



WAIMAKARIRI
DISTRICT COUNCIL

Utilities and Roading Committee

Agenda

Tuesday 23 August 2022

4pm

***Council Chamber
215 High Street
Rangiora***

Members:

Cr Robbie Brine (Chairperson)

Cr Al Blackie

Cr Sandra Stewart

Cr Joan Ward

Cr Paul Williams

Mayor Dan Gordon (ex officio)

A MEETING OF THE UTILITIES AND ROADING COMMITTEE WILL BE HELD IN THE COUNCIL CHAMBER, RANGIORA SERVICE CENTRE, 215 HIGH STREET, RANGIORA ON TUESDAY 23 AUGUST 2022 AT 4PM

Recommendations in reports are not to be construed as
Council policy until adopted by the Council

BUSINESS

Page No

1 **APOLOGIES**

2 **CONFLICTS OF INTEREST**

Conflicts of interest (if any) to be reported for minuting.

3 **CONFIRMATION OF MINUTES**

3.1 **Minutes of a meeting of the Utilities and Roding Committee held on Tuesday 19 July 2022**

7-16

RECOMMENDATION

THAT the Utilities and Roding Committee:

- (a) **Confirms** the circulated Minutes of a meeting of the Utilities and Roding Committee held on 19 July 2022, as a true and accurate record.

3.2 **Matters arising**

PUBLIC EXCLUDED MINUTES (*Refer to public excluded agenda*)

3.3 **Minutes of the public excluded portion of the Utilities and Roding Committee Meeting Tuesday 19 July 2022**

4 **DEPUTATION/PRESENTATIONS**

Nil.

5 **REPORTS**

5.1 **Request Approval for Youngs Road Seal Extension – Joanne McBride (Roding and Transport Manager) and Carl Grabowski (Roding Operations Team Leader)**

17-21

RECOMMENDATION

THAT the Utilities and Roding Committee:

- (a) **Receives** Report No. 220810137462.
- (b) **Approves** the sealing of Youngs Road under the Private Funding of Seal Extensions Policy, for a length of 210m from the existing seal on Lineside Road.

- (c) **Notes** that the estimated cost of sealing is \$43,000 excluding GST, of which the Council share will be 50% or \$21,500 excluding GST and the property owner share will be \$24,725 including GST.
- (d) **Notes** that funding is available within the Subdivision Contribution budget area for Council share of the funding required.
- (e) **Notes** that written agreement will be sought from the property owner prior to any work being undertaken on site.

5.2 Waka Kotahi Procedural Audit Report May 2022 – Joanne McBride (Rooding and Transport Manager) and Gerard Cleary (General Manager Utilities and Rooding)

22-40

RECOMMENDATION

THAT the Utilities and Rooding Committee:

- (a) **Receives** Report No. 220725126300.
- (b) **Notes** the Waka Kotahi Procedural Audit Report provided an in depth report focused around four subject areas with two being assessed as “Effective” and two as “Some Improvement Needed”, resulting in an overall rating of “Some Improvement Needed”.
- (c) **Notes** the report made three recommendations for improvement, one relating to the financial processes, one for procurement procedures and the last related to contract management along with four suggestions which are more minor in nature.
- (d) **Notes** that an Action Plan has been developed and implemented with work being undertaken to address all issues by December 2022.
- (e) **Circulates** this report to the Community Boards for information.

5.3 2021-2022 Flood Events – Service Requests and Further Investigations Update – Emile Klopper (Flood Team Lead) Caroline Fahey (Water Operations Team Leader) and Kalley Simpson (3 Waters Manager)

41-67

RECOMMENDATION

THAT the Utilities and Rooding Committee:

- (a) **Receives** report No 220811137957.
- (b) **Notes** that 598 drainage service requests were received related to the significant rainfall events in May 2021, December 2021 and February 2022, from which a total of 61 areas were identified for further investigation work.
- (c) **Notes** that 17 of the 61 investigations are either complete, and the issue resolved, or incorporated into the Business as Usual (BAU) work and is being tracked as part of a maintenance or capital works programme.
- (d) **Notes** that 685 drainage service requests were received related to the rainfall events on 12 July 2022, 20 July 2022, 26 July 2022 and 30 July 2022 and further work is currently underway to identify the number of additional further investigations required.
- (e) **Notes** that a page has been set up on the Council’s website to provide updates on the status of drainage works underway, which will be updated to include information related to the July rainfall events.

URL:<https://www.waimakariri.govt.nz/services/water-services/stormwater/drainage-works>

- (f) **Notes** that a communications strategy will be developed that covers both general messaging as well as targeted area specific information.
- (g) **Circulates** this report to the Council and Community Boards for information.

6 PORTFOLIO UPDATES

- 6.1 Roading – Councillor Paul Williams
- 6.2 Drainage and Stockwater – Councillor Sandra Stewart
- 6.3 Utilities (Water Supplies and Sewer) – Councillor Paul Williams
- 6.4 Solid Waste– Councillor Robbie Brine
- 6.5 Transport – Mayor Dan Gordon

7 MATTERS REFERRED FROM KAIAPOI-TAUHIWI COMMUNITY BOARD

- 7.1 Island Road / Ohoka Road Intersection Improvements – Approval of Traffic Signal Scheme Design – Joanne McBride (Rooding and Transport Manager) and Glenn Kempton (Project Engineer)

68-96

RECOMMENDATION

THAT the Utilities and Rooding Committee:

- (a) **Adopts** the Island Road / Ohoka Road Traffic Signals Scheme Design, as per section 3.4.1 of this report.
- (b) **Authorise** staff to proceed to detailed design stage.
- (c) **Approves** the installation of the required no stopping lines through the intersection, to be installed as part of construction.
- (d) **Notes** that the recommended scheme design option includes raised speed tables to align the design with Waka Kotahi's Standard Intervention Toolkit and Safe System approach.
- (e) **Notes** that staff will continue to work alongside Waka Kotahi to progress the traffic signals design and give consideration for potential queuing and any adverse impacts due to the proximity of the off-ramp.
- (f) **Notes** that staff conducted an All Boards briefing on the 4th August 2022 for discussion of three options.
- (g) **Notes** that there was Council budget of \$100,000 allocated to the design for this project in the 2021/22 budget, and that unused budget has been carried over to allow detailed design to progress in 2022/23.
- (h) **Notes** that Waka Kotahi have not approved co-funding for the construction of this project at this time, and that Council staff are continuing to advocate for funding to support this project in the future.

7.2 Approval to Consult on Scheme Design Options for the Tuahiwi Footpath – Joanne McBride (Roading and Transport Manager) and Allie Mace-Cochrane (Graduate Engineer)

97-107

RECOMMENDATION

THAT the Utilities and Roading Committee:

- (a) **Receives** Report No. 220801130424.
- (b) **Approves** consultation being undertaken on the proposed scheme design options shown in Attachment i.
- (c) **Notes** that a communication and engagement plan will be put together following approval of this report which will detail the method of engagement for directly affected residents, the Marae, and Ngāi Tūāhuriri.
- (d) **Notes** that there is a budget of \$450,000, allocated within PJ 101229.000.5135, for the 2022/2023 financial year to undertake the detailed design and construction of the Tuahiwi Footpath.
- (e) **Notes** that all three scheme design options are below the allocated budget of \$450,000 and include 20% contingency.

8 MATTERS FOR INFORMATION

8.1 Request for Approval to Engage Waugh Infrastructure Management Limited for 3 Waters Climate Change Risk Assessment Project – Colin Roxburgh (Water Asset Manager)

108-144

RECOMMENDATION

THAT the Utilities and Roading Committee

- (a) **Receives** the information in Item 8.1.

9 QUESTIONS UNDER STANDING ORDERS

10 URGENT GENERAL BUSINESS

11 MATTERS TO BE CONSIDERED WITH THE PUBLIC EXCLUDED

Section 48, Local Government Official Information and Meetings Act 1987

RECOMMENDATION

THAT the public be excluded from the following parts of the proceedings of this meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution, are as follows:

Item No	Minutes/Report of:	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
11.1	Minutes of the Public Excluded portion of the Utilities and Roding Committee Meeting Tuesday 19 July 2022.	Confirmation of Minutes	Good reason to withhold exists under Section 7	Section 48(1)(a)
REPORTS				
11.2	Report from Management Team meeting	Report for Information	Good reason to withhold exists under Section 7	Section 48(1)(a)

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987, and the particular interest or interests protected by section 6 or section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public are as follows:

Item N°	Reason for protection of interests	Ref NZS 9202:2003 Appendix A
11.1 – 11.2	Protection of privacy of natural persons To carry out commercial activities without prejudice	A2(a) A2(b)ii

CLOSED MEETING

See Public Excluded Agenda (separate document)

OPEN MEETING

NEXT MEETING

The next meeting of the Utilities and Roding Committee is scheduled for 3.30pm, on Tuesday 27 September 2022.

Workshop

- *Annual Eastern Districts Sewer Scheme – Kalley Simpson (3 Waters Manager)*

WAIMAKARIRI DISTRICT COUNCIL

MINUTES OF A MEETING OF THE UTILITIES AND ROADING COMMITTEE HELD IN THE COUNCIL CHAMBER, RANGIORA SERVICE CENTRE, 215 HIGH STREET, RANGIORA ON TUESDAY 19 JULY 2022 COMMENCING AT 3.30PM

PRESENT

Councillor R Brine (Chairperson), Councillors S Stewart, J Ward and P Williams

IN ATTENDANCE

Councillors P Redmond, W Doody
J Millward (Acting Chief Executive), G Cleary (remotely via Zoom), J McBride (Roading and Transport Manager), C Roxburgh (Water Asset Manager), K LaValley (Project Delivery Manager), C Fahey (Water Operations Team Leader), E Klopper (Flood Team Leader), D Lewis (Land Drainage Engineer), G Bennett (Stormwater Engineer) and A Smith (Governance Coordinator)

1 APOLOGIES

Moved Councillor Williams Seconded Councillor Ward

THAT apologies for absence be received and sustained from Councillor Blackie and Mayor Gordon.

CARRIED

2 CONFLICTS OF INTEREST

There were no conflicts of interested noted.

3 CONFIRMATION OF MINUTES

3.1 Minutes of a meeting of the Utilities and Roading Committee held on Tuesday 21 June 2022

Moved Councillor Williams Seconded Councillor Ward

THAT the Utilities and Roading Committee:

- (a) **Confirms** the circulated Minutes of a meeting of the Utilities and Roading Committee held on 21 June 2022, as a true and accurate record.

CARRIED

3.2 Matters arising

There were no matters arising.

4 DEPUTATION/PRESENTATIONS

There were no deputations or presentations.

5 REPORTS

5.1 Proposed Roding Capital Works Programme for 2022/23 – Joanne McBride (Roding and Transport Manager)

J McBride presented this report seeking the committees approval of the Roding Capital Works Programme for the 2022/23 year, and the indicative three year programme for the following years. This was mostly for assets that require renewal and includes new footpaths, road safety programme, and public transport infrastructure. Feedback had been sought from the community boards and this had been included in the report. The road safety programme also includes active warning signs outside Sefton School.

Councillor Williams asked if the Capital Works programme could come back to the Community Boards (specifically Rangiora), to allow the Board members to have some input into the prioritisation of projects. J McBride responded that a number of the programme projects are condition driven and need to meet Waka Kotahi funding criteria, but the Community Boards could be given the opportunity to look at the minor works programme. J McBride agreed that time could be given to include discussion with the Board for future capital works programmes.

Councillor Doody referred to the intersection improvements and asked if there had been consideration given to upgrading the Tram Road/Oxford Road intersection, to realign it from its current curved approach. J McBride noted that this had been identified as needing improvements, as a separate project within the Long Term Plan. J McBride agreed to provide the proposed dates in the LTP that this work would be undertaken. Councillor Doody also asked if the School Warning Signs were going to be available for all schools. J McBride advised that as part of the new Setting of Speed Limits Rule, there was to be a speed management plan developed for the area that the authority controls and this was to include information on how it planned to meet the targets for Road to Zero, for school safety and to reduce speeds outside schools. Over coming months staff would be assessing all schools in the district, and what needed to be done to meet the Road to Zero targets. There would be further discussion with Council on this and also with Waka Kotahi on how this would be funded.

Moved Councillor Williams

Seconded Councillor Ward

THAT the Utilities and Roding Committee:

- (a) **Receives** Report No. 220705114266.
- (b) **Approves** the attached 2022/23 Roding Capital Works Programme (TRIM No. 220705114267).
- (c) **Authorises** the Roding Manager to make minor changes to this programme as a result of consultation or technical issues that may arise during the detailed planning phase, provided the approved budgets and levels of service are met, and the changes are reported to the Utilities & Roding Committee.
- (d) **Endorses** the indicative Roding Programme for the three years following 2022/23.
- (e) **Circulates** this report to the Community Boards for information.

CARRIED

Councillor Williams reiterated his earlier comment for community board members to have more input into prioritising of roading projects in their areas.

Councillor Doody offered congratulations on the report, which showed a good balance of projects across the district.

5.2 Ocean Outfall Benthic Survey – Caroline Fahey (Water Operations Team Leader) and Kalley Simpson (3 Waters Manager)

C Fahey presented this report which informed the committee of results of the benthic survey undertaken on the Ocean Outfall by NIWA in May 2022. The report showed that there were no significant issues raised by the survey and the Council has met all the requirements of the consent.

Councillor Williams noted that it was pleasing that all the consent requirements had been met, but asked if the Council was working towards providing a better level of service which may be a requirement at the time of renewal of the consent. G Cleary acknowledged Councillor Williams question and also referred to previous investigations that had been undertaken some years ago by the Council, following complaints about sea foam. There were extensive investigations carried out to determine if there was any link between the sea foam and the ocean outfall discharge. Another part of the consent that requires work by the Council was cultural monitoring and staff were endeavouring to get this underway at the moment and would be working with Te Ngai Tuahuriri to establish this. With the new Water Regulator, the Council will also need to be giving effect to Taumata Arowai.

Councillor Williams would also like to be informed at a future briefing the cost of any future upgrades required for the Ocean Outfall to maintain compliance with the consent.

Councillor Stewart asked if there was any clam dredging undertaken in Pegasus Bay and had there been any consultation with this industry. G Cleary said there ocean outfall was not having any adverse effect on commercial fishing operations in the area. It was agreed that it would be of benefit for the Council to engage with those in the fishing industry and be pro-active. Councillor Stewart saw benefit in this report being circulating wide in the community.

Moved Councillor Williams Seconded Councillor Ward

THAT the Utilities and Roading Committee:

- (a) **Receives** report No. 220707115265.
- (b) **Notes** that the survey of physical, chemical, and bacteriological parameters of surface waters, sediment physicochemical properties and seabed fauna assemblages undertaken by NIWA in May 2022 found no significant effects from the Ocean Outfall, based on sampling and analysis undertaken.
- (c) **Notes** that no significant effects attributable to discharge from the Ocean Outfall were evident from the analysis of the spatial and temporal distribution of benthic biota living in and around the seabed when comparing the results of this survey with previous post-construction surveys.
- (d) **Notes** that this report will be submitted to Environment Canterbury and circulated to the Community Boards, Mahi Tahī Committee and the Waimakariri Water Zone Committee as part of the Ocean Outfall Annual Compliance Report 2021/22.

CARRIED

Councillors Williams and Ward both commented that it was pleasing to know that the ocean outfall was operating within the consent conditions and there were no adverse effects on the environment.

Councillor Stewart suggested that there should be a media release go out to all media advising what this survey reveals. Over recent years, a significant amount of money was spent investigating various criticisms of the outfall, and the samples have shown that this is quite contrary to the criticisms and it is important for this information be circulated to the community. With the surveys that have been undertaken, there was 15 years of sampling showing no deterioration in the water quality or the sediments in Pegasus Bay over that time.

5.3 Wastewater Treatment Plant Compliance Reporting – Caroline Fahey (Water Operations Team Leader) and Kalley Simpson (3 Waters Manager)

C Fahey presented this report which informed the Utilities and Rooding committee of recent compliance monitoring reports received from Environment Canterbury for the Council wastewater treatment plants and to set out the proposed approach to respond to the non-compliances received.

Of 13 compliance monitoring reports recently received from Environment Canterbury for various consents held for the Woodend, Rangiora, Oxford, Waikuku Beach and Kaiapoi wastewater treatment plants, six of these reports were graded as non-compliant with further action required. These non-compliances were grouped into three classifications, being Administrative non-compliance (four conditions), Technical non-compliances (four conditions) and process non-compliance. This was due to the Oxford Wastewater Treatment Plant irrigator being damaged in the 2021 wind event and staff were in the process of replacing this.

Councillor Williams expressed concern regarding the Oxford Wastewater Treatment Plant irrigator and the time it had taken to hire a temporary irrigator to rectify the situation. C Fahey responded that the order for the replacement irrigation unit had been impacted by supply chain issues and the non-compliant order was put in prior to the temporary irrigation unit being in place.

Councillor Stewart queried two of the comments in the compliance report from Environment Canterbury – one regarding properties adjacent to the Rangiora Wastewater Treatment Plant, which G Cleary provided a response to.

The second point raised by Councillor Stewart regarding comments in the Ecan compliance report referred to the Oxford Wastewater Treatment Plant, the population in Oxford and future growth. The scheme was designed for a population level which was already exceeded and it was also now accepting trade waste, which the scheme was not initially designed for. The volume of effluent was exceeded when stormwater gets into it and Councillor Stewart also queried how much growth could this plant accommodate when it is already potentially at peak. G Cleary noted that there had been significant funds spent on upgrading the Oxford WWTP and there was still some funding in the Long Term Plan in outer years. There were limitations on this plant and it was an issue to find a long term solution for Oxford. G Cleary advised there would be a briefing scheduled in the near future with the Councillors, to discuss getting this work included in the work programme.

Councillor Doody noted that funding had previously been set aside for investigating where the stormwater was leaking into the wastewater. Though acknowledging there were issues with staff resourcing, she stressed the importance of this investigative work being undertaken. Councillor Doody also expressed concern at the continued cost of this scheme.

Moved Councillor Williams

Seconded Councillor Stewart

THAT the Utilities and Roothing Committee:

- (a) **Receives** report No. 220707115263.
- (b) **Notes** that based on the current compliance grading we expect to achieve 96.2% compliance with our wastewater consents conditions for the 2021/22 financial year.
- (c) **Notes** that of the 13 compliance monitoring reports recently received from Environment Canterbury for various consents held for the Woodend, Rangiora, Oxford, Waikuku Beach and Kaiapoi wastewater treatment plants, six of these reports were graded as non-compliant with further action required against 9 consent conditions.
- (d) **Notes** that Council staff have formally responded to Environment Canterbury requesting that they regrade the administrative and technical non-compliances, and also to provide an update on measures we are implementing to address the process non-compliances.
- (e) **Circulates** this report to the Community Boards, Mahi Tahi Committee and the Waimakariri Water Zone Committee for their information.

CARRIED

Councillor Williams noted that even though Waimakariri was well placed in comparison with other Councils throughout New Zealand with regard to compliance, he suggested that the Council should be aiming for at least 100% compliance with the consent requirements

Councillor Stewart expressed disappointment that the Council was not stringently carrying out the requirements of the consents, though did acknowledge that some of the breaches were technical and still being negotiated. The Council needed to be proactive with these matters rather than responding to ECan report. Councillor Stewart's main concern was with the Oxford treatment plant and also welcomed the variation in the consents so that what the Council was required to do, was what it was actually doing.

Councillor Ward acknowledged that the staff are working on improvements to processes to ensure that there is 100% compliance.

5.4 May 2021, December 2021 & February 2022 Flood Events – Service Requests Update – Emile Klopper (Flood Team Leader), Caroline Fahey (Water Operations Team Leader) and Kalley Simpson (3 Waters Manager)

This report provided an update to the committee on the status of the drainage service requests received related to the significant rainfall events that occurred in May 2021, December 2021 and February 2022. The report focused on the 61 areas identified for further assessment and progress made on staff investigation since the June meeting of the Utilities and Roothing committee. C Fahey spoke to the report advising that of the 61 focus areas, all of these had been allocated and commenced, 17 had been completed or as now considered as Business as Usual. Staff were progressing through the investigations on the remaining 41 focus areas..

Councillor Williams noted that there had been concerns raised by some members of the Drainage Advisory Groups and asked when a meeting could be arranged to provide an update to the Group members. D Lewis advised this

was planned for September, at the next combined meeting of all the Rural Drainage Advisory Groups, with a date still to be confirmed.

Moved Councillor Williams

Seconded Councillor Ward

THAT the Utilities and Roothing Committee:

- (a) **Receives** report No. 220609098129.
- (b) **Notes** that 598 drainage service requests were received related to the significant rainfall events in May 2021, December 2021 and February 2022, which have all been responded to although approximately 138 requests require further maintenance or investigation work.
- (c) **Notes** that there are currently 61 drainage assessments identified and this is likely to increase as the service requests are worked through. Progress made since the previous Utilities & Roothing Committee meeting is set out in Section 4 and is supported by the weekly update memos.
- (d) **Notes** that 17 of these investigations are either complete, and the issue resolved, or incorporated into the Business as Usual (BAU) work, and is being tracked as part of a maintenance or capital works programme.
- (e) **Notes** that background information in regards to the recent flooding event can be viewed in report No. 220310034384 entitled: "*February 2022 Flood Event - Update on Service Requests*".
- (f) **Notes** that a webpage has been set up on the Council's website to provide updates on the status of drainage works underway and targeted information will be sent out to the Waikuku Beach and Kaiapoi communities.

URL: <https://www.waimakariri.govt.nz/services/water-services/stormwater/drainage-works>
- (g) **Notes** that additional budgets for the Swindells Road Drainage Upgrade and Broadway Ave Drainage Upgrade projects in Waikuku Beach and High Street Drainage Upgrade project in Oxford have been approved for inclusion in the 2022/23 Annual Plan.
- (h) **Circulates** this report to the Council and community boards for information.

CARRIED

6 PORTFOLIO UPDATES

6.1 Roothing – Councillor Paul Williams

Councillor Williams noted there had been significant concerns raised by the public on the condition of some gravel roads, especially with the further recent heavy rainfall. It was suggested that the Council contractors may be letting the Council down and any requests for pot holes to be fixed are not being undertaken. Councillor Williams does not believe that the contractors are progressing these requests, which then become much bigger jobs.

6.2 Drainage and Stockwater – Councillor Sandra Stewart

Councillor Stewart advised that the Stockwater Race Bylaw information booklet has now gone out to Waimakariri Irrigation for their comments, and will come back to the panel. Once reviewed, this will go out to 1670 properties, which all have drains on their properties.

Councillor Stewart commented that land drainage is under stress. There were long standing issues that the Rural Drainage Advisory Groups bring up that were sometimes not acted on. Councillor Stewart would like to see these issues addressed and suggested that these would need some change to levels of service and rating.

6.3 Utilities (Water Supplies and Sewer) – Councillor Paul Williams

There had been some spraying undertaken at the Oxford Wastewater Treatment Plant, which should ease the issues. The short term rented centre pivot irrigation system is currently in transit from overseas and hoping to arrive in August.

There were no new or major issues with the Council's wastewater system during the recent heavy rainfall event and there are a number of minor issues being worked through.

Three Waters staff were kept busy by the recent flood event in Oxford. The wind event last night caused some power outages in the Oxford area, making it difficult for repairs to be carried out in the field due to safety issues. With no power, a temporary generator had been deployed to refill the reservoirs in Oxford No. 1 water supply.

6.4 Solid Waste– Councillor Robbie Brine

Councillor Brine advised that the wind caused safety issues for kerbside collection in Oxford yesterday and this would need to be covered by a catch up collection.

A Member of the public was injured at the Southbrook RRP yesterday, which was understood to be wind related and both Council staff and Waste Management were undertaking investigations as to why this happened. Councillor Brine was not aware of the exact injuries that were caused.

6.5 Transport – Mayor Dan Gordon

Mayor Gordon was not present.

7 QUESTIONS UNDER STANDING ORDERS

There were no questions.

8 URGENT GENERAL BUSINESS

There was no urgent general business.

9 MATTERS TO BE CONSIDERED WITH THE PUBLIC EXCLUDED

Section 48, Local Government Official Information and Meetings Act 1987

Moved Councillor Brine Seconded Councillor Williams

THAT the public be excluded from the following parts of the proceedings of this meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds

under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution, are as follows:

Item No	Minutes/Report of:	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
9.1	Report of C Roxburgh (Water Asset Manager) and H Proffit (Water Safety and Compliance Specialist)	Submission of Water Safety	Good reason to withhold exists under Section 7	Section 48(1)(a)
9.2	Report from Management Team meeting	Report for information	Good reason to withhold exists under Section 7	Section 48(1)(a)

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987, and the particular interest or interests protected by section 6 or section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public are as follows:

Item N°	Reason for protection of interests	Ref NZS 9202:2003 Appendix A
9.1 and 9.2	Protection of privacy of natural persons To carry out commercial activities without prejudice	A2(a) A2(b)ii

CARRIED

CLOSED MEETING

Resolution to Resume in Open Meeting

Moved Councillor Brine

Seconded Councillor Ward

THAT for Item 9.1, recommendations (a) to (i) be made public, and recommendation (j), the report, complete attachments and discussion to remain public excluded. For Item 9.2 the recommendation be made public and the report remain public excluded.

CARRIED

The public excluded portion of the meeting commenced at 4.27pm and concluded at 4.39pm.

OPEN MEETING**9.1 Submission of Water Safety Plans for Cust, Garrymere and Ohoka, and Residual Disinfection Application for Cust – Colin Roxburgh (Water Asset Manager) and Hayley Proffit (Water Safety and Compliance Specialist).**

Moved Councillor Ward Seconded Councillor Williams

THAT the Utilities and Roothing Committee

- (a) **Receives** Report No. 220701112062.
- (b) **Approves** the Garrymere Drinking Water Safety Plan for submission to Taumata Arowai.
- (c) **Approves** the Cust Drinking Water Safety Plan for submission to Taumata Arowai.
- (d) **Approves** the Ohoka Drinking Water Safety Plan for submission to Taumata Arowai.
- (e) **Approves** the Cust Residual Disinfection Exemption Application for submission to Taumata Arowai.
- (f) **Authorises** that the General Manager Utilities and Roothing to approve any minor amendments to the documentation covered by this report, following final internal staff review and/or, review by Taumata Arowai, but notes that if significant changes to the plan are required (new risks identified, or significant new improvement projects required to be proposed that cannot be delivered within existing budgets), then staff will report back to the Utilities and Roothing Committee for further approval.
- (g) **Notes** that a communication and engagement plan is being developed to make the community aware of the potential chlorination of our public water supplies.
- (h) **Notes** that a public summary of our DWSPs will be prepared and made available on the Council's website.
- (i) **Notes** that Council staff are currently seeking input from Mahaanui Kurataiao Limited on how Te Mana o te Wai is given effect to within our Source Water Risk Management Plans (SWRMPs) and DWSPs.

CARRIED

REPORT FOR INFORMATION**9.2 Contract 22/14 Williams Street Upgrade Tender Evaluation and Contract Award Report – Report to Management Team Meeting 20 June 2022 – to be circulated to Utilities and Roothing Committee.**

Moved Councillor Ward Seconded Councillor Brine

THAT the Utilities and Roothing Committee

- (a) **Receives** the information in Item 9.2.

CARRIED

NEXT MEETING

The next meeting of the Utilities and Roothing Committee is scheduled for 4pm, on Tuesday 23 August 2022.

There being no further business, the meeting concluded at 4.40pm.

CONFIRMED

Chairperson
Councillor Robbie Brine

Date

BRIEFING

Following the meeting, a briefing was held to provide an update on the following matters:

- *Woodend-Pegasus Water Supply Source Water Quality – Colin Roxburgh (Water Asset Manager) and Gerard Cleary (General Manager Utilities and Roothing, CPEng, CMEngNZ)*
- *Flooding Debrief – Don Young (Senior Engineering Advisor)*

WAIMAKARIRI DISTRICT COUNCIL**REPORT FOR DECISION**

FILE NO and TRIM NO: RDG-32-10 / 220810137462


REPORT TO: UTILITIES AND ROADING COMMITTEE

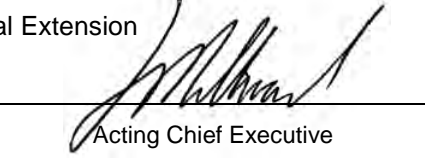
DATE OF MEETING: 23 August 2022

AUTHOR(S): Joanne McBride, Roading and Transport Manager
Carl Grabowski, Roading Operations Team Leader

SUBJECT: Request Approval for Youngs Road Seal Extension

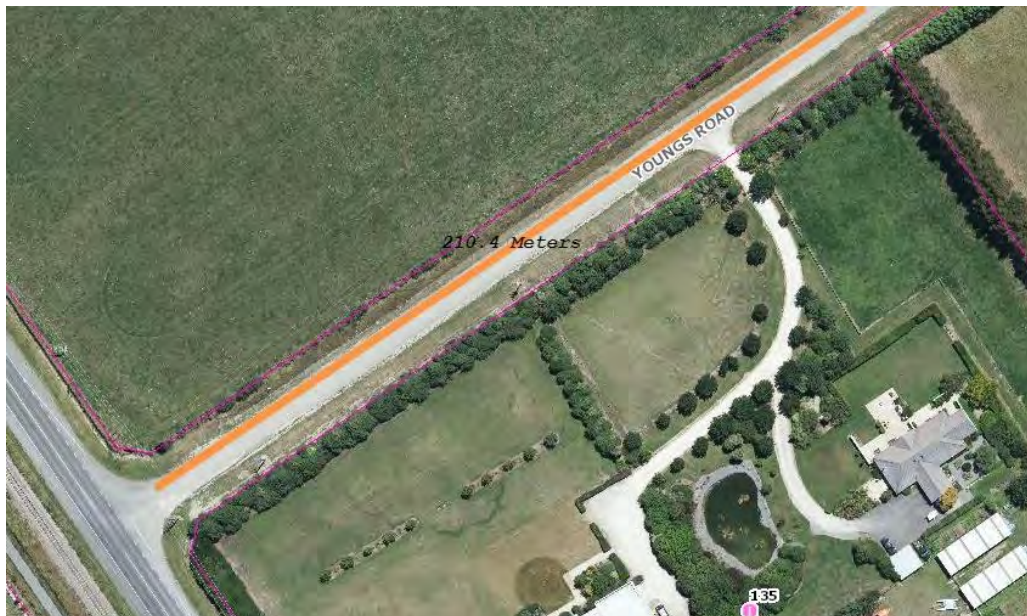
ENDORSED BY:
(for Reports to Council,
Committees or Boards)


General Manager


Acting Chief Executive

1. SUMMARY

- 1.1. This report is seeking approval to undertake a seal extension on Youngs Road under the Private Funding of Seal Extensions Policy.
- 1.2. The length of sealing requested is 210m from the existing seal on Lineside Road to the northern property boundary of no. 135 as per the diagram below.



- 1.3. Sealing has been requested by a property owner on Youngs Road, who operates North Canterbury Cremations Ltd and Gulliver and Tyler Funeral Directors Ltd from no. 135 Youngs Rd.
- 1.4. The property owner has agreed to fund 50% of the cost of sealing in line with the Private Funding of Seal Extensions Policy.
- 1.5. The estimated total cost of sealing is \$43,000 excluding GST of which Council share would be \$21,500 excluding GST.

2. **RECOMMENDATION**

THAT the Utilities and Roding Committee:

- (a) **Receives** Report No. 220810137462.
- (b) **Approves** the sealing of Youngs Road under the Private Funding of Seal Extensions Policy, for a length of 210m from the existing seal on Lineside Road.
- (c) **Notes** that the estimated cost of sealing is \$43,000 excluding GST, of which Council share will be 50% or \$21,500 excluding GST and the property owner share will be \$24,725 including GST.
- (d) **Notes** that funding is available within the Subdivision Contribution budget area for Council share of the funding required, as outlined in section 6.1.
- (e) **Notes** that written agreement will be sought from the property owner prior to any work being undertaken on site.

3. **BACKGROUND**

- 3.1. Youngs Road is located just east of Rangiora and runs north from Lineside Road.
- 3.2. North Canterbury Cremations Ltd and Gulliver and Tyler Funeral Directors Ltd is located at no. 135.
- 3.3. The business operation has grown over the past few years, with the increase in population in Rangiora and the servicing of Cremations for six Funeral companies in Christchurch area and Kaikoura Funeral Services.
- 3.4. This growth in business has resulted in increased traffic movement and the property owner has requested sealing be undertaken under the Private Funding of Seal Extensions Policy to help address dusty / dirty road issues and to help maintain a tidy road frontage for the business.

4. **ISSUES AND OPTIONS**

- 4.1. The Private Funding of Seal Extensions Policy allows for the approval of seal extensions up to a total length of 1km per year, subject to meeting the policy conditions, which this does.
- 4.2. The seal width for this road has been assessed and determined to require a minimum seal width of 6.0m, which meets the requirements of the Engineering Code of Practice.
- 4.3. The minimum length of seal required under the policy is 100m and as such this requested length of 210m complies. The new seal will join to the existing seal at Lineside Rd.
- 4.4. The alignment of the proposed seal extension section is straight with no bends or vertical curves and therefore the proposed sealing is considered appropriate.
- 4.5. The options available to the Utilities & Roding Committee are as follows:
- 4.6. Option One: Approve Sealing of 210m of Youngs Road:
This option involves approving the sealing of 210m of Youngs Rd with the property owner at no. 135 agreeing to pay 50% of the cost of sealing.
This is the recommended option.
- 4.7. Option Two: Decline the Sealing of Youngs Road and retain the status quo:
This option would involve declining the request from the property owner and retaining the unsealed road. This will continue to have impacts on the business and as such is not the recommended option.

It is noted that staff are currently working through other requests for sealing under the Private Funding of Seal Extensions Policy and these will be brought forward if they progress beyond initial discussions.

Implications for Community Wellbeing

There are not implications on community wellbeing by the issues and options that are the subject matter of this report.

