



Infrastructure and Community Services Committee Meeting Agenda – 1 June 2023

NOTICE OF MEETING

This meeting will be held in the Supper Room, Waihinga Centre, 62 Texas Street, Martinborough and via audio-visual conference, commencing at 10.00am. The meeting will be held in public and will be live-streamed and will be available to view on our [YouTube channel](#).

Committee Membership: Councillor Aidan Ellims, Mayor Martin Connelly, Deputy Mayor Melissa Sadler-Futter, Councillors Rebecca Gray, Martin Bosley, Aaron Woodcock, Alistair Plimmer and Pip Maynard.

Open Section

- A1. Mihi / Karakia Timatanga - Opening**
- A2. Apologies**
- A3. Conflicts of interest**
- A4. Public participation**
As per standing order 14.17 no debate or decisions will be made at the meeting on issues raised during the forum unless related to items already on the agenda.
- A5. Actions from public participation**
- A6. Extraordinary business**
- A7. Confirmation of minutes** Pages 1-4
Proposed resolution: *That the minutes of the Infrastructure and Community Services meeting held on 13 April 2023 are a true and correct record.*
- A8. Matters arising from previous minutes**

B Decision Reports from Chief Executive and Staff

- B1. Update from the Partnerships and Operations Group** Pages 5-92
- B2. Martinborough Wastewater Treatment Plant Compliance and Capacity Issues** Pages 93-109
- B3. Better Off Funding – Project Substitution Decision** Pages 110-117

C Information Reports from Chief Executive and Staff

- C1. Action Items** Pages 118-121

D Chairperson's Report

- D1. Report from Councillor Ellims** Pages 122-123

E Member's Report

E1. SH53 Proposal Report from Mayor Connelly

Pages 124-126

F. Karakia Whakamutunga - Closing



Infrastructure and Community Services Committee Minutes from 13 April 2023

- Present:** Deputy Mayor Melissa Sadler-Futter (Chair), Councillor Aidan Ellims, Mayor Martin Connelly (until 10.33am), Councillors Pip Maynard, Alistair Plimmer, Martin Bosley, Aaron Woodcock and Rebecca Gray (from 10.05am)
- In Attendance:** Councillor Colin Olds
Stefan Corbett (Group Manager, Partnerships & Operations), James O'Connor (Partnerships and Operations Manager) Robyn Wells (Principal Advisor-Water Transition) and Kaity Carmichael (Lead Policy Advisor).
- Also in Attendance:** Adam Mattson, Justine Jones and Charles Baker (Wellington Water)
- Conduct of Business:** This meeting was held in public in the Supper Room, Waihinga Centre, 62 Texas Street, Martinborough and via audio-visual conference from 10:02am to 11:16am. This meeting was live-streamed is available to view on our YouTube channel.
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Open Section

A1. Karakia Timatanga - Opening

Cr Maynard opened the meeting.

A2. Apologies

INFRASTRUCTURE AND COMMUNITY SERVICES RESOLVED (ICS2023/05) to accept apologies from Councillor Gray.

(Moved Cr Bosley /Seconded Cr Maynard)

Carried

A3. Conflicts of Interest

There were no conflicts of interest.

A4. Public Participation

There was no public participation.

A5. Actions from public participation

There were no actions from public participation.

A6. Extraordinary Business

INFRASTRUCTURE AND COMMUNITY SERVICES RESOLVED (ICS2023/06) to allow Councillor Olds to speak as a non-voting member of Council at the Infrastructure and Community Services meeting held on 13 April 2023.

(Moved Cr Bosley /Seconded Cr Maynard)

Carried

Cr Gray joined the meeting at 10.05am.

Members debated the urgency of the Member Report to be added as an extraordinary item for consideration and discussed the appropriate process to be used when considering such a matter. Members voted on the inclusion of the report, and it was not added to the agenda for consideration.

ICS NOTED:

Action 117: To request a report from officers on the process of requesting Waka Kotahi to terminate SH53 at the entrance to Martinborough.

A7. Minutes For Confirmation

INFRASTRUCTURE AND COMMUNITY SERVICES RESOLVED (ICS2023/07) that the minutes of the Infrastructure and Community Services meeting held on 1 February 2023 are a true and correct record.

(Moved Cr Gray /Seconded Cr Ellims)

Carried

A8. Actions from Previous Minutes

ICS NOTED:

Action 119: To request the full actions list from the Assets and Services Committee throughout the 2019-2022 triennium be circulated to the committee for consideration.

B Decision Reports from Chief Executive and Staff

B1. Adoption of the Soldiers' Memorial Park New Bore Statement of Proposal f or Community Consultation.

Mr Mattson and Mrs Jones spoke on behalf of Wellington Water about consultation process and items outlined in the report. Members queried the necessity of the project if it is not the primary water supply for Greytown and requested clarification of the risks associated with not completing the project. Members queried the costing variation outlined in the report and Mr Mattson undertook providing clarification.

Mayor Connelly left the meeting at 10.33am.

Mr Corbett noted that the committee was being asked to consider the consultation document at this time. The committee would have the opportunity to hear the views of the community through use of the special consultative procedure, prior to considering the work at an upcoming meeting.

INFRASTRUCTURE AND COMMUNITY SERVICES RESOLVED (ICS2023/08) to:

1. Note that Wellington Water, on behalf of the Council, is applying for approval under the Reserves Management Plan to install a new bore at the Soldiers' Memorial Park water treatment facilities as part of the plant upgrades.
2. Note that consultation with the community is proposed to take place between mid-February and mid-May 2023. (Council note that engagement has already taken place with affected park users and stakeholder groups between mid-February and late-March 2023).
3. Note that the Hearings Committee will hear submissions and undertake deliberations in May 2023 ahead of making final recommendations to Council.
4. Adopt the Statement of Proposal for consultation, using the Special Consultative Procedure, with the community subject to the inclusion of further information on project risks.

(Moved Cr Plimmer/Seconded Cr Gray)

Carried

C

Information Reports from Chief Executive and Staff

C1. Update from the Partnerships and Operations Group

INFRASTRUCTURE AND COMMUNITY SERVICES RESOLVED (ICS2023/09) to receive the Update from the Partnerships and Operations Group report.

(Moved Cr Woodcock /Seconded Cr Ellims)

Carried

Mr Corbett spoke to items outlined in the report and requested feedback from members on the type of information to be included in the reports moving forward.

Members queried the City Care contract, budget allocation for Donald's Creek pump station and the status of the lighting in Martinborough Square and Mr Corbett provided further information.

C2. Action Items Report

Members discussed open actions and queried the status of Councils advice for use of water races. Ms Wells and Mr Corbett provided an update on the management of water races and provided a timeline for the joint council engagement plan to reach users.

D

Chairperson's Report

D1. Report from Councillor Ellims, Infrastructure and Community Services Committee Chair

Cr Sadler-Futter noted that the report included in the agenda is not the most current Chairperson Report and an updated report has been provided to the committee and will be uploaded to the website.

INFRASTRUCTURE AND COMMUNITY SERVICES RESOLVED (ICS2023/10) to receive the Chairperson's report.

(Moved Cr Maynard/Seconded Cr Bosley)

Carried

Cr Ellims spoke to items outlined in the report and members discussed the potential for a joint Council initiative focused on forestry slash, willows and gravel in our river systems and the risks that they place on Council infrastructure across the Wairarapa.

ICS NOTED:

Action 123: To request a 'lessons learned' report from officers following Cyclone Hale and Cyclone Gabrielle.

Cr Ellims requested that the reports presented at the Hinekura Road Residents meeting be released publicly on the website.

D Karakia Whakamutunga – Closing

Cr Maynard closed the meeting.

The meeting closed at 11:16am

Confirmed as a true and correct record

.....(Chair)

.....(Date)

Update from the Partnerships and Operations Group

1. Purpose

To provide Councillors with an update on activity in the Partnerships and Operations Group (the Group).

2. Recommendations

Officers recommend that the Committee:

1. Receive the *'Update from the Partnerships and Operations Group'* Report.
2. Note the early warning of an issue that we are dealing with in the Featherston WWTP Consent Project. The issue relates to increased infiltration rates for the plant.
3. Note management requests further guidance on a preferred option for Hinekura Road, so that progress may be made on designed and consented plans, which will then be used for a tender process.
4. Note the Martinborough Pedestrian Lighting project is on track to commence in Financial Year 2023/24 as planned and a costed business case is in draft.

3. Executive Summary

In roading, the initial response to Cyclone Gabrielle and Hale is ongoing, noting the ground is continuing to slump and slip. This includes an assessment of Tora Road as well as repairs to Cape Palliser Road due to damage by sea swells. We have completed a major repair to Boar Bush Gully Road. The final Hinekura Road options report and economic analysis is now complete. We have been notified by Waka Kotahi that they would not fund the preferred alignment in the WSP options report because they do not believe the road would offer value for money from a road transport perspective. We are now looking for guidance from Elected Members on a preferred option. Our Project Lead for the Martinborough Pedestrian Lighting Project is making good progress on a business case and costed work plan.

In water, we are pleased to report that construction has started on the Donald Street Pump Station in Featherston. Wellington Water have been able to accommodate the cost of the rising main project into their original estimate which is also great news. Submissions are to be heard shortly on the proposed new bore at Soldiers Memorial Park. This is a strategically important drinking water supply, that will provide resilience and futureproof Greytown's drinking water supply. We are managing a few challenges, including the suspension of wastewater connections to the Martinborough plant (the

subject of a separate paper) and increased inflow rates at Featherston creating complexity around the Featherston Wastewater Treatment Plant design.

4. Background

Monthly operational reports from Roading Services and the Featherston Wastewater Treatment Plant Consent Project will continue to be provided to Councillors and are useful supplements to formal reporting. We will continue to use the Wellington Water Limited (WWL) dashboards to convey essential information to the ICSC on water projects. Updates on Three Waters Reform will continue via the monthly email report.

4.1 Tangata whenua considerations

Engagement considered not required in this case.

4.2 Long Term Plan alignment

Activity reporting aligns with the strategic objectives assigned to the Partnerships and Operations Group in the Long-Term Plan.

5. Discussion

5.1 Water - Capital Programme

5.1.1. Financial

At the end of April, the capital programme continues to track below the capital range of \$4m to \$9m. Year to date actuals are coming in at \$2m against a budget of \$4m. This variance of \$2m is primarily driven by the Memorial Park WTP Stage 3 project. The construction start date has been deferred because of the Reserves Management Plan consent approval process for the new bore. It is now expected that construction will commence in the new financial year. At a programme level we are forecasting \$3.8m for the full year against a budget of \$5.3m. Our level of confidence in achieving this is medium. With two months of this financial year remaining, forecast work to complete totals \$1.8m, with a significant portion of this relating to two key projects; Featherston Wastewater Treatment Plant (WWTP) Consent and the Donald Street Pump Station renewal. Work continues on the WWTP consent, with the consent being lodged on 1 May; there remains risk in this forecast as costs incurred are dependent on requests from the resource consenting process. Please refer to the WWL Capital Programme dashboard (**Appendix One**) for more detailed information.

We have recently received Wellington Water's FY2023/24 annual plan Capital Delivery Advice. The memo provides advice on the proposed capital delivery programme for Year 3 (FY2023/24) and early indications for Year 4 (FY 2024/25).

5.1.2. Delivery

Featherston WWTP Consent Project

We would like to provide early warning of an issue that we are dealing with in the Featherston WWTP Consent Project. The issue relates to the design assumptions used for infiltration rates for the plant.

- A formal consent application was submitted to Greater Wellington by the due date of 1st May 2023.
- Prior to submission it was recognised that the daily and average flows recorded this year have been significantly higher than those used in the Basis of Design and hence in the Assessment of Environmental Effects on which the application was based.
- We asked GWRC to put the application on hold upon receipt so we could work out a way forward with them on the impacts of the apparent flow discrepancies.
- GHD, our technical consultants, are working through an assessment of the impacts of the flow discrepancies on our application and have indicated they will be able to report back to us by the end of May.
- A first step is to validate the flow data.
- There is an enhanced risk due to the flow discrepancy issue that we may see an increased cost for rework and time impact on the overall project. The quantum of this risk will be more apparent once GHD have completed their work by the end of the month.

GWRC have suggested that we request a further section 37A(5) timeframe extension for making a decision under section 95(2). This extension would be until Tuesday 24 July 2023 to allow time to reach a conclusion on the potential data discrepancy issue. Further they have suggested a date of Monday 19 June 2023 to inform them of the outcome of the data discrepancy investigation.

Martinborough wooden reservoir

The Martinborough wooden reservoir was brought back into service in March. This reservoir was originally taken offline late last year due to possible water contamination concerns. During the cleaning activities, the liner within the reservoir was found to be faulty and the operations team worked through an urgent upgrade to source and replace the liner. Whilst the reservoir was offline, the treatment plant operations managed the drinking water supply for Martinborough to ensure there was no risk of water outages.



Installation of a new liner into the Martinborough reservoir. This involves taking out all the water, before using a 100-tonne crane to lift the 6.6 tonne reservoir roof, putting the liner inside, doing some work to the exterior wall, refilling the reservoir, putting the roof back on, and bringing the reservoir back into service.

Donald St Wastewater Pump station renewal

Construction has begun this month in Featherston, where communications and letter drops have been done to neighbouring properties. Although the adjacent Rising Main pipeline has not received council funding for renewal (asset identified in poor condition, and at risk of failure), the project team and contractor have managed to repurpose dewatering costs within the pumpstation project to enable the renewal at the same time.

Benefits expected from the increased pump station capacity include helping move wastewater away from the eastern side of Paetūmōkai more efficiently, reduced occurrence of wastewater overflows, and minimising any potential public health and environmental risks while improving the performance of the wastewater network. Work is scheduled to last a few months.

Memorial Park Water Treatment Plant upgrade

The formal consultation period on the proposed new bore at Soldiers Memorial Park, closed on 18 May and hearings are scheduled for May/June. We have received 4 submissions (all against) with two requests to speak to submissions. This is a strategically important drinking water supply, that will provide resilience and future proof the Greytown's drinking water supply.

Featherston Public engagement on flood maps

In May WWL ran two public drop-in sessions alongside Greater Wellington Regional Council, at the Featherston Weekly Markets and local hall, where residents learnt about the flood mapping work we do. This provided a chance for the community to share their flooding observations and photos, which help validate our flood models. These models feed into council long-term planning processes, including the Long-Term Plan, Featherston Masterplan and District Plan. We are delighted with the response, with around 80 people attending.

5.2 Water - Operational programme

5.2.1. Financial

Full year forecast for the OPEX programme, excluding Water Races, is an overspend of 8% (\$304k). This forecast overspend is mainly due to emergency event network costs for the Fitzherbert Street sewer overflow (\$240k), and unbudgeted costs (\$64k).

After an initial consideration in the Finance Committee in May, the request for approval of additional OPEX spend from WWL will be presented to full Council on 7 June. WWL will outline operational and compliance risks attached to not approving the overspend amount.

5.2.2. Delivery

Detailed information is provided in the WWL OPEX dashboard (**Appendix Two**). Faults and response across the network are as expected.

5.3 Other issues

Martinborough Wastewater Treatment Plant

Dealt with in a separate paper.

5.4 Roothing

Please refer to the project summary template (**Appendix three**) for a full account of activity. Major recent achievements in the reporting period include:

- Initial response to Cyclone Gabrielle and Hale is ongoing, noting the ground is continuing to slump and slip.
- Started repairs to Cape Palliser Road damaged by sea swells.
- Completed major repair to Boar Bush Gully Road.
- Final Hinekura Road options report and economic analysis is complete. We are now looking for guidance from Elected Members on a preferred option to progress.
- Project Lead for the Martinborough Pedestrian Lighting Project is making good progress on a business case and costed work plan.

An additional rural berm mowing cycle has been completed early due to the wetter than average summer, which encouraged growth. Rural berm and side drain spraying is also underway.

Additional street sweeping has been programmed through autumn to capture leave fall.

The annual road marking programme of all the district roads has been completed prior to winter.

Death and serious injury accident statistics until the start of May is 5 for the financial year thus far.

An audit of Ponatahi Road has been completed to determine the need for additional signage and delineation. Audits are also planned for Lake Ferry and Cape Palliser Roads. The identified needs will be implemented as part of the 23/24 Low-Cost Low-Risk category. Funding is approved in the current LTP.

Hinekura Road

We have been notified by Waka Kotahi that they would not fund the preferred alignment in the WSP options report (**attached as Appendix 5**) at a cost of \$14m. Waka Kotahi do not believe the road would offer value for money from a road

transport perspective (**attached as Appendix 4**). Council retains the ability to pursue the preferred option, but the cost would predominantly have to be drawn from rates.

Councillors have considered the final WSP report, participated in two workshops to digest and interrogate the technical advice, had discussions with Council engineers, and hosted a community meeting to receive feedback. To move forward Council management now seeks guidance on a preferred option. This would allow us to tender to achieve engineered and consulted plans as a basis for construction (if a new road is to be built). The preferred option would come from the ICSC as a recommendation to full Council. If more information is required to make a decision we would appreciate details of what is needed.

Martinborough Pedestrian Lighting Project

Our Project Manager (NZStreetlighting) engaged with two lighting design supply companies to provide complaint lighting designs for the pedestrian crossings around Martinborough Square. The lighting designs have been assessed not only on compliance to ASNZ1158 X2 Category for Pedestrian crossings, but also assessed on whole of life cost – which includes upfront cost, plus ongoing electricity cost based on kWh electricity consumption, and luminaire stock availability.

A provider has been selected based on more competitive purchase price, some limited product in stock, and due to an overall lower Whole of Life cost. Installation quotes are expected back week of 1 June 2023 and will be added to the provisional business case being developed.

Once installation costs are back the Project Manager and product supplier will visit Martinborough and present the full business case, including a review of the full designs they have supplied.

5.5 Amenities

A summary of project activity is provided in **Appendix three**. All LTP projects are on track however capacity continues to be a factor as the team delivers on planned work as well as a wide range of reactive work and additional requests. In advance of the upcoming LTP we are compiling a list of possible ideas from the community for capital investment, along with ideas the team has based on management of the amenities assets.

In addition to the project activity report, below are some of the other activities we have underway:

Martinborough Square Reserve Lighting

As part of the Martinborough Pedestrian Lighting Project we have investigated remedies to the lighting inside the Martinborough Square reserve. An electrical assessment was carried out to determine the faults and subsequent fixes. The fixes revolve around light fittings to be replaced, replacing concrete surrounds on recessed lights, underground cabling, and new lights to be installed associated with new benches. The new lights and benches have already been purchased and are in storage.

We have had quotes for the electrical work and the associated trenching and reinstatement for cabling that total \$44,027+GST. As per SWDC procurement policy we are seeking additional quotes to ensure best value for money. The works will also require a resource consent and an associated report due to notable trees in the reserve, estimated at \$2,500+GST. This work is budgeted from the \$500,000 approved by previous resolution.

The Dark Sky specifications have been used to inform the particular lights required.

Wellington Region Waste Management and Minimisation Plan (WMMP)

The WMMP is progressing well with collaborative work happening across the Greater Wellington Region, and within the Wairarapa. The plan will set out what we intend to do over the next 6 years to make sure we manage our waste as best as we can for the benefit of our communities, economies, and environment. There is a particular focus on “circular economy” which is an alternative to the traditional linear economy. A circular economy seeks to keep resources in use for as long as possible, then recover and regenerate products / materials at the end of service life. It is anticipated that a draft plan will go out for public consultation in August 2023.

Soldiers Memorial Park – Pavilion Rebuild and Swimming Pool Ablutions Upgrade

As part of the LTP there are two distinct build projects in the planning stages for Soldiers Memorial Park. These are the pavilion demolition and rebuild, and prior to that the swimming pool abluion facility upgrade. The pavilion rebuild will see an improved and fit for purpose facility to accommodate the expanding size and needs of clubs. The swimming pool abluion upgrade is long overdue and will provide facilities for sports clubs while the pavilion build occurs. These facilities will be fenced off from the swimming pool to remove any health and safety concerns.

Recreation Trails

The Western Lake Road limestone recreation trail has had a revised maintenance plan agreed which will see a lift in trail conditions. This section of trail has been submitted (1st May) to MBIE by the Remutaka Cycle Trail (RCT) Steering Group to formally become part of this trail. The RCT is one of the 23 Great Rides in New Zealand that attract central government funding. If successful, this section of trail would formally link the RCT to Featherston and the 5 Towns Trail development.

Property Lease Portfolio

- Pāpāwai has a new lessee who is well respected in the community and farms locally.
- Due to personal reasons the Pain Farm lessee has not extended their lease and we will be going to market.
- Work is progressing well regarding the Lake Ferry Campground.
- The leases for the Design Library in Greytown and the Old Courthouse in Featherston have been taken to market and close on 9th June.

Parks and Reserves

- We have moved a memorial seat at Soldiers Memorial Park, with agreement from the family, to accommodate better utilisation of the park by Greytown Football. Resource consent has been granted to position the seat under notable trees and works will be carried out soon.
- We have worked with community groups on the Kings Coronations plaque at Lake Domain; a commemorative plaque and tidy up around the Soldiers Memorial Park gates; and preparation of sites for ANZAC ceremonies.
- As mentioned in the project activity report we are working closely with City Care to achieve improved outcomes, and these are being noticed. We are also working with them to develop a regular dashboard report to show contracted works versus activity.

Property Tenancy

- All properties are tenanted apart from one unit at Westhaven senior housing due to required underground works that has been noted previously.
- Senior housing waitlists remain high as follows:
 - Cicely Martin Martinborough (12 units) – 20 waiting
 - Matthews Flats Featherston (6 units) – 11 waiting
 - Burling Flats Featherston (8 units) – 12 waiting
 - Westhaven Greytown (6 units) – 15 waiting

Cleaning of Buildings

- We are reviewing the requirements for the cleaning of our buildings to ensure service provision is fit for purpose and cost effective.
- We will be looking to tender cleaning services and are also investigating the all of government (AoG) cleaning contract lead by NZ Police.

Cemeteries

- New ash and burial beams are being installed into all three cemeteries with completion over the next 2 months.
- The majority of ashes are being interred into existing plots.
- Through professional development, expert support from funeral directors, and utilising Plotbox we are gaining more insights into how our cemeteries operate and planning for the future.
- Data in Plotbox continues to be worked on to correct inaccuracies of historic records with Greytown and Martinborough almost finished and good progress being made in Featherston.

Venues

- Venue bookings are steady with most venues close to being booked out.
- Bookings have dropped a little for the Waihinga Centre but during the second half of the year we have a number of large events booked such as the jazz festival, Martinborough music festival, and a Queen tribute show.
- ANZAC Hall bookings have increased.
- Overall, there has been an increase in regular use by community groups.
- The Waihinga Centre and Greytown Town Centre have some weddings coming up.

Public Toilets

- The majority of reactive work is due to blockages.
- The Arbor reserve toilet has been a target for vandalism resulting in approximately \$8,000 repairs over 6 months. This was discussed with the Greytown Community Board Chair who has been raising the issue within the community. During the next LTP we will investigate what improvements can be made to mitigate vandalism.
- The condition of Featherston toilets has been raised several times from the community. This is another item we have put on the LTP ideas list for capital investment.

Refuse and Recycling

- We are investigating options for new collections from the Tora community based on a recent community meeting.
- We have been supporting the disposal of old bailage wrap from the Wairarapa Moana that has been removed by a member of the community and a few volunteers.

Wairarapa Library Service

To end of April 2023, just over 203,000 print items have been issues and returned from/to WLS branches in 2023/24. For the same period 22,168 e-books, e-audiobooks and e-magazines have been issued. 715 new members have signed up in 2023/24 year (to end of April 2023). WLS members continue to make good use of the wider SMART library resources, with a most items being borrowed from other sites being titles WLS does not carry.

Operating with less FTE than required to cover base hours, in the first four months of 2023, WLS branches have had to close 10 times due to under-staffing. While casual staffing mitigates staff gaps, casual staff are not always available and do not have the depth of skills or experience to undertake various aspects of library work.

Management is starting to consider efficiencies for libraries that may be introduced in the Long Term Plan. One opportunity is for WLS to move away from a transactional model of operation. Self-service capability across the sites would catch WLS sites up with technology which has been commonplace in public libraries for more than a

decade. Implementing self-service enables staff resource to be deployed in the development and delivery of more sophisticated library services to our communities.

5.6 Community Development/Partnerships

Te Rautaki Rangatahi o Wairarapa

On 5 April and 10 May the three Wairarapa District Councils adopted a shared Wairarapa Youth Strategy - Te Rautaki Rangatahi o Wairarapa (the Strategy). It is the first time all three district councils have come together to develop a common vision for the rangatahi of the Wairarapa region.

The Strategy sets out seven rangatahi-centred priority areas for the Wairarapa District Councils to support and respond to within our roles and responsibilities, and in partnership with rangatahi, agencies, community groups and our wider community. It also outlines some ways the three councils will work together to collaborate on aspects of these priorities.

A Communication and Engagement Plan is under development with the other Wairarapa Councils to engage with the wider community on the Strategy. Work is underway to develop an Implementation Plan for year 1 of the Strategy and we are working with key stakeholders to develop, coordinate and deliver initiatives for youth in the South Wairarapa. A workshop for the Community Boards is scheduled for 31 May to provide an up to date framework for youth representation on Community Boards.

Wairarapa Moana Statutory Board

Community Development and Pou Māori has been coordinating Council's input to a Briefing Paper to provide the incoming Wairarapa Moana Statutory Board with an understanding of the Wairarapa Moana Wetlands Project. This work is led by Greater Wellington Regional Council and the paper provides detail to enable a seamless transition to maintain the Wairarapa Moana Wetland's Project's momentum.

The Wairarapa Moana Wetlands Project is a collaborative effort that has been running since 2007 under the leadership of the Wairarapa Moana Governance Group (WMGG). The WMGG comprises membership of all partners – Ngāti Kahungunu ki Wairarapa, Rangitāne o Wairarapa, Greater Wellington Regional Council (GW), Department of Conservation (DOC) and South Wairarapa District Council. We are awaiting notification of the formation of the Wairarapa Moana Statutory Board.

Welcoming Communities

The Welcoming Communities programme is a three-year programme funded by central government to support new people, and people from other cultures and countries, settle well into South Wairarapa. When new people are welcomed,

connected and included, the whole community stands to benefit, particularly small rural towns like ours.

The programme is currently in a 'stock-take' and engagement phase, with the Coordinator getting a picture of what new people's experiences are like, what is currently in place to support new people, and what the gaps and opportunities are.

Findings so far suggest that, being a district consisting of small rural towns, there are unique challenges and obstacles, but also unique strengths; for instance, we have a large number of passionate volunteers and community-minded retirees.

Later in 2023 a Welcoming Plan will be developed to find cost-effective, sustainable ways of supporting new people to easily integrate into our communities. In the process of developing this, the draft Welcoming Plan will be brought before the Infrastructure & Community Services Committee for input and direction. If the Committee wishes to be involved earlier, the Coordinator (Michaela Lloyd) welcomes your correspondence.

6. Appendices

Appendix 1 – WWL Capital Programme Dashboard

Appendix 2 – WWL Operational Programme Dashboard

Appendix 3 – Roding and Amenities Dashboard

Appendix 4 – Correspondence with Waka Kotahi on Hinekura Road

Appendix 5 – Final WSP Hinekura Road Options Report (for public release)

Contact Officer: Stefan Corbett, General Manager Partnerships and Operations

Reviewed by: Paul Gardner, Interim Chief Executive Officer

Appendix 1 – WWL Capital Programme Dashboard

Executive summary:

At a full capex programme level, the forecast is in the range of \$3m to \$4m against a budget of \$5.3m. Construction of the Donald St WWPS renewal project was brought forward and the contractor will mobilise in final quarter and continue construction into FY 23-24. Wellington Water continues to work with SWDC to confirm the FY 23/24 capital programme.

Monthly updates of significance:

Construction Completed:

- Featherston Waiohine WTP stage 1 & 2 upgrades (water) - Outstanding electrical compliance works are complete. Project close-out activities are to occur for the remainder of FY 22-23.

Construction Commencement:

- Featherston Donald Street pump station renewal (wastewater) - Construction is forecast for start in Q4 FY 22-23 and will continue into the next FY 23-24. The project team are optimising the construction activities for the opportunity to include the rising main renewal within the current budget.

Contract Awarded:

- No construction contracts were awarded in the month of April.

Design Completed:

- No projects achieved detailed design approval in the month of April.

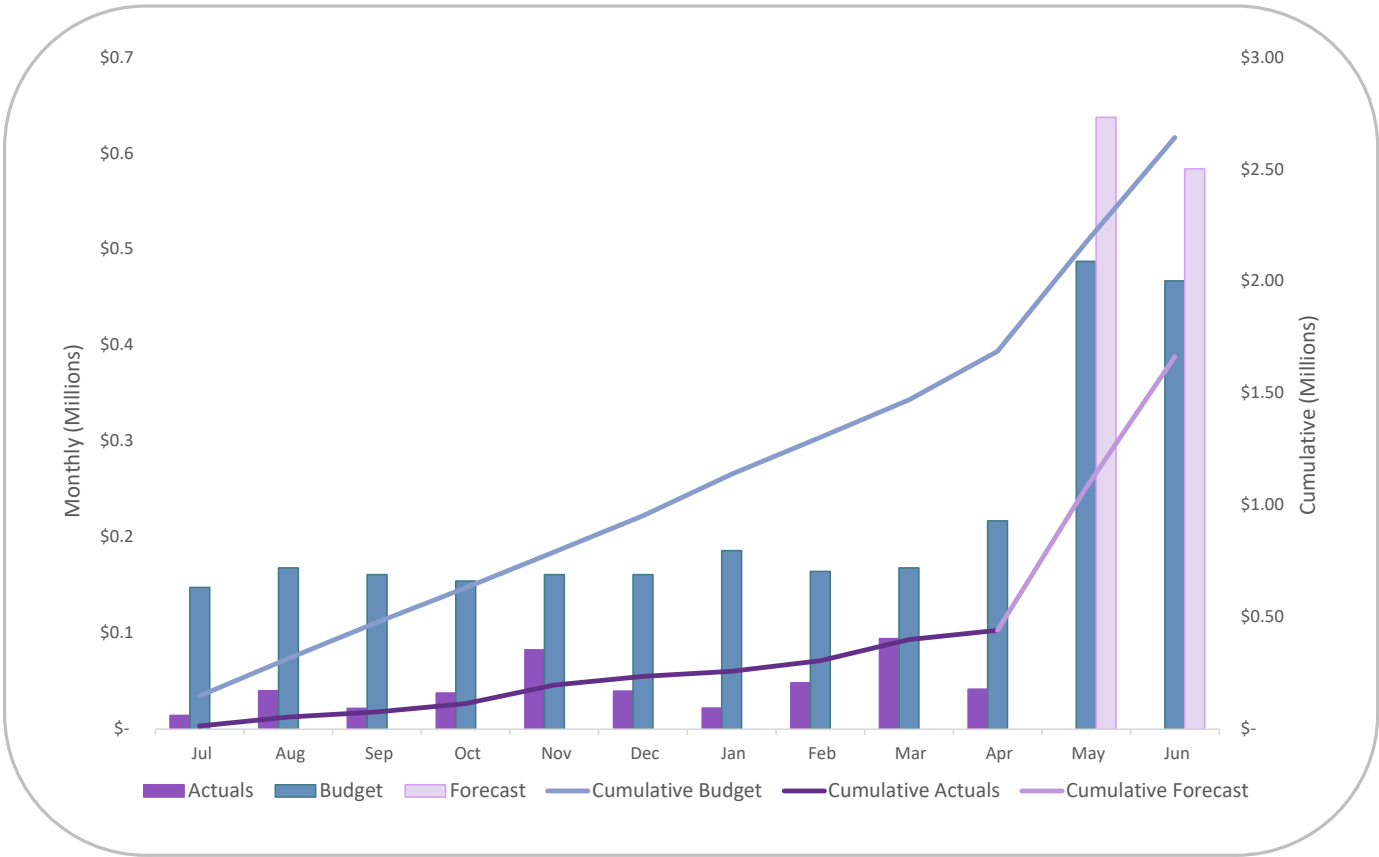
Design in Progress:

- Greytown Memorial Park WTP stage 2/3 upgrades (water) - Formal community engagement period on the new bore statement of proposal is underway. Consent hearing is scheduled for the end of May. Construction start is now forecast for FY 23-24 due to outstanding consent approval for the new bore.
- Featherston Donald Street pump station rising main renewal (wastewater) - Detailed design is in the final stage of sign-off approval. The project team are reviewing the option of including the construction within the existing Donald St WWPS project.
- Martinborough and Greytown wastewater treatment plant compliance upgrades (wastewater) - The project team continue to work on updating the delivery plan to address the Martinborough abatement notice. The delivery plan is due by the end of May (GWRC) and is expected to be executed from FY 23-24 onwards, pending funding availability.
- Featherston Waiohine WTP stage 3 upgrades (water) - Design activities will continue in the next FY on the permanent pH dosing system, pending funding availability.
- Featherston water main renewals (water) - Project is in early design phase. Continued progress into next FY is dependent on funding availability.

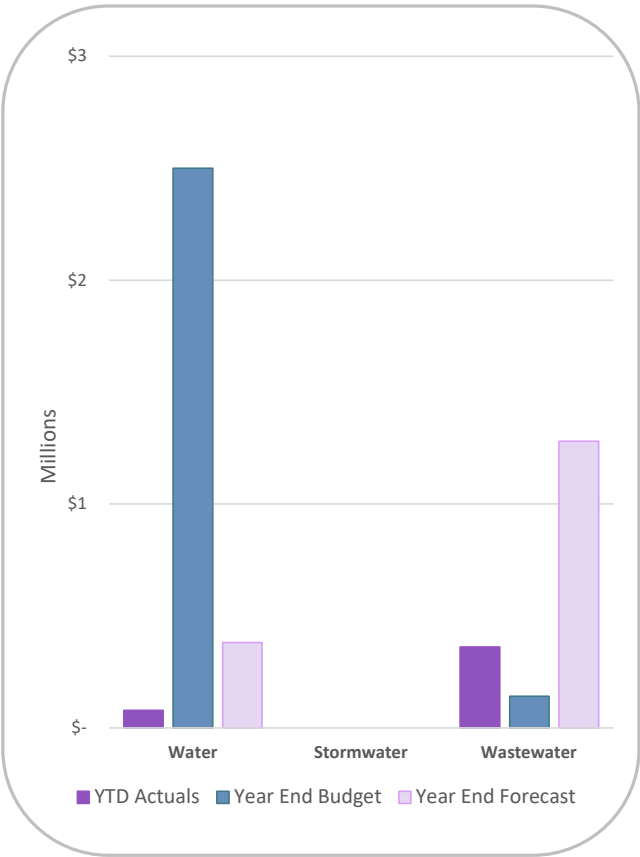
Top Risks and Issues :

Risk Description	Mitigation / Comments
The traffic management Code of Practice (CoPTTM) is to be replaced by NZGTTM (New Zealand Guide to Temporary Traffic Management). The proposed guide is creating uncertainty for capital works suppliers and road controlling authorities (RCAs)	A workshop was convened where Waka Kotahi introduced the proposed changes and the safety reasons behind the new guide. The workshop was attended by RCAs of the region along with health and safety managers, contractors and consultants. We will work with RCAs and suppliers to share work programmes and maximize the opportunities for cooperation in this changing environment. It is expected that the training and competency framework to support the transition will take two years to fully implement.
Water Reform Transition	Contractor and Consultant Panel Engagements were extended beyond the date of water reform. WWL provided significant support to their staff during transition into NTU. We are working to consolidate the FY 24/25 programme and will soon begin planning for FY 25/26 to provide continuous workflow for the consultant and contractor panels.
Programme slippage	The annual plan is monitored and adjusted where needed for effective delivery against Council priorities, with the resources available. Wellington Water contractors are actively engaged and work with the project teams to deliver optimal results.
The number of health and safety observations coming through our Q-Pulse reporting system has increased but is still below our targets for proactive risk identification.	We have started to share the Q-Pulse reporting data with both the contractor and consultant panels for visibility and to help us to understand which organizations are more proactive with their reporting.
Ongoing risk to Programme delivery in both design and construction delivery associated with contractor and consultancy resourcing/capacity .	Both panels have put together their growth plans to show how they will increase their resourcing capacity to meet programme uplifts. The forward capital programmes are being developed to include visibility into out-years as well as Wellington Water moving to award contracts earlier to provide certainty of workload for our panels.
Impact of community transmission of COVID on delivery of the Programme, due to people being unwell and unable to work, or requiring to isolate.	The supply chain have adapted to working with community cases of COVID-19 and controlling the risks. It is our 'new normal'. We continue to monitor latest guidance and advice and adapt as required.
Issue Description	Mitigation / Comments
The recovery efforts following Cyclone Gabrielle have slowed down the delivery of materials from affected regions to Wellington. Currently, the supply of pumps, larger diameter PE pipelines and generators is disrupted.	The contractors will look at their programmes to identify if there are material supply risks and we will use mechanisms like early procurement of the materials/sharing spares across the panels to keep on track.
Extended timeframe for transition to the new entity is creating uncertainty for funding levels.	Ongoing engagement to understand future funding levels will be required. This will enable the prioritization of delivery between now and the establishment of the new entity.
A reduction of available clean fill tips in the Wellington region	There are reduced availability of clean fill tips in the region due to others either being filled up or being unable to comply with their consent conditions. This doesn't appear to be a current issue for the Wairarapa tips however will continue to be monitored should cost changes occur.
Material cost increases	Significant material cost increases are still being observed across the programme. Working with contractors to procure material items early to mitigate against future cost increases.
Materials supply chain causing delays in project delivery	An increase in shipping timeframes results in project delays and in some cases a project costs increase. Working with contractors to mitigate through early procurement of materials in advance of project works beginning.
Construction cost increases	Wellington Water is seeing significant construction cost increases in labor cost. This is result of the current market economy and an insufficient amount of labor on the market. Project delivery forecasts are being adjusted to accommodate any cost increases.
Stretched resources in the Operations Groups (NMG and COG) are resulting in project and programme delays.	Working with NMG and COG to prioritize and minimize project input required. Project teams are participating in NMG planning meetings. Seeing to improve processes associated with operations engagement so that interactions are targeted and streamlined.

