012. Richmond - Park Drive pipe	M	153,000	985,000	0
0601621632. UDA Discharge Consent	M	127,594	0	0
06146216048. Stormwater Modelling	M	66,300	0	0
0600621632. Occupational health & Safety Works	M	15,949	16,589	17,054
0601621629. Urban Flood Modelling for development	M	10,632	11,060	11,369
06146216017. Richmond South - Bateup Drain	M	0	331,789	0
0601621627. Growth Allowance for pipelines	M	0	94,007	0
0601621630. Quality Improvement Programme	M	0	55,298	56,847
06036216009. Mapua - Seaton Valley Stream - Stage 2	M	0	20,879	42,928
06076216001. Murchison Neds Creek Flood Works	M	0	16,589	213,174
06036216005. Mapua - Seaton Valley Resource Consent Renewal	M	0	12,000	0
06146216034. Richmond Stormwater Quality Improvements	L	53,164	55,298	28,423
06146216032. Richmond Pipe Renewals	L	51,000	55,322	0
0602621610. Motueka drainage improvements (Poole Street Stormwater Upgrade)	L	48,460	423,031	25,581
0605621603. Wakefield - Bank enhancement project	L	31,899	0	0
06026216001. Motueka Flap Gates renewal	L	12,977	118,797	0
06146216045. Borck Creek Planting Programme	L	10,200	0	0
06146216010. Richmond Middlebank Drive pipe	L	0	995,367	2,202,065
0621621601. Collingwood - Outlets Beach Road Drain	L	0	22,119	0
06026216008. Motueka Pah/Atkins Street Upgrade	L	0	21,563	199,505
0605621605. Wakefield Manholes	L	0	1,721	0
06036216002. Mapua - Langford, other small areas	L	0	0	377,250
06036216001. Mapua - Aranui road culvert	L	0	0	121,451
06046216002. Brightwater - Mt Heslington Stream Diversion	L	0	0	113,693
0604621605. Brightwater - Flooding repairs	L	0	0	34,108
06036216007. Mapua - Crusader Drive	L	0	0	25,479
0607621606. Murchison Pipes - Fairfax Street	L	0	0	22,739
06036216008. Mapua - Stafford Drive pipes	L	0	0	18,504

High, Medium and Low (H,M,L) rating based on assessment of factors listed below:

Present need for the work	Growth
Flooding house floor levels	Stormwater Quality

Flooding effects	Works in progress
Safety	Legal or Consent requirements

9.4 APPROVAL FOR FOOTPATH OPERATION OF ELECTRIC NZ POST DELIVERY VEHICLES**Decision Required**

Report To: Engineering Services Committee
Meeting Date: 29 June 2017
Report Author: Jamie McPherson, Transportation Manager
Report Number: RESC17-06-04

1 Summary

- 1.1 NZ Post are part way through a roll-out of new electric delivery vehicles to replace traditional 'posties' on bicycles in most urban areas in New Zealand.
- 1.2 NZ Post have sought and received approval from the New Zealand Transport Agency (NZTA) for an exemption to section 2.13 of the Land Transport (Road User) Rule, subject to approval from the relevant Road Controlling Authority (RCA), to allow footpath access for these vehicles.
- 1.3 NZ Post needs the approval of Tasman District Council as Road Controlling Authority to operate these vehicles on footpaths in Tasman District. At this stage, they are proposing to operate the vehicles only in Richmond.
- 1.4 The risks presented to footpath users are considered very minor considering the way the vehicles will be operated. Operators will be properly trained to give way to all other footpath users and travel at low speed. Vehicles will also avoid CBD shopping areas and high use areas such as schools at busy times.
- 1.5 Staff recommend that the Council approve the use of these vehicles.

2 Draft Resolution**That the Engineering Services Committee**

- 1. receives the Approval for footpath operation of electric NZ Post delivery vehicles report, RESC17-06-04; and**
- 2. approves the use of electric delivery vehicles on Council footpaths in accordance with the terms and conditions set out in Attachment 1, Approval of the Footpath Operation of Electric Delivery Vehicles in the Jurisdiction of Tasman District Council.**

3 Purpose of the Report

- 3.1 This report seeks the approval for NZ Post to operate new electric delivery vehicles on footpaths in Richmond.

4 Background and Discussion

- 4.1 NZ Post are part way through a roll out of new electric delivery vehicles to replace traditional 'posties' on bicycles in most urban areas in New Zealand.
- 4.2 NZ Post needs the approval of Tasman District Council as Road Controlling Authority (RCA) to operate these vehicles on footpaths in Tasman District. At this stage, they are proposing to operate the vehicles only in Richmond.
- 4.3 NZTA have given NZ Post an exemption from the Land Transport Rules to enable these vehicles to be driven along a footpath subject to approval and any conditions imposed by RCAs.
- 4.4 Figure 1 below describes the 'Paxster' vehicle for which NZ Post are seeking approval to operate on footpaths.



Specifications:

- Dimensions (Width/length, mm): 1120 x 2150
- Weight: 400kg
- Max payload: 300kg
- Max speed: 45km hr
- Max speed on the footpath is 20 kph as approved by the NZTA
- Range: 57km
- NZ Post are installing forward facing cameras to record activity on the footpath ahead of the Paxster
- Fitted with a camera to record speed and environment

Figure 1. Proposed 'Paxster' electric delivery vehicle

- 4.5 **Attachment 1** is a draft approval document which outlines some key issues including guidelines for safe operation of vehicles, exclusion areas, complaints processes, engagement with stakeholders, and amendment and review conditions.
- 4.6 The most significant issue for existing footpath users will be safety and ensuring all users, but especially vulnerable users such as those with mobility or other impairments, have priority of use.
- 4.7 NZ Post guidelines for operation include the following measures:
- Operators will maintain a safe speed on the footpath – maximum of 15 km/h for first 12 months, to be reviewed.
 - Operators must give way to pedestrians, mobility devices or wheeled recreational devices being used on the footpath.

- This means that the vehicle must pull off the footpath if possible so as not to obstruct the other user, and come to a complete stop until the other user passes.
- The vehicle should never be operated in a way that forces another user of the footpath to step off the footpath, into traffic, take any other evasive action, or force the other user into an unsafe situation.
- Vehicles will not block the footpath.
- Vehicles will not be ridden on grass verges.
- All operators should only enter or exit footpaths from driveways or other formed access points. The vehicle shall never be driven up or down the kerb.
- All operation shall be on the left-hand footpath of the road except in specifically identified areas.

4.8 Further, there are restrictions on where vehicles will be operated, including:

- Not in the CBD (Queen Street and Sundial Square).
- Not near schools, childcare centres, rest-homes and hospitals during high traffic times.
- Any other specific exclusions nominated by Tasman District Council

4.9 The vehicles are fitted with cameras enabling video of any incidents to be reviewed as well as verifying operating speeds.

4.10 NZ Post have an engagement plan (Appendix 6 of approval agreement) with key stakeholders, and will be communicating directly with various groups and the media.

4.11 NZ Post have already tested and used these vehicles in various cities around the country since initial trials in Auckland and Lower Hutt in 2014. According to NZ Post, feedback from the trials was almost universally positive. Staff have sought independent feedback from New Plymouth District Council, who confirm that there have been no issues on their network in the 12 months or so that NZ Post have been operating these vehicles.

4.12 Most RCAs have now approved NZ Post to use these vehicles.

5 Options

5.1 Option 1 – Confirm approval for NZ Post to operate electric delivery vehicles on footpaths in accordance with the agreement set out in **Attachment 1**.

5.2 Option 2 – Decline approval.

5.3 Staff recommend Option 1.

6 Strategy and Risks

6.1 The main risks for the Council associated with Option 1 are potential safety concerns of footpath users. Based on the information provided by NZ Post, including their driver training requirements and vehicle operation guidelines, we consider the likelihood of there being an incident on our footpaths as extremely low. Risks are further mitigated by identifying and restricting vehicle use on specific footpaths at times of high use.

- 6.2 The Council may withdraw approval if it is dissatisfied with how NZ Post are operating the vehicles, in particular if there are safety concerns or other significant issues for other footpath users.

7 Policy / Legal Requirements / Plan

- 7.1 The Paxster vehicles are classified as a class NA light good vehicle.
- 7.2 NZ Post have sought and received NZTA approval for an exemption to section 2.13 of the Land Transport (Road User) Rule, subject to approval from the relevant road controlling authority, to allow footpath access for these vehicles.
- 7.3 The operator must hold a current class 1 license.
- 7.4 This proposal does not conflict with any other legislation, plan or Council policy.

8 Consideration of Financial or Budgetary Implications

- 8.1 There are unlikely to be any financial implications from this proposal. Trials on other similar road networks showed no additional wear and tear on footpath assets.

9 Significance and Engagement

- 9.1 This proposal is considered of low significance although engagement with stakeholders and media is proposed to ensure footpath users and the general public are informed about these vehicles. The new Paxster vehicles will be noticeable, therefore engagement will be important so people understand the change and any concerns can be addressed.