4.8. The Management Team has reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Mana whenua

Te Ngāi Tūāhuriri hapū are not likely to be affected by, or have an interest in the subject matter of this report.

5.2. Groups and Organisations

There are not groups and organisations likely to be affected by, or to have an interest in the subject matter of this report.

5.3. Wider Community

The wider community is not likely to be affected by, or to have an interest in the subject matter of this report.

6. OTHER IMPLICATIONS AND RISK MANAGEMENT

6.1. Financial Implications

There are financial implications of the decisions sought by this report.

An estimate has been provided by Corde for the seal extension which would be undertaken under the District Rooding & Drainage Maintenance Contract (CON201943). The cost estimate for sealing Youngs Rd is \$43,000 excluding GST, of which Council share will be \$21,500 excluding GST and the property owner share will be \$24,750 including GST.

This budget is included in the Annual Plan/Long Term Plan. It is anticipated that requests such as this will arise from time to time and as such there is budget allocated within the Subdivision Contribution Area to cover Council share of costs associated with both development and these types of requests.

- Council Performed Works – PJ 100361.000.5133 - \$360,469
- Direct Payment to Developers – PJ 100364.000.5133 - \$418,608

TOTAL - \$779,077

These two budgets then get further allocated to smaller projects within this subdivision contribution area, as required through the year.

The following table outlines the likely commitments in the 2022/23 year within this budget area:

DESCRIPTION	TIMELINES (Likely Year)		ESTIMATED COST \$\$
	2022/23	2023/24	
Enverton Drive (near River Road)		✓	\$100,000
Charles Upham Western Footpath	✓		\$100,000

Topito Road Upgrade	✓		\$175,000
Huntingdon Dr Deeds Strip	✓		\$20,000
Johns Rd Urbanisation as part of Townsend Fields Development	✓		\$110,000
Charles Upham Drive connection to Huntingdon Drive (Not a firm estimate)	✓		\$50,000
Smith Street Footpath extension	✓		\$15,000
Youngs Road Seal Extension (Council 50% cost share)	✓		\$21,500
Pentecost Rd Upgrade - South of the school		✓	\$300,000
Total (estimate) for 2022/23			\$491,500
Available Budget			\$779,077

The predicted expenditure for the financial year if all projects as indicated above proceed and are claimed is \$491,500. This would result an underspending in this budget area.

Funding for Roading growth areas is budgeted to allow under's and over's due to the fluctuating nature of growth within the district and the fact that growth assumptions and actual growth are likely to differ. Therefore it is important to consider this budget as a whole over a longer period of time.

It is noted that over the last five years, despite predicting overspends some years, development often occurs slower than predicted and this budget area has not been overspent in the last 5 years.

As such it is proposed to proceed with the seal extension on Youngs Road.

6.2. Sustainability and Climate Change Impacts

The recommendations in this report do not have sustainability and/or climate change impacts.

6.3 Risk Management

There are risks arising from the adoption/implementation of the recommendations in this report.

There is a risk that development may occur either ahead or behind of the anticipated programme. Staff liaise with developers to better understand timing of proposed developments with an aim to mitigate the risk around this issue.

6.3 Health and Safety

There are health and safety risks arising from the adoption/implementation of the recommendations in this report.

The physical works will be carried out by the District Maintenance Contractor (Corde Ltd) using contract approved health & safety systems. Corde have a SiteWise score of 100%.

7. CONTEXT

7.1. Consistency with Policy

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Authorising Legislation

Not applicable

7.3. Consistency with Community Outcomes

The Council's community outcomes are relevant to the actions arising from recommendations in this report.

There is a safe environment for all

- Harm to people from natural and man-made hazards is minimised.

Transport is accessible, convenient, reliable and sustainable

- The standard of our District's roads is keeping pace with increasing traffic numbers.
- Communities in our District are well linked with each other and Christchurch is readily accessible by a range of transport modes.
- Public transport serves our District effectively

7.4. Authorising Delegations

The Utilities & Roading Committee has the authority to approve work programmes for works that the Council has budgeted a general level of expenditure for.

WAIMAKARIRI DISTRICT COUNCIL**REPORT FOR INFORMATION**

FILE NO and TRIM NO: RDG-29 / 220725126300


REPORT TO: UTILITIES AND ROADING COMMITTEE

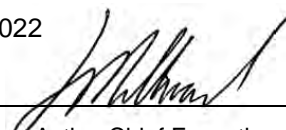
DATE OF MEETING: 23 August 2022

AUTHOR(S): Joanne McBride, Roding and Transport Manager
Gerard Cleary, General Manager Utilities and Roding

SUBJECT: Waka Kotahi Procedural Audit Report May 2022

ENDORSED BY:
(for Reports to Council,
Committees or Boards)


General Manager


Acting Chief Executive

1. SUMMARY

- 1.1. This report is to inform the Utilities and Roding Committee of the results of the Waka Kotahi Procedural Audit that was carried out in May 2022. The final report was received on 30 June 2022.
- 1.2. The objective of the audit is to provide assurance that Waka Kotahi's investment in Waimakariri District Council's land transport programme is being well managed and delivering value for money. It also sought assurance that the Council is appropriately managing risk associated with the investment.
- 1.3. The following subject areas were audited:
- Previous audit issues
 - Financial processes
 - Procurement procedures
 - Contract management
 - Professional services
- 1.4. In summary the audit found that Waimakariri District Council has effective controls in place for both financial processes and professional services and that some improvement is needed in the areas of procurement procedures and contract management.
- 1.5. The audit report made three recommendations and three suggestion for improvement.
- 1.6. The recommendations related to reporting on programme delivery, declaring conflicts of interest and closing out safety audit reports. The suggestions were related to how the monthly claim sheet is linked to information, the use of templates and standard documents, and the numbering of meeting minutes.
- 1.7. An Action Plan has been implemented to ensure all recommendations and suggestions are undertaken and completed by December 2022.

Attachments:

- i. Waka Kotahi Procedural Audit May 2022 Final Report (Trim No. 220809136447)
- ii. Waka Kotahi Procedural Audit - Waimakariri District Council Action Plan 2022 (Trim No. 220629110727)

2. RECOMMENDATION

THAT the Utilities and Roading Committee:

- (a) **Receives** Report No. 220725126300.
- (b) **Notes** the Waka Kotahi Procedural Audit Report provided an in depth report focused around four subject areas with two being assessed as “Effective” and two as “Some Improvement Needed”, resulting in an overall rating of “Some Improvement Needed”.
- (c) **Notes** the report made three recommendations for improvement, one relating to the financial processes, one for procurement procedures and the last related to contract management along with four suggestions which are more minor in nature.
- (d) **Notes** that an Action Plan has been developed and implemented with work being undertaken to address all issues by December 2022.
- (e) **Circulates** this report to the Community Boards for information.

3. BACKGROUND

- 3.1. As part of Waka Kotahi’s Monitoring Investment Performance programme NZTA carry out regular audits of Council’s land transport programmes.
- 3.2. Waka Kotahi last carried out a Procedural Audit of the Waimakariri District Councils land transport programme in March 2018.
- 3.3. The previous 2018 Audit report included two recommendations as follows:
 - Updates its Procurement Strategy to reflect the Transport Agency’s in-house professional services policy requirements; and
 - Confirms that the updated strategy document has been endorsed by the Transport Agency.

Both of these recommendations have been completed and was endorsed by Waka Kotahi in 2019. As such this was noted as completed.
- 3.4. There are three recommendations from the 2022 Audit report which are as follows:
 - R2.1 - Meets the condition of funding for the Low Cost-Low Risk Programme by identifying and reporting on individual project from the programme line
 - R3.1 - Ensures that Conflicts of Interest declarations are completed for all tender evaluations of Waka Kotahi funded contracts
 - R4.1 - Urgently addresses outstanding recommendations resulting from road safety audits conducted and ensures it addresses all road safety audit findings
- 3.5. There are four suggestions from the 2022 Audit report which are as outlined below:
 - S2.1 Considers using hyperlinks from TRIM, instead of screenshots, in the claim spreadsheet
 - S3.1 Considers using a template for administrative documents, and to not copy and paste information from previous documents to reduce the errors cited.
 - S4.1 Considers numbering the Roading Professional Service contract meeting minutes with WPS to provide a clear chronological order
- 3.6. All recommendations and suggestions have been agreed and an action plan has been developed which outlines how and when these audit points will be resolved. Progress against this Action Plan is monitored and will be reported to the Utilities & Roading Committee.

4. **ISSUES AND OPTIONS**

- 4.1. The recent audit noted three recommendations and four suggestions for improvement. Recommendations are required to be actioned, while suggestions are more minor issues which can be done at the Council's discretion.
- 4.2. The recommendations related to reporting on programme delivery, declaring conflicts of interest and closing out safety audit reports.
- 4.3. The suggestions were related to how the monthly claim sheet is linked to information, the use of templates and standard documents, and the numbering of meeting minutes.
- 4.4. All recommendations and suggestions have been agreed and an action plan has been developed which outlines how and when these will be resolved. Progress against this Action Plan is monitored and will be reported to the Utilities & Roading Committee.
- 4.5. Good progress has been made in addressing the issues raised in the Procedural Audit.
- 4.6. Overall the audit rating was "Some Improvement Needed".

Implications for Community Wellbeing

There are not implications on community wellbeing by the issues and options that are the subject matter of this report.

- 4.7. The Management Team has reviewed this report and support the recommendations.

5. **COMMUNITY VIEWS**

5.1. **Mana whenua**

Te Ngāi Tūāhuriri hapū are not likely to be affected by, or have an interest in the subject matter of this report.

5.2. **Groups and Organisations**

There are not groups and organisations likely to be affected by, or to have an interest in the subject matter of this report.

5.3. **Wider Community**

The wider community is not likely to be affected by, or to have an interest in the subject matter of this report.

6. **OTHER IMPLICATIONS AND RISK MANAGEMENT**

6.1. **Financial Implications**

There are not financial implications of the decisions sought by this report.

While this audit does not directly have financial implications, the audit results will help inform Waka Kotahi of the Council's performance when it applies for funding in the future.

6.2. **Sustainability and Climate Change Impacts**

The recommendations in this report do not have sustainability and/or climate change impacts.

6.3 **Risk Management**

There are not risks arising from the adoption/implementation of the recommendations in this report.

The recommendations of the Audit are provided to ensure that Council is meeting Waka Kotahi's requirements as an Approved Organisation (AO) and to provide assurance that

Waka Kotahi's investment in Waimakariri District Council's land transport programme is being well managed and delivering value for money.

6.3 **Health and Safety**

There are not health and safety risks arising from the adoption/implementation of the recommendations in this report.

7. **CONTEXT**

7.1. **Consistency with Policy**

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. **Authorising Legislation**

The report of the investment audit was carried out under section 95(1)(j)(ii) of the Land Transport Act 2003.

7.3. **Consistency with Community Outcomes**

The Council's community outcomes are relevant to the actions arising from recommendations in this report.

There is a safe environment for all

- Harm to people from natural and man-made hazards is minimised.
- Our district has the capacity and resilience to quickly recover from natural disasters and adapt to the effects of climate change.
- Crime, injury and harm from road crashes, gambling, and alcohol abuse are minimised.

Transport is accessible, convenient, reliable and sustainable

- The standard of our District's roads is keeping pace with increasing traffic numbers.
- Communities in our District are well linked with each other and Christchurch is readily accessible by a range of transport modes.

7.4. **Authorising Delegations**

The Committee is responsible for the Roding & Transport Activity and has delegation to receive this audit report and consider matters relating to it.



INVESTMENT AUDIT REPORT

Procedural Audit of Waimakariri District Council

Monitoring Investment Performance

Report of the investment audit carried out under Section 95(j)(ii)(iii) of the Land Transport Management Act 2003.

Ben Roddis

23 May 2022

DRAFT

Approved Organisation (AO):	Waimakariri District Council
Waka Kotahi NZ Transport Agency Investment (2021 – 2024 NLTP):	\$27,262,705 (budgeted programme value)
Date of Investment Audit:	16 th - 19 th May 2022
Auditor(s):	Ben Roddis - Senior Investment Auditor
Report No:	RABRI-2185

AUTHORITY SIGNATURES

Prepared by:



Ben Roddis, Senior Investment Auditor

Approved by:



Yuliya Gultekin, Practice Manager Audit & Assurance

30/06/2022

Date

DISCLAIMER

WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF THIS REPORT, THE FINDINGS, OPINIONS, AND RECOMMENDATIONS ARE BASED ON AN EXAMINATION OF A SAMPLE ONLY AND MAY NOT ADDRESS ALL ISSUES EXISTING AT THE TIME OF THE AUDIT. THE REPORT IS MADE AVAILABLE STRICTLY ON THE BASIS THAT ANYONE RELYING ON IT DOES SO AT THEIR OWN RISK, THEREFORE READERS ARE ADVISED TO SEEK ADVICE ON SPECIFIC CONTENT.

EXECUTIVE SUMMARY

Waka Kotahi NZ Transport Agency's (hereafter Waka Kotahi) funds Waimakariri District Council's land transport activity through its National Land Transport Programme (NLTP). Waimakariri District Council is responsible for the management of the land transport activity, excluding the state highways, within the Waimakariri District. This procedural investment audit was completed for the 1st of July 2017 to the 30th of June 2021 period.

There were two recommendations resulting from the previous March 2018 procedural investment audit. Both recommendations were procurement related and have been satisfied.

Funding assistance for the four financial years to 30 June 2021 were reconciled against the Council's General Ledger records. Sufficient audit trail was evident, along with successful transaction testing across work categories. Generally, Council has good financial practices in place, however an issue was identified during the review of the financial process that requires Council's attention regarding the management of the Low Cost-Low Risk spreadsheet whereby a condition of funding was not being met and this needs to be rectified for future audits.

Waimakariri District Council's current Procurement Strategy expires on the 20th of December 2022 and is published on the Council's website. Six contracts were reviewed with all being generally consistent alongside Council's Procurement Strategy and Waka Kotahi procurement requirements. However, no Conflict of Interest declarations are being completed. Council needs all tender evaluation team members to complete and sign a Conflict of Interest declaration.

The contract management review identified good practices in place including well documented contract monitoring supported by effective record keeping systems. Council use of their electronic document management system (EDMS) is well structured and easy to follow. It's an exemplar of how to structure an EDMS.

Council understands the Road Safety Audit (RSA) process and when they are required, or if an exemption is required. RSAs for improvement projects are being commissioned from independent providers but there was no documentation showing how Council is addressing the resulting recommendations from these audits. None of the reports had been signed off by Council staff. Council must urgently address these findings and formally document their responses and decisions.

AUDIT RATING ASSESSMENT

Subject Areas		Rating Assessment*
1	Previous Audit Issues	N/A
2	Financial Processes	Effective
3	Procurement Procedures	Some Improvement Needed
4	Contract Management	Some Improvement Needed
5	Professional Services	Effective
Overall Rating		Some Improvement Needed

* Please see Introduction for Rating Assessment Classification Definitions

RECOMMENDATIONS

The table below captures the audit recommendations. Agreed dates are provided for the implementation of recommendations by the approved organisation.

We recommend that Waimakariri District Council:		Implementation Date
R2.1	Meets the condition of funding for the Low Cost-Low Risk Programme by identifying and reporting on individual project from the programme line.	1 July 2022
R3.1	Ensures that Conflicts of Interest declarations are completed for all tender evaluations of Waka Kotahi funded contracts.	1 August 2022
R4.1	Urgently addresses outstanding recommendations resulting from road safety audits conducted and ensures it addresses all road safety audit findings.	1 August 2022

1. INTRODUCTION

1.1. Audit Objective

The objective of this audit is to provide assurance that Waka Kotahi NZ Transport Agency's (hereafter Waka Kotahi) investment in Council's land transport programme is being well managed and delivers value for money. We also seek assurance that the Council is appropriately managing risk associated with Waka Kotahi investment. We recommend improvements where appropriate.

1.2. Assessment Ratings Definitions

	Effective	Some Improvement Needed	Significant Improvement Needed	Unsatisfactory
Investment management	Effective systems, processes and management practices used.	Acceptable systems, processes and management practices but opportunities for improvement.	Systems, processes and management practices require improvement.	Inadequate systems, processes and management practices.
Compliance	Waka Kotahi and legislative requirements met.	Some omissions with Waka Kotahi requirements. No known breaches of legislative requirements.	Significant breaches of Waka Kotahi and/or legislative requirements.	Multiple and/or serious breaches of Waka Kotahi or legislative requirements.
Findings/ deficiencies	Opportunities for improvement may be identified for consideration.	Error and omission issues identified which need to be addressed.	Issues and/or breaches must be addressed, or on-going Waka Kotahi funding may be at risk.	Systemic and/or serious issues must be urgently addressed, or on-going Waka Kotahi funding will be at risk.

1.3. Council Comments

Before being finalised Council was invited to comment on the auditors' findings, recommendations, and suggestions. The form and content of the audit report was accepted to finalise.

2. ASSESSMENT FINDINGS

Our findings relating to each subject area are presented in the tables below. Where necessary, we have included recommendations and/or suggestions.

1. Previous Audit Issues

There were two recommendations resulting from the March 2018 audit; both related to procurement and have been satisfied.

RECOMMENDATIONS SUMMARY

That Waimakariri District Council:

	Recommendations	Implementation Target Date
Q.3	a) Updates its Procurement Strategy to reflect the Transport Agency's in-house professional services policy requirements; and b) Confirms that the updated strategy document has been endorsed by the Transport Agency.	a) 30 June 2018 b) 31 July 2018

Waimakariri District Council's comment

The Waimakariri District Council Roading Procurement Strategy was reviewed, updated, and then endorsed by Waka Kotahi in December 2019.

* * *

2. Financial Processes

Effective

Claims for funding assistance for the four financial years 1 July 2017 to 30 June 2021 were reconciled against Council's General Ledger (GL) records with sufficient audit trail evident. Council has good financial practices in place, and costs recorded in the claim spreadsheet are sourced from Council's 'Tech One' GL Codes. The claiming process is clearly mapped to Waka Kotahi work categories and is easy to follow. Appropriate controls are in place for effective monitoring and management of Council's financial accounting systems and three staff members can produce and submit the claim.

The claim spreadsheet is reconciled every month against the GL. The claim spreadsheet has multiple screenshots that relate to important claim information. Council may wish to hyperlink information from TRIM into the claim spreadsheet instead of using screenshots. This would reduce the need for scrolling over the spreadsheet to find relevant data and would also be a check that important claim information is stored within TRIM.

Transaction testing across the four years was successful across several work categories. The transactions tested were eligible for funding assistance and posted to the correct Waka Kotahi work categories, with Council utilising 96% of the MOR approval. Subsidised and non-subsidised expenditure was completed for street sweeping and was tracked to the correct work categories. The 30/70 split is calculated clearly on the contractor's invoice prior to entry into 'Tech One' and through the claims process.

Regarding Council's W/C 341 Low Cost-Low Risk programme (LC-LR):

- there is a condition of funding that "Each low cost, low risk improvements programme must be supported by a list of projects" (project inclusion)
- "Funding approval for the Low cost, low risk programme at the start of the new NLTP is conditional on each programme being supported by a list of projects" (programme submission and management); and
- "The template list is expected to be maintained and updated regularly".

Council have entered a programme line for the Regional Land Transport Programme (RLTP) bid, however as the programme develops into actual projects, the individual projects should be identified in the spreadsheet and actual cost reported against the year in which subsidy was claimed. Council is not meeting this condition.

The balance of the retentions account was confirmed. The account is well maintained and is reconciled every quarter. There are no historic roading retentions.

Recommendation	We recommend that Council: R2.1 Meets the condition of funding for the Low Cost-Low Risk Programme by identifying and reporting on individual project from the programme line.
Suggestion	We suggest that Council: S2.1 Considers using hyperlinks from TRIM, instead of screenshots, in the claim spreadsheet.
Waimakariri District Council's comment	R2.1 – Agreed that funding be reported on an individual project basis in the Low Cost- Low Risk programme. S2.1 – Agreed to move to hyperlinks in the claim spreadsheet from 1 July 2022.

* * *

3. Procurement Procedures**Some Improvement Needed**

Waimakariri District Council's current Procurement Strategy expires on the 20th of December 2022 and is published on the Council's website.

Five physical contracts and one professional services contract were reviewed. All were generally consistent with Council's Procurement Strategy and Waka Kotahi procurement requirements. Three contracts utilised the Lowest Price Confirming (LPC) method and three utilised the Price Quality Method (PQM). Overall, Council has good practices and well-managed procurement. There is healthy competitive market with an average of 4.5 tenderers per contract.

However, it was noted that Conflict of Interest declarations were not being completed. A disclaimer on the tender evaluation sheet is being used to cover Conflict of Interests. After discussing this with Waka Kotahi Procurement and Legal teams, it was confirmed that a declaration (or disclosure) is different to a disclaimer. A disclaimer would usually state that a person is not liable for something and doesn't give a tender evaluation team (TET) member any tools or information as to what may constitute a Conflict of Interest. Council's own '4160 Procurement and Contract Management policy' (pg. 7, section 8) states that "every person on the Tender Evaluation Team (TET) must complete a declaration in writing that they have no actual or undisclosed conflict of interest". Council needs TET members to complete and sign a Conflict of Interest declaration. Incorrectly managed Conflict of Interest can expose Council to a potential risk of public or media criticism, a formal inquiry, a legal challenge etc. Further guidelines can be found at Procurement.govt.nz.

There were a few minor errors noted in documentation, such as the following:

- Two differing dates on the same meeting minutes (Kerb & Channel Renewal 19/42),
- Unsuccessful tender letters going out with the wrong number of tenderers received on them (Rangiora Woodend Cycleway 17/19), and
- Incorrect engineers estimate in the tender approval document (K&C Renewal 19/42).

It was also noted that the TET was named in two contracts, being Roding Professional Services (CON 202020) and Roding and Drainage Maintenance (CON 201943). There is no requirement to name the TET in a request for tender and naming them does carry the risk that if a TET member is ill or leaves the organisation, then Council would need to issue a Notice to Tenderers (NTT) stating a change in the TET.

Tenderlink was used for all six contracts advertised that were audited. It is a requirement under section 10.6a (1.) of the Waka Kotahi Procurement Manual to advertise on the Government Electronic Tender Service (GETS) and Council has started using GETS, as of December 2021. A follow up check on GETS confirmed this with a roading contract being advertised in December 2021 (Ivory Street).

Recommendation	We recommend that Council: R3.1 Ensures that Conflicts of Interest declarations are completed for all tender evaluations of Waka Kotahi funded contracts.
Suggestion	We suggest that Council: S3.1 Considers using a template for administrative documents, and to not copy and paste information from previous documents to reduce the errors cited.
Waimakariri District Council's comment	R3.1 – Agreed. A declaration form has been prepared and is currently going through an approval process and will then be incorporated into our ProMapp processes and Procurement Plans as a gateway.

	S3.1 – Agreed that administrative documents should not be cut and paste. Templates are available. Discussed at Project Delivery Unit and Roothing meetings.
--	---

* * *

4. Contract Management	Some Improvement Needed
<p>Council has a comprehensive programme for monitoring and reporting on the performance of network maintenance and renewal contracts. There are some good and effective contract management practices in place to ensure that Waimakariri District Council is getting value for money from its investments.</p> <p>Council staff are responsible for overseeing maintenance, renewals, and improvements projects. Safety issues are identified, and actions taken to eliminate or mitigate the issue. Meeting minutes were provided to support this with Council staff regularly meeting their contractors regarding the maintenance, renewals, and improvements programmes/projects. It was noted that meeting with the Roothing Professional Services supplier (WSP) have become bi-monthly to make best use of Council staff and contractors time, and with this change Council may wish to consider numbering the meeting minutes to provide a clear chronological order.</p> <p>Contract variations requests and approvals for the contracts selected were communicated using NTC's. There was good documentation describing the reasons for contract variations with accompanying approvals.</p> <p>Four Road Safety Audit (RSA) reports were reviewed, and all complied with the independent reviewer requirement. However, Waimakariri District Council has yet to document how it proposes to address any of the audit report recommendations on two of the reports (Rangiora Woodend/Boys Rd right turn bay design phase <i>and</i> post construction phase), with the remaining two reports missing Council responses i.e., safety engineer response, client response or action taken response (Rangiora Woodend Cycleway design phase and Kaiapoi Cycleway connections post-construction phase). None of the reports had been signed off by Council staff and the four RSAs contained 4 significant and 24 moderate risks that require documented responses. This exposes Council to unnecessary risk if the RSA's recommendations are not addressed. Council must urgently address these findings and formally document its responses and decisions.</p> <p>One road safety audit exemption was cited for the Skewbridge Active Warning signs project, with all the relevant reasoning and signatories present.</p> <p>Council understands the RSA process and when they are required, or if an exemption is required. Council has implemented good practices to improve the RSA process which should assist with closing out the loop on any issues raised in the RSA reports.</p> <p>Council's electronic document management system (EDMS) is well structured and easy to follow. We consider this an exemplar of how to structure an EDMS.</p>	
Recommendation	<p>We recommend that Council:</p> <p>R4.1 Urgently addresses outstanding recommendations resulting from road safety audits conducted and ensures it addresses all road safety audit findings.</p>
Suggestion	<p>We suggest that Council:</p> <p>S4.1 Considers numbering the Roothing Professional Service contract meeting minutes with WPS to provide a clear chronological order.</p>

Waimakariri District Council's comment	<p>R4.1 – Review and completion of all previous safety audits is underway and will be completed by 1 August 2022.</p> <p>S4.1 – Professional Services Contract Meeting Minutes are now chronologically numbered in TRIM. This will be included in the minutes as well going forward.</p>
--	--

* * *

5. Professional Services	Effective
<p>The delivery of professional services is mainly carried out in-house, supplemented by external expertise as required e.g., pavement smoothness. A multiplier of 1.74 is applied directly to in-house roading staff costs across work categories and this figure is justifiable. Council has reviewed this rate for FY 21/22.</p> <p>Council may wish to test the administration fee model to see which one is more realistic and to ensure all costs of the roading activity are being captured if desired. Further information on how to build that methodology can be found through General circulars 14-01 & General circulars 14-06.</p>	
Suggestion	<p>We suggest that Council:</p> <p>S5.1 Considers testing the administration fee model to ensure all costs of the roading activity are being captured.</p>
Waimakariri District Council's comment	Agreed. This will be undertaken in the 2022 year as per the General Circulars provided by the auditor.

* * *

3. APPENDICES

APPENDIX A

Council Feedback

APPENDIX B**Audit Programme**

1. Previous audit March 2018
2. Land Transport Disbursement Account
3. Final Claims for 2017/18, 2018/19, 2019/20 & 2020/21
4. Reconciliation between ledgers supporting final claim and the audited financial statements
5. Transactions (accounts payable) 2017/18, 2018/19, 2019/20 & 2020/21
6. Retentions Account
7. Procurement Procedures
8. Contract Variations
9. Contract Management
10. Road Safety Audits
11. Professional Services
12. Transport Investment On-line (TIO) Reporting
13. Other issues that may be raised during the audit
14. Close-out meeting

APPENDIX C**Contracts Audited**

Contract Number	Tenders Received	Date Let	Description	Contractor		
			Physical Works			
17/19	9	Sept 2017	RANGIORA WOODEND CYCLEWAY	NOR'WEST CONSTRUCTION	Estimate Let Price Final Cost	\$839,393 \$872,157 \$848,919
CON201942	4	Dec 2019	KERB & CHANNEL RENEWALS	ON-GRADE DRAINAGE	Estimate Let Price Final Cost	\$645,284 \$448,889 \$1,084,389
CON201951	3	Feb 2020	RANGIORA WOODEND RD RIGHT TURN BAY	SCHIK CONSTRUCTION	Estimate Let Price Final Cost	\$182,717 \$143,838 \$185,760
CON201943	3	Nov 2020	DISTRICT ROAD MAINTENANCE	SICON CONSTRUCTION (NOW CORDE)	Estimate Let Price Final Cost	\$22,680,292 \$23,068,378 Ongoing
CON202015	5	Jan 2021	FLAXTON FERNSIDE ROUNDABOUT	ISAAC CONSTRUCTION	Estimate Let Price Final Cost	\$1,805,200 \$1,276,103 \$1,506,099
			Professional Services			
CON202020	3	Sept 2020	ROADING PROFESSIONAL SERVICES	WSP	Estimate Let Price Final Cost	\$525,108 \$308,350 Ongoing

PROCEDURAL AUDIT - ACTION PLAN 2022						
Recommendations and Suggestions from the Procedural Audit:	Proposed Implementation Date	Status or Completion Date	Comments	Responsible for delivery	Progress	Updated
PREVIOUS AUDIT ISSUES						
R1	Two recommendations: a) Updates its Procurement Strategy to reflect the Transport Agency's in-house professional services policy requirements; and b) Confirms that the updated strategy document has been endorsed by the Transport Agency	30 June 2018 31 July 2018	Completed	The Waimakariri District Council Rooding Procurement Strategy was reviewed, updated, and then endorsed by Waka Kotahi in December 2019.	Rooding & Transport Manager	Completed 30 July 2022
FINANCIAL PROCESSES						
R2.1	Meets the condition of funding for the Low Cost-Low Risk Programme by identifying and reporting on individual project from the programme line.	1 July 2022	In progress	Agreed that funding be reported on an individual project basis in the Low Cost Low Risk programme.	Rooding & Transport Manager Asset Planning Engineer	Implemented into process. To be included in Waka Kotahi reporting which is due late August. 30 July 2022
S2.1	Considers using hyperlinks from TRIM, instead of screenshots, in the claim spreadsheet	1 July 2022	In progress and ongoing	Agreed to move to hyperlinks in the claim spreadsheet from 1 July 2022	Rooding & Transport Manager Finance Accounts Officer	To be added to first claim of the year which will be prepared late August. 1 July 2022
PROCUREMENT PROCEDURES						
R3.1	Ensures that Conflicts of Interest declarations are completed for all tender evaluations of Waka Kotahi funded contracts.	1 August 2022	Underway Delayed	Agreed. A declaration form has been prepared and is currently going through an approval process and will then be incorporated into our ProMapp processes and Procurement Plans as a gateway.	Rooding & Transport Manager Civil Projects Team Leader	A Conflicts of Interest form has been developed and has been to the Procurement PCG but has not yet been signed off. This is being implemented into the contract management process. 11 August 2022
S3.1	Considers using a template for administrative documents, and to not copy and paste information from previous documents to reduce the errors cited.	1 July 2022	Completed	Agreed that administrative documents should not be cut and paste. Templates are available. Discussed at Project Delivery Unit and Rooding meetings.	Rooding & Transport Manager Civil Projects Team Leader	This has been discussed at the Project Delivery Unit, Civil Projects and Rooding Team meetings. 1 July 2022

CONTRACT MANAGEMENT							
R4.1	Urgently addresses outstanding recommendations resulting from road safety audits conducted and ensures it addresses all road safety audit findings.	1 August 2022	In progress Delayed	Review and completion of all previous safety audits is underway and will be completed by 1 August 2022.	Roading & Transport Manager Civil Projects Team Leader Project Managers	This is underway and nearing completion. Delayed slightly due to weather events however will be completed by the end of August.	11 August 2022
S4.1	Considers numbering the Roading Professional Service contract meeting minutes with WPS to provide a clear chronological order	25 June 2022	Completed	Professional Services Contract Meeting Minutes are now chronologically numbered in TRIM. This will be included in the minutes as well going forward.	Roading & Transport Manager	All minutes updated with sequential numbering.	25 June 2022
PROFESSIONAL SERVICES							
S5.1	Considers testing the administration fee model to ensure all costs of the roading activity are being captured	December 2022	Programmed	Agreed. This will be undertaken in the 2022 year as per the General Circulars provided by the auditor	Roading & Transport Manager	To be undertaken later in 2022.	

R = Recommendation

S = Suggestion

WAIMAKARIRI DISTRICT COUNCIL**REPORT FOR INFORMATION**

FILE NO and TRIM NO: DRA-16-03 / 220811137957

REPORT TO: UTILITIES AND ROADING COMMITTEE

DATE OF MEETING: 23 August 2022

AUTHOR(S): Emile Klopper, Flood Team Lead
Caroline Fahey, Water Operations Team Leader
Kalley Simpson, 3 Waters Manager

SUBJECT: 2021-2022 Flood Events – Service Requests and Further Investigations Update

ENDORSED BY:
(for Reports to Council,
Committees or Boards)



General Manager



Acting Chief Executive

1. SUMMARY

- 1.1 The purpose of this report is to update the Utilities and Roading Committee on the status of the drainage service requests and further investigations related to the following flood events:
- Group 1. 29 to 31 May 2021, 15 December 2021 and 12 February 2022.
- Group 2. 12 July 2022, 20 July 2022, 26 July 2022 and 30 July 2022
- 1.2 A total of 598 drainage service requests were received related to the rainfall events in Group 1 and total of 61 areas were previously identified for further assessment. A further 685 drainage service requests were received related to the rainfall events in Group 2. Council staff are currently triaging and classifying these service requests to determine how many additional investigations are required.
- 1.3 The Flood Team, which was in the process of being disestablished following the Group 1 rainfall events, has been extended to work through the additional services requests and further investigations. Based on the scale of additional service requests, it is anticipated that it will take at least 3-6 months to work through these investigations. Accordingly, while almost all customers have received an initial call back, it may take some time to respond with the outcome of the investigations.
- 1.4 This report provides an update on the 61 further investigations underway for the Group 1 rainfall events, including progress made since the previous Utilities and Roading Committee meeting held on 19 July 2022, and also provides an overview of the Group 2 rainfall events and the processing of service requests.

Attachments

- i. Progress and status of the 61 Further Investigations for Group 1
- ii. Presentation on the July 2022 Flood Events (TRIM 220811137976)

2. **RECOMMENDATION**

THAT the Utilities and Roading Committee:

- (a) **Receives** report No 220811137957.
- (b) **Notes** that 598 drainage service requests were received related to the significant rainfall events in May 2021, December 2021 and February 2022, from which a total of 61 areas were identified for further investigation work.
- (c) **Notes** that 17 of the 61 investigations are either complete, and the issue resolved, or incorporated into the Business as Usual (BAU) work and is being tracked as part of a maintenance or capital works programme.
- (d) **Notes** that 685 drainage service requests were received related to the rainfall events on 12 July 2022, 20 July 2022, 26 July 2022 and 30 July 2022 and further work is currently underway to identify the number of additional further investigations required.
- (e) **Notes** that a page has been set up on the Council's website to provide updates on the status of drainage works underway, which will be updated to include information related to the July rainfall events.