PMO Programme Financial Results



Programme Financial Results by Water

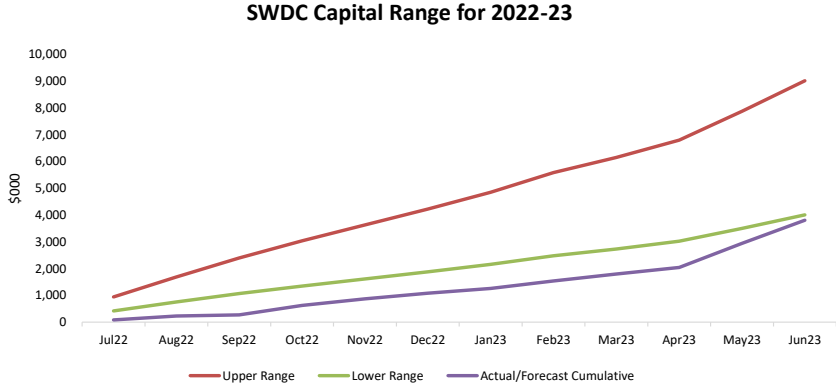


CAPEX Dashboard
As at 30 April 2023

Water		April 2023				Year To Date				Full Year			
Asset Type		Actual \$	Budget \$	Variance \$	%	Actual \$	Budget \$	Variance \$	%	Forecast \$	Budget \$	Variance \$	%
Drinking Water	All	73,287	262,923	189,636	72%	398,762	2,165,767	1,767,006	82%	712,455	3,235,000	2,522,545	78%
	Network	18,527	15,129	-3,398	(-22%)	148,908	162,075	13,167	8%	185,664	195,000	9,336	5%
	Storage	52,408	0	-52,408		115,098	24,899	-90,199	(-362%)	68,949	35,000	-33,949	(-97%)
	Control Systems	1,741	4,958	3,216	65%	25,987	74,789	48,802	65%	42,420	95,000	52,580	55%
	Treatment Plant	610	242,836	242,226	100%	108,769	1,904,004	1,795,235	94%	415,422	2,910,000	2,494,578	86%
Stormwater	All	11,414	9,055	-2,359	(-26%)	36,229	100,251	64,022	64%	39,027	120,000	80,973	67%
	Planning	(30)	4,257	4,286	101%	13,850	50,426	36,576	73%	17,738	60,000	42,262	70%
	Network	11,444	4,798	-6,646	(-139%)	22,379	49,825	27,446	55%	21,289	60,000	38,711	65%
Wastewater	All	163,443	111,207	-52,236	(-47%)	1,604,395	1,759,869	155,474	9%	3,048,517	1,985,000	-1,063,517	(-54%)
	Network	9,351	15,862	6,511	41%	106,664	165,974	59,310	36%	131,255	199,999	68,745	34%
	Pump Stations	46,700	7,282	-39,418	(-541%)	336,860	74,867	-261,993	(-350%)	1,396,089	90,000	-1,306,089	(-1,451%)
	Control Systems	1,749	8,723	6,974	80%	22,363	91,709	69,346	76%	30,521	110,001	79,480	72%
	Treatment Plant	105,643	79,341	-26,302	(-33%)	1,138,508	1,427,319	288,811	20%	1,490,653	1,585,000	94,347	6%
Total		248,144	383,185	135,041	35%	2,039,386	4,025,888	1,986,501	49%	3,800,000	5,340,000	1,540,000	29%

Key Projects		April 2023				Year To Date				Full Year			
		Actual \$	Budget \$	Variance \$	%	Actual \$	Budget \$	Variance \$	%	Forecast \$	Budget \$	Variance \$	%
SWDC-CPX-FSTN WWTP Upgrades & Consent		100,390	10,203	(-90,187)	(-884%)	1,129,685	1,190,593	60,908	5%	1,431,287	1,300,000	(-131,287)	(-10%)
	SWDC-CPX-GTN Memorial Park WTP Up -Stg3	(67)	1,520,671	1,520,738	100%	31,098	1,520,671	1,489,573	98%	233,346	2,450,000	2,216,654	90%
	SWDC-CPX-FSTN-Donald St PS Renewal	38,919	0	(-38,919)		279,982	0	(-279,982)		1,337,176	0	(-1,337,176)	
	SWDC-CPX-MTB-WWTP Compliance Upgrades	0	41,667	41,667	100%	0	41,667	41,667	100%	12,759	50,000	37,241	74%

Work Type		April 2023				Year To Date				Full Year			
		Actual \$000	Budget \$000	Variance \$000	%	Actual \$000	Budget \$000	Variance \$000	%	Forecast \$000	Budget \$000	Variance \$000	%
Renewals		70,776	63,213	(-7,563)	(-12%)	532,725	680,698	147,972	22%	1,720,120	824,999	(-895,121)	(-108%)
	Upgrades - Level of Service	160,794	310,187	149,393	48%	1,408,682	3,244,837	1,836,155	57%	1,978,144	4,395,001	2,416,857	55%
	Upgrades - Growth	16,574	9,785	(-6,789)	(-69%)	97,979	100,352	2,373	2%	101,736	120,000	18,264	15%
Total		248,144	383,185	135,041	35%	2,039,386	4,025,888	1,986,501	49%	3,800,000	5,340,000	1,540,000	41%



Monthly Commentary (CAPEX)

Summary:

At the end of April, the capital programme continues to track below the capital range (for SWDC this is \$4m to \$9m).

Year to date actuals are coming in at \$2m against a budget of \$4m. This variance of \$2m is primarily driven by the Memorial Park WTP Stage 3 project. The construction start date has been deferred because of the Reserves Management Plan consent approval process for the new bore. It is now expected that construction will commence in the new financial year.

At a programme level we are forecasting \$3.8m for the full year against a budget of \$5.3m. Our level of confidence in achieving this is medium.

With two months of this financial year remaining, forecast work to complete totals \$1.8m, with a significant portion of this relating to two key projects; Featherston Wastewater Treatment Plant (WWTP) Consent and the Donald Street Pump Station renewal. Work continues on the WWTP consent, with the consent being lodged during the month; there remains risk in this forecast as costs incurred are dependent on requests from the resource consenting process. In terms of Donald Street Pump Station, the contractor is due to start on site in May.

FY22/23 Capital Programme:

We are in year two of this three-year programme and are continuing the sustained delivery uplift of capital works across the region. Like last year, there are risks and opportunities for delivery. For SWDC this means:

- The SWDC budget is \$5.3m.
- We have reviewed the risks to the programme and potential mitigations and assess the capital range for SWDC at \$4m-\$9m for this financial year.

Updated advice regarding the capital delivery plan on financial years 2023/24 and 2024/25 is due to be provided during May.

Year To Date Summary:

Capex spend for the year to date is \$2m, with \$1m of this being associated with the Featherston WWTP Upgrades & Consenting project. This is a key project, with the consent now having been lodged.

For the remainder of the programme:

- The Memorial Park WTP Stage 3 project has been deferred with construction now expected to commence next financial year. This is the primary driver of the drinking water treatment plant variance.
- The forecast for the Donald Street Pump Station project includes the purchase of materials, which have now been ordered and are due to arrive on site in time for construction, with the contractor scheduled to start in May. This project has been brought forward to start this financial year and is the main reason for the variance showing against the wastewater pump station line.

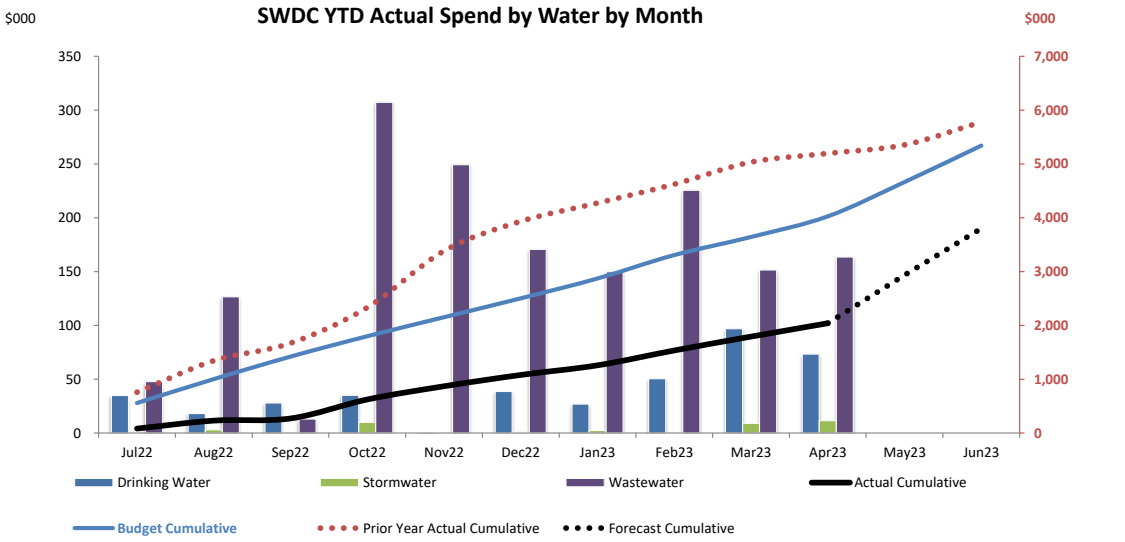
Full Year Forecast:

Looking out towards the end of the financial year, at a programme level, we are forecasting \$3.8m, against a budget of \$5.3m.

Work is progressing on the Featherston WWTP Upgrades & Consenting project. The full year forecast variance is largely driven by delays with iwi engagement and additional reviews. There remains risk in this forecast as costs incurred are dependent on requests from the resource consenting process.

As mentioned in the summary, due to the deferral of the Memorial Park WTP Stage 3 project, we are currently forecasting to start the construction of the Donald Street Pump Station in May, which aligns with the prioritisation workshop with SWDC officers.

Further details on projects, including associated risks, issues, and mitigation/comments, can be found on the PMO Programme Dashboard and the Major Projects Monthly Report, which will be provided separately.



Appendix 2 – WWL Operational Programme Dashboard









OPEX Dashboard
As at 30 April 2023

Water		April 2023					YTD					Full Year				
	Activity	Actual	Budget	Variance			Actual	Budget	Variance			Forecast	Budget	Variance		
		\$	\$	\$	%		\$	\$	\$	%		\$	\$	\$	%	
Drinking Water	All	187,365	191,760	4,395	2%	🟢	1,893,187	1,917,599	24,412	1%	🟢	2,294,000	2,301,099	7,099	%	🟢
	Network	55,910	59,001	3,091	5%	🟢	709,194	590,010	-119,184	(-20%)	🟢	800,417	708,015	-92,402	(-13%)	🟢
	Treatment Plant	77,244	54,084	-23,160	(-43%)	🟢	649,877	540,840	-109,037	(-20%)	🟢	801,960	649,021	-152,939	(-24%)	🟢
	Monitoring	28,634	36,192	7,558	21%	🟢	255,264	361,920	106,656	29%	🟢	338,789	434,302	95,512	22%	🟡
	Investigations	10,454	19,753	9,299	47%	🟢	84,825	197,530	112,705	57%	🟢	95,289	237,027	141,738	60%	🟡
	Control Systems	5,338	9,744	4,406	45%	🟢	105,663	97,440	-8,223	(-8%)	🟢	134,053	116,922	-17,131	(-15%)	🟢
	Storage	1,995	2,909	914	31%	🟢	8,115	29,090	20,975	72%	🟢	20,028	34,905	14,877	43%	🟡
	Pump Stations	0	1,896	1,896	100%	🟢	78	18,960	18,882	100%	🟢	5,763	22,740	16,977	75%	🟢
	Utilities	0	390	390	100%	🟢	2,260	3,900	1,640	42%	🟢	4,209	4,676	467	10%	🟢
	Management & Advisory Services	7,791	7,791	0			77,909	77,909	0			93,491	93,491	0		
Stormwater	All	13,635	17,528	3,892	22%	🟢	160,756	175,275	14,519	8%	🟢	243,795	210,325	-33,470	(-16%)	🟢
	Network	4,671	8,296	3,625	44%	🟢	99,644	82,960	-16,684	(-20%)	🟢	133,665	99,552	-34,113	(-34%)	🟢
	Investigations	4,695	4,690	-5	(-%)	🟢	12,745	46,900	34,155	73%	🟢	51,681	56,277	4,595	8%	🟢
	Control Systems	374	646	272	42%	🟢	9,413	6,460	-2,953	(-46%)	🟢	11,702	7,750	-3,952	(-51%)	🟢
	Contingency	0	0	0			0	0	0			0	0	0		
	Management & Advisory Services	3,896	3,896	0			38,955	38,955	0			46,746	46,746	0		
Wastewater	All	150,372	116,221	-34,151	(-29%)	🟢	1,380,751	1,162,213	-218,537	(-19%)	🟢	1,672,153	1,394,624	-277,529	(-20%)	🟢
	Treatment Plant	109,677	43,171	-66,506	(-154%)	🟢	423,950	431,710	7,760	2%	🟢	505,476	518,040	12,565	2%	🟢
	Network	13,227	28,838	15,611	54%	🟢	503,305	288,380	-214,925	(-75%)	🟢	575,317	346,041	-229,276	(-66%)	🟢
	Investigations	13,945	12,893	-1,052	(-8%)	🟢	86,303	128,930	42,627	33%	🟢	134,395	154,715	20,320	13%	🟢
	Monitoring	8,070	9,997	1,927	19%	🟢	166,774	99,970	-66,804	(-67%)	🟢	201,011	119,968	-81,043	(-68%)	🟢
	Pump Stations	-9,994	4,302	14,296	332%	🟢	27,222	43,020	15,798	37%	🟢	47,682	51,621	3,939	8%	🟢
	Control Systems	1,164	2,737	1,573	57%	🟢	30,364	27,370	-2,994	(-11%)	🟢	36,873	32,839	-4,034	(-12%)	🟢
	Management & Advisory Services	14,283	14,283	0			142,833	142,833	0			171,400	171,400	0		
Total Opex, excluding Water Rates		351,372	325,509	-25,863	(-8%)	🟢	3,434,694	3,255,088	-179,606	(-6%)	🟢	4,209,948	3,906,047	-303,900	(-8%)	🟢
Total Opex Programme		325,402	299,539	-25,863	(-9%)	🟢	3,174,996	2,995,390	-179,606	(-6%)	🟢	3,898,311	3,594,410	-303,900	(-8%)	🟢
Total Management & Advisory Services		25,970	25,970	0	%	🟢	259,698	259,698	0	%	🟢	311,637	311,637	0	%	🟢
Water Rates Longwood		3,882	9,427	5,545	59%	🟢	36,590	52,600	16,010	30%	🟢	50,364	113,124	62,760	55%	🟢
Moroo		1,131	6,797	5,666	83%	🟢	39,460	109,640	70,180	64%	🟢	68,718	81,556	12,838	16%	🟢
Total Opex		356,385	341,733	-14,652	(-4%)	🟢	3,510,744	3,417,328	-93,417	(-3%)	🟢	4,329,030	4,100,727	-228,302	(-6%)	🟢

Investment Category		April 2023					YTD					Full Year				
		Actual	Budget		Variance		Actual	Budget		Variance		Forecast	Budget		Variance	
		\$	\$	\$	%		\$	\$	\$	%		\$	\$	\$	%	
Drinking Water	All	187,365	191,760	4,395	2%	🟢	1,893,187	1,917,599	24,412	1%	🟢	2,294,000	2,301,099	7,099	%	🟢
	Monitoring and Investigations	10,454	20,170	9,716	48%	🟡	84,825	201,700	116,875	58%	🟡	96,789	242,027	145,238	60%	🟡
	Maintenance (Planned)	17,842	2,655	-15,187	(-572%)	🔴	41,359	26,550	-14,809	(-56%)	🔴	31,872	31,860	-12	(-%)	🟡
	Maintenance (Reactive)	40,063	61,124	21,061	34%	🟡	678,289	611,240	-67,049	(-11%)	🔴	797,045	733,476	-63,569	(-9%)	🟡
	Operations	33,971	45,936	11,965	26%	🟡	356,806	459,360	102,554	22%	🟡	468,721	551,224	82,502	15%	🟢
	Treatment Plant	77,244	54,084	-23,160	(-43%)	🔴	653,999	540,840	-113,159	(-21%)	🔴	806,081	649,021	-157,060	(-24%)	🔴
	Management & Advisory Services	7,791	7,791	0	%	🟢	77,909	77,909	0	%	🟢	93,491	93,491	0	%	🟢
Stormwater	All	18,648	33,752	15,103	45%	🟡	236,807	337,515	100,708	30%	🟡	362,877	405,005	42,128	10%	🟢
	Monitoring and Investigations	8,773	12,736	3,963	31%	🟡	52,384	127,360	74,976	59%	🟡	98,880	152,828	53,948	35%	🟡
	Maintenance (Planned)	0	306	306	100%	🟢	3,304	3,060	-244	(-8%)	🔴	4,429	3,683	-746	(-20%)	🔴
	Maintenance (Reactive)	5,606	16,168	10,562	65%	🟡	132,751	161,680	28,929	18%	🟡	201,119	193,998	-7,121	(-4%)	🔴
	Operations	374	646	272	42%	🟡	9,413	6,460	-2,953	(-46%)	🔴	11,702	7,750	-3,952	(-51%)	🔴
	Management & Advisory Services	3,896	3,896	0	%	🟢	38,955	38,955	0	%	🟢	46,746	46,746	0	%	🟢
Wastewater	All	150,372	116,221	-34,151	(-29%)	🔴	1,380,751	1,162,213	-218,537	(-19%)	🔴	1,672,153	1,394,624	-277,529	(-20%)	🔴
	Monitoring and Investigations	22,015	22,890	875	4%	🟢	253,077	228,900	-24,177	(-11%)	🔴	335,405	274,683	-60,723	(-22%)	🔴
	Maintenance (Planned)	0	3,415	3,415	100%	🟢	18,524	34,150	15,626	46%	🟡	25,731	40,962	15,231	37%	🟡
	Maintenance (Reactive)	3,233	29,725	26,492	89%	🟡	512,003	297,250	-214,753	(-72%)	🔴	597,269	356,700	-240,569	(-67%)	🔴
	Operations	1,164	2,737	1,573	57%	🟡	28,880	27,370	-1,510	(-6%)	🔴	35,388	32,839	-2,549	(-8%)	🔴
	Treatment Plant	109,677	43,171	-66,506	(-154%)	🔴	425,434	431,710	6,276	1%	🟢	506,960	518,040	11,080	2%	🟢
	Management & Advisory Services	14,283	14,283	0	%	🟢	142,833	142,833	0	%	🟢	171,400	171,400	0	%	🟢
Total Opex		356,385	341,733	-14,652	(-4%)	🟢	3,510,744	3,417,328	-93,417	(-3%)	🟢	4,329,030	4,100,727	-228,302	(-6%)	🟡

Unexpected Event Reserve Commentary:
In years that SWDC actual costs finish below budget, the funds are retained for the Unexpected Event Reserve (capped at 5% of the opex charge for the current financial year). Wellington Water is able to utilise these funds for costs arising from unexpected events in subsequent years. The funds are ring-fenced for the council in which the savings were achieved.
The opening balance for this financial year is nil.

Unexpected Event Reserve	\$000s
Opening Balance	0
<i>Events:</i>	
Closing Balance	0

Legend	Description
 	Overspend more than 10%
 	Overspend but less than 10%
 	Underspend more than 20%
 	Within budget and ≤20% underspend

Monthly Commentary (OPEX)

Summary

Full year forecast for the bau opex programme, excluding Water Races, is overspend 8% (\$304k). This forecast overspend is mainly due to emergency event network costs for the Fitzherbert Street sewer overflow (\$240k), and unbudgeted costs (\$64k). We have been advised that our request to fund the overspend (\$304k) has been declined, and Wellington Water is drafting a memo to the Council clarifying the impact of this.

The change to the forecast on last month for the bau opex programme was increased overspend of 0.1% (\$3k), and Water Races forecast underspend increased 7% (\$9k).

Year to date spend for the opex programme is 6% (\$180k) over budget.

Network

- Drinking Water 20% (\$119k) over budget YTD and forecasting 13% (\$92k) full year overspend.
- Stormwater 20% (\$17k) over budget YTD and forecasting 34% (\$34k) full year overspend, mainly attributed to Featherston St events (\$10k YTD) and Harrison St culvert maintenance (\$21k YTD).
- Wastewater 75% (\$215k) over budget YTD and forecasting 66% (\$219k) full year overspend, mainly attributed to heavy rain events that have required an operational response to mitigate the impact of a reported sewer overflow in Fitzherbert St; YTD costs are \$240k. This is an ongoing issue every time we have a wet weather event and the costs for this maintenance have been ringfenced.

Water Races

53% (\$86k) under budget YTD and forecasting 39% (\$76k) full year underspend. Council has advised that Water Races budgets are separately rated and therefore cannot be used to offset overspends on other budgets.

Treatment Plant

- Drinking Water 20% (\$109k) over budget YTD and forecasting 24% (\$153k) full year overspend, mainly attributed to a global increase in chemical prices as well as plant maintenance, including \$23k for lightning repairs.
- Wastewater 2% (\$8k) under budget YTD and forecasting to remain favourable with 2% (\$13k) full year overspend.

Monitoring

- Drinking Water 29% (\$107k) under budget YTD and forecasting 22% (\$96k) full year underspend.
- Wastewater 67% (\$67k) over budget YTD and forecasting 67% (\$81k) full year overspend, mainly attributed to wastewater treatment plant consent fees.

Investigations

51% (\$189k) YTD under budget, and forecasting 37% (\$167k) spend across all three waters attributed to the planned Ruamahunga Whaitua policy programme not going ahead this year (\$80k) and \$25k forecast underspend for growth planning.

Control Systems

17% (\$20k) forecast overspend across all three waters attributed to backfilling of permanent resources with contractors on hourly rates. This is an industry trend largely driven by skills shortages in a tight labour market. We are monitoring these expenses and making savings where possible.

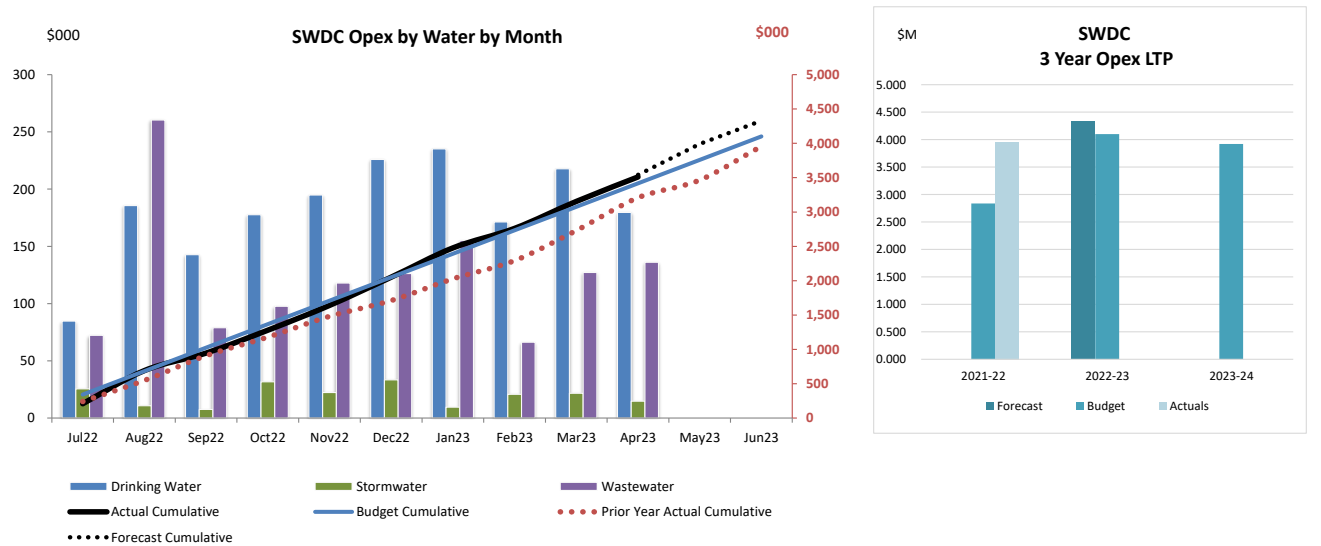
Notes on our approach for reporting:

Wellington Water invoices Council a monthly fixed charge in advance for the opex programme and management & advisory services.

The opex programme is made up of the following:

- Controllable costs incurred by Wellington Water in delivering the programme, such as charges for repairs and maintenance, costs of consumables, consultants, and contractors' charges
- Costs of labour and plant which are charged to specific jobs. This is for Wellington Water employees within our Customer Operations, Network Management and Network Engineering groups i.e. those working directly on opex jobs.

Management & Advisory Services is made up of staff costs that cannot be directly attributed to Council opex or capex programmes and overheads such as insurance, rent, IT costs, etc. We're a council-controlled organisation jointly owned by six client councils; the management charge is agreed on an annual basis and proportionately allocated to each of these councils.



Appendix 3 – Roading and Amenities Dashboard

SWDC Assets and Services Committee		Programme	Roading			
Meeting		Period	May-23			
Overall Programme Status (RAG)	Finance	Delivery	H&S	Stakeholders	Risk profile	Commentary
						Programme on track overall. Some resource constraints remain but works progressing well.
Current Projects						
Bidwills Cutting RD Pedestrian Upgrade	\$306k	March 22-June 22				
Five Rivers Hospital development						Completed November 2022
Reading Street Upgrade		July 22- Dec 23				
Upgrade Street, kerb and channel, carparking drainage as part of Resource Consent.						work has commenced by Higgins contractors
Sealed Road Pavement Rehab	\$250K	March 22 - May 22				
Western Lake Rd Area Wide , Wards Line overlay						Western Lake Rd Completed March 2023 Wards Line not completed
Sealed Road Resurfacing Local Roads	\$700.0k	Oct 22 - March23				
Scheduled programme of works comprising 13kms of resurfacing on: <div> <div>STREET</div> <div>RP'S</div> <div>OXFORD ST</div> <div>1105 -1190</div> <div>HECKLERS RD</div> <div>3-40</div> <div>GEORGES RD</div> <div>0-370</div> <div>LAKE FERRY RD</div> <div>12427-13520</div> <div>POUAWHA RD</div> <div>0-66</div> <div>POUAWHA RD</div> <div>838-1003</div> <div>RANGE RD</div> <div>0 -210</div> <div>TORA FARM SETT RD</div> <div>1430-1630</div> <div>TODDS RD</div> <div>0-909</div> <div>TE MUNA RD</div> <div>2810-4706</div> <div>SHOOTING BUTTS RD</div> <div>400-1200</div> <div>WESTERN LAKE RD</div> <div>10852-10969</div> <div>WESTERN LAKE RD</div> <div>13369-14941</div> <div>PONATAHI RD</div> <div>7333- 9474</div> <div>HINEKURA RD</div> <div>1020- 2216</div> <div>WHITE ROCK RD</div> <div>2560-2860</div> <div>WHITE ROCK RD</div> <div>10900-11250</div> <div>GOVERNORS GREEN</div> <div>0-705</div> <div>MASSEY ST</div> <div>3 -191</div> <div>PAPAWAI RD</div> <div>1984-2841</div> </div>						Completed February 2023, KPI of 5% networks resealed not met
Sealed Road ResurfacingCape Palliser Rd	\$102K	Oct 22 - Dec22				
Scheduled programme of works comprising 2.5kms						Sites Complete
FootPath Renewals	\$530K	Feb 22 - Jun 23				
Streets-Regent Street, Jellicoe street ,Venice Street , Revans St , Greenaway Pl ,		↑				Hotmix resurfacing but Greenaway Place is concrete replacement
Low Cost Low Risk Local Roads	268K	Jun 22 - Jun 23				
Identified Projects as approved by Waka Kotahi: Longbush Road seal widening and visibility improvements, Ponatahi Road safety improvements, Seal widening and safety improvements on Western Lake Road.Bidwills Cutting Road signage improvements. Cattle underpass contributions. Te Awaiti Rd stability investigations at the Gluepot						Seal widening on Western Lake was completed on March 2023 and the stock underpass construction on Lake Ferry was completed on September 2022. The traffic safety audit on Ponatahi Road is progressing. Gluepot brush wall installation was completed. Guard rail terminal ends are being upgraded to current standards

Low Cost low Rick Special Purpose Rd	\$696K	Jan 22 - Jun 23				
Identified projects as approved by Waka Kotahi:, Signage upgrade, Bridge scour protection, CPR resilience study and investigation, Rock revetment protection works, Johnson Hill slumping investigation and modeling,Ecoreef installation						Geotechnical investigation on Johnsons Hill including borehole drilling and movement measuring and rainfall guage. Rip Rap rock has been ordered along with signage and delineation audit.
Road to Zero	333K	Jan 22 - Jun 23				
Consult re speed review and impliment programme over 3 years						Link to NZTA speed reduction and Road to Zero, Urban safety for vulnerable users etc. NZTA planned consultation and in discussions with NZTA on alignment. Wilkie Consultants have been engaged to manage delivery and consultation processes. The project is progressing and finance 333k includes CPR.
Other projects	300k					
Boar Bush Gully road reinstatement and river realignment to prevent future scouring.						Completed
	120k					
Annual Bridge inspections						WSP bridge Engineers are completing annual bridge inpsection, to determine condion, maintenance and renewal work requirements
	300k					
Installing safe, compliant cost-effective light options to provide safe passage for pedestrians in Martinborough around the square.						The street light designer from NZ Street lighting is working on the final design and the estimate of the street light design will be presnetd to the Council soon.

Status key:



On track/achieving



Some concern



Off Track/Major concern

SWDC Infrastructure and Community Services Committee		Programme		Amenities			
Meeting 1/06/2023		Period		Jun-23			
Overall Programme Status (RAG)		Finance	Delivery	H&S	Stakeholders	Risk profile	Commentary
Service Contracts							
City Care		\$977k					
Parks and Reserves							Current FY has been underbudgeted by \$178k - Finance are aware of this and the overall budget is being managed to accommodate this shortfall - This came about as budgets were set prior to the contract being set - The 23/24 budget has been set correctly Working closely with City Care to achieve improved outcomes which are being noticed - in particular with mowing Working with City Care on a regular dashboard report to show the contract vs. activity
Earthcare		\$1.7 million					
Solid Waste Management Joint contract between CDC, MDC and SWDC (led by MDC)							Working well Regular operational meetings with Earthcare and the three Councils
CLM (Swimming pools)		\$265k					
Greytown Martinborough Featherston							Season finished - numbers down approx. 35% from last year due to weather CLM are providing suggested R&M items for each pool Contract term ended and will be re-tendered Council paper aiming for 2 August meeting to obtain CEO delegation approval to sign new contract as life of contract will be outside CEO delegation
Current LTP Projects							
Greytown Wheels Park		\$1 million					
							Reviewing / negotiating supplier contract - Legal advice to split into two contracts to minimise risk (design contract, and then build contract) - Looking to have this completed in the next 2 weeks Looking to hold a contract signing event to kick the project off User group to be established Community group to be re-established
Tauherenikau bridge		\$100k					
Contingency for bridge build							Project being managed by Greytown Trails Trust (GTT) Physical bridge build is complete and funded via MBIE Final tranche of funding from MBIE cannot be received until GTT receive engineers report to allow "final completion". Until this occurs SWDC is paying for project expenses out of its own funds. - The engineers report is dependant on adverse weather to test the bridge stiffening that took place to minimise movement in strong winds Reviewing sale and purchase agreement and once agreed will coordinate an official opening This contingency may go towards additional trail development on Underhill Road, especially on the Featherston side, and compliment further MBIE funding that is also being sought
Featherston skate park repairs		\$21k					
							Completed November 2022
Carkeek Observatory		\$93k					
Conservation options							Options report completed by external expert Next steps to be mapped out based on report recommendations
Considine Park toilet block		\$103k					
To complement the pump track once built							Contingent on pump track build which is being funded by the community Applied for 50% co-funding via the MBIE Tourism Infrastructure Fund (TIF)
Painting of swimming pools interior		\$103k					
One pool complex per year							Investigating providers, and cost estimates Timing of works will require warm/fine weather so likely carried out later in the year
Exterior paint of senior housing		\$61k					
One senior housing site per year							Building wash has uncovered R&M issues at Burling Flats in Featherston which are being investigated Painting will now occur at Cecily Martin Flats in Martinborough during November 2022
Land purchase for new open spaces - sports field for Greytown		\$3.1 million					
							Planning underway to ensure we keep informed about real estate options Discussions underway with Greytown Trust Lands Trust regarding the Rugby grounds and Bowling grounds Land is scarce and expensive so there is concern about finding and affording suitable land
Greytown cemetery extension		\$155k					
							Continuation of planning and works Discussions are underway with contractors to clear the hedge area between the existing and new cemetery areas, planning has started for new burial beams to be installed.
Featherston Natural Burials extension		\$75k					
							Continuation of planning and works Discussions are underway with contractors for completion of the driveway into the extension and any required re-shaping and levelling of the proposed burials area.
ANZAC Hall exterior repaint		\$154k					
							Planning underway Reviewing quotes and looking to start work mid January 2024
Featherston Stadium paint, and vinyl of foyer and ablutions		\$50k					
							Completed November 2022
Greytown sports facility - upgrade ablutions, changing rooms.		\$180k					
Upgrade to the swimming pool ablutions to allow winter sports code access during and after Pavilion rebuild							Planning underway Working with sports codes to develop a tender These works will occur prior to the Pavilion works in order for sports codes to have access to facilities
Greytown sports facility - demolish and rebuild Pavilion		\$1 million					
							Planning underway Working with sports codes to develop a tender Investigation of one possible solution would reduce earlier anticipated expenditure from clubs making it more viable One solution can make use of the current roof to retain the character of the building
ANZAC Hall - fix leaking top windows		\$91k					
							Planning underway Reviewing quotes and waiting on further quotes as per procurement policy Works to take approx. 6 weeks and will take place prior to painting
Greytown Hall - repair rotten foundations		\$154k					
							Planning underway Engineers report completed 2021 Awaiting site visit / inspection from builder to inform a tender process
Gateway to the Wairarapa - consultation		\$113k					
Public consultation for a feature at the entry into the Wairarapa towns							Yet to start
Other Significant Projects							
Wellington Region Waste Minimisation Management Plan (WMMP)							
							Stakeholder workshops underway Targeting Council adoption of the WMMP for October 2023 Some concern over Iwi engagement as intended to be led by Becca, but now to be led by Councils. Regional project leads developing engagement plans with Iwi liaison reps. Plan to be discussed at Iwi Climate Change Conference in June. Organics kerbside collection to be implemented by 2030, will be action in the WMMP, business case to be completed in the next 12 months funding available from MFE for 75% if applied for with CDC and MDC.
Lake Ferry Slip Drainage		\$19k					
							In May 2022 an engineers report was completed after a slip above 64 Lake Ferry Road. This was from SWDC owned land into a residents property. Recommendations included site planting (completed and ongoing); site drainage (approval now received and about to go ahead with works); ongoing monitoring. An officer has visited the site with the engineer and drainage contractor plus met with the resident (and his neighbour) who we are in regular contact with. Drainage solution on the slip above 64 Lake Ferry Road, \$18,351+GST
Welcome to Featherston Signs							
Providing support to the community group for the re-install of the signs that were removed a few years ago							Southern site fence has been moved back into the reserve to accommodate the build Davis Sawmilling have been paid for the posts New resource consent has been lodged with the Planning Team who will liaise with Waka Kotahi Once resource consent has been provided the community group will project manage the build
Martinborough Square Lights		\$47k					
Remedy the non-functioning lights inside the reserve NB - this does not include pedestrian lights							Electrical assessment has been carried out to determine faults to remedy - mostly light fittings to be replaced, plus some underground cabling Electrical quote and trenching quote received total \$44,027+GST Costs for resource consent and associated tree report estimated at \$2,500+GST As per procurement policy seeking additional quotes This work has approval as per Council resolution in conjunction with the pedestrian lighting project
Status key: On track/achieving Some concern Off Track/Major concern							

Appendix 4 – Correspondence with Waka Kotahi on Hinekura Road

09th May 2023

Stefan Corbett
Group Manager, Partnerships & Operations
South Wairarapa District Council
19 Kitchener Street
Martinborough, 5741
PO Box 6, Martinborough 5741
Via email: Stefan.corbett@swdc.govt.nz

Kia ora Stefan,

Re: Hinekura Road Realignment

We have reviewed Council's request of \$14M for the preferred road realignment option for Hinekura Road, Martinborough, following damage sustained in the June 2022 rain event. Hinekura Road is a low traffic volume rural road with approximately 50-200 ADT and 10% heavy vehicles, according to traffic count information in Council's RAMM database.

With this road user data in mind, we do not believe the current preferred project, as this indicative cost represents 'value for money', from a transport investment. If this road realignment remains Council's preferred option, Waka Kotahi may possibly be able to make a contribution to this work (around 20 % of project costs) in line with Waka Kotahi's uneconomic roads policies.

On the other hand, if a more affordable solution were agreed then this would likely be funded at an enhanced Financial Assistance Rate (75% Waka Kotahi share) based on Council's level of Emergency Works Expenditure to date.

We look forward to your response and to working collaboratively with Council to reinstate Hinekura Road level of service for the South Wairarapa Community as soon as we can.