Issue	Level of Significance	Explanation of Assessment
Is there a high level of public interest, or is decision likely to be controversial?	Moderate	Members of the public will be interested
Is there a significant impact arising from duration of the effects from the decision?	Low	Council have right to withdraw approval
Does the decision relate to a strategic asset? (refer Significance and Engagement Policy for list of strategic assets)	Moderate	Roads are a strategic asset but this decision affects a small portion of the asset,
Does the decision create a substantial change in the level of service provided by Council?	Low	
Does the proposal, activity or decision substantially affect debt, rates or Council finances in any one year or more of the LTP?	Low	

10 Conclusion

10.1 The Council, as Road Controlling Authority can approve NZ Post to use new electric delivery vehicles on our footpaths without exposing the Council or footpath users to undue risk.

11 Next Steps / Timeline

11.1 Sign the Approval agreement between Tasman District Council and NZ Post.

11.2 NZ Post will lead engagement with stakeholders and media regarding the introduction of the new vehicles. This is likely to be during July and August 2017.

12 Attachments

1. NZ Post approval

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NEW
ZEALAND
POST
GROUP

Approval for the Footpath Operation of Electric Delivery Vehicles (Tasman)

In the Jurisdiction of Tasman District Council
June 2017

MJR-348176-2320-9-1:rl

1 Application

New Zealand Post Limited (“New Zealand Post”) has applied to Tasman District Council as the road controlling authority for approval to operate its electric delivery vehicles on the footpaths within the jurisdiction of Tasman District as the road controlling authority.

This document serves as approval of this application and outlines the conditions and rules that New Zealand Post must abide by as a condition of that approval.

This approval acknowledges the exemptions granted to New Zealand Post by NZTA over section 2.13 of the Land Transport (Road User) Rule 2004, and satisfies the condition that the Road Controlling Authority must authorise New Zealand Post’s application, as specified in the exemption letters.

Application lodged on behalf of New Zealand Post:

Name	Alan Court	Designation	GM, Transport
Signature		Date	

Application Approved on behalf of Tasman District Council:

Name		Designation	
Signature		Date	

2. Contents

This document includes:

- Section 3 - Background to the need for this approval
- Section 4 - Description of the approved vehicle
- Sections 5 - 10 - Terms of the Approval
- Appendix 1 - Schedule of the approved activity
- Appendix 2 - Exclusion Zones for approval
- Appendix 3 - Round Assessment Report
- Appendix 4 New Zealand Post Training Guide for Paxster Operators (Attachment 2)
- Appendix 5 - New Zealand Post Safety Management Plan (Attachment 3)
- Appendix 6 – Summary of Planned Engagement

Approval of the Footpath Operation of Electric Delivery Vehicles
 In the Jurisdiction of Tasman District Council
 New Zealand Post Group



3. Requirement for footpath access

Changes in customer demand means New Zealand Post needs to change the ways it delivers postal products. The introduction of an Integrated Delivery Agent allows for greater efficiency and more flexibility as to the products that can be delivered, in-line with changing customer expectations. This is complementary to maintaining the level of service specified by New Zealand Post's Deed of Understanding mandated by the New Zealand Government

The Integrated Delivery Agent requires the use of an electric delivery vehicle, and access to the footpath by those vehicles to deliver mail, parcels and other postal products.

4. Electric Delivery Vehicle Descriptions

This approval relates to the use of New Zealand Post's 4 wheeled electric delivery vehicles used for the purpose of delivering postal product. The vehicle that this approval covers is specified below:

4.1. Loyds Paxster

- Classified as a class NA light good vehicle
- Exemption granted to section 2.13 of the Land Transport (Road User) Rule by NZTA, and subject to approval from the relevant road controlling authority to allow footpath access
- Operator must hold a current class 1 licence

5. Guidelines for safe operation on the footpath

New Zealand Post will operate on the footpath in accordance with the policies specified in its Safety Management Plan (included as appendix 5) for electric delivery vehicles. The rules relating to footpath operation are summarised below:

General safety rules:

- Operators will maintain a safe speed on the footpath – maximum of 15km/h for first 12 months, to be reviewed under clause 12]
- Operators must give way to pedestrians, mobility devices or wheeled recreational devices being used on the footpath
 - o This means that the vehicle must pull off the footpath if possible as to not obstruct the other user, and come to a complete stop until the user passes.
 - o The vehicle should never be operated in a way that forces another user of the footpath to step off the footpath, into traffic, take any other evasive action, or force the other user into an unsafe situation.
- Vehicles will not block the footpath
- Vehicles will not ride on grass verges
- All operators should only enter or exit footpaths from driveways or other formed access points. The vehicle should never be driven up or down the kerb.
- All operation shall be on the left-hand footpath of the road except in specifically identified areas

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Riding on the Footpath is not permitted:

- In areas specifically excluded or not permitted by Tasman District Council as notified to New Zealand Post as additions or deletions apply.
- When travelling to and from the Delivery Branch and any dead-rides
- If there is no mail delivery for some distance i.e. 50m or greater distance between delivery points (unless during a formal hazard assessment, it is demonstrated to be unsafe on the road).
- In areas where there is reason for the 'operator' or 'leader' to expect that there will be high footpath usage at the time of the vehicles passing the area.
- Exclusion zones will be regularly reviewed taking into account fault and hazard identification reporting and new developments that have occurred in the area resulting in additional areas of high footpath usage.

Council will supply a list of approved Corridor Access Permits on a weekly basis which sets out all of the worksites that have been approved for operation in the upcoming week. This will assist the operator to identify any additional locations where operation on the footpath will not be possible due to an approved closure of the footpath.

6. Additional safety measures

New Zealand Post has completed a Safety and Wellbeing assessment of the vehicles and operating model. This assessment identifies risks needing to be eliminated, isolated or minimized in line with its obligations under the Health & Safety Employment Act, including:

- Rounds will be left-hand side delivery to allow for the safe entry of electric delivery vehicles into traffic flow when exiting the footpath
- Operators are required to wear Personal Protection Equipment (PPE) as specified by New Zealand Post

7. Engagement

Engagement as set out in appendix 6 shall be undertaken before and during the first 12 months of this agreement.

The conditions for NZ Post to operate electric vehicles on Tasman District footpaths may be amended by agreement after consideration of the engagement.

8. Hazards and Fault reporting

New Zealand Post will report the location and nature of any hazards and faults which affect the safe operation of the footpath (eg overhanging vegetation, missing service lids, trips hazards or potholes, building site operations) to the Council's maintenance contractor as per current operating practice. Any significant or high risk hazards or faults should be reported immediately.

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9. Complaints & issue resolution

New Zealand Post will investigate any issues raised by Tasman District Council in good faith.

In regards to complaints from the public via the New Zealand Post customer call centre, New Zealand Post commits to either resolving the issue or agreeing a timeline for resolution with the customer within 48 hours of lodging the complaint.

New Zealand Post will provide Tasman District Council, City Transportation Unit with monthly reports regarding incidents involving any electric delivery vehicles and other road users or property damage. Incidents involving a fatal or serious injury crash will be notified within 24 hours.

Any complaints or requests for information/service that are received by Tasman District in regard to the Paxster operation will be shared with New Zealand Post immediately and New Zealand Post will work with the city to provide timely and accurate responses.

New Zealand Post holds motor vehicle insurance which covers the electric delivery vehicles while being used on the footpath, as well as the road. The insurance includes cover for liability for property damage and personal injury arising out of use of the insured vehicles.

To the fullest extent permitted by law, New Zealand Post indemnifies the Council for any claim, damage or loss suffered or incurred by Council in connection with this approval.

10. Operators and Training

All Delivery Agents of electric delivery vehicles will be employees of New Zealand Post and must have completed New Zealand Post's training programme prior to driving on the footpath, and have passed an assessment administered by an approved NZQA trainer.

A refreshment/review training programme will be tailored by the 'leader' which reflects the period since the last assessment and incidents that the operator has experienced.

11. Letter of Authorisation

All electric delivery vehicles will carry a letter of authorisation demonstrating approval for footpath operation provided by Tasman District Council. Vehicles will carry authorisation documentation from NZTA.

Approval of the Footpath Operation of Electric Delivery Vehicles
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12. Amendment and Review

Tasman District Council may change or withdraw this approval after the first 12 months or on a review date if the activity proves to be unsafe, creates significant issues for other legitimate users, fails to meet the terms and conditions of either party, or other changes are required arising from changes to Bylaws, District Plans or Policies, in which case it will consult with New Zealand Post, giving reasons for the change or withdrawal. Tasman District Council will allow at least 30 days for New Zealand Post to respond with suggested changes or mitigations for identified issues. After reasonable consultation between the parties on other possible solutions, Tasman District Council may confirm, change or withdraw this approval, by giving 90 days' notice unless in its reasonable opinion serious health and safety issues require an earlier effective date.

Extensions of the agreement beyond the original 3 year term shall be for 3 years each, to be confirmed or declined by Tasman District Council at least 3 months before the end of the relevant term.

New Zealand Post and Tasman District Council may agree on variations to this agreement at any time to reflect operational changes or material concerns of either party. Each will consult with the other in good faith on the required change, after giving at least 30 days' notice of a request to make changes (except in the case of material safety concerns, for which 5 days' notice (or as little as 1 day's notice, in an extreme case) may be given).