URL: <https://www.waimakariri.govt.nz/services/water-services/stormwater/drainage-works>
- (f) **Notes** that a communications strategy will be developed that covers both general messaging as well as targeted area specific information.
- (g) **Circulates** this report to the Council and Community Boards for information.

3. **BACKGROUND**

- 3.1. Background on the Group 1 rainfall events was previously reported through to the Utilities and Roading Committee in the following reports:
 - May 2021 Flood Event – TRIM 210909144676
 - December 2021 Flood Event – TRIM 211223205713
 - February 2022 Flood Event – TRIM 220310034384
- 3.2. During the month of July 2022, four rainfall events occurred and the total rainfall for the month was about 4 times higher than the typical average for this time of the year. While individually these were not significant events, the cumulative monthly rainfall for the month reached record levels. Additionally the high annual rainfall we have experienced over the past 12 months (refer Figure 1 below) means the catchment in the district are saturated catchments and groundwater levels high to the extent the resurgence channels are flowing in the Mandeville area.
- 3.1. Figure 2 below shows the current groundwater levels in a monitoring bore M35/0143 to the west of Mandeville. When levels are above 10m below ground level the undercurrents are usually following in the District, which is currently occurring in the No.10 Road and Siena Place areas. It is expected that the undercurrents will continue to flow in the Mandeville area for at least the next two months.
- 3.2. Groundwater levels in the coastal area are also very high at the moment, which is impacting drainage systems, particularly soakage type systems, in Waikuku Beach, Pegasus, Woodend Beach and The Pines Beach.

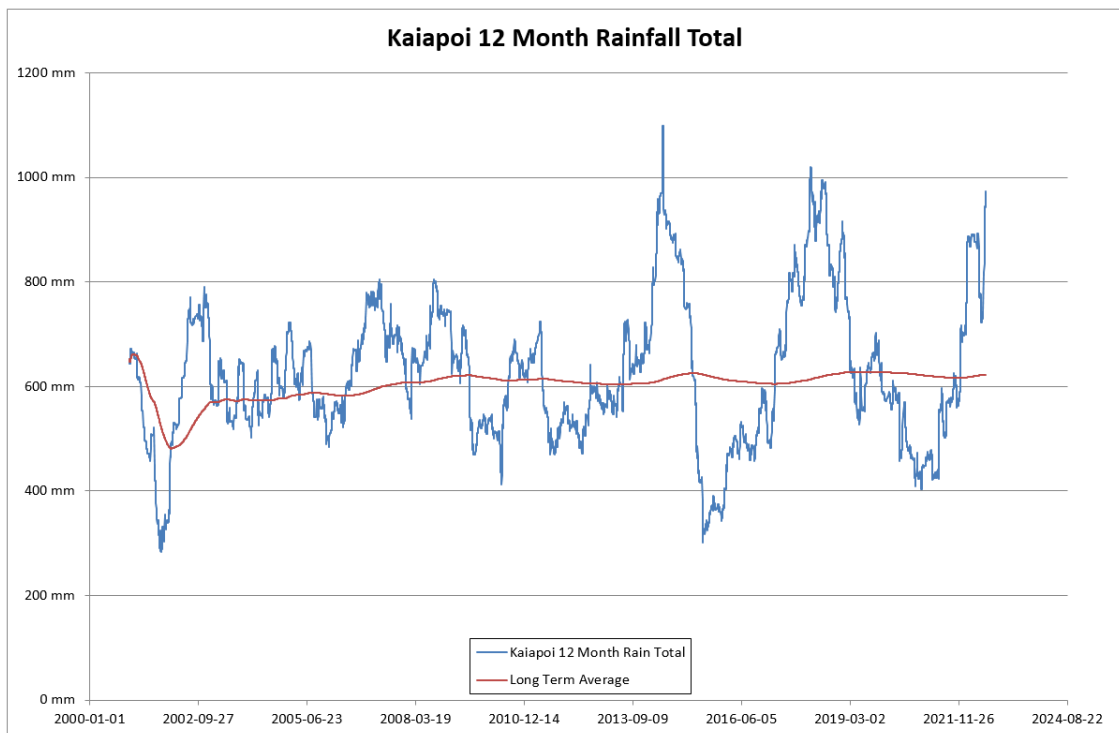


Figure 1 – Rainfall and Return Period 12th February 2022

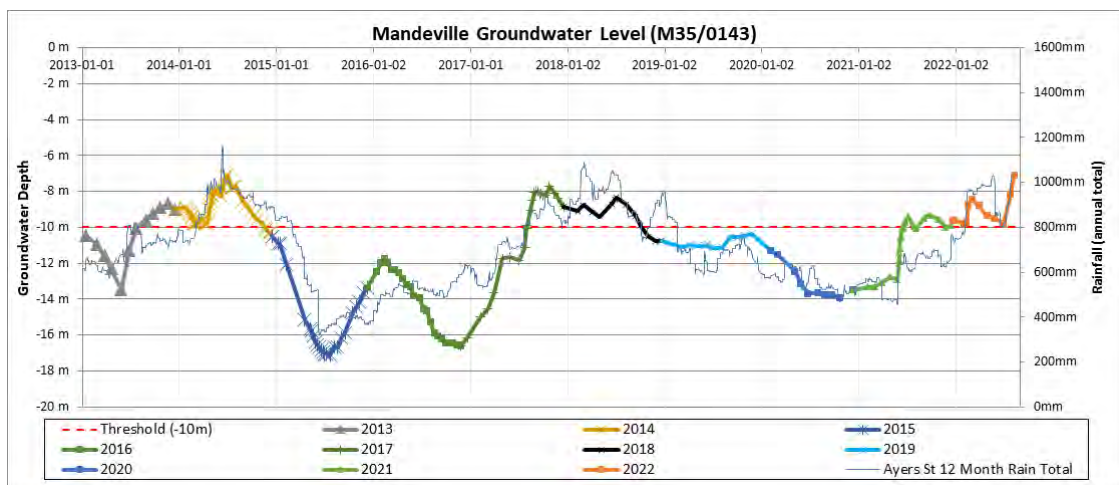


Figure 2 – Mandeville Bore (M35/0143) Groundwater Level

4. **ISSUES AND OPTIONS**

- 4.1. A total of 598 drainage service requests were received related to the May 2021, December 2021 and February 2022 rainfall events and total of 61 areas were identified for further assessment.

Progress since Previous Report

- 4.2. Attachment i provides a snapshot of each of the status of the 61 further investigation and whether CCTV, maintenance and/or survey is required.
- 4.3. In addition to Attachment i, three separate projects were compiled to consolidate the remaining focus areas' works into separate packages of maintenance, CCTV and survey works.
- 4.4. Since the previous U&R Committee update meeting, the Flood Team have continued to focus their attention on investigating the below 5 key focus areas, with the addition of the

aforementioned “consolidation projects”. These key Focus Areas and their progress are discussed in Section 4.6 of this report.

- Broadway Avenue, Waikuku Beach
- Swindells Road, Waikuku Beach
- Fuller Street, Kaiapoi
- Cust Road, Cust
- Ranui Mews, Kaiapoi
- Consolidation Projects
 - Maintenance
 - CCTV & Jetting
 - Surveying

4.5. Table 1 below provides a breakdown/summary of all the focus areas per drainage scheme.

Table 1: 61 Further Investigation Areas Breakdown

Scheme	Total	Status			Planned		
		Allocated	Started	Complete /BAU	Maintenance	CCTV & Jet	Survey
Rangiora	3	3	3	0	1	0	0
Kaipoi	17	17	11	6	2	3	0
Woodend	3	3	3	0	0	1	0
Waikuku Beach	3	3	2	1	2	1	0
Pines Kairaki	3	3	2	1	1	0	0
Pegasus	1	1	1	0	1	0	0
Oxford Urban	7	7	5	2	4	0	0
Ohoka Rural	4	4	3	1	1	1	0
Oxford Rural	1	1	0	1	0	0	0
Coastal Rural	4	4	3	1	1	0	2
Rural Central	1	1	1	0	1	0	0
Cust Rural	3	3	0	3	2	0	0
District Drainage	9	9	7	2	2	0	0
Other	2	2	1	1	1	0	0
Total	61	61	42	19	19	6	2

4.6. Of the 61 areas identified for further investigation, all 61 projects have been allocated and started while 19 have been completed or are considered to be Business as Usual (BAU) (up from 7 last month). The remaining 42 focus areas have been allocated and investigations are underway.

4.6.1. For the purposes of this report, BAU is defined as no further action and/or input is required from the Flood Team whilst “Completed” is defined as the project has been completed and can be closed off.

4.6.2. Appendix I provides a breakdown of all projects’ progress.

Key Focus Areas

4.7. Progress on the key focus areas is summarised below:

4.7.1. Broadway Avenue, Waikuku Beach

- The Flood Team have progressed the 31 Broadway Avenue project to a point that the Project Delivery Unit can take it over to manage, procure and construct as part of their ongoing business as usual projects.
- It is noted that flooding was reported at this location during the 26 July 2022 rainfall event.

4.7.2. Swindells Road, Waikuku Beach

- CORDE have recently (early August) completed the cleaning of the swales and road culverts.
- A sump is currently being installed on Park Terrace, which will enable a private stormwater system from a low point in the rear of properties to be checked for blockages.
- Options memo is still being worked on to determine the recommended upgrading solution. The following potential options are being considered:
 - Localised upgrades of driveway culverts, pipes and swale to provide a functional improvement to the existing system (expected 2-year capacity).
 - System wide upgrades and extension to provide a 5-year level of service capacity in the primary system.
 - Provision of pump chamber to enable efficient and effective deployment of a temporary pump.
 - Installation of a permanent pump station.
 - Use of the adjacent reserve to provide a stormwater retention basin.
- An additional budget of \$450,000, comprising of \$50,000 in 2022/23 for design and \$400,000 in 2023/24 for construction, has been approved as part of Drainage Staff Submission to 2022/23 Annual Plan.
- This budget will enable the system to be upgraded and extended along the toe of the stopbank, and also for a pump chamber to be installed for a temporary pump. The next steps are to finalise the options memo before seeking feedback on the proposed solution.
- It is noted that flooding was reported at this location during the 12 July 2022 rainfall event. In the other July events a temporary pump was proactively deployed, although flooding was reported during the 26 July 2022 rainfall event.

4.7.3. Fuller Street, Kaiapoi

- A draft memo has been issued for review, which recommends a two-stage approach. The first being the management of onsite generated stormwater and the second being the management of offsite generated stormwater and minimising offsite runoff surcharging onto the property.
- It is proposed that advice is provided to the landowners to implement the onsite improvements and that Council progresses the non-return valves and a barrier along the rear boundary.
- The works to implement the proposed solution will be undertaken from the existing Kaiapoi Minor Stormwater Improvements budget in 2022/23.

4.7.4. Cust Road, Cust

- Preliminary design report has been prepared and a workshop has been held between 3 Waters, Roding and the Flood Team to discuss the preliminary designs' findings. Following on from the workshop the implementation of upgrades will be progressed by the Roding team.
- The proposed upgrade improvements include:
 - At 1838 Cust Road a staged approach is proposed whereby firstly the existing soak pits will be replaced with larger and deeper soak pits, and additional soak pits will be installed and then secondly PDU will develop a design to implement a piped overflow system.

- At 1790 Cust Road, landowners are to be notified of their responsibility to maintain driveway culverts. A courtesy clearing of driveway culverts by the maintenance contractor to be completed.
- 1689 Cust Road & 467 Earlys Road, maintenance of the water race and inspection of the pipe is completed. No flooding was observed during the 12 July 2022 event.
- At 1649 Cust Road a new sump is to be installed opposite 1657 Cust Road along with the installation of bunding to allow for some ponding within the swale. A new soak pit will also be installed and is programmed with planned soak pits at 1838 Cust Road.

4.7.1. Ranui Mews, Kaiapoi

- During the 12 July 2022 event the sewer main in Ohoka Road surcharged which caused issues with Ranui Mews onsite sewer system. Portable chemical toilets were deployed to about 12 units during the rainfall event. Unit 20 with the new external vent did not experience any issues with the toilet.
- The developer informed us that air admittance valves (AAV) existed in the roof cavity. One of these was removed during the 12 July rainfall event and this prevented the toilet backing up. All of the AAV were removed in advance of the 26 July rainfall event and no issues with the toilets were reported.
- A price has been obtained from a contractor to modify the AAV vents and extend them through the roof to vent externally.
- Further investigation on the surcharging in the sewer main in Ohoka Road is underway based on information collected from the loggers installed in a manhole at Ranui Mews and in a manhole in Ohoka Road and also from operational data from the Parnham Lane pump station.

4.7.2. CCTV Consolidation Projects

- Table 2 below contains a breakdown of all the further investigations with CCTV works planned and their status.
- Current forecasts show CCTV works to be completed by mid-September, subject to agreeing the scope and approach for a number of the more difficult sites.

Table 2: CCTV Consolidation Focus Areas' Status

Project	Scoped	Priced	Agreed	Complete
Newnham Street	Removed from CCTV consolidation focus areas			
Strachan Place	Y	Y	Y	Y
310 Beach Road	Y	Y	N	N
34 Mansfield Drive	Y	Y	Y	Y
44 Bracebridge Street	Y	Y	Y	Y
46 A Fuller Street	Y	Y	Y	Y
Dale Street	Y	Y	Y	Y
1 Wesley Street	Y	N	N	N
14 Kalmia Place	Y	Y	Y	Y
15 Cridland Street	Y	N	N	N
169 Williams Street	Y	Y	Y	Y
39 Woodglen Drive	Y	N	N	N
5 B Norton Place	Y	Y	Y	Y

31 Broadway Avenue	Y	Y	Y	Y
12 Reserve Road	Y	Y	Y	Y
14 Kiwi Avenue	Y	Y	Y	Y
4 Swindells Road	Y	Y	Y	N
6 Weka Street	Y	Y	Y	N
Wilson Drive	Y	N	N	N
494 Mill Road	Y	Y	Y	Y
Skewbridge Road	Y	Y	Y	Y
467 Earlys Road	Y	Y	Y	Y
1649 Cust Road	Removed from CCTV consolidation focus areas			
Ranui Mews	Y	Y	Y	Y
Kairaki PS	Y	Y	Y	Y

Processing of the July Service Requests

- 4.8. A total of 685 drainage service requests were received related to the July 2022 rainfall events. Council staff are currently triaging and classifying these service requests to determine how many additional investigations are required. It is expected the some of these requests will relate one of the existing Flood Team investigations (referred to above), however it is anticipated that additional investigations will be required.
- 4.9. Of the 685 drainage service requests, approximately a third have already been processed into one the following categories
- Customer Advised – for private related issues
 - Maintenance Programmed / Investigation – where maintenance related checks or work is required to ensure the existing system is operating as intended.
 - Flooding Land / Road Investigation – where further investigation is required to determine if upgrades are necessary to reduce the likelihood of flooding in future events.
- 4.10. Once the triaging and grouping work is complete, the investigations will be prioritised and programmed. Based on the scale of additional service requests, it is anticipated that it will take at least 3-6 months to work through these additional investigations. While almost all customers have received an initial call back acknowledging their request and seeking further information, it may take some time to respond with the outcome of the investigations.
- 4.11. Further programme and progress updates will be reported to the Utilities and Rooding Committee at future meetings as this work progresses. It is noted that only the additional investigation work will be itemised in these updates, however a percentage complete figure will be provided for the maintenance related work.
- 4.12. It is also noted that there have been 130 sewer service requests related to the July rainfall events. These will be separately reported through to the Utilities and Rooding Committee and any further investigations included into the subsequent progress reporting.

Implications for Community Wellbeing

Some of the locations of flooding have had flooding in the past and some residents have had to make insurance claims for flood related damage. This has a potential implication on community wellbeing for these residents.

- 4.13. The Management Team has reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Mana whenua

Te Ngāi Tūāhuriri hapū are not likely to be directly affected by this work. However, they will have an interest in any future proposed works that may have an impact on waterways and rivers. Staff will update the Runanga at the executive meetings and where relevant on specific projects engage with MKT.

5.2. **Groups and Organisations**

Directly affected property owners will be consulted with on the proposed upgrades.

Community boards and drainage advisory groups will be updated on the investigation works and any specific future proposed works that come out of the assessment.

5.3. **Wider Community**

The wider community will be kept informed via the Council's website. A dedicated webpage has been set up for the recent flood events across the wider district, refer:

<https://www.waimakariri.govt.nz/services/water-services/stormwater/drainage-works>

A community meeting was held for Waikuku Beach residents on 6 July 2021, however not all investigation work has been completed in this area. If necessary, a targeted update to the Waikuku Beach community, either via a local newsletter flyer or dedicated flyer will be delivered to all addresses in the village.

Target consultation has been undertaken for the Kaiapoi Community via the Shovel Ready programme of works which will address most of the issues experienced in the Dudley Drain, Feldwick Drain and McIntosh Drain catchments.

6. **OTHER IMPLICATIONS AND RISK MANAGEMENT**

6.1. **Financial Implications**

The costs associated with this investigation work will be charged to existing Drainage asset management and operations budgets. Any physical inspection work such as pipe maintenance and CCTV inspection work will be charged to the maintenance budget for the relevant Drainage scheme.

It is expected additional capital works budget will be required to implement upgrades identified as part of the further investigation work. These budgets will be sought as part of the 2023-24 Annual Plan process.

All other investigation and maintenance works is being undertaken from existing operational budgets.

6.2. **Sustainability and Climate Change Impacts**

The recommendations in this report do not have sustainability and/or climate change impacts.

Any proposed upgrading works will consider the potential impacts of climate change in terms of higher rainfall intensities and sea level rise. The procurement of any physical works will use sustainable procurement practices.

6.3 **Risk Management**

There are no additional risks arising from the adoption/implementation of the recommendations in this report. The improvements implemented as a result of the drainage assessment identified will reduce the overall risk profile to Council and the community.

Health and Safety

The health and safety risks associated with undertaking this investigation work will be managed by standard Council processes.

7. **CONTEXT**

7.1. **Consistency with Policy**

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. **Authorising Legislation**

The Local Government Act 2002 sets out the power and responsibility of local authorities, including the Council's role in providing drainage services.

7.3. **Consistency with Community Outcomes**

The Council's community outcomes listed below are relevant to the actions arising from recommendations in this report.

- *There is a safe environment for all*
- *Core utility services are provided in a timely and sustainable manner*

7.4. **Authorising Delegations**

The Utilities and Roading Committee is responsible for activities related to stormwater drainage.

Appendix I – Progress and status of the 61 Focus Areas

Location	Allocated	Progress	Maintenance	CCTV & Jet	Survey
Newnham Street	Flood Team - Consolidation Projects	Underway			
Ivory Street	Roading	Underway			
Strachan Place	3 Waters	Underway	Planned	Complete	
310 Beach Road	3 Waters	BAU	Complete	Planned	
34 Mansfield Drive	Flood Team - Consolidation Projects	Underway		Complete	
364B Williams Street	Roading	Underway	Planned		
44 Bracebridge Street	Flood Team - Consolidation Projects	Underway		Complete	
46 A Fuller Street	Flood Team	Underway	Complete	Complete	Complete
52 Feldwick Drive	Roading	Underway			
59 Main North Road	3 Waters	BAU	Complete		
68 Sovereign Boulevard	3 Waters	Underway	Planned		
69 Old North Road	3 Waters	BAU			
Dale Street	Roading	Underway		Complete	
1 Wesley Street	Flood Team - Consolidation Projects	Underway		Planned	
Porter Place	3 Waters	Complete	Complete		
14 Kalmia Place	Flood Team - Consolidation Projects	Underway		Complete	
15 Cridland Street West	Flood Team	Underway		Planned	
169 Williams Street	Flood Team - Consolidation Projects	Underway		Complete	
26 Hamel Lane	3 Waters	Complete			
30 Williams Street	Roading	Complete			
39 Woodglen Drive	PDU	Underway		Planned	
5 B Norton Place	PDU	Underway		Complete	Complete
189 Rangiora Woodend Road	Roading	Underway			
31 Broadway Avenue	Flood Team	BAU	Complete	Complete	Complete
12 Reserve Road, 14 Kiwi Avenue & 19 Cross Street	Flood Team	Underway	Planned	Complete	Complete
4 Swindells Road	PDU	Underway	Planned	Planned	Complete
Beach Road	PDU	Underway			
Batten Grove	Flood Team - Consolidation Projects	Underway	Planned		
56 Featherstone Avenue	3 Waters	BAU			

31 Pegasus Main Street	Flood Team - Consolidation Projects	Underway	Planned		
12 - 16 Kowhai Street	Flood Team - Consolidation Projects	Underway	Planned		
6 Weka Street	PDU	Underway		Complete	
Bay Road	3 Waters	Underway	Planned		
13 Queen Street	3 Waters	Complete	Complete		
23 Burnett Street	PDU	Underway	Planned		
189 High Street	PDU	Complete			
Pearson Drain	3 Waters	Underway	Planned		
494 Mill Road	3 Waters	Complete		Complete	
175 Mill Road	3 Waters	Underway	Planned		
181 McHughes Road	PDU	Underway			
Wilson Drive	3 Waters	Underway		Planned	
31 Victoria Street	3 Waters	BAU			
SH1	Roading	Underway			TBD
4 Macdonalds Lane	Flood Team	Underway	Planned		
11 Stalkers Road	Flood Team	Underway			TBD
820 Main North Road	3 Waters	Complete			
Skewbridge	Roading	Underway	Planned	Complete	
1649 Cust Road	Flood Team	BAU			
467 Earlys Road & 1689 Cust Road	Flood Team	BAU	Planned	Complete	
1838, 1840 & 1842 Cust Road	Flood Team	BAU			
105 Taaffes Glen Road	PDU	Complete			
217 Toppings Road	3 Waters	Underway			
51 Smarts Road	PDU	Underway			
556 Steffens Road	Roading	Underway	Planned		
730 Depot Road	Roading	Underway			
951 Upper Sefton	Roading	Complete	Complete		
Dixons Road	Roading	Underway	Planned		
Hodgsons Road	Roading	Underway			
Mt Thomas Road	3 Waters	Underway			
Ranui Mews	3 Waters	Underway	Planned	Complete	
Kairaki PS	3 Waters	Complete		Complete	



July 2022 Flood Events

Council Briefing

9 August 2022



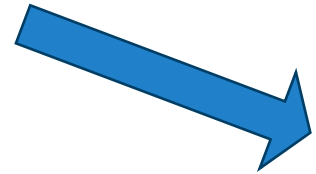
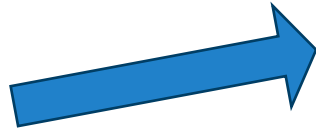
Agenda

- Events – Rainfall & Groundwater
- Service Requests
- Further Investigations
- Next Steps
- Public Communications



July Rainfall Events

- 12 July – 65-75mm
- 20 July – 25-35mm
- 26 July – 50-120mm
- 30 July – 25-35mm



Site	Total Rainfall	Return Period	Critical Duration	Rainfall For Critical Duration
Kaiapoi	74.4mm	12 years, 2 months	12 Hours	62.2 mm
Woodend	74.8mm	10 years, 4 months	12 Hours	62.4 mm
Rangiora	76.6mm	8 years, 10 months	12 Hours	63.0 mm
Mandeville	68.6mm	5 years, 10 months	12 Hours	53.4 mm
Summerhill	69.2mm	4 years, 2 months	12 Hours	53.6 mm
Oxford	66.8mm	4 years, 8 months	12 Hours	57.2 mm

Site	Total Rainfall	Return Period	Critical Duration	Rainfall For Critical Duration
Kaiapoi	109.6 mm	20 years, 2 months	24 Hours	96.2mm
Woodend	119.6mm	30 years, 4 months	24 Hours	108.2mm
Rangiora	78.6mm	4 years, 0 months	24 Hours	67.2mm
Mandeville	72.2mm	3 years, 8 months	24 Hours	62.0mm
Summerhill	61.8mm	1 years, 5 months	24 Hours	51.4mm
Oxford	47.2mm	0 years, 7 months	48 Hours	47.2mm

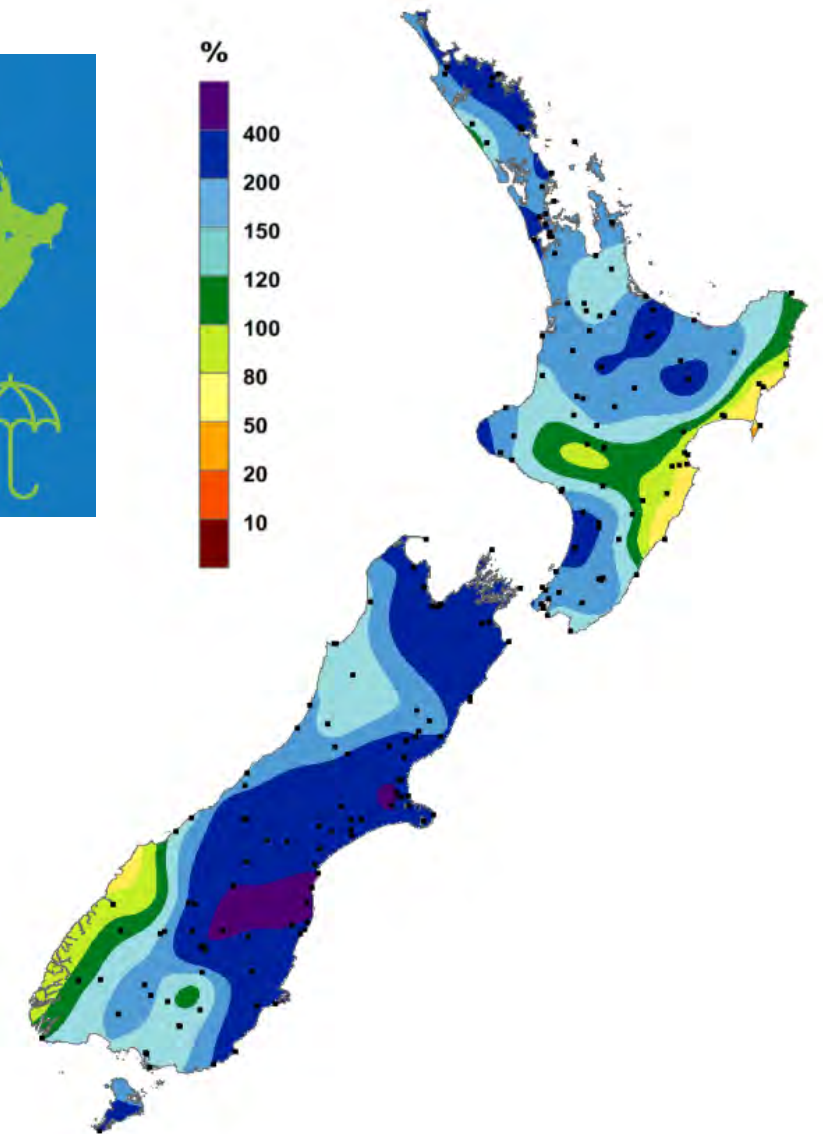
July Total Rainfall



- Kaiapoi – 259mm
- Rangiora – 234mm (Average 54mm)
- Oxford – 205mm (Average 80mm)

*“Rangiora saw 238.4mm of rain in July, the 1991-2020 July average is 54mm so that would be **441% of normal.**”*

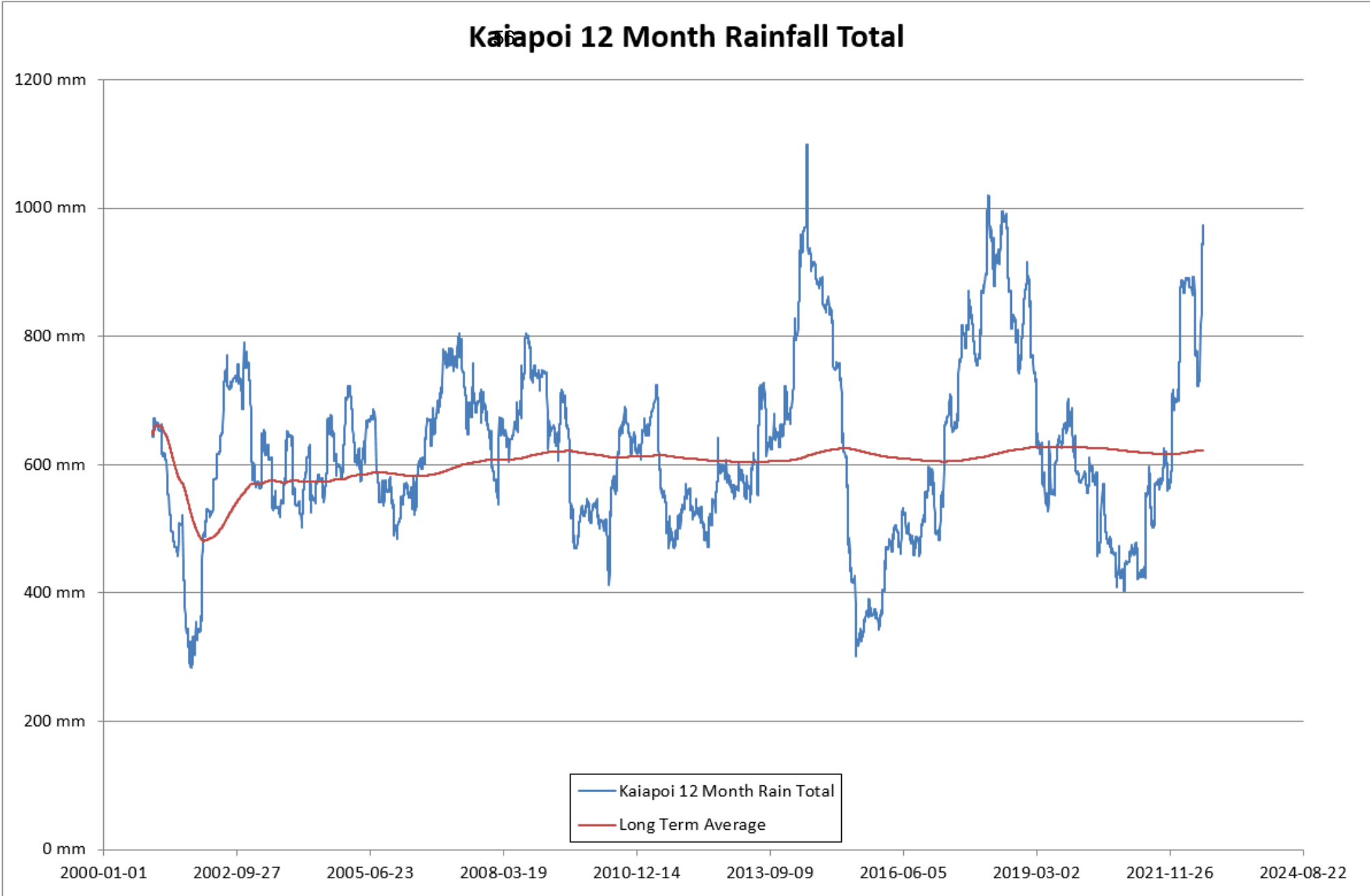
Nava Fedaeff, NIWA Forecaster/Science Communicator



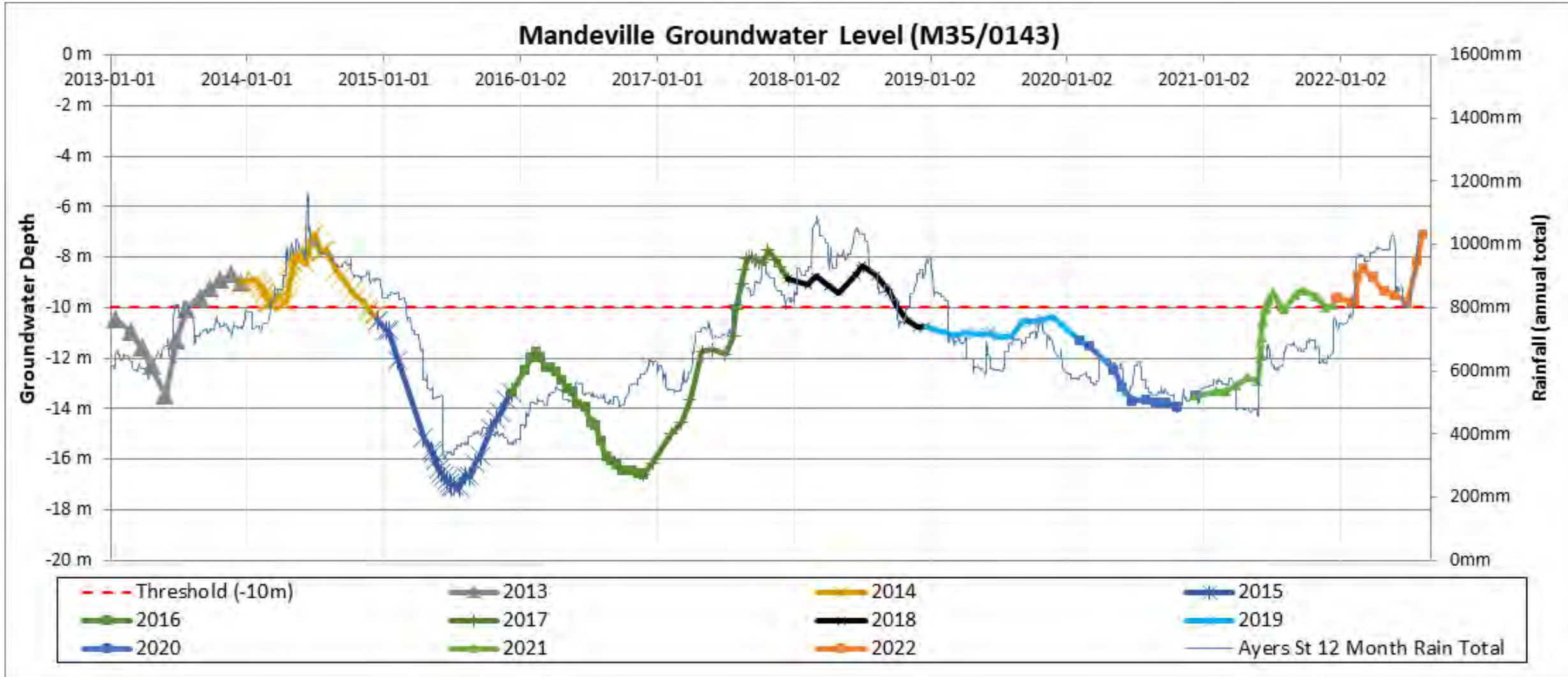
July rainfall

Expressed as a percentage of the 1981-2010 normal.