Ngā mihi nui,



Mark Owen
Regional Manager Maintenance & Operations, Transport Services (Greater Wellington and Top of the South)

Appendix 5 – Final WSP Hinekura Road Options Report (for public release)

Hinekura Road Corridor Assessment and Options Report

Project Number: 5-C4072.01

4 May 2023

CONFIDENTIAL



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Document Details:

Date: 04/05/23
Reference: 5-C4072.01
Status: Final

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Alexei Murashev

Document History and Status

Revision	Date	Author	Reviewed by	Approved by	Status
A	17/02/23	Githmi Amarasekera	Fariz Rahman David Stewart	Alexei Murashev	Final
B	22/02/23	Githmi Amarasekera	Fariz Rahman David Stewart	Alexei Murashev	Final
C	04/05/23	Githmi Amarasekera	Fariz Rahman	Alexei Murashev	Final

Revision Details

Revision	Details
A	Final.
B	Final – report updated, inclusion of section 7.5.5.
C	Final – report updated, inclusion of rough order costs and construction programme for the re-alignment options.

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Disclaimers and Limitations

This report ('Report') has been prepared by WSP exclusively for the South Wairarapa District Council ('Client') in relation to the alignment options for Hinekura Road ('Purpose') and in accordance with an emailed request to WSP from South Wairarapa District Council dated 14 November 2022. The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.

Executive Summary

Following a significant slip event at 1673 Hinekura Road in June 2022, Hinekura Road between Longbush Road and Moeraki Road has been closed.

An alternative route was provided for the public via Admiral Hill Road. This alternative route is tortuous with several winding curves. The alternative route from the north side of the slip on Hinekura Road to the south side of the slip on Hinekura Road takes approximately 1 hour and 17 minutes to traverse in a passenger vehicle. Due to the geometry of the alternative route, it is expected to take longer for heavy vehicles due to the bridges and road geometry. The total detour route is approximately 57km and the roads are predominantly unsealed, two-way, undivided carriageways. Since the main slip has occurred, WSP have provided the South Wairarapa District Council (SWDC) with several realignment options for Hinekura Road. This report assesses five shortlisted options and provides discussion of the existing characteristics of Hinekura Road and feasible route options for a long-term transport solution.

The landslide itself is 500m long and about 100m wide and moved 90m over a period of few days in June 2022. Survey monitoring of the landslide since this time has been carried out by repeat drone surveys and through a network of remote monitoring movement sensors. Data to date suggests that the main landslide has not moved significantly since the large June 2022 event. However, slope movements have been detected in the upper part of the landslide particularly after heavy rain events.

In August and September 2022, the local farmers arranged the construction of a temporary private road through their land, starting from Hikawera Road bypassing the top of the landslide and connecting back to Hinekura Road about 200m to the east of the landslide. This temporary road has steep vertical grades and has not been formally designed or constructed to public road engineering standards.

Apart from the Admiral Hill route the other shortlisted route options involve either:

- bypassing the landslide on the upslope side; via a geometrically compliant, but longer, route (option 1), or utilising and upgrading the private temporary road (option 2) or
- crossing the landslide on shorter routes; either at close to the original road level (Option 3), or near the top of the landslide (Option 4). Options 3 and 4 are higher risk due to the uncertainty of the behaviour of the landslide, but may be options in the short term if the risk can be managed (option 3) or if stable ground can be uncovered to form a stable road on (Option 4).

Hinekura Road is located on slip prone land along most of its length, hence apart from Option 5 all other options will require ongoing Council maintenance at multiple sites. Closer to the main landslide a number of smaller underslips are developing on Hinekura Road either side of the main slip. Option 1 will bypass these underslips, whereas Options 2 to 4 will not (to the same extent). As indicated by slope failures on the recently constructed temporary road, whichever new route is chosen by SWDC, slope failure risks will need to be managed.

1 Introduction

1.1 Project Description

Following a significant slip along this section of the carriageway in June 2022, Hinekura Road between Longbush Road and Moeraki Road has been closed off. An alternate route was opened via Admiral Hill Road for public use. For locals, a temporary track was constructed through private land, starting from Hikawera Road and connecting back to Hinekura Road. This report intends to provide the South Wairarapa District Council (SWDC) with a discussion of the existing characteristics of Hinekura Road and feasible route options for a long-term transport solution.

2 Background

2.1 History

Hinekura Road is located in the Wairarapa, east of Martinborough, and stretches from Todds Road to the Moeraki Road/Bush Gully Road intersection as shown in Figure 1. The majority of this road is located in a general rural zone, and has history of land erosion and landslides in severe weather events leaving the road vulnerable.

During 2020 and 2021, movement of a large landslide at 1673 Hinekura Road resulted in closure of the road for a number of days, when a 100m wide section of the landslide moved 3 to 4 m on at least three occasions following heavy rain. However during a June 2022 heavy rain event, the amount of movement of the landslide was much greater (moving about 90m downslope), destroying the road and an already compromised farm dam upslope of the road, and forcing the road to be closed off to the public.

The landslide, between Hikawera Road and the Bush Gully Road/Moeraki intersection, as shown in Figure 1 and Figure 2

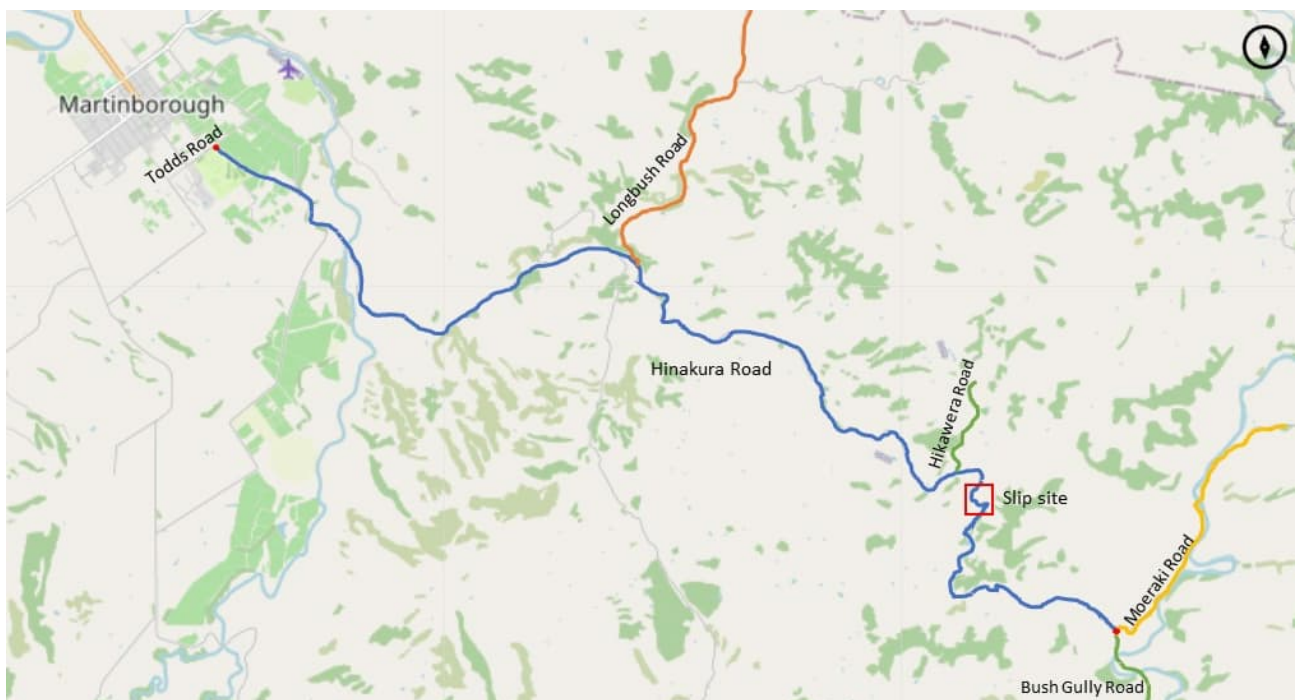


Figure 1: Hinekura Road location

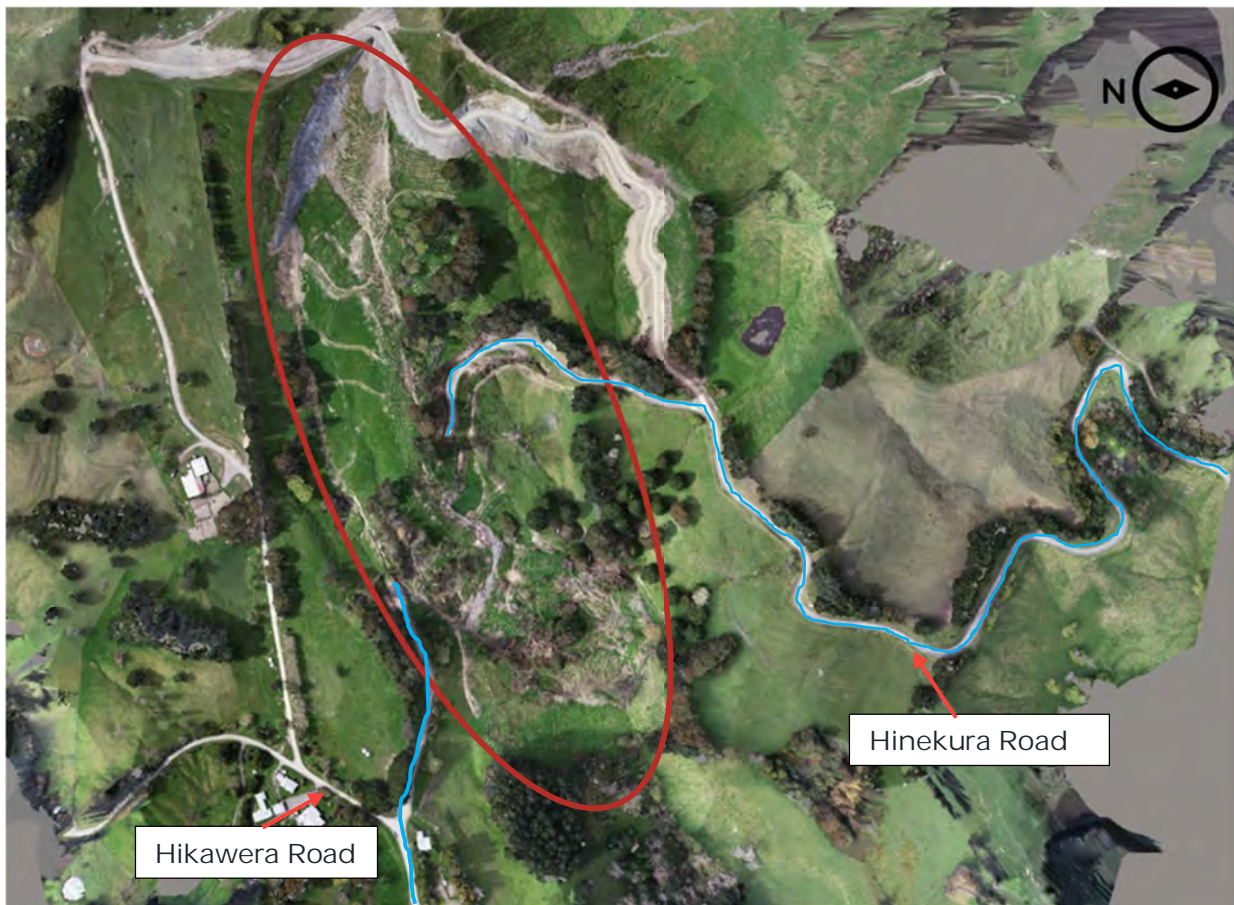


Figure 2: Extent of Landslide at 1673 Hinekura Road, imagery December 2022.

Either side of the main landslide, smaller slips are present along Hinekura Road. Between Hikawera Road and the main landslide, a 35m underslip affecting about half the road has been developing since June 2022 as shown in Figure 3.

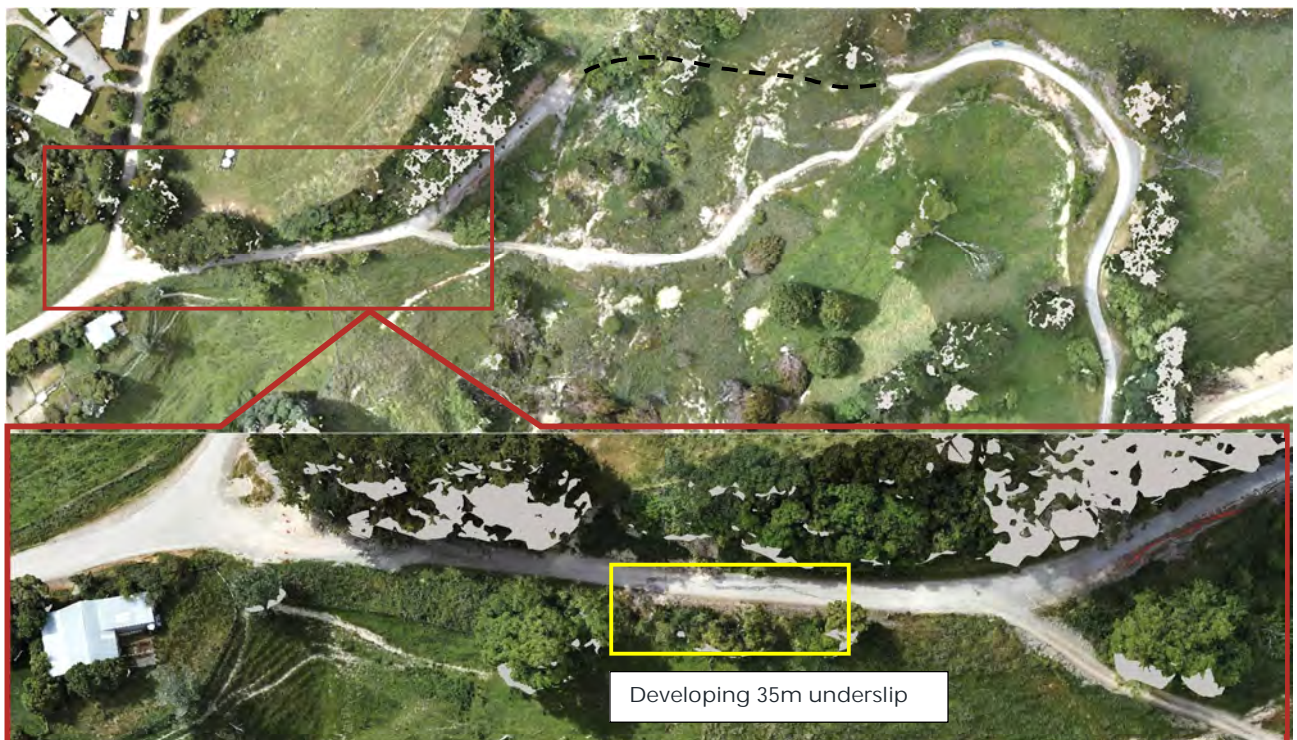


Figure 3: Underslip forming along Hinekura Road near Hikawera Road .

On the southern side of the slip on Hinekura Road, an underslip has developed. The developed underlip is shown in Figure 4.



Figure 4: Developing underslip on Hinekura Road immediately upslope of southern farm dam, about 400m east of the main landslide

Since the closure of Hinekura Road, a temporary road serving only locals has been constructed by the landowners through private property as highlighted in yellow in Figure 5. The temporary road is accessed via Hikawera Road and is currently gated. The lock combinations are known only to the locals, impeding access for public road users. This temporary road has been constructed over two private farmland properties (McCreary and Hancock).

An unofficial steep track has also been constructed below the existing road partly utilising the damaged old road material, as shown in Figure 6. As seen on site, this appears to be used predominantly by quad bikes, and due to the very steep grades is unsuitable for normal vehicle traffic.



Figure 5: Temporary road constructed by landowners to bypass Hinekura Road landslide .



Figure 6: State of Hinekura Road in December 2022 with new downslope temporary track following remnants of old severely displaced carriageway.

2.2 Previous Work and Engagements

WSP was previously engaged by the SWDC to conduct inspections and Unmanned Aerial Vehicle (UAV) surveys of the landslide movement that occurred at 1673 Hinekura Road in June 2020. The output of this work was a geotechnical memorandum covering a description of the landslide, mitigation options and recommendations for the monitoring of the landslides.

In August 2021, WSP carried out an assessment following reactivation of the landslide affecting Hinekura Road, at 1673 Hinekura Road. The outcome of this assessment summarised the landslide data using the UAV surveys and provided recommendations for mitigating the risk at the site.

Following the June 2022 movement WSP carried out inspections and monitoring of the movement and provided advice to SWDC on risk management at the site. This included remote monitoring recommendations.

In July 2022, SWDC conducted maintenance works on the alternative route through Admiral Hill Road to sustain the extra traffic over a longer period. Work to smooth out sharp corners, cut back foliage for better visibility and new signage were completed. The improvement work is a continuous work programme as the road is impacted each time there is heavy rain¹.

During August and September 2022, a temporary private road was constructed for local use, from the Hinekura / Hikawera Road junction through two private farmland properties bypassing the landslide on the upslope side and re-joining Hinekura Road about 500m from Hikawera Road.

In August 2022, SWDC fast-tracked funding for realignment design plans for Hinekura Road to be completed by WSP. These plans were intended to allow the Council to apply for the required consents and legal permissions. In September 2022 WSP provided realignment options. WSP provided a range of alternate route options for review. During this time WSP also installed instrumentations to monitor and further movement of the landslide.

On 13 February 2022, WSP completed an economic assessment: Hinekura Road Realignment Option - Economic Assessment, for the option to realign Hinekura Road. The assessment concluded that the benefit of constructing the option outweighs the cost of closing Hinekura Road and directing traffic to use the longer detour or alternative route. The Benefit Cost Ratio (BCR) is 3.1.

3 Existing Environment

3.1 Corridor Characteristics

Hinekura Road is located in a general rural zone in the South Wairarapa District and is surrounded by farmland as shown in Figure 7.



Figure 7: Draft Wairarapa combined district plan

¹ <https://swdc.govt.nz/hinekura-road/>

Hinekura Road between Longbush Road and Moeraki Road is an undivided, two-way, two-lane carriageway with a speed limit of 100 km/h. The road has a One Network Road Classification (ONRC) of 'Access' as Hinekura Road provides connectivity to the wider road network. This road is used by both passenger vehicles and heavy vehicles such as logging trucks. The Average Daily Traffic (ADT) on this road is estimated at 225 with 8% heavy vehicles². Hinekura Road has an average width of 6.0 m, with the narrowest segments of the roads having an approximate width of 4.5m and the widest segments approximately 7.4m. The carriageway lanes are not delineated with line markings, however, does have edge lines on the true left of left-hand horizontal curves and the true right of right-hand horizontal curves. Edge marker posts delineate the road on both sides of the road. There is also little to no shoulder along the road, ranging from 0 – 0.5m.

According to MegaMaps³, the horizontal alignment of Hinekura Road from Longbush Road to Hikawera Road is described as 'winding'. A winding alignment is described as many consecutive curves and sharp curves (350-500m radius)⁴. From Hikawera Road to Moeraki Road, Hinekura Road has a horizontal alignment that is 'tortuous'. A tortuous alignment is described as numerous consecutive curves (350–500m radius) and numerous sharp curves (radii < 350m).

Hinekura Road has a posted speed limit of 100km/h, however, the safe and appropriate speed, as per MegaMaps, is 60km/h. The operating speed between Longbush Road and Hikawera Road is 67km/h and between Hikawera Road and Moeraki Road is 46km/h. The lower operating speed between Hikawera Road and Moeraki Road is likely due to the road geometry having greater horizontal curves.

3.2 Crash History

In the ten years between 2012 and 2022 (inclusive), there have been four crashes along Hinekura Road. Of the four crashes, two crashes were of serious severity, one minor severity, and one non-injury. Figure 8 shows the location of the crashes and Table 1 summarises the events of the crashes.

² <https://mobileroad.org/desktop.html>

³ <https://maphub.nzta.govt.nz/MegaMaps/>

⁴ <https://www.nzta.govt.nz/assets/resources/infrastructure-risk-rating-manual-road-to-zero-edition/infrastructure-risk-rating-manual-road-to-zero-edition-2022.pdf>

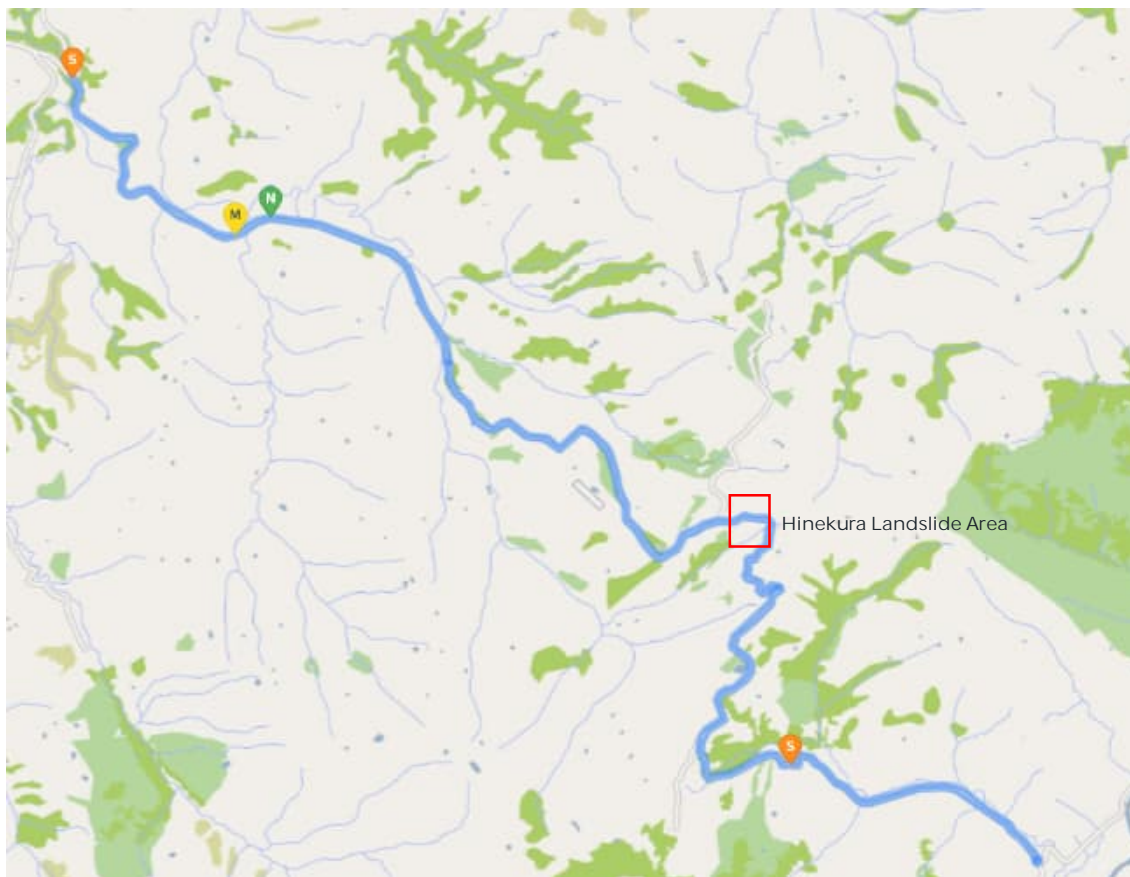


Figure 8: Crash locations.

Table 1: Crash descriptions

Date	Severity	Crash Type	Description
29/03/2012	Serious	Rear-end	Vehicle 1 slowed down at the intersection. Vehicle 2 has crashed into the rear of Vehicle 1
12/10/2013	Minor	Lost control	Vehicle 1 failed to take corner correctly and hit the gravel on the edge of the road causing the driver to overcorrect and come off the motorcycle
23/12/2016	Non-injury	Lost control	Vehicle 1 fleeing authorities have lost control on a wet road surface bend. The vehicle then lost control and rolled.
02/11/2017	Serious	Lost control	Motorcyclist has lost control going up a hill possibly due to uneven seal and going too fast for the conditions on a narrow and winding road.

3.3 Road Safety Metrics

The following road safety metrics were taken from Waka Kotahi's MegaMaps Road to Zero Edition 1⁵.

The Infrastructure Risk Rating (IRR) is inherent to the road and is determined by the key roadside attributes listed below.

- land use
- road stereotype
- geometry
- carriageway width
- horizontal alignment
- roadside hazards
- intersection density
- access density
- traffic volumes.

There are five IRR risk bands: low, low medium, medium, medium-high and high. The threshold levels are established based on adjacent land use.

The IRR for Hinekura Road can be seen in Figure 9. Hinekura Road between Longbush Road and Hikawera Road has an IRR of medium high. Between Hikawera Road and Moeraki Road, near the landslide, the IRR is predominantly high. Further away from the landslide, Hinekura Road has two small sections of carriage rating at medium and medium-high, respectively.

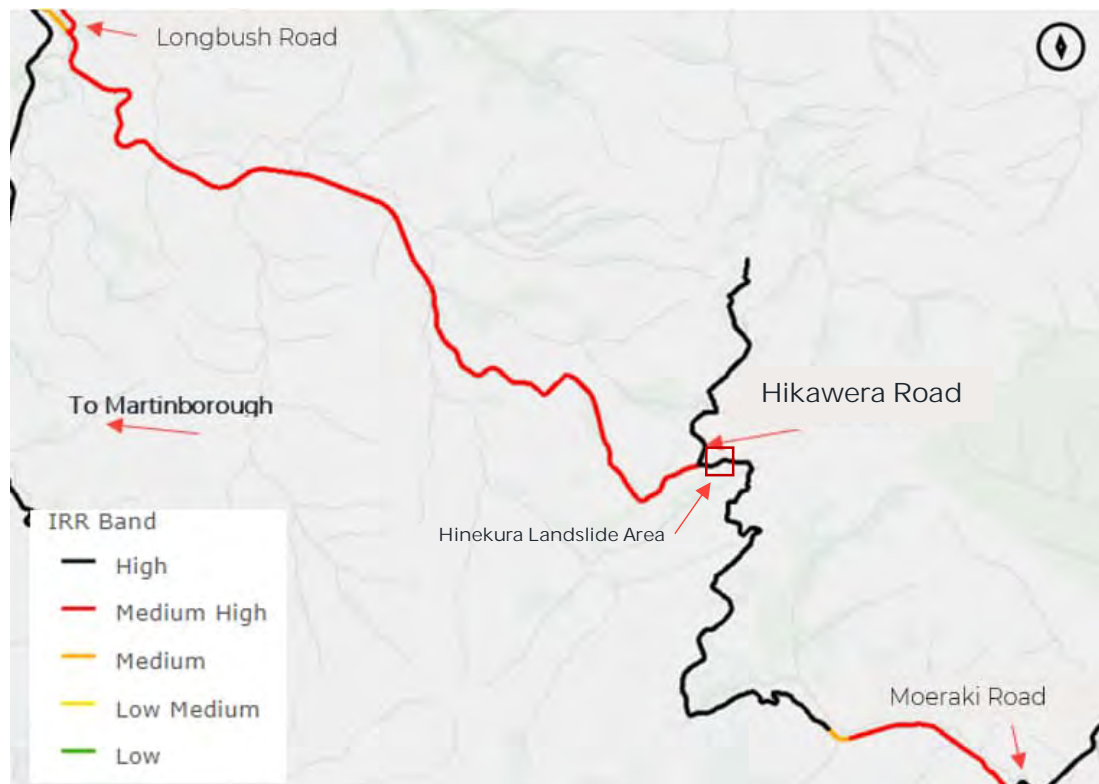


Figure 9: Hinekura IRR rating

⁵ <https://maphub.nzta.govt.nz/megamaps/>

The collective risk is relative to the crash history and measures of the risk density of death and serious injuries per kilometre. Collective risk is a measure of the number of fatal and serious injuries per kilometre that can be expected over the next five-year period.⁶

Similar to the collective risk, the personal risk is related to the crash history. It measures the risk of a fatal or serious injury crash for the individual. The personal risk can be thought of as the 'crash rate'. The five bands for collective risk and personal risk are shown in Table 2 below.

Table 2: Collective and personal risk bands⁷

Risk Rating	Collective risk Average annual fatal and serious injury crashes per km	Personal risk Average annual fatal and serious injury crashes per 100 million vehicle-km	Colour
Low	≤ 0.039	< 4	Green
Low medium	$0.04 \leq 0.069$	$4 \leq 4.9$	Yellow
Medium	$0.07 \leq 0.10$	$5 \leq 6.9$	Orange
Medium-high	$0.11 \leq 0.189$	$7 \leq 8.9$	Red
High	$0.19+$	$9+$	Black

The collective and personal risk of Hinekura Road is shown in Figure 10. Hinekura Road between Longbush Road and Moeraki Road has a low collective risk.

Overall, the personal risk of Hinekura road is low, except for a small section of the carriageway, which is near the landslide, with medium personal risk.



Figure 10: Hinekura Road collective risk (left) and personal risk (right).

3.4 Farm Dams

There are three farm dams located in the area assessed for local realignments, as shown in Figure 11. Before the catastrophic landslide in June 2022, ground movement was recorded in this area,

⁶ https://at.govt.nz/media/1987521/101_attachment-1-proposed-speed-limits-amendment-bylaw_glossary-rp.pdf

⁷ https://www.kiwirap.org.nz/presentation_risk.html

compromising the structural integrity of the northern farm dam. Prior to the June 2022 movement, WSP had conducted an analysis to provide improvement options and an alternative location for the farm dam. However, following the catastrophic June 2022 event, the northern farm dam was destroyed.



Figure 11: Farm dam locations.

3.5 Other Slips

The terrain through which Hinekura Road passes is hilly and prone to slips. In Figure 12 the brown dots indicate locations of slips mapped by GNS Science, in relation to SWDC's preferred road realignment (pink); as well as two developing underslips identified by WSP in 2022 either side of the main landslide. Figure 13 shows three large landslides in the GNS landslide database, two of which currently directly affect Hinekura Road between Hikawera Road and Moeraki Road. This shows Hinekura Road is in a slip-prone environment. If Hinekura Road is reopened for public use, SWDC will need to allow for managing existing and future landslides along this route. This will include regular maintenance to manage drainage but may involve managing development of other large disruptive landslides. Given expected more damaging storm events due to climate change more slip management is to be expected.

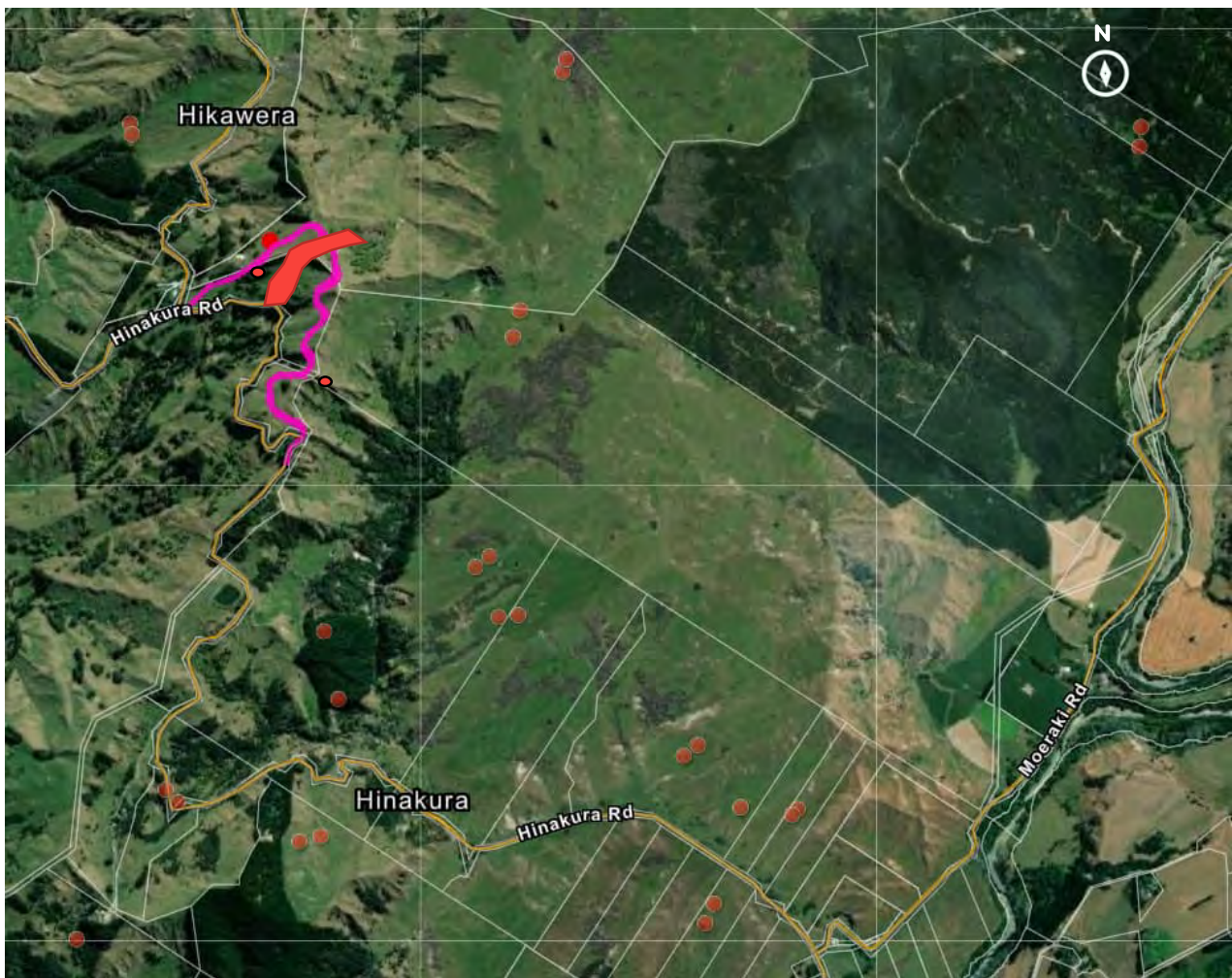


Figure 12: Slip locations near the assessment area (Brown dots are from GNS Landslide database). Red dots from the 2022 investigations

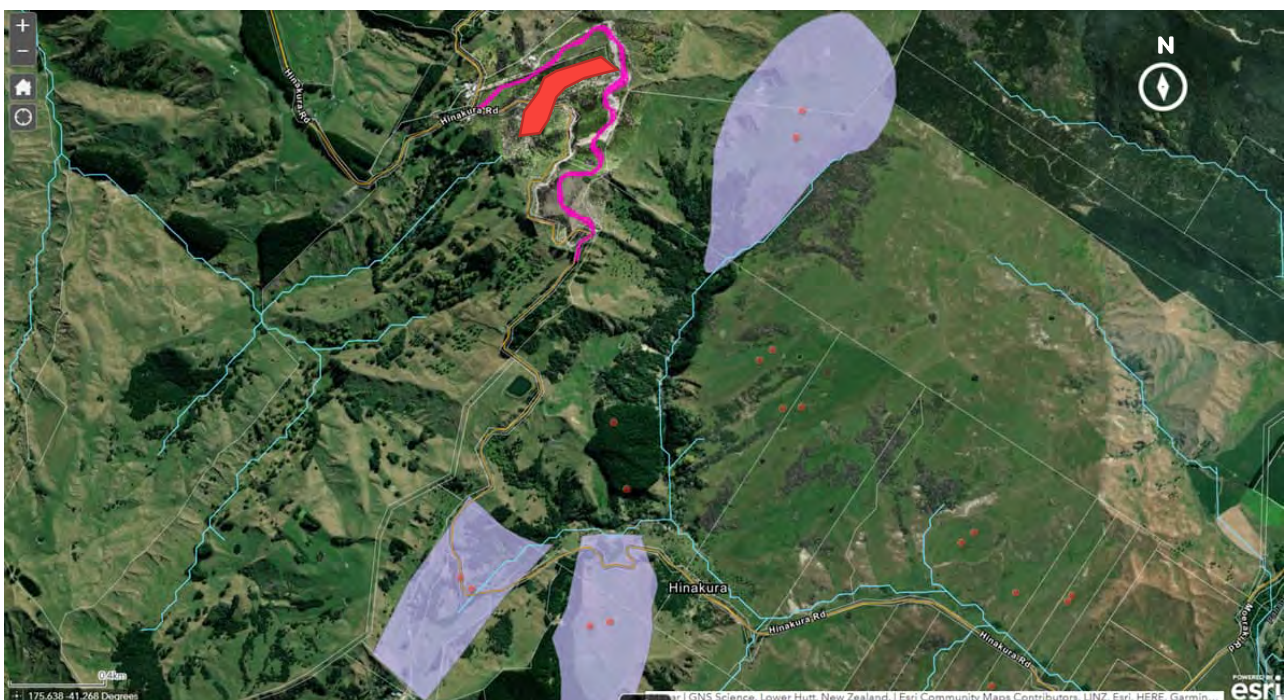


Figure 13: Large landslides in GNS landslide database in the vicinity of Hinekura Road.

4 Alternative routes

Due to the road closure of Hinekura Road, an alternate route has been provided as shown in Figure 14. This alternative route is open to all members of the public.

As Hinekura Road is closed, those travelling west towards Martinborough, unless they have access to the temporary private road bypassing the landslide, will need to travel onto Moeraki Road, Ngakonui Road, Wainuioru Road, and Clifton Grove, Admiral Road before travelling Longbush Road.

Vehicles travelling east will travel from Hinekura Road to Longbush Road onto Admiral Road, following onto Clifton Grove, Wainuioru Road, and Ngakonui Road, before travelling Moeraki Road. The detour route takes approximately 1 hour and 17 minutes to traverse in a passenger vehicle, however, it is expected to take longer for heavy vehicles due to the bridges and road geometry.

The total detour route is approximately 57km and the roads are predominantly unsealed, two-way, undivided carriageways.