Approval of the Footpath Operation of Electric Delivery Vehicles
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Appendix 1: Schedule of activity

Applicant: New Zealand Post Group Private Bag 39990 Wellington Mail Centre Wellington 5045	
Description of approved activity	Operation of electric delivery vehicles on the footpath for the purposes of delivery mail, parcels and other postal products.
New Zealand Post Delivery Route References	This approval covers all footpaths and streets in the Tasman District jurisdiction (Tasman Delivery Branch), with the exceptions shown in Appendix 2 - in these areas vehicles will not operate on the footpath.
Proposed Footpath Operating Hours	This approval is applicable 12 hours a day (7am to 7pm), seven days a week. However, during peak periods (such as Christmas) operating hours can be extended. It is expected no more than 2 hours either side of the agreed operating hours will be required.
Proposed Traffic Management and Safety Measures	New Zealand Post is to abide by measures outlined in its Safety Management documentation: <ul style="list-style-type: none"> • Safe speed limit on footpaths • Electric delivery vehicles to be ridden on formed footpaths only • Riders to give way to pedestrians • Footpath only to be used when delivering mail & other postal items • Roadway to be used when there is some distance (50m+) between delivery points • New Zealand Post to provide training for operators
Public Notification	A copy of Tasman District Council approval to be sent to the New Zealand Police - Tasman Branch New Zealand Post to implement communications plan on implementation
Commencement Date	1 June 2017
Review Date	Review 1 June 2020 and then every three years
Responsible persons	Alan Court General Manager, Transport E: alan.court@nzpost.co.nz M: 027 447 6401

Approval of the Footpath Operation of Electric Delivery Vehicles
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Appendix 2: Exclusion zones

The map below shows the footpath exemption for the Tasman District Council, which is serviced by the Nelson Delivery Branch. Vehicles will not operate on footpaths in the area marked in yellow on the map below.

Queen Street and Croucher Street, Richmond



Approval of the Footpath Operation of Electric Delivery Vehicles
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Appendix 3: Round Assessment Report**Nelson Delivery Branch - Richmond**

This delivery branch has 1 team.

Known Hazards:

Detailed below are the rest homes, hospitals, schools and early childhood centres located within this branch catchment. As per our safety management plan we will not use the Paxster vehicle on the footpath during high traffic times:

Rest Homes/Hospitals:

Round No.	Street No	Street	Name of Rest Home/Hospital
Rcd001	60 - 44	Templemore Drive	Still Water Garden Resthome
Rcd002	125	Gladstone Rd	Waimea Village
Rcd002	37	Langdale Drive	Oliva Estate
Rcd005	357	Lower Queen Street	Oakwoods

Schools/Childcare Centres:

Round No.	Street No.	Street	Name of School/Childcare Centre
Rcd001	35	Champion Rd	Garyn College
Rcd001	60	Salisbury Rd	Waimea College
Rcd001	45	Salisbury Rd	Waimea Intermediate
Rcd001	61A	Salisbury Rd	First Years
Rcd001	6D	Champion Rd	Early Childhood
Rcd001	60	Champion Rd	Champion Kids
Rcd002	46	Waverly St	Richmond Play Centre
Rcd002	2	Cautley St	Paula's Tiny Tots
Rcd002	42	Waverly St	Paula's Pre School
Rcd002	56	Waverly St	Waverly St Kindergarten
Rcd003	111	Ranzau Rd	Ranzau School
Rcd005	14	Cambridge St	Richmond School
Rcd006	24	Florence Street	Richmond Kindergarten
Rcd006	11A	Gilbert St	Kindergarten
Rcd006	9	Gilbert St	Play Centre
Rcd006	9	Warren Kelly	Play Centre
Rcd006	56A	Henley St	Henley School
Rcd007	34	Edward St	Pre School

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Appendix 4: New Zealand Post Training Guide for Paxster Operators

Provided as a separate document - Attachment 1

Appendix 5: New Zealand Post Safety Management Plan

Provided as a separate document - Attachment 2

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Appendix 6: Summary of Planned Engagement

A – Prior to use of Electric Vehicles on Footpaths Commencing

i) Engagement

<p>New Zealand Post plans to inform residents and businesses in Tasman through several channels around the time the new delivery vehicles become visible on the streets as part of driver training.</p>	
<p>Tasman District staff and Councillors</p>	<p>Prior to any media release relating to Tasman delivery services, an update will be provided to the Tasman District Council staff to enable notification of staff and Councillors of the upcoming media release and operation of electric vehicles on the footpath</p>
<p>Local Media</p>	<p>Prior to the commencement of driver training, a media release will be distributed to local agencies to explain what’s happening and provide detail on the Paxster and its operation.</p>
<p>Stakeholders</p>	<p>Prior to the commencement of driver training, stakeholders (e.g. local business associations, chambers of commerce, Greypower, community interest groups, Accessibility for All (A4A) Forum, Blind Foundation, CCS Disability Action Group, Living Streets (Tasman, AA) will be contacted and provided with information about how we’ll be using the vehicles to deliver mail along with parcels in local residential neighbourhoods.</p> <p>Stakeholders will be encouraged to share this information with their members.</p>
<p>New Zealand Post Website</p>	<p>Information about the vehicles, how we will use them, safety etc. will be available on the New Zealand Post website (www.nzpost.co.nz). Frequently Asked Questions (FAQs) will be included. People who have additional questions will be directed to an 0800 number and email address.</p>
<p>Customer Service Centre</p>	<p>Residents and businesses can ask questions and get further information by calling New Zealand Post’s Customer Service Centre on 0800 501 501.</p>

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B – Once Electric Vehicles are operating on footpaths

i) Engagement

a) Tasman District Staff

Meetings with Tasman District Transportation staff will initially be held on a bi-weekly basis, moving to a monthly meeting depending on the issues that need to be discussed. These meetings shall consider (amongst other things):

- Review of incidents and accidents
- Report of any complaints involving members of the public
- Review of exclusion zones – noting any new developments will result in high footpath usage

b) Advocacy Group meetings

Meetings with the Tasman District Advocacy Group will be held on a bi-monthly basis for the first 12 months, and will provide an opportunity to discuss:

- Review of incidents and accidents
- Report of any complaints involving members of the public
- Review of exclusion zones
- Feedback from the Advocacy Group members on any feedback or concerns

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9.5 ENGINEERING DEPARTMENT HEALTH AND SAFETY PRACTICES

Information Only - No Decision Required

Report To: Engineering Services Committee
Meeting Date: 29 June 2017
Report Author: Mike Schruer, Utilities Manager
Report Number: RESC17-06-05

1 Summary

- 1.1 This report provides background to the Engineering Services Committee on how the Engineering Services Department identifies site hazards and audits its sites to comply with relevant H&S legislation.

2 Draft Resolution

That the Engineering Services Committee receives the Engineering Department Health and Safety Practices report, RESC17-06-05.

3 Purpose of the Report

- 3.1 The purpose of this report is to brief the Engineering Services Committee on how the Engineering Services Department identifies site hazards and audits its work and infrastructure sites to comply with relevant H&S legislation.

4 Background and Discussion

- 4.1 The Council has a requirement to comply with relevant Health and Safety legislation.
- 4.2 The Engineering Services Department needs to improve its practice of hazard identification and site audits.
- 4.3 Attached are copies of the hazard identification and site safety observation templates that are being used for each of the sites that the Engineering Services Department operates and maintains (**Attachments 1 and 2**).
- 4.4 The risk assessment largely focuses on likelihood and consequences of an event. These risk ratings then determine the priorities of interventions to remove, minimise or mitigate risk.