Annual Rainfall



Groundwater Levels



July Rainfall Events

Summary

- Individually – not significant events
- Cumulative monthly rainfall – at record levels
- Annual rainfall high – saturated catchments
- Groundwater levels high – resurgence channels flowing


“Hasn’t been this bad since 2014”.

Mandeville resident

Service Requests

- Drainage related service requests received - **685**
 - 12 July event – 271
 - 20 July event – 58
 - 26 July event – 234
 - 30 July event – 122
- Typically 800 per year, so 85% years' work in less than a month!
- **Almost all have been called back to acknowledge their request**

29-31 May 2021
15 December 2021
12 February 2022




598 Service Requests



61 Investigations

12 July 2022
20 July 2022
26 July 2022
30 July 2022



685 Service Requests



?? Investigations

Service Requests

- **Sewer related service requests – 130**
- Cridland Street West, Kaiapoi
- Featherstone Ave, Kairaki
- Stalkers Road, Woodend Beach
- Percival Street, Rangiora
- Tuahiwi (Various)
- Mandeville (Various)

- Drone footage has been taken on undercurrent flow in the Mandeville area.



Further Investigations

- **Triage and classification of all Drainage related service requests**
- **Grouping:**
 - Existing Investigation (61)
 - Historical Investigation (e.g.: View Hill Stream / Depot Road)
 - New Investigation
- **Prioritisation**
- **Programming – 3-6 months**

Classification
Customer Advised
Maintenance Programmed
Maintenance Investigation
Flooding Road Investigation
Flooding Land Investigation
Stockwater Issue

Further Investigations

- Kiln Place / McDougal Place

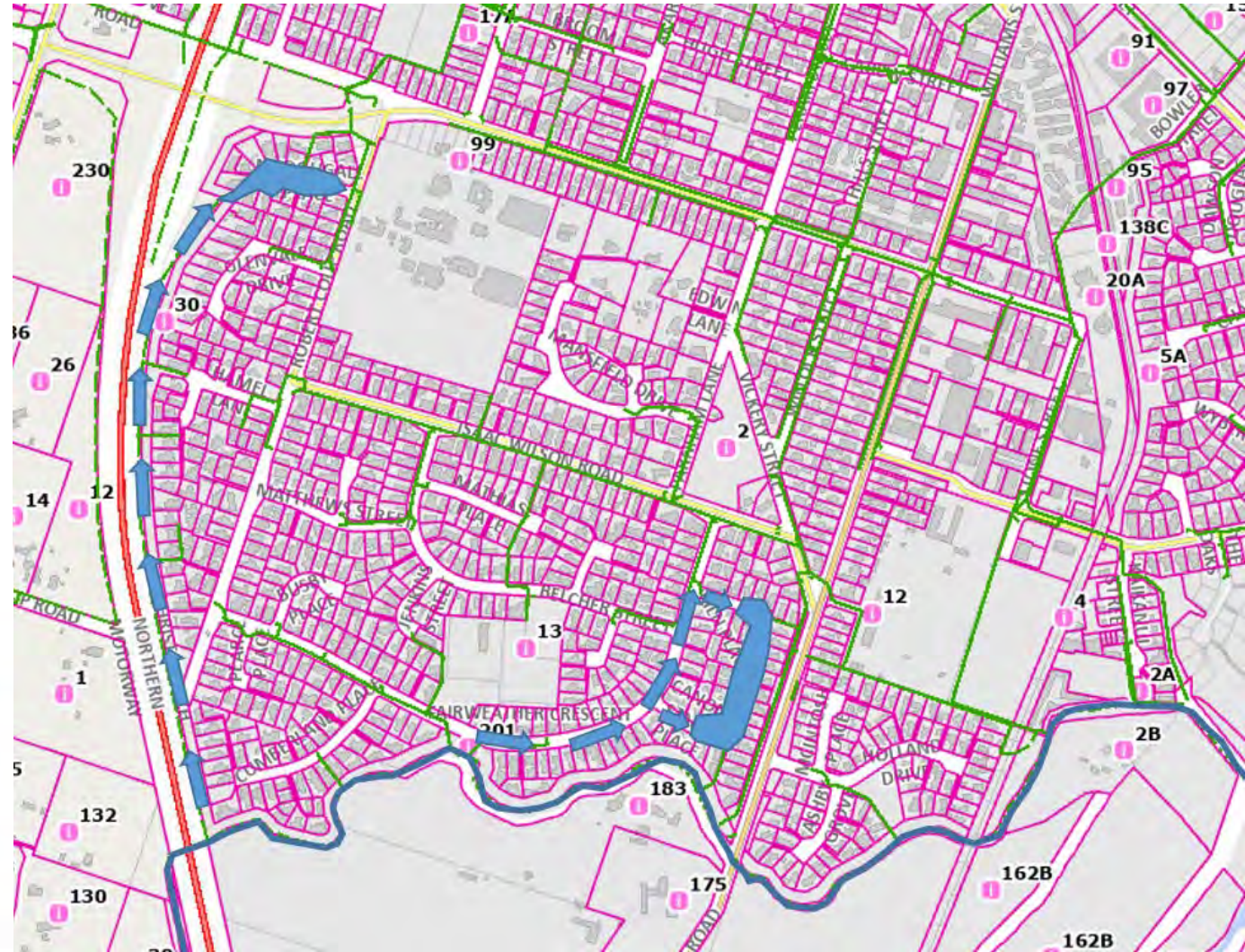
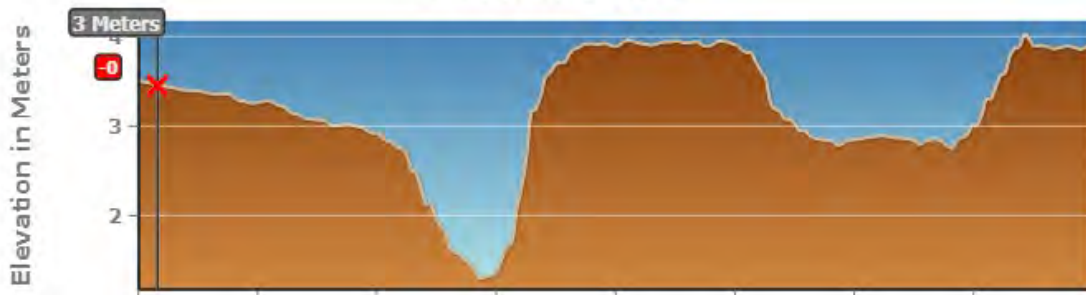


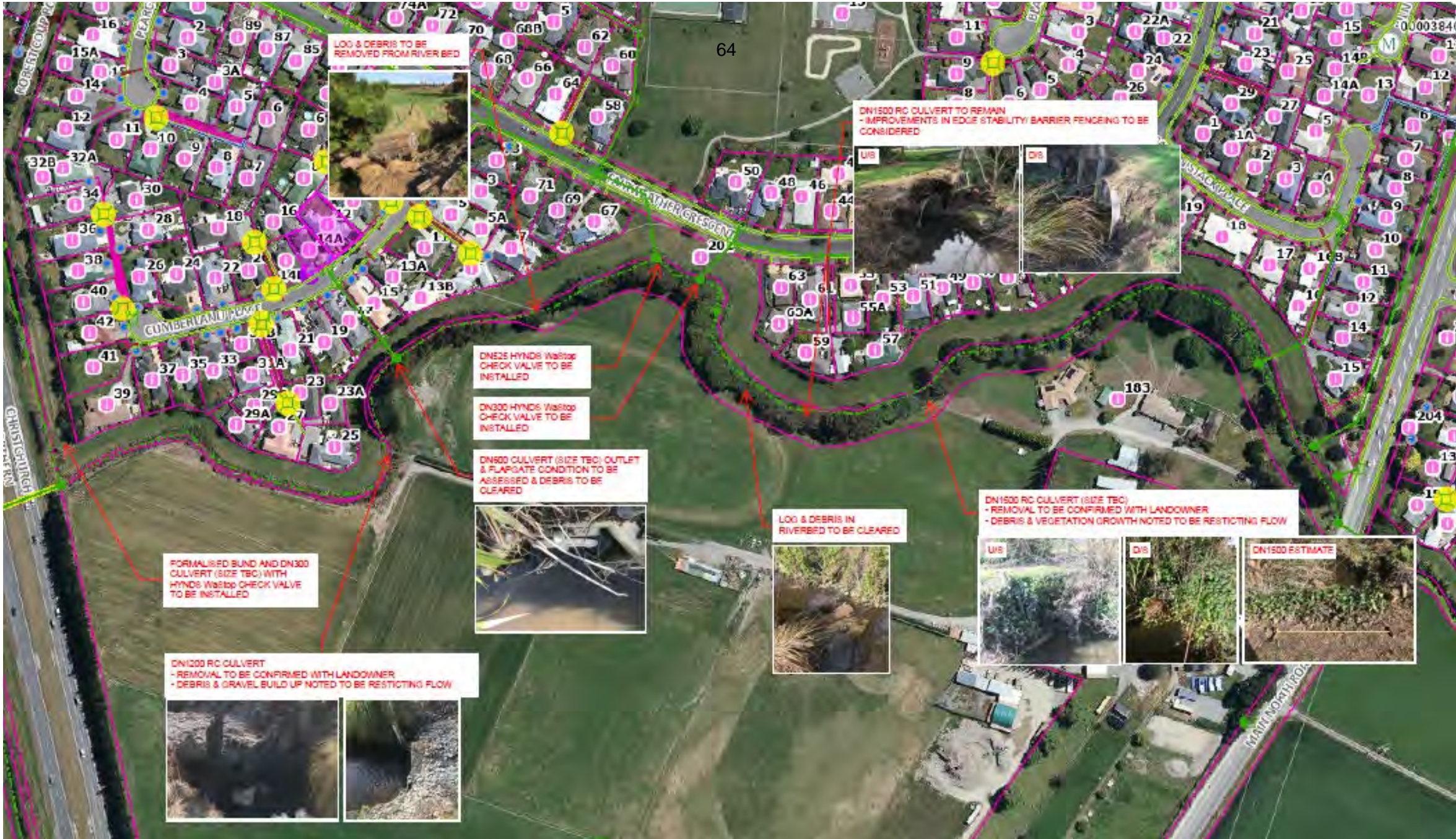
Further Investigations

- Kiln Place / McDougal Place



Elevation Profile





LOG & DEBRIS TO BE REMOVED FROM RIVER BED



DN1500 RC CULVERT TO REMAIN
- IMPROVEMENTS IN EDGE STABILITY/ BARRIER FENCING TO BE CONSIDERED



DN225 HYNDS Wastop CHECK VALVE TO BE INSTALLED

DN300 HYNDS Wastop CHECK VALVE TO BE INSTALLED

DN500 CULVERT (SIZE TBC) OUTLET & FLAPGATE CONDITION TO BE ASSESSED & DEBRIS TO BE CLEARED



LOG & DEBRIS IN RIVERBED TO BE CLEARED



DN1500 RC CULVERT (SIZE TBC)
- REMOVAL TO BE CONFIRMED WITH LANDOWNER
- DEBRIS & VEGETATION GROWTH NOTED TO BE RESTRICTING FLOW



FORMALISED BUND AND DN300 CULVERT (SIZE TBC) WITH HYNDS WASTOP CHECK VALVE TO BE INSTALLED

DN1200 RC CULVERT
- REMOVAL TO BE CONFIRMED WITH LANDOWNER
- DEBRIS & GRAVEL BUILD UP NOTED TO BE RESTRICTING FLOW



Next Steps

- Complete **post event de-brief** with maintenance contractors
- Complete **classifying**, grouping and prioritising additional 685 service requests
- Assign to Flood Team (External consultants + 3 Waters & Roading staff, support from PDU) to undertake **follow-up investigations**
- **Programme** being developed and an progress update will be reported to U&R in August
- Complete **inspections** of Roading network and determine extent of repair work required
- Establish whether this qualifies as an emergency event under Waka Kotahi **funding** rules

Public Communications

- **Website will be updated and kept up to date**
- **Communications strategy to be developed:**
 - General
 - Area specific
- **Individual service request submitters will be contacted to close out once complete**

Questions ...



WAIMAKARIRI DISTRICT COUNCIL**REPORT FOR DECISION**

FILE NO and TRIM NO: RDG-32-89 / TRIM 220516077821

REPORT TO: Kaiapoi-Tuahiwi Community Board

DATE OF MEETING: 15th August 2022

FROM: Joanne McBride, Roding and Transport Manager
Glenn Kempton, Project Engineer

SUBJECT: Island Road / Ohoka Road Intersection Improvements - Approval of Traffic Signal Scheme Design

SIGNED BY:
(for Reports to Council,
Committees or Boards)



 General Manager



 Acting Chief Executive
1. SUMMARY

- 1.1 The purpose of this report is to seek a recommendation from the Utilities & Roding Committee for the scheme design for the upgrade of the Island Road / Ohoka Road intersection, being a signalised intersection.
- 1.2 Three scheme designs were developed by staff following the initial scheme route design conducted in 2013 by Davis Ogilvie, during the planning stage of the Kaiapoi Arterial Road.
- 1.3 Abley Consultants carried out a technical review of five options for the intersection including; Do Nothing, Traffic Signals and three different roundabout options. They also reviewed and updated the traffic flow data assumptions and modelling for both the current and future years.
- 1.4 Consideration has been taken to ensure safety for all modes of transport and to limit disruption /queuing onto the state highway off-ramp.
- 1.5 Following this review, the preferred option is to install traffic signals with raised tables at the intersection. This has the following advantages:
- Allows for controlled movement in all directions
 - Safer for pedestrians and cyclists
 - Better caters for over dimension vehicles which are detoured off the State Highway
 - Raised tables help reduce speed (designed to minimise noise impacts for residents)
 - Phasing can be adjusted to help control queues which may impact the State Highway
 - Effectively provides a dedicated left turn lane off the Ohoka Rd Off-Ramp

Attachments:

- i. Abley Technical Note (TRIM: 220516078091)
- ii. Single Lane Roundabout Scheme Design (TRIM: 210423065918)
- iii. Dual Lane Roundabout Scheme Design (TRIM: 220118004835)
- iv. Traffic Signal Scheme Design (TRIM: 220404049907)

2. **RECOMMENDATION**

THAT the Kaiapoi-Tuahiwi Community Board:

- (a) **Receives** report No. 220516077821.

AND

THAT the Kaiapoi-Tuahiwi Community Board recommends:

THAT the Utilities and Roading Committee:

- (b) **Adopts** the Island Road / Ohoka Road Traffic Signals Scheme Design, as per section 3.4.1 of this report.
- (c) **Authorise** staff to proceed to detailed design stage;
- (d) **Approves** the installation of the required no stopping lines through the intersection, to be installed as part of construction.
- (e) **Notes** that the recommended scheme design option includes raised speed tables to align the design with Waka Kotahi's Standard Intervention Toolkit and Safe System approach.
- (f) **Notes** that staff will continue to work alongside Waka Kotahi to progress the traffic signals design and give consideration for potential queuing and any adverse impacts due to the proximity of the off-ramp.
- (g) **Notes** that staff conducted an All Boards briefing on the 4th August 2022 for discussion of three options.
- (h) **Notes** that there was Council budget of \$100,000 allocated to the design for this project in the 2021/22 budget, and that unused budget has been carried over to allow detailed design to progress in 2022/23.
- (i) **Notes** that Waka Kotahi have not approved co-funding for the construction of this project at this time, and that Council staff are continuing to advocate for funding to support this project in the future.

3. **BACKGROUND**

- 3.1. As part of the New Arterial Road (NAR) project (2013), a design report was undertaken by Davis Ogilvie which investigated long-term options for this intersection. The recommended option was traffic signals and ducting was installed during this project in anticipation for future construction.
- 3.2. Since 2013, the Island Road / Ohoka Road intersection has been flagged as a high risk intersection in the District, with motorist's demonstrating high speeds and risky behaviour during peak traffic flows. There has been 6 reported accidents at this intersection since 2016.
- 3.3. Waka Kotahi's "standard intervention" approach, developed beyond 2013 indicated a preference for a roundabout rather than the previously recommended traffic signals. This is driven by improved safety outcomes associated with roundabouts when compared to traffic signals but does not take into consideration any operational or flow considerations for the intersection.
- 3.4. As a result, Council staff developed two alternative roundabout options for consideration, and engaged Abley Transportation Consultants to provide comment on the roundabout scheme plans, and completed further modelling based on traffic counts between 2013 and present in order to revisit the recommendation stated in 2.1 following the new road construction. The dual-lane roundabout option developed was also modelled as a dual-lane

in the west-bound direction only. This effectively creates a 4th option, or sub-option to the dual lane roundabout. This option is not detailed within this report, but is found within the technical note (attachment i)

- 3.5. The latest technical note (attachment i) provided by Abley recommended traffic signals for the same reasons stated in 2.3 and also allowed more control over potential queuing caused by the State Highway off-ramp.
- 3.6. Council staff will work with Waka Kotahi through the detailed design process to ensure the issue of potential queuing from the intersection up to the motorway off-ramp is well understood and mitigated.
- 3.7. To mitigate the safety concerns associated with the traffic signals, the scheme design provides for raised speed ramps to help reduce vehicle speed through the intersection. This reduces the severity of any accident, and aligns the design with Waka Kotahi's Standard Intervention Toolkit. These would be designed to achieve traffic calming but also to minimise any noise impacts to the adjacent residents.

4. ISSUES AND OPTIONS

- 4.1. Between 2016 to present there has been 6 crashes at the Island Road and Ohoka Road intersection with 4 of these resulting in injuries.
- 4.2. An intersection assessment has been carried out, which achieved a high risk personal risk, and a medium high collective risk based on Waka Kotahi intersection assessment guidelines.
- 4.3. There are two main Road Safety concerns that currently exist at this intersection;
 - 4.3.1 Traffic Speed

The 85th percentile speed from speed counts in 2022, located 50m east of Island Road, is 65km/h with a posted speed limit of 50km/hr. This changes to 60km/h west of the intersection. However this takes into account traffic entering Ohoka Rd from both sides of Island road and is not a good representation of the speeds being observed for vehicles coming off the overpass and / or the off ramp onto a negative grade. This has been supported by comments from the Police.
 - 4.3.2 High Risk Driver Behaviour

Traffic movements witnessed during peak hours contain high risk behaviour. During busy times, traffic from Island Road are observed to take risks in order to cross or merge into Ohoka Road. Other movements that were noticed of concern was traffic crossing lanes from the off ramp to turn right into Island Road.
- 4.4. The Scheme design also takes into consideration connectivity for multi-modal transport such as walking & cycling.
 - 4.4.1 Walking and Cycling connections are required to provide a connection between Kaiapoi East (and the high school) with Silverstream, and also Kendall Park which is located further along Island Road.
 - 4.4.2 The proposed Walking and Cycling Network Plan which was consulted upon earlier this year includes Ohoka Rd overbridge as a "Grade 2" facility, while Kendall Park is proposed as a future "Grade 3" facility. These equate to a shared path, and an on-road cycle lane respectively.
- 4.5. Council staff developed three Intersection Options, which were then submitted to Abley Transportation consultants to carry out traffic modelling to determine delay times (both for

now, and future traffic growth), and a Multi-Criteria Analysis on each scheme option. The results of this are included within Ableys Technical note (attachment i)

The options assessed were as follows:

4.5.1 Traffic Signals with Raised Platforms. Cost Estimate - \$1,250,000 including contingency and professional fees

- In order to achieve the required safety outcomes, this option required a raised speed platform to help reduce likelihood, and severity of accidents.
- This option has the greatest delay times by 2038, achieving a “Level of Service C” with current volumes, and a “Level of Service D” in 2038. This is considered an acceptable level of service, and the signals provide great opportunities to manage the queuing back to the motorway off-ramp
- The traffic signal option provides the best solution to integrate with pedestrian and cycle facilities, encouraging active modes of transport.
- Ducting is already installed, resulting in a significant reduction of install costs that would otherwise result.
- This option came out as the preferred option within the MCA assessment completed by Abley Transportation.
- Provides a good link north for over-dimension vehicles who are not able to travel up the Northern Motorway.

4.5.2 Single Lane Roundabout. Cost Estimate - \$1,200,000 including contingency and professional fees

- The single lane roundabout option increases the risk associated with potential queuing back to the motorway off ramp. Should this occur, it would be impossible to manage, however under normal operating conditions, this option achieves a “Level of Service A” with current traffic volumes, and a “Level of Service C” in 2038.
- Safety outcomes for pedestrians and cyclists are lower with the roundabout options.
- Challenging to cater for over-dimension vehicles while controlling speed through the intersection.

4.5.3 Dual Lane Roundabout (East and West Bound). Cost Estimate - \$1,500,000 including contingency and professional fees

- The dual lane roundabout option provides for a second lane to minimise the risk associated with unexpected delays to motorway off-ramp
- This option provides the greatest Level of Service, achieving a “Level of Service A” with current traffic volumes, and a “Level of Service B” in 2038
- Adding dual lanes (either solely west-bound, or both east and west bound) increases the complexity of the intersection, and increases traffic speed through the intersection which further reduces safety outcomes for pedestrians and cyclists.
- Better able to cater for over-dimension vehicles through the intersection than a single lane roundabout but results in increased through speeds and lane cutting.

4.6. There are three options available for the Kaiapoi-Tuahiwi Community Board;

- i. Recommend to the Utilities and Roading Committee that it approves the recommendations of this report, to allow the project to be progressed to detailed design. This is the recommended option, and based on the recommendations from Abley Transportation Consultant (refer to attachment i).

- ii. Recommend to the Utilities and Roothing Committee that it declines the recommendation of this report, and request staff proceed with the development of either attachment ii, or attachment iii which are both roundabout options discussed within this report. This option is not recommended.
- iii. Recommend to the Utilities and Roothing Committee that it declines the recommendation of this report, and retain the status quo. This is not recommended as the current road layout will not cope with increased growth, nor achieve required safety outcomes. .

4.7. Based on the recommended option, the proposed timeline for the project is outlined below.

Table 1.1: Project timeline

Date	Item
15th August 2022	Kaiapoi – Tuahiwi Community Board Meeting
23rd August 2022	Utilities and Roothing Committee Meeting
September – March 2023	Detailed Design and prepare tender documents
June 2023	Tender (subject to co-funding from Waka Kotahi becoming available)
September / October 2023	Earliest physical works could begin should funding become available.

4.8. The Management Team have reviewed this report and support the recommendations.

5. COMMUNITY VIEWS

5.1. Implications for Community Wellbeing

This report has implications on community wellbeing as the primary purpose of this project is to improve safety for all modes of transport that utilise Island Road and Ohoka Road.

5.2. Groups and Organisations

The upgrading of this intersection will be a key action in the ongoing development of the surrounding towns and the efficiency in which people can access them.

The intersection improvements will also provide safer walking and cycling links to the surrounding preschool and retail outlets.

5.3. Wider Community

5.3.1 An initial information notice has been circulated to the stakeholders. Upon confirmation of Waka Kotahi funding and approval of design layout, an additional information notice will be circulated.

5.3.2 The wider community have not been informed on the project but will be informed through online channels and the local newspapers.

5.3.3 Ohoka Road and Island Road are a main arterial road into Rangiora and the planned upgrades will inevitably have an impact on commuters, as well as local businesses and communities.

5.3.4 The proposed traffic signals have been modelled to ensure that the effect on commuters is understood, and phasing of lights will be implemented to try to minimise further delays, especially with consideration to queuing from the State Highway off ramp by means of que loops.

5.3.5 During construction, delays to travel times may be incurred, however these will be communicated to the public and surrounding residents / businesses.

6. **IMPLICATIONS AND RISKS**

6.1. Financial Implications

- 6.1.1 There is currently a design budget of \$100,000.00 which does not include any Waka Kotahi co-funding and as such is fully funded by Council.
- 6.1.2 Funding would need to become available in the Road to Zero funding are before Waka Kotahi would considered further allocations. This funding category is currently fully subscribed however there is a chance funding may become available in the last year of the NLTP (2023/24) and continuing design work will allow Council to be well positioned should this funding become available.

6.2. Sustainability and Climate Change Impacts

- 6.2.1 The recommendations in this report do have sustainability and/or climate change impacts. Controlling traffic flows through the intersection and reducing speeds will reduce emissions, alongside improving pedestrian and cycle safety will encourage more active modes of travel.

6.3. Risk Management

- 6.3.1 There are risks arising from the adoption/implementation of the recommendations in this report.
- 6.3.2 Construction is likely to cause some delays on both Island Road and Ohoka Road, however as most of the ducting and intrusive work is completed this will be minimal, and will not require road and/or lane closures in comparison with other options.
- 6.3.3 There is a risk of queuing on the eastern side of Ohoka Road with the State Highway off ramp during peak hours within any option. However this can be mitigated within the traffic signal option via the installation of que loops to provide a longer green phase for westbound traffic. Further discussions with Waka Kotahi will also be carried out to ensure this risk is minimised.
- 6.3.4 The installation of raised tables at the intersection may receive negative public comment. This is considered to be outweighed by the safety benefit they provide.

6.4. Health and Safety

- 6.4.1 Standard Health and Safety Risks will be associated with this project.
- 6.4.2 The project will follow all relevant Council polices, procedures and guidelines relating to Health and Safety.

7. **CONTEXT**

7.1. Policy

- 7.1.1 This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Legislation

- 7.2.1 Land Transport Management Act
- 7.2.2 Local Government Act 2002.

7.3. Consistency with Community Outcomes

The Council's community outcomes are relevant to the actions arising from recommendations in this report. The relevant community outcomes include:

There is a safe environment for all

- Harm to people from natural and man-made hazards is minimised.
- Crime, injury and harm from road crashes, gambling, and alcohol abuse are minimised.

Transport is accessible, convenient, reliable and sustainable

- The standard of our District's roads is keeping pace with increasing traffic numbers.

7.4. Authorising Delegations

The Kaiapoi-Tuahiwi Community Board has the authority to make recommendations to the Council and Standing Committees on local implications of such policies, projects and plans, which have district-wide impacts and are referred to the Board for comment.

The Utilities & Roding Committee has delegated responsibility for activities related to Roding and Transportation (including road safety, multimodal transportation and traffic control).

Ohoka Road Island Road Intersection Options Assessment

Prepared for	Waimakariri District Council
Job Number	WMKDC-J110
Revision	A
Issue Date	12 May 2022
Prepared by	Aini Fayaz Mansoor
Reviewed by	Jeanette Ward – Technical Director

1. Introduction

Abley were commissioned by Waimakariri District Council (WDC) to review the design options for an upgrade of the intersection of Ohoka Road and Island Road in Kaiapoi. This technical note assesses the options presented by WDC. Each intersection option was modelled using SIDRA Intersection 9. Multicriteria analysis (MCA) was used to evaluate the options against safety, pedestrian and cycling provisions, impacts on public transport, efficiency with current and future volumes, and interactions with SH1 off-ramp with current and future volumes. The MCA findings are discussed in Section 4.

2. Background

The Ohoka Road extension, known as the New Arterial Road (NAR) was designed in 2013 and constructed in 2016. The intersection with Island Road was designed and constructed as a Stop controlled intersection with priority to Ohoka Road. Options to cater for future traffic volumes were developed and assessed. At that time a roundabout was discounted due to the land required and the adverse impact on active users. Traffic signals were the preferred option, a design was developed so that cable ducts could be installed at the time of the NAR construction. It was acknowledged at the time that careful consideration of the interaction with the motorway off ramp would be required regardless of which option was pursued in the future.

Traffic volumes have already reached the predicted 2041 CAST volumes and the intersection is considered a safety concern due to the high volumes and speeds through the intersection. An upgrade of the intersection is identified in the Infrastructure Strategy in the Waimakariri Long Term Plan (2021-2031) with \$2.3M allocated.

The intersection of Ohoka Road and Island Road is within 130m of the Ohoka Road off-ramp from the Christchurch Northern Motorway (SH1), seen in Figure 1. Island Road north of the intersection connects to Cosgrove Road which is the access to SH1 northbound. The access to SH1 southbound is on Ohoka Road 300m east of Island Road. The speed limit on Ohoka Road is 60km/hour.



Figure 1 Location of Ohoka Road/Island Road intersection in relation to SH1 off-ramp

Island Road (south), Cosgrove Road and the Ohoka Road overbridge are over-dimension routes identified in Waka Kotahi's over dimension vehicle route maps (Figure 2). These have not been updated since 2004 hence do not have the current road lay out.

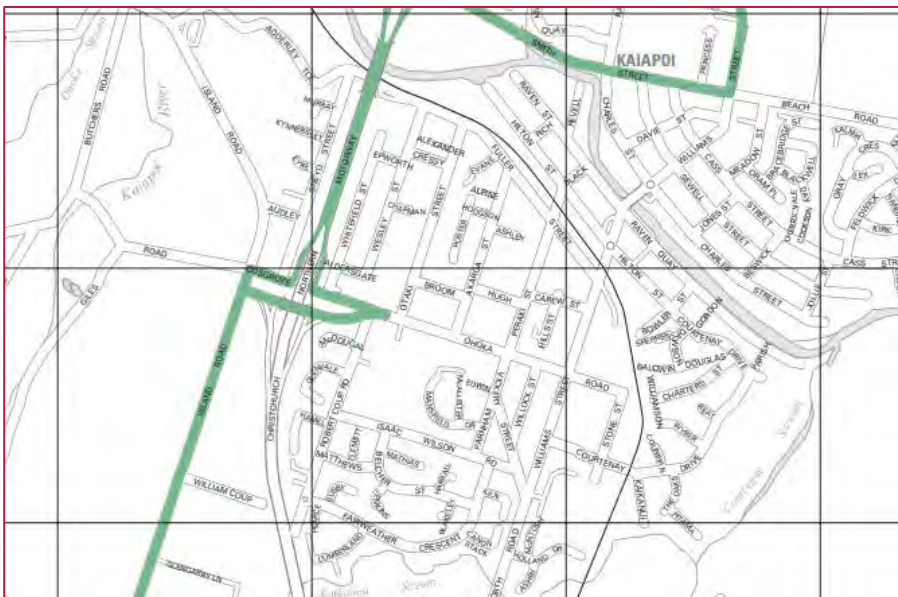


Figure 2 Over-dimension routes in Kaiapoi (Waka Kotahi, 2004)

2.1 Current intersection layout

Currently, the intersection is a priority crossroads as shown in Figure 3 and Figure 4. The Island Road legs are stop controlled while Ohoka Road has priority. There are left turn slip lanes from Ohoka Road into Island Road. These slip lanes are not priority controlled which can lead to confusion when interacting with right turning traffic from the opposing direction and through traffic from Island Road. On the eastern leg, the left turn slip lane has a shoulder with hashed white lines to guide traffic from the off-ramp into the general traffic stream. The right turn bay and median on the eastern leg is approximately 100m long. The right turn bay on the western leg is approximately 40m long.



Figure 3 Current Ohoka Road/Island Road intersection (Canterbury Maps)



Figure 4 Current Ohoka Road/Island Road intersection – view for the southwest corner

2.2 Traffic volumes

Traffic volumes of surrounding streets are shown in Figure 5. Figure 6 shows the traffic volumes from a tube count on Ohoka Road to the west of the intersection. Ohoka Road sees 1000 vehicles during the morning peak and around 1250 vehicles during the evening peak. This is a highly trafficked intersection and an important route for commuters to and from Christchurch as can be seen by the volumes on Ohoka Road.