Of the detour route, Longbush Road and Admiral Hill Road are sealed roads. Clifton Grove, Wainuioru Road, Ngakonui Road, and Moeraki Road are unsealed roads, spanning approximately 24 km of the total detour route (42% of the route). There are also several bridges and gates along the detour route. Admiral Hill Road itself has cattle access across it and vehicles driving through this route are required to travel through five farm gates

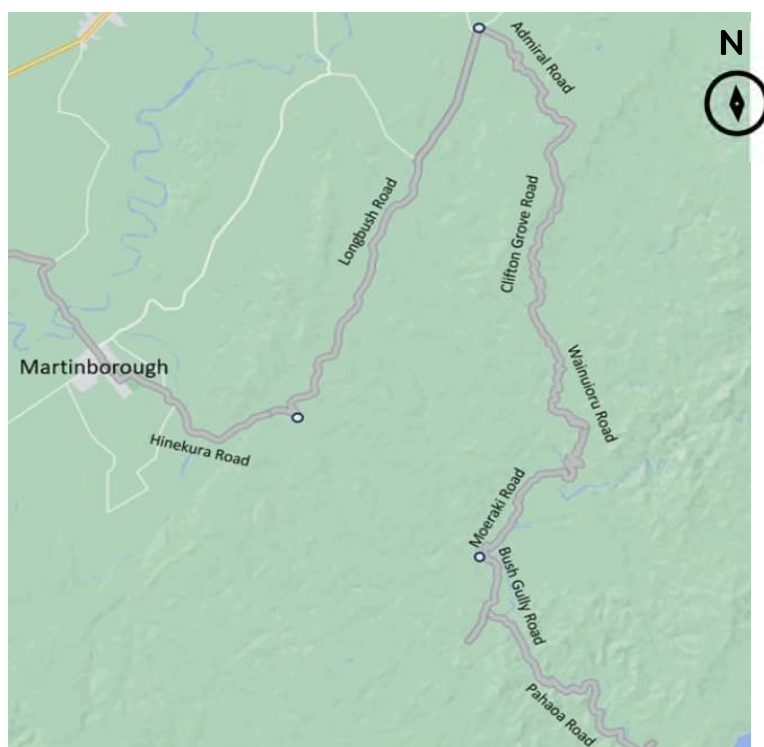


Figure 14: Detour route.

Since the provision of the detour route, the council have carried out minor maintenance work on the Admiral Hill Road access to make the route safer and accommodate increased traffic. The council has made efforts to smooth out sharp corners and cut back foliage for better visibility.

If the alternative route is to be made the permanent route, further improvements are likely to be required. These improvements would potentially include but are not limited to, enlarging corners, widening pinch points, clearing fallen trees, debris, and slips, strengthening weak shoulders and installing retaining walls to stabilise developing underslips, and installing signage and upgrades

to bridges may be required. Overall, there is approximately 3.3 km of out of context curves on the alternative route, hence, these corners should be investigated further to determine if improvements are required

4.1 Road Safety Metrics

The following road safety metrics were taken from Waka Kotahi's MegaMaps Road to Zero Edition 1⁸. Table 3 shows a summary of the average safety metrics for the detour route. As some carriageways are broken into multiple segments the table below shows the average metrics for the whole detour road.

Table 3: Safety metrics for detour route roads

Road Name	Longbush Road	Admiral Road	Clifton Grove	Wainuioru Road	Ngakonui Road	Moeraki Road
AADT Band	<1,000 veh/day (354)	<1,000 veh/day (120)	<1,000 veh/day (38)	<1,000 veh/day (15)	<1,000 veh/day (3)	<1,000 veh/day (48)
Alignment	Winding	Tortuous	Tortuous	Tortuous	Tortuous	Winding
Lane Width	3.0m-3.5m	<3.0 m – narrow	<3.0 m – narrow	3.0m-3.5m	3.0m-3.5m	3.0 m – narrow
Shoulder Width	0m-<0.5m	0m-<0.5m	0m-<0.5m	0m-<0.5m	0m-<0.5m	0m-<0.5m
Roadside Hazards	High Moderate	Severe	Severe	Severe	Severe	Severe
Infrastructure Risk Rating Band	Medium	High	High	High	High	High
Collective Risk	Low	Low	Low	Low	Low	Low
Personal Risk	Low	Medium High	Low	Low	Low	Low Medium

4.2 Bridge Inspections

The roads which make up the detour route have several bridges. Figure 15 shows the bridges in the vicinity of Hinekura Road and the detour route. Previously, WSP conducted bridge inspections in February and March 2021 as requested by the Carterton and South Wairarapa District Councils. WSP have conducted the bridge inspections for 2022 and the reporting is underway.

During the 2021 inspections and reporting, WSP inspected 15 bridges along the detour route provided for Hinekura Road. The Ruamahanga Roads Structural Inspection Report 2020/21 reported the findings of the inspected bridges and maintenance cost estimates. The inspection included but was not limited to the 15 bridges on the detour route and 2 bridges along Hinekura Road between Longbush Road and Moeraki Road as shown in Figure 15.

⁸ <https://maphub.nzta.govt.nz/megamaps/>

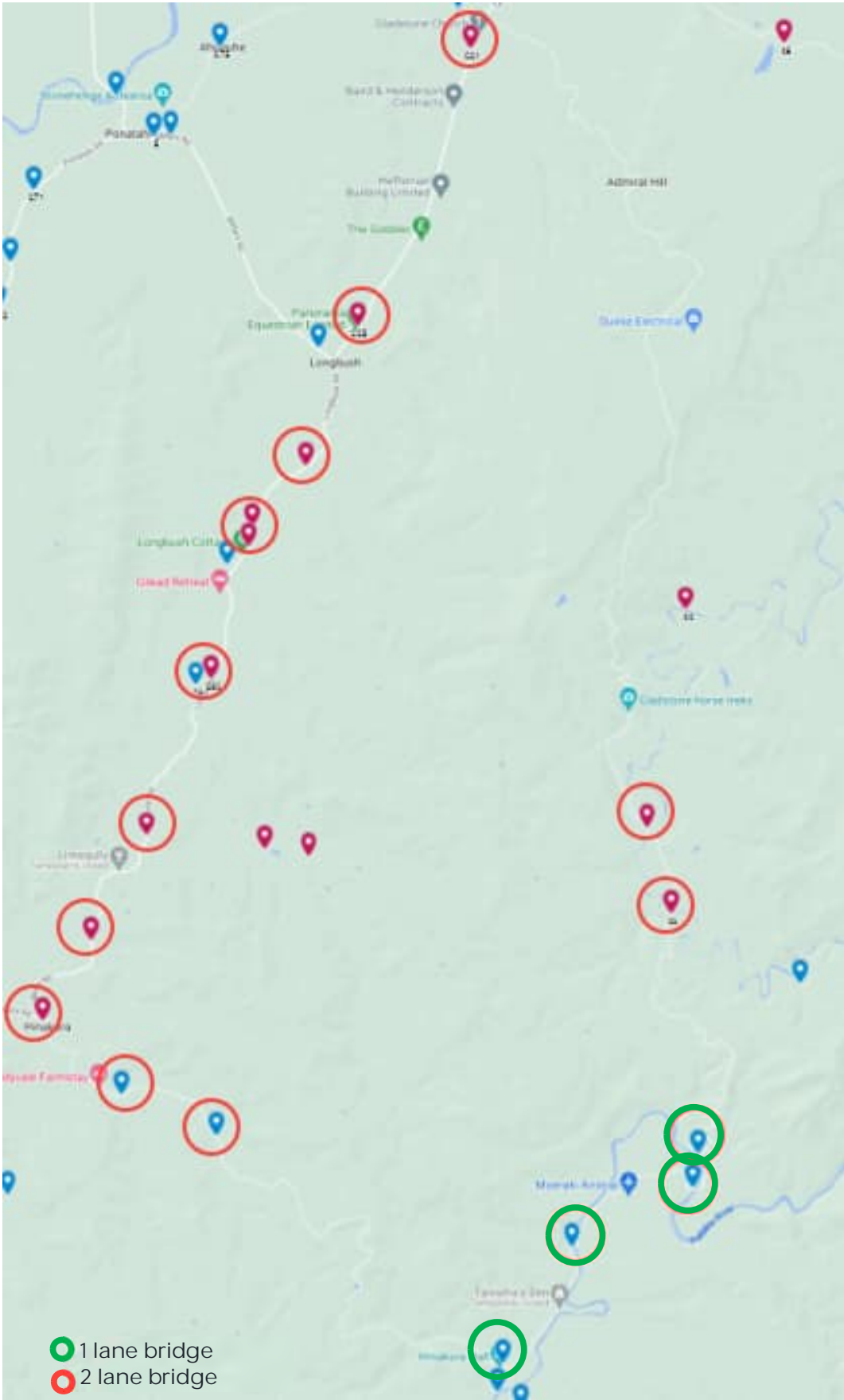


Figure 15: Bridges Inspected in 2020/21 in the assessment area

The Ruamahanga Roads Structural Inspection 2020/21 Reports outlined the maintenance required for each bridge and the prioritization of this work. A maintenance item with high priority was classified as requiring attention within approximately 1 year, medium priority within approximately 5 years and low priority in the next 5+ years.

Of the two bridges on Hinekura Road, one bridge required maintenance work which was prioritized as medium and/or high. Of the 15 bridges on the alternative route, 12 bridges required maintenance work which was prioritized as medium and/or high.

It should also be noted that 4 bridges on the alternative route are one-lane bridges (circled green in Figure 15). These bridges have signage showing the heavy vehicle limits as axles 5,200 kg and gross 44,000kg. For the alternative route to be a viable permanent option, the one lane bridges will need to be upgraded to two lane bridges.

The council needs to consider the loading limitations and existing maintenance required if the detour route is to be made permanent. Live load assessments are recommended to be conducted if not already done on the load limit and/or one-way bridges to identify if strengthening would be required.

4.3 Alternative Route Slips

In December 2022 slip, a site inspection was carried out by WSP staff and Tim Langley of SWDC along the alternate route from Admiral Hill Road to Hinekura Road near the slip. During this drive over the WSP geotechnical engineer noted several under-slips and over-slips, in between Admiral Hill Road and the Moeraki Road/Hinekura Road intersection. It was noted that most of these slips were not yet compromising the integrity of the carriageway, whereas the slips on Hinekura Road between the landslide and the Moeraki intersection were recorded as affecting the carriageway. Table 4 summarises the findings during the site inspection.

Table 4: December 2022 observations

Road Name	Approximate RP Location	Comment
Clifton Road	3.6	Underslips
	4.2	Good box culvert, potentially place rip rap
	4.5 – 4.6	Underslips
	6.5 – 6.6	Underslip
	8.5 – 8.6	The road is very narrow, and potential widening needed
Wainuioru Road	4.0	Underslip
	3.92 – 3.77	Underslips. Instability detected and potential strengthening required
	3.4 – 3.3	Narrow and windy road, potential investigation for improvements
	2.75	Potential instability near the shoulder

Road Name	Approximate RP Location	Comment
	2.15	Narrow road, potential widening needed
	0.27 – 0.21	Overslip
Ngakonui Road	3.7 -3.5	Overslip
	2.35	Windy and narrow road
Moeraki Road	5.6	Overslip
	4.4 – 4.3	Overslip
Hinekura Road	19	Underslips
	18.6	Underslip
	18.1	Underslip
	17.9	Underslip
	17.8	Underslip
	17.6	Underslip

The formalisation of the alternative route as the preferred route would require works to ensure the underslips and overslips in the area can be managed and monitoring of the area may be required to determine the possibility of any large slips, particularly if earthworks associated with road widening results in undercutting of marginally stable slopes above the road or fills loading marginally stable slopes below the road. Progressively more widening and corner easing will result in a greater level of service.

5 Road Alignment Options

5.1 Previous Work

WSP has provided the South Wairarapa District Council with the potential realignment options shown in Figure 16. During this process, the route was broken into three sections: the northern, middle, and southern sections. For all options, the carriageway was designed to be a two-way, two-lane carriageway with a width of 2.5 m and a 0.5 m berm on either side.

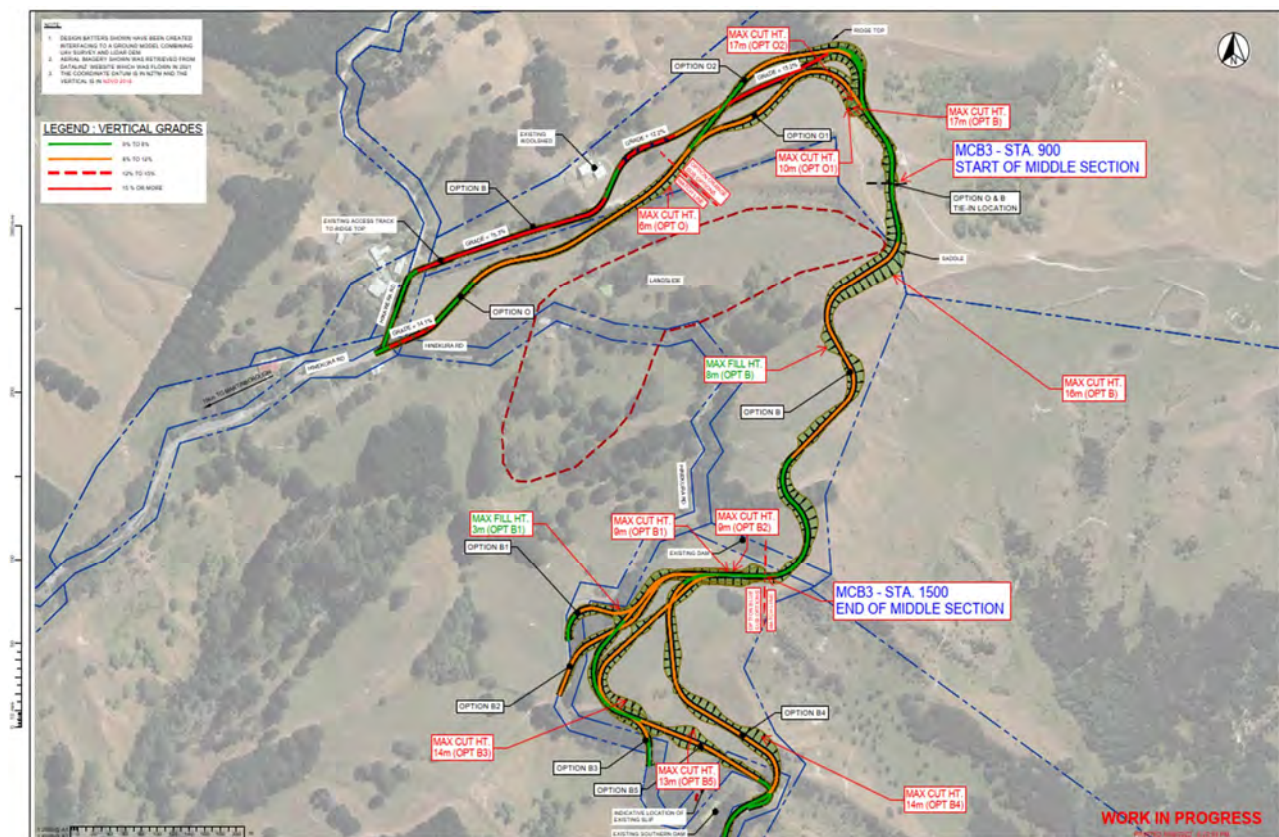


Figure 16: Realignment options and associated earthworks footprints and gradients (coloured)

Table 5 shows a summary of the provided options for each section. Please refer to Appendix A for the Hinekura Road Realignment Options – updated summary letter which details each option. This letter provides a high-level summary of the various options.

The two main options considered was the new alignment of O+O1+B+B4 and B+B+B4, which follows the alignment and profile of the existing farmers temporary road. SWDC preferred the route option combination of O+O1+B+B4. It is believed that this is a superior alignment due to the vertical grades, horizontal alignment, and resilience.

Table 5: Options for each section

Section	Option/ option combination	Preferred option
Northern Section	B	O+O1
	O+O1	
	O+O2	
Middle Section	B	B
Southern Section	B1	B4
	B2	
	B3	
	B4	
	B5	

Since the selection of the preferred route, further alignment options for Hinekura Road have been considered. This includes the following two options and 1 sub-option.

- Option 3: realignment through the slip, near the slip toe, option 3 in (yellow)
- Option 3A: (sub-option) realignment across the slip zone, through the un-official temporary track used by farmers, option 3A in Figure 17 (blue)
- Option 4: realignment from Hikawera Road through the upper landslide, option 4 (green).

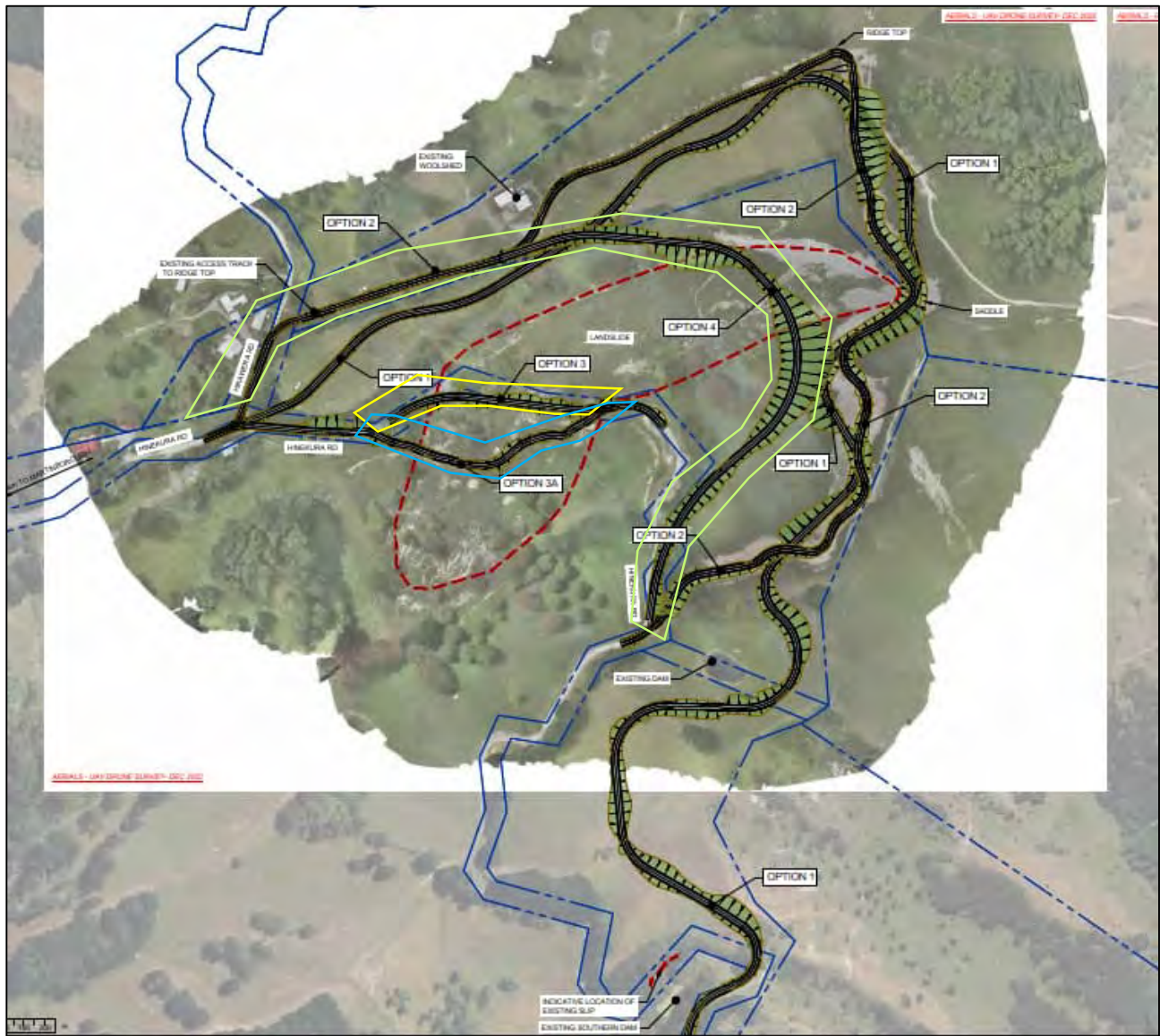


Figure 17: Further realignment options through the Hinekura Landslide

Option 3, traverses through the slip zone. The earthwork required for this alignment is less substantial compared to other options. The resilience of this option is still being explored. The resilience of option 3 is low due to its location relative to the slip zone. We believe this option is not a feasible long-term option, however, could be considered in the short term

Option 4 provides a better alignment in comparison to the current preferred option, however, this alignment is possible only if stable ground can be uncovered, either by the landslide completely failing, or by being dug out to expose stable land.

The sub-option: Option 3A, follows the alignment of the unofficial temporary track that's currently used by the local farmers for quad bikes. This alignment has not been considered as a shortlisted option due to the extremely steep vertical grades and low resilience.

For all options considered please refer to Appendix B for the long sections.

6 Shortlisted Realignment Options

Of the options explored, Table 6 summarises the five options. To determine the optimal route the horizontal alignment, vertical alignment, farm dam locations, earthworks, etc. should be considered.

Table 6: shortlist options

Option Name	Option Description
Option 1	Current preferred Realignment (O + O1 + B + B4)
Option 2	Upgrading Farmers temporary road (B+B+B4)
Option 3	New alignment through the landslide at the same level as the original road
Option 4	New alignment through the upper slip zone
Option 5	Hinekura Road closed + Upgrading alternative route

6.1 Horizontal and Vertical Alignments

The horizontal alignment of a road significantly influences the operating speed of vehicles travelling on an open road. When developing the horizontal alignment, the curve radii, and the change in speed between successive elements is important to create a safe road alignment. The NZ Forestry Road Engineering Manual describes the minimum curve radius for off-highway trucks to be greater than 18m and can typically be 40m.

Out-of-context curves (OOC) are isolated unusually sharp curves. For this report, an out-of-context curve will be defined as a curve with a radius of less than 30m that results in a significant speed reduction from the posted speed limit. In any option, where the decrease in operating speed between successive geometric elements is expected alternative treatments including realignment or warning signs will be considered in further development stages,

The vertical alignment affects the vehicle travel speeds, especially those of heavy vehicles. A steep uphill gradient can slow heavy vehicles causing congestion issues. Steep vertical downgrades can cause increased speeds for heavy vehicles. If the vertical curves are too steep, heavy vehicles may lose control and become runaway vehicles. The NZ Forestry Road Engineering Manual describes an adequate vertical gradient to be within 8-12%.

6.2 Farm Dam Considerations

All local options may require the consideration of the farm dam locations. The northern dam is now destroyed. Some options affect some dams and not others. For example, the southern dam and associated slip above is not affected by option 1 but is for options 2 to 4. For option 1 only, the presence of the central dam will require mitigation actions such as relocation or strengthening / drainage of the slope above supporting the new road. For option 1, Figure 18 shows the preferred location for the northern farm dam.

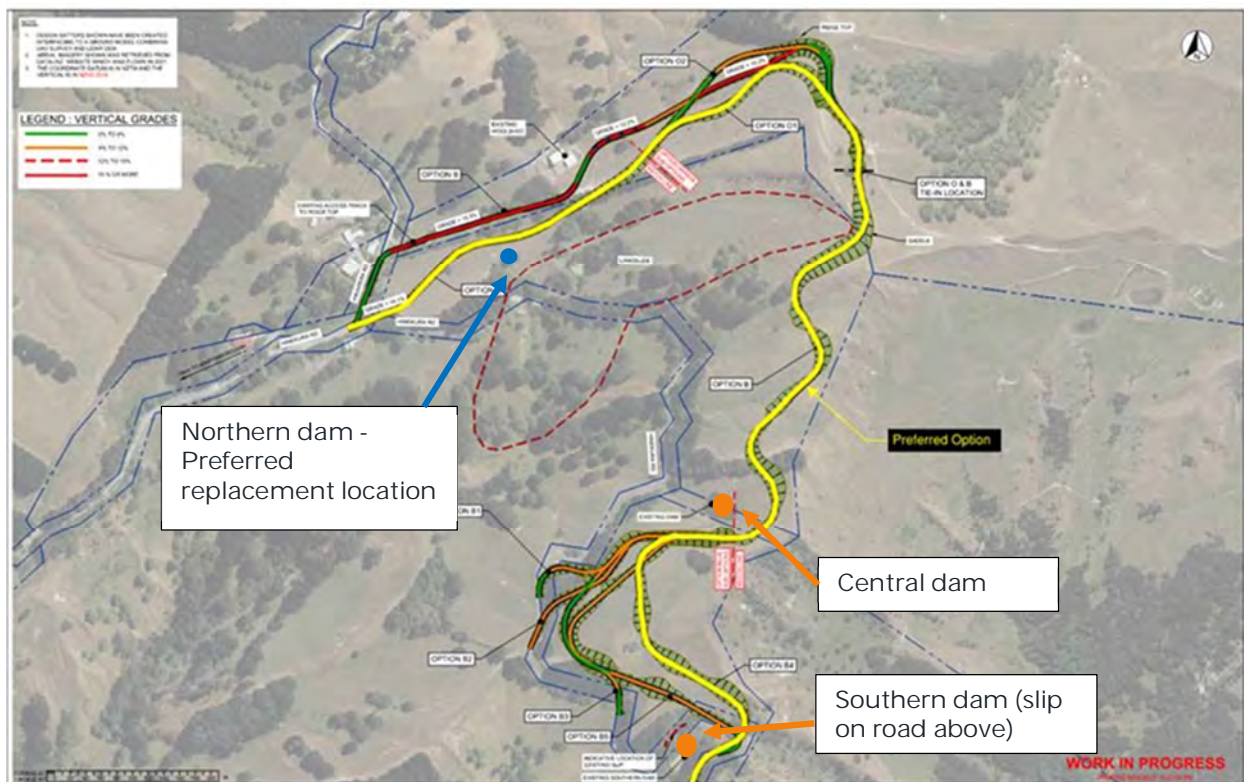


Figure 18: Farm dam locations

6.3 Earthworks and investigations

All options will require some level of earthworks to either strengthen an existing road alignment, stabilise potential slips and/ or construct a road alignment. The earthworks to develop the temporary track provided information on the ground conditions and hence may reduce the amount of ground investigations required for all options. Once a route option is selected additional investigations such as test pits and hand auger / scalar penetrometer testing is recommended. Investigation boreholes are recommended where high cuts are proposed. For options with a significant surplus of cut materials, a dump site will need to be identified.

It should be noted that only the cut and fill heights are available on the long sections for all options. As cross sections are unavailable at present, the volume of earthworks required is unable to be calculated. Therefore subjective

6.4 Slope movements

The Hinekura landslide is currently being monitored by remote movement sensors and a rain gauge and periodic drone surveys. Local movements have been recorded during heavy rain periods, however movement of the whole landslide itself has not been recorded since the June 2022 event.

The depth of movement on the upper slope is inferred to be shallow, however, a site investigation with boreholes is recommended. Figure 19 shows the remote monitoring network for the sensors at the Hinekura Road Slip.

wsp Slope Monitoring - Hinakura Rd



Figure 19: Remote monitoring network at Hinekura Road Landslide

7 Shortlist Options Discussion

7.1 Option 1 - Current preferred Realignment (O + O1 + B + B4).

Option 1 is the current preferred option as highlighted in yellow in Figure 20. This option consists of a combination of the segments O + O1 + B + B4. This option bypasses the slip zone and connects back to Hinekura Road immediately east of the southern farm dam.

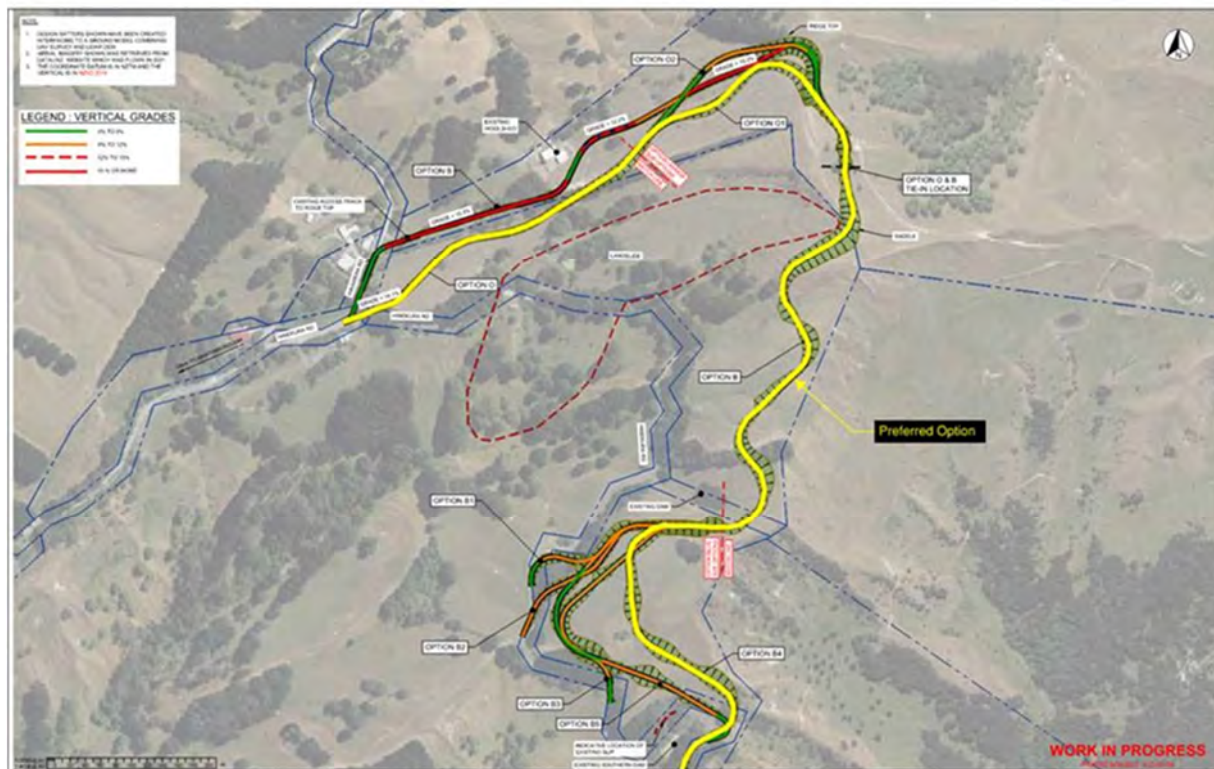


Figure 20: Option 1 – previously preferred alignment

For the plan and longitudinal section please refer to Appendix B

7.1.1 Horizontal Alignment

Overall, this option consists of 19 horizontal curves with a minimum curve radius of 32m. This option does not have out-of-context curves and provides for a smooth horizontal alignment.

7.1.2 Vertical Alignment

Overall there are 15 vertical curves in this alignment. The northern section (O+O1) reaches a maximum grade of 14.15%, the middle section (B) and the southern section (B4) reach a maximum of 12.0%. By the NZ Forestry Road Engineering Manual, an adequate vertical gradient is considered to be within 8-12%. All three sections have a relatively steep grade. Redesigning these sections with a lower grade and/or widening the road may be favourable.

7.1.3 Farm dams

This option would require consideration of the farm dams. The northern (destroyed) dam is to be reinstated. The exact point of relocation is yet to be determined however the location shown in Figure 18 is favourable. Investigations will be required to determine if the proximity of the reinstated dam would have impacts on the new road alignment or vice versa.

There is potential work required for the central dam due to the proximity of the realigned road. The central dam may require relocation however this needs further investigation. If the central dam is to remain at its current location, the installation of a subsoil drain on the slopes above the dam to

have the dual function of draining the slope and tapping into the groundwater for farm use, and the storage requirement/ dam size possibly could be reduced.

7.1.4 Earthworks

This alignment has a maximum cut to a depth of 12.4m and a maximum fill of 3.3 m is required. This option predominantly requires cutting to meet the proposed ground profile. Due to significant length of this option, it is estimated that a large amount of earthworks will be required.

7.1.5 Slips

The Option 1 route is in the vicinity of the large slip, however, does bypass the slip zone. Small amounts of movement have been recorded near the Option 1 route at the edge of the landslide during heavy rain periods. The depth of movement on the upper slope is inferred to be shallow, however, a site investigation with boreholes is recommended to confirm this.

Due to the nature of the environment, there is potential that this route may experience localized slips in the future. Therefore, it is important to ensure a robust design and consider what works may be necessary to attempt in the adverse effects on this route alignment.

7.2 Option 2 – Farmers temporary road (B+B+B4)

Option 2, as highlighted in Figure 21 is an alternative alignment to the preferred option and consists of a combination of the segments B + B + B4 (segments shown in Figure 16). This option follows the existing temporary track from Hikawera Road, reaching the ridge top before passing around the slip and reconnecting at Hinekura Road. The first section of this alignment is on a private driveway, which starts from Hinekura Road to the woolshed.

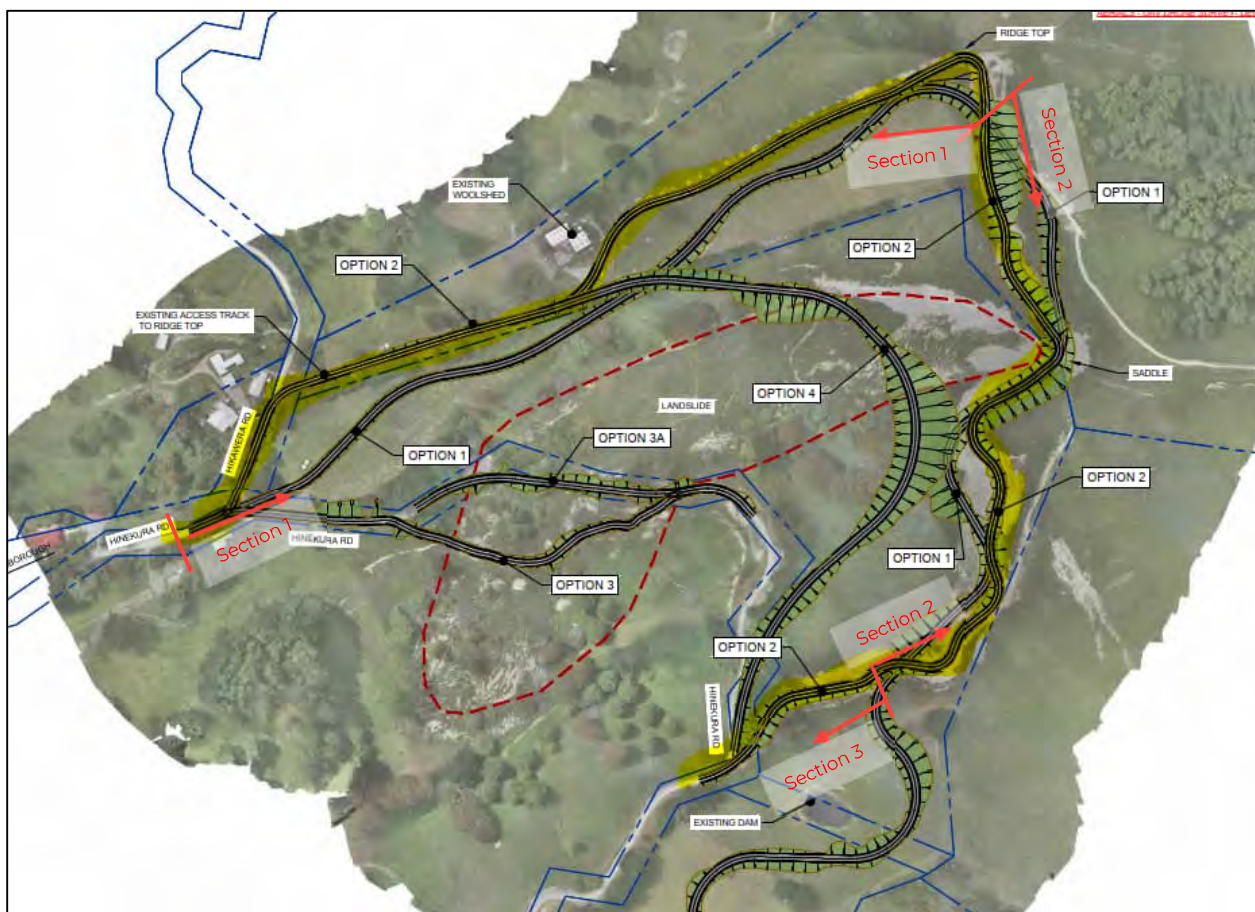


Figure 21: Option 2 – Upgrading farmers temporary road (B + B + B4)

For the plan and longitudinal section please refer to Appendix B

7.2.1 *Horizontal Alignment*

The option 2 realignment consists of 28 horizontal curves with the smallest curve radius being 15m. Of the 29 curves, 7 curves have a radius of less than 30m and for this assessment, these 7 curves would be considered out-of-context curves. These curves are highlighted in Appendix B. Overall, this option has the windiest horizontal alignment

7.2.2 *Vertical Alignment*

This alignment has 11 vertical curves. The vertical alignment in section 1, towards the ridge top, reaches a grade of approximately 15%. In section 2 the maximum grade reaches 15% over approximately 200m in two locations (one uphill grade and one downhill grade). In section 3, the maximum gradient is a steep 19% grade which is experienced over 80m. Although the design speed for this option is 40 km/h, the steep uphill and downhill gradients may affect the speed of heavy vehicles. If this option is selected further engineering to reduce the steep grades may be required to meet the heavy vehicle design standards.

7.2.3 *Farm dams*

The northern dam would require reinstatement and further investigation will be required to determine its location.

The alignment bypasses the central dam with sufficient space there so it is likely this dam will not require relocation. It would still be recommended to investigate the structural strength of the dam and if this dam would have any effect on the new alignment or vice versa.

The southern dam is causing an underslip on the road above which compromises the continuation of this option and hence requires consideration.

Due to the nature of the environment, there is potential that this route may experience localized slips in the future. Therefore, it is important to ensure a robust design and consider what works may be necessary to attempt in the adverse effects on this route alignment.

7.2.1 *Earthworks*

For this alignment, a maximum cut to a depth of 13.56m and a maximum fill of 6.50 m is required. If it is decided to conduct further work on this alignment (i.e., reduce steep grades) further earthworks may be required.

7.2.2 *Slips*

This option is in the vicinity of the large slip. This option, however, deviates the furthest from the main slip zone. If more slope movement occurs, the potential effect on this alignment may be less.

This option connects to Hinekura Road south of the main slip. Hence consideration for treatments for the developed underslip on Hinekura Road south of the main landslide will be required.

Due to the nature of the environment, there is potential that this route may experience ongoing localized slips in the future (Refer Figure 22 below). Therefore, it is important to ensure a robust design and consider what works may be necessary to attempt in the adverse effects on this route alignment.



Figure 22: Moderate sized overslip developing above recent temporary road

7.3 Option 3 – New Road near the toe of the landslide

Option 3, as highlighted yellow in Figure 23 is to construct a road through the slip, closely imitating what was existing on Hinekura Road. This option has the shortest alignment length compared to all options.

For the plan and longitudinal section please refer to Appendix B.

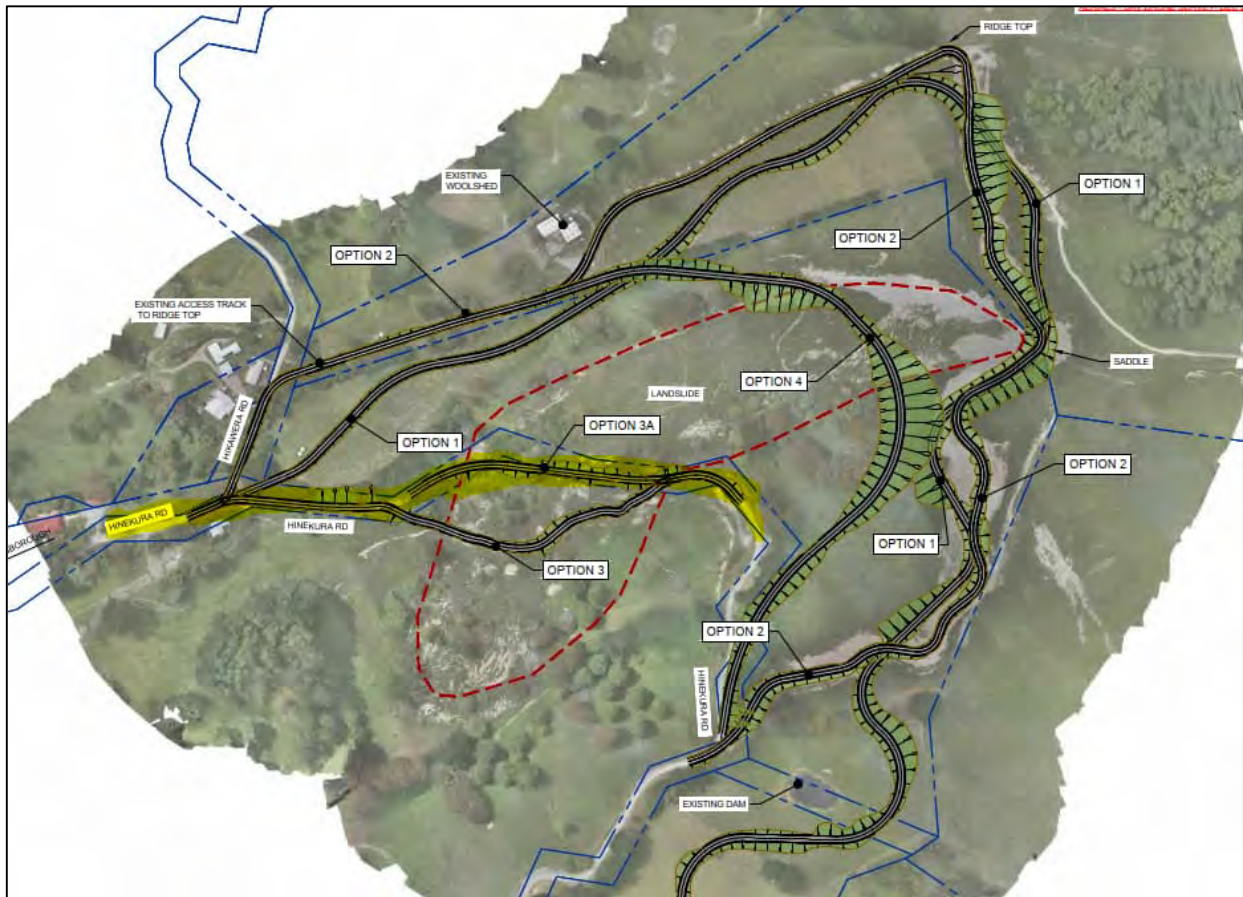


Figure 23: New road near the toe of the slip

7.3.1 Horizontal Alignment

This option provides an alignment that consists of only two horizontal curves, very similar to the previous alignment. These curves have radii of greater than 100m, and therefore this alignment does not have any out-of-context curves.

7.3.1 Vertical Alignment

This vertical alignment of this option is less severe as compared to option 1 and option 2. However, there is a large incline of 12% experienced over 42 metres. Of the 5 vertical curves present only one vertical curve has a grade of 12% with all other grades less than or equal to 8%. This option provides a comfortable vertical alignment for both passenger and heavy haulage vehicles.

7.3.2 Earthworks

For this alignment, a maximum cut to a depth of 2m and a maximum fill of 2.5 m is required. It is estimated that the earthworks required for this option will be a medium amount. This is estimated based on the short alignment length and due to the option traversing through the current landslide.

7.3.3 Slips

This option traverses directly through the landslide slip zone, hence, carries more risk than Option 1 and option 2. If movement of the main landslide reactivates this route will be translated downslope as has occurred on a number of occasions since 2020. In addition, smaller movements of the landslide may induce under-slips and over-slips.

Severe weather events are likely to result in further movement of the two existing under slips on Hinekura Road either side of the landslide.

Therefore, regular monitoring and possibly stabilisation works will be required to attempt the prevention of adverse effects on this route alignment. Hence this option is considered to be a high risk option but could be considered for the short term.

7.4 Option 4 – New alignment through the upper slip zone

Option 4 as highlighted yellow in Figure 24 is to construct a road through the upper part of the slip. This alignment follows the northern section of option 2 (section B) before deviating through the slip and joining back on Hinekura Road before the central dam.

For the plan and longitudinal section please refer to Appendix B.

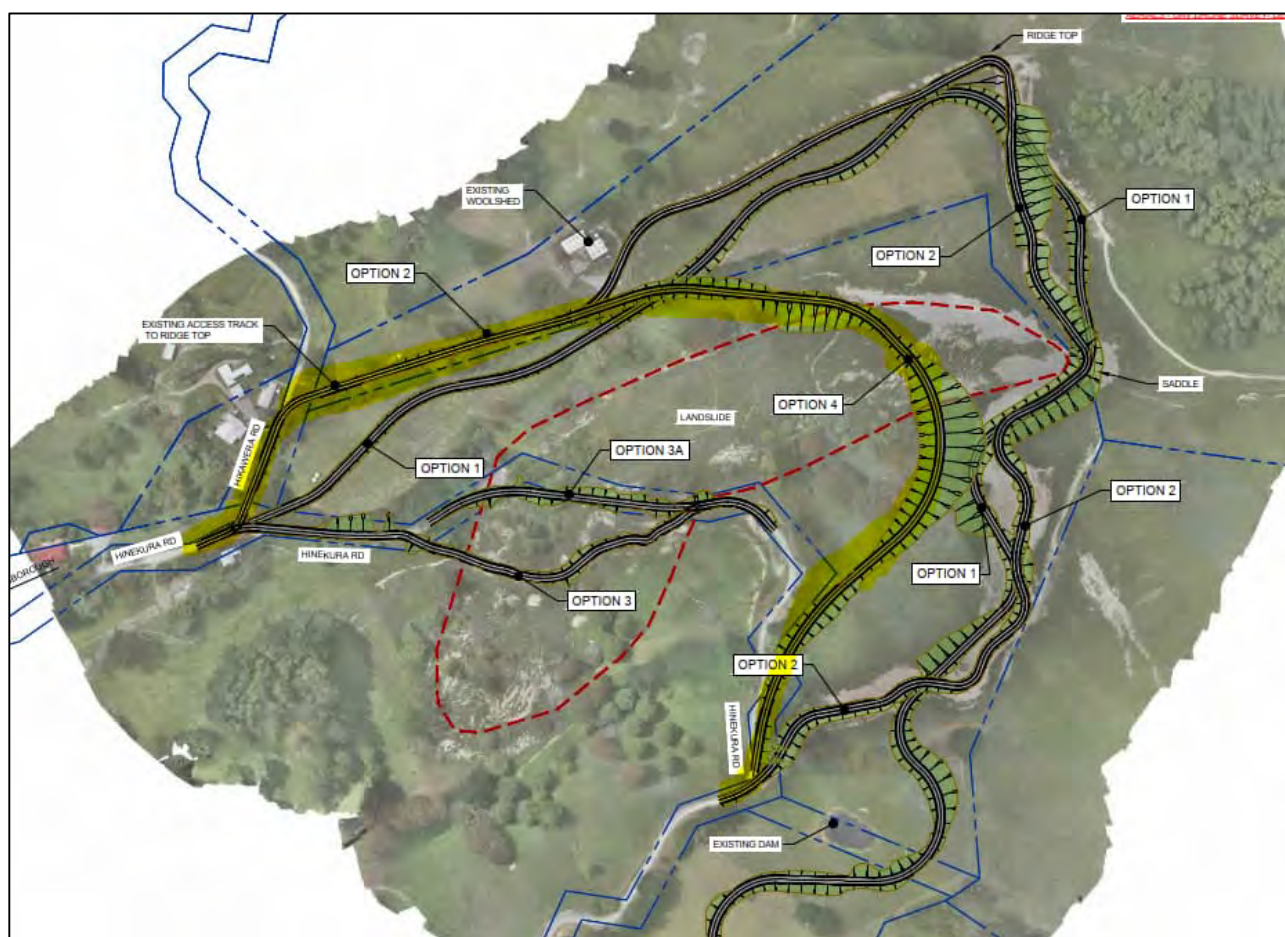


Figure 24: Option 4 – New alignment through upper slip zone

7.4.1 Horizontal Alignment

This option provides an alignment that consists of four horizontal curves. These curves have radii of greater than 80m, and therefore this alignment does not have any out-of-context curves. The curves on this alignment have a relatively large radius, therefore, provide a more comfortable driving experience

7.4.2 Vertical Alignment

This option has three vertical curves with a maximum gradient of 12%. Two out of three curves have a vertical grade of 12%, (one uphill grade and one downhill grade). These two 12 % downhill grade is experienced over a significant length of the alignment, covering 330m. This option provides a moderate vertical alignment for both passenger and heavy haulage vehicles.

7.4.3 Earthworks

This alignment has a maximum cut depth of 17m and a maximum fill of 5.5 m. In addition, cutting out of the upper landslide (if shallow enough) and forming a stable embankment are likely to be required for this option. It is estimated that a medium amount of earthworks will be required for this option.

7.4.1 Slips

This option traverses directly through the slip zone, hence, potentially carries more risk than Options 1 and 2 but less than Option 3. As the route is in the upper part of the landslide there is the possibility that if stable ground can be located at a relatively shallow depth, a stable route may be able to be economically established. The best-case scenario is that another large movement of the main landslide occurs which exposes stable ground in this area.

This option connects to Hinekura Road south of the main slip. Hence consideration for treatments for the developed underslip on Hinekura Road south of the main landslide will be required.

Therefore, ground investigations and survey monitoring will be required to assess the feasibility of this option.

7.5 Option 5 – Closure of Hinekura Road and divert to alternative routes

Option 5 involves the permanent closure of Hinekura Road to the public and diverting to the alternative route. The alternative route is defined as Longbush Road, Admiral Road, Clifton Grove, Wainuioru Road, Ngakonui Road and, Moeraki Road as shown in Figure 25.

The detour route is approximately 57 km in length and takes approximately 1 hour and 17 minutes to traverse in a passenger vehicle. The detour route likely takes longer for heavy vehicles due to their constraints. This route is also predominantly unsealed, an element that may also add to the travel time. It would be ideal for this route to be sealed however, this is a large area to cover and even with the additional traffic from Hinekura Road the traffic volumes are relatively low. As compared to resealing the road, leaving the route unsealed means the work to improve the alternate route will be cheaper (no design work required, no change to drainage, no physical works, no temporary traffic management) and have a lower carbon footprint.

7.5.1 Horizontal Alignment

The horizontal alignment of the alternative route is torturous, with several narrow winding curves. The posted speed limit of the alternative routes is 100 km/h, however, the safe and appropriate speed for all roads is 60 km/h except for Longbush Road with a safe and appropriate speed of 80km/h.

The alternate route also has several out-of-context curves. For this assessment, an out-of-context curve has been classified as a curve of radius less than 30m (matching the preferred option design standard). A desktop exercise was conducted to approximate the curve radii on the alternative route. Although for this report an OOC is recognised as a curve with a radius less than 30m, any curve measured between a radius of 30-35m during this exercise has been considered an out-of-context curve to account for any discrepancies.

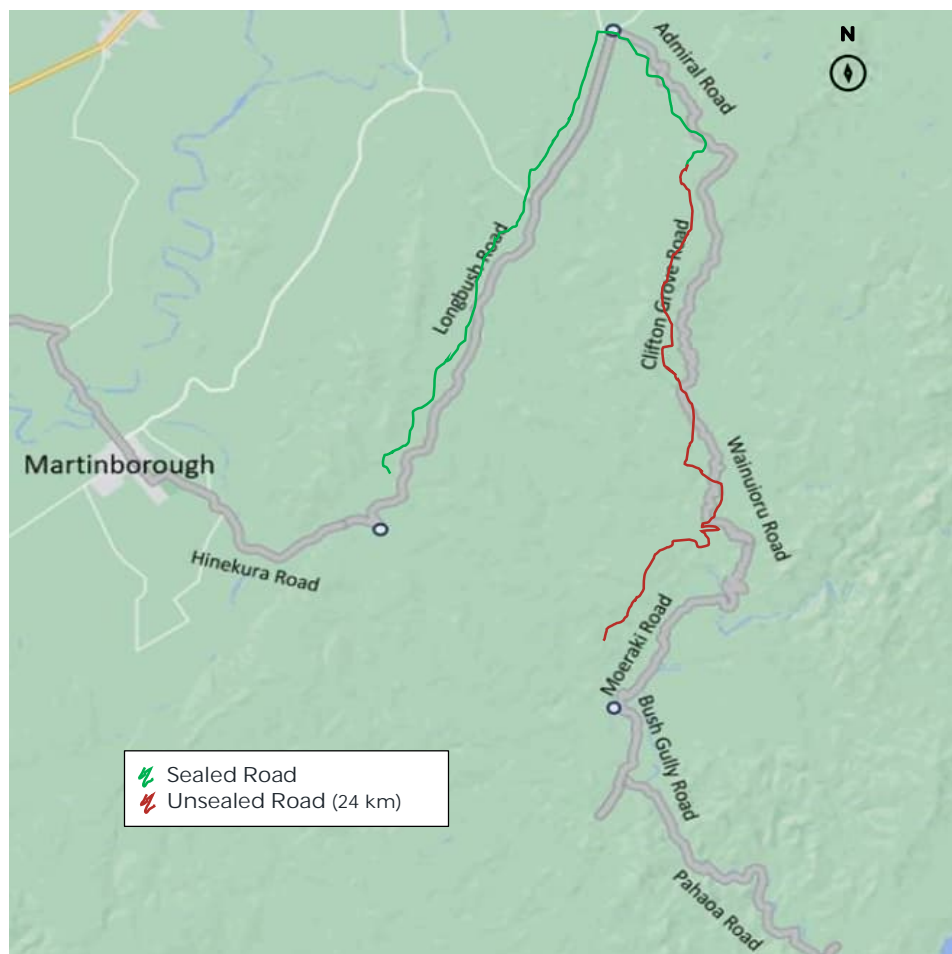


Figure 25: Alternative Route

Table 7 summarises the out-of-context curves along the alternative routes and shows that Wainuioru Road and Ngakonui Road have the highest density of OOC.

Table 7: OOC on the alternative route

Road Name	Approximate Road Length	Number of OOC	Curve radii (m)	Min Radius
Longbush Road	20.7 km	No OOC noted	NA	
Admiral Grove	12.0 km	10	33.5, 26.9, 32.0, 22.9, 17.2, 26.6, 28.6, 34.3, 30.5, 31.5	17.2 m
Clifton Grove	9.4 km	14	35.2, 28.0, 27.4, 23.2, 27.2, 23.9, 27.3, 30.4, 25.7, 23.4, 15.0, 19.9, 13.3, 24.2	13.3 m
Wainuioru Road	4.4 km	27	29.6, 28.4, 13.6, 24.6, 19.4, 32.7, 29.6, 27.2, 17.8, 26.7, 25.5, 33.9, 24.8, 34.1, 32.9, 9.2, 29.6, 22.5, 20.0, 22.8, 16.8, 32.1, 19.7, 30.5, 22.4, 26.3, 14.9	9.2 m

Road Name	Approximate Road Length	Number of OOC	Curve radii (m)	Min Radius
Ngakonui Road	4.4 km	30	29.4, 18.0, 32.1, 33.4, 23.4, 31.6, 24.0, 23.0, 21.9, 11.2, 20.4, 25.7, 16.9, 30.0, 17.5, 17.7, 21.4, 24.6, 27.9, 23.3, 16.1, 29.6, 15.8, 31.1, 23.1, 10.0, 10.9, 13.6, 31.8, 31.2	10.0 m
Moeraki Road	6.0 km	1	27.0	27.0 m

*Disclaimer the number of curve radii and measurement of radii are approximations only and should not be taken as exact

The visibility on the approach to and at the tight corners is limited due to the road geometry and environment. Foliage trimming and road widening may be required in areas to allow for large vehicles to pass one another safely. Overall, there is approximately 3.3 km of out of context curves of the alternative route. These corners should be investigated further to determine if improvements are required.

7.5.2 Vertical Alignment

It is important to note that the alternative route is in a mountainous environment however the vertical alignment is not as severe as the horizontal alignment. During the site inspection, it was noticed that the vertical alignment was comfortable with only gradual inclines and declines. Vertical alignment effects on vehicle speeds are typically greater for heavy vehicles. For heavy vehicles, the vertical alignment of the alternate route proves beneficial as there is less potential to experience high downhill speeds and low uphill speeds.

7.5.3 Slips

The alternate route is in a relatively slip-prone area. As stated in the report above, several slips and developing slips were identified along this route were noted. Routine maintenance for slips may already be regularly occurring, however, for this option, there may be the potential for proactive remedial works to mitigate any large future slips.

7.5.4 Infrastructure

There are 15 bridges located on the alternative route, with four of these bridges being one-way bridges.

The majority of bridges have signage showing the heavy vehicle limits as axles 5,200 kg and gross 44,000kg. This loading limitation may not be accurate hence live load assessments would be recommended for accuracy and safety. This will help to identify if bridges require strengthening works to sustain the increased traffic demand and loadings.

The four one-way bridges may potentially require upgrading to two-lane bridges to minimise any congestion near the bridges, providing greater connectivity and accessibility for passenger and freight vehicles. Upgrading, strengthening and regular maintenance of this bridge are costly.

During the residents' meetings, residents acquired about the provision of line markings along the route to improve delineation. Due to the route being unsealed, delineation improvements could include the installation of edge marker posts and/or side rails where possible.

7.5.5 Cost to improve Detour Route

Costs for improving the detour route are expected to be between \$5 - \$15 Million. Improvement works anticipated are:

- 1 Slip repairs and stabilisation.
- 2 Visibility improvements on approach to corners with radius more than 20m e.g. vegetation clearance, improved delineation, curve warning signs and chevrons.
- 3 Improve sight distance around the corners where radius is less than 20m e.g., corner widening, easing of the curvature.
- 4 Replace one-lane bridges to two lanes.

Please note that these costs are subject to council accepting the appropriate level of service along the detour or alternative route. Options for level of service that council may consider are summarised below.

- Low level of services option between \$5M to \$7M – includes slip repairs, visibility improvements and strengthen the single lane bridges.
- High Level of service option between \$11M to \$15M - includes slip repairs, visibility improvements, easing of corners and bridge replacement.

8 Economic Analysis

Please refer to the WSP Hinekura Road Realignment Option - Economic Assessment Report dated 13 February 2023.

9 Rough Order Costs and Construction Programme of Re-alignment Options

The Rough Order Costs (ROCs) are predominantly driven by cut and fill volumes (based on June 2022 drone survey data). The ROC for the options assumes a risk adjusted cost embedded in the road construction. The table also shows a range of expected ROC following sensitivity tests undertaken by varying the rates for the base road reconstruction cost.

Note, Option 2, which follows the temporary farm track is not pursued due to it being geometrically inferior to the other options.

Table 8: Physical Works Rough Order Costs for selected Re-alignment Options

Option Nos.*	Length of Option	Risk Adjusted ROC	Expected ROC Range
1 (PINK)	2.00km	\$10.5M	\$7.8M - \$10.5M
3 (YELLOW)	0.25km	\$1.2M	\$0.7M - \$1.2M
4 (ORANGE)	0.70km	\$7.3M	\$5.7M - \$7.3M

*Refer to Figure 26: Realignment Options.

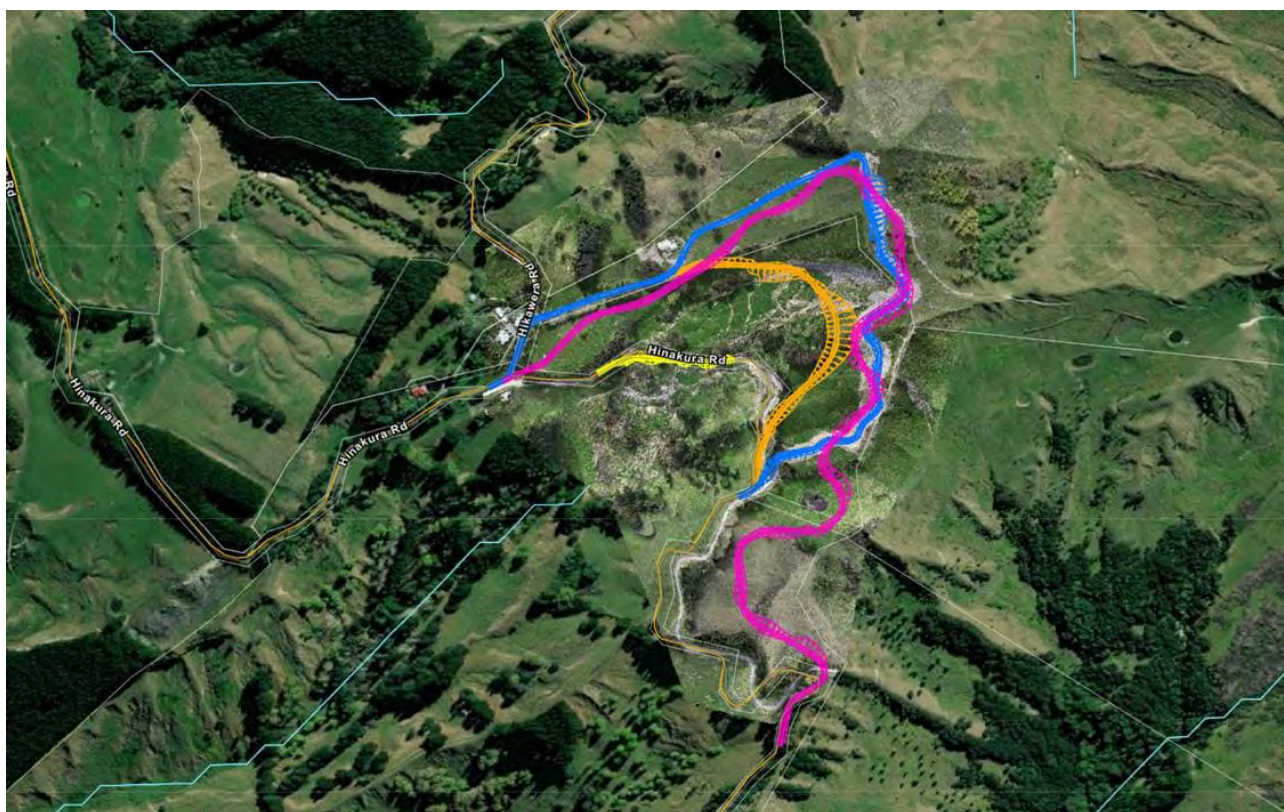


Figure 26: Realignment Options

Assuming starting investigations and detailed design on 1-May-2023, Table 2 provides an indicative programme of works. The programme is risk adjusted to account for potential delays through the different phases of the project (indicative programme schedules for each option are attached in Appendix C of this report).

Table 9: Indicative Programme of Works for selected Re-alignment Options

Option Nos.*	Length of Option	Risk Adjusted Programme
1 (PINK)	2.00km	May 2023 to Mar 2026
3 (YELLOW)	0.25km	May 2023 to Nov 2024
4 (ORANGE)	0.70km	May 2023 to Dec 2025

*Refer to Figure 26: Realignment Options.

10 Summary

Following the significant slip in June 2022, Hinekura Road between Longbush Road and Moeraki Road has been closed off. Since then, an alternative route was provided for public use. For locals a temporary road was constructed through private land, starting from Hikawera Road and connecting back to Hinekura Road.

Since the construction of the temporary road, WSP have provided the SWDC with realignment options for Hinekura Road. This report assesses and summarises the realignment options to provide SWDC with high level information on the five shortlisted options.

Error! Reference source not found. summaries the aspects of each alignment option, colour-coded to assist comparison (red = less favourable, green = more favourable, orange is intermediate). It is

important to note that these parameters are not weighted equivalently and therefore judgement cannot be based solely on the colour coding.

Table 10: Summary of options

Aspect		Option 1	Option 2	Option 3	Option 4	Option 5
Length		2.03 km	1.53 km	0.23 km	0.65 km	57 km
Horizontal Alignment	No. curves	19	28	2	4	Approximately 74 OOC on the alternate route. Investigations required to identify if treatments are required and if so treatment type.
	% Of OCC	0%	25%	0%	0%	
	Min curve radius	32 m	15 m	100 m	80 m	
Vertical Alignment	No. of vertical curves	15	11	5	3	it was noticed that the vertical alignment was comfortable with only gradual inclines and declines
	% Of vertical grades $\geq 12\%$	33.3%	54.5%	20%	33.3%	
	Maximum Grade	14.15%	19.12%	12.0%	12.0%	
Farm Dams	Northern dam	Potentially reinstate northern dam	Council may decide to reinstate northern dam	Council may decide to reinstate northern dam	Council may decide to reinstate northern dam	Council may decide to reinstate northern dam
	Central dam	Central dam investigated to determine if relocation is necessary. Investigation to determine dam effect on road alignment and vice versa. Potential works necessary if to remain in current location	No Effect	No Effect	No Effect	No Effect
	Southern dam	Central dam investigated to determine if relocation is necessary. Investigation to determine dam effect on road alignment and vice versa.	No Effect	No Effect	No Effect	No Effect

Aspect		Option 1	Option 2	Option 3	Option 4	Option 5
		Potential works necessary if to remain in current location				
Earthworks	Predicted amount	Large amount	Earthworks may be required to bring the road to standard	Medium amount	Medium amount	Undefined amount
Slips/ Resilience		By passes the slip zone. Investigation and stabilisation work likely required	By passes the slip zone. Investigation and stabilisation work likely required	Traverses through current slip zone Stabilisation work will be required Underlips and over slips forming at the start of Hinekura Road so will require work there to stabilise	Traverses through the upper slip, if the landslide can be dug out to achieve stable ground	Various over slips and under slips and developing slips were identified during the site visit, however it was noted that these slips are not yet affecting the carriageway.
Infrastructure		Sealed road	Sealed road	Sealed road	Sealed road	24km of unsealed road 15 bridges which may require live load assessments Four one-way bridges that may need to be upgraded to two-way bridges

Assumptions and Inclusions

- The ranking and rating of the individual items are subjective.
- The aspects are not weighted equivalently i.e., cannot conclude that an option is more suitable due to having more green
- Not all aspects have been considered in this report and table i.e., barriers, delineation, resource consenting, land use

Appendix A

Hinekura Road Realignment Options –
updated summary letter

4 October 2022

Tim Langley
Roading Manager
South Wairarapa District Council
19 Kitchener St
Martinborough

Hinekura Road Realignment Options – updated summary

5-C4072.01

Dear Tim,

This letter presents a summary of the various options for realigning Hinekura Road, to assist SWDC to choose a preferred option to take to detailed design, consenting, and construction. This update includes additional information on stormwater, consenting and comments on cost estimates, as well as an update from the latest survey monitoring.

The realignment route options bypass the large active landslide on the property of 1673 Hinekura Road (John and Liz Hancock), which moved dramatically in June of this year.

In September WSP has carried out:

- Geological inspection of the ground exposed as part of the newly completed earthworks for the temporary access vehicle track through the McCreary and Hancock properties.
- Discussions with John and Liz Hancock regarding their three dams and water sources and requirements in the vicinity of the realignment route options.
- An updated drone survey of the full site on 20 September and preparation of a 3D survey model of the site
- Upgrading of the remote monitoring system on the main landslide on 20 September 2022
- Assessment of slope movement data including comparing the 23 June 2022 and 20 September UAV surveys and remote monitoring data.

Comparison of the UAV surveys indicate that there has been very little movement of the main part of the landslide from late June to late September 2022 (Figure 1). However, ongoing movement of the upper part of the landslide has continued, with accelerating rates of movement picked up by the real-time monitoring sensors following rain events.

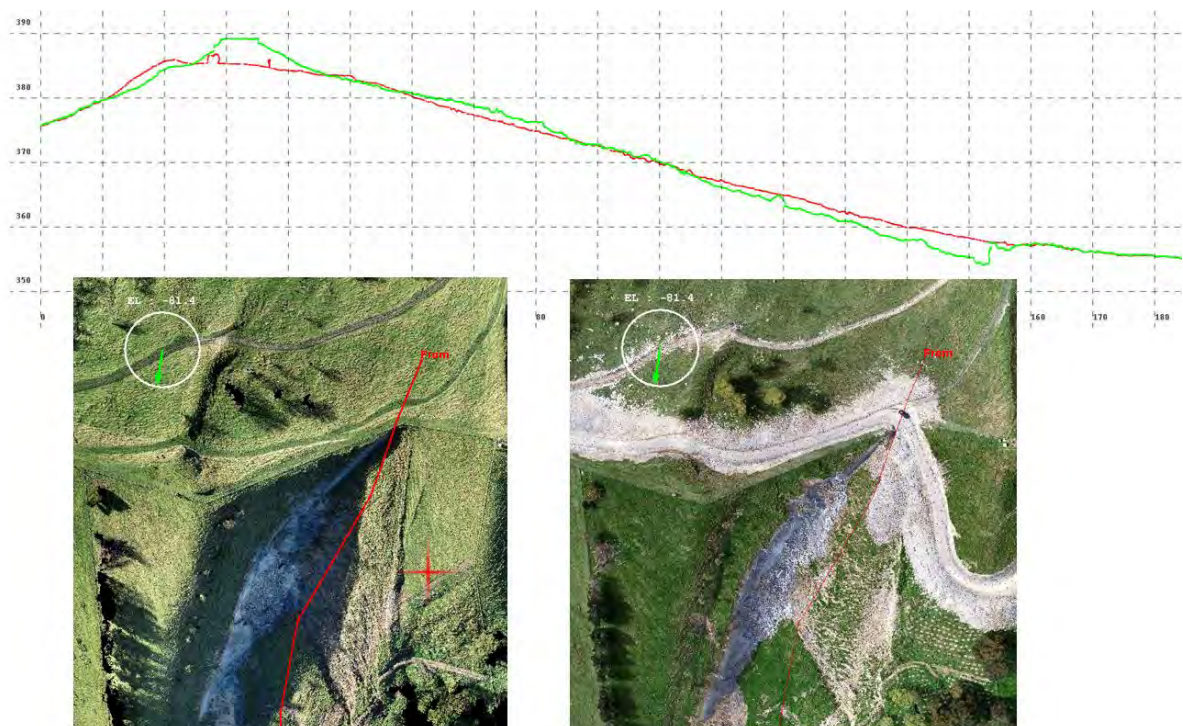


Figure 1: Profiles through the upper portion of Landslide on 23 June 2022 (green line and plan lower left) and September 2022 (red and plan lower right), showing earthworks at Saddle. Despite moving about 80m in mid June, the green triangular block at bottom right (below kink in red line) has not shown any obvious movement since June. The earthworks for the recently constructed 4WD farm road is obvious.

The various realignment route options are shown on Figure 2. The colours on the various routes shown on Figure 2 represent the gradient (steepness) of that section of the route – with solid red being steepest (>15.0%), red dashed 12-15%, orange (8-12%), and green least steep (<8.0%). Attached to the covering email is a digital version of this figure.

For convenience we have split the route up into three sections, as follows:

1. Northern section (Table 1) – two main options – Option B (the original blue route) utilises McCreary's original access road past the woolshed and Option O (the original orange route) runs through the sloping paddocks above McCreary's access road to the south; with two sub options (O1 and O2) on the upper slope to the ridge line.
2. Middle section (Table 2) – from the ridgetop to Hancock's middle farm dam. Options are limited here hence only *one option is presented*; however, adjustments to this may be made during the design stage and/or following the assessment of the effect of the new temporary access road and the middle dam. Given the need to drain slopes to improve stability for the new road, this intercepted groundwater can be utilised for farm water requirements and result in reducing farm water storage volumes.
3. Southern Section – 5 options (B1 to B5) are outlined in Table 3. The longer two of these bypasses some unstable or substandard sections of the existing road, which are likely to need repair/stabilisation soon. The options have varying earthworks implications with provisional cut slope heights up to 14m for the longer three options.

A high-level comparison of the various options is presented in the Tables. To assist comparison of the options, where applicable the cells have been colour-coded: red being less favourable, green more favourable, and orange intermediate between red and green.

All options have a large surplus of cut material for which dump sites will need to be identified.

The new temporary road earthworks provide very useful information on the ground conditions in the middle section of the site and reduces the amount of ground investigations required to provide a robust design. Additional investigations involving excavator test pits and hand auger / Scala penetrometer testing are recommended once the preferred route is chosen. Investigation boreholes are recommended for sections with proposed high cuts. The earlier these are done the more certainty can be provided in the design.

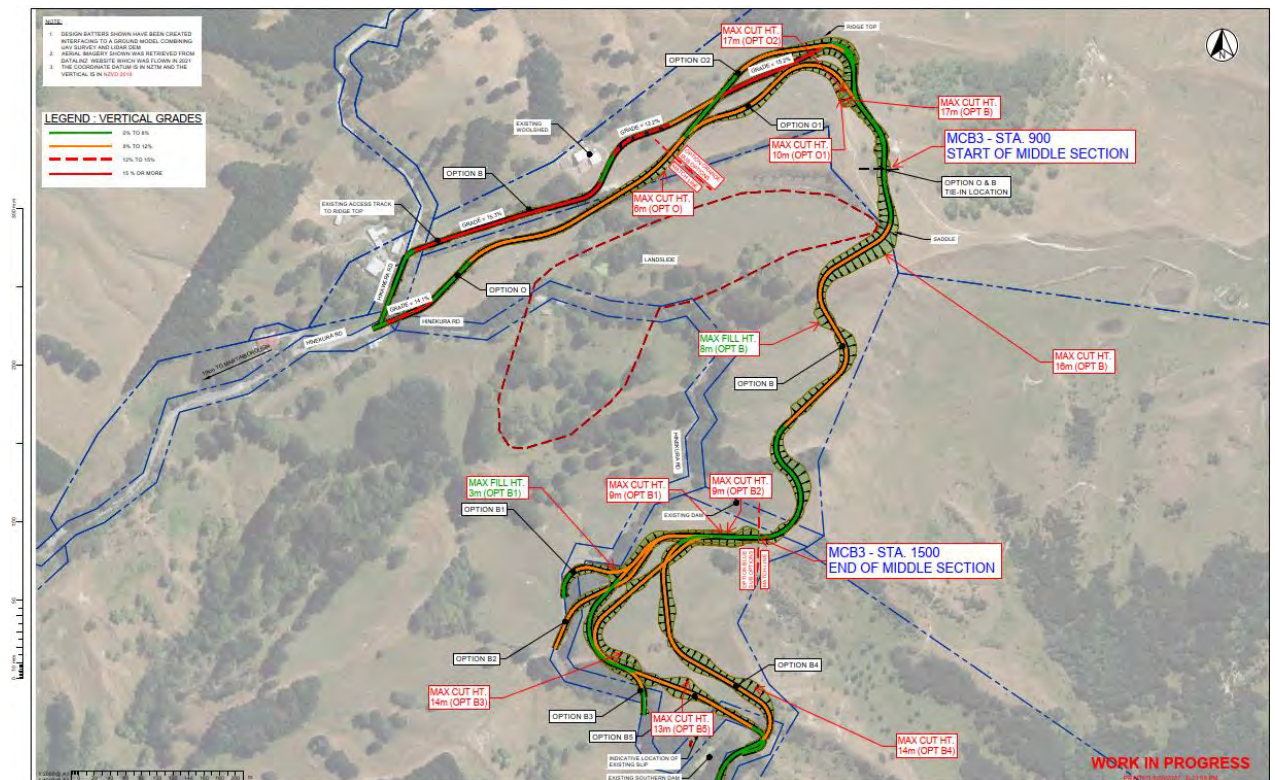


Figure 2: Realignment Options and associated earthworks footprints. The colours represent the gradients of the options, with red being steepest and green the flattest.

Table 1: Northern Section options. Cells colour-coded to assist comparison (red = less favourable, green = more favourable, orange is intermediate)

Option	Landowner	Overall comments	Length of alignment	Max Cut Height	Max Grade	Earthwork Volumes	Geotech Observations	Geotech investigations	Stormwater	Consenting	Farm Dams
B	McCreary: access for existing private road affected if upgrading	Utilises McCreary's existing access road from Hikawera Road past the woolshed and up to the ridgetop	900	17m	15.30%	Cut:- 10870 m ³ Fill:- 920 m ³	A temporary road was cut along an existing track ("Middle Track"). The cut slopes show very unstable material of highly weathered and deformed thin layers of alternating sandstone and mudstone. Exposed to the elements it appears that they are easily susceptible to erosion and can flake, block or be washed off the cuts which are relatively steep. Natural drainage of these cuts seems to be ok. Risk of soil horizon eroding off the tops or being undercut.	Hand/auger Scalas and borehole for area of high cut	Upgrade existing – relatively steep gradients	More favourable as pre-existing road, but requires same level of technical information	Consider relocating north dam to saddle above (north of) current destroyed dam
O + O1	Hancock, McCreary paddocks	Farm paddock option off-line from McCreary's access road; route will be close to the preferred location for replacement for Hancocks original (destroyed) farm dam	842	10m	14.10%	Cut:- 15470 m ³ Fill:- 750 m ³	Earthworks in the marginally stable east facing slopes may require some slope stabilisation.	Ground investigation (~4 test pits, auger/scalas) required to determine the depth of soils	'Green fields'	slightly more comprehensive technical information required as 'green fields' construction	
O + O2	Hancock, McCreary paddocks		893	17m	14.10%	Cut:- 18470 m ³ Fill:- 740 m ³		Ground investigation (~4 test pits, auger/scalas) required to determine the depth of soils Borehole for area of 17m high cut	'Green fields'		

Table 2: Middle Section preferred option (B)

Option	Landowner	Overall comments	Length of alignment	Max Cut Height	Max Grade	Earthwork Volumes	Geotech Observations (From north to south)	Geotech investigations	Stormwater	Consenting	Farm Dams
B	McCreary, Hancock, locally close to Maori land (which McCreary leases)	<p>This section (following the previous blue (B) route is constrained by the saddle above the landslide and Hancock's middle dam.</p> <p>At the saddle, the new farm road has a 4m deep cut, the permanent road needs to be cut about another 5m (9m deep) to achieve suitable grades;</p> <p>The slopes above the central dam are creeping and either need to be drained by removing (relocating?) the dam or stabilizing /strengthening the slopes.</p>	600	16m	12.00%	Cut:- 35020 m ³ Fill :- 3170 m ³	<p>Earthworks in the marginally stable east facing slopes may require some slope stabilisation.</p> <p>South of the saddle the route is very close to the top (eastern-most point) of the large landslide.</p> <p>Many slopes and the upper landslide itself appear to be controlled by shallow north-west dipping bedding in 'Papa' bedrock.</p> <p>Risks to this section include southward enlargement of the landslide And potential 'bedding plane' failure of the slope above when undercut during construction. Risk mitigation options include slope stabilisation or considering 300m long rerouting to eastern side of ridge to avoid.</p> <p>Where failures are shallow these should be able to be 'cut out' in construction.</p> <p>Areas of poor drainage and soft substrate/ creeping soils in many gullies. Instability and erosion of cut slopes in these areas is expected; significant instability and seepage observed in recent benched cut 70m south of the landslide, with fines washing out and risking blocking culvert. Significant enlargement of gully soil failures is a risk when such slopes undermined by cuttings.</p> <p>Slopes above middle dam saturate and creeping. Gully below dam subsurface seems fully saturated/ seepage.</p> <p>Papa when in a large/thick unit seems to hold up reasonably well in cut slope. However slabbing failures and over time breakdown of mudstone into soil. Moderate to steep cuts into Papa observed on the temporary road.</p>	<p><i>Shallow Investigations:</i> Test pits, augers/Scalas to determine: a) the depth to competent ground on the slopes for a stable road platform. b) the nature of seepages for drainage and farm water supply. c) the depth of the main landslide below the Saddle</p> <p><i>Deeper investigations :</i> Machine boreholes in areas of higher cuts and above the landslide to confirm appropriate cut slope angles</p>	To be advised	To be advised	Install subsoil drainage on the creeping slopes above the middle Hancock dam; to drain and stabilise slope for road line and potentially also provide groundwater source for farm use; may eliminate the need for, or reduce the required storage requirement/dam size for, the middle dam. Dam is located on a 'paper road' (SWDC land).

Table 3: Southern Section summary of options

Option	Length of alignment	Max Cut Height	Max Grade	Earthwork Volumes	Geotech Observations	Geotech investigations	Stormwater	Consenting	Farm Dams
B1	292	9m	12.00%	Cut:- 7110 m ³ Fill :- 1580 m ³	Incorporates significant section of original Hinakura road with hairpin bend and portions of observed instability; Observed subsidence of the downslope lane directly above the southern Hancock dam;. Stabilisation of this developing underslip may require combination of tree planting, drainage improvements (and/ or dam removal?),or retaining wall.	Test pits (~5), plus augers/Scalas to: <i>a) determine the depth to competent ground on the green fields slopes for a stable road platform.</i> <i>b. determine depth of failures of unstable sections of existing road to south of merge with old road, including southern dam</i>	Shorter than B4/B5 but may need to upgrade existing culverts	New route less environmental obstacles to address in supporting application than options B3 to B5. Option to remove southern dam may require environmental consideration	Consider decommissioning (or reducing size) of the southern Hancock dam (for options B1, B2, and B3 only) to improve slope stability below existing road
B2	328	9m	12.00%	Cut:- 8400 m ³ Fill :- 800 m ³	As for B1.	Test pits (~6), plus augers/Scalas to: <i>a) determine the depth to competent ground on the green fields slopes for a stable road platform.</i> <i>b. determine depth of failures of unstable sections of existing road to south of merge with old road including southern dam</i>	As for B1	As for B1	
B3	392	14m	12.00%	Cut:- 11860 m ³ Fill :- 1500 m ³	Incorporates section of original Hinakura road with observed subsidence of the downslope lane directly above the southern Hancock dam; Stabilisation of this developing underslip may require combination of tree planting, drainage improvements (and/ or dam removal?),or retaining wall. Potential for cut slopes of greater than 14m if cut slope angles need to be flattened	As for B2, plus: 1-2 boreholes for high cut area	Intermediate length but may need to upgrade a few existing culverts	B3 intermediate in terms of issues to be addressed compared with B1/B2 and B4/B5. Option to remove southern dam may require environmental consideration	
B4	558	14m	12.00%	Cut:- 19030 m ³ Fill :- 650 m ³	Bypasses the unstable sections of Hinekura Rd including subsided lane above Hancock's southern farm dam. The section of the existing road south and east of the southern dam is in good condition without any indication of subsidence on the downslope side, or movement in the cut slope on the upslope side of the carriageway. The downslope side of the carriageway appears to be well stabilised by mature trees.	1. . ~6 test pits plus augers and scalas to determine soil depth 2. Boreholes (~2) in areas of high cuts	Deeper gullies to traverse for culverts / scour issues?	Intersecting the most gullies (compared to B1 to B3). Highest visual impact	The southern dam has very limited affect
B5	588	13m	12.00%	Cut:- 10200 m ³ Fill :- 4600 m ³	As for B4.		AS for B4	Intersecting the most gullies (compared to B1 to B3). Second highest visual impact	The southern dam has a minor affect

Assumptions and Notes for the preliminary geometric design:

- 1 Geometric design is based on a design speed of 40kph
- 2 Design vehicle - 11.5m Truck (swept path is checked against the full road width)
- 3 Curve widening and maximum grades will be based on NZ Forest Road Engineering Manual
- 4 Cut and fill batter slope angles are assumed and shall be confirmed once the geotechnical investigations / assessment is completed
- 5 All options will require Resource Consent as greater than 3000m³ of earthworks
- 6 Pavement layer design will be undertaken once test pits are completed
- 7 For developing these options, we have not considered barrier treatment design. These will be investigated during detailed design.
- 8 Geotechnical site investigations will be required to verify whether existing ground material is suitable to build the road on.
- 9 The proposed preliminary cross-section configuration is:
 Carriageway - 2 x 2.50m
 Berm - 2 x 0.5m
 Cut - 1V :1H
 Fill - 1V :1.5H /2H
 Widening - TBC "

Cost Estimates

At this stage a realistic cost estimate is not possible as there are so many unknowns.

The main costs are related to the earthworks volumes and associated drainage and slope design/stabilisation measures. While shorter options or those that utilise existing roads may appear cheaper, this is dependent on the state of the existing routes which may require expensive retrofitting / strengthening.

While we have done initial costings we are reluctant to release these due to the number of unknowns which could significantly affect the costings. Further investigation is required to reduce the uncertainties to allow a realistic cost estimate to be prepared.

This would include assessing:

- Cost rates for cut to waste (e.g. can local waste dumps be identified?),
- Cost rates for fill materials,
- Appropriate cut slope angles / cut slope profiles / benching given the relatively high cut slopes,
- Extent of slope stabilisation measures / catch zones required to ensure a resilient road adjacent to the upper landslide area,
- An acceptable farm water storage / supply system that doesn't compromise stability of the road alignment,
- Property purchase costs.

The above items will be better understood in the following phases of the design work.

At this stage none of the combinations of options are significantly cheaper than others, given the larger uncertainties inherent in each option which will more significantly affect the cost.

We ask the Council to consider the information presented in this letter and indicate how you would like WSP to proceed. We would be happy to further discuss the findings of this report in a meeting or workshop if this would be helpful.

Regards



David Stewart
Technical Principal - Geotechnical

Appendix B

Plan and Long Sections of Progressive Options

- NOTE:
1. DESIGN BATTERS SHOWN HAVE BEEN CREATED INTERFACING TO A GROUND MODEL COMBINING UAV SURVEY AND LIDAR DEM.
 2. AERIAL IMAGERY SHOWN WAS CAPTURED DURING UAV SURVEY UNDERTAKEN BY WSP IN DEC 2022.
 3. AERIAL IMAGERY SHOWN FOR OUTER EXTENT WAS RETRIEVED FROM DATALINZ WEBSITE WHICH WAS FLOWN IN 2021.
 4. FOR OPTION 1, 2, 3, 3A & 4 PLAN AND LONGITUDINAL SECTION REFER TO SHEET SK11-SK13, SK21-SK23, SK31, SK3A, SK41.
 5. THE COORDINATE DATUM IS IN NZTM AND THE VERTICAL IS IN NZVD 2016.

300 mm
200
100
50
0 10 mm

AERIALS - RETRIEVED FROM DATALINZ - FLOWN IN 2021

AERIALS - UAV DRONE SURVEY- DEC 2022

AERIALS - UAV DRONE SURVEY- DEC 2022

AERIALS - RETRIEVED FROM DATALINZ - FLOWN IN 2021



19km TO MARTINBOROUGH

EXISTING ACCESS TRACK TO RIDGE TOP

EXISTING WOOLSHED

RIDGE TOP

OPTION 1

SADDLE

OPTION 2

OPTION 4

LANDSLIDE

OPTION 1

OPTION 3A

OPTION 2

HINEKURA RD

EXISTING DAM

OPTION 1

OPTION 2

OPTION 1

INDICATIVE LOCATION OF EXISTING SLIP
EXISTING SOUTHERN DAM

WORK IN PROGRESS
PRINTED 16/02/2023 3:39:28 PM

1:2000@ A1
1:4000@ A3
0 20 40 60 80 100 120 140 160 180 200 m

REVISION	AMENDMENT	APPROVED	DATE
UR*	UNDER REVISION		



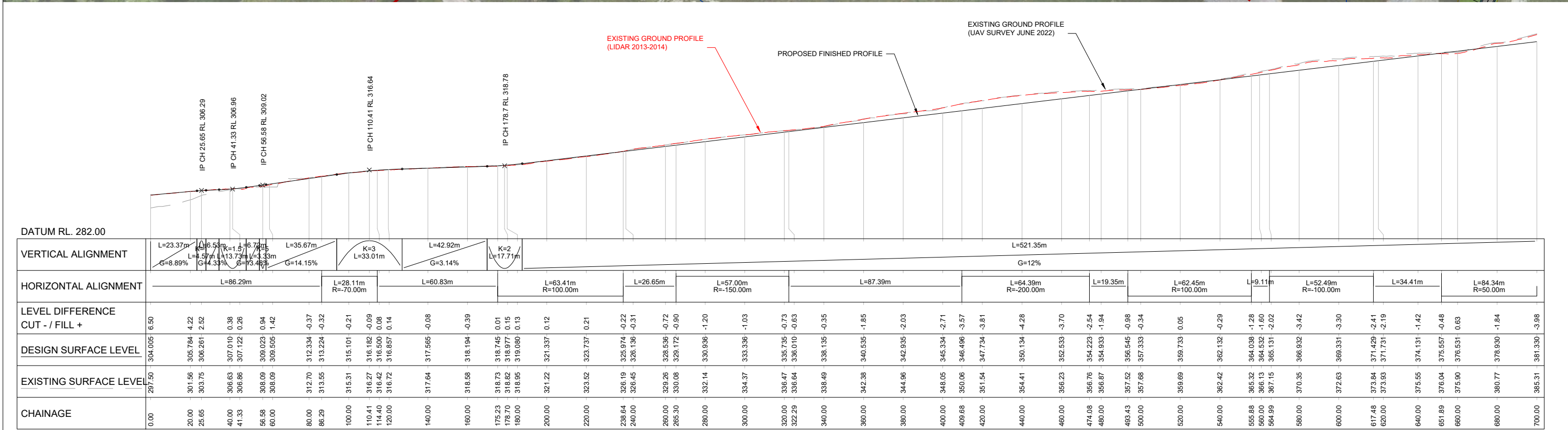
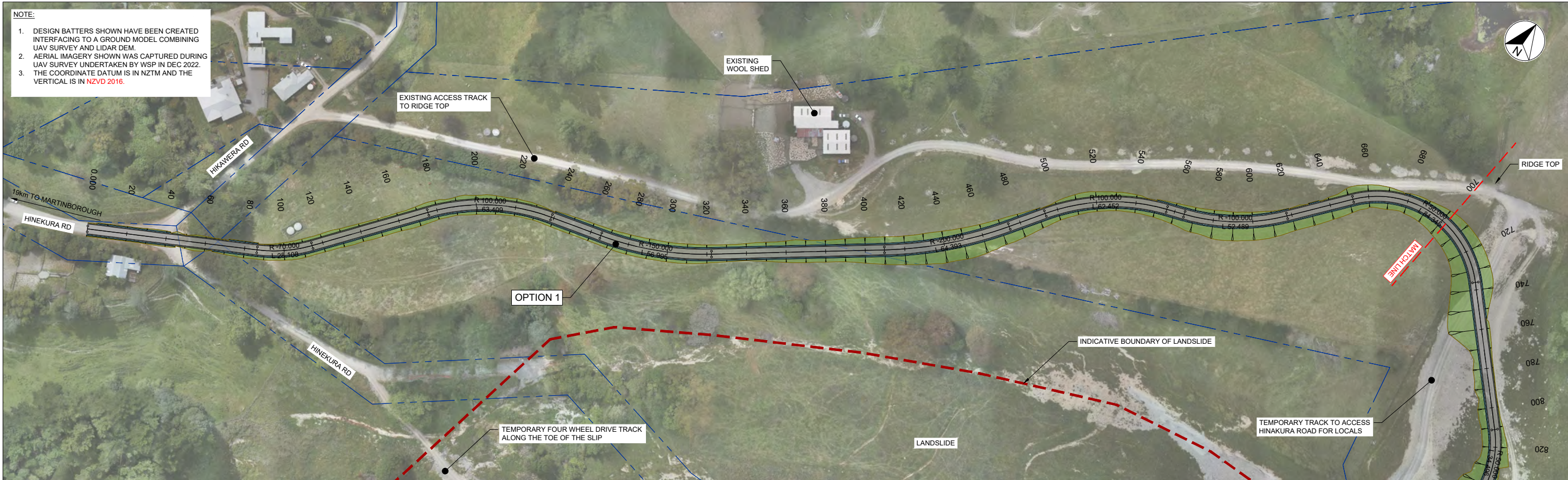
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New Zealand

SOUTH WAIRARAPA DISTRICT COUNCIL

SCALES		ORIGINAL SIZE
1:2000(A1) , 1:4000(A3)		A1
DRAWN	DESIGNED	APPROVED
N.M	N.M	APPROVER
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PRELIMINARY

PROJECT		
SOUTH WAIRARAPA DISTRICT COUNCIL		
HINEKURA ROAD		
ROAD REALIGNMENT		
TITLE		
REALIGNMENT OPTIONS		
OVERVIEW PLAN		
WSP PROJECT NO. (SUB-PROJECT)		SHEET NO.
5-C4072.01		SK00
		REVISION
		UR*



LONGITUDINAL SECTION - MC10

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 0m - 700m

SCALE: 1:1000 (A1)

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SCALES		
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ORIGINAL SIZE A1		
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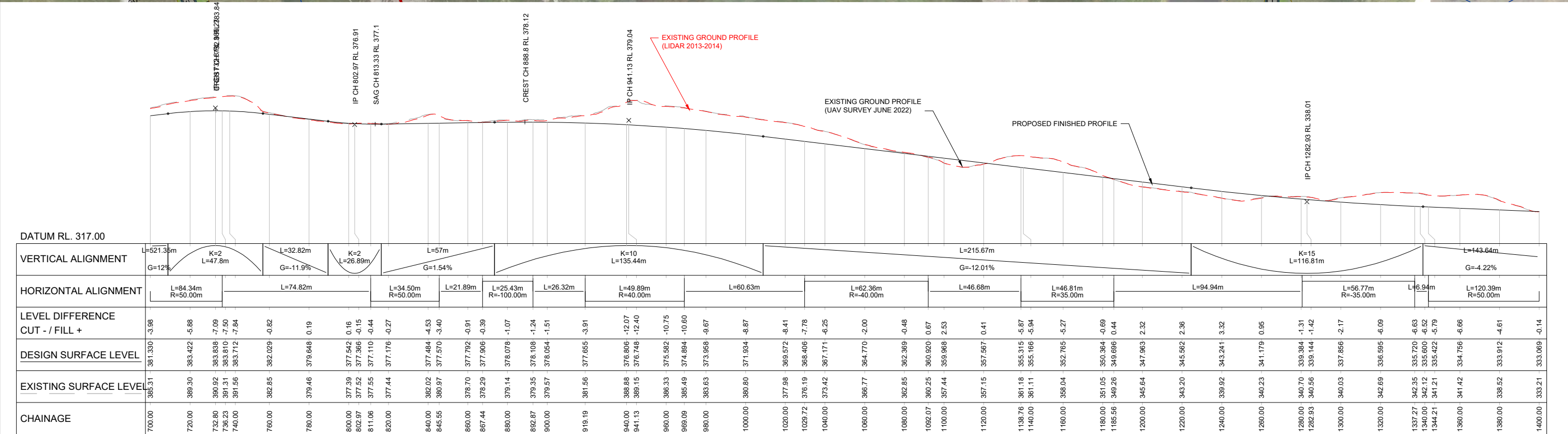
PROJECT
SOUTH WAIRARAPA DISTRICT COUNCIL
HINEKURA ROAD
ROAD REALIGNMENT

TITLE
OPTION 1 - PLAN LAYOUT & LONGITUDINAL SECTION
SHEET 1 OF 3

WSP PROJECT NO. (SUB-PROJECT)
5-C4072.01

SHEET NO.
SK11

REVISION
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LONGITUDINAL SECTION - MC10

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 700m - 1400m

SCALE: 1:1000 (A1)

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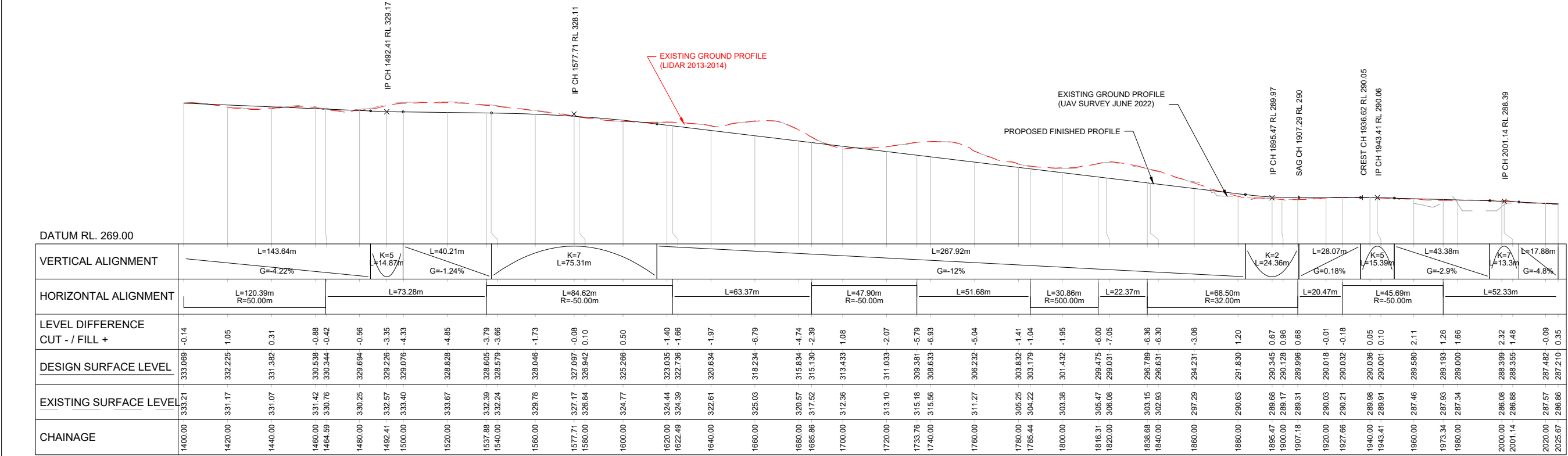
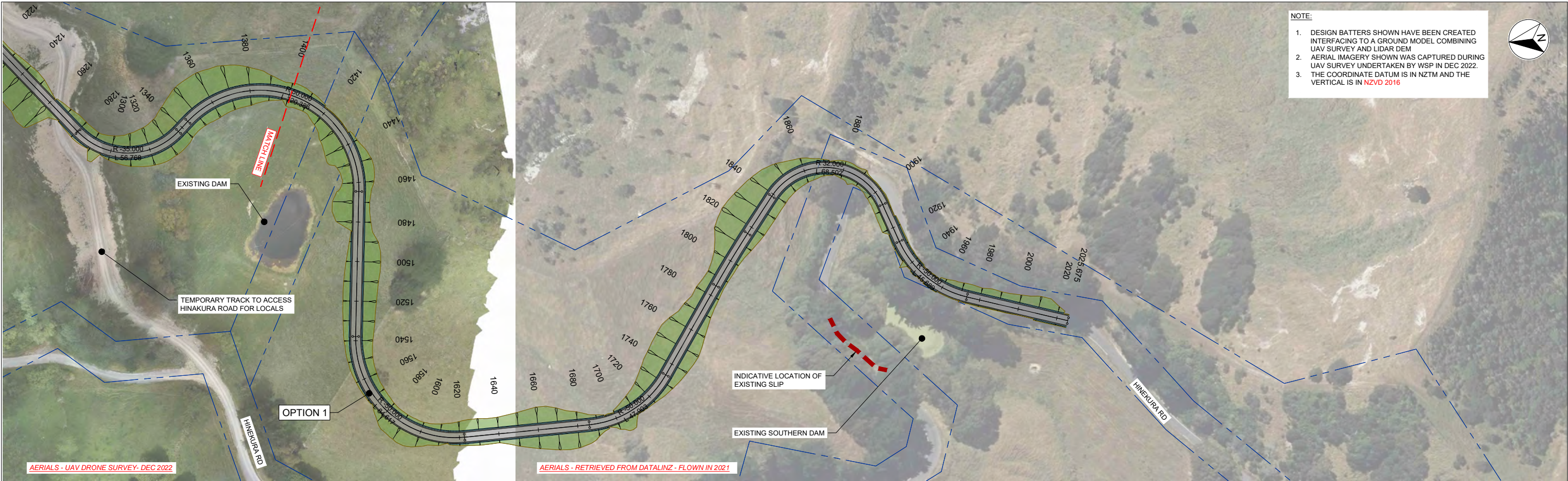
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SOUTH WAIRARAPA DISTRICT COUNCIL		
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PRELIMINARY		
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PROJECT SOUTH WAIRARAPA DISTRICT COUNCIL HINEKURA ROAD ROAD REALIGNMENT TITLE OPTION 1 - PLAN LAYOUT & LONGITUDINAL SECTION SHEET 2 OF 3 WSP PROJECT NO. (SUB-PROJECT) 5-C4072.01			SHEET NO. SK12	REVISION UR*
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LONGITUDINAL SECTION - MC10

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 1400m - 2025m

SCALE: 1:1000 (A1)

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SCALES		ORIGINAL SIZE
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PROJECT

SOUTH WAIRARAPA DISTRICT COUNCIL

HINEKURA ROAD

ROAD REALIGNMENT

TITLE

OPTION 1 - PLAN LAYOUT & LONGITUDINAL SECTION

SHEET 3 OF 3

WSP PROJECT NO. (SUB-PROJECT)

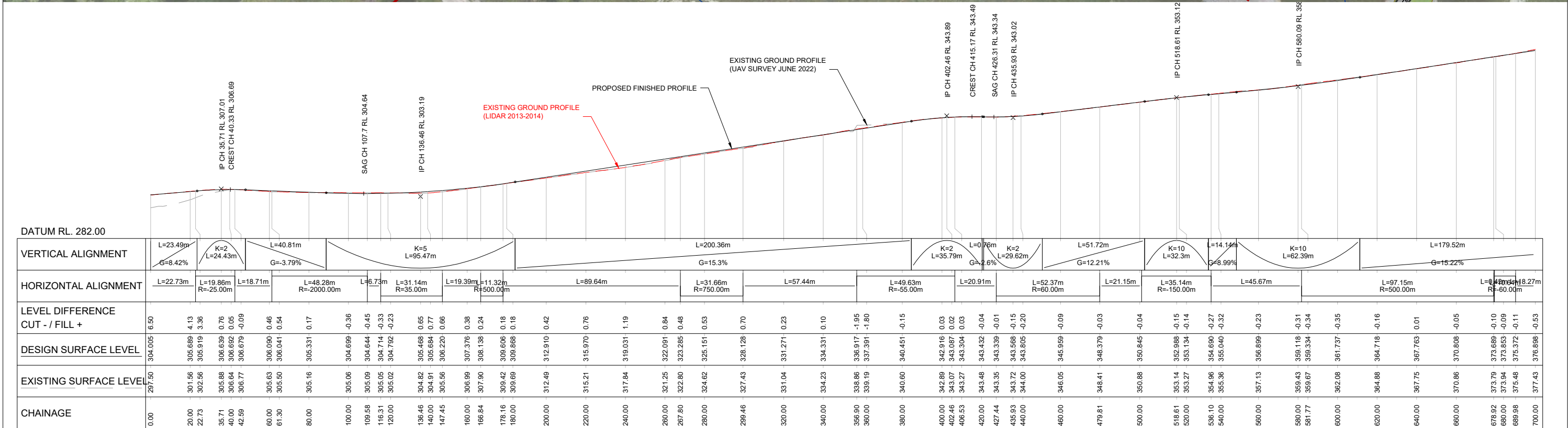
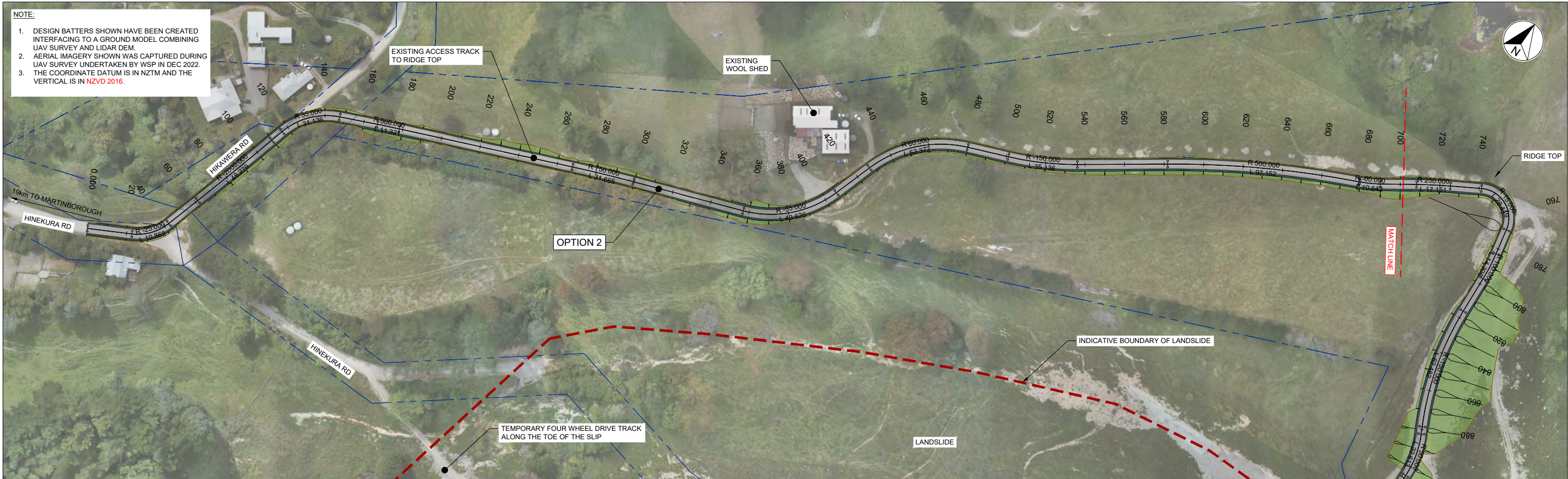
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SHEET NO.

SK13

REVISION

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LONGITUDINAL SECTION - MC20

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 0m - 700m

SCALE: 1:1000 (A1)

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SCALES		ORIGINAL SIZE
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VERIFIER	VERIFIER	YYYY-MM-DD

PROJECT
SOUTH WAIRARAPA DISTRICT COUNCIL
HINEKURA ROAD
ROAD REALIGNMENT

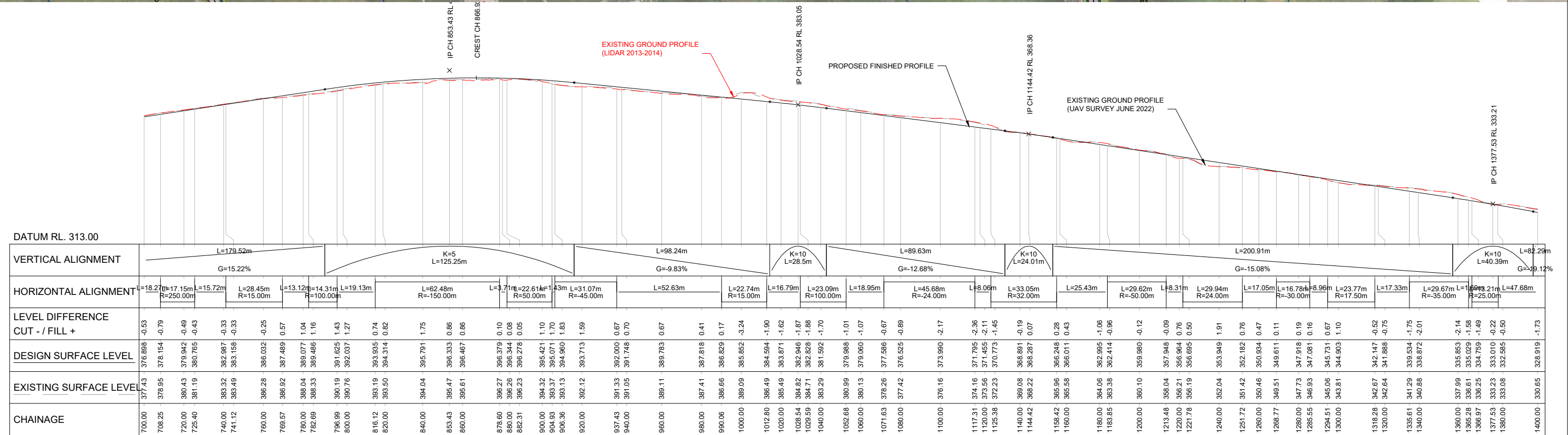
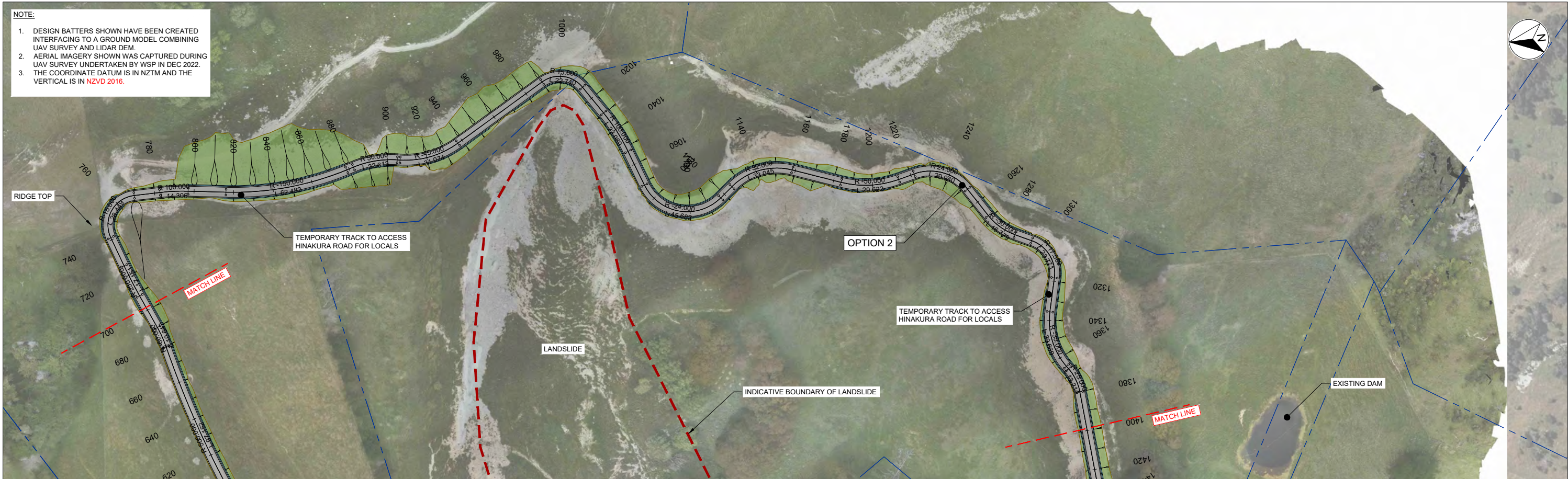
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OPTION 2 - PLAN LAYOUT & LONGITUDINAL SECTION
SHEET 1 OF 3

WSP PROJECT NO. (SUB-PROJECT)
5-C4072.01

SHEET NO.
SK21

REVISION
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- NOTE:
1. DESIGN BATTERS SHOWN HAVE BEEN CREATED INTERFACING TO A GROUND MODEL COMBINING UAV SURVEY AND LIDAR DEM.
 2. AERIAL IMAGERY SHOWN WAS CAPTURED DURING UAV SURVEY UNDERTAKEN BY WSP IN DEC 2022.
 3. THE COORDINATE DATUM IS IN NZTM AND THE VERTICAL IS IN NZVD 2016.



LONGITUDINAL SECTION - MC20

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 700m - 1400m

SCALE: 1:1000 (A1)

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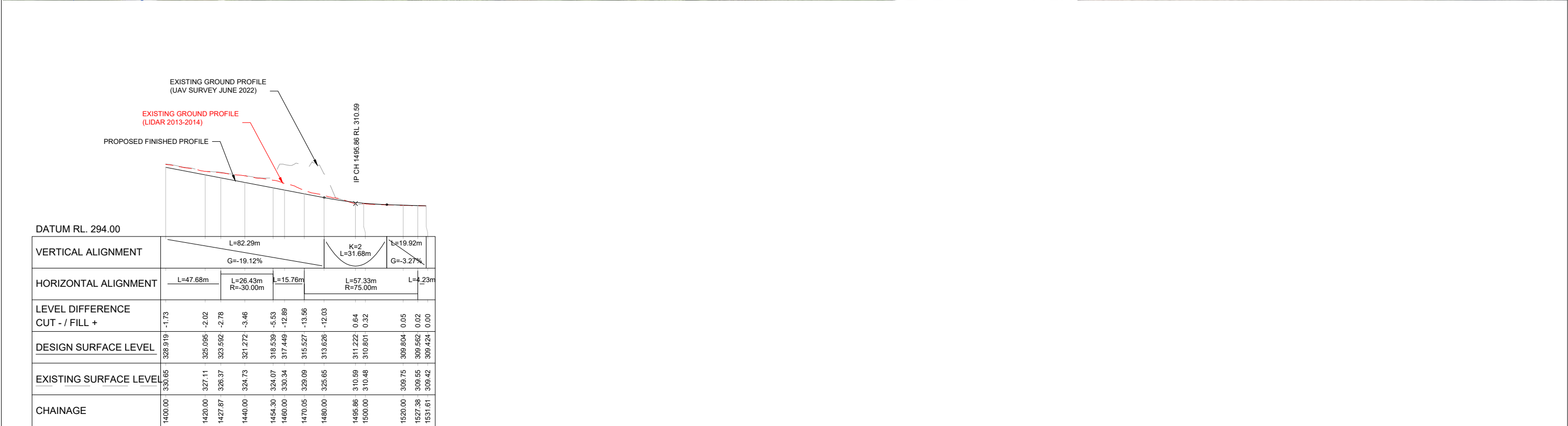
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PRELIMINARY

PROJECT	SHEET NO.	REVISION
SOUTH WAIRARAPA DISTRICT COUNCIL HINEKURA ROAD ROAD REALIGNMENT	SK22	UR*
TITLE	OPTION 2 - PLAN LAYOUT & LONGITUDINAL SECTION SHEET 2 OF 3	
WSP PROJECT NO. (SUB-PROJECT)	5-C4072.01	



LONGITUDINAL SECTION - MC20

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 1400m - 1531m

SCALE: 1:1000 (A1)

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SOUTH WAIRARAPA DISTRICT COUNCIL

24

SCALES
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ORIGINAL SIZE
A1

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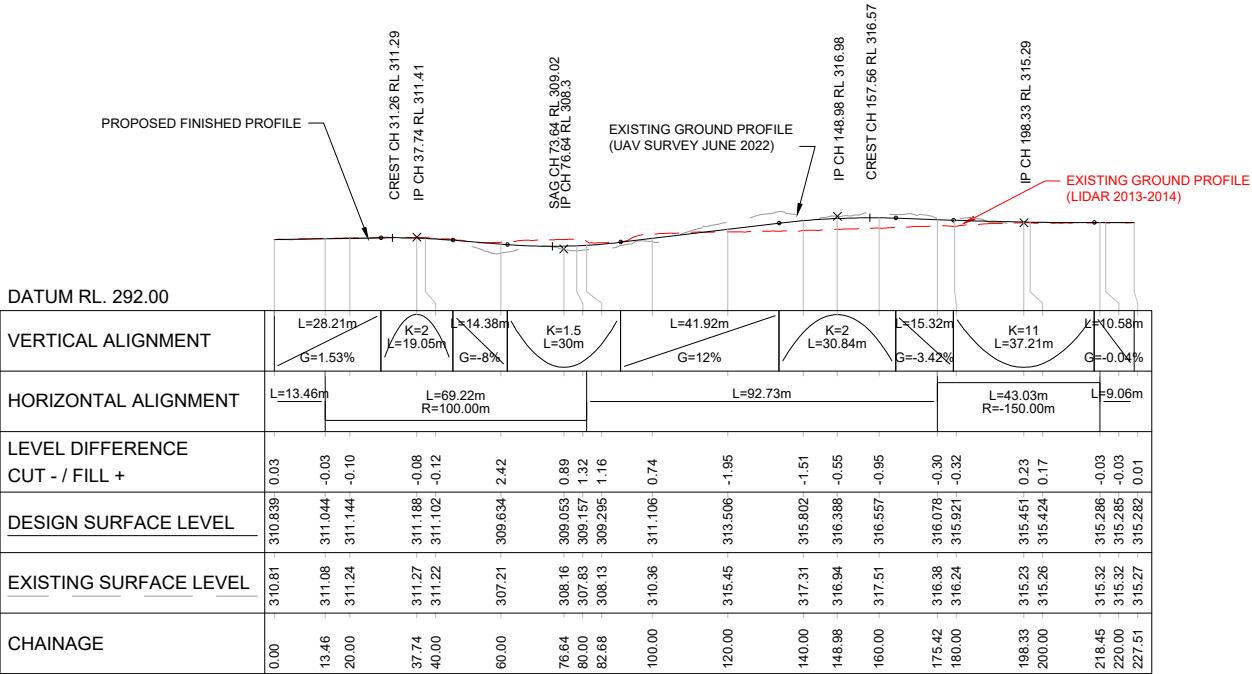
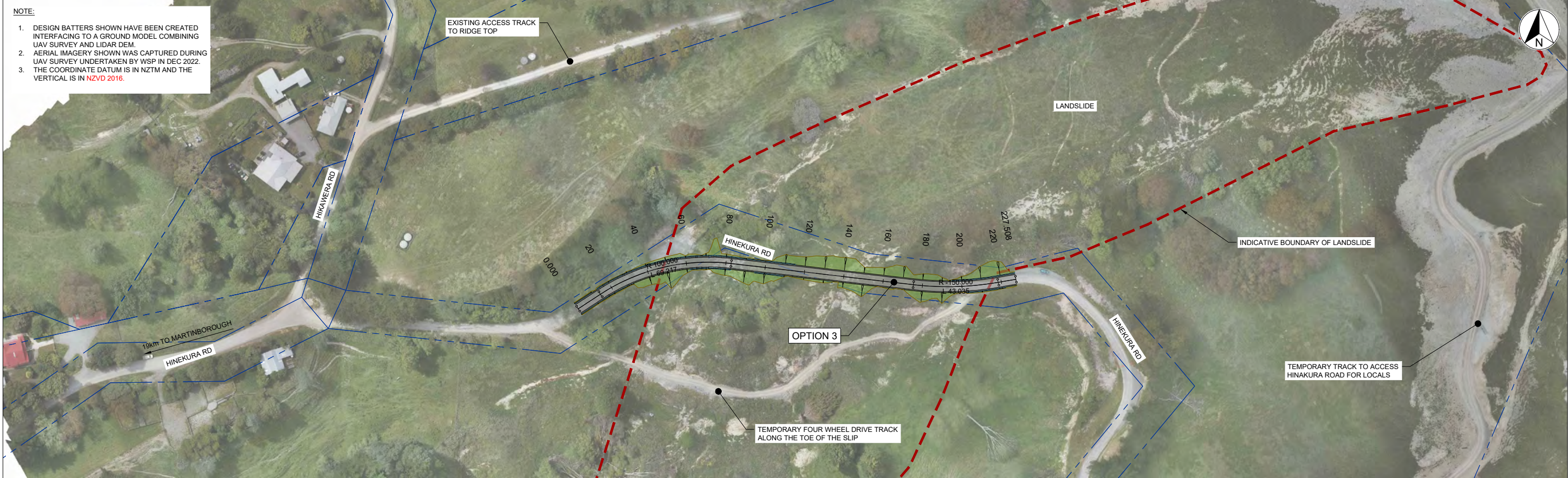
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SOUTH WAIRARAPA DISTRICT COUNCIL
HINEKURA ROAD
ROAD REALIGNMENT

TITLE
OPTION 2 - PLAN LAYOUT & LONGITUDINAL SECTION
SHEET 3 OF 3

WSP PROJECT NO. (SUB-PROJECT)
5-C4072.01

SHEET NO.
SK23

REVISION
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LONGITUDINAL SECTION - MC3A

HORZ 1:1000 VERT 1:1000

LONG SECTION - CH 0m - 227m

SCALE: 1:1000 (A1)

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PRELIMINARY

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ORIGINAL SIZE
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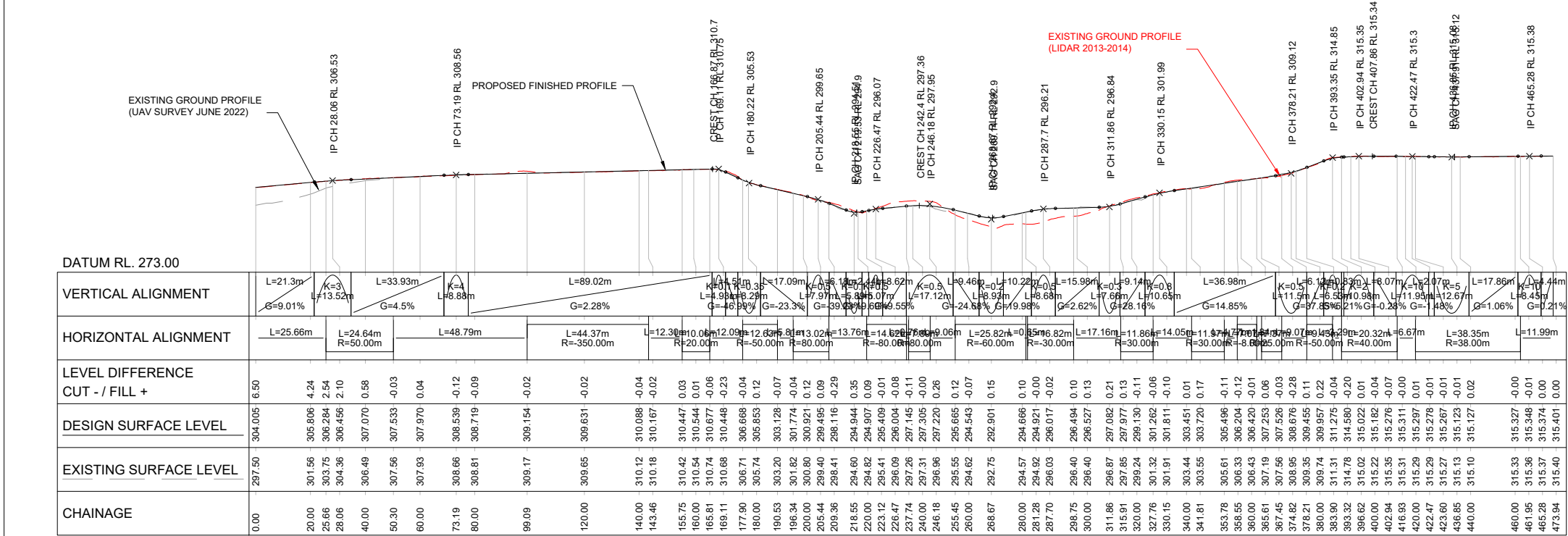
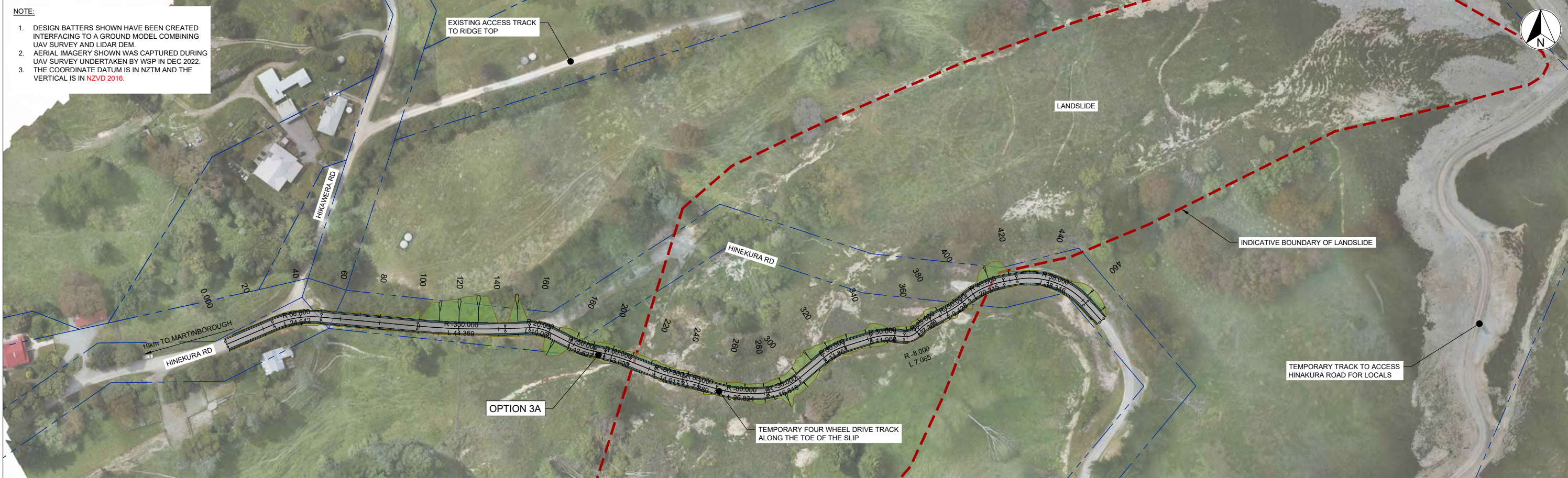
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SOUTH WAIRARAPA DISTRICT COUNCIL
HINEKURA ROAD
ROAD REALIGNMENT

TITLE
OPTION 3 - PLAN LAYOUT & LONGITUDINAL SECTION
SHEET 1 OF 1

WSP PROJECT NO. (SUB-PROJECT)
5-C4072.01

SHEET NO.
SK31

REVISION
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LONGITUDINAL SECTION - MC30

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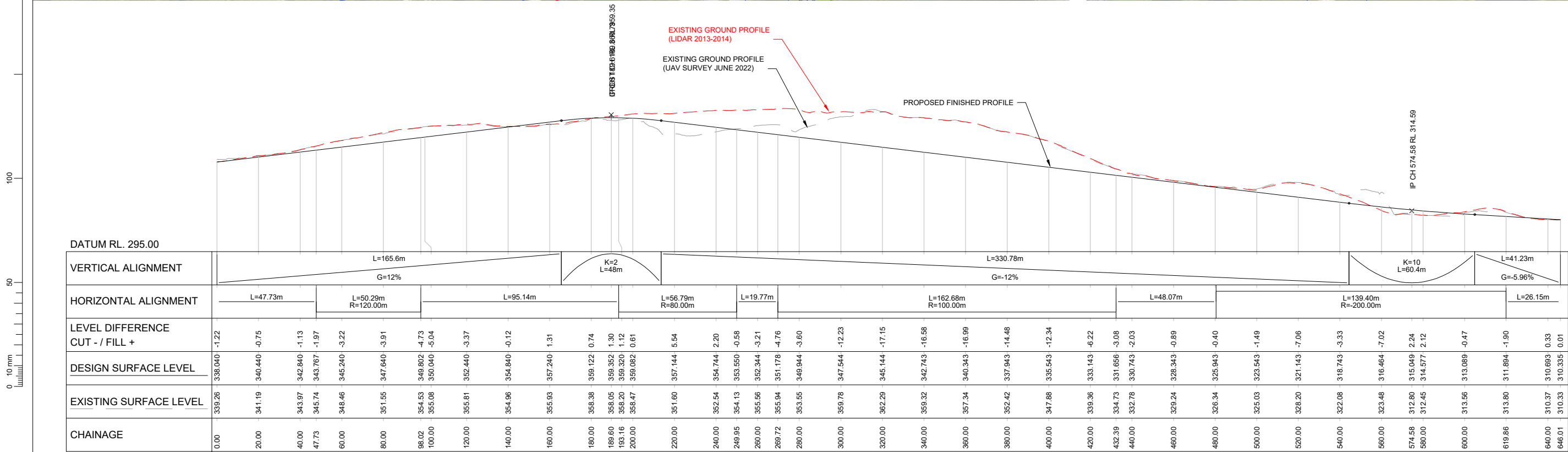
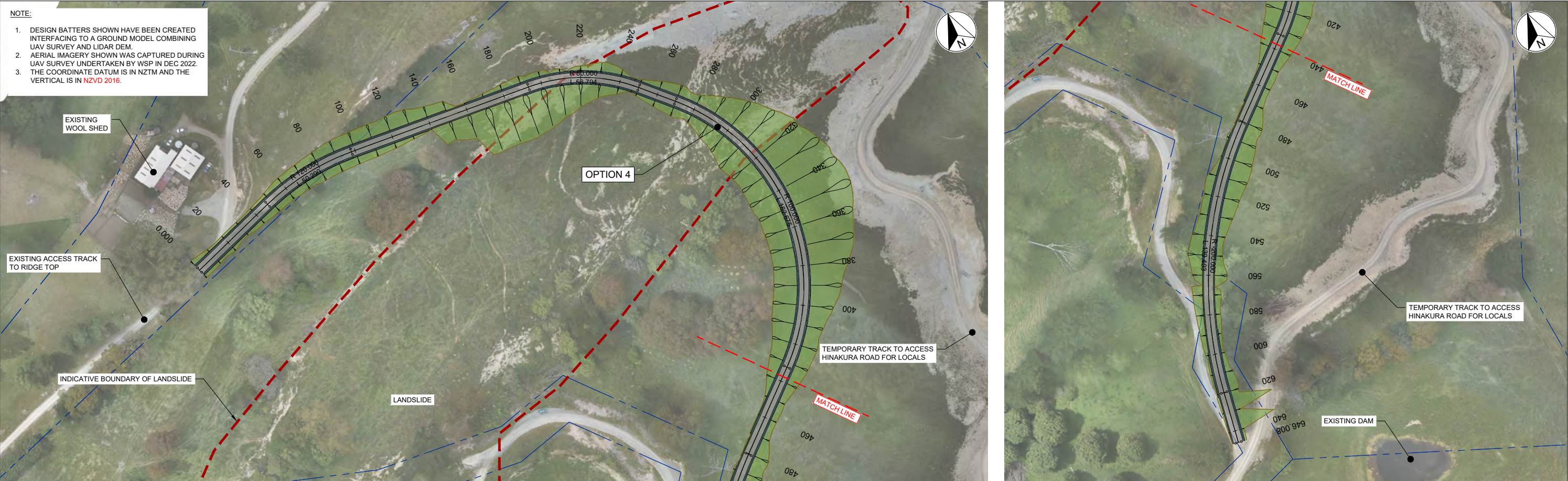
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ORIGINAL SIZE
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PRELIMINARY

PROJECT
**SOUTH WAIRARAPA DISTRICT COUNCIL
HINEKURA ROAD
ROAD REALIGNMENT**

TITLE
**OPTION 4 - PLAN LAYOUT & LONGITUDINAL SECTION
SHEET 1 OF 1**

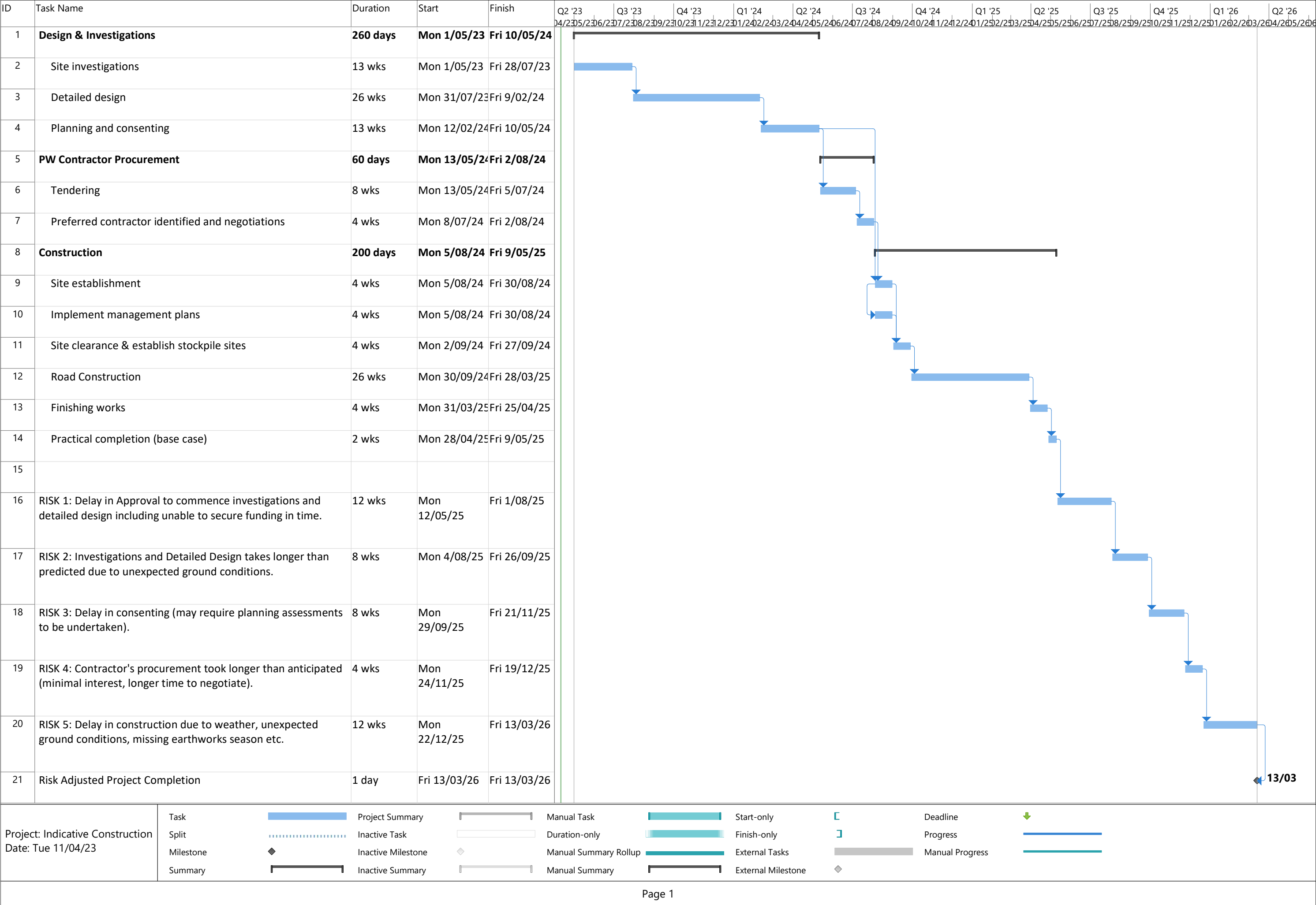
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REVISION
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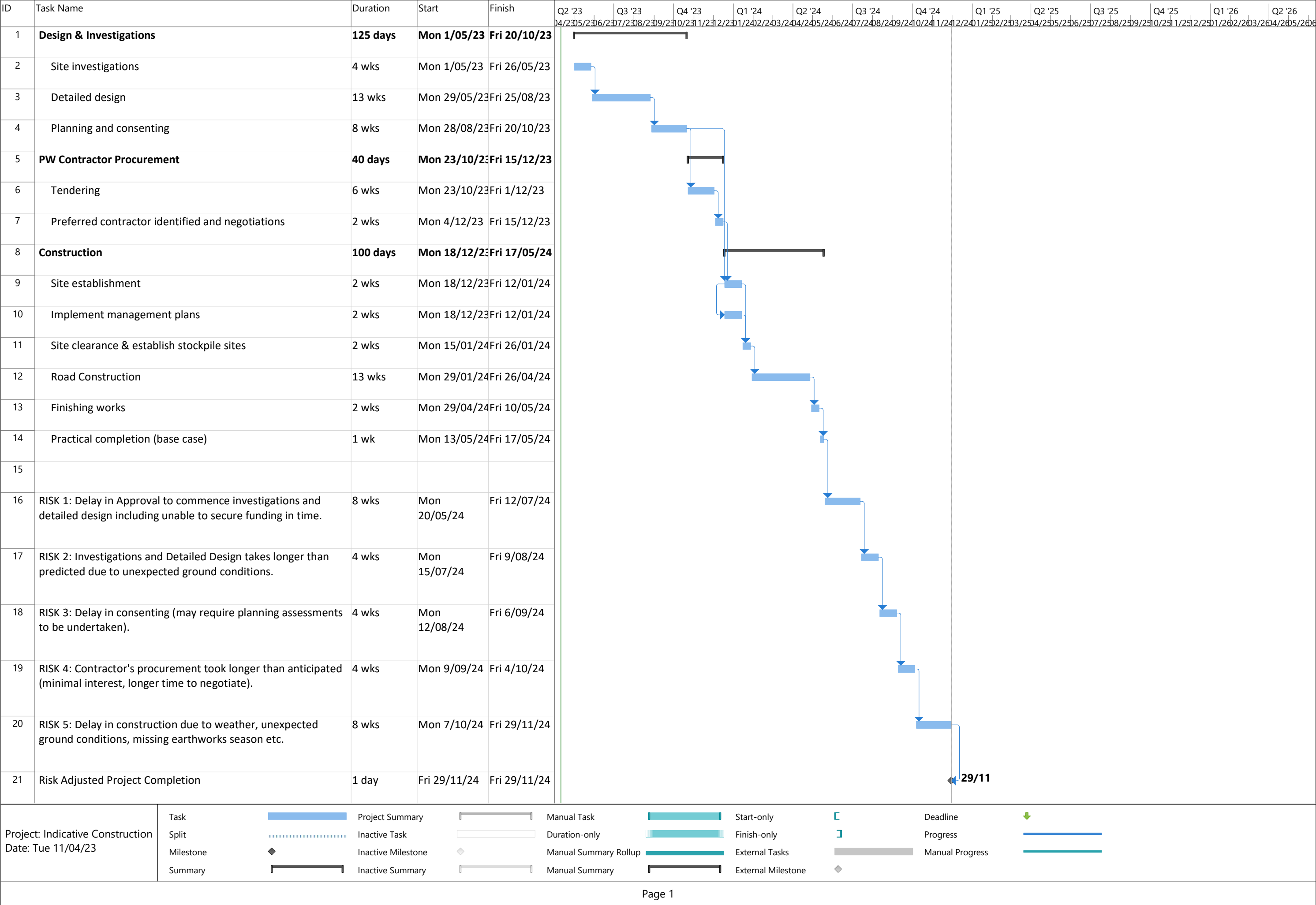
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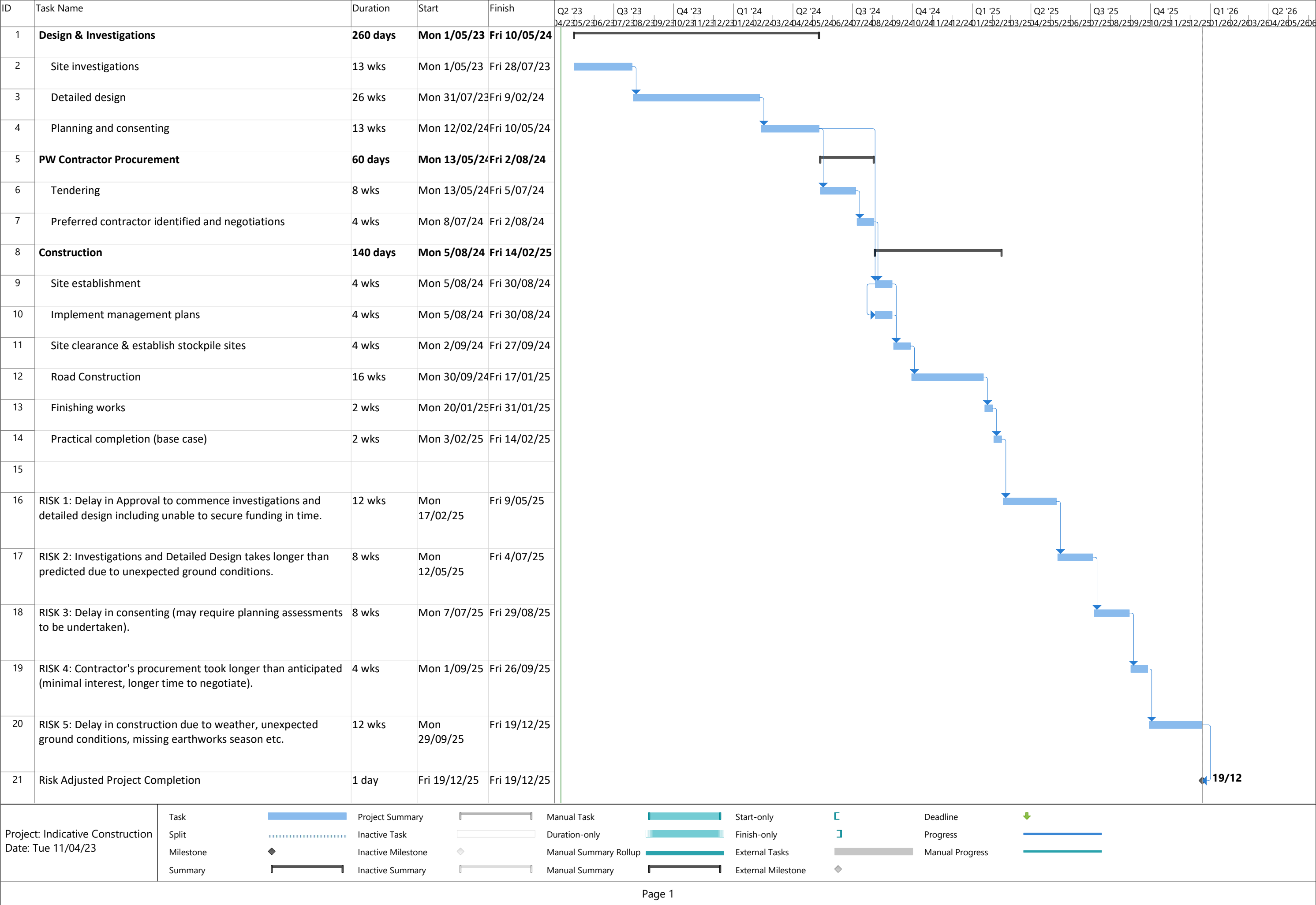
Indicative Programme of Works



Page 1

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Martinborough Wastewater Treatment Plant – Compliance and Capacity Issues

1. Purpose

This report explains the factors contributing to the decision to suspend connections to the Martinborough Wastewater Treatment Plant (MWWTP) and the proposed steps, cost, and timeline to address those factors so that investment plans can be developed and a process and timeline to lifting the order can be endorsed and communicated.

2. Recommendations

Officers recommend that the Council:

1. Receives Martinborough Wastewater Treatment Plant – Compliance and Capacity Issues Report.
2. Recommend that the committee endorses a joint review at a CE level between SWDC and WWL into the circumstances under which the plant had new connections suspended.
3. Recommend that the committee extend the review to recommend improvements to project management, governance and reporting to reduce the likelihood of a similar event happening in the future.
4. Recommend that an appropriate governance structure be investigated as part of the review noting the success of the Featherston WWTP project structure.
5. Note an urgent health check of our other wastewater treatment plants is underway by Wellington Water with a report back date of 31st May 2023.
6. Note that urgent work is underway to confirm a compliance plan to bring the plant into consent as fast as possible.

3. Executive Summary

In May 2023 SWDC received advice from Wellington Water that all connections be suspended at the Martinborough Wastewater Treatment Plant until a compliance plan has been submitted and accepted by Greater Wellington and a budget, including contingencies, approved, and included in the Annual Plan.

Further, the WWL team recommended that new applications should only be considered:

- After the plant is fully compliant
- When there is a plan in place to increase capacity

A Compliance Delivery Plan is being developed by Wellington Water and SWDC staff as requested by Greater Wellington and is due to be delivered by 31st May for sign-off.

Assuming this is accepted by the regulator, a budget of \$477,000 for CAPEX and \$600,000 for OPEX is required (provisionally). The CAPEX costs are included in the Annual Plan. *However, there is currently no OPEX allocated under the AP.* These numbers may need to be revised as the estimates are currently being confirmed. Contingent funds are being sourced through a project substitution request for the Tranche 1 Better Off Funds (\$1.88M).

Wellington Water and SWDC have committed at CE level to a joint review which will cover how we arrived at the current situation and what we need to do to avoid it happening again. We will want to ensure that risks resulting in an event such as suspending connections with little notice are flagged well ahead of the critical decision point. We expect to receive the review by 24th May, which will then need to be supplemented with a review of our joint processes for gaps and improvements.

Wellington Water have also committed to report by the end of May on the health of our other wastewater treatment plants so that we can fully understand risks and communicate as required with our stakeholders well in advance of any key decisions such as suspension of connections.

A key consideration in the joint review will be improved governance and project management, which may see the implementation of a project governance structure similar to what is in place for the Featherston Wastewater Plant Upgrade project. That model has successfully provided for confidence and transparency and follows good project management practice such as Project Management Plans, risk registers and regular reporting.

An important part of the compliance plan is the completion of a population growth study that will inform the longer-term requirements to design a capacity increase at the plant.

Although over \$4.8M funds were allocated in the LTP for improved level of service between Yr1 and 7, it is highly likely that additional funds will be required over and above the current budget necessitating consultation in the future (subject to transfer of SWDC three waters assets under Affordable Water Reform).

4. Background

The background to the decision to stop accepting connections to the Martinborough Wastewater Treatment Plant is encapsulated within the table below with details available in **Appendix 1**.

<u>Date</u>	<u>Event</u>
August 2019	Due diligence report issued by WWL on status of treatment plants prior to handover – no issues noted ¹
October 2019	SWDC became shareholder of WWL and WWL assumed operating responsibilities
January 2020	Overflow issues occurred at MWWTP 527MWWTP-Overflow-incident-summary.pdf (wellingtonwater.co.nz)

¹ SWDC Wastewater System Risk Reduction – Progress Update 10 June 2020

Date	Event
February 2020	SWDC commission a report from WWL on risks, actions, and budgets for the four SWDC wastewater plants and agree an initial placeholder budget to complete work of \$500k ²
June 2020	WWL briefed SWDC on wastewater treatment plant issues to be addressed in regard to consent compliance and other risks. Additional funding of \$500k for urgent work approved in 20-21 financial year ³
February 2021	WWL prepare input on SWDC Spatial Plan SWDC Spatial Planning 2020 - WWL Inputs
June 2021	Funds allocated in LTP for MWWTP projects and upgrades
November 2021	SWDC Spatial Plan approved
December 2021	WWL issue report ⁴ indicating the scale of investment required at Martinborough to be \$21M-\$47M over the 1–30-year horizon noting population growth needs to be addressed to ensure compliance is established and maintained
July 2022	WWL provides advice to SWDC on three waters Capex and Opex for FY 2022/23 and 2023/24 and noted that with a lack of investment in modelling there was a risk of quality data for wastewater capacity and Spatial Planning purposes ⁵
August 2022	SWDC and WWL receive an Abatement Notice for MWWTP non-compliances
November 2022	WWL advises consultant for Martinborough property developer that there was no capacity in the Martinborough Wastewater Network ⁶
December 2022	SWDC, along with WWLs advice, delivers a proposed compliance plan to Greater Wellington Regional Council (GW)
January 2023	GW declines to accept the plan and asks for an independent technical assessment of the on-going risks to the environment of non-compliance
February 2023	The property developer's consultant previously corresponding with WWL emails SWDC CE wishing to understand the development constraints for a site designated as a future urban zone in the Wairarapa Combined District Plan in Martinborough.

² SWDC Wastewater System Risk Reduction – Progress Update 10 June 2020

³ Report to Assets and Services Committee 17 June 2020

⁴ SWDC Wastewater Treatment Plant – Resource Consent Compliance Risk Review

⁵ Advice to SWDC regarding three waters services CAPEX delivery plan for FY2022/23 and 2023/24 (Y2&# CDP) – 05 July 2022

⁶ As per email to Harry Wilson from Kahu Environmental received 23 February 2023

<u>Date</u>	<u>Event</u>
March 2023	GW receives advice that indicates less than significant environmental impacts and asks to meet to confirm plan for compliance
April 2023	SWDC received a memo from WWL that recommended SWDC not approve additional connections to the Martinborough wastewater network until the WWTP is compliant and there is a plan in place to provide sufficient treatment capacity.
May 2023	Decision to suspend MWWTP connections taken.

The suspension of connections was aligned with the recent advice from the Land Development Team at WWL, where the recommendation is that all connections be suspended until a compliance plan has been submitted and accepted by GW and a budget, including contingencies, approved, and included in the AP.

Further, the WWL team recommended that new applications should only be considered:

- After the plant is fully compliant
- When there is a plan in place to increase capacity

Currently there is no plan in place to increase capacity as any design work is dependent on a growth study which was scheduled (but not yet funded) for the next financial year, apart from the high-level risk assessment and cost estimates presented by WWL in December 2021 (**Appendix 2**). Once funding is confirmed (this is an item that is anticipated to be drawn from Better Off Funding) it is expected the growth study will be undertaken alongside the ongoing compliance work.

It should be noted that existing resource consent decisions and approved building consents will be honoured. These are estimated to be represent 24 additional lots. Council will also honour the issued connection permits (9).

4.1 Tangata whenua considerations

Consultation will be required throughout the compliance planning and subsequent design for increased capacity. The possible governance structure caters for Māori Standing Committee inclusion. Guidance will also be taken from the SWDC and WWL Māori advisors on what further korero, and hui should be arranged.

4.2 Long Term Plan alignment

Upgrades to improve levels of service and growth projections to our wastewater assets was noted as a strategic priority in Infrastructure Strategy 2021/31 and some funds for the MWWTP included in the LTP.

5. Discussion

Following the WWL recommendations of what is required to lift the suspension of new connections the first step is to understand what is required to get the plant into a compliant status.

Abatement Notice Ramifications

In August 2022 SWDC and WWL received an Abatement Notice from Greater Wellington Regional Council (GW) requiring:

1. The submission of a proposal for corrective actions to bring the MWWTP to full compliance with its consent by 1 December 2022.
2. To cease, and be prohibited from commencing, all unauthorised discharges from the Martinborough Wastewater treatment Plant by 15 August 2023 and thereafter.

The nature of the non-compliances related to:

- Exceeding maximum daily volume and instantaneous rate of discharge (discharge to water)
- Exceeding nutrient discharge limits (discharge to water)
- Six exceedances of E. coli limits⁷ (discharge to water)
- Exceeding the hydraulic loading rate (discharge to land)

With advice from WWL, SWDC submitted a letter and proposal for corrective actions to GW on 1st December 2022. GW responded to the proposal on 16th January 2023 declining to accept the plan without an independent assessment of the impacts of continuing non-compliances during a staged approach to addressing the compliance issues with the plant, as suggested in the action plan.

Dr Michael Greer was commissioned to assess the likely effects of further non-compliant discharges at the Martinborough WWTP as a result of undertaking the required corrective actions over an extended timeframe. In late March 2023 he reported to GW that, in his assessment, the level of effects was likely to be low. GW then sought a meeting to discuss the proposed corrective action plan.

WWL engaged a Project Manager from engineering firm Stantec to further develop the proposed corrective action plan to give SWDC, and the regulator, confidence that the plan would be appropriately detailed and budgeted to achieve the desired outcomes.

WWL and SWDC have committed to deliver a formal structure / compliance plan including firm dates by which each item will be completed by 31st May 2023. Once GW has the formal plan they will either:

- Cancel the Abatement Notice and replace it with a To-Do Abatement Notice; or
- Could seek an Enforcement Order through the Courts.

An abatement notice is issued under section 322 of the Resource Management Act 1991. By failing to comply with the notice SWDC would be committing an offense under the RMA 1991. Irrespective of the notice, SWDC is still at risk of prosecution or other enforcement activity if the activity or inactivity in question contravenes the RMA, a

⁷ Two of which were recorded when discharges were not occurring and the UV not in operation

resource consent, or a rule under a Plan. GW has the right to pursue additional or alternative enforcement action at all times, as we were reminded in their email requesting a compliance plan by 31st May 2023.

Compliance Delivery Plan (CDP)

Representatives from SWDC, WWL and Stantec have been meeting with the GW Enforcement Officer regularly to ensure the plan delivered meets GW's expectations which are:

- that the Compliance Delivery Plan (CDP) will include firm dates or a timeframe by which compliance will be achieved at the plant, noting that this will not remove the capacity constraints for the facility, and
- to link the work proposed to the impact on the compliance of the plant, and to explain the contingencies included in the event the actions we identify are not delivering as expected.

The outline of the CDP as currently proposed is as follows:

- Deliver an immediate action plan, cost, and program to WWL, SWDC and GWRC by 31/05/23 subject to SWDC approval.
- During FY23/24 implementation of immediate action items and physical works that are estimated to take 12 – 18 months to deliver (but budgeted as CAPEX in the 23/24 Annual Plan).
- Simultaneously in FY23/24 WWL, SWDC development of growth assessment implications for WW network and WWTP; followed by,
- In FY24/25 development of intermediate and long-term focused upgrade plan and cost estimate.

There are six parts to the plan to be detailed and funded:

1. Assessing, facilitating, and organising the desludging of the facility pond/s⁸
2. Enabling works for the preferred desludging option including consenting and site preparation
3. Selection of the most suitable option, either off-site disposal or Geobags
4. Working out the influent volumes by collecting accurate data over the next 4-6 months that will contribute to the growth element by understanding current volumes being seen at the facility⁹
5. A sampling plan within the plant
6. Ultraviolet optimisation, that is, investigate and understand the current performance and bring in specialist advice to understand if we can improve performance incrementally, and
7. A growth assessment to plan for the future.

SWDC has also asked that a budget for a possible governance structure to be wrapped around the project to ensure that all stakeholders are involved and kept informed is costed.

⁸ There is a question whether both the oxidation and maturation ponds should be desludged to be assessed

⁹ This will also allow us to understand I&I impacts on the design and the need for an I&I targeted plan

Desludging

There are two options with the sludge that are explained in more detail in **Appendix 3**.

There are four important aspects to note about the current desludging plan:

- Desludging is carried out by specialists who have the appropriate equipment and experience to deliver,
- Desludging will not address growth constraints, detailed growth assessment studies, plans and network modelling are required to be able to assess and plan for impacts to the WWTP due to growth,
- Desludging is planned as an immediate action item in order to bring the plant back in line with its design specifications and intent and will allow greater retention time and form part of the actions to meet consent requirements, and
- The current estimates are based on information provided in 2021 and the levels and extent of the sludge to be removed has not yet been audited by the contractors and hence the estimate provided can change significantly.

Consents

In the original compliance plan submitted in December 2022 it was envisaged that to address the discharge to land issues we would submit a section 127 for Stage 1B Land Disposal to operate as deficit irrigation, not at a set application rate per week.

However, subsequent discussions with GW have indicated that as the MWWTP consent is complex, we would not be able to separate the section 127 and would therefore open up the entire consent for review. This has now been put on hold until the growth work has been completed and we can assess whether we need a new consent to accommodate the capacity enhancements required.

Preliminary discussions have been held with GW on the use of the Geobags for sludge disposal and the initial advice is that there will be the need for some consents. Defining the needs will be part of the CDP.

Transparency and Proposed Governance Structure

With the announcement that connections are to be suspended at MWWTP and that there are capacity issues that will impact on growth in the town, this is a very high-profile project that will require explanations and on-going communications with all stakeholders.

It is suggested that, as part of the CE-led review process initiated out of this incident, consideration be given to the success of the governance structure implemented for the Featherston Wastewater Treatment Plan (FWWTP) project to ascertain if a similar approach would be warranted and endorsed. Provisionally, GW have indicated their support for this level of governance and control.

The compliance team are already developing a Project Management Plan (PMP) of similar content and agreement as the FWWTP project example, and we expect regular project reports from the project team that would be available on a dedicated projects site.

Growth Study

WWL had recommended that a Growth Planning Study for Martinborough to align with the SWDC Spatial Plan adopted in November 2021 which outlines the programme of master planning and infrastructure activities between 2022-24 be commissioned. However, no budget exists in the approved FY2023/24 LTP for this investment activity estimated at \$100k.

In consulting on the AP for 2023/24 only the Opex Option 3 Water Budget included investment in planning for growth.

In order to have a plan to increase capacity at MWWTP it is essential the planning work progresses and SWDC intends to fund the budget required through a substitution of Better Off Tranche 1 funds into this activity (Better Off Funding – Project Substitution Decision Report 1 June 2023).

Risks to the Compliance Delivery Plan Being Accepted

<u>Risk</u>	<u>Mitigation</u>	<u>Residual Risk Level</u>
I&I assessment – GW indicated Council had previously committed to an Infiltration and Inflow (I&I) study and questioned if this should be in the current plan.	The mitigation is that we do not currently know what the levels of I&I are, so we have included measurement and characterisation of inflow studies in first year of the plan and have communicated this to GWRC to adjust their expectations.	Residual risk low.
Level of sludge to be removed – two contractors have been invited to site to assess and price sludge removal. It is expected that there will be more sludge than previous estimates and this will impact on the budget required for removal.	The mitigation is the use of Better Off funds not currently allocated to a budget for increased Opex. Also, the first step will be to do a sludge survey. For our current budget 250 T Dry Solids has been used versus 230 T estimated in 2021.	There is a high risk that the current budget will be exceeded until the survey is complete.
Funding – in the annual plan discussions we allocated \$200k to MWWTP and held a \$270k reserve for capex to be applied to the highest priority projects. There was no Opex allocated to complete sludge removal.	The mitigation is to use the Better Off substitution to fund the Opex required. Budget will be moved away from less critical projects to fully fund the Capex required for AP 2023/24 for this project if required.	Low to moderate risk our Better Off substitution project will not be accepted and that the total needs are higher than the \$1.88m available.

The Compliance Delivery Plan does not meet Greater Wellington's expectations.	The mitigation is frequent meetings with GW staff to ensure we are in alignment to what is being delivered.	Low to moderate.
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Risk of Similar Situation at Other WWTP

The need to suspend connections at the MWWTP with little prior notice requires Council to assess the health of its other wastewater treatment plants so that a more transparent communication of impending issues can be shared with stakeholders and mitigations taken earlier if practicable.

Wellington Water have undertaken to prepare an assessment, and this will be reported as a separate paper by the end of May 2023.

Financial Considerations

There are three levels of funding to be discussed in this report, being funds already deployed, short term compliance funding for AP 2023/24, and funding extending beyond 2024.

Funds Spent to Date

As indicated in the background table of events, some funds have been deployed into addressing the risks at the MWWTP since WWL took over operations in 2019 and the details are included as **Appendix 4**. A budget of \$50k is being spent in 2022/23 to develop the Compliance Delivery Plan and set up the project for 2023/24.

Compliance Delivery Budget

The MWWTP compliance upgrades project is a Key Project being run out of the Project Management Office at Wellington Water.

Below is a table breakdown on the immediate action items the project team are focusing on, which must be budgeted in the 2023/24 Annual Plan (commencing 1 July 2023). These items will be refined and populated into the delivery plan required by GW by 31st May.

De-sludging is a key delivery item in getting the plant back to a compliant state and the team are looking at how/where these costs can be capitalised as much as possible. In terms of delivery, it is likely that construction of a containment pad would be a summer activity (working around the WWTP irrigation season) following which the Geobag desludging could then occur.

Item for 2023/24 Annual Plan	Capex	Opex	Contingency
Influent flow and quality measurement to collect suitable seasonal data to determine appropriate LTP upgrade actions and plan	\$80,000		\$32,000
Optimising the UV plant operations	\$22,000		\$8,800
Desludging by way of Geobag including building a suitable dewatering and containment pad	\$28,150	\$500,000**	\$211,260

Consultant and specialist fees to develop design, PMP and monitor construction activities	\$150,000		
WWL management fee (6%)	\$27,000		
Growth study to inform design for population growth (not currently in option 1 or 2 of Opex 23/24)		\$100,000	
Project Governance Structure	TBD		
Total	\$307,150	\$600,000	\$252,060*

*The budget numbers are high-level cost estimates with 40% contingencies applied.

**The Capex / Opex split is yet to be confirmed.

In the 2023-24 AP Capex budget the MWWTP Compliance Project was identified as a Priority 1 and a budget of \$200k was allocated with a recommendation that additional funding be provided once estimated costs were known. An additional \$270k was available to be prioritised from the LTP budget for this project.

De-sludging was not included in the LTP Opex budget of \$3.5M (Option 1 in the consultation document).

In the latest advice memo from Wellington Water, received on 8 May 2023 requesting carry-over of unexpended capex funds from 2022/23 into 2023/24, a total of \$477k¹⁰ was allocated with an estimate of \$2m for 2024/25.

Total cost estimate for the compliance plan is therefore \$1.16m with 40% contingency applied.

Long Term Investment Advice

A compliance investment estimate as per Wellington Water's Cost Estimating Manual Level 1 was issued in line with Long Term Planning periods in December 2021, being:

- Years 1 – 3: \$3.5M-\$8M
- Years 4 – 10: \$6.8M - \$15M
- Years 11 – 30: \$9M – \$20M
- Total of \$21M - \$47M over the 1 – 30-year horizon

In the SWDC LTP 2021 – 31 the following funds were included:

- District wastewater modelling (Growth) – Year 1, 4 & 5, 8 & 9 of \$60k
- Martinborough WWTP (ILOS) – Years 1 – 7 of \$4.8M
- Martinborough WWTP Consent (Renewal) – Year 1 and Year 6 of \$460k

It is likely that after the compliance plan is delivered and the growth study complete, the budget required for the plant capacity upgrades will exceed the LTP budgets.

Joint Review

At the request of SWDC, Wellington Water has committed to a CE led review about the passing of information and reporting, with the intent to make sure that risks resulting in

¹⁰ \$470k plus \$7k carry-over from 2022/23

an event such as suspending connections with little notice are flagged well ahead of the critical decision point.

The recommendation therefore is that the review addressing not only what has happened, but how we do better, together in the future. Wellington Water expect their initial investigation to be ready by 24th May 2023.

6. Consultation

Information on the Abatement Notice, the suspension decision and technical details are included on the SWDC website under Consultation and Projects. This page will be regularly updated.

7. Financial Considerations

This report should be considered in tandem with the Better Off Funding – Project Substitution Decision Report that describes how any potential impacts for 2023/24 can be mitigated and managed. If the Better Off substitution is not approved there will be significant impact to fund the 23/24 Opex requirements for the compliance plan.

8. Climate Change Considerations

There are no positive or negative effects on climate change from this decision.

9. Health and Safety Considerations

There are no health and safety considerations.

10. Appendices

Appendix 1 – Additional Background Information

Appendix 2 – Martinborough WWTP Compliance Capex Summary 2021

Appendix 3 – Desludging Information

Appendix 4 – Funds Spent on MWWTP 2019-2023

Contact Officer: Stefan Corbett, General Manager Partnerships and Operations

Reviewed by: Paul Gardner, Interim Chief Executive Officer

Appendix 1 – Additional Background Information

The Treatment Plant

SWDC became a shareholder of Wellington Water Limited (WWL) on 1st October 2019¹¹. At that time SWDC and WWL entered a contract for Provision of Management Services Relating to Water Services setting out the terms under which WWL would provide the management Services to, and exercise the Statutory Powers on behalf of, SWDC.

Post-transition, SWDC wound down their Water Infrastructure capabilities and the management of the WWL Agreement was positioned within the Partnership and Operations Group, but without any staff below Group Manager having responsibility for outcomes of the relationship.

Prior to entering the agreement, in August 2019, as part of due diligence WWL issued a report detailing their assessment of the risks and issues related to the SWDC wastewater treatment plants that generally noted nothing of concern.

However, in January 2020 two overflow incidents at Martinborough occurred and operational issues began to emerge challenging the routine operation of the plant.

Post the January 2020 events, SWDC commissioned WWL to complete a full risk assessment of the four wastewater treatment plants to capture, collate and prioritise system risks, actions, and budgets. A budget of \$500k was approved in the 2020 – 21 Annual Plan to complete the identified work.

In February 2021 WWL provided input into Spatial Planning and noted that the MWWTP scored a '3' in the multi-criteria analysis (mid-range between poor and high) and noted that capacities will need to be reviewed against new growth scenarios and consent limitations as the plant was currently sized for a population of approx. 2,000.

In December 2021 WWL issued a report on SWDC Wastewater Treatment Plant – Resource Consent Compliance Risk Review to SWDC for work funded through the AP allocation of \$500,000. The conclusions to this review for the Martinborough WWTP (MWWTP) were that:

¹¹ First revision of the SLA was signed 11 April 2022 to incorporate Water Services Act and possible water reform.

- The MWWTP would require considerable investment over the duration of its consent (expires 2051).
- Some early commitments of the staged consent appeared to have been deferred.
- Increased population growth had occurred since the consent was granted and confirmation of population projections were required.
- The facultative treatment plant was overloaded (design capacity being reached), although not currently resulting in resource consent non-compliance.
- Due to the increased population growth and therefore influent flow and load, the likelihood of treated effluent quality compliance failure increases.

It was recommended that an investigation be carried out to determine what additional treatment capacity may be required over the life of the consent to 2051 to meet population growth.

A compliance investment estimate as per Wellington Water's Cost Estimating Manual Level 1 was issued within the report and, in line with Long Term Planning periods, SWDC included some funding in its 2021-31 LTP for MWWTP upgrades.

Between 2021 and 2023 some Opex and Capex funds have been spent on addressing the overflows, resilience, and H&S at the facility.

In August 2022 SWDC and WWL received an Abatement Notice from Greater Wellington Regional Council (GW) relating to non-compliant discharges at the Martinborough Wastewater Treatment Plant.

With advice from WWL, SWDC submitted a letter and proposal for corrective actions to GW on 1st December 2022. GW responded to the proposal on 16th January 2023 declining to accept the plan without an independent assessment of the impacts of continuing non-compliances during a staged approach to addressing the compliance issues with the plant, as suggested in the action plan.

In late March 2023, the GW consultant¹² provided his advice that, in his assessment, the level of effects was likely to be low. GW then sought a meeting to discuss the proposed corrective action plan which was held on 13th April.

WWL and SWDC have committed to deliver a formal structure for a compliance plan including firm dates by which each item will be completed by 31st May 2023. Once GW has the formal plan they will either:

- Cancel the Abatement Notice and replace it with a To-Do Abatement Notice; or
- Could seek an Enforcement Order through the Courts.

Connection Requests

Since taking over the management of Management Services for SWDC, WWL has been providing technical advice to the SWDC building and resource consent teams on applications for connection to our water networks.

¹² Dr Michael Greer

WWL provides recommended engineering standards and notes any constraints prior to the SWDC Planner making a final decision on an application. Please note, these decisions are for works 'within the property boundary'.

In February 2023, the SWDC CE received an email from a consultant for a Martinborough property developer wishing to understand the development constraints for a site designated as a future urban zone in the Wairarapa Combined District Plan.

In November 2022, the consultant had received advice from WWL that there was no capacity in the Martinborough Wastewater Network. Consequently, the consultant requested additional information from both WW and SWDC on the process going forward, the realistic timeframes for development of the site, and an understanding of the development of the Proposed District Plan.

In April 2023, SWDC received a memo from WWL that recommended SWDC not approve additional connections to the Martinborough wastewater network until the WWTP is compliant and there is a plan in place to provide sufficient treatment capacity.

Appendix 2 – Martinborough WWTP Compliance Capex Summary 2021

INVESTMENT SUMMARY BY PLANT AREA

Martinborough WWTP Compliance Capex Summary		
Area	Amount	Timing
Pond Inlet Screening	\$1,492,000	2022/24
Facultative Pond Improvements	\$1,200,000	2022/23 - Desludging component. Other components TBC
Maturation Pond Improvements	\$1,407,000	TBC
Ultraviolet Disinfection Renewal / Upgrade	\$675,000	TBC
Stage 1B Land Irrigation	\$46,000	2021/23
Stage 2A Land Irrigation	\$6,454,000	2022/26
Stage 2B Land Irrigation (Winter Storage)	\$3,127,000	2030/34
Electrical and Control	\$130,000	2021/26
Site Works	\$351,000	2023/24 Some components
Documentation	\$140,000	Various
Additional Treatment Capacity (Provisional)	\$6,175,000	TBC
Contingency (20%)	\$8,479,000	Across programme
Funding Risk (30%)	\$17,805,000	Across programme
Total	\$47,481,000	

Appendix 3 – Desludging Information

The first option is to bring a mobile centrifuge to site, run the sludge through it and load it on a truck to take it to land disposal. All this operation is opex spend and cannot be capitalised. It is also expensive as the nearest land disposal is quite some distance away and you are shipping a lot of water (a high moisture % of the centrifuged sludge).

The second option is to remove and load the centrifuged sludge into Geobags and locate them in an appropriate and bunded area on site so that they can 'dry-out' over time (see potential areas at Martinborough site attached). Moisture will evaporate and you will be left with a solid of a higher percentage (less % water) that you can either ship off site more economically, or some people use it and plant shrubs and trees in the bags.

We are asking two contractors to price both options for us.

Because the second option includes a permanent lay down area and hardstand to put the Geobags on, some of that cost can be capitalised and funded with debt. This is our preferred option because:

1. We are not shipping water, which is very expensive, and
2. We can capitalise and debt fund some of the expense (not all of it)

In terms of capacity, the consensus of the team is that desludging is important, but we cannot rely on it for capacity. This is because design capacity is based on the load entering the system, biological oxygen demand (kg) per hectare of pond, and we are not reducing the load coming into the plant by desludging. The reduction of sludge should increase the holding time in the ponds and should lead to better treatment of the influent, but it does not change the design capacity.



Appendix 4 – Funds Spent on MWWTP 2019-2023

Item	Capex value	Comment
Plant operational and maintenance plans developed. Operating process changes – Critical point alarms installed, pond storage adjustments for summer and irrigator maintenance	Covered within WWTP opex costs	Implemented following Jan 2020 overflows.
Land irrigator repairs & operational improvements	Covered within WWTP opex costs	Implemented following Jan 2020 overflows.
Upgrade to mechanical valve (automated) & chamber between primary and secondary ponds	\$290,000	Implemented following Jan 2020 overflows. Project completed in FY20-21
WWTP Safety upgrades – new handrails, sampling tether points, pond exit ladders	\$30,000	Completed FY20-21
Electrical surge protection	\$10,000	Completed FY21-22
Martinborough WWTP Compliance Upgrades project – planning	\$50,000	Forecast to spend within FY22-23
Total	\$380,000*	

Better Off Funding – Project Substitution Decision Report

1. Purpose

The purpose of this report is to request approval from Councillors to substitute the previously agreed allocation of Council's tranche 1 of Better Off Funding support of \$1.88m from a Community Wellbeing Fund to unbudgeted operational costs associated with three waters services.

2. Recommendations

Officers recommend that the Council:

1. Receives the *Better Off Funding – Project Substitution* Report.
2. Approves the preparation and submission of a substitute programme request to the DIA Better Off Funding agreement comprising:
 - a. Wellington Water Limited 2023/24 operational budgets of \$1.25m (details to be agreed between WWL and SWDC by priority including compliance of other WWTP), and
 - b. Desludging of the Martinborough WWTP at a minimum of \$0.5m, and
 - c. Accelerating a growth study for populations projections (\$0.1m) to support capacity design at MWWTP, for
 - d. A total between the three projects of \$1.88m.
3. Delegate authority to the Interim CEO for the content and draft of the substitute proposal as described in this paper to be submitted to DIA through the appropriate channels as soon as practicable and after consulting the Māori Standing Committee.

3. Executive Summary

Since signing off on an agreement for a Better Off Funding package (Tranche 1) with the DIA in December 2022 there have been significant changes that support the application for a substitute programme of work. These are:

1. Advice from WWL that the appropriate Opex budget for three waters is significantly higher than the LTP approved budget of \$3.5m,
2. An Abatement Notice at the Martinborough wastewater treatment plant (MWWTP) and subsequent suspension of new connections at the plant that necessitates funding of a compliance delivery plan,
3. The need to consider the health and compliance of the other WWTP in the context of the MWWTP issues to ensure we prioritise growth opportunities and positive outcomes for our communities, and

4. The government reset on water reform that removed the promised second tranche from the Better Off package.

After testing a substitution programme with DIA, council staff have a level of confidence that an application to apply the \$1.88m of funds to the WWL 2023/24 operational budgets in excess of LTP and towards compliance issues at the Martinborough wastewater treatment plant, including desludging and a growth study, would be successful.

Due to the removal of tranche 2 Better Off Funding in the recent water reform reset we no longer believe that the Community Wellbeing Fund as originally conceptualised would be an appropriate use of the funds because there would be no alternative funding mechanism available post-2024.

4. Background

SWDC was allocated an amount of \$1.88m as part of the Three Waters Reform – Better Off package (Tranche 1 Funding). A second tranche of funding for an amount of \$5.63m was to be forthcoming once the new entities were established, and to be funded from the entity's balance sheet.

We applied for a single project for the \$1.88m, being the the creation, governance, and funding of a South Wairarapa Community Wellbeing Fund (CWBF); an entirely new mechanism for community and mana whenua involvement in the prioritisation and delivery of community wellbeing projects, including accelerating some of those already included in the LTP years 4 – 10.

The initiative was approved by Council at its August 2022 meeting and an agreement was subsequently signed with the DIA in December 2022.

We have not yet made any claims for the funds as one of the initial steps, as resolved by Council when giving approval in August 2022, was that the programme would incorporate:

- Funding decisions and oversight of community project applications to the Fund will be via a governance group made up of Councillors, ELT members, mana whenua and community representatives, formed by Council resolution.

The rules, governance, criteria, and administration of the proposed CWBF has not been agreed or endorsed by Council resolution.

Since signing the agreement with DIA in December 2022 additional events have initiated a review of the decision to invest the \$1.88m in a CWBF. These are:

1. Advice from WWL that the appropriate Opex budget for three waters should be significantly higher than the LTP approved budget of \$3.5m,
2. An Abatement Notice at the Martinborough wastewater treatment plant (MWWTP) and subsequent suspension of connection requests to limit capacity issues at the plant that necessitates the funding of a compliance delivery plan and growth study,
3. The need to consider the health and compliance of our other WWTP in the context of the MWWTP issues to ensure we prioritise growth opportunities and positive outcomes for our communities, and

4. The government reset on water reform that removed the promised second tranche from the Better Off package.

There is an ability to substitute other projects into the programme even after our formal agreement with the DIA signed December 2022.

4.1 Tangata whenua considerations

Engagement will be required before making a formal substitute request with DIA as the MSC submitted a letter of support for the original CWBF application.

4.2 Long Term Plan alignment

There are restrictions around Better Off funding that ensures that any requests are aligned with the LTP.

5. Discussion

Three options have been included in the Consultation Document prepared for the 2023/24 Annual Plan for water budgets; however, the current rates increase is based on Option 1, being the LTP budget of \$3.5m (inflated). Significant risks have been identified by WWL and management for this level of funding.

Council staff have tested with DIA their appetite to allow SWDC to substitute the WWL operational budget above the LTP budget, including funds to apply to desludging, and received informal advice that a substitute application would be approved. The draft substitute application tested is attached in **Appendix 1**. Indications from DIA were that the formal approval via a variation to our agreement would have a very short turnaround.

The draft application requested the difference between Option 1 (LTP budget) and Option 2 (High-risk Owner budget) to be funded which is allowed by the funding rules.

In addition, we requested \$100k to be funded for partial desludging at the Martinborough WWTP.

This draft application left the remaining 33% of the original \$1.88m for the CWBF as originally envisaged.

However, since we tested the substitution, it has been announced that tranche 2 of the Better Off package has been discontinued and therefore there would be no funding available for the CWBF after 1 July 2024, as originally envisaged. This would mean the CWBF would need to be funded from alternative sources such as rates.

The Martinborough WWTP project manager is now indicating that a complete desludging of the ponds would be \$500k (with low confidence), to be confirmed before delivery of the compliance plan to GWRC at the end of May 2023.

There is a need for us to accelerate the growth projections study for our wastewater plants, that is only included in Option 3 of Opex funding by WWL at \$100k, so that we

can better inform the design of any capacity improvements at the MWWTP at the same time we deliver the compliance plan.

Finally, a recommendation from the MWWTP incident has been to complete a health check of our other wastewater treatment plants to ensure we prioritise growth opportunities and positive outcomes for our communities and any outcomes of that health check would need to be funded.

It would now seem prudent and appropriate for the SWDC ratepayers, that the full amount of tranche 1 funding (\$1.88m) be applied to the WWL operational budget over and above LTP, the full desludging of the MWWTP and growth studies, and if possible, any high priority issues identified out of the health check of the other plants.

6. Consultation

No consultation or communications plan is required on a decision to make an application for project substitution.

7. Financial Considerations

There will be a significant impact to the Annual Plan if we are not successful in this substitution application as the Opex required for compliance at the MWWTP is currently unfunded.

8. Climate Change Considerations

There are no positive or negative effects on climate change from this decision.

9. Health and Safety Considerations

There are no health and safety considerations.

10. Appendices

Appendix 1 – Draft Substitute Application

Contact Officer: Stefan Corbett, General Manager Partnerships and Operations

Reviewed by: Paul Gardner, Interim Chief Executive Officer

Appendix 1 – Draft Substitute Application

The substitute application revises 67% of South Wairarapa District Council's tranche 1 funding allocation. The substitute project seeks to bridge a shortfall in current Long Term Plan funding relating to three waters operational spend to address issues of affordability, service level consistency and compliance; plus, align with Water Reform outcomes.

List of Projects/Initiatives under this Programme

- Wellington Water Limited 2023/24 operational budgets \$1.25m
- South Wairarapa Community Wellbeing Fund (CWBF) – already funded through original agreement for remaining \$0.63m and not addressed in the below details.

As a small council (population 12,000; area 238,775 hectares; ratepayers 2,500) SWDC is finding it increasingly difficult to affordably provide access to safe and reliable drinking water, fit for purpose wastewater and stormwater services and a level of service consistent with our fellow Wellington Water Limited shareholding councils (amongst others) who are primarily urban based. Coupled with a confluence of factors currently facing all LGO's in New Zealand (depreciation, inflation, insurance costs, emergency events), maintaining the current level of LTP spend for three waters services in 2023/24 will lead to a drop in community well-being and risks degrading the community's ability to transition to a more resilient and sustainable economy post-reform as the infrastructure would be in a worse-off position than anticipated.

The result will be a very high level of risk (plant failure, legal prosecution, consent breaches) that would flow into the Water Services Entity as of its establishment date of 1 July 2024.

By redirecting a portion of Better Off Funds, the council wishes to meet essential/critical costs that would not otherwise be affordable (because of a confluence of unanticipated events) via the LTP budget. This will thereby improve outcomes and reduce risk to the community, enhancing their wellbeing.

If the total estimated cost exceeds the Total Maximum Amount Payable, please specify the additional funding source(s) and amount(s):

Funding Source	Amount (NZ\$M)
SWDC LTP 21/31 - Wellington Water Limited 2023/24 operational budget funded through general and targeted rates	\$3,375,427

Please indicate below the expenditure programme funding status:

	Yes/No	Amount in NZD \$	Year
Included in LTP	Yes	\$3,375,427	23/24
Included in the latest Annual Plan	No		
Not funded in any plan	Yes	\$1,251,136	23/24

Was funded but COVID-19 deferred	No		
Local authority co-funding being contributed	No		

Describe the risks you have identified in completing the programme on time and on budget (e.g.: availability of and access to specialist skills) and any steps/actions you have taken to mitigate these risks.

Risks

That we cannot redirect the Better Off Funding – the work will not occur, and community well-being will be impacted.

Water reform is delayed – SWDC will be making new decisions in the 24/25 LTP based on our financial position and where we sit with 3W reform.

Availability of suitable contractors to undertake works – current processes will be maintained if funding is secured. Without secured funding there is a risk that resources will be lost to the district. WWL has the resources required to deliver to a required level of service and this funding will allow WWL to retain resources and deliver the tasks.

Budget / Timing – as WWL has provided their advice on the necessary level of investment to bridge a gap between LTP and an acceptable level of delivery for the council we do not consider there are any material risks to delivery of this project.

Please provide a high-level breakdown of the expenditure programme, including the programme commencement and completion dates, key delivery milestones, and for each milestone the planned completion date and estimated cost (GST exclusive):

	Expenditure Programme / Project Milestone (including description of how the milestone is identified)	Estimated Completion Date	Estimated Costs (NZD \$)
1	Operational spend 2023/24 Financial Year	30/06/2024	\$1,151,136
2	Desludging of Martinborough WWTP	30/06/2024	\$ 100,000
	TOTAL		\$1,251,136

Wellbeing Assessment

Programme Title	South Wairarapa Better Off Funding Substitution Project		
Project / Initiative	Wellington Water Limited 2023/24 operational budgets		
Better Off Funding criteria (select as many as apply)			Criteria 3: Delivery of infrastructure and / or services that support improvements in

			community well-being	
Wellbeing Area (the fund will apply to all wellbeing areas)	Social wellbeing	Economic wellbeing	Environmental wellbeing	Cultural wellbeing
Wellbeing Outcomes				
Outcome	How Outcome will be Measured		How Outcome will be Monitored / Reported	
Operation levels of service are provided to the community	Reactive and Planned maintenance levels of service are improved (\$ spent)		Monthly reporting from WWL on progress and expenditure	
Compliance risks at wastewater treatment plant reduced	Assessed against current risk level		Quarterly active risk dashboard produced by WWL Discussed at Community Liaison Group meetings (including iwi)	
Community sense of wellbeing and confidence maintained through response to events and reduction in risk to the environment	Leaks repaired in a timely manner		Monthly reporting from WWL on progress and expenditure	

Action Items

1. Purpose

To present the Committee with updates on actions and resolutions.

2. Executive Summary

Action items from recent meetings are presented to the Committee for information. The Chair may ask the Chief Executive for comment and all members may ask the Chief Executive for clarification and information through the Chair.

If the action has been completed between meetings it will be shown as 'actioned' for one meeting and then will remain in a master register but no longer reported on. Procedural resolutions are not reported on.

3. Appendices

Appendix 1 – Action Items to 1 June 2023

Contact Officer: Amy Andersen, Committee Advisor

Reviewed By: Paul Gardner, Interim Chief Executive Officer

Appendix 1 – Action Items to 1 June 2023

Number	Raised Date	Responsible Manager	Action or Task details	Open	Notes
516	27 Oct 21	S Corbett	Work on a health and safety action plan with the Wairarapa Trails Action Group to ensure network safety of the proposed trails and continue discussions on cyclist safety on Underhill Road leading to the Tauherenikau Cycle Bridge.	Open	<p>8/11/21: WTAG chairman Greg Lang, Carterton Mayor is having discussions with SWDC Mayor on a way forward to resolve this problem on both sides of Underhill Road</p> <p>20/12/21: Bridge construction delayed 12-14 weeks (subject to weather).</p> <p>27/1/22: Underhill Road will be included as part of the speed review, other initiatives will be investigated prior to the bridge opening in September.</p> <p>9/3/21: Action amended to include advance changing of speed limit on Underhill Road.</p> <p>20/4/22: Amended - action above deleted.</p> <p>06/05/2022: Officers working to make Underhill Road safe before opening of bridge. Funding applied for. Request to close action.</p> <p>Check with Stefan</p> <p>11/01/22: Action reassigned from A&S to ICS following implementation of new committee structure.</p> <p>25/01/23: Committee Chair requested update required on project, costs for work to be completed, (quote from Pope and Gray), how will this be funded; PGF/Ratepayers or other funding source.</p> <p>1/02/23: Ongoing work to be completed– remains open.</p>
398	8 Aug 22	S Corbett/ K Ashcroft	To provide further information and costings on the options to manage the water race networks in future and prepare a water race next steps plan for moving forward following the survey results	Open	<p>12/09/2022: On hold until future of water races as stock water supply assets under proposed Natural Resources Plan and NPS confirmed with GWRC</p> <p>11/01/22: Action reassigned from WRS to ICS following implementation of new committee structure.</p> <p>25/01/23: Committee Chair requested update on now that Water races are to remain in Council control and not 3 Waters, should this be combined with numbers 268, 267 and 25 above to resolve issues.</p> <p>01/2/23: Action combined with 267.</p>

Number	Raised Date	Responsible Manager	Action or Task details	Open	Notes
117	13 Apr 23	S Corbett	To request a report from officers on the process of requesting Waka Kotahi to terminate SH53 at the entrance to Martinborough.	Open	
123	13 Apr 23	S Corbett/S Priest	To request a 'lessons learned' report from officers following the two Cyclones to hit the district in 2023.	Open	

Chairperson's Report

1. Purpose

To update the Infrastructure and Community Services Committee on activities and issues that have occurred since the last meeting.

2. Recommendations

The Chairperson recommends that the Infrastructure and Community Services Committee:

1. Receive the Chairperson's Report.

3. Discussion

3.1 Annual Plan Consultation

Firstly I would like to thank the Council staff who have attended the Annual Plan drop in sessions/meetings with both Councillors and Community Board members over the last month. In these meetings we have met and discussed the AP consultation document with ratepayers, both urban/rural and received feedback particularly from rural residents that the agreed level of service that Council has with Ruamahunga Roads/Fulton Hogan of cleaning water tables and culverts every two years is not satisfactory in their opinion.

We received comments from rural residents that increased preventative maintenance, such as annual cleaning of water tables and culverts would prevent more expensive/costly repairs at a later date.

I would like our Committee to be involved in a discussion with ELT around reviewing the levels of service for our roading network, in particular our rural road network.

3.2 Lessons Learned Review

Earlier this year, after Cyclone Hale, our former CEO mentioned that a "Lessons Learned Review" would occur with the aim of looking for improvements which could be made. I am aware that staff have been busy with Cyclone Gabrielle and then the AP process, but could we please ensure that this "Lessons Learned Review" occur so that we as a Council are prepared for the next event which will impact our district.

3.3 Customer Service

From the Customer Service lens of our Committee, can we please get some visibility of the customer service requests/enquiries that our residents/ratepayers make to Council.

We have the “Get it Sorted” channel for residents, alongside the dedicated channel for elected members and it will be beneficial to be able to see monthly data on the numbers of enquiries made, a timeline for action on addressing the fault/issue and a timeline on reporting back to the resident.

It would be good to get visibility and strive for improved customer service around faults/complaints that are logged regarding our infrastructure and facilities.

3.4 First Masonic Hall - Lease

Council has recently advertised for lease two Council buildings, one which is the First Masonic Hall, in Stella Bull Park, Main Street, Greytown. This building was originally the Greytown Library from the 1980’s until the Library was moved into its current location at the Greytown Town Centre.

At an Extraordinary Meeting on the 23rd May, the Greytown Community Board have presented their proposed Community Plan, advocating to Council that instead of leasing the First Masonic Hall out to a commercial business, the Library be relocated from its current location to the First Masonic Hall or alternatively house Council staff (Finance and Building Control) who are in leased office space at the north end of Main Street, Greytown.

Both Greytown Community Board and Councillor Bosley have asked that the tender process for the First Masonic Hall be paused as they wish to make submissions to the Annual Plan regarding moving the Library to this new location and creating a youth hub in Stella Bull Park or alternatively relocating Council staff to the First Masonic Hall which Council already owns and reducing lease payments in existing office space. (Councillor Bosley to provide any further information.)

Prepared By: Councillor Aidan Ellims – Chairperson, Infrastructure and Community Services

Member's Report – SH53 Proposal

1. Purpose

The purpose of this report is to get approval to investigate a request to Waka Kotahi that it terminates SH53 before the Martinborough Square. As the first step in that process I recommend that we ask the Martinborough Community Board to:

- sound out community sentiment on this proposal from those most affected by it; and
- propose the appropriate place for a termination, if we were to request one.

2. Recommendations

It is recommended that the Infrastructure and Community Services Committee recommend to the full Council that the SWDC:

1. *Agree in principle to request Waka Kotahi to terminate SH53 before the Martinborough Square, subject to a report on the communities views of such a proposal.*
2. *Request that the Community Board seek the community's opinion of such a move and the best place for such a termination. (If it was to go ahead).*

3. Discussion

This paper proposes that the SWDC starts a process that might lead to Waka Kotahi terminating SH53 before the Martinborough Square.

In the short time I have been Mayor, one of the most common requests I have had from Martinborough Businesses relates to the termination of SH53. I had discussed this with the previous CEO who advised me that he thought this would be an excellent proposal, but that the Council should not proceed until after Waka Kotahi resealed that road, which they have just done.

This matter has also come before the Community Board on several occasions, again strongly supported by local interests. The main benefits of an earlier termination are:

- Simplifying Traffic Management arrangements for people who run events/fairs that cover both SH53 and SWDC roads. If Waka Kotahi agrees to a future

termination request, then we make things that much simpler, easier and cheaper for event organisers.

- The opportunities presented to retailers and community groups to run events such as night fairs, parades that could incorporate the area between the Square and Ohio Street, in particular. Pedestrianising streets, even for short periods can add a lot of 'life' and excitement to an urban area.

At our meeting with waka Kotahi on the 6th of April, Mark Owens stated that termination of a State Highway was usually a straightforward process. But he also warned that sometimes people whose businesses are on the affected highway can object to the change of status. I have not heard anyone say to me that they would object, but I have heard many people say they are strongly in favour. We need to get a full picture of the opinion of those who live and do business on that stretch of road.

There will be some discussion and debate about the right place to do the termination. Some people assume that a termination would take place at Ohio Street. However, the Intersection of SH53 and Princess Street is a dangerous intersection and if, at some time in the future, the council wished to modify that intersection it would be much easier if the council had full control of it.

4. Costs and Benefits

The costs are that the SWDC would now be responsible for the costs of maintaining the road and we would be paying for the next resealing.

The benefits are to festival organisers and community groups that use that stretch of road for fairs etc. There would also be a benefit if the council wanted to implement safety improvements to some parts of what is currently SH53 (particularly around Process Street). But other well documented benefits from being able to close off streets from time to time are:

- **Creating vibrant public spaces:** These areas can be used for various purposes, such as outdoor seating, street performances, festivals, or markets. They become focal points for social interaction and community gatherings, enhancing the overall liveliness and sense of belonging in the neighborhood.
- **Boosting local businesses:** When people can comfortably walk and explore an area, they are more likely to discover and patronise shops, restaurants, cafes, and other establishments. Pedestrian-friendly environments can increase foot traffic and benefit the local economy.

5. Interim CEO comment

Work has already commenced to gather information on the financial impacts of such a move in terms of maintenance, insurance etc.

This information is important if Councillors are to make an informed decision on The possible impact on rates in future years.

It is our understanding that an action item from the last meeting at which this paper was tabled, that Council officers were asked to prepare a feasibility and benefits report, recognizing that the matter was deemed as low priority at that time.

Prepared By: Mayor Martin Connelly