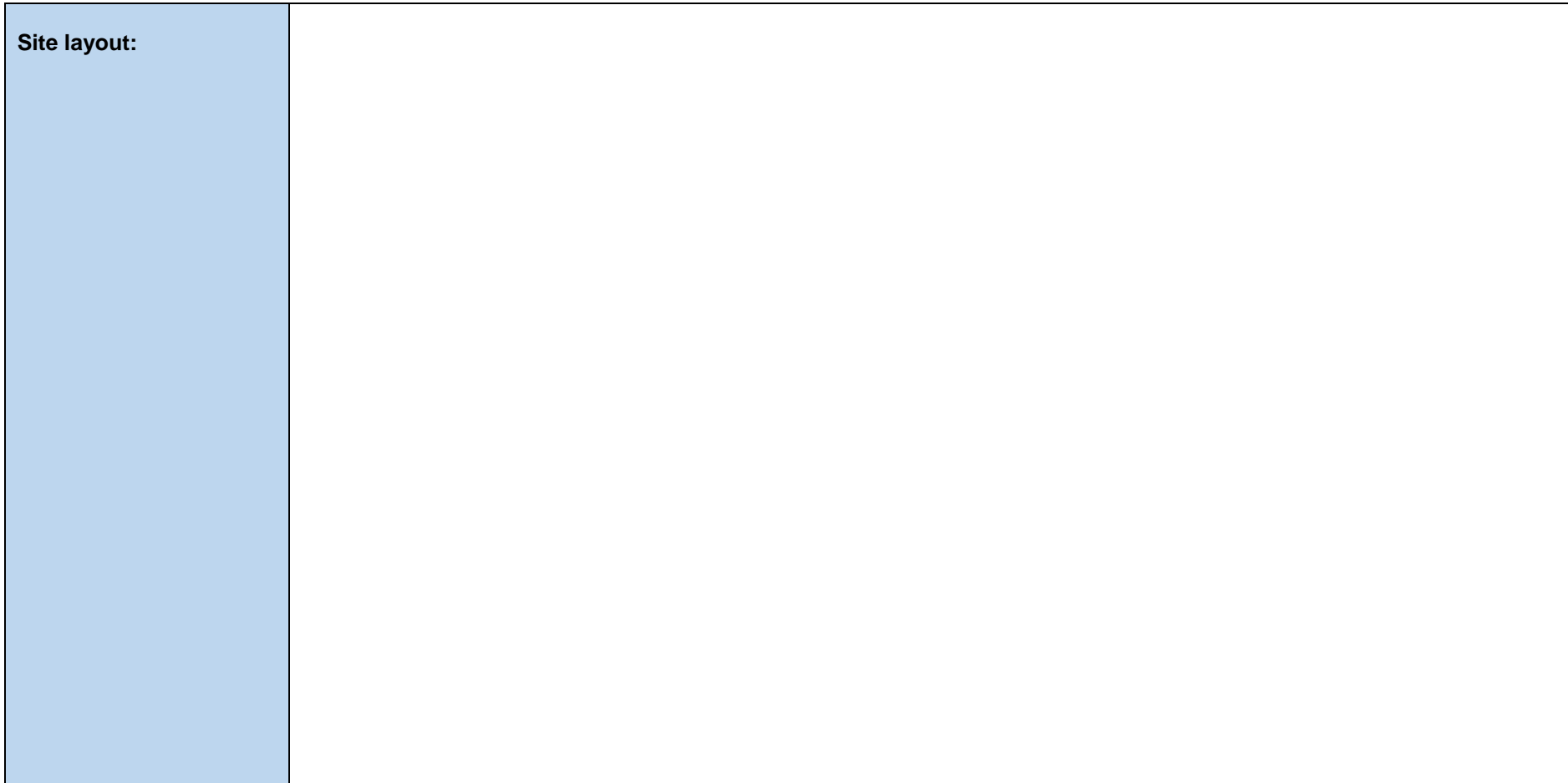
5 Next Steps / Timeline

- 5.1 It is intended that future Engineering Activity update reports will include a commentary on Health and Safety assessments and outcomes.

6 Attachments

- | | | |
|----|--------------------------------------|----|
| 1. | H&S Template, Site Hazard Assessment | 55 |
| 2. | H&S Site Observation Form | 61 |

Asset:		Date of Assessment:	
Address:			
Emergency:	For medical emergencies ring 111.		
Public facilities:			
Site access:			



This site hazard assessment is intended to provide an awareness of the hazards for staff or visitors undertaking a routine site visit for observation/inspection purposes. It does not include for physical works activities and does not replace the maintenance contractor's site induction. If you identify additional hazards or unsafe practices you are to notify your supervisor and the controller of the site.

All staff to have the required PPE, undertake the contractor's site induction and sign the register located in the control cabinet. If in doubt of your own safety or the safety of others you are to stop what you are doing, move to a safe area, alert others and contact your supervisor and worksite representative.

Site photographs have been included to show the hazards as well as aid in what to expect on site.

Likelihood	1 - Rare	2 - Unlikely	3 - Possible	4 - Likely	5 – Almost certain	<table border="1"> <tr> <td colspan="6" style="text-align: center;">Risk Rating</td> <td colspan="2" style="text-align: center;">Rating</td> </tr> <tr> <td colspan="6" style="text-align: center;">Consequence</td> <td colspan="2"></td> </tr> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td></td> <td></td> </tr> <tr> <td>Likelihood</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> <td>1</td> <td>Low (1-4)</td> </tr> <tr> <td></td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> <td>2</td> <td>Moderate (5-9)</td> </tr> <tr> <td></td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> <td>3</td> <td>High (10-12)</td> </tr> <tr> <td></td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td>4</td> <td>Critical (15-25)</td> </tr> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td></td> <td></td> </tr> </table>	Risk Rating						Rating		Consequence									1	2	3	4	5			Likelihood	5	10	15	20	25	1	Low (1-4)		4	8	12	16	20	2	Moderate (5-9)		3	6	9	12	15	3	High (10-12)		2	4	6	8	10	4	Critical (15-25)		1	2	3	4	5		
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	2	4	6	8	10	4	Critical (15-25)																																																															
	1	2	3	4	5																																																																	
Consequence	1 – Insignificant, no injury	2 – Minor, first aid	3 – Moderate, medical treatment	4 – Serious harm, admitted to hospital	5 – Fatality, death																																																																	

Hazards	Risk	Initial Risk			Harm that could occur	Controls	Residual Risk		
		Likelihood	Consequence	Risk Rating			Likelihood	Consequence	Risk Rating
		3	5	15			2	4	8

<p>Site entrance gate off Tapawera / Tadmor Road.</p>			

Action Plan

Issue	Action	Responsibility	Deadline



Project Team Safety Observation

Date: 04/05/2017

Pass Rate: 8/8 (100%)

Checked by: Blythe, Chris

Location: Tasman District Council → Engineering → Programme Delivery

Subject: C1049 Collingwood WWTP

Description:

No.	Item	Status	Score	Comments
1 Information				
1.1	Weather conditions	✓	Not set	Sunny 15 degs
1.2	Is the site Entry/Exit controlled	✓	Not set	Site gate locked
1.3	Are there other workers onsite?	✓	Not set	Steve Webster- Downer Avik Holder and Jennie McGuinness- MWH Russell McGuigan and Chris Blythe- TDC
1.4	Were you inducted onto site?	✓	Not set	
1.5	Are workers and visitors on site wearing appropriate PPE?	✓	Not set	
1.6	Is there evidence of site risk identification and controls in place ?	✓	Not set	
2 Traffic Management and public safety				
2.1	Is a Traffic Management Plan required	NA	Not set	
2.2	Signage, chains, fence or tape used to isolate the contract work are used as appropriate?	NA	Not set	
3 Construction Monitoring Record				
3.1	General observations on work in progress:	✓	Not set	Site walkover to discuss defects
4 Additional Information				
4.1	Is the site safe and tidy? Please take photos for evidence.	✓	Not set	

Signature

Blythe, Chris

Item 9.5

No Photos or Videos

No Locations

Attachment 2

9.6 ENGINEERING SERVICES ACTIVITY UPDATE

Information Only - No Decision Required

Report To:	Engineering Services Committee
Meeting Date:	29 June 2017
Report Author:	Richard Kirby, Engineering Services Manager; Dwayne Fletcher, Activity Planning Manager; Russell McGuigan, Programme Delivery Manager; Jamie McPherson, Transportation Manager; Mike Schruer, Utilities Manager
Report Number:	RESC17-06-06

1 Summary

- 1.1 This reports provides the six-weekly update of activity in the Engineering Services Department.

2 Draft Resolution

That the Engineering Services Committee receives the Engineering Services Activity Update report. RESC17-06-06.

3 Purpose of the Report

- 3.1 This report is the regular six-weekly update for Engineering Services activities.

4 Management Update

- 4.1 We have welcomed two new staff and a fixed term contractor to the team this month.
- 4.2 Andy Nelson has been engaged on a fixed term contract as a specific resource to manage project planning over the next four to five years. Andy will be identifying particular tasks within each project to not only programme those tasks, but also assess the resources required, internally and externally.
- 4.3 We have also welcomed two new Project Managers, Graham Rimmer and Jenny Callaghan to help boost our resources to deliver the capital expenditure programme in the Programme Delivery team. Costs for these two new staff members are covered in existing budgets.
- 4.4 In light of the recent uncertainty around the Waimea Water Augmentation Project, I have applied my mind to the Council's options to mitigate water shortages that could occur this summer. I will provide a verbal update at the meeting.
- 5 Staff often bear the brunt of complaints from ratepayers who do not like some of the things we do or don't do on our infrastructure network. But we always appreciate positive feedback and I was very pleased to receive an email from a resident in Old House Road, Upper Moutere expressing appreciation for a Council staff member and Councils contractor. This related to Council's responding to recent storm damage and bank erosion in an effective manner.

6 Activity Planning**Asset Data Group**

- 6.1 Asset valuations have progressed well. Staff have provided the Roding asset data to Opus and expect to receive the Roding asset valuation report from them during June. The Utilities valuation report is complete.

Development Infrastructure Group**Existing Developments**

- 6.2 Work on Stage 3 of the Puketutu subdivision is currently underway along with the Grey Street subdivision. Combined, these developments will provide 44 residential sections in Motueka.
- 6.3 The Beaches and Bays subdivision in Little Kaiteriteri is progressing well with services installed and tested. The project is located off Talisman Heights and will have 28 lots.
- 6.4 Harley Road Holdings Ltd is a 43 lot rural residential subdivision being built off Harley Road in Tasman. Major earthworks are complete and culverts are being installed.
- 6.5 The first stage of Mapua Coastal Village (also known as Mapua Inlets) has been completed. The first stage comprises 15 residential allotments with two reserve areas, one adjoins the existing reserve located between Aranui Road and Iwa Street and the other is an esplanade reserve adjoining the estuary.

- 6.6 Construction continues on the Richmond West subdivision, located on Lower Queen Street, with services being installed. This development will have 64 residential lots.
- 6.7 The Mapua Landholdings subdivision on Old Coach Road is continuing with earthworks and road formation.
- 6.8 Concept designs for stormwater detention in the Richmond South area are being finalised. This will allow the Council to open up deferred residential land for development.
- 6.9 The first stage of the Arizona subdivision continues to be constructed with the majority of utilities installed and tested.
- 6.10 The Kihilla Road subdivision continues to be developed with the majority of utilities installed.
- 6.11 There are also numerous other small developments (2-3 lots) currently being constructed throughout the district.