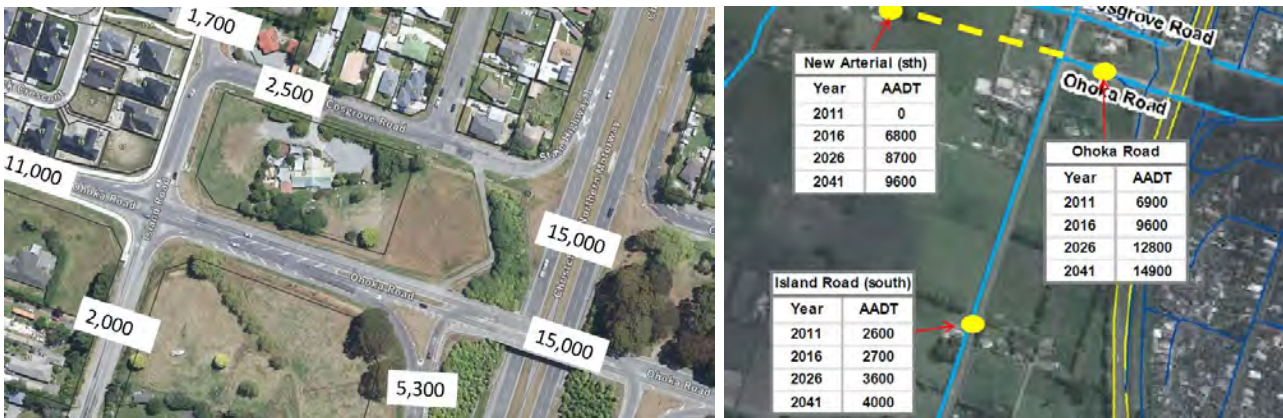


Figure 5 Current traffic volume on surrounding roads (2022 counts) and the 2013 predicted volumes (Abley Tech Note 2013)

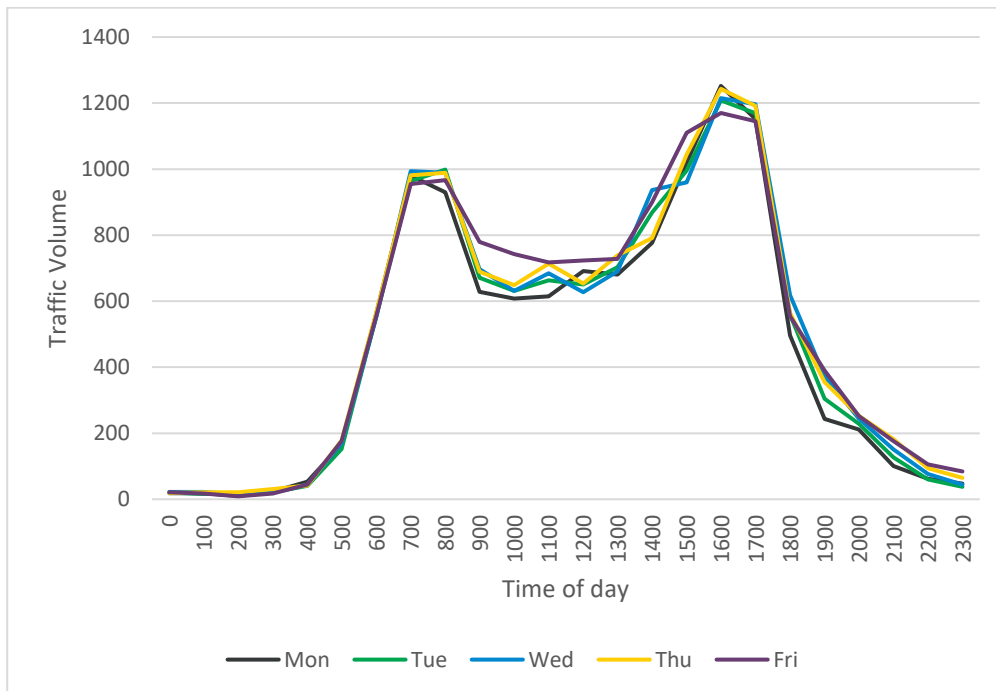


Figure 6 Current traffic volumes on western leg of the intersection (Ohoka Road)

Intersection counts

Morning and evening intersection counts were undertaken on Thursday 31 March 2022 to determine the movement volumes at the intersection. The traffic volumes observed were comparable to those from the tube count in Figure 6. Some observations from these surveys were:

- Dangerous weaving manoeuvres on the western leg of the intersection due to vehicles coming off the motorway wanting to turn right onto Island Road and those travelling through Ohoka

Road wanting to turn left onto Island Road. The potential danger of these movements are enhanced by high speeds.

- Some vehicles coming off the motorway, who wanted to go through or right, sometimes could not find an acceptable gap to move into the traffic stream and would wait on the left shoulder for a gap.
- Primary direction of travel was westbound in the morning and eastbound in the evening – commuters to Christchurch.
- Those attempting to turn right from Island Road (both sides) to Ohoka Road waited for a long time for a gap and often took small gaps. Some gave up looking for a safe gap to turn right and turn left instead.

The traffic volumes obtained during the AM and PM peaks are shown in Figure 7 and Figure 8.

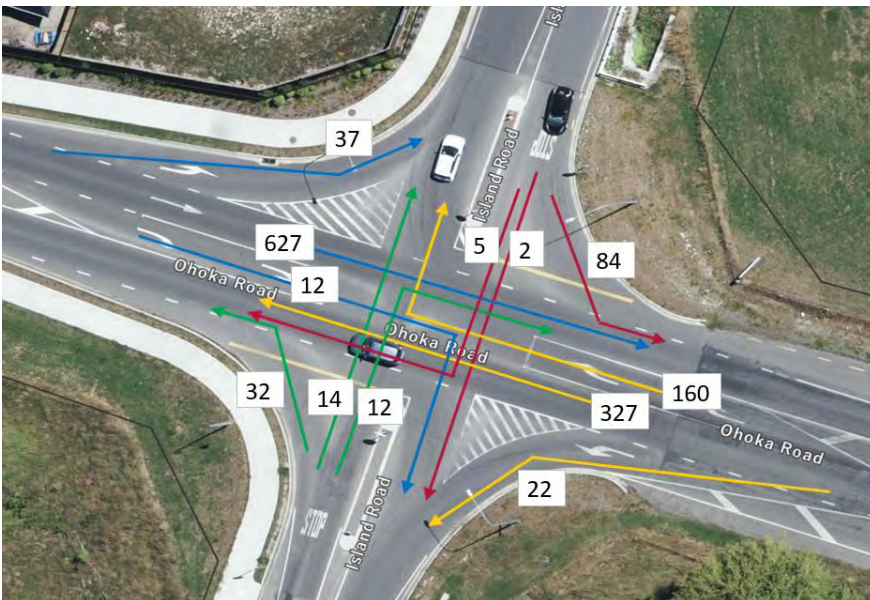


Figure 7 Traffic volumes from AM peak survey (7:00-8:00 am)

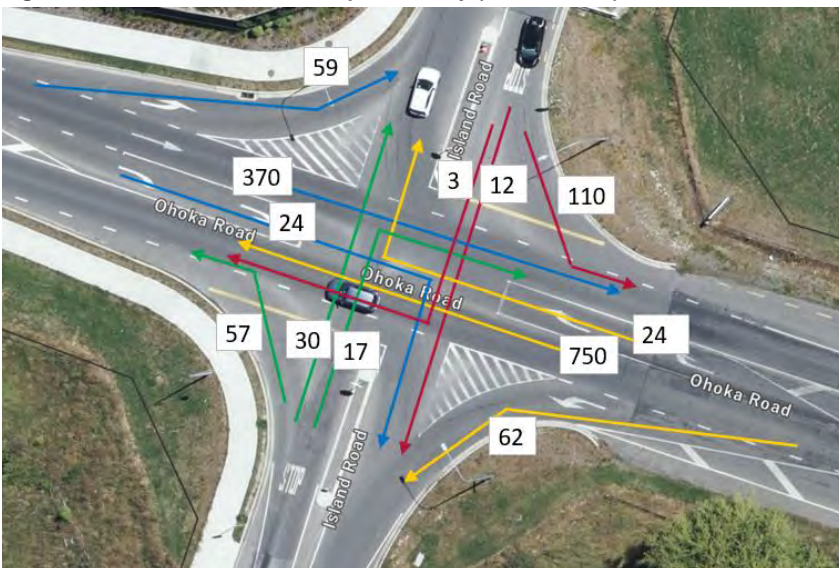


Figure 8 Traffic volumes from PM peak survey (4:30-5:30 pm)

2.3 Active modes

During the traffic surveys, very few cyclists and pedestrians were observed. A few students were seen in the morning walking from Island Road south towards Cosgrove Road to access the path connection to Ohoka Road. Some recreational and commuting cyclists were also observed (Figure 9). The pedestrians that crossed Ohoka Road did not use the pedestrian refuge islands indicating it is not in the desire line. One cyclist used the refuge island.

Alternate cycling routes are shown in Figure 10. There is an off-road connection to Rangiora (Passchendaele Memorial Path), and some cyclists may also use the old Island Road to connect with Ohoka Road. It is likely that there is a higher demand for sport cycling in the weekend and access to Kendall Park further south on Island Road. Pedestrian demand may also be higher in the weekend however this is unlikely due to the lack of footpaths.



Figure 9 Active mode users observed during traffic surveys



Figure 10 Walking and cycling overview

2.4 Current bus routes

Currently, one bus service goes through the intersection – 95: City/Pegasus and Waikuku (Figure 11). The northbound service comes off the SH1 off ramp onto Ohoka Road and turns right on to Island Road. The southbound service goes south on Island Road north and turns left onto Ohoka Road. School buses were also observed using this intersection. More bus services may be added as Kaiapoi continues to develop.

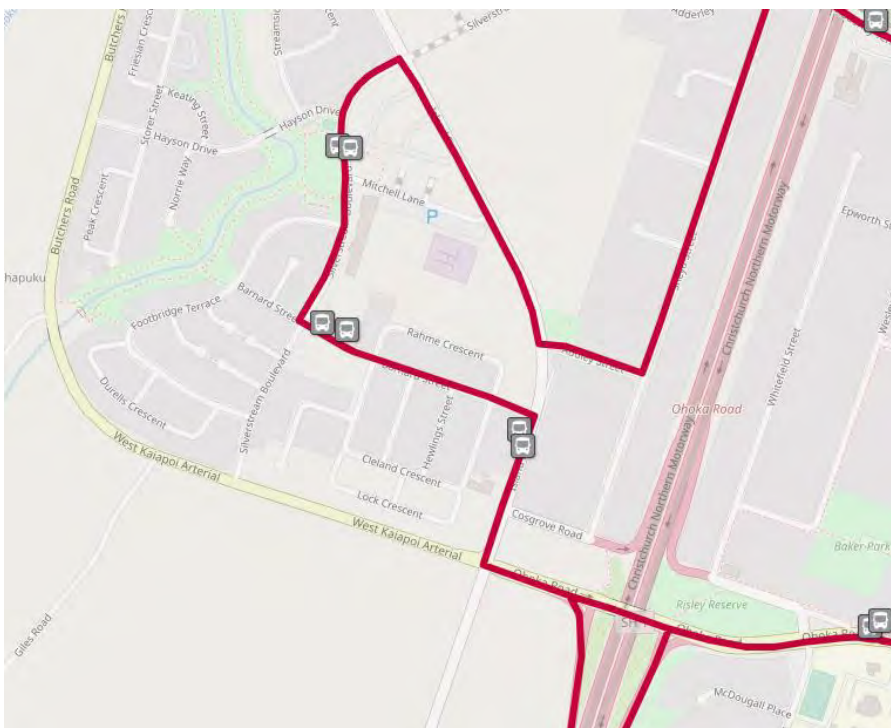


Figure 11 Current bus route which goes through the intersection at Ohoka Road/Island Road (source: MetroInfo)



Figure 12 A bus approaching the intersection on Ohoka Road

2.5 Crash history (2017-2022)

Figure 13 is a diagram of the crashes that occurred at the intersection between 2017 and 2022. There were 5 crashes due to failing to give way at stop controls. These were minor or non-injury crashes. One serious crash was caused by a vehicle attempting to overtake a car travelling north on Island Road as it slowed to turn left onto Ohoka Road. There was one rear-end crash due to the weaving manoeuvres observed on Ohoka Road East.

Though the current crash history is mostly minor crashes, the short gap taking, high speeds and weaving manoeuvres on Ohoka Road could lead to deaths or serious injury crashes (DSi's). The weaving manoeuvres only caused one crash in the last five years. This indicates that those who commonly use this intersection are aware of the dangers. However, drivers who are unfamiliar with this intersection or less confident drivers are likely to have difficulty navigating it.

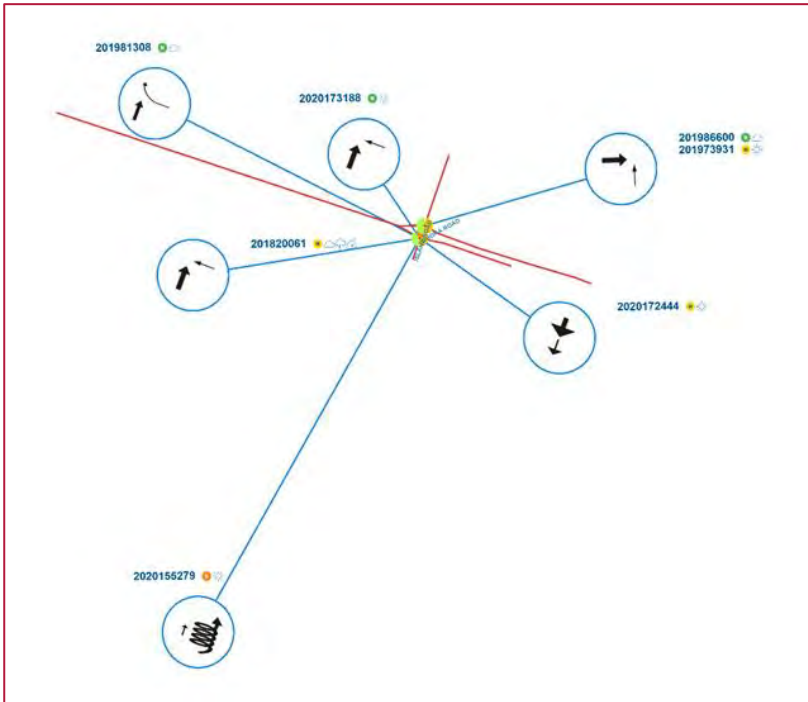


Figure 13 Crash diagram at Ohoka Road/Island Road intersection between 2017 and 2022.

3. Options

The following options have been assessed:

1. Do nothing (current layout)
2. Traffic signals
3. Roundabout: single lane
4. Roundabout: dual lane eastbound and westbound
5. Roundabout: dual lane westbound and single lane eastbound

Each option, as well as the current intersection, were modelled using the model SIDRA Intersection 9 with current peak traffic volumes and predicted 2038 traffic volumes from CAST to represent a future case. It is important to note that the CAST model appears to be underestimating future traffic volumes. The CAST results for 2028 and 2038 for the AM and PM peaks were less than what was observed during the 2022 surveys for some movements. CAST model results for 2021 traffic volumes were adjusted with the traffic survey carried out by Abley in March 2022. The differences between the 2021 cast model results and the 2022 survey results were factored into the 2038 CAST model volumes.

Overall, the future volumes appear to be lower than expected. Further analysis of the preferred option will be required.

The options and SIDRA model results are described in turn below. As the traffic volumes in Figure 6 and Figure 8 indicate, the evening peak is the critical case for this intersection. Therefore, the evening peak models will be discussed in this report.

3.1 Option 1 – Do nothing

Leaving the intersection as it is (Figure 3) could have significant safety implications in the future. Though the current crash history is mostly minor crashes, short gap taking and high speeds on Ohoka Road has potential to cause deaths and serious injuries. The weaving issue on the eastern leg has resulted in one minor crash in the last five years

Pedestrians were observed not using the pedestrian refuge on Ohoka Road as it is not on their desire line. Pedestrians cross closer to the intersection which is a significant safety issue particularly due to the high speeds on Ohoka Road.

Currently, there are no cycling provisions on Ohoka Road except on the shoulders. The alternate cycling connections are discussed in Section 2.3.

SIDRA modelling

Summaries of SIDRA Intersection analysis for the morning and evening peaks with current and future traffic volumes are shown in Table 1 and Table 2. Note that the gap acceptance time in the model was reduced for the stop-controlled legs to obtain results similar to what was observed during the traffic surveys. Safe and appropriate gaps are hard to find so vehicles were observed taking smaller gaps than would be considered safe.

Currently, the intersection operates at an appropriate level of service during the morning peak. However, queue lengths and delays increase on Island Road South in the evening peak. As Ohoka Road which carries most of the traffic has priority, vehicles on Island Road are having to wait for an appropriate gap. This reduces the level of service of the Island Road legs as can be seen in the tables below. This issue is expected to get worse with future growth leading to 200m of queueing during the PM peak. Although in reality drivers would re-route to avoid such long queues. With the current intersection, queueing on Ohoka Road is not expected to interact with the SH1 off-ramp or merging vehicles, however, the risk of collision due to the weaving manoeuvres remain.

Table 1 Morning peak hour - current intersection layout

Approach	95%ile Queue Length (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	4.9	10.0	15.6	26.3	C	D
Ohoka Road (east)	12.2	25.0	4.4	9.5	A	A
Island Road (south)	4.5	10.0	21.1	43.8	C	E
Ohoka Road (west)	0.4	0.1	0.5	0.4	A	A

Table 2 Evening peak hour - current intersection layout

Approach	95%ile Queue Length (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	4.3	7.3	15.4	20.8	C	C
Ohoka Road (east)	13.9	13.2	2.5	2.6	A	A
Island Road (south)	20.2	25.7	61.6	50.8	F	F
Ohoka Road (west)	1.8	1.6	1.4	1.1	A	A

3.2 Option 2 – Traffic signals

The traffic signals option being considered is shown in Figure 14. The northern, southern, and western approaches have two approach lanes – left turn/through and right turn only. The eastern approach has three approach lanes – left turn/through, through only, and right turn only. The eastern and western approaches have raised platforms to slow speeds down.

When Ohoka Road was extended and the intersection was upgraded in 2013, the future signalised intersection was designed with left turn lanes on Ohoka Road approaches, but this was before the change to the give ways rules that mean and left and through lanes can be combined.

This option has good active mode provision particularly for Island Road cyclists as they will have a phase for north-south movements. Cyclists on Ohoka Road need cycle lane space to transition to the shoulders from the over bridge. Ohoka Road cyclists also still have conflicts with left turners. There are shared paths on all legs of the intersection and signalised crossings on the western and northern legs. It is recommended that design features such as advanced stop boxes and hook turn boxes be included in the design as per current best practice.

The pedestrian crosswalks are on the desire line, and phasing can allow for full or partial pedestrian protection. Therefore, the pedestrian level of service is good for this option.

Operating speeds will reduce due to the raised platform intersection. Traffic signals would interrupt the free flow of traffic on Ohoka Road and lead to queueing. This option also would not solve the weaving issue on the eastern leg. Vehicles exiting the motorway to turn right onto Island Road will still need to interact with vehicles wanting to go through or left from Ohoka Road East.



Figure 14 Traffic signals option scheme design (WDC design)

SIDRA modelling

The signal phasing implemented in this model are shown in Figure 15. Pedestrian protection was implemented using a delayed red arrow drop off on pedestrian crossing phases. A variable phase (phase C) was used to manage queueing on Ohoka Road.

The SIDRA modelling results for the signals option are shown in Table 3 and Table 4 below. All legs of the intersection have a LOS of C. Eastern queues extend up to the SH1 off-ramp with current volumes. With the 2038 volumes, queues extend 50m beyond the off-ramp merge. Therefore, the interactions with the off-ramp are significant in this option and further consideration of the off-ramp will be required.

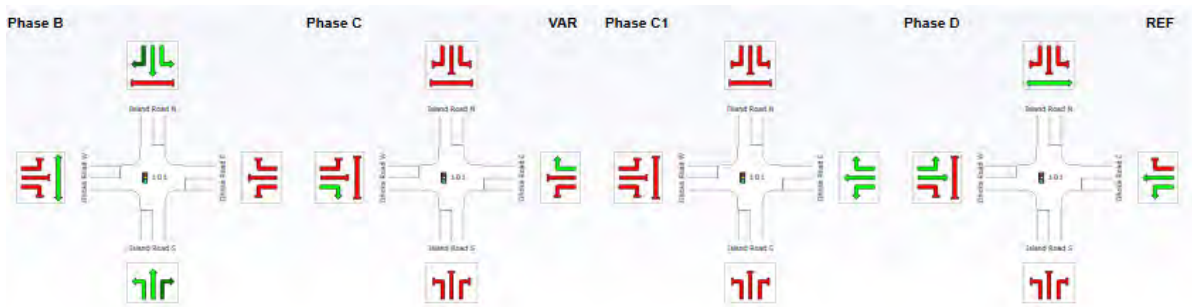


Figure 15 Signal phasing

Table 3 Morning peak hour – signals option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	21.1	30.6	34.2	46.0	C	D
Ohoka Road (east)	47.8	66.3	20.4	23.5	C	C
Island Road (south)	11	14.4	32.6	44.1	C	D
Ohoka Road (west)	164	330.3	20.7	30.1	C	C

Table 4 Evening peak hour – signals option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	25.4	30.5	28.6	29.1	C	C
Ohoka Road (east)	127.2	159.7	21	24.4	C	C
Island Road (south)	17.9	54.2	27.5	32.4	C	C
Ohoka Road (west)	93.7	115.7	22.3	22.7	C	C

3.3 Option 2 – Roundabout: single lane

Figure 16 shows a roundabout option with single approach and exit lanes on each leg. A roundabout will encourage slower speeds at the intersection. East-west traffic volumes are significantly greater than the north-south volumes. Therefore, the roundabout will indirectly prioritise the east-west movements.

Roundabouts generally have a lower level of service for active mode users than traffic signals. Pedestrian refuges are set back from the desire line in roundabouts and departure lanes are likely to be difficult to cross at peak times. Large roundabouts do not provide good cycling safety. Single lane roundabouts are safer for cyclists than dual lane roundabouts. However, provision of an off-road cycle bypass option is supported for roundabouts. Raised platforms on the approaches would improve the safety for active modes by reducing the speed and providing a place to cross.

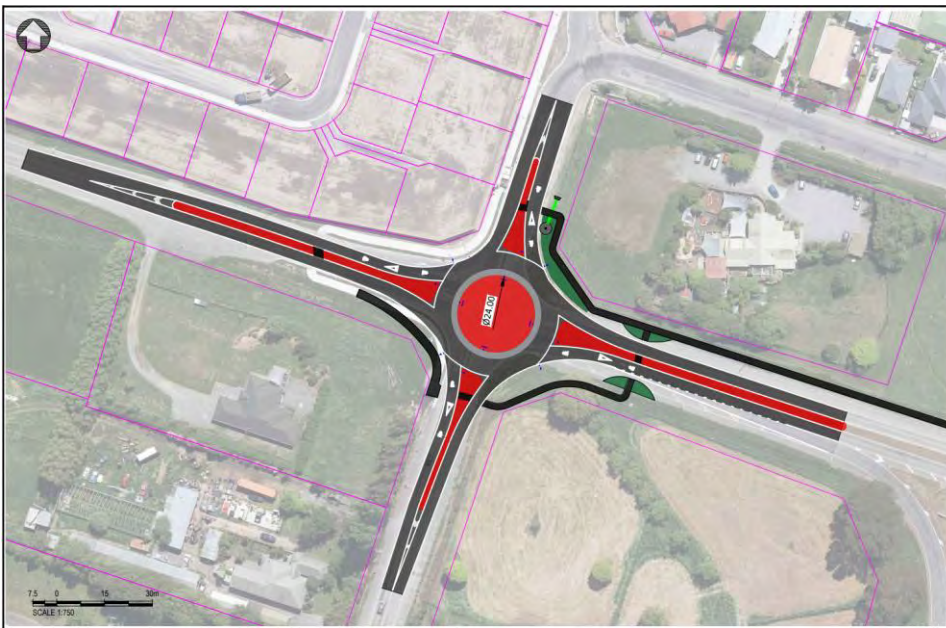


Figure 16 Single-lane roundabout option scheme design (WDC Design)

SIDRA modelling

The SIDRA model results for this option are shown in Table 5 and Table 6. The single approach lane roundabout has a high level of service on all legs. However, significant queues (75m) are expected on the eastern leg in the PM peak with current traffic volumes. This queue will interact with vehicles merging from the off-ramp. With 2038 volumes the evening queue is expected to be around 85m and interact with vehicles on the off-ramp.

Table 5 Morning peak hour – single-lane roundabout option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	6.9	12.3	7.2	10.7	A	B
Ohoka Road (east)	19.8	21.3	3.8	3.8	A	A
Island Road (south)	2.9	2.9	6.4	6.6	A	A
Ohoka Road (west)	38.3	79.7	3.9	5.9	A	B

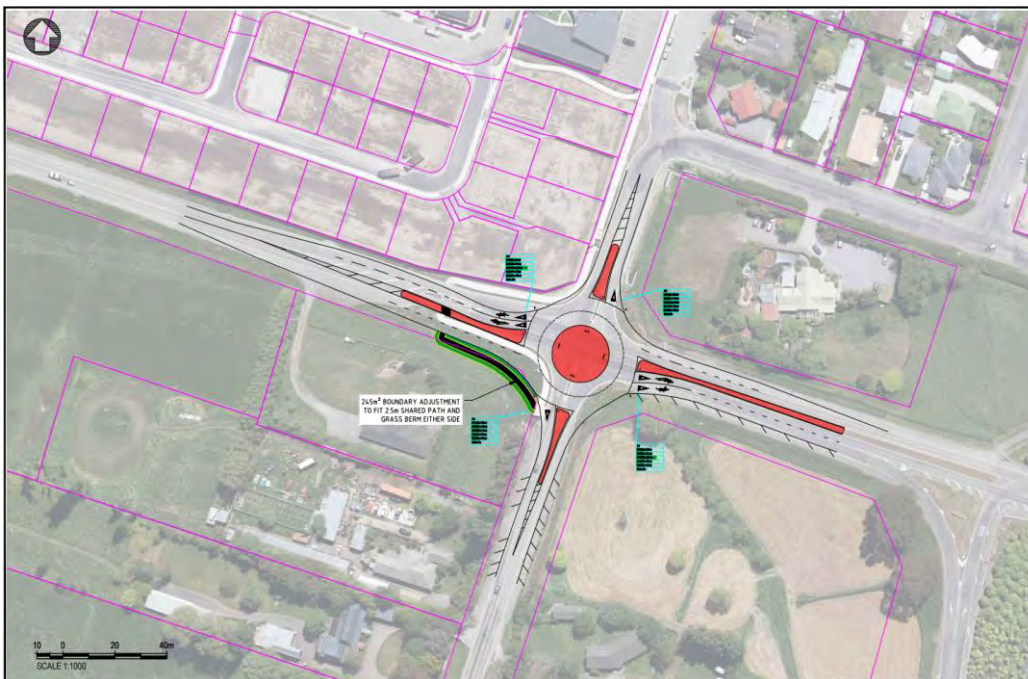
Table 6 Evening peak hour – single-lane roundabout option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	6.9	9.2	5.2	5.9	A	A
Ohoka Road (east)	76.2	82.9	3.7	3.6	A	A
Island Road (south)	12.5	37.8	13.8	20.3	B	C
Ohoka Road (west)	25.5	29.9	4.7	4.4	A	A

3.4 Option 3 – Roundabout: dual eastbound and westbound lanes

An option with dual eastbound and westbound lanes (shown in Figure 17) is also being considered. As shown in the figure, this would have dual approach and dual exit lanes on the east and west legs of the intersection with dual circulating lanes. The exit lanes would merge to one after approximately 40m. The north and south legs remain as single-lane approaches. Dual through movements on the eastbound and westbound legs allow more vehicles through than single lane roundabouts and cause less queueing. However, those entering the roundabout from Island Road may struggle with selecting safe gaps due to the dominant east-west movement on a dual lane roundabout.

Roundabouts generally have a poor level of service for active modes, particularly, dual lane roundabouts. Crossing the exiting lanes on Ohoka Road is likely to be difficult for pedestrians. Roundabouts have a poor cycling safety. Therefore, the provision of an off-road route for cyclists is recommended if this option is chosen. Raised platforms on the approaches would improve the safety for active modes by reducing the speed and providing a place to cross.


Figure 17 Roundabout with dual eastbound and westbound lanes schematic drawing (WDC design)

SIDRA modelling

The SIDRA model results for this option are shown in Table 7 and Table 8. This option has a high level of service on all legs. Compared to the single-lane roundabout in Option 3, this option has shorter queues. However, queues of 40m are expected on the eastern leg in the PM peak with current traffic volumes and this increases 43 m with the 2038 traffic volumes.

Table 7 Morning peak hour – dual lane eastbound and westbound roundabout option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	4.9	6.8	6.8	6.4	A	A
Ohoka Road (east)	12.4	13.1	4.3	4.3	A	A
Island Road (south)	2.4	2.4	6.3	6.4	A	A
Ohoka Road (west)	23.0	37.1	4.3	4.6	A	A

Table 8 Evening peak hour – dual lane eastbound and westbound roundabout option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	6.0	7.6	5.0	5.5	A	A
Ohoka Road (east)	40.2	42.4	3.6	3.4	A	A
Island Road (south)	7.4	22.2	9.7	12.6	A	B
Ohoka Road (west)	15.9	18.4	4.3	4.0	A	A

3.5 Option 4 – Roundabout: dual lane westbound and single lane eastbound

Figure 18 shows a schematic of a roundabout option with dual westbound lanes. As shown in the figure, this would have dual approach lanes on the east leg and dual exit lanes on the west leg. The exit lanes on the west leg would merge to one after approximately 40m. The north, south, and west legs remain as single-lane approaches. Dual through movements on the westbound leg will allow more vehicles through and cause less queueing on the eastern leg. However, the eastbound movement is dominant during the AM peak. Therefore, this option may cause more queueing during the morning peak.

As with the other roundabout options, this option has a poor level of service for active modes. Crossing the exiting lanes on Ohoka Road is likely to be difficult for pedestrians. Roundabouts have a poor cycling safety. Therefore, the provision of an off-road route for cyclists is recommended if this option is chosen.

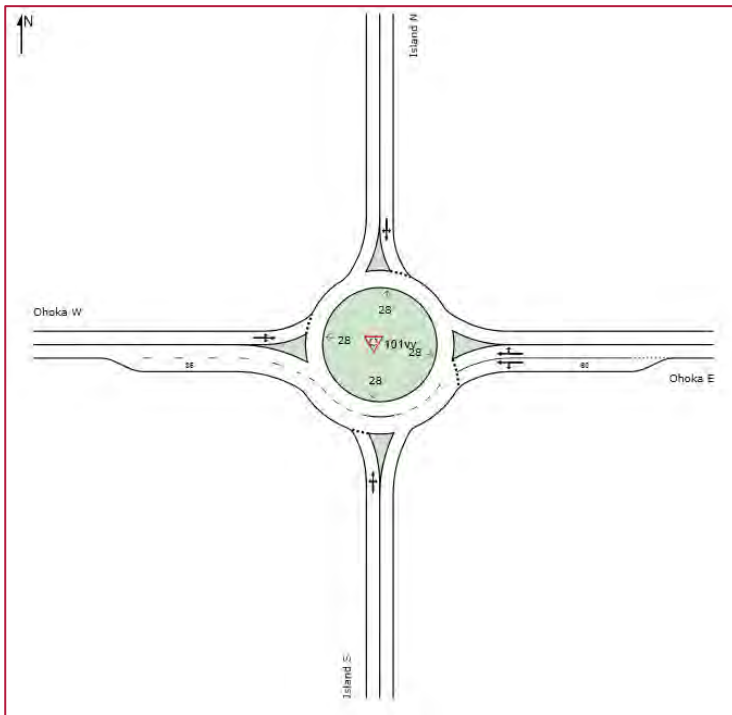


Figure 18 SIDRA schematic of roundabout with dual westbound lanes (no WDC design)

SIDRA modelling

The SIDRA model results for this option are shown in Table 9 and Table 10. Like the other roundabout options, this option has a high level of service. However, the queues on the western leg are greater than that of option 3. Queues on the east leg are similar to that of option 3. These queues will interact with vehicles merging from the off-ramp. Therefore, the interactions with the off-ramp need to be investigated further with this option.

Table 9 Morning peak hour – dual lane eastbound and single lane westbound roundabout option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	6.5	11.3	7.0	10.1	A	B
Ohoka Road (east)	12.3	13.3	4.0	4.0	A	A
Island Road (south)	2.3	2.3	5.8	5.9	A	A
Ohoka Road (west)	35.6	67.4	4.0	5.2	A	A

Table 10 Evening peak hour – dual lane eastbound and single lane westbound roundabout option

Approach	95%ile Queue (m)		Average Delay (sec)		Level of Service	
	Current volumes	2038 volumes	Current volumes	2038 volumes	Current volumes	2038 volumes
Island Road (north)	6.9	9.2	5.2	5.9	A	A
Ohoka Road (east)	39.3	41.0	3.6	3.4	A	A
Island Road (south)	7.3	21.8	9.5	12.3	A	B
Ohoka Road (west)	24.7	29.0	4.7	4.4	A	A

4. Conclusion

4.1 Assessment findings

A multicriteria analysis (MCA) of the four options discussed above was undertaken. The results of the MCA are shown in Table 11, where green shading indicates a good outcome, yellow an outcome has an impact that could be mitigated, and pink is an impact of high concern.

Traffic signals would cause queues on the east leg which conflict with the SH1 off-ramp with current evening traffic volumes. This could be controlled by placing detection loops on the off ramp to detect when queues reach a certain distance and trigger a green light phase for westbound traffic to clear the intersection. Signalising the off-ramp in conjunction with signalising the Ohoka Road/Island Road intersection will reduce movement conflicts due to weaving manoeuvres at the off-ramp merge. Traffic signals provide a good level of service for active modes. Pedestrian crossings are on the desire line and phasing can provide pedestrian protection. Cycling safety is better for cyclist crossing Island Road but Ohoka Road cyclists will still require a transition space to move to the shoulder safely once past the intersection. Conflicts with cyclists and left turning vehicles still remain.

All the roundabout options have high level of service for traffic. However, the single approach lane roundabout with current traffic volumes is expected to cause queuing on the east leg that conflicts with vehicles merging from the off-ramp. With 2038 traffic volumes, this queueing is expected to reach the off-ramp. Therefore, this option would not appropriate. The two dual approach lane options are also expected to have queues that conflict with merging vehicles from the off-ramp with current and future traffic volumes. Additionally, dual approach lanes can create confusion and drivers may weave across lanes. Pedestrian crossing are off the desire line in the roundabout options. The single lane roundabout option is safer for cyclists than the dual approach lane options. Dual roundabouts are a complex environment for pedestrians and cyclists. An off-road option should be provided for cyclists with dual approach roundabouts. Single lane crossing may act as courtesy crossings, particularly if raised platforms are used. However, dual exit lanes will be difficult to cross during peak times and are less likely to act as courtesy crossings.

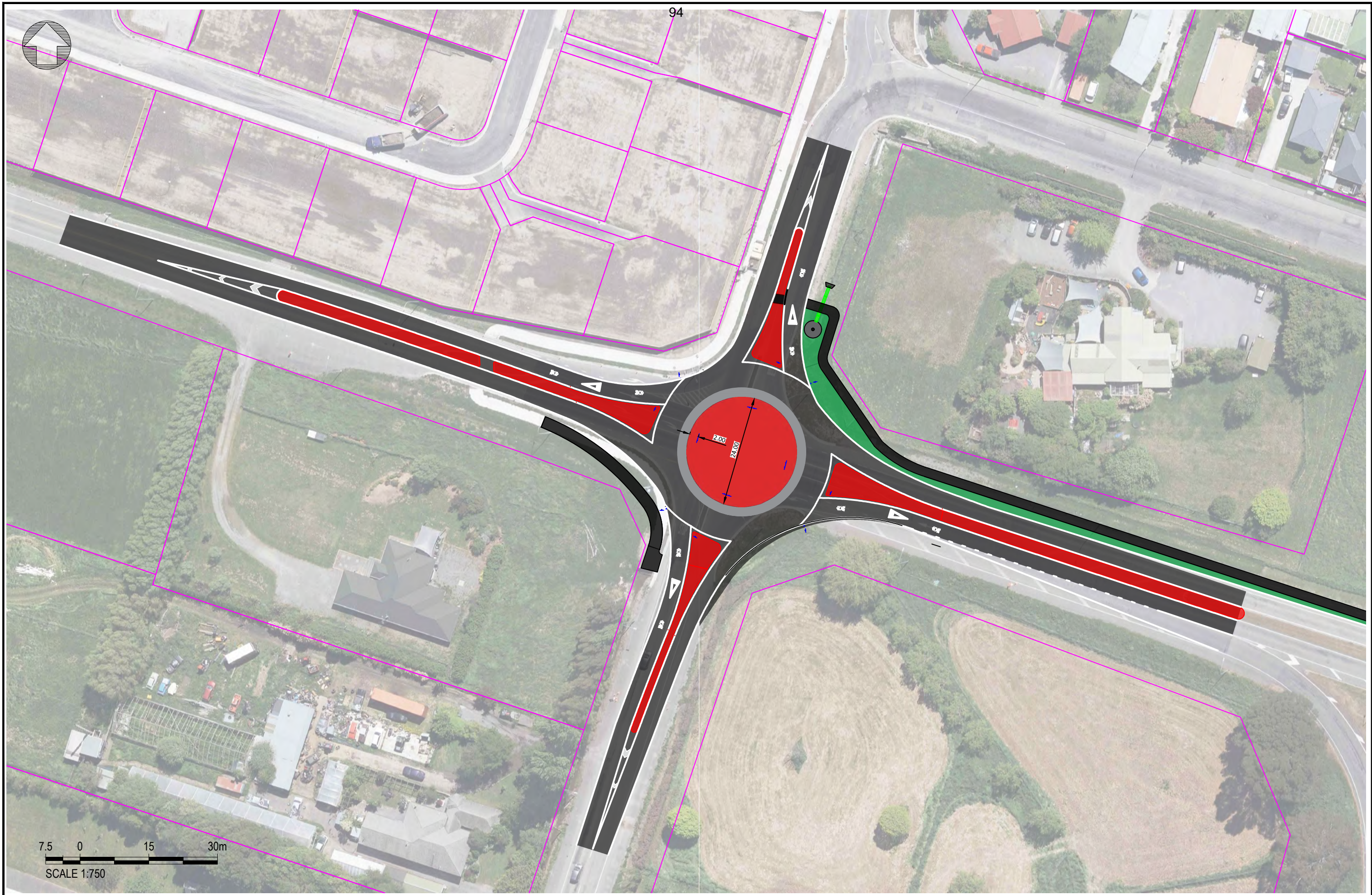
4.2 Recommendation

Overall, with consideration of a range of assessment criteria, traffic signals are recommended for the Ohoka Road/Island Road intersection as it will provide a good level of service for active mode users, and a reasonable level of service for traffic. However, interactions with the off-ramp and vehicles merging from the off-ramp will need to be managed carefully. Signalising the off-ramp in conjunction with the Ohoka Road/Island Road intersection may be an appropriate option but further investigation is required. As a minimum queue detection on the off ramp would be required to ensure queues do not extend back onto the motorway.

Table 11 MCA for the proposed options

Option	Assessment criteria							
	Safety	Peds (direct/con)	Cycling provision	Impact on public transport	Efficiency (with current volumes)	Interaction with off ramp (with current volumes)	Efficiency (with future volumes)	Interaction with off ramp (with future volumes)
Do nothing	Current crash history mostly minor injury crashes, short gap taking and high speeds on Ohoka Rd could lead to DSI, weaving issue seems to result in few crashes	Low demand at peak time, more expected at the weekends? Refuge island provided but not on desire line, peds observed to cross closer to intersection and not use the island	No provision made on NAR except shoulders. Alternative off road Kaiapoi to Rangiora connection provided, some may also use old Island Rd, low use observed on Ohoka Rd, potential for some sport cyclists at the weekend and access to Kendall Park		overall LOS=C LOS A for Ohoka Rd traffic, LOS D/E for side road through and right traffic, these volumes are low due to delays, gaps being taken are very short	OK	overall LOS=C LOS A for Ohoka Rd traffic, LOS C/F for side road through and right traffic, these volumes are low due to delays, gaps being taken are very short	OK
Traffic signals	Less risk with the side road gap taking issue, slow speeds on the approaches due to raised platforms will reduce severity of any collisions	Crosswalk will be more direct as on desire line and phasing can allow for full or partial protection	Better for Island Rd cyclists than currently as will have phase for north-south movement, Ohoka Rd cyclists need cycle lane space to transition to shoulders, still have left turn conflict risks.	Increased delay for buses arriving on the red	overall LOS=C Improved LOS for side roads but results in long queues on the NAR, concern in the PM due to interaction with off-ramp	East queues conflict with off-ramp	overall LOS=C LOS C for Ohoka Rd traffic, LOS D for side road Improved LOS for side roads but results in long queues on the NAR, concern in the PM due to interaction with off-ramp	East queues conflict with off-ramp
Single app RB	Less risk with the side road gap taking issue, slow speeds on the approaches due to raised safety platforms will reduce severity of any collisions	Crossings set back from desire line, approach lane crossing likely to be treated as a courtesy crossing by drivers, departure lane will be difficult to cross at peak times, need to get speeds low with raised safety platforms	Roundabouts generally less safe for cyclists		overall LOS=A	East queues conflict merging vehicles from off-ramp	overall LOS=A Future volumes will struggle	East queues conflict merging vehicles from off-ramp
Dual app RB - east	Less risk with the side road gap taking issue, slow speeds on the approaches due to raised safety platforms will reduce severity of any collisions, dual lanes can create confusion and drivers weave across lanes	Crossings set back from desire line, single approach lane crossings likely to be treated as a courtesy crossing by drivers, dual approach lanes increase crossing distance and less likely to act as courtesy crossing, departure lanes (particularly the dual lanes) will be difficult to cross at peak times, need to get speeds low with raised safety platforms	Dual lane roundabouts very unsafe for cyclists, would need off-road options		overall LOS=A	East queues conflict merging vehicles from off-ramp	overall LOS=A	East queues conflict merging vehicles from off-ramp
Dual through - east and west	Less risk with the side road gap taking issue, slow speeds on the approaches due to raised safety platforms will reduce severity of any collisions, dual lanes can create confusion and drivers weave across lanes	Crossings set back from desire line, single approach lane crossings likely to be treated as a courtesy crossing by drivers, dual approach lanes increase crossing distance and less likely to act as courtesy crossing, departure lanes (particularly the dual lanes) will be difficult to cross at peak times, need to get speeds low with raised safety platforms	Dual lane roundabouts very unsafe for cyclists, would need off-road options		overall LOS=A	East queues conflict merging vehicles from off-ramp	overall LOS=A	East queues conflict merging vehicles from off-ramp

This document has been produced for the sole use of our client. Any use of this document by a third party is without liability and you should seek independent advice. © Abley Limited 2022. No part of this document may be copied without the written consent of either our client or Abley Limited. Refer to <https://www.abley.com/output-terms-and-conditions-1-1/> for output terms and conditions.



REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	SCHEME DESIGN	GK	---	---	22/04/2021

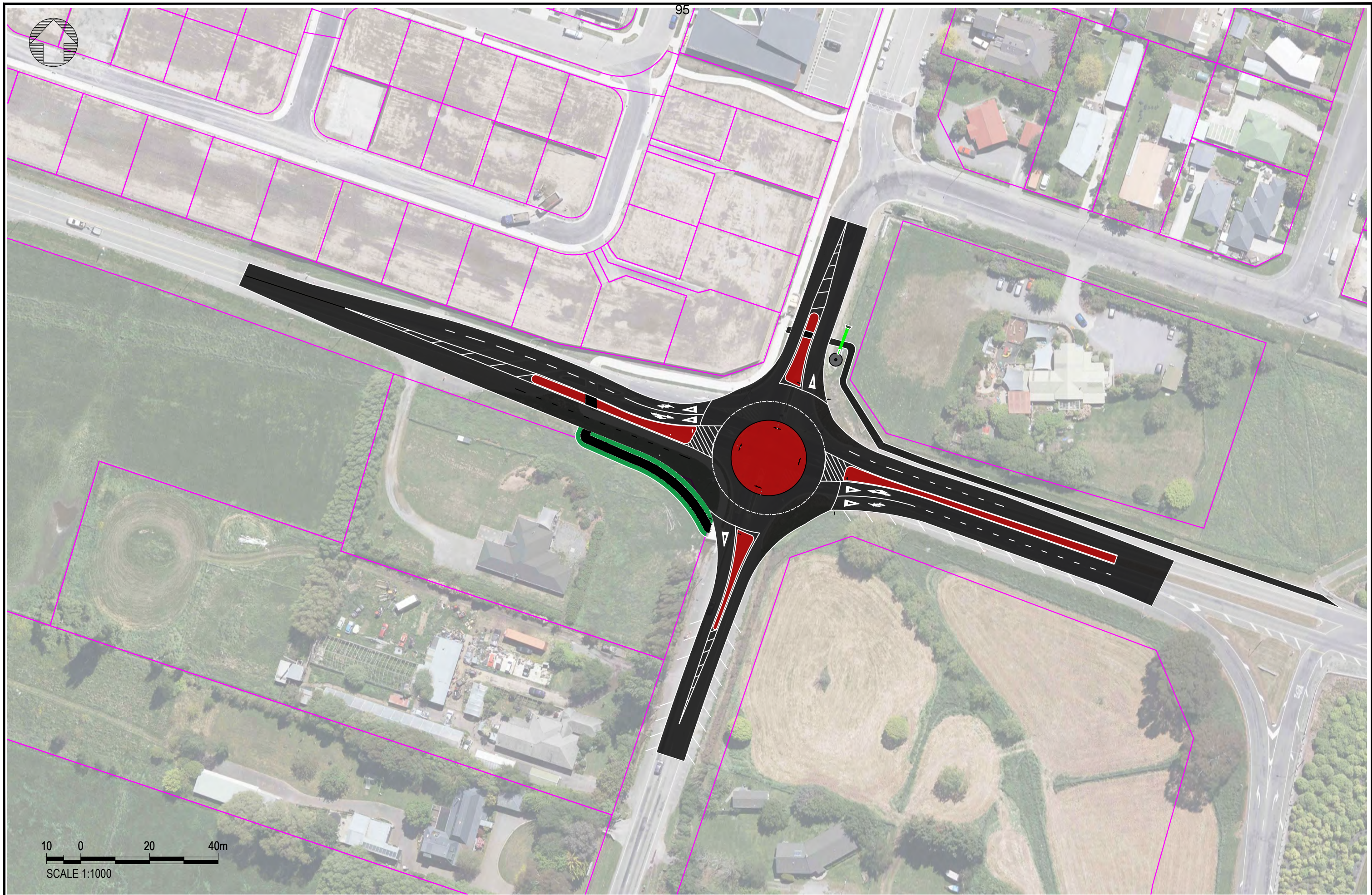
SURVEYED	---	---/---/2020	PROJECT No	PD000353
DRAWN	GK	22/04/2021	CON No	
DRAWING CHKD	---	---/---/2020	SCALE (A3)	1:750
DESIGNED	GK	22/04/2021	DATUM ORIGIN	
DESIGNED CHKD	---	---/---/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	---/---/2020	VERTICAL	



PROJECT	ISLAND ROAD / OHOKA ROAD
---------	--------------------------

SHEET TITLE	ROUNDAABOUT SCHEME DESIGN
-------------	---------------------------

FOR INFORMATION	
NOT FOR CONSTRUCTION	
DRAWING	4201
SHEET	REVISION
01	A



REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	SCHEME DESIGN	GK	---	---	22/04/2021

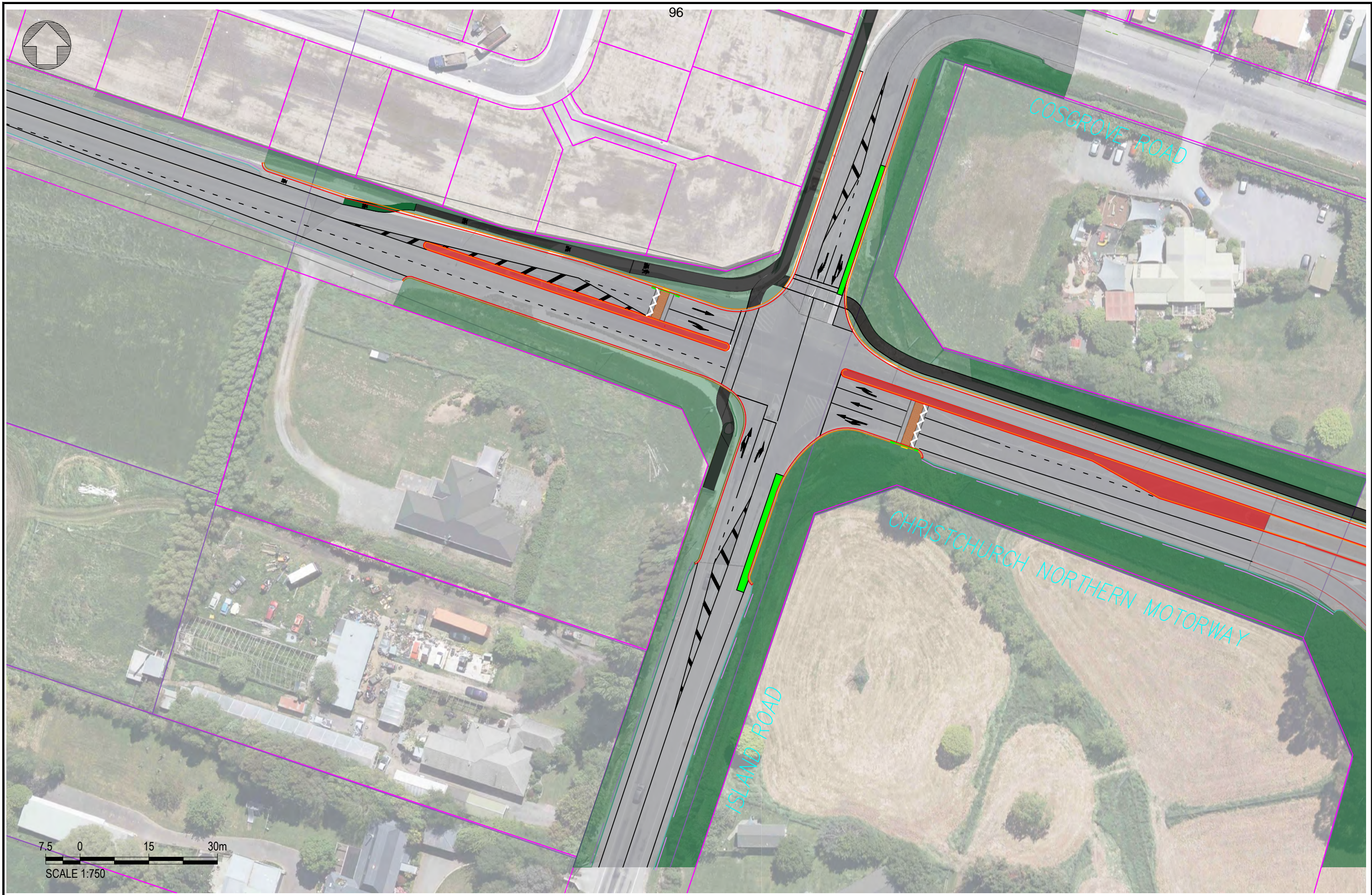
SURVEYED	---	---/---/2020	PROJECT No	PD000353
DRAWN	GK	22/04/2021	CON No	
DRAWING CHKD	---	---/---/2020	SCALE (A3)	1:1000
DESIGNED	GK	22/04/2021	DATUM ORIGIN	
DESIGNED CHKD	---	---/---/2020	HORIZONTAL NZTM	GD2000
APPROVED	---	---/---/2020	VERTICAL	



PROJECT	ISLAND ROAD / OHOKA ROAD
---------	--------------------------

SHEET TITLE	DUAL LANE ROUNDABOUT SCHEME DESIGN
-------------	---------------------------------------

FOR INFORMATION NOT FOR CONSTRUCTION	
DRAWING	4201
SHEET	REVISION
03	A



REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	SCHEME DESIGN	GK	---	---	22/04/2021

SURVEYED	---	---/---/2020	PROJECT No	PD000353
DRAWN	GK	22/04/2021	CON No	
DRAWING CHKD	---	---/---/2020	SCALE (A3)	1:750
DESIGNED	GK	22/04/2021	DATUM ORIGIN	
DESIGNED CHKD	---	---/---/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	---/---/2020	VERTICAL	



PROJECT	ISLAND ROAD / OHOKA ROAD
---------	--------------------------

SHEET TITLE	TRAFFIC LIGHT SCHEME DESIGN
-------------	-----------------------------

FOR INFORMATION	
NOT FOR CONSTRUCTION	
DRAWING	4201
SHEET	REVISION
01	A

WAIMAKARIRI DISTRICT COUNCIL**REPORT FOR DECISION**

FILE NO and TRIM NO: RDG-32-92-08 / 220801130424


REPORT TO: KAIAPOI-TUAHIWI COMMUNITY BOARD

DATE OF MEETING: 15th August 2022

AUTHOR(S): Joanne McBride – Roading and Transport Manager
Allie Mace-Cochrane – Graduate Engineer

SUBJECT: Approval to Consult on Scheme Design Options for the Tuahiwi Footpath

ENDORSED BY:
(for Reports to Council,
Committees or Boards)



 General Manager



 Chief Executive

1. SUMMARY

- 1.1. The purpose of this report is to seek a recommendation from the Kaiapoi-Tuahiwi Community Board for the Utilities & Roading Committee to approve consultation on the footpath construction, and the three scheme design options specific to the eastern side of Tuahiwi Rd, opposite the Marae as shown in Attachment i.
- 1.2. The footpath was requested by the community and Ngāi Tūāhuriri at a meeting held in May 2019. The footpath will be constructed on the eastern side of Tuahiwi Road, between the urupa and 160 Tuahiwi Road.
- 1.3. The footpath will be constructed to a width of 1.8 m and have an unsealed, gritted surface.
- 1.4. The recommended option is for consultation to be undertaken on the three scheme design options to enable the community and Ngāi Tūāhuriri to provide feedback on the proposals.

Attachments:

- i. Tuahiwi Footpath – Scheme Design Options (TRIM No. 220801130509)

2. **RECOMMENDATION**

THAT the Kaiapoi-Tuahiwi Community Board:

- (a) **Receives** Report No. 220801130424.

AND

THAT the Kaiapoi-Tuahiwi Community Board recommends:

THAT the Utilities & Roading Committee:

- (b) **Receives** Report No. 220801130424.
- (c) **Approves** consultation being undertaken on the proposed scheme design options shown in Attachment i.
- (d) **Notes** that a communication and engagement plan will be put together following approval of this report which will detail the method of engagement for directly affected residents, the Marae, and Ngāi Tūāhuriri.
- (e) **Notes** that there is a budget of \$450,000, allocated within PJ 101229.000.5135, for the 2022/2023 financial year to undertake the detailed design and construction of the Tuahiwi Footpath.
- (f) **Notes** that all three scheme design options are below the allocated budget of \$450,000 and include 20% contingency.

3. **BACKGROUND**

- 3.1. On the 3rd May 2019, a meeting was held at the Tuahiwi Marae. This was facilitated by Mahaanui Kurataiao Ltd. and had a number of residents' from the Tuahiwi area in attendance.
- 3.2. A number of issues were raised regarding road safety in the wider Tuahiwi area, including the availability of pedestrian and cycling facilities.
- 3.3. As a result of these issues raised, a 1.8 m wide gritted footpath has been proposed on the eastern side of Tuahiwi Road, between the Urupa and 160 Tuahiwi Road.
- 3.4. This footpath is intended to improve mobility through the Tuahiwi Village, by connecting residents on the eastern side of Tuahiwi Road to existing footpath infrastructure and to key destinations within the village.
- 3.5. This section of Tuahiwi Road is also included within the draft Walking and Cycling Network Plan as a Grade 2 facility (medium confidence), and is also included within the draft prioritisation programme as a priority two route.
- 3.6. Constructing a 2.5 m wide shared path was considered during the scheme design phase. However, due to the location of power poles, swales, and letterboxes at various locations along Tuahiwi Road, it is not feasible to construct a shared path within the existing budget.
- 3.7. The construction of extensive speed management infrastructure to support a 40km/h speed limit through the township was completed in June 2021. Traffic counts completed in December 2021 have indicated that the mean operating speed through the village is now at 40.8 km/h, which is a great result and ensures Council is compliant with the Setting of Speed Limits Rule.
- 3.8. The scheme design shown in Attachment i includes three options for the area between the Marae and the existing footpath on the eastern side of Tuahiwi Road. The three options are as follows:

- (g) Option A - Sheet 2.1: Kerb and channel, underchannel pipe, widened roadway (parking), with a generic cross-section from the road edge line to the property boundary shown in Figure 1.

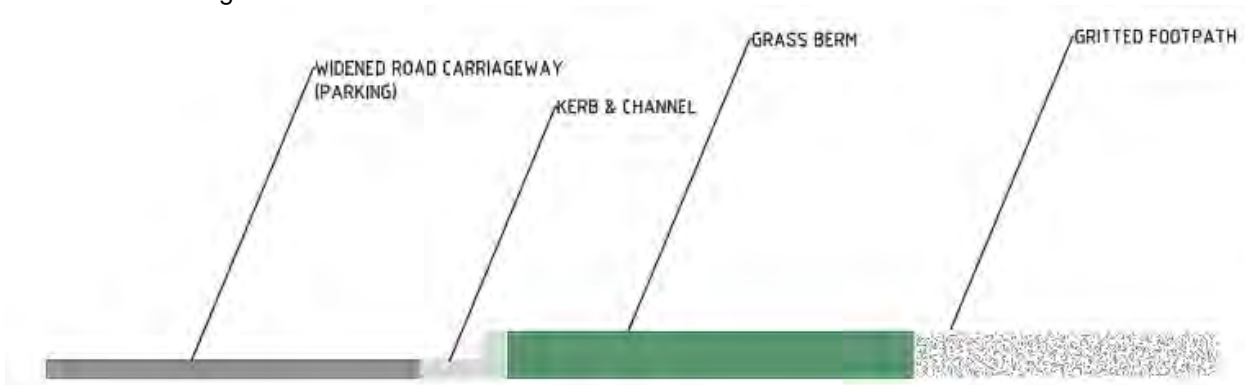


Figure 1. Kerb and channel cross-section.

- (h) Option B - Sheet 2.2: Reinforced shoulder (e.g. Gobi blocks) for parking, with a generic cross-section from the road edge line to the property boundary shown in Figure 2. Figure 3 shows a potential product which would be utilised for the reinforced shoulder, noting that this allows for grass to grow through the openings.

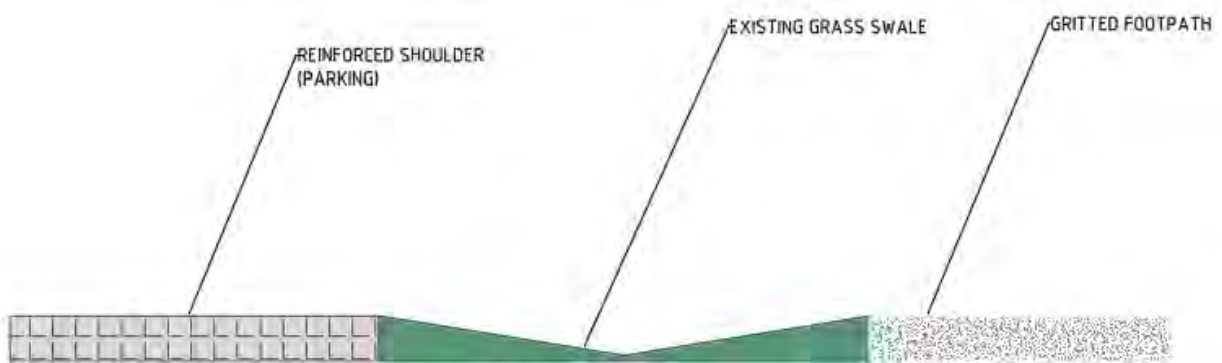


Figure 2. Reinforced shoulder cross-section.



Figure 3. Example of reinforced shoulder product (Firth Gobi® Block).

- (i) Option C - Sheet 2.3: Retain the status quo i.e. no allowance for parking, with a generic cross-section from the road edge line to the property boundary shown in Figure 4.

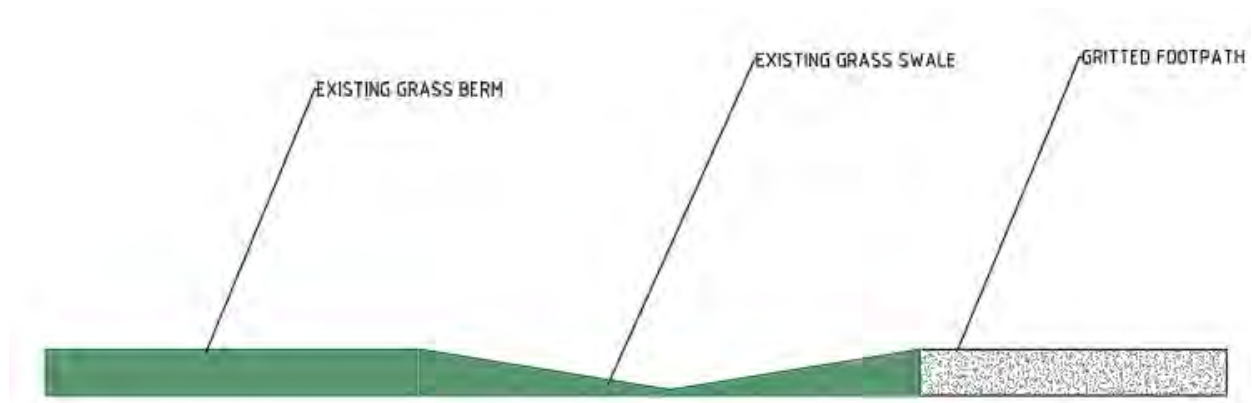


Figure 4. Existing cross-section, with the addition of a gritted footpath.

4. **ISSUES AND OPTIONS**

4.1. The following options are available to the Kaiapoi-Tuahiwi Community Board:

4.2. Option One: Approve Consultation for the Scheme Design Options

4.2.1. This option involves the Kaiapoi-Tuahiwi Community Board recommending that the Utilities & Roading Committee approves this report and authorises staff to undertake consultation on the scheme design options.

4.2.2. This is the recommended option because it allows the community and Te Ngāi Tūāhuriri hapū to provide feedback on which option they would like to be constructed in the section between the Marae and the existing footpath on the eastern side of Tuahiwi Road.

4.3. Option Two: Select a Scheme Design Option and Bypass Consultation

4.3.1. This option involves the Kaiapoi-Tuahiwi Community Board recommending that the Utilities & Roading Committee selects a scheme design option to progress to detailed design and subsequently bypasses consultation at the scheme design stage.

4.3.2. This is not the recommended option because it does not allow the community and Te Ngāi Tūāhuriri hapū to provide feedback on potential design options for the section between the Marae and the existing footpath on the eastern side of Tuahiwi Road. There is therefore a risk that that the option progressed to detailed design is not favoured by the community or Te Ngāi Tūāhuriri hapū, and as such, may affect the Council's reputation.

4.4. Option Three: Decline Consultation for the Scheme Design Options

4.4.1. This option involves the Kaiapoi-Tuahiwi Community Board recommending that the Utilities & Roading Committee decline consultation for the scheme design options and require staff to consider other options.

4.4.2. This is not the recommended option because staff have already investigated options in the area and decided on the three most feasible options for the budget available. The budget for this project is allocated within the 2022/2023 financial year and therefore any further scheme design work required may mean that the Tuahiwi Footpath is not constructed by the 30th June 2023.

4.5. Implications for Community Wellbeing

4.5.1. There are implications on community wellbeing by the issues and options that are the subject matter of this report. Therefore, community engagement will be undertaken to obtain their opinions.

- 4.6. The Management Team has reviewed this report and support the recommendations.

5. **COMMUNITY VIEWS**

5.1. **Mana whenua**

- 5.1.1. Te Ngāi Tūāhuriri hapū are likely to be affected by, or have an interest in the subject matter of this report.
- 5.1.2. The Rūnanga have requested that a footbath be constructed through the Tuahiwi Village, between the Urupa and 160 Tuahiwi Road. This was requested in 2019 and put forward for the 2021-2031 Long Term Plan.
- 5.1.3. At this stage, no formal consultation has occurred with Te Ngāi Tūāhuriri hapū; however, this will be progressed once approval is received to consult on the scheme design options.
- 5.1.4. A communications and engagement plan will be put together following the approval of this report which will detail the method of engagement with Ngāi Tūāhuriri and the Marae.

5.2. **Groups and Organisations**

- 5.2.1. There are groups and organisations likely to be affected by, or to have an interest in the subject matter of this report.
- 5.2.2. An archaeological authority is required from Heritage New Zealand to undertake these works. This application process has been started by staff and will be continued once the option to be progressed to detailed design is decided.

5.3. **Wider Community**

- 5.3.1. The wider community is likely to be affected by, or to have an interest in the subject matter of this report.
- 5.3.2. The Tuahiwi community will be consulted with once approval is received to consult on the scheme design options.
- 5.3.3. A communications and engagement plan will be put together following the approval of this report which will detail the method of engagement with the directly affected residents.

6. **OTHER IMPLICATIONS AND RISK MANAGEMENT**

6.1. **Financial Implications**

- 6.1.1. There are financial implications of the decisions sought by this report. This budget is included in the Annual Plan/Long Term Plan.
- 6.1.2. There is a budget of \$450,000, allocated within PJ 101229.000.5135, for the 2022/2023 financial year to undertake the detailed design and construction of the Tuahiwi Footpath.
- 6.1.3. The engineer's estimate for all three proposed options is less than the \$450,000 allocated for this project.
- 6.1.4. Option one, two and three are estimated at \$434,000, \$397,000 and \$322,000, respectively. These estimates include a 20% contingency, 10% allowance for preliminary and general costs, PDU fees, and an allowance for engaging an archaeologist and site stand-over.

6.2. **Sustainability and Climate Change Impacts**

- 6.2.1. The recommendations in this report do not specifically have sustainability and/or climate change impacts, as this report is seeking approval to consult on scheme design options.

6.2.2. However, the implementation of walking infrastructure improves accessibility for those in the surrounding area and increases the uptake of walking as a mode of transport. This means that more individuals will travel by foot for journeys they may have previously undertaken by motor vehicle, resulting in a small reduction in carbon emissions.

6.3. Risk Management

6.3.1. There are risks arising from the adoption/implementation of the recommendations in this report.

6.3.2. This risk is directly related to COVID-19, which may result in a change of consultation method or a delay. If this is required, staff will manage this by following guidelines prescribed by the New Zealand Government.

6.3.3. Subsequently, there is also a risk that staff members undertaking consultation may be exposed to COVID-19 from a member of the public; however, government procedures will be followed to reduce this risk.

6.4. Health and Safety

6.4.1. There are health and safety risks arising from the adoption/implementation of the recommendations in this report.

6.4.2. Staff members undertaking the consultation are at greater risk of exposure to COVID-19 from a member of the public. Staff will follow guidelines prescribed by the New Zealand Government/Ministry of Health to reduce this risk.