New Zealand Vertical Datum 2016

- 6.12 From 1 July 2017, Nelson City Council and Tasman District Council will adopt the New Zealand Vertical Datum, (NZVD2016). This new datum will bring consistency in the way land height is measured across the region and with the New Zealand standards.
- 6.13 NZVD2016 is the official vertical datum for New Zealand and is maintained by Land Information New Zealand (LINZ). It was adopted by LINZ on 27 June 2016. By adopting this national standard, both council's GIS services, works and infrastructure, planning and consents information will be compliant with the national norm. It will also assist with modelling for climate change and sea level rise.
- 6.14 Why is it changing?
 - To align the way Nelson City Council and Tasman District Council record elevation data.
 - To adopt best practice by using a national standard to record elevation data.
 - To display elevation data in a consistent datum on the Top of the South Maps website.
 - To ensure both councils can readily contribute to national datasets such as sea level rise.
 - To simplify infrastructure planning between councils.

Policy, Planning and Regulatory Group

Long Term Planning

- 6.15 The team has been focused on development of the 2018-2028 Long Term Plan and the associated growth model and activity management plans. Using the growth model outputs, staff have identified the key infrastructure required in order for the Council to supply the demand for development over the short, medium and long term future.

Waimea Water Demand and Supply

- 6.16 Staff engaged Stantec to undertake modelling of the urban water supply schemes in the Waimea Basin to determine the 100 year demand projections for the schemes and compared that to the Council's ability to meet demand. Staff workshopped the outcomes of the report with the Council in May 2017.

Development Contributions

6.17 Staff have continued work on the Development Contributions Policy and will workshop the proposed changes with the Council in June. In September/October 2017, staff will be able to workshop the preliminary charges with the Council. The Policy will be consulted on concurrent to the Long Term Plan.

Richmond Network Operating Framework

6.18 In April, the Steering Group met to determine the strategic case goals and network principles as well as agreeing on the various transportation mode hierarchies. Next steps are to undertake a workshop with the key stakeholder group in July. The workshop will identify operating gaps and project a scenario.

Transportation Strategic Case

6.19 The transportation strategic case considers the long-term provision of the transportation network. It is being developed in conjunction with the Transportation Activity Management Plan using NZTA's guidelines. To date the working group has defined four key problem statements. The work has been led by Rhys Palmer from Indicate Consultancy. Staff will shortly complete the draft strategic case, programme business cases and financial forecasts which will be reviewed by NZTA. The strategic case and programme business case will be presented to the Engineering Services Committee in August 2017.

7 Utilities

Water Supply

- 7.1 The contractor has been busy working on finalising leak detection repair work, Queen Street main connections, backflow testing and finalising the restrictor inspections as well as other leaks and emergency works.
- 7.2 The contract audit result for water during May is 83%. This was lower than recent scores due to a small pump station building receiving a lower mark.
- 7.3 The new trunk main in Queen Street is now in operation.
- 7.4 The contractor has had one loss time incident due to a head injury and concussion when a staff member was climbing a fence and hit his forehead on a tree branch. Another serious incident occurred when a staff member did a U-turn in front of a rubbish truck while putting out traffic management signage.
- 7.5 There have been a number of failures in the D'Arcy Street-Fauchelle Avenue area of Richmond, which is disappointing as we are currently in the process of replacing these mains.
- 7.6 A break occurred on the Riwaka-Kaiteriteri water main, this fortunately only impacted a couple of households while repairs were carried out.
- 7.7 A burst occurred on Hill Street on the main which required a 3 metre section replacement.
- 7.8 Work to improve valving on Thorp Street Motueka has been hampered by finding a number of telecommunication ducts sitting on and next to our main, which is going to require relocation of these services to get the final valve in place.

- 7.9 Work is to begin soon on seismic upgrade work at Wakefield, Brightwater and Murchison Reservoirs. This work involves strengthening of the connections between the reservoir walls and base and will be carried out on the inside of the tanks. With two tanks at each site it is still possible to maintain supply.

Wastewater Networks

- 7.10 Downer achieved an audit score of 89% in May. This was above the required 80%.
- 7.11 There were six wastewater overflow events in the last month. Four resulted from heavy rain, while two were caused by blockages.
- 7.12 On Thursday 11 May 2017, intensive rain fell between 4.00 and 6.00am in Mapua, with steady rain through to noon. This resulted in large quantities of stormwater entering the Mapua-Ruby Bay wastewater network with in an overflow from the floor drains in the Mapua School toilet block. The school closed for the day, the second time in seven months. Downer staff checked the network and found that many pump stations were at high level but were coping, however a section of gravity pipe between Stafford Drive and around 136 Aranui Road was full. This, combined with the toilet floor drains being lower than the manhole in the Stafford Drive - Aranui Road intersection, led to the overflow at the school. The gravity pipe downstream of the school has been inspected by CCTV and no blockages were found. There was a lot of fat build up which will be cleaned. More concerning, it appears that sections of this pipe are regularly full indicating little or no spare capacity during rain events.
- 7.13 The Mapua Rise pump station discharges into the Stafford Drive – Aranui Road manhole and was overloading the network at this point. A review of the pump station controls and as-built plans highlighted a few issues. As a result, the flow from this pump station has been restricted and the pump station will automatically shut down if one of the downstream pump stations go into high level. Several other issues have been referred back to the Developer for clarification.
- 7.14 Council staff are also working to resolve the sources of stormwater that are getting into the Mapua Rise reticulation causing excessive flows.
- 7.15 Heavy rain (about 60mm in four hours) fell in Takaka on Wednesday 17 May 2017 resulting in overflows from the Pohara Valley and Pohara Camp pump stations as well as another manhole in Pohara. Substantial amounts of stormwater flooded the wastewater network. The overflow at Pohara Valley was directly into the adjacent stream and onto the beach. The overflow at the Pohara Camp pump station flowed into a road sump and into a drain on Richmond Road and into Winter Creek and on to the beach. The third overflow ponded in a low point on the roadside berm. The overflow is likely to have started around 5.00am and continued intermittently for four hours. A septic tanker was used to transfer wastewater from Pohara Valley to Delaneys pump station to reduce the extent of the overflow. The total volume of overflows is difficult to estimate but Downer indicated around 200m³ from the three overflow points. This is well in excess of the normal daily flow volume. Warning signs were erected at various locations along the beach for 48 hours.
- 7.16 Heavy rain on Thursday 18 May 2017 resulted in two minor overflows being reported, one in Bryant Road, Brightwater, the other in Queen Victoria Street, Motueka. The Bryant Road overflow was due to the high volumes of wastewater in the network and an unexplained shut down of one of the pumps in the Brightwater Main pump station for an hour during the event. The Queen Victoria Street overflow was reported as wastewater coming back up a stormwater drain. After inspection it was found that poor road drainage has led to flooding of

properties and inundation of gully traps, as well as stormwater downpipes discharging into gully traps.

- 7.17 At around 6.00pm on Saturday 29 May 2017, two gully traps overflows were reported at 10 and 18 Iwa Street in Mapua. Downer found a partial blockage in the manhole at the intersection of Iwa Street and Aranui Road, on the trunk main. Pump stations upstream of the blockage were shut down while the blockage was cleared. Approximately 10-20m³ of wastewater flooded across three low-lying properties at 10, 16 and 18 Iwa St with some wastewater making into the stormwater network and into the Mapua Channel, adjacent to the Waterfront Park. The risk to public health was assessed as minimal as there was light rain falling at the time, big tides and significant dilution in the Mapua channel.
- 7.18 The cause of the blockage was a combination of gravel and a 1 metre long tangled rope of rags and wipes. The properties on Iwa St have suffered from overflows in the past, as their gully traps are below the level of the wastewater manholes on the network.
- 7.19 On Friday 2 June a minor overflow occurred adjacent to Black Valley Stream in Kerr Bay, beside Lake Rotoiti. The overflow was minor and soaked away before reaching the stream and downstream lake. The cause of the overflow was a blockage in the manhole adjacent to the stream. We have contacted the Department of Conservation to see if they have made any changes to their toilet block or caravan dump station as this is the second blockage of this manhole this year. Previously this manhole has been trouble free.
- 7.20 On Wednesday 24 May the wastewater pump stations in Kaiteriteri and Riwaka were shut down for the day, between 9am and 4pm. This was so Downer could install a non-return valve and flow meter on the Riwaka/Kaiteriteri pipeline at the Motueka Wastewater Treatment Plant (WWTP). The valve and meter are needed to provide early warning of a main break and to also prevent wastewater from Motueka flowing back down the Riwaka/Kaiteriteri main if there is a break.
- 7.21 Downer also took the opportunity to replace a 28 year old pump in Riwaka Main pump station and make adjustments to the second pump. During the shutdown septic tankers were used to transport waste to the WWTP. The shutdown was very successful with no overflows or complaints from residents. This was a good test for when the new Kaiteriteri pipeline needs to be commissioned.