7. CONTEXT

7.1. Consistency with Policy

7.1.1. This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Authorising Legislation

7.2.1. The Local Government Act (2002) is the relevant legislation for this matter.

7.3. Consistency with Community Outcomes

7.3.1. The Council's community outcomes are relevant to the actions arising from recommendations in this report.

7.3.2. Public spaces and facilities are plentiful, accessible and high quality, and reflect cultural identity.

- The accessibility of community and recreation facilities meets the changing needs of our community

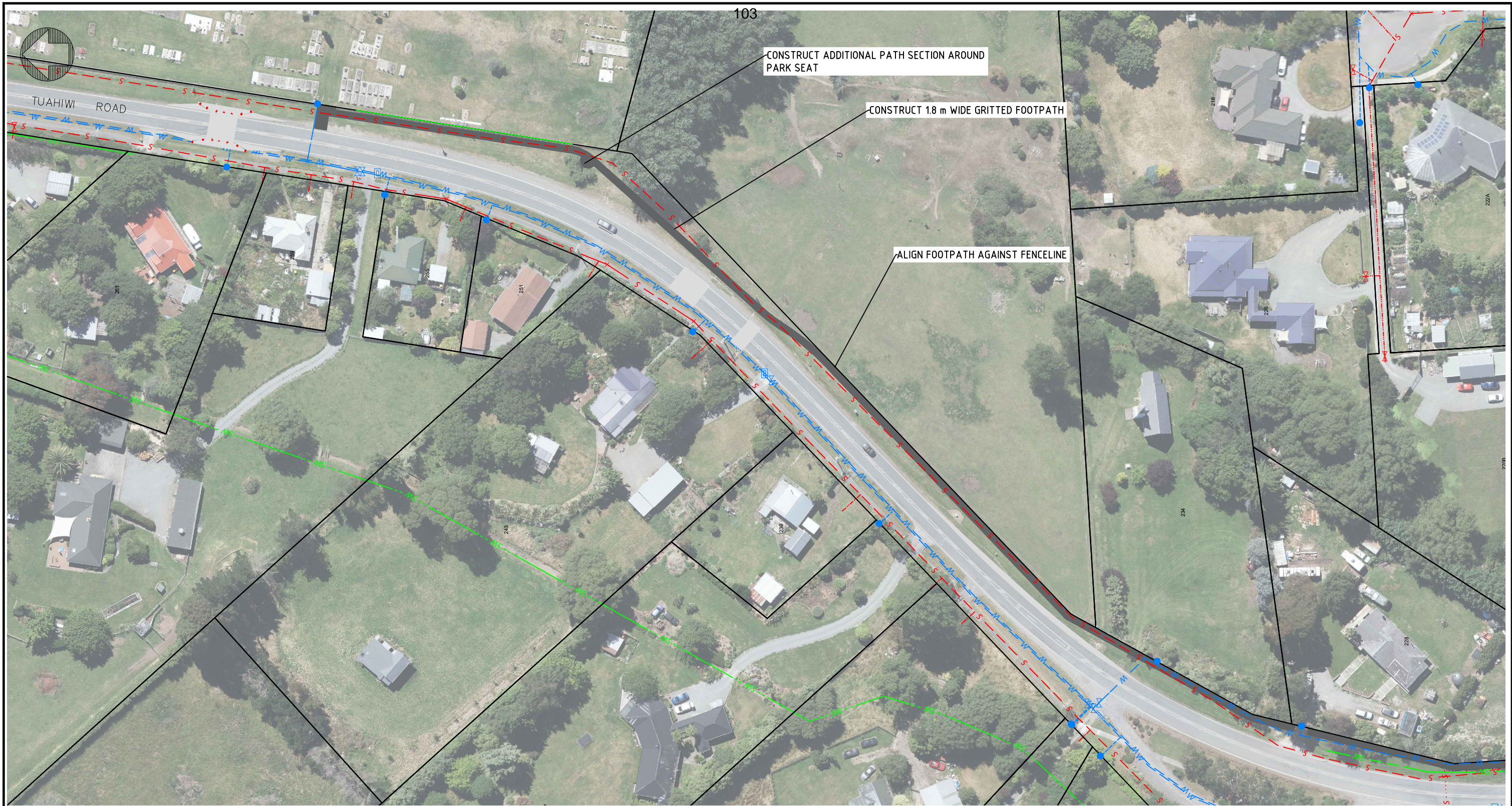
7.3.3. Transport is accessible, convenient, reliable and sustainable.

- The standard of our District's transportation system is keeping pace with increasing traffic numbers

7.4. Authorising Delegations

7.4.1. The Kaiapoi-Tuahiwi Community Board are responsible for considering any matters of interest or concern within their ward area and making a recommendation to the Utilities & Roading Committee.

7.4.2. The Utilities & Roading Committee has delegated responsibility for activities related to Roading and Transportation (including road safety, multimodal transportation and traffic control).



LEGEND

- NEW ROAD SHOULDER
- NEW FOOTPATH ALIGNMENT
- NEW PEDESTRIAN CUTDOWN/VEHICLE ENTRANCE
- GOBI BLOCKS
- NEW VEHICLE ENTRANCE
- GRASS BERM (HYDRO-SEED AND TOPSOIL)

REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	FOR COMMUNITY BOARD - SCHEME DESIGN	AMC	KS	JM	04/08/2022

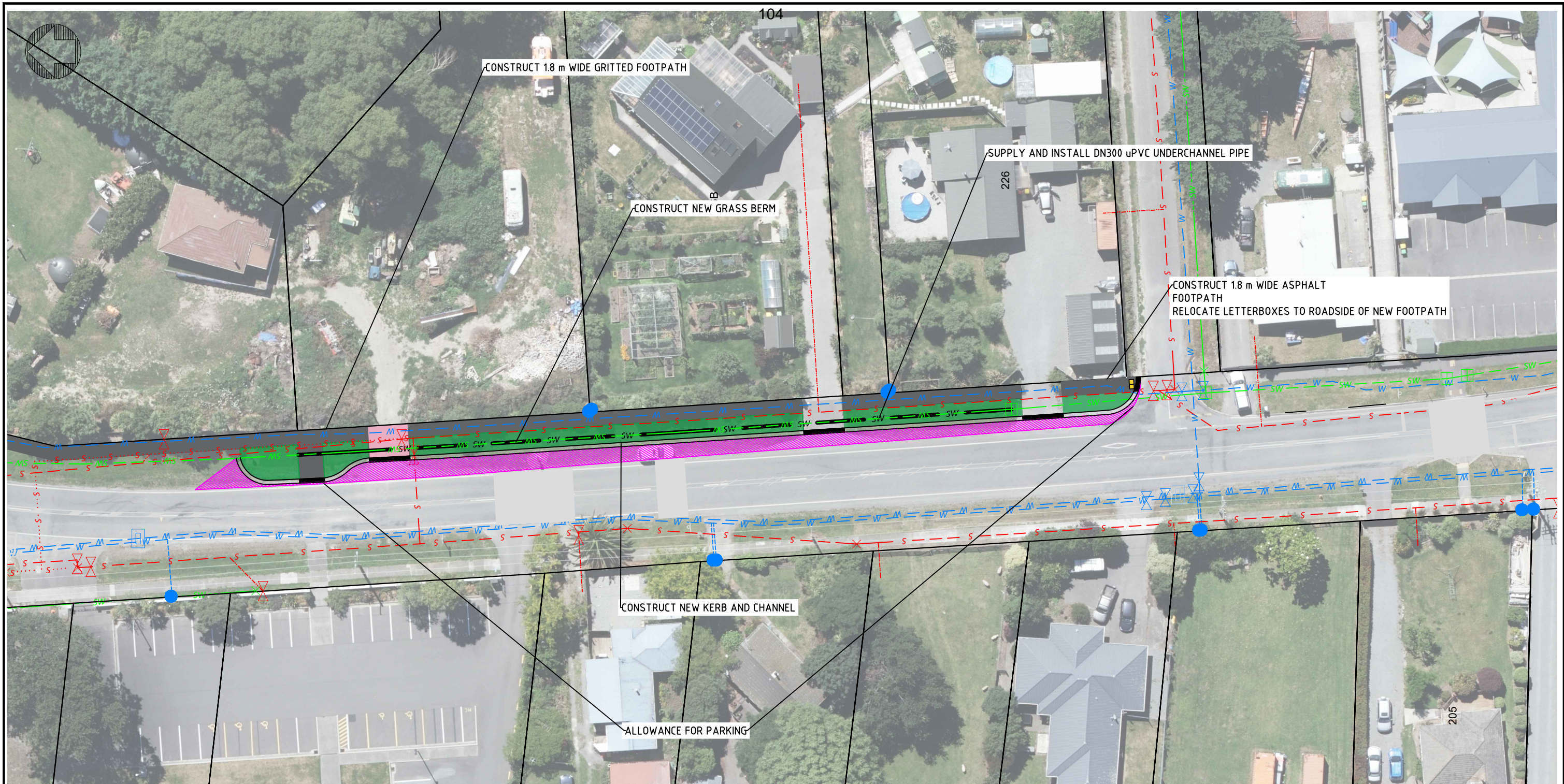
SURVEYED	RR	23/09/2021	PROJECT No	PD001839
DRAWN	AMC	17/03/2022	CON No	CON2021-38
DRAWING CHKD	KS	31/05/2022	SCALE (A3)	1:1000
DESIGNED	---	--/--/2020	DATUM ORIGIN	
DESIGNED CHKD	---	--/--/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	--/--/2020	VERTICAL	



PROJECT	TUAHIMI FOOTPATH CONSTRUCTION
---------	-------------------------------

SHEET TITLE	NORTHERN FOOTPATH SECTION
-------------	---------------------------

PRELIMINARY NOT FOR CONSTRUCTION	
DRAWING	4278
SHEET	REVISION
01	A



LEGEND

- NEW ROAD SHOULDER
- NEW FOOTPATH ALIGNMENT
- NEW PEDESTRIAN CUTDOWN/VEHICLE ENTRANCE
- GOBI BLOCKS
- NEW VEHICLE ENTRANCE
- GRASS BERM (HYDRO-SEED AND TOPSOIL)

REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	FOR COMMUNITY BOARD - SCHEME DESIGN (OPTION 1)	AMC	KS	JM	04/08/2022

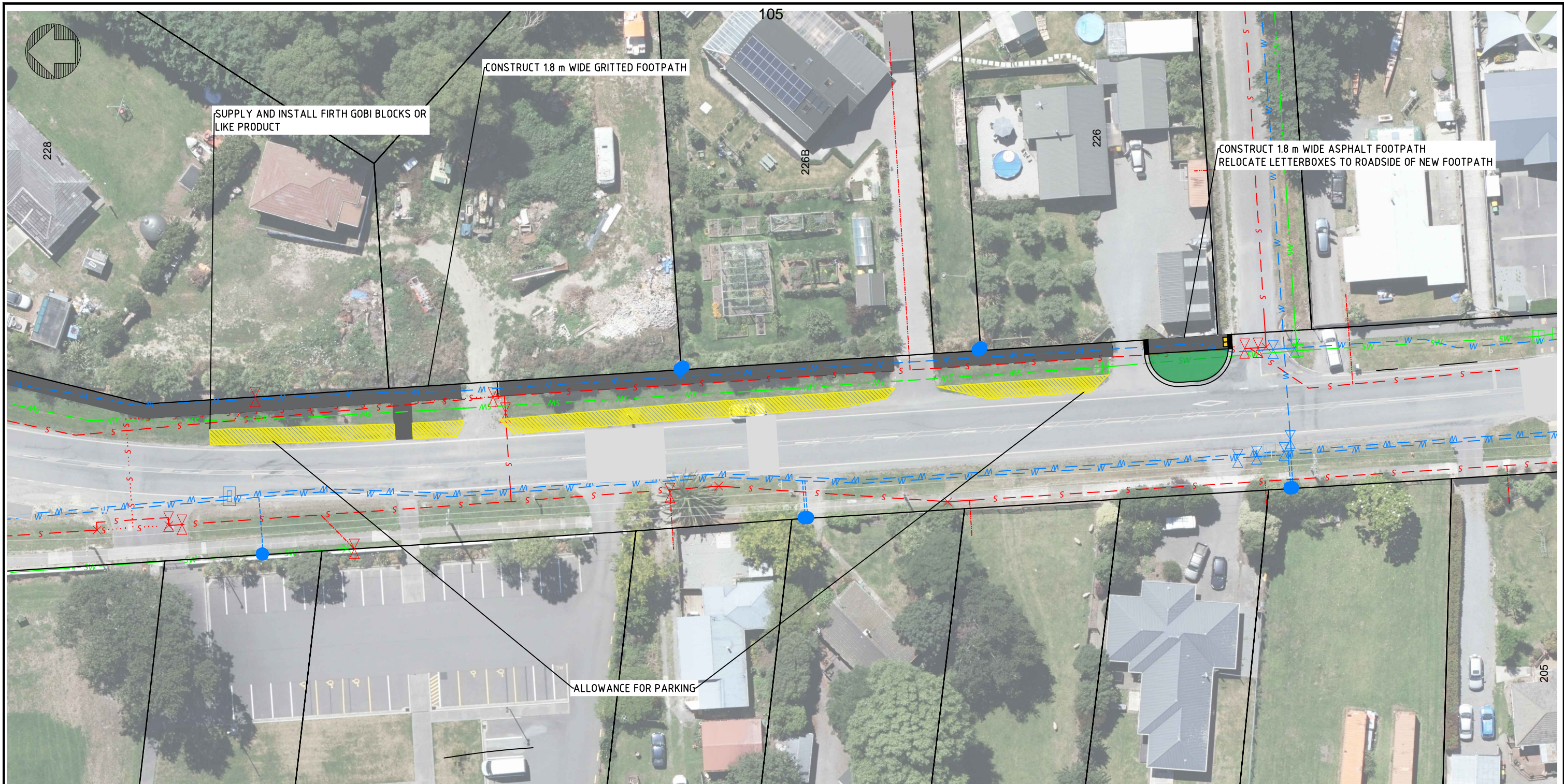
SURVEYED	RR	23/09/2021	PROJECT No	PD001839
DRAWN	AMC	17/03/2022	CON No	CON202138
DRAWING CHKD	KS	31/05/2022	SCALE (A3)	1:500
DESIGNED	---	--/--/2020	DATUM ORIGIN	
DESIGNED CHKD	---	--/--/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	--/--/2020	VERTICAL	



PROJECT	TUAHIWI FOOTPATH CONSTRUCTION
---------	-------------------------------

SHEET TITLE	MARAE FOOTPATH SECTION KERB AND CHANNEL OPTION
-------------	--

PRELIMINARY NOT FOR CONSTRUCTION	
DRAWING	4278
SHEET	REVISION
02.1	A



LEGEND

- NEW ROAD SHOULDER
- NEW FOOTPATH ALIGNMENT
- NEW PEDESTRIAN CUTDOWN/VEHICLE ENTRANCE
- GOBI BLOCKS
- NEW VEHICLE ENTRANCE
- GRASS BERM (HYDRO-SEED AND TOPSOIL)

REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	FOR COMMUNITY BOARD - SCHEME DESIGN (OPTION 2)	AMC	KS	JM	04/08/2022

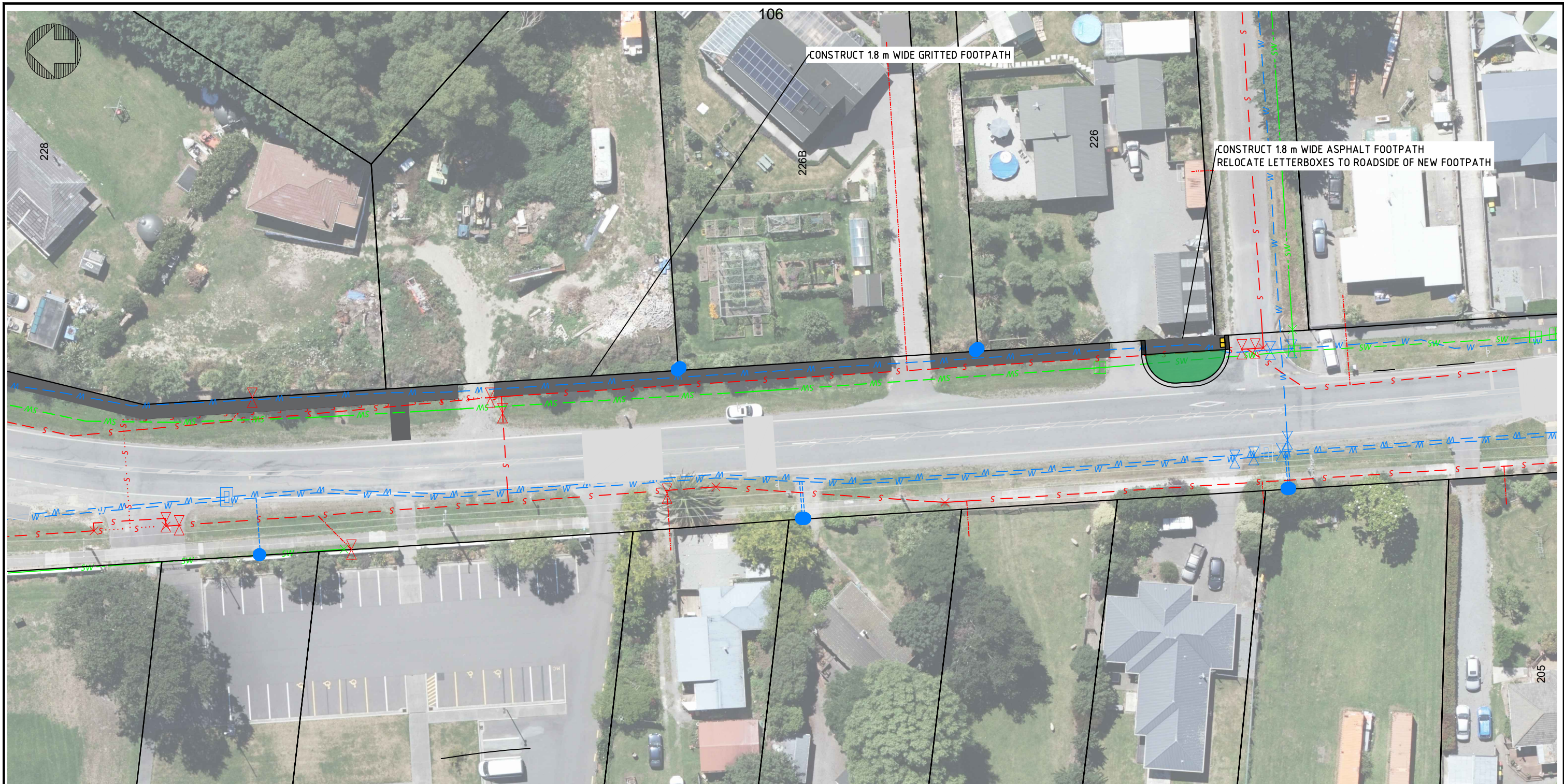
SURVEYED	RR	23/09/2021	PROJECT No	PD001839
DRAWN	AMC	17/03/2022	CON No	CON202138
DRAWING CHKD	KS	31/05/2022	SCALE (A3)	1:500
DESIGNED	---	--/--/2020	DATUM ORIGIN	
DESIGNED CHKD	---	--/--/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	--/--/2020	VERTICAL	



PROJECT	TUAHIWI FOOTPATH CONSTRUCTION
---------	-------------------------------

SHEET TITLE	MARAE FOOTPATH SECTION GOBI BLOCK OPTION
-------------	--

PRELIMINARY NOT FOR CONSTRUCTION	
DRAWING	4278
SHEET	REVISION
02.2	A



LEGEND

- NEW ROAD SHOULDER
- NEW FOOTPATH ALIGNMENT
- NEW PEDESTRIAN CUTDOWN/VEHICLE ENTRANCE
- GOBI BLOCKS
- NEW VEHICLE ENTRANCE
- GRASS BERM (HYDRO-SEED AND TOPSOIL)

REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	FOR COMMUNITY BOARD - SCHEME DESIGN (OPTION 3)	AMC	KS	JM	04/08/2022

SURVEYED	RR	23/09/2021	PROJECT No	PD001839
DRAWN	AMC	17/03/2022	CON No	CON202138
DRAWING CHKD	KS	31/05/2022	SCALE (A3)	1:500
DESIGNED	---	--/--/2020	DATUM ORIGIN	
DESIGNED CHKD	---	--/--/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	--/--/2020	VERTICAL	



PROJECT	TUAHIWI FOOTPATH CONSTRUCTION
---------	-------------------------------

SHEET TITLE	MARAE FOOTPATH SECTION DO NOTHING OPTION
-------------	--

PRELIMINARY NOT FOR CONSTRUCTION	
DRAWING	4278
SHEET	REVISION
02.3	A



LEGEND

- NEW ROAD SHOULDER
- NEW FOOTPATH ALIGNMENT
- NEW PEDESTRIAN CUTOFF/VEHICLE ENTRANCE
- GOBI BLOCKS
- NEW VEHICLE ENTRANCE
- GRASS BERM (HYDRO-SEED AND TOPSOIL)

REV	REVISION DETAILS	DRN	CHK	APP	DATE
A	FOR COMMUNITY BOARD - SCHEME DESIGN	AMC	KS	JM	04/08/2022

SURVEYED	RR	23/09/2021	PROJECT No	PD001839
DRAWN	AMC	17/03/2022	CON No	CON202138
DRAWING CHKD	KS	31/05/2022	SCALE (A3)	1:1000
DESIGNED	---	--/--/2020	DATUM ORIGIN	
DESIGNED CHKD	---	--/--/2020	HORIZONTAL	NZTM GD2000
APPROVED	---	--/--/2020	VERTICAL	



PROJECT	TUAHIMI FOOTPATH CONSTRUCTION
---------	-------------------------------

SHEET TITLE	SOUTHERN FOOTPATH SECTION
-------------	---------------------------

PRELIMINARY NOT FOR CONSTRUCTION	
DRAWING	4278
SHEET	REVISION
03	A

WAIMAKARIRI DISTRICT COUNCIL**REPORT FOR DECISION**

FILE NO and TRIM NO: IFR-02 / 220721124634

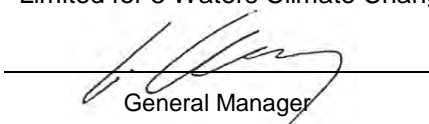
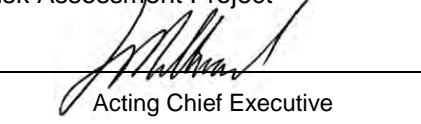
REPORT TO: MANAGEMENT TEAM

DATE OF MEETING: 1 August 2022

AUTHOR(S): Colin Roxburgh, Water Asset Manager

SUBJECT: Request for Approval to Engage Waugh Infrastructure Management Limited for 3 Waters Climate Change Risk Assessment Project

ENDORSED BY:
(for Reports to Council, Committees or Boards)

1. SUMMARY

- 1.1. This report is to request Management Team's approval to engage Waugh Infrastructure Management Limited to undertake the 3 Waters Climate Change Risk Assessment Project for the sum of \$74,715.
- 1.2. The 3 Waters Climate Change Risk Assessment Project was initiated from the Asset Management Improvement Project process (ID IP054), driven by the Activity Management Plan process, where needs were identified to improve asset management processes. There is a clear need to better understand the risk that climate change poses at an asset level for 3 Waters infrastructure, given the scale of the forecast impacts of climate change, and the value of assets potentially affected.
- 1.3. A direct negotiation procurement method has been selected as the optimum way to deliver this project due to a combination of a lack of available expertise internally, as well as the broad nature of the scope which presents challenges with a competitive procurement method.
- 1.4. The proposal from Waugh is considered to represent good value, and is seen to be the optimum way of delivering the outputs required from this project. The estimate provided of cost across the various components that will be delivered is reasonable, and in line with earlier allowances made for this project, taking into account typical costs and rates from external consultants.

Attachments:

- i. Problem Definition Workshop Memo
- ii. Procurement Plan Trim: 210517077914

2. RECOMMENDATION

THAT the Management Team:

- (a) **Receives** Report No. 220721124634.
- (b) **Notes** that the Activity Management Plan process identified a need to undertake a 3 Waters Climate Change Risk Assessment process, and that staff identified the optimum way of delivering this project being by direct negotiation with Waugh Infrastructure Management Limited, who have expertise and experience in work of this nature.

- (c) **Approves** staff engaging Waugh Infrastructure Management for the sum of \$74,715, funded from the 3 Waters Asset Management Budget to undertake the 3 Waters Climate Change Risk Assessment project, noting that it is considered unlikely that a better balance of value and quality would be achieved through an alternative method.
- (d) **Circulates** a copy of this report to the Utilities and Roading Committee for their information.

3. **BACKGROUND**

- 3.1. The 3 Waters Climate Change Risk Assessment Project was initiated from the Asset Management Improvement Project process (ID IP054), driven by the Activity Management Plan process, where needs were identified to improve asset management processes. There is a clear need to better understand the risk that climate change poses at an asset level for 3 Waters Infrastructure, given the scale of the forecast impacts of climate change, and the value of assets potentially affected.
- 3.2. This project will be informed by the recent reports prepared by NIWA regarding the forecast nature of Climate Change within the District as well as the Canterbury Climate Change Risk Assessment recently completed for the Canterbury Mayoral Forum, and will inform a wider risk assessment and climate change pieces of work at a corporate level for the Council. This piece of work while directly applicable to 3 Waters, will also be beneficial to other parts of Council in the future as other more targeted risk assessments take place.
- 3.3. The procurement method used to determine how to deliver this work has been through direct negotiation and workshops with Waugh Infrastructure Management Limited. The reasons for selecting this method are:
 - The scope of this work is very broad, as the level of effort (and therefore cost) depends almost entirely on the level of detail of each element of the project. If an open or invited tender method was selected, tenders could significantly vary their level of effort (and therefore cost) of the various elements of the project, with it being difficult to avoid a situation in which the winning tenderer was simply the one that proposed delivering the least detailed and comprehensive set of deliverables.
 - This broad range of scope would therefore be at risk of not delivering the optimum outcome of cost versus quality of deliverables.
 - Some external assistance was found to be beneficial in defining the scope initially, from a consultant experienced in work of this nature. This again lent itself towards a direct negotiation method with an experienced consultant, rather than competitive tendering process. Taking this into account, negotiations commenced with Waugh Infrastructure Management (WIM) Limited. The reasons for selecting this consultant were:
 - WIM have recent and relevant experience with other WDC asset management projects. This has included work on the 3 Waters Generator Strategy and Kaiapoi Wastewater Master Planning exercise. This experience has brought with it familiarity and understanding of the Council's 3 Waters assets and asset management systems, that will be beneficial and create efficiencies in delivering this project.
 - WIM have recent and relevant experience with similar climate change risk assessment projects and 3 waters asset management projects for other local authorities and countries. This has included delivery of One Water Blueprints and Strategy for Selwyn District Council, Samoa Climate Ready Asset Management Project, delivery of Climate Change Risk Assessment projects for other local authorities, involvement in the Canterbury lifelines group as well as a sub-consultant from the University of Auckland bringing experience from the Climate Adaptation Platform, and international climate change adaptation projects.

- There is a lack of available resources internally. While there are some staff internally with some experience in asset management risk assessments, there are none with the specific experience offered by Waugh with regard to climate change risk assessments. Further, of those internal staff that could be considered to deliver this project, none have the available time to commit, regardless of their level of expertise.
- 3.4. Following the selection of procurement method, a problem definition workshop has been held between Waugh Infrastructure and Council staff, including representatives from the 3 Waters team and the Strategy and Business Unit. From this process, the 'problem statement' has been agreed, and a proposal received from Waugh to address this.
- 3.5. After agreement on the problem definition, a proposal has been delivered by Waugh, feedback provided, and the proposal amended. This has led to the final proposal which is recommended to be accepted. A procurement plan has been prepared which has been approved by the Procurement PCG.

4. **ISSUES AND OPTIONS**

- 4.1. There are two options available:
- Accept the proposal from Waugh. This is the recommended option given the value and quality presented by the proposal, and the low likelihood of a better outcome being achieved through an alternative means.
 - Reject the proposal from Waugh, and undertake a competitive tendering process. This is not recommended given the additional time and cost associated with this, and the low likelihood of a better outcome being achieved.

Implications for Community Wellbeing

There are implications on community wellbeing by the issues and options that are the subject matter of this report. The wellbeing of those in the district at risk of the impacts of climate change (or reliant on infrastructure that is at risk from the impacts of climate change) is reliant on the Council first understanding these risks, and secondly managing them. This project is the first step in this process.

5. **COMMUNITY VIEWS**

5.1. **Mana whenua**

Te Ngāi Tūāhuriri hapū are likely to be affected by, or have an interest in the subject matter of this report. The impacts of climate change will impact all members of the district to varying degrees, including Te Ngāi Tūāhuriri hapū. As the project progresses and steps to address the risks are identified, ongoing engagement with Te Ngāi Tūāhuriri hapū will be required.

5.2. **Groups and Organisations**

There are groups and organisations likely to be affected by, or to have an interest in the subject matter of this report. This report addresses procurement only at this stage. Community group engagement with respect to climate change needs to be considered as part of the wider Council response to climate change, rather than with regard to this project in isolation. 3 Waters staff are working closely with the Strategy and Business Unit on this project, to ensure it feeds into the wider Council response.

5.3. **Wider Community**

The wider community is likely to be affected by, or to have an interest in the subject matter of this report. There are groups and organisations likely to be affected by, or to have an interest in the subject matter of this report. This report addresses procurement only at this stage. Wider community engagement with respect to climate change needs to be considered as part of the wider Council response to climate change, rather than with

regard to this project in isolation. 3 Waters staff are working closely with the Strategy and Business Unit on this project, to ensure it feeds into the wider Council response.

6. OTHER IMPLICATIONS AND RISK MANAGEMENT

6.1. Financial Implications

There are financial implications of the decisions sought by this report. Funding for this project is included within the 3 Waters Asset Management budget.

This budget is included in the Annual Plan under the 3 Waters Asset Management budget (GL 10.260.668.2533).

6.2. Sustainability and Climate Change Impacts

The recommendations in this report do have sustainability and/or climate change impacts. This project is specifically about understanding the risk that climate changes poses to 3 Waters assets.

6.3 Risk Management

There are not risks arising from the adoption/implementation of the recommendations in this report. While the project as a whole is part of a risk management process, there are no risks with respect to the procurement method for these works, which is the key subject matter of this report.

6.3 Health and Safety

There are not health and safety risks arising from the adoption/implementation of the recommendations in this report.

7. CONTEXT

7.1. Consistency with Policy

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

7.2. Authorising Legislation

The Local Government Act is relevant in this matter.

7.3. Consistency with Community Outcomes

The Council's community outcomes are relevant to the actions arising from recommendations in this report. Specifically, the following outcomes are relevant:

- There is a safe environment for all;
- There is a healthy and sustainable environment for all;
- Core utility services are sustainable, low emissions, resilient, affordable; and provided in a timely – manner.

7.4. Authorising Delegations

The Management Team is authorised to accept this proposal. Management Team approval is required for any works that are sole sourced over the value of \$20,000.

Workshop Notes

Title	Problem Definition – Climate Change and 3Waters Assets
Date	1 June 2022 1030-1200 hrs
Location	Waimakariri District Council Offices Rangiora [Rakahuri Room]
Attendance	Veronica Spittal (VJ), Colin Roxburgh, Kalley Simpson, Chris Bacon, Simon Colin
Apologies	Gerard Cleary

1 Recommendation

That, based on the Problem Definition Statement, 3 Waters develop a scope of works titled “Climate Change – 3 Waters Infrastructure Impact Assessment”.

The scope of works will primarily focus on distinguishing between assets which are exposed to climate change hazards and those that are not.

The impact on communities and adaptation options would follow as a separate output.

2 Problem Definition Statement (Draft)

Based on the discussions of 1.6.2022 and information assessed prior, the following Problem Definition (draft) has been produced:

3 Waters agree an adaptation response to climate change is needed urgently, but recognise that it needs to be based on a sound understanding of risk exposure to infrastructure and services.

3 Waters does not currently have a broad understanding of risk exposure across its assets which support the delivery of services to the community to enable informed discussion and set an investment direction.

Notes:

- i) The NIWA Report provides the hazard exposure baseline for climate change impacts. Any infrastructure impact assessment (risk exposure) must be based on that information
- ii) Mitigation approaches will be led by the Corporate Team. Regular engagement and coordination with them will be essential as both adaptation and mitigation programmes progress.

3 Problem Definition Workshop Notes

3.1 Background

- Kalley explained that there is currently a 3 Water Project underway – see below.

Ref	Project Name	Project Description	AMP Activity	AMP Section	District / Scheme Level
IP054	Climate Change Asset Risk Assessment	Carry out an assessment of the likely operational and asset management risks associated with rising GW levels in affected areas.	Water / Wastewater / Drainage	Risk Assessment	Overview

- VJ provided a short summary of the IPCC 5th and 6th reports. The 6th IPCC set out scenarios as follows:
 - a) Sustainability
 - b) Middle of the Road = approximately equivalent to RPC 4.5
 - c) Regional Rivalry
 - d) Inequality = approximately equivalent to RPC 8.5
 - e) Fossil fuels
- The recently released NIWA report was noted as being the basis for any assessments
- Aotearoa | New Zealand can make a difference. If every Country of our scale/emissions footprint did so, approx. 20-30% of global emissions would be managed/controlled

3.2 What are our views and concerns about climate change?

The range of views and attitudes towards climate change are captured below. These are not necessarily the views of the participants.

Views	Concerns
<p>Summary of Views and Concerns:</p> <ul style="list-style-type: none"> - This is real, and a very important issue. Solutions are complex and are likely to be act on from a social policy perspective. - Politics may stop us making transformational changes. We may not know what to do (reliable data) and may not be able to afford to pay for solutions. There will be stress impacts on our youth. <p>Other notes:</p> <ul style="list-style-type: none"> - WDC can act (lead and own) or Government will implement requirements (Zero Carbon) 	
<ul style="list-style-type: none"> • We need to start acting with more urgency than we have shown to date • This is one of the most important issues facing us, if not the most important • Adaptation is the most likely outcome • Economics will dictate behaviour • We can engineer our way out of anything • Retreat is a social policy decision, not an engineering decision • Technology will provide a solution in the future • Existential threat to human kind • Need to reframe to climate change economy • Mother nature has the last laugh • Extremely complex • Long term actions need (difficult to achieve politically) • Poverty exacerbated i.e. higher food prices 	<ul style="list-style-type: none"> • Getting the communication on board will be a massive mission • More flooding, sewer overflows, damage to infrastructure accelerated • Lack of Data • Action will be too late • Affordability • Secondary implications are unknown e.g. WWTP processes may no longer work if 2 degrees Celsius hotter/longer droughts • Impacts on other species, biodiversity wildlife • Scary especially for youth • Cascading effects • Transformational change may not be possible because of politics

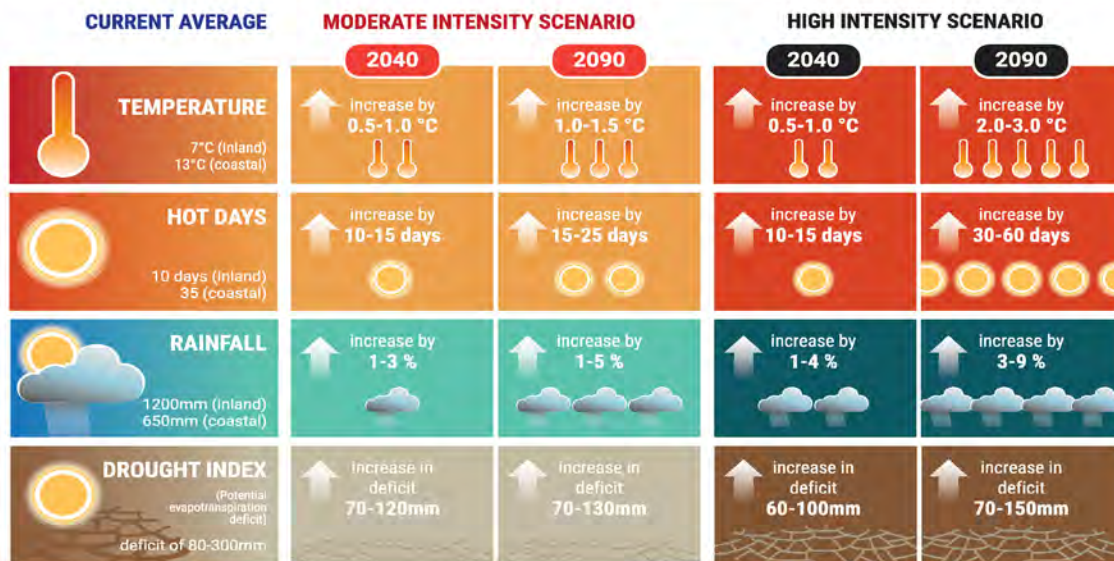
Problem Definition – Climate Change and 3Waters Assets

3.3 Impacts

- VJ discussed the NIWA report and general impacts e.g. hotter in Lees Valley.
- Hugh noted that the general impacts are experiences as hotter days, drought, reduced rainfall (and intense rainfall). Colin noted that sea level rise was expected to occur.