Stormwater Networks

- 7.22 Site audits undertaken in May produced a contractor performance level of 90% for stormwater maintenance indicating a very good level of performance. The rate of growth of vegetation along the open drains has now declined due to the colder weather.
- 7.23 Since the last report there was two pre-storm checks; on the 9 and 16 May. The pre-storm checks are done by the contractor on request at specific at risk drain, inlet and detention dam locations. These sites are critical during heavy rainfall events and are checked for any obstructions to flow.
- 7.24 The Motueka tidal control gates operated in “Storm Mode” on the 10 and 11 May.
- 7.25 Collingwood again experienced a heavy rainfall event on the 11 May with gravels and silts being washed down Gibbs Road blocking the stormwater inlets and overflowing down the road. The kitchen floor of the Courthouse Café in Collingwood was flooded. The storm event was recorded as a 1 in 40 year return period with 72.5mm falling in 2 hours.

- 7.26 The stream widening work has been completed along the section of Neds Creek which runs through the Recreation Reserve. The weather to date has been favourable and it is expected that the bund work will be completed by 9 June.
- 7.27 There have been concerns raised with regard to the disposal of stormwater into a discharge field on private land at the end of Harry Rankin Street, for which there is an agreement. However, it appears that even during moderate rainfall events, with the ground saturated, there is excessive ponding in the field that remains for longer than the landowners were originally advised when their approval was given to install the discharge point.
- 7.28 The stormwater pipe system is being checked for any blockages but we may need to divert flows to Fearon Street with a new pipe system.
- 7.29 Sewer overflows were reported in Thomason Avenue, Motueka where there is a lack of stormwater drainage resulting in the flooding of gully traps. Soakage is a short term and not very effective improvement option but long term a suitable drainage system will be required for this area. This will be part of the wider review of stormwater issues in Motueka.

Ned's Creek, Murchison

- 7.30 Aside from a few finishing touches (fencing, swale channel on upstream property), the majority of the Ned's Creek widening and bunding work is complete. Considering the winter conditions, construction went well with no great delays resulting from adverse weather.



Waste Management and Minimisation

- 7.31 Recycling services continued over the period, with Smart Environmental meeting all performance targets. We continue to see growth in collection volumes with this year tracking at 3% above last year.
- 7.32 We have agreed with Smart Environmental for ongoing audits of recycling bins to reduce contamination. Initial results indicate a small number of bins that are significantly contaminated rather than a large number of slightly contaminated bins. We are following up with customers where issues have been identified.
- 7.33 On 30 June 2017 a Smart Environmental vehicle was involved in an accident with a Downer service vehicle. Neither driver was injured but the vehicles sustained significant damage. The Smart Environmental vehicle was an additional vehicle used for smaller streets and other resources are being used to complete collections.

- 7.34 Waste at the landfill has been significantly higher than budget this year, with resource recovery centres 8% above budget and special and direct waste up 400% on budget. These special waste volumes are from land development, including this month material from the Queen Street upgrade and the Richmond RRC rock protection work.
- 7.35 On 18 May the Tenders Panel approved award of Contract 1092 for waste transport to Fulton Hogan. Council accepted an alternative tender from Fulton Hogan, which included the installation of two additional weighbridges (at Richmond and Takaka) to ensure maximum payloads in waste bins. This tender represented best value for Council in the long and short term and was within budget. The new contract commences on 1 September.
- 7.36 We are continuing to work with Nelson City Council staff to transition to regional landfill operations in July. All landfill customers have been informed and encouraged to contact Nelson City Council to make arrangements from 1 July. We are working with Fulton Hogan to finish landfilling at Eves Valley and to move to a maintenance regime.
- 7.37 The Nelson Tasman Joint Landfill Committee held a workshop on 26 May and the first committee meeting is scheduled for Thursday 15 June.
- 7.38 We are continuing to work a joint waste assessment with Nelson City Council in preparation for a review of the Joint Waste Management and Minimisation Plan.

8 Programme Delivery

Project Stage	Total
Preliminary Design	13
Detailed Design	5
Procurement	5
Construction	16
Grand Total	39

Projects in Preliminary Design Stage

ID	Name	Project Description	Project Status	Estimated Tender Upload Date	Comments
1059	Trewavas WWPS Emergency Storage	New emergency overflow storage	Cost		Cost estimates exceed current budget. Reviewing funding options.
1082	Richmond Stormwater Quality Improvements	Identify stormwater quality improvement requirements and system intervention works in relation to existing discharge quality and receiving environments.			Report due by end June 2017.
1061	Richmond Ranzau Rd/	Upgrade to White Rd and Ranzau Rd at Paton Rd intersection. This area has	On-Hold		On hold until flood modelling for Richmond is completed.

ID	Name	Project Description	Project Status	Estimated Tender Upload Date	Comments
	Paton Rd/White Rd Stormwater	flooding issues. Modelling will be undertaken to further understand the extent and depth of flooding.			
1058	Motueka New Water Treatment Plant	Design a new water treatment plant at Parker St site to supplement the existing Recreation Centre supply.	Cost		Scope at Parker St site is to be confirmed once the preliminary design is finalised. The options are to account for staged development and water uptakes. Reviewing funding options.
1054	Takaka RRC Weighbridge	On hold. Install weighbridge and re-locate kiosk	On-Hold		Project is on-hold. Future funding is required to complete works. Transfer of funding to complete Mariri RRC upgrade is approved.
1060	Lower Queen Street Stormwater	Stormwater upgrade in Lower Queen Street to enable development. Originally a combined 3-waters upgrade under 1060, it was split in Jan 2017. Linked projects: - LQS Water & Sewer Pipelines, and - Headingly Lane Gravity Sewer	Late	03/07/2017	MWH has proposed an option with two stages, road pipeline to meet immediate needs, with future connections to estuary. Pending review by Utilities
1047	Richmond Bateup Road Widening	Widening of Bateup Road to provide for growth in Richmond South. Year 1 and 2 design, Year 3 construction.	Late	03/07/2017	Design delayed owing to stormwater issue and road layout review.
1086	Poutama Drain Upgrade 2017/18	Upgrade of Poutama Drain for stormwater to meet growth of Richmond.	Land	06/09/2017	27m wide channel in 32m wide corridor option chosen. Working on scope for consents and design for construction. One landowner resistant to selling additional land.
1057	Pohara Stormwater Improvements	Upgrade infrastructure to mitigate flood impact.	Late	08/09/2017	Finalised stormwater model received from Tonkin & Taylor. Next phase is to secure Resource Consents and Land agreements. Physical work is proposed to begin in October 2017.
1062	Borck Creek Widening Phase 2	Upgrade of Borck Creek from Poutama Drain confluence to SH60		31/01/2018	The current work is assessing design flows and design options. Consent and design planned by end 16/17 year. Construction date uncertain.
1019	Wakefield New Water Source	New Water Source for Wakefield Community		02/05/2018	Water quality testing from sample bores in progress
1071	Washbourn Gardens Stormwater Diversion	Washbourn Gardens Stormwater Bypass - new stormwater pipe from Washbourn Gardens to		01/07/2018	Recommendation made for preferred route along Oxford Street. Ready for Gate 2a.

ID	Name	Project Description	Project Status	Estimated Tender Upload Date	Comments
		Poutama Drain to relieve stormwater flows on Queen Street including stormwater diversion from Gladstone Rd to Poutama Drain to allow the Washbourn Gardens Stormwater Bypass to cross Gladstone Road.			
1039	Richmond Church Street Water Pipeline	May be included in Project 1071 - Washbourn Gardens Stormwater Diversion. New water line to replace the existing while maintaining water to properties.	On-Hold	30/08/2018	Potential for this work to be tendered in 2017/18 as part of the Richmond Stormwater upgrade project. Design yet to be completed.

Projects in Detailed Design Stage

ID	Name	Project Description	Project Status	Estimated Tender Upload Date	Comments
1056	Pohara Water Treatment Plant Upgrade	Upgrade the Pohara Water Treatment Plant to improve water quality and to comply with the NZ drinking water standards (DWSNZ).	Cost		Scope yet to be confirmed. Current budget will not be sufficient to fund the preferred membrane filtration option. Design only to be completed in 2016/17. The remaining funding has been transferred to the Collingwood WTP project.
1069	Collingwood WTP Upgrade	Upgrade treatment to meet NZ Drinking Water Standards	On-Hold		Bore has been drilled. 17-18 work will complete bore headworks and design. New funding through LTP
1068	Goodman Park Wastewater Pump Station - Wetwell Rehab	Relining of Ledger Goodman Park wastewater pump station wetwell	Late		The mechanical/electrical work is to be procured via a variation to Contract 688, and wetwell coating completed by a wetwell coatings specialist
913	Traffic Counting Contract	New traffic counting contract		03/07/2017	
1076	McShane Rd & Lower Queen St Intersection Upgrade	Minor Improvements Programme project to widen intersection and create a right turn bay into McShane Road from Lower Queen Street.	On-Hold	03/07/2018	Safety Audit complete. Design update on hold pending future funding approval.

Projects in Procurement Stage

ID	Name	Project Description	Project Status	Tender Close Date	Comments
1094	Lower Queen St Water and Sewer Pipelines	Part of Lower Queen Street 3-waters upgrade to service growth in the area. Originally all under 1060 – split out in January 2017.		07/06/2017	Tender in evaluation
1091	Mariri Site Development - Stage 2	Stage 2 - Replace Wastewater disposal system. Improve access to recycling drop-off areas, reverse flow direction with new ramp. New compactor and bin weighing system - by subcontractor.		31/05/2017	Tender in evaluation.
950	Kaiteriteri WTP Treatment Upgrade	Upgrade drinking water supply to meet NZ Drinking Water Standards	Cost	10/05/2017	Being retendered 22 Jun. Tender prices above market prices.
1065	Three Waters Operational and Maintenance	New Three Waters Operations and Maintenance Contract, which will begin service on 1 July 2018. Key objectives are to efficiently and sustainably manage water, stormwater and wastewater services and networks, improve operational responsiveness, provide better data on the condition of assets, and reduce demand on Council's internal resources to manage day to day activities.		13/09/2017	Three companies have been shortlisted for the next tender stage
1025	Waimea Community Dam	A community driven project to enhance the economic and social opportunities for the urban water supply, public good, environmental effects and irrigation .	Cost		Funding model and governance structure under review.

Projects in Construction Stage

ID	Name	Project Description	Project Status	Comments
1000	Kaiteriteri Replacement Wastewater Pipeline	Replace estuary pipeline with pipeline in road. Upgrade 2 pump stations. Improvements to local wastewater network.		Good progress being made on sewer main construction. On track
1035	Maintenance Roothing Network 2015-17	Maintain approximately 248km of both sealed and unsealed Local Authority Urban and Rural roads and streets within the Tasman District Murchison Network area.		On-going maintenance contract.
1038	Mariri RRC - Compactor & Bin weighing system	New compactor and bin weighing system to be installed in conjunction with overall site development (P1091)		C1038 awarded to BJ Scarlett. Civil works portion has been retendered separately in May 2017 as Contract 1091A.
1040	Borck Creek Planting Programme	Planting programme for Borck Creek		Borck Creek has been planted. Poutama Drain planting on hold until scope of future widening is known.
1044	Richmond & Motueka Meter Renewals	Three year water meter replacement programme throughout the District. These new manifold meters will significantly reduce time and cost for meter replacements in the future.		On track
1050	Richmond Watermain Renewals (Fauchelle area)	Renew 100mm AC main with 100/150mm PVC. Includes rider mains and new meters. Includes D'arcy St, Elizabeth St, Fauchelle Ave, Florence St and Herbert St.		Contract awarded to Ching Contracting. Scope reduced to meet available budgets. Work commenced in April on D'arcy St, and Florence St in May. work is on track.
1067	Seismic Inspection and Remediation of Water Assets	Seismic strengthening of highest priority Water Reservoirs and associated structures.		Contract has been awarded to Scott Construction Ltd. Work has commenced in May.
1074	Professional Services for Three Waters Operations	Professional Services contract for the new Three Waters Operations and Maintenance Contract		In process linked with 1065
1084	Streetlighting & Electronic Speed Sign Maintenance	Contract for the on-going maintenance of street lights including electrical testing as well as speed within Council's road network.		Contract awarded to Powertech Nelson

ID	Name	Project Description	Project Status	Comments
1087	Pavement Rehabilitation 2016-17	Kerr Hill Road pavement rehabilitation at various locations. Blackbyre Road granular overlay.		Contract awarded to Fulton Hogan Ltd. Kerr Hill work is complete. Work in Blackbyre Road was completed in May.
1088	Motupipi Carpark Improvements	Improvement works to Motupipi Carpark - 31 & 33 Motupipi Street, Takaka		Variation to existing contract approved. Work is near completion.
1090	Bridge Structural Repairs 2016/17	Part of on-going repair programme for bridges.		Contract awarded to Higgins. Work commenced in April.
1092	Waste Transport Services 2017-2023	Waste transport services.		Contract awarded to Fulton Hogan.
1093	Headingly Lane Gravity Sewer	Part of Lower Queen Street 3-waters upgrade to service growth in the area. Originally all under 1060 – split out in January 2017.		Awarded to Donaldson Civil. Works start Dec 2017.
1096	Tasman Road Maintenance 2017-2020	Road maintenance services for Tasman District (excluding Golden Bay and Murchison).		Out to tender. Price Quality Method (40% Price / 60% Non-price).
967	Richmond Queen Street Infrastructure	Replace services in Queen Street and reshape street. Streetscape	Late	<p>Progress to date:</p> <ul style="list-style-type: none"> - the main water pipe has been laid the full length of the street up to the Salisbury intersection and is now 'live'. The remaining AC water pipe will be removed during each stage of construction. . - Stage 1 the services have been replaced and the road construction is underway the target date to re-open this section of street is 6 July. This is later than scheduled due to a number of unplanned services and design/construction issues. <p>Each of the unplanned events have been resolved and a number of these will re occur in future stages - we are planning ahead to ensure that they do not hold up progress.</p> <p>Stage 2 is underway - the main 1200 diameter pipe has been laid and the old 900 mm diameter pipe now has to be removed.</p> <p>All opportunities to improve on productivity are under consideration.</p>

Tenders Awarded since last Report

ID	Name	Procurement Plan / Methodology	Date Contract awarded	Tender Value (Excl. GST)	Range of Tendered Prices	Contractor
1084	Streetlighting & Electronic Speed Sign Maintenance	Lowest Price Conforming Open Market Tender	18/05/2017	\$848,591.00		Powertech Nelson
1096	Tasman Road Maintenance 2017-2020	Open Tender - Price Quality (60/40) 3+2+2 years	18/05/2017	\$15,712,497.00	\$15,712,497 - \$19,521,413.88	Downer Construction
1092	Waste Transport Services 2017-2023	Price Quality	18/05/2017	\$2,381,179.00	\$2,304,468.36 - \$3,232,839.94	Fulton Hogan Ltd
1093	Headingly Lane Gravity Sewer	LPC	07/06/2017	\$592,198.00	592,198.10	Donaldson Civil

9 Transportation**Urban Network**

- 9.1 There were several weather events in May that caused minor slips in the Kaiteriteri area and isolated flooding in both Motueka and Richmond.
- 9.2 Fulton Hogan is working on Churchill Avenue upgrading the kerb, channel and footpath along the southern side at the Hill Street end. This work will extend into June. Churchill Avenue is programmed for resealing later this year. There are other sections of kerb particularly along the northern side with associated sections of footpath for programmed replacement prior to the next reseal cycle.
- 9.3 A drinking fountain with water bottle filler was installed in Motueka.
- 9.4 Pavement repairs were completed at the Memorial Hall Carpark, Motueka on behalf of Reserves and Facilities prior to resealing later this year.
- 9.5 Council's road marking contractor Independent Traffic Services which is owned by Downer, undertook a condition survey of Raised Reflective Pavement Markers (RRPMs) on tourist and major rural roads on local roads.
- 9.6 No Stopping line markings were installed around the cul-de-sac head of various roads mainly in Richmond and Motueka. These parking restrictions are to permit large vehicles such as the recycling trucks to turn safely without having to reverse back along the street. This is the designed purpose of these turning areas, which can only operate properly in the absence of parked vehicles.
- 9.7 Fulton Hogan completed various footpath repairs in Motueka.
- 9.8 Pothole filling on various roads with the Lower Queen Street near McShane Road having the worst potholed surface. With the recent widening of Lower Queen Street near McShane Road, the construction work necessitated the temporary diversion of traffic along with construction traffic and this accelerated the stress on what is a very aged and brittle seal.

This road section is overdue for resealing but has been delayed due to planned utilities upgrades.

- 9.9 Completion of the path reinstatement associated with the High Street overhead undergrounding project.
- 9.10 The installation of a pedestrian refuge in Wensley Road near West Avenue along with footpath improvements.

Urban Network

9.11 Work planned for June includes:

- The installation of a pedestrian refuge in Hill Street near Angelus Avenue by the reservoir Creek walkway. A manhole cover close to where the proposed refuge is planned, will be lowered.
- Fulton Hogan will be installing advance public carpark signage in Motueka, this work will occur during the last week of June.
- Replacement of various RRPMS on tourist and major rural routes identified from the previous month's survey.
- Various pavement repairs by Fulton Hogan before hand-over of the urban roads to Downer on 1 July 2017.
- Ordering a new Bus Shelter for Salisbury Road to replace the existing shelter near Talbot Street damaged by an SBL bus. The cost of this work, will be recovered from SBL. The new shelter will have a roof with a shorter overhang to reduce the chances of being struck. The newer SBL buses have a far greater overhang than the older buses.

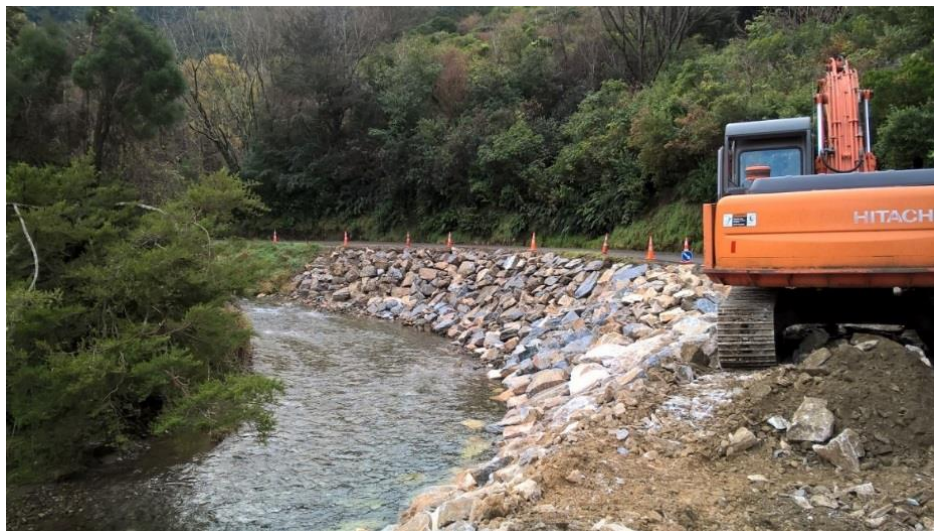
9.12 Urban Network – Other work planned includes:

- Pricing of Seaton Valley Road gravel footpath formation including minor earth works
- Completion of a New Footpath programme developed from the New Footpath Matrix.
- Finalising a programme for kerb and footpath replacements enabling this work along with new footpath sites to be procured by the most cost effective means.
- Finalising the design for tender for the Higgs Road Footpath and Mapua Drive shared path

Rural Network

- 9.13 During this period the contractors worked on fallen trees on the Kaiteriteri-Sandy Bay Road, slips on Sunrise Valley Road, Kelling Road and George Harvey Road and road widening in the Clarke Valley Area
- 9.14 April was an exciting month of weather with two ex-cyclones (Debbie and Cook). Ex-cyclone Debbie was a bit of a non-event, but was wet enough to stop any progress on the Clarke Valley Earthworks and pavement repairs.
- 9.15 Ex-cyclone Cook was another beast all together. It brought significant flooding and slips, largely concentrated in the Dovedale and Motueka West Bank areas. Other areas were affected, but to a lesser extent.
- 9.16 May will see the completion of the culvert installs on Wills Road, Cozens Road and Motueka West Bank Road.

- 9.17 The contractors will be focusing on the remaining general pavement repairs, the finish of the post ex-cyclone Cook clean-up, and spreading of additional maintenance metal.



Rock revetment on the Riwaka Valley Road



Flood waters across the Thorn Road concrete splash

Golden Bay Maintenance

- 9.18 The Golden Bay network was affected by typical weather events during May with minor road closures at times due to slips and fallen trees. Able Tasman Drive (Wainui Hill) and Totaranui Road were most affected.
- 9.19 The roads have been in generally good condition and the contractor has kept on top of the programme of work with the most time spend on drainage maintenance. The programme is on track for completion in June.

- 9.20 Included in the June programme is package of work for new bridge naming signs on Collingwood-Bainham Main Rd, Aorere Rd, and Collingwood-Puoponga Main Rd which has been a community board item of interest.

Murchison Maintenance

- 9.21 Culvert replacements and other drainage maintenance on Tutaki Road South, Braeburn Track, and in the Matakītaki Valley has been completed.
- 9.22 A good portion of the programme of unsealed metalling has also been completed but is expected to continue into June. Overall, the roads in the Murchison Area are in good condition for this time of year.

River Activity Update

Physical Works Progress (X&Y rated river sections)

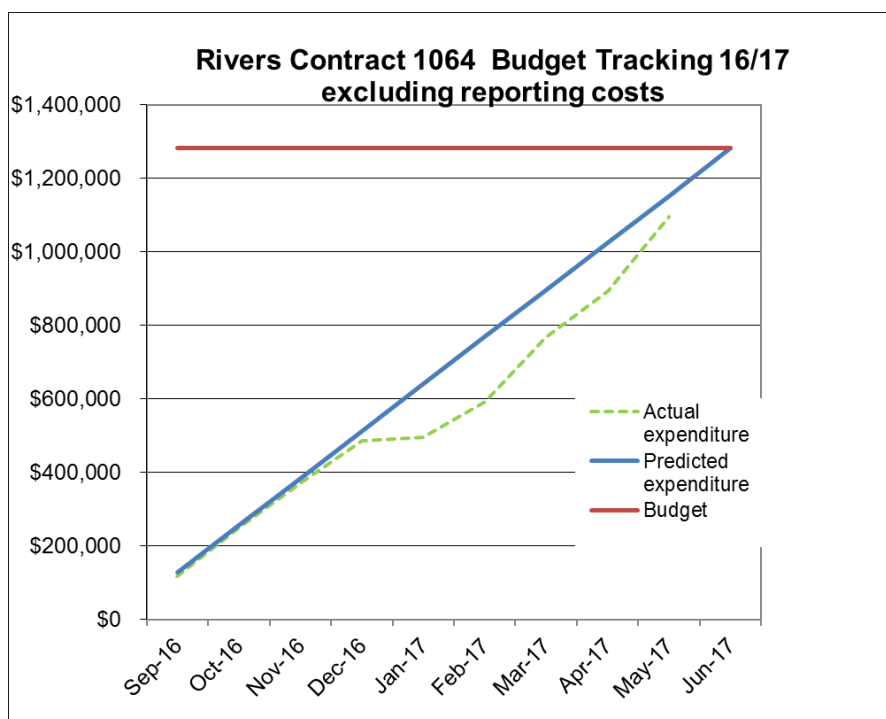
- 9.23 Expenditure for maintenance Contract 1064 with Taylors Contracting Ltd for the current contract financial period is \$1,095,000. This is \$60,000 under the forecast expenditure for the same period (September 2016 to April 2017 inclusive). This is a further improvement on the previous period with a claim of \$200,000 for May 2017.
- 9.24 A second flood, which raised river levels districtwide on 17 May 2017 has exacerbated damaged areas from the pre-Easter flood with Pigeon Valley, Dovedale and the Upper Moutere being the worst hit. The contractor has dis-established from Golden Bay flood repair work in Dovedale and Upper Moutere is now well underway.
- 9.25 The planting season is well underway, with sites in the Waimea, Moutere and Lower Motueka completed.
- 9.26 Newly erected gates on the Waimea eastern bank have been suffering vandalism and we will be undertaking surveillance monitoring.
- 9.27 The end of Reilly Street in Takaka has now been fully blocked off, our contractor and a community initiative were undertaken to clean up the river bank from camping leftovers.
- 9.28 A group of residents has approached us over Clover Road West pig dog running and carcass dumping with the plan to bring forwards development of this trailhead as part of the Waimea River Park Plan.

River Z (Z rated river sections)

- 9.29 River Z works remain busy with ongoing calls from landowners wanting assistance. The keys areas are Golden Bay, Buller catchment, Dovedale, Wakefield side valleys and the Moutere. The first works from the pre-Easter flood are now underway or completed but contractor availability is an issue.

Other Work

- 9.30 The Takaka riverbed surveys are complete with data received, and the Upper Motueka and Motupiko surveys are on track to be completed by July.
- 9.31 We are working with NIWA to look at undertaking a delimiting survey for the seeding willows in the Motueka catchment.



Coastal Update

Marahau Rock Revetment

- 9.32 There has been erosion of the sand deposited back in November 2016 at the northern end of the existing revetment wall and in front of Wakatu Incorporation land.
- 9.33 The existing resource consent allows for the replenishment of sand twice a year with a total allowable volume per annum of 2000m³.
- 9.34 We are at the point where further sand needs to be relocated to protect the roading infrastructure.
- 9.35 A meeting was held on 3 May 2017 with representatives of the Marahau-Sandy Bay Ratepayers and Residents Association who expressed concern that a more permanent fix should be undertaken by the Council.
- 9.36 It was explained to the Association that an understanding had been reached with Wakatu Incorporation that if it considered a more hard protection option was more acceptable to Wakatu, that they would apply for a resource consent to undertake that work.
- 9.37 To date we are not aware of any action taken by Wakatu Incorporation for an alternative solution to the erosion at this site.

Ruby Bay

- 9.38 There has been no damage identified to the Ruby bay revetment from recent storm events.

Abel Tasman National Park

- 9.39 DoC have indicated that they intend to apply for a resource consent to relocate sand at several sites to protect infrastructure from further risk of coastal erosion.
- 9.40 Tasman District Council staff will provide advice and assist in contract management when work proceeds.

Road Safety Update

School zones

- 9.41 Variable 40km/hr signs have been installed at Brightwater School and Motueka High School. Flashing advance warning signs have been installed on Oxford Street for Richmond Primary School. Static advanced school warning signs have been replaced and additional ones installed at the Riwaka, Parklands, Tasman, Upper Moutere, Wakefield, Tapawera and Collingwood Schools.
- 9.42 The next schools (all those on or near Salisbury Road, Richmond) will be considered during the 2017-2018 year.

Rotary Youth Driver Awareness (RYDA) programme

- 9.43 The RYDA programme was run as a joint project with Tasman and Nelson Colleges attending during March 2017. Overall 780 students from 8 colleges attended the programme. There was also interest from one of the colleges which has not attended previously to attend next year. There was additional local print media coverage as during the week the 50,000 student attended the programme. There was positive feedback from students, teachers and all presenters.

Winter driving

- 9.44 A winter driving campaign using radio, print media and roadside billboards is ongoing. Ice scrapers were also given away at Council service centres and libraries and local workplaces.
- 9.45 The fatigue/take a break campaign was extended through the winter months. Drivers were encouraged to stop at participating cafes with the offer of a free coffee or tea. This campaign was well received and from local feedback did encourage drivers to stop and take a break.

Eyes On

- 9.46 A comprehensive top of the south intersection campaign was run during April, May and June using space on the back of buses, cinema, radio advertising and newspaper coverage.



Seatbelt campaign

- 9.47 A joint top of the south seat belt campaign was held during May and June 2017. This was based on national "What's the Diff" advertising. It involved roadside billboards, radio and print media.