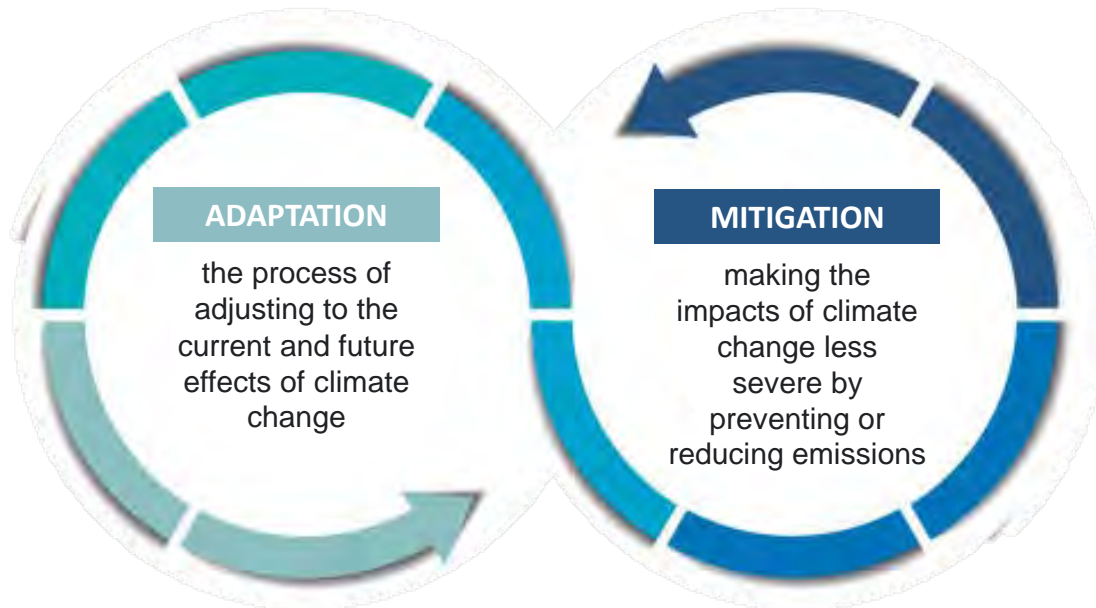
OVERVIEW

Waimakariri Climate Change Scenarios



3.4 Adaptation and Mitigation

- Hugh defined adaptation and mitigation
- Attendees were asked, based on their roles / responsibilities at WDC and under other personas to describe what adaptation approaches could be taken
- Attendees were allocated a persona, to challenge them to look at the problem from an alternative perspective. Personas were: 3Waters Asset Manager/Engineer, Iwi/Rūnanga representative, Councillor, Community member – rural, Taumata Arowai (CEO)



Adaptation (current role/responsibilities)	Adaptation Approaches (persona)
<p>Summary</p> <ul style="list-style-type: none"> - Staff have the opportunity to make adaptation based changes through the Council mechanisms/processes. Some have tried before, but not seen any change. - We don't yet understand which assets will be exposed to what degree - There is no baseline assessment. 	
<ul style="list-style-type: none"> • Ensure water sources can withstand drought or drill new bores • Increase wastewater and stormwater network capacity • At a high level establish scenarios to start a conversation with affected communities • Change design standards (+ that allow for expected CC) • Bigger pipes, pumps etc • Higher finished floor levels • Retreat • Stormwater basin, natural green infrastructure • District Adaptation Strategy framework for AM's • Provide science to inform AM's e.g. NIWA report • Natural Environment Strategy • Model affects in water supplies (+ modelling and hydraulic modelling that allows for expected CC) 	<ul style="list-style-type: none"> • Setting standards for design • Ensuring water quality not compromised due to increased rainfall (improved capacity and treatment systems) • Support investigation into more efficient water use • Wait and see what happens to the climate and respond at the time • How can we help design stormwater basin to enhance biodiversity at risk from climate change • Start increasing the capacity of my drain network and lobby Council to also do so. • Retreat from our coastal communities is not an option while I'm on Council

Problem Definition – Climate Change and 3Waters Assets

Adaptation (current role/responsibilities)	Adaptation Approaches (persona)
<ul style="list-style-type: none"> • Planning – avoiding areas of future flood risk and high GW levels and coastal inundation • Promoting higher stop banks that allow for future climate change. Working with ECan to achieve this 	

The following responses were considered to sit across both adaptation and mitigation areas:

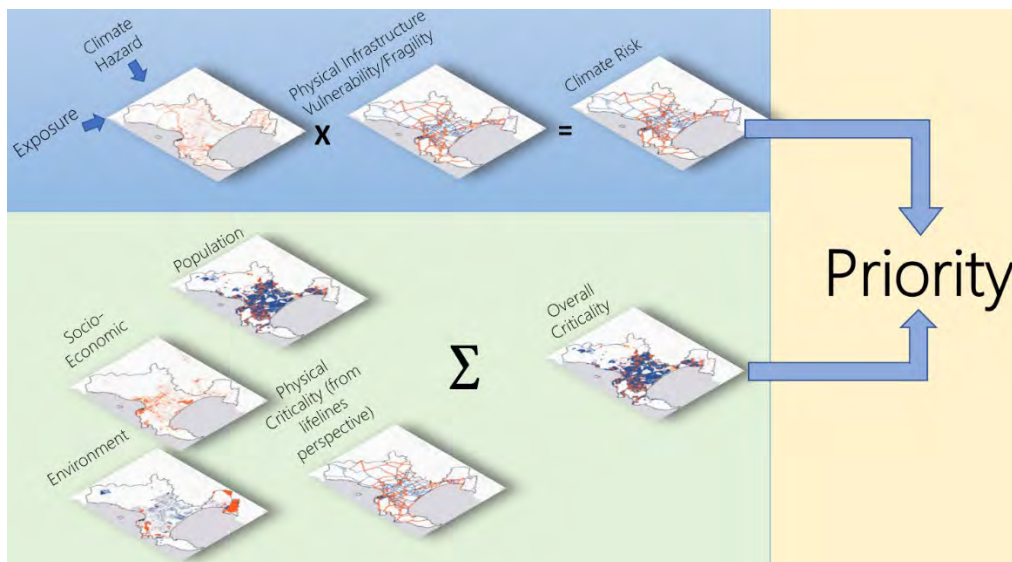
Adaptation and Mitigation (current role/responsibilities)
<ul style="list-style-type: none"> • I need to ensure we can still deliver LOS at an affordable costs and in a politically acceptable way • We want to be known as a green sustainable, progressive district • How do I deliver BAU and be transformational as the Councils climate change policy requirements me? • Carbon sinks • Corporate Policy framework e.g. Infrastructure Strategy

Mitigation (current role/responsibilities)	Mitigation Approaches (persona)
<p>Summary</p> <ul style="list-style-type: none"> - There are many opportunities, solutions are complex and require an interdisciplinary coordinated approach - Other departments may already be looking at approaches e.g. transport – what can we learn from them? 	
<ul style="list-style-type: none"> • Changing peoples behaviours • Solar panels, wind etc + investigate for treatment facilities (x2) • Change wastewater treatment processes to reduce GHG emissions • Convert wastewater treatment and sludge treatment processes to reduce methane emissions • Sustainable materials • Emissions reduction strategy (Corporate and District) • Sustainable procurement • Baselining GHG emissions from wastewater processes • More remote work (less site visits use of drones etc) • Promote low emissions construction techniques e.g. trenchless • Energy efficient facilities e.g. pumps 	<ul style="list-style-type: none"> • We want sustainable materials / outcomes at no additional cost • What opportunities are there for 3 Waters to work with other departments to reduce emissions e.g. carbon sinks • Waiting for technology to solve all the problems • Managing land use • We want sustainability considered in every thing we do • Land based wastewater treatment that captures GHG's • Promote electric/hybrid vehicle use in operations of 3 Waters staff and contractors

4 Problem Definition

An infrastructure impact assessment has not yet been undertaken. With reference to the figure below:

- The NIWA report provides a climate hazard and exposure assessment
- A physical infrastructure vulnerability/fragility “infrastructure impact” assessment should follow, based on the NIWA date
- Combined, these will provide a climate risk exposure profile



(Source: World Bank)

In support of this it was also noted that:

- We must look at adaptation opportunities for 3 Waters assets
- Establish a risk exposure based line to enable informed discussion
- Learn from other departments
- Support the Corporate team in undertaking / assessing mitigation (GHG) work
- The community is at the heart of the approach, with the Corporate team holding the primary responsibility to engaged with them. The community cannot be “decoupled” from any response.

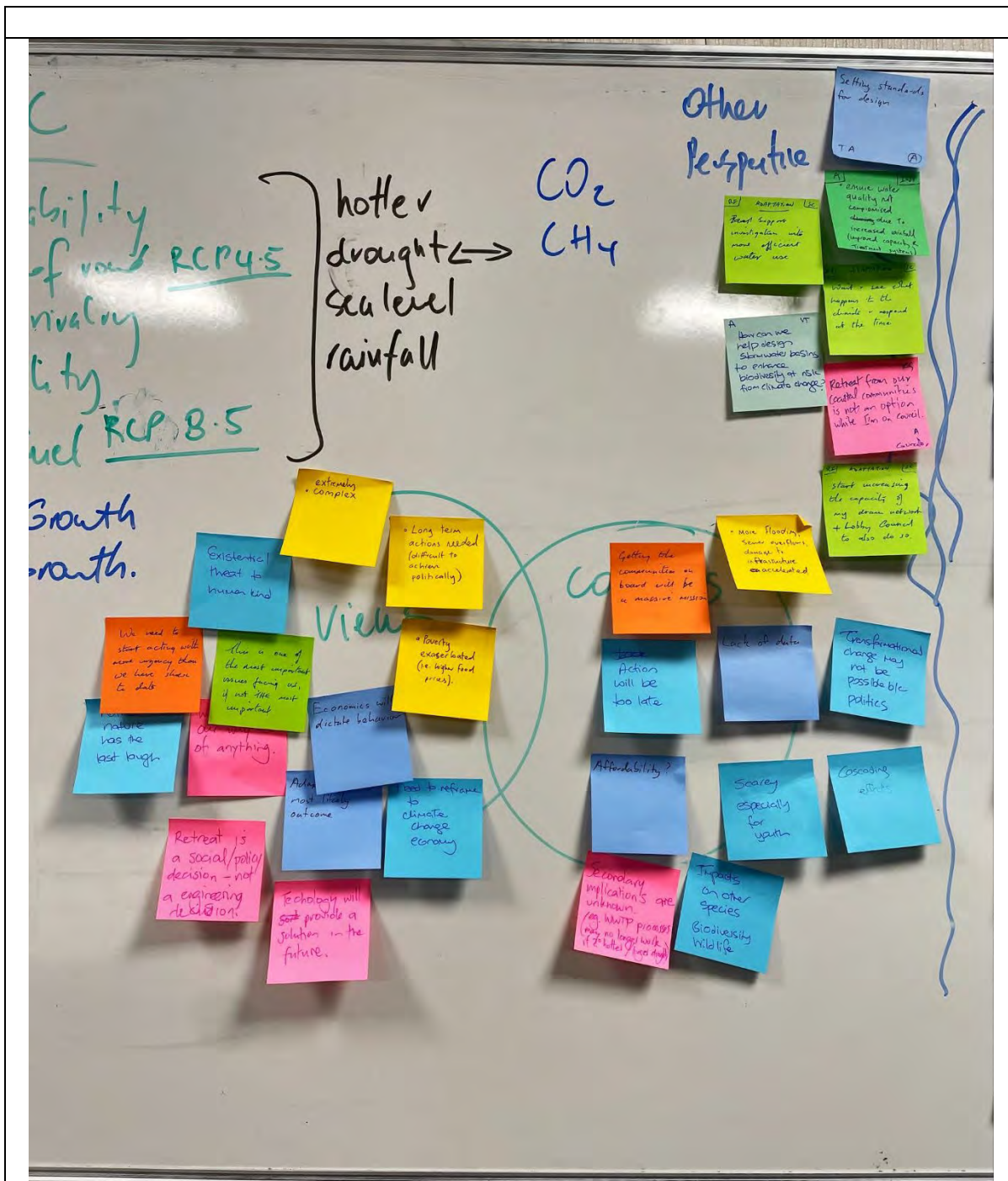
The draft Problem Definition is therefore:

3 Waters agree an adaptation response to climate change is needed urgently, but recognise that it needs to be based on a sound understanding of risk exposure to infrastructure and services.

3 Waters does not currently have a broad understanding of risk exposure across its assets which support the delivery of services to the community to enable informed discussion and set an investment direction.

Problem Definition – Climate Change and 3Waters Assets

Appendix One – Workshop White Board Images



PROCUREMENT

Procurement Plan

Introduction

What is a Procurement Plan?

The Procurement Plan outlines the entire procurement process, from sourcing suppliers through to completion/exit in line with the Council's Procurement Policy and Principles. In the Procurement Plan you will identify your procurement requirements, determine key milestones and/or delivery timeframes and describe the process in the identification and selection of suppliers/contractors/consultants. The objective is to provide a clear understanding of the scope, timeframe, budget and funding, as well as document responsible, effective and fit-for-purpose procurement of goods and services by the Council.

When do I need to complete a Procurement Plan?

At a minimum you will need to complete a Procurement Plan for any goods, services and works being purchased from third party suppliers:

- of value greater than or equal to \$50,000; or
- not in compliance with Table 1 below.

In addition, a Procurement Plan should be considered when the project is either high risk or high public interest.

The following table sets out the Council's procurement thresholds as per the Procurement and Contract Management Policy (the Policy).

Note: Guidelines to be used in conjunction with N3 and All of Government pricing.

Table 1

Dollar value	Procedure
Less than \$5,000	Direct Purchase* from supplier with PO
\$5,000 to \$20,000	3 quotations or Direct Purchase* from supplier with PO
\$20,000 to \$100,000	3 quotations
>\$100,000	Public tender

* Direct purchase means the procurement of goods and/or services by placing an order with the supplier of choice, without seeking other bids. As per 2.1 Definitions, Procurement and Contract Management Policy (190121005949).

What sections do I need to fill out ?

All projects	section 1
When PDU help is required	section 2
When an external consultant is required	section 3
When physical works are required	section 4
Where the purchase of goods is required	section 5

The approval levels are as outlined below:

Level 1 - Delegated Authority Approval

- <\$50,000 estimate AND
- In compliance with Table 1

Level 2 - Delegated Authority, plus Procurement Manager Approval

- \$50,000-\$249,999 estimate, AND
- In compliance with Table 1, OR
- High risk project/procurement
- Examples of high risk project/procurement:
 - Politically sensitive
 - Significant disruption
 - Uncommon technology
 - Cross-council work element

Level 3 - Delegated Authority, plus Procurement PCG Approval

- >=\$250,000 estimate, AND
- In compliance with Table 1, OR
- <\$250,000 estimate, AND not in compliance with Table 1

Level 4 - Delegated Authority, plus Procurement PCG Approval, plus Management Team

- >=\$250,000 AND not in compliance with Table 1, OR
- Multi-year maintenance contract, OR
- Strategic multi-year programme of works, OR
- Significant CBD/Red Zone/Arterial road works, OR
- High risk project*
- Examples of high risk project/procurement:
 - Politically sensitive
 - Significant disruption
 - Uncommon technology
 - Cross-council work element

* Note: Applies to any value.

PROCUREMENT

Procurement Plan

Section 1 - Project brief

Project name: _____

Council department: _____

Scheme/activity/location: _____

TRIM folder: _____ TRIM document number: _____

Project Owner/sponsor: _____ Project Manager: _____

PCG required: Yes No PCG Terms of Reference Trim number: _____

Procurement plan applicant: _____ Date: _____

Project brief - describe the full project

To be populated prior to discussing professional services with PDU or external consultants. Please reference any relevant TRIM documents in the spaces below.

Background

Provide a paragraph on what the issue is, any work done to date, and why the project is required:

Project objectives/outcomes

This project is intended to achieve the following:

Project specific constraints, critical H&S hazards and risks

Total project scope

Describe the total project scope, including intended achievement in each financial year:

Significant tasks required to complete project 123

Resource consent: Yes No Maybe Building consent: Yes No Maybe

Land purchase: Yes No Maybe Easements: Yes No Maybe

Is the activity compatible with underlying land status? Yes No Maybe

Agreement to enter private property: Yes No Maybe

Heritage NZ authority: Yes No Maybe Cultural consultation: Yes No Maybe

Public consultation: Yes No Maybe

Comment on what is required:

Options for combining works into this project

	Considered		Viable		Comment
	Yes	No	Yes	No	
Other projects planned in same geographic area that could be contracted together?					
Other similar Council projects that could be contracted together?					
Other works by external organisation that could be included in scope?					

Project financials and budgets

Please enter relevant financial year.

	20	/ 20	20	/ 20
	\$	\$	\$	\$
PJ number: _____	_____	_____	_____	_____
PJ number: _____	_____	_____	_____	_____
PJ number: _____	_____	_____	_____	_____
PJ number: _____	_____	_____	_____	_____

Is internal assistance required? (tick one) Yes - complete section 2 No - skip section 2

To be populated by Asset Manager prior to and after agreement with PDU.

PDU scope

Describe the project scope required from PDU, including intended achievement in each financial year.

PDU deliverables, reviews, hold points and approvals

The deliverables that are required are:

PDU estimated fees: _____

Note: Budget Holder's estimate of PDU fees.

Tick all that apply Required service	To be populated by Asset Manager Is this service required?	To be populated in conjunction with PDU Manager PDU manage?
Project management		
Investigations		
Geotechnical investigations/design		
Optioneering/concept		
Surveying		
Modelling		
Public consultation		
Civil design		
Structural design		
Resource consents		
Electrical/mechanical design		
Procurement documentation		
Tender management		
MSQA		
Post construction support		
Legal review		
Peer review		
Architectural design		
Landscape design		

Budget holder

Name: _____ Position: Budget holder

Signed: _____ Date: _____

Note: By entering your name in the box above you are giving your authority for this procurement plan to proceed.

Project management

Who is Project Manager? _____

Approval

Date sent to PDU: _____ Date approved by PDU: _____

Name: _____ Position: PDU Manager

Signed: _____ Date: _____

Note: By entering your name in the box above you are giving your authority for this procurement plan to proceed.

Are external professional services required? (tick one)

Yes - complete section 3

No - skip section 3

To be populated by PM prior to committing to Procurement of Professional Services.

Is it likely that multiple external consultants require procuring? Yes No

If yes, fill out section 3 multiple times.

Sustainable consultant procurement

Describe how sustainable procurement, in accordance with the procurement strategy, is to be considered as an outcome to this procurement and within the procurement evaluation and performance management criteria

- Require sustainability policy
- Require based within 40km

Consultant scope

Describe the project scope required from a consultant, including intended achievement in each financial year.

[Empty text box for describing project scope]

Consultant deliverables, reviews, hold points and approvals:

[Empty text box for describing deliverables, reviews, hold points and approvals]

Note: Budget Holder's estimate of Professional Service fees.

External procurement detail

For all services where an external provider is intended, tick all that apply from the following:

Tick all that apply	To be populated by Asset Manager	To be populated in conjunction with consultant
Required service	Is this service required?	Is consultant delivering?
Project management		
Investigations		
Geotechnical investigations/design		
Optioneering/concept		
Surveying		
Modelling		
Public consultation		
Civil design		
Structural design		
Resource consents		
Electrical/mechanical design		
Procurement documentation		
Tender management		
MSQA		
Post construction support		
Legal review		
Peer review		
Architectural design		
Landscape design		

Intended procurement request date: _____

Intended procurement method (tick one)

Open tender (see Procurement by tender - detail overleaf)

Selected tender (see Procurement by tender - detail overleaf)

Panel (see Procurement by panel - detail overleaf)

Sole sourced (see Procurement by sole sourced - detail overleaf)

Describe why method chosen:

If selected tender, who is intended to be invited and why?¹²⁹

Procurement by tender - detail

For all contracts where an open or selected tender is intended, complete the following:

Service being tendered: _____ Contract no: _____

Open or selected tender? Open Selected

Intended general conditions of contract *(tick one)*

 NZS3910 ACENZ Short Form Agreement Purchase Order

List any non-standard contractual approaches:

List any specific technical requirements:

List any specific health and safety issues:

Intended evaluation method *(tick one)*

 Quality only Price quality method Weighted attribute Lowest price conforming

Intended weighting percentage - only fill in those percentages that apply:

Price	Relevant experience	Track record	Management skills	Technical skills	Methodology	Total
%	%	%	%	%	%	100%

Tender evaluation lead: _____

TET member: _____

Probity representative required? Yes No

For all contracts where sole sourced procurement is intended, complete the following:

Service being sought: _____

Why sole sourced? _____

Who: _____

Why this provider? _____

Specialist skill set Previous knowledge or experience

Other _____

Intended General Conditions of Contract *(tick one)*

NZS3910 ACENZ Short Form Agreement Purchase Order

List any non-standard contractual approaches:

List any specific technical requirements:

List any specific Health and Safety issues:

Approval to proceed with Professional Services Procurement

Select a level to confirm that signatories have read and agreed with the procurement approach.

Note: By entering your name in the Signed box below you are giving your authority for this procurement plan to proceed.

Level 1 Delegated Authority Approval

- <\$50,000 estimate AND
- In compliance with Table 1.

Name:	Position: Activity Manager (Delegated Financial Authority)
Signed:	Date:

Level 2 Delegated Authority, plus Procurement Manager Approval

- \$50,000-\$249,999 estimate, AND
- In compliance with Table 1.
- Examples of high risk project/procurement
 - Politically sensitive • Significant disruption • Uncommon technology • Cross-council work element.

Name:	Position: Activity Manager (Delegated Financial Authority)
Signed:	Date:
Name:	Position: Procurement Manager
Signed:	Date:

Level 3 Delegated Authority, plus Procurement PCG Approval

- Either <\$249,999, AND
- not in compliance with Table 1, OR
- >=\$250,000 estimate, AND
- In compliance with Table 1.

Name:	Position: Department Manager
Signed:	Date:
Name:	Position: Procurement Manager (on behalf of PCG)
Signed:	Date:

Level 4 Delegated Authority, plus Procurement PCC Approval, plus Management Team

- >=\$250,000 AND not in compliance with Table 1, OR
- Multi-year maintenance contract, OR
- Strategic multi-year programme of works, OR
- Significant CBD/Red Zone/Arterial road works, OR
- High risk project*:
 - Politically sensitive
 - Significant disruption

* Note: Applies to any value.

Name:

Position: Procurement Manager

Signed:

Date:

Management Team Approval Received

Date:

Is this procurement for a construction contract? *(tick one)*

Yes - Complete Section 4 No - Skip Section 4

To be populated prior to committing to procuring construction.

Construction details

Specific project construction risks or constraints

Site or project specific risks or constraints (e.g. time, cost, quality, sustainability):

Construction procurement objectives and benefits sought

Throughout this procurement, the following objectives will be achieved:

Construction procurement risks

ID#	Potential risks	How risks will be managed	Assigned to

Construction scope

Describe the project scope required in the construction contract, including intended achievement in each financial year:

Milestone	Date

List any specific technical requirements:

List any specific health and safety issues:

Construction contract estimate: _____

Procurement details

Construction procurement method

Intended procurement request date: _____

- Open or Selected tender *(see Procurement by tender - detail)*
- Panel *(see Procurement by panel - detail)*
- Sole sourced *(see Procurement by sole sourced - detail)*

1 - Procurement by open tender - detail

For all contracts where an open tender is intended, complete the following:

Contract No: _____ Open tender

Intended general conditions of contract *(tick one)*

- NZS3910
- ACENZ
- Short Form Agreement
- Purchase Order
- Other

List any non-standard contractual approaches: 135

Intended evaluation method (tick one)

Quality only Price Quality method Weighted attribute Lowest Price Conforming

Intended Weighting percentage - only fill in those percentages that apply:

Price	Relevant Experience	Track Record	Management Skills	Technical Skills	Methodology	Other	TOTAL
%	%	%	%	%	%	%	100%

Tender Evaluation Lead: _____

TET Members: _____

Tender Secretary advised: Yes No Probity representative required: Yes No

2 - Procurement by panel – detail

For all contracts where Panel procurement is intended, complete the following:

Service being sought: _____

Panel name: _____

All Panelists As Per Panel Management Plan

List Panelists approached and why?

3 - Procurement by invited/selected tender or sole sourced – detail

For all contracts, complete the following:

Are these works being added to an existing contract? Yes No

Are these works rolling over an existing maintenance contract? Yes No

Service being sought: _____

Why invited/selected or sole sourced? _____

Who: _____

Why this provider? _____ 136 _____

Specialist skill set Previous knowledge or experience

Other: _____

Conditions of contract: _____

Key procurement milestones

Choose the table that applies to this evaluation and edit accordingly.

Milestones for procurement	Date

Budget details

Costs

The budget codes are: _____

Please enter relevant financial year.

Budget elements	20 /20	20 /20	20 /20	Total
Total budget available per year	\$	\$	\$	\$
Minus actual committed costs to date – fixed sums	\$	\$	\$	\$
Minus other specific/identified costs (not yet committed)	\$	\$	\$	\$
Balance available for this contract	\$	\$	\$	\$
Engineers estimate	\$	\$	\$	\$
Proposed contingency	\$	\$	\$	\$
Unallocated balance remaining	\$	\$	\$	\$

Contract Contingency: \$ _____ %

Reason for contingency level: _____

Approval to proceed with Construction Procurement

Select a level to confirm that signatories have read and agreed with the procurement approach.

Note: By entering your name in the Signed box below you are giving your authority for this procurement plan to proceed.

Level 1 Delegated Authority Approval

- <\$50,000 estimate AND
- In compliance with Table 1.

Name:	Position: Activity Manager (Delegated Financial Authority)
Signed:	Date:

Level 2 Delegated Authority, plus Procurement Manager Approval

- \$50,000-\$249,999 estimate, AND
- In compliance with Table 1
- Examples of high risk project/procurement:
 - Politically sensitive
 - Significant disruption
 - Uncommon technology
 - Cross-council work element.

Name:	Position: Activity Manager (Delegated Financial Authority)
Signed:	Date:
Name:	Position: Procurement Manager
Signed:	Date:

Level 3 Delegated Authority, plus Procurement PCG Approval

- Either <\$249,999, AND
- not in compliance with Table 1, OR
- >=\$250,000 estimate, AND
- In compliance with Table 1.

Name:	Position: Department Manager
Signed:	Date:
Name:	Position: Procurement Manager (on behalf of PCG)
Signed:	Date:

Level 4 Delegated Authority, plus Procurement PCG Approval, plus Management Team

- >=\$250,000 AND not in compliance with Table 1, OR
- Multi-year maintenance contract, OR
- Strategic multi-year programme of works, OR
- Significant CBD/Red Zone/Arterial road works, OR
- High risk project*:
 - Politically sensitive
 - Significant disruption

* Note: Applies to any value.

Name:	Position: Procurement Manager (on behalf of PCG and Management Team)
-------	---

Signed:	Date:
---------	-------

Management Team Approval Received	Date:
--	-------

Does this project involve the purchasing of goods (outside of a Construction contract)? (tick one)
Yes - Complete section 5 No - skip section 5

To be populated prior to committing to procuring goods.

Supplier selection

How will the supplier be selected? (tick one)

- Existing supply contract/agreement All of Government contract Open tender
- Invited price Sole sourced

If included in an existing contract/agreement, provide details of the contract:

[Empty box for contract details]

Does this work comply with the contract conditions of the existing contract/agreement (for example, is it within the scope, or does it require a formal variation)? Yes No

How will the supplier’s price be evaluated? (tick one)

- Comparison to contract rates Lowest Price Negotiation

If negotiated, is a negotiation plan required? Yes No

What will be the legal conditions for supply? (tick one)

- Covered under existing supply contract/agreement Covered under all of Government contract
- Government model contract for goods supply Government model contract - Lite
- Supplier’s terms and conditions

Where the supplier is already known, provide details below:

Legal name of the supplier: _____

New Zealand business number of the supplier: _____

Address (for a company, use the registered office, for others use physical address): _____

Description of goods

Provide a short description of the nature of the goods being purchased. Include any product codes or serial numbers, and any specific certifications or standards that the goods must comply with:

[Empty box for description of goods]

Delivery

Delivery time frame: The goods must be delivered within _____ (number) of business days from the date of order.

OR

Provide a date: _____

Delivery address: _____

List any specific delivery requirements (e.g. Water Unit to be notified prior to delivery, forklift required for unloading):

Who will insure the goods during delivery (e.g. supplier or transport company):

Do the goods require inspection/acceptance following delivery? Yes No

If yes, who will be responsible for this?

List any specific storage requirements (e.g. goods must be stored under cover):

Who will insure the goods during storage, and is a specific policy required for this?

Do the goods require security or monitoring? Yes No

If yes, who will be responsible for this?

Do the goods create a health and safety or environmental risk? (Such as spill risks or dangerous goods storage)

Yes No

If yes, who will be responsible for this, and how will it be managed?

Cost

The cost of the goods will be calculated as follows:

- Choose one option, insert relevant details and mark remainder as N/A
- If Buyer is to pay expenses for delivery, state these in 'expenses' below
- Specify any discount for early payment
- If the currency is not NZD, clearly state the agreed currency.

List

<i>Insert description of item or model number</i>	<i>Insert price</i>
Item/model/product number	Unit cost (excl GST)
	\$
	\$
	\$
Total cost (excl GST)	\$

If more rows are required, insert TRIM number to full list of items.

OR

Fixed cost

A fixed cost of \$_____ (fixed cost amount) excluding GST.

OR

Variable cost

As set out in the attached Schedule of Pricing _____ (insert TRIM number).

Expenses

- Choose one option, insert relevant details and mark remainder as N/A
- If the currency is not NZD, clearly state the agreed currency

No expenses are payable

OR

Specific items and agreed cost per item — specified expenses

Such as freight/courier/insurance

Such as packaging costs

Such as storage

Cost per item

Item of expense	Cost (excl GST)	Total max cost (excl GST)
	\$	\$
	\$	\$
	\$	\$
Total cost (excl GST)	\$	\$

If more rows are required, insert TRIM number to full list of items.

OR

Specific items and actual and reasonable cost per item — specified expenses

The buyer will pay the supplier's actual and reasonable expenses incurred in delivering the goods up to the total maximum amounts stated below, provided that the claim for expenses is supported by GST receipts.

Such as freight/courier/insurance

Such as packaging costs

Such as storage

Cost per item

Item of expense	Cost (excl GST)	Total max cost (excl GST)
	\$	\$
	\$	\$
	\$	\$
Maximum total expenses not to exceed (exc GST)		\$

If more rows are required, insert TRIM number to full list of items.

Invoices

The supplier must send the buyer an invoice for the charges at the following times:

- Choose one option, insert relevant details and mark remainder as N/A
- If the currency is not NZD, clearly state the agreed currency

On supply of the goods

OR

At the end of the month, for goods delivered during that month.

Address for invoices - buyer's address

For the attention of (Name of Senior Manager or Contract Manager): _____

Address (insert address for invoices: physical, postal, or email): _____

Other instructions about invoices

For example, Contract numbers, Purchase Order number(s), name of Buyer's contract manager, clear description of goods.

Insert any special instructions:

Approval to proceed with Goods Procurement 143

Select a level to confirm that signatories have read and agreed with the procurement approach.

Note: By entering your name in the Signed box below you are giving your authority for this procurement plan to proceed.

Level 1 Delegated Authority Approval

- <\$50,000 estimate AND
- In compliance with Table 1.

Name: _____ Position: Activity Manager
(Delegated Financial Authority)

Signed: _____ Date: _____

Level 2 Delegated Authority, plus Procurement Manager Approval

- \$50,000-\$249,999 estimate, AND
- In compliance with Table 1
- Examples of high risk project/procurement:
 - Politically sensitive
 - Significant disruption
 - Uncommon technology
 - Cross-council work element.

Name: _____ Position: Activity Manager
(Delegated Financial Authority)

Signed: _____ Date: _____

Name: _____ Position: Procurement Manager

Signed: _____ Date: _____

Level 3 Delegated Authority, plus Procurement PCG Approval

- Either <\$249,999, AND
- not in compliance with Table 1, OR
- >=\$250,000 estimate, AND
- In compliance with Table 1.

Name: _____ Position: Department Manager

Signed: _____ Date: _____

Name: _____ Position: Procurement Manager
(on behalf of PCG)

Signed: _____ Date: _____

Level 4 Delegated Authority, plus Procurement PCG Approval, plus Management Team

- >=\$250,000 AND not in compliance with Table 1, OR
- Multi-year maintenance contract, OR
- Strategic multi-year programme of works, OR
- Significant CBD/Red Zone/Arterial road works, OR
- Examples of high risk project*:
 - Politically sensitive
 - Significant disruption.

* Note: Applies to any value.

Name:	Position: Procurement Manager (on behalf of PCG and Management Team)
Signed:	Date:
Management Team Approval Received	Date: