Consents Hearing
16 December 2020

Gore District Council – APP-20202268

Appendices

Further Information

LANDPRO
Make the most of your land

23 July 2020

Landpro Reference: 20012
Council Reference: APP-20202268

Environment Southland
Attn: Jade McRae
Private Bag 90116
Invercargill, 9840

Dear Jade

Re: Request for Further Information under Section 92(1) of the Resource Management Act 1991 – Application for Longford Bridge Shared Pathway.

In reference to your request for further information dated 21 July 2020, please find outlined below our response to this request.

1 Paint and Lighting

"In depth details on paint colour and lighting to be used on the bridge. In particular, but not limited to, what colour of paint, what type of lighting, how many lights will be installed, what height they will be installed at and what direction they will face. I am requesting this information because the visual effects are of a concern at present and little detail has been supplied in the application regarding paint and lights."

Gore District Council (GDC) staff are working with the local Hokonui Runanga and seeking their advice for cultural sensitivity on this design. Any painting/ colour for the bridge mast will be in agreement with the local Runanga. The colours shown in the design drawings at present are a white mast, stainless steel wires and timber and steel bridge deck and railing materials.

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info@landpro.co.nz
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The lighting design has not been commenced, yet. However, any lights on the bridge and cycling track will be primarily for public safety and amenity; downward facing pedestrian lighting, plus an aviation signal light on the top of the bridge mast.

Consent conditions to control these matters have been proposed in Section 5.13 of the Application, with a few further amendments proposed in underline:

> *6. Any lighting installed shall be downward facing and directed away from residential properties.*
>
> *7. Paint treatment of the mast shall be undertaken in consultation with a suitably qualified landscape architect and Hokonui Runanga to ensure that recessive colours are used. This may include patterns.*

2 Bridge Levels

"Confirmation of the eastern abutment construction level. The design diagram shows the soffit at a level of 76.4m (plan S101), but the abutment set out plan shows a level 76.269m (SOP-EA1) plan S111. I am requesting this information because Council's Engineer has some concerns relating to the inconsistent construction levels of the eastern abutment."

The abutment shelf level on S111 is not the same thing as the beam soffit level as shown on S101. Between these two levels is the abutment bearing of circa 130mm (see Figure 1 below). This is not an inconsistency.

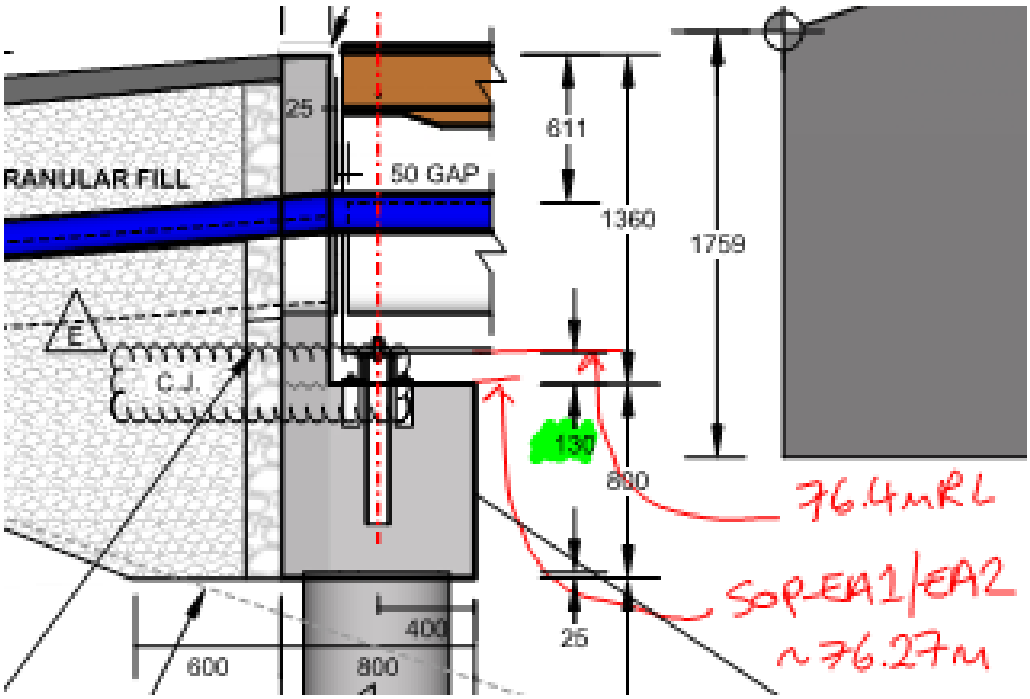

Figure 1: Abutment shelf and beam soffit levels

The entire structure has been modelled in 3D over the top of the 3D survey contours (see Figure 2 below). The set-out has been taken directly from the modelling which mitigates any irregularities from potential conversion and/or offsets that might otherwise be used. This 3D design approach provides added confidence that vertical levels are consistent across all vertical and lateral planes of the structure.

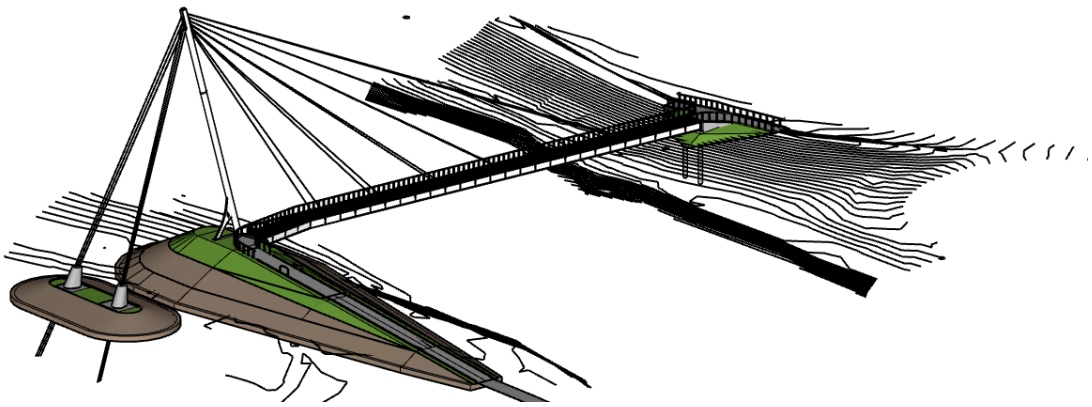

Figure 2: 3D modelling

3 Work on cycleway/walkway

"Confirmation that no work associated with the cycleway/walkway in the floodway or stopbank will be undertaken until authorization under the Southland Flood Control and Drainage Management Bylaw 2020 has been granted."

GDC can confirm that no work associated with the cycleway/walkway in the floodway or stopbank will be undertaken until authorisation under the Southland Flood Control and Drainage Management Bylaw 2020 has been granted.

I trust that the information set out above satisfies the request for further information. However, if you have any further queries, please do not hesitate to contact me.

Kind Regards,

Claire Perkins

Senior Planner / Planning Team Leader

Application

LANDPRO
Make the most of your land

Resource Consent application to Gore District Council and Environment Southland

Prepared for the Longford Bridge and Pathway

Prepared For

Gore District Council

Prepared By

Landpro Ltd
13 Pinot Noir Drive
PO Box 302
Cromwell
Tel +64 3 445 9905

QUALITY INFORMATION

Reference:	C:\Users\Claire\Desktop\20200626 - Longford Bridge - AEE - Final for lodgement v2.2.docx
Date:	7 July 2020
Prepared by:	Brodie Costello
Reviewed by:	Claire Perkins
Client Review:	Gore District Council
Version Number:	**Final**

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We have done our best to ensure the information is fit for purpose at the date of preparation and meets the specific needs of our client. Sometimes things change or new information comes to light. This can affect our recommendations and findings.

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LIST OF APPENDICES

1. INTRODUCTION

1.1 Overview of Proposal

Gore District Council, the applicant, is undertaking a wider project relating to an upgrade of its East Gore water treatment plant and centralising the treatment of water for Gore.

The project will see:

- A membrane filtration treatment plant built at the site of the East Gore treatment plant, in Wentworth Street
- Water treatment for all of Gore centralised at East Gore, instead of split between East Gore and Hilbre Avenue
- Construction of a bridge across the Mataura River to attach the new water pipelines linking East Gore with the Jacobstown Wells and Hilbre Ave reservoir

One key feature of this project is the new bridge across the Mataura River to carry water pipelines from the East Gore plant to the Jacobstown wells and Hilbre Ave reservoir. The bridge will be located about 650 metres upstream from the existing traffic bridge and will also provide a safer shared link for cyclists and pedestrians, connecting the residential area of East Gore to the CBD and schools located in West Gore.

On the other hand, the Council adopted the Southland Cycle Strategy (2016-26) in 2018. The strategy intends to promote alternative modes of travel, to unlock and strengthen social connections through the uptake of cycling.

The main barriers to increasing the uptake of cycling in Gore are severance and safety. The State Highway (SH) transport routes dissect the town and any walking or cycling trips entail people to interact with highway traffic. The safety risk of crossing or moving along these major roading corridors, particularly at the SH1 Mataura river bridge, reduces the uptake of active travel. NZTA agree a safe cycling facility needs to be developed to address these safety and access problems.

This project is developed to address safety and access problems, which includes a shared cycling and pedestrian track connecting East Gore through the Mataura river to the other side of the town including the CBD and schools. This link is the most important part of the network as it will provide a connection between East Gore and businesses, schools, shopping and sporting facilities in Gore. This central link, along with a new river crossing, will lead to a significant step-change in the provision of safe walking and cycling connections in the town.

The proposed bridge is a cable-stay design and will be the longest and tallest structure of this type in New Zealand at 39m high and 90m long. Detailed design plans are contained in Appendix A.

The bridge spans the river near the intersection between Church and Huron streets, on the east bank, and Surrey Street on the west bank. While this is not the shortest route between the East Gore treatment plant and Jacobstown, the river is at its narrowest here.

In addition to the bridge construction itself, the proposal involves temporary work to construct two crane platforms and install temporary piles.

1.2 The Applicant

Applicant Address: Gore District Council
29 Bowler Avenue
PO Box 8
Gore 9740
Attn: Ramesh Sharma, General Manager Infrastructure

Address for Service: C/- Landpro Limited
PO Box 302
Cromwell 9342
Attn: Claire Perkins

1.3 Purpose of Documentation

Under Section 88 of the Resource Management Act 1991 (the RMA), this report provides an assessment of the activities effects on the environment as required by Schedule 4 of the RMA.

2. DESCRIPTION OF PROPOSAL

2.1 Location

The proposed bridge is located over the Matāura River on the northern part of the Gore township, as shown in Figure 1. The associated shared pathway will run south down the true right side of the Mataura River, to connect with downtown West Gore. This is illustrated in Appendix B.

The specific land parcels on which works will occur are identified on Drawing S100 Rev D in Appendix A. Most of the works will occur on the legal riverbed and margins, alongside legally identified road reserve and recreation reserve already owned by the Council. The identified Lot 1 and Lot 2 of Sec 80 Blk XVI indicate the future subdivision of the property currently owned by Ben Abernethy (Sec 80 Blk XVI). Lot 2, where the anchors will be located, would then be purchased by the Council.

Figure 2 below, taken from Quickmap, shows the legal description, land owners, legal roads and legal river (in blue). The western end of the bridge will be at or about map reference NZTM 1287103 E 4887653 N.

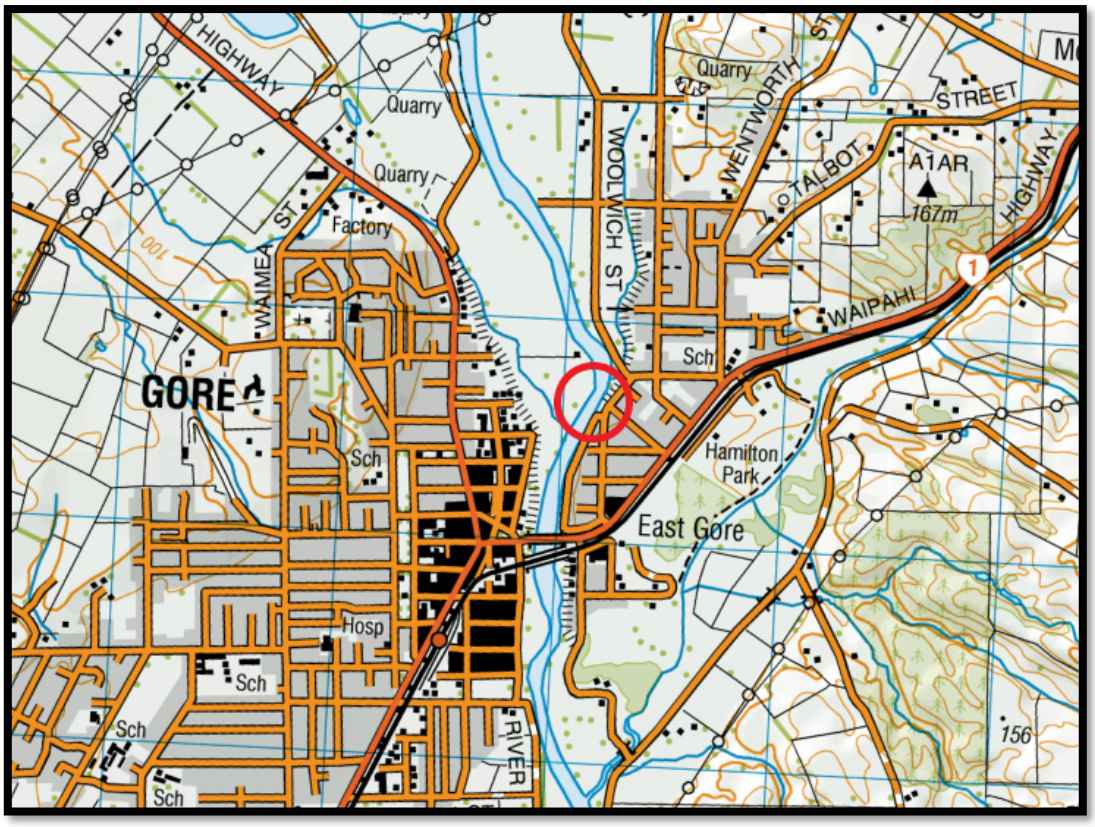

Figure 1: General location of the Longford Bridge identified by the red circle (Source: Topomap, 2020).

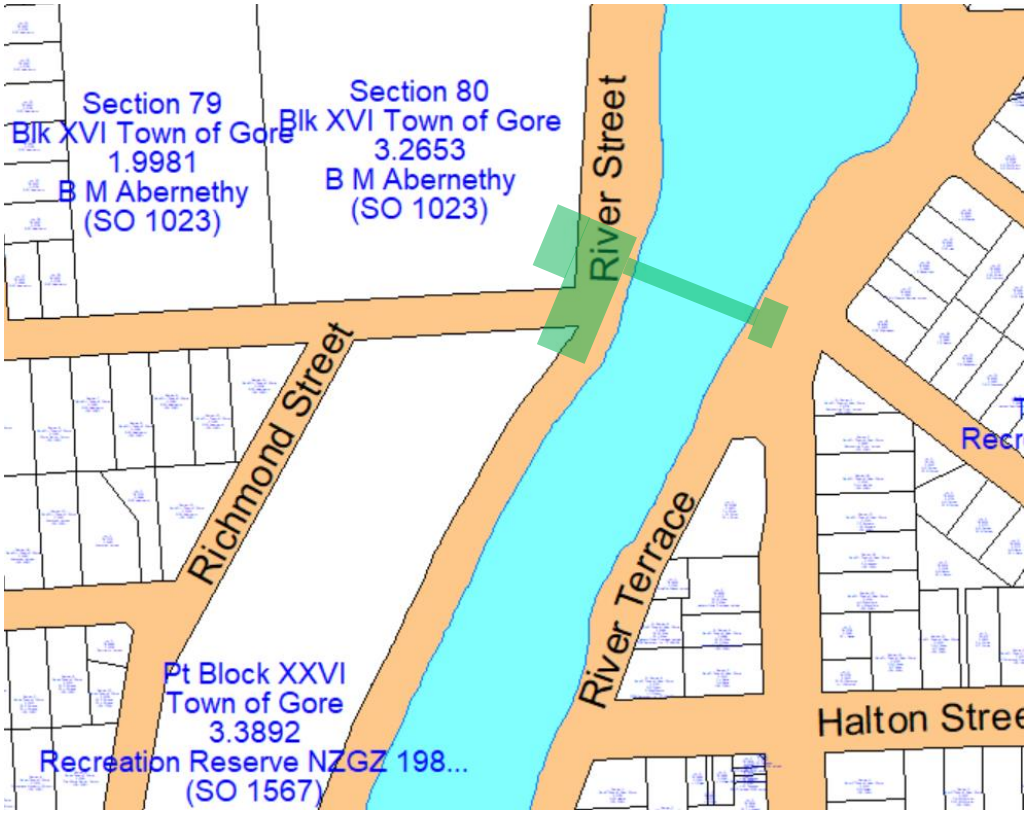

Figure 2: Legal description of works location - shown in green (Source: Quickmap, 2020)

3

2.2 Details

The bridge component of the wider water upgrades project is subject to this consent application for a shared pedestrian and cycle bridge, spanning the Matāura River within Gore. The bridge will cross from the flood bank on the eastern side of the Matāura River, to a new causeway embankment on the western side. From here, the shared pedestrian and cycle path will cross the floodplain to connect with Gore's CBD, with the final location of the path still to be confirmed but generally as shown in the preliminary design plans in Appendix B. Any required fencing of the pathway from stock along the flood plains will consist of 3 wires nailed to posts on the downstream side. This will ensure that the wires will pull out should any flood debris come down the river in high flow events.

The bridge will be 39 metres high, 90 metres long and 3 metres wide.

The proposed bridge structure is to consist of a steelwork skeleton encased in timber, with a 916mm diameter steel mast supporting 26.4mm diameter cables situated along the span of the bridge. The bridge will have permanent piles outside of the riverbed as well as back-stay anchorages cabled to the mast. The western end of the bridge will have a built embankment to allow access to the bridge. An illustration, looking south down the Matāura River, is shown in Figure 2, with the detailed design and illustrative scheme plans included in Appendix A.

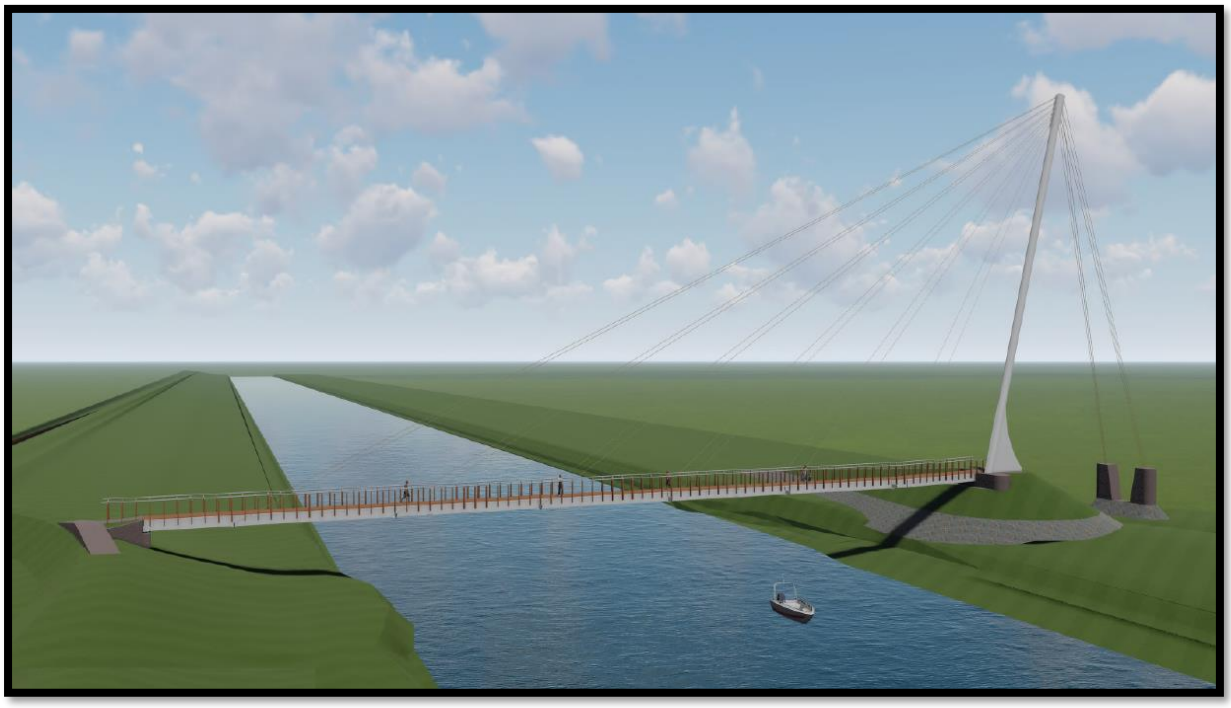

Figure 3: Longford Bridge, looking south (Source: Concrete Structures Ltd, 2019, extract from Appendix C)

2.3 Construction Methodology

The construction programme and tasks are summarised in Table 1, and illustrated in Figures 3, 4 and 5 and the attached details and plans in Appendix C, provided by the Council and extracted from the construction plans prepared by the contractor, Concrete Structures Ltd.

A 10-month construction timeframe is proposed. Should consent be granted in time, the current construction timeline (Appendix C) has onsite construction scheduled to commence at the end of September 2020.

A detailed Construction Management Plan will be prepared by the contractor once their appointment has been confirmed. This will set out the construction methodology along with final detailed plans showing for example fenced compounds, stockpiling locations and sediment/dust/noise management etc. A condition to this effect has been proposed. A preliminary plan showing site access, storage areas and fenced compounds is shown in Figure 4 below. No road closures are anticipated and public access along the eastern side of the river will remain.

Figure 4: Fencing, access and storage locations during construction (Source: Concrete Structures Ltd, 2019, extract from Appendix C)

Table 1: Construction programme (graphic illustration of these steps shown in Drawings 4 and 5 of

5

Appendix C)

Construction Sequence	Construction Tasks	Comments and Environmental Risks
Establish to site	• Establish site fencing and environmental controls • Set up compound and lay down area	Machinery/equipment and hazardous substances used for the activity will be located in the fenced compounds (refer to Figure 4 for locations).
Bulk Earthworks, Piling & Abutments	• Site clearance • Topsoil stripping and stockpile • Construct crane access tracks and hard standing • Bulk fill to western abutment • Install geofabric and riprap to abutment locations • Install permanent piles for bridge abutments – casings filled with concrete (outside of riverbed) • Construct abutments	The crane platforms will be constructed in the shallows of the Mataura River from imported rock material (not excavated from river onsite) and on the western side will extend approximately 8m into the 62m wide wetted channel (refer Figures 4 and 5). Some sediment may be released during the construction.
Erect Bridge Mast and Deck Structure	• Drive temporary piles to support construction loads (within riverbed) • Erect mast • Pour shear keys and install bridge bearings • Unload structural steelwork to lay down area • Fully construct bridge • Install each 45m section in one lift onto temporary piles • Cantilever supported using temporary RB bracing system	The temporary UC steel tube piles (no concrete centre), will be vibrated and driven into place (within the wetted riverbed – refer Figure 5 below for locations of temporary piles), constructed to support temporary construction loads and bracing, and some sediment may be released during installation.
Cable install and Stressing	• Pin guy ropes to mast • Pin all guy ropes to stressing points on deck • Stress guy ropes to required tension	
Remove	• Use vibro hammer and crane to	Some sediment may be released

Construction Sequence	Construction Tasks	Comments and Environmental Risks
temporary piles	extract piles	during extraction.
Construct round Anchor Deadmen	• Install ground anchors • Tie reinforcing steel cages • Form and pour anchor deadmen • Install rip rap to deadmen	Some sediment may be released during construction. There is a risk of cement or other contaminants being spilt during construction.
Complete Earthworks	• Finishing earthworks • Grass seeding	Some sediment may be released during earthworks.
Disestablish from site		

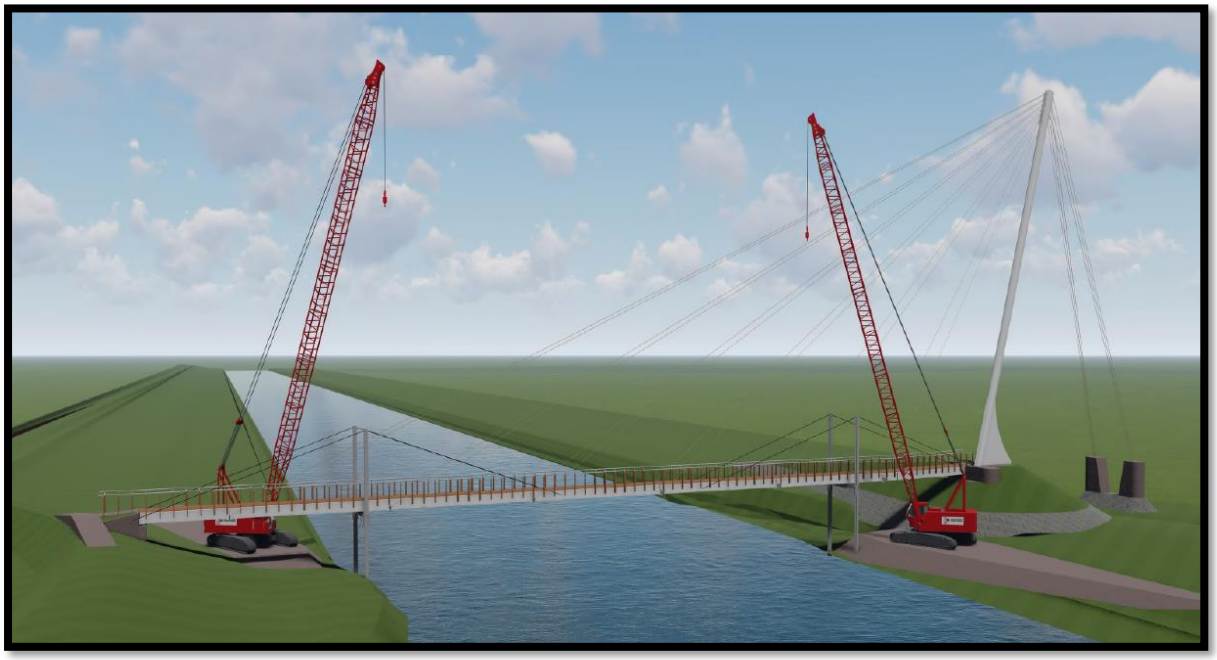

Figure 5: Longford Bridge construction, showing the temporary piles and crane platforms (Source: Concrete Structures Ltd, 2019, extract from Appendix C)

In terms of the environmental management of the construction project, the following major risk identification

and management has been undertaken and is included in Appendix C:

- **Sediment release**. This may occur during construction of the bridge and the causeway. Sediment release during piling and other construction activities will be minimised as follows:
    - For works involving soil disturbance above the waterline but within the banks, silt fences will be installed on the down-gradient side of these works within 1m of the edge of the river and extend 20m either side of the work area, and stabilisation as soon as practicable after the relevant task is completed. Secondary protection will be installed in areas of high earthworks and groundwater controls and settlement ponds utilised where possible. Stockpiles will be no closer than 5m to the edge of the river. Note that there will be some works around the waterline to install erosion control (rip rap).
    - Visual monitoring of sediment during the construction and removal of the temporary piles and crane platform to ensure that there is no visible sediment plume beyond the reasonable mixing zone (in this case, 200 m, as defined in the Glossary of the Southland Land and Water Plan). If a visible plume is noted to extend for this distance, the in-stream works will be temporarily stopped until this dissipates and will then proceed at a slower rate or with additional controls in place.
    - Minimising bed disturbance as far as is practicable during removal of the temporary piles and the crane platform (shown in Figure 4).
- **Release of other contaminants to water**, with cement and fuel being the primary concerns. These will be carefully managed by:
    - Carrying out the permanent piling (outside of the river) as noted above, and with the in-situ concrete to be poured within a pre-driven casing, because this is outside the riverbed, will effectively eliminate cement discharges to the river.
    - Management of refuelling, and regular machinery checks and maintenance to reduce the risk of any fuel/oil release to the practicable minimum.
    - Use of a spill kit if required.
- **Flood risk**. The presence of the causeway/crane platform in the riverbed will affect the flow path and stage of the river during flood events. This is an unavoidable effect of the works, but will be minimised by:
    - Completing the in-stream works as quickly as is practicable and safe, therefore minimising the likelihood that a flood event will occur during the works.

- Completing a flood assessment to predict the impact of the proposal on the Matāura River during future flood events, as provided in Appendix D.
- All plant will be required daily to park in a nominated compound elevated from the flood plain. All small plant will be removed daily.
- Should significant flood events be forecast, plan to remove any temporary crane platform as necessary, but within 20 hours of a predicted high water event. Staff will always be available during the working week with the construction team living locally, and one man will be available on standby and within 2 hours of the site during weekends where the construction team are not on site.

3. DESCRIPTION OF EXISTING ENVIRONMENT

3.1 Location and topography

The Longford Bridge site is located on the Matāura River, within the Gore township. The site is approximately 650m north of the existing State Highway 1 bridge.

The permanent river channel at the site is approximately 55m wide in typical conditions. The western side of the river is largely undeveloped land, primarily used for stock grazing, and is generally flat to gentle sloping (see Figure 6). On the eastern side, the land slopes steeply up towards the 4 m high earthfill stop bank, beyond which is suburban area. Stopbanks have also been built on both sides of the river, being approximately 250-300m on the western side and 20m on the eastern side respectively from the permanent river channel.

Engineers soil logs from the investigative drilling are included within the *Geotechnical and Hydraulic Report* in Appendix D.

Figure 6: View looking west from the top of the stop bank on the eastern side of the Matāura River

3.2 Cultural and historical context

The site is within the rohē of Ngāi Tahu. The Matāura River is of special significance to local Māori, both culturally and as a native fishery and is the subject of a Statutory Acknowledgement. Through previous consultation we have engaged in with Te Ao Mārama and Hokonui Rūnanga, we are aware of the following sites within the catchment which have particular cultural significance:

- Māori ovens have been located approximately 20-30m downstream of the bridge site on the eastern banks. While the proposed works will be in close proximity to these, conditions are proposed to ensure these sites are protected during with works.
- A Mātaitai Reserve (customary fishing area) on the main stem of the Matāura River near the town of Mataura. The proposed activity is approximately 10 km upstream of this reserve.
- There are also a number of traditional eel fishing sites along the length of the Matāura. It is unclear at this stage whether any of these are near the site.

- Nohoanga (traditional camp sites) on the Waikaia River near Piano Flat and on the Matāura near Ardlussa. Both of these sites are upstream of the proposed activity.

- The Iwi Management Plan (discussed in detail in Section 7.2.4) also records numerous archaeological sites within the rohē, but none of these are within approximately 8 km of the site, with the exception of the Hokonui Rūnanga tribal property, located southwest of Gore. These sites are distant from the proposed Longford Bridge, and the proposed work will have no effect on them. The Archsite online GIS viewer shows four sites within 2 km from the site, all located within the western Gore township.

Since European settlement, the dominant land uses are a mix of residential, industrial, and agricultural activities in the area near the bridge site.

The eastern side (true left) of the subject site includes an existing pathway used for recreational walking, cycling, and pedestrian access to West Gore. Pedestrians also use a second informal path on the ridge of the flood bank, running parallel with the river and Huron/Woolwich St.

3.3 Climate

According to NIWA's Weather and Climate of Southland report, average annual rainfall at Gore is 945 mm. The Summer months are typically the wettest, with December having the highest average rainfall (100 mm). The driest months are typically July-September, when approximately 60 mm/month of rainfall occurs on average.

3.4 Matāura River

The proposed Longford Bridge would be sited over the Matāura River and within the Matāura River catchment. The catchment extends from the Eyre and Hector Mountain ranges in the north and discharges into Toetoes Bay, south-east of Invercargill. The Matāura River catchment area upstream of the bridge is approximately 2693 km^2 based on data from NIWA's NZ River Maps website.

The Matāura River catchment is one of the 10 largest catchments in New Zealand, and is strongly recognised for recreational fishing, in particular brown trout. Agriculture, including intensive dairy, sheep and beef farming is the primary land use within this catchment.

Environment Southland monitors flow in the Matāura River at several sites. At Gore, the median flow is 49 m^3/s and the Q95 is 16 m^3/s as per Environment Southlands Environmental Data website. Flow rates for the three highest recorded floods is also available, these being 2,111, 1,882, and 1,783 m^3/s in 1978, 1987 and 1999 respectively. As detailed in the *Geotechnical and Hydraulic Inputs* report (Appendix D), future flood events may generate flows of up to 2,612 m^3/s for a 1/50 year event and up to 4,802 m^3/s for a 1/500 year event (including an additional 15% allowance for climate change effects). In such flood events, approximately one third of the flow is expected to spill out on to the floodplain, with the remainder flowing within the channel.

The modelling outlined in the *Geotechnical and Hydraulic Inputs* report was validated by the recent flood events in February 2020, where the Mataura River was recorded to peak at 2,450 m^3/s at the Gore monitoring station. The previous record flood was in October 1978, where the peak was recorded as 2,110 m^3/s.

The Land, Air, Water Aotearoa (LAWA) website shows that the area is located within the Mid-Matāura surface water zone, which extends from the hill country of the Matāura Ranges to Gore. The following information is available on the LAWA website on the Matāura River at Gore:

- Ecology data shows a macroinverterbrate community index (**MCI**) of 99, classified as "fair", a **taxonomic richness** of 13, and a **percent EPT richness** of 41 % (all 5-year medians)
- ***E. coli*** concentrations in the last 5 years is 395 n/100ml (median). Based on three years of data, this site is graded as "unsuitable for swimming".
- Various water quality parameters show that the site is listed as in the worst 25 % of like sites for **black disc clarity** with a 5-year median of 1.04 m, and in the best 50 % of like sites for **turbidity** (5-year median: 2.2 NTU).

Overall, these results suggest that water near the site will be of low clarity in typical conditions, with the worst low-clarity events probably coinciding with high flows.

The Matāura River is host to a renowned brown trout fishery, and a number of native species. The species present are likely to include long fin eel, lamprey, torrent fish, upland bully, koaro and Galaxiid-gollum. The conservation statuses of these species range from Not Threatened to Nationally Vulnerable, with the lamprey being the most threatened species.

3.5 Terrestrial ecology

The surrounding area is dominated by the built urban area, with pastoral areas on the true right side of the river. The surrounding area contains exotic pasture grasses and the introduced Prunus and Willow trees. Additionally, the Matāura catchment is known to be a significant habitat for a number of species of ground nesting bird, however none have been specifically observed on numerous site visits within the footprint of the proposed bridge and associated works.

4. SUMMARY OF CONSENT REQUIREMENTS

A summary of the activities that require consents, as per the regulatory frameworks of the Gore District Council and Environment Southland plans, are identified respectively in Table 2 and Table 3 below. Consideration of permitted activities is also included below.

Overall, the proposed bridge and associated works are considered **discretionary activities** under the District

and Regional planning frameworks.

Table 2: Summary of activity status under the District Plan

Activity	Status under District Plan	Comments
ACTIVITIES TO OCCUR DURING CONSTRUCTION PERIOD ONLY		
Landuse consent for bridge construction	**Restricted discretionary activity** under Rule 4.11 and Rule 4.A.9	For the construction of the bridge, storage of fuel and associated building materials, and earthworks.
ONGOING/PERMANENT ACTIVITIES		
Landuse consent for bridge construction	**Discretionary activity** under Rule 4.2.4	For land use activities not permitted in the Rural Zone.
	Discretionary activity under Rule 2.4.9	For activities within the margins of the Matāura River.
	Restricted discretionary activity under Rule 4.7	For daylight admission of the mast of the bridge.
	Restricted discretionary activity under Rule 4.7A	For the location of the western end of the bridge.
	Restricted discretionary activity under Rule 4.8	For the mast height of the bridge.
	Restricted discretionary activity under Rule 7.9.8	For the height and ground coverage of the bridge as a utility support structure.

Table 3: Summary of activity status under Environment Southland Plans

Activity	Status under RWP	Status under PSWLP	Comments
ACTIVITIES TO OCCUR DURING CONSTRUCTION PERIOD ONLY			
Vehicle and machinery operations in a stream bed	**Restricted discretionary activity** under Rule 45(b)	**Restricted discretionary activity** under Rule 77(b)	For operation of machinery within the bed of the river.
ONGOING/PERMANENT ACTIVITIES			
Construction of a bridge	**Restricted discretionary activity** under Rule 26(b)	**Restricted discretionary activity** under Rule 57(b)	For the construction of the new bridge.
Erosion control structures	**Discretionary activity** under Rule 30(c)	**Discretionary activity** under Rule 61(c)	For rocks to be placed for the crane platforms and reused for the

			embankment at the western end of the bridge.

Following discussion with Colin Young at ES, because resource consent is already required for the proposed works, a separate authority under the Southland Flood Control and Drainage Management Bylaw 2020 for works within the floodway and over the stopbanks is not required for the bridge. Further authority under this bylaw may be required for construction of the associated shared path on the western banks may be required, however, works associated with the shared path are not covered by this application.

Full details of the consents required under both the ES and GDC planning framework have been included here in the same application document in order to ensure a full understanding of the nature of the proposal (as required under s91 of the RMA). However, Council requests that the consents under each consent authority's jurisdiction are processed separately. The reasons for this are the nature of the effects associated with the required consents are relatively distinct, but more particularly, other than iwi, affected parties do not overlap and the ES consents are more likely to be able to be processed non-notified (see discussion in Section 6 below). Section 102(4A) of the RMA provides for this situation and states that in the situation where consent authorities separately decide applications, they ensure that any conditions to be imposed are not inconsistent with each other.

4.1.1 District Plan

The Gore District Council has statutory jurisdiction for the effects of certain activities within the area covered by this application. These effects are managed through the District Plan, which sets out rules for managing the effects of the proposed activities.

As shown on the GOR 07 Planning Map, the subject site is located on land that is unzoned (being road reserve, river margins and riverbed) and in the Rural Zone. The subject site is also located within the Matāura River Floodway, as shown on the GOR 07 Hazards and Utilities map. A small part of the subject site includes reserve land (see Figure 2).

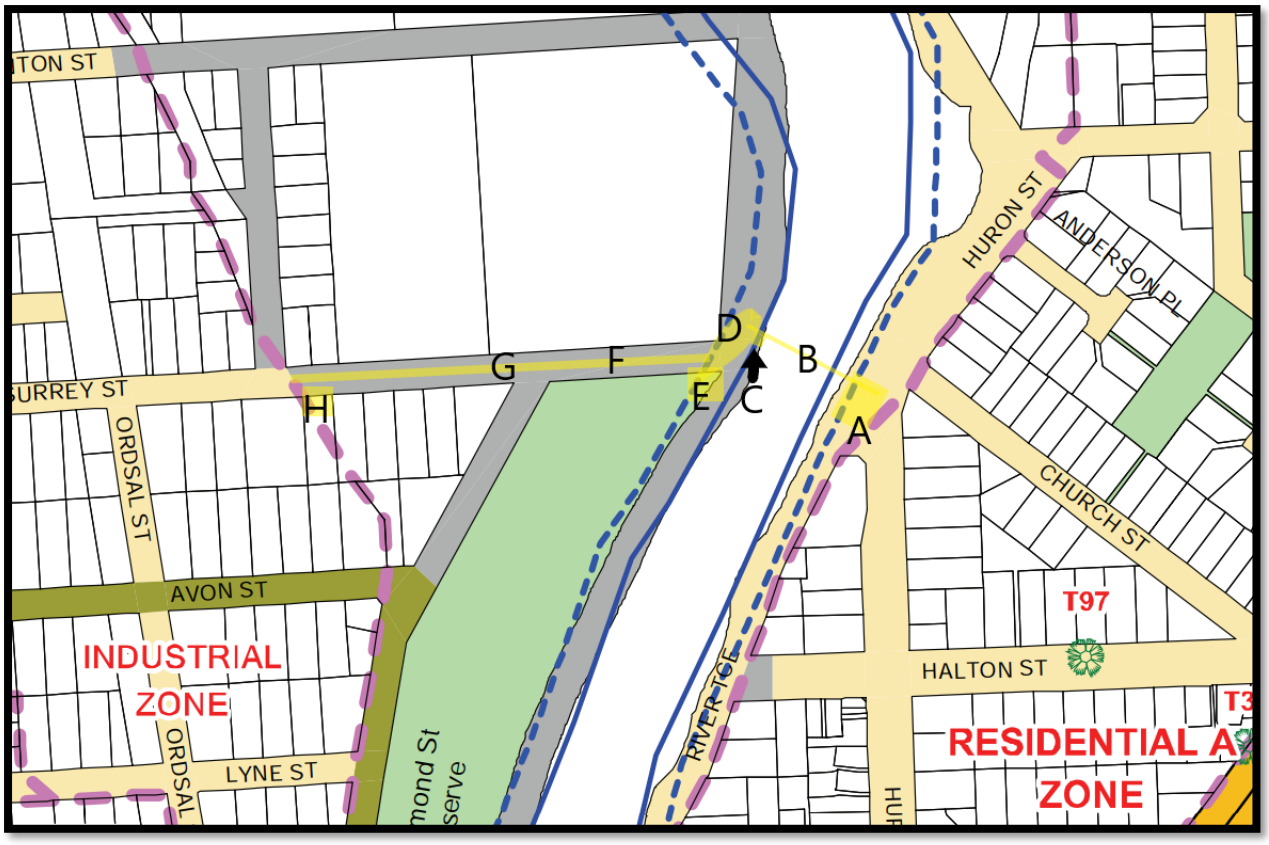

Figure 6: Gore District Map, with proposed activity areas shown in yellow (Source: GOR 07 Planning Map, 2020).

The following proposal components and their approximate locations within the Gore District Plans are described in Table 4. A full scheme plan illustrating the project components is attached in Appendix A.

Table 4: Proposal components and their locations within the Gore District Plans

Map key	Component	Zone	Temporary/Permanent
A	Fenced compound and crane platform	Road reserve and river margins. Partially within the Mataura River 20M Buffer Zone.	Temporary – Will be used during construction.
B	Bridge	Within the legal riverbed and river margins. Crosses the Matura River and is within the Mataura River 20M Buffer Zone.	Permanent.
C	Crane platform	Within the legal riverbed and river margins. Within the Mataura River	Temporary – Will be removed once construction is completed.

		20M Buffer Zone, and a small part within the Mataura River.	
D	Embankment	Rural Zone and river margins. Within the Mataura River 20M Buffer Zone.	Permanent.
E	Fenced compound	Rural Zone and river margins. Within reserve land and within the Mataura River 20M Buffer Zone.	Temporary – will be used to hold machinery during construction.
F	Temporary access road	Rural Zone.	Temporary – Will only be used for machinery access to the site during construction.
G	Temporary culvert	Rural zone.	Temporary – To be removed once access to the construction site is no longer required. **Note:** The proposed access to the site may not require a culvert. Temporary access may instead be gained utilising an existing track on the adjacent property, north of the proposed bridge location.
H	Flood event storage compound	Located in the Rural Zone.	Temporary – Will be used to hold equipment in the event of a flood.

The proposed development involves a range of activities which are regulated in the District Plan, as summarised in Table 5.

Table 5: Summary of activity status under the District Plan

Activity	Status under District Plan
ACTIVITIES TO OCCUR DURING CONSTRUCTION PERIOD ONLY	
Construction of the bridge	***Permitted activity*** *under Rule 4.3* ***Permitted activity*** *under Rule 4.5* ***Permitted activity*** *under Rule 4.10* ***Permitted activity*** *under Rule 6.9*
ONGOING/PERMANENT ACTIVITIES	
Bridge construction completed	***Discretionary activity*** *under Rule 4.2.4* ***Discretionary activity*** *under Rule 2.4.9* ***Restricted discretionary activity*** *under Rule 4.7* ***Restricted discretionary activity*** *under Rule 4.7A* ***Restricted discretionary activity*** *under Rule 4.8*

	Restricted discretionary activity *under Rule 4.11 and 4.A.9* ***Restricted discretionary activity*** *under Rule 7.9.8*

4.1.1.1 Permitted activities compliance

Table 6 sets out the relevant District Plan rules relating to the permitted activities involved in the works.

Table 6: Permitted activities under the District Plan

Rules under the District Plan	Provision	Assessment
4.3. Temporary activities	*(1) The following is a permitted activity:* *(c) Construction, maintenance and demolition work provided that it complies with the recommended noise limits set out in NZS 6803:1999.*	Contractors have confirmed that they will conform with the specified noise limits as per Rule 4.5 of the Gore District Plan, which has a more restrictive noise limit than that set out in NZS 6803:1999.
4.5. Noise	*Unless otherwise stated, all activities shall comply with the following standards:* *(1) Noise limits in rural and residential zones* *On any day: 7.00 a.m. to 10.00 p.m. 55 dBA Leq* *10.00 p.m. to 7.00 a.m. 40 dBA Leq* *10.00 p.m. to 7.00 a.m. 75dBA Lmax* *Measured:* *Rural zones at any point in the notional boundary of any noise sensitive activity.* *Residential zones at any point in any other site.*	There is the potential for increased noise associated with the users of the proposed bridge structure, none of which will exceed the noise limits specified. Noise associated with the bridge construction is inevitable given the machinery required, such as hammers for driving pile sections and earthmoving equipment such as excavators. Noise will be minimised as far as practical through the use of silenced earthmoving machinery/equipment and compressors. Noise will be monitored at the boundaries of the site and at an equivalent distance to the nearest house to ensure no nuisance is being caused, as part of the on-site auditing process. Regular contact with landowners will be carried out to ensure noise levels are not causing undue stress. Contractors have confirmed that all construction activities will comply with the specified noise limits set by this Rule.
4.10 Signs	*(1) The following signs are a permitted activity throughout the district.* *(a) Electioneering signs* *(b) Traffic management signs, directional signs and public information signs erected by the road controlling authority* *(c) Signs advertising a property for sale:*	Signs will be required for traffic management and informational purposes during construction. Site fencing and environmental controls will be the first onsite work, which will include signage.

Rules under the District Plan	Provision	Assessment
	(i) Located on the property *(ii) Limited in area to 1.2 square metres, for any individual selling privately, or for any companies acting as agents for that sale.*	
6.9 Hazardous Substances	*(1) It is a permitted activity to store or use hazardous substances provided that the quantities in storage or use do not exceed the amounts specified in Table 6.2.* *(2) Any storage or use of hazardous substances that exceeds the quantities specified in Table 6.2 is a restricted discretionary activity. The matter over which the Council shall exercise its discretion shall be the environmental effects of storing or using hazardous substances in quantities in excess of those specified in Table 6.2.* *(3) Facilities for the disposal of hazardous substances are a discretionary activity.*	A small amount of hazardous substances will be stored on site, in quantities that do not exceed the amounts specified in Table 6.2. These include approximately 20L of diesel, 5L of paint, 9kg of LPG, and 30kg of oxygen. All hazardous substances can be moved prior to any flood events. Spill kits will be maintained on site and a register of all spills kept. Best practice will be used to determine fueling location and waste disposal.

4.1.1.2 Permitted baseline of non-permitted activities

Table 7 shows the permitted activities which the proposal is unable to comply with, and therefore in relation to which consent is required. In summary, consent is required for these works due to the height of the mast of the bridge, and the activities that will take place within the Matāura River Floodway.

Table 7: Summary of the permitted baseline for activities requiring consent

Rules under the WLP	Provision	Assessment
4.2.1 General Rule	*The following land use activities are a permitted activity:* *(1) Rural zone* *(a) Agriculture;* *(b) Animal Boarding Activity;* *(c) Farm Quarry;* *(d) Essential Services;* *(e) Home Occupation;* *(f) Home Stay;* *(g) Land Development;* *(h) Residential Activity on:* *(i) a site equal to or exceeding 2 hectares in area; or* *(ii) a site of more than 2,000 square metres and less than 2 hectares in area existing, or approved for subdivision, prior to 27 March 2014.* *(i) Roadside Sales Activity;* *(j) Temporary Military Training;* *(k) Veterinary Clinic.* *(2) Residential A zone*	The proposed activity is not considered one of the permitted land use activities under the Gore District Plan.

	(a) Health Care Activity; *(b) Home Occupation;* *(c) Home Stay;* *(d) Hospital Activity;* *(e) Land Development;* *(f) Residential Activity:* *(i) on site located within 30 metres of the Council's reticulated sewerage system:* *(a) equal to or exceeding 400 square metres in area; or* *(b) of less than 400 square metres in area existing, or approved for subdivision, prior to 27 March 2014* *(ii) on a site located more than 30 metres from the Council's reticulated sewerage system that has an area of at least 2,000 square metres.* *(g) Residential Care Activity limited to a maximum of 6 persons.*	
2.4.9 Margins of rivers and streams	*Within the area 20 metres each side of the bed of the Mataura River where land is zoned Rural, the following is a discretionary activity:* *(1) Mining or quarrying activities.* *(2) The erection of any structure greater than 3 metres in height or 6 square metres in area.* *(3) Earthworks, other than those associated with the tilling of the soil, fencing or pest plant management, exceeding:* *(a) more than 100 linear metres along the river; or* *(b) 1 metre in depth in the case of excavation; or* *(c) 3 metres in height in the case of stockpiles or fill; or* *(d) 50 cubic metres in volume.*	The mast of the bridge exceeds the height restriction specified in part 2. The western embankment will exceed the fill restriction specified in part 3(c). A full assessment is provided in above.

4.7 Daylight Admission	*(1) Any structure, or production forestry where the contiguous land is not held in the same Certificate of Title, or heaps of material, shall comply with the following standards:* *(a) Rural zones* *(i) Except as provided for by (ii) below, no building or other structure shall extend beyond the recession plane calculated from Diagram 4.2, measured from the boundary of the site.* *(ii) No recession plane is required along the boundary of any site that is contiguous with the boundary of any Commercial, Industrial or Mixed Use Zone.* *(b) Residential zones* *No building or other structure shall extend beyond the recession plane calculated from Diagram 4.2, measured from the boundary of the site.* *(c) Commercial, Industrial and Mixed Use zones* *No building or other structure shall extend beyond the recession plane calculated from Diagram 4.2, measured from a point three metres on the Commercial, Industrial or Mixed Use Zone side of any Residential or Rural Zone boundary.* *(2) Any land use activity that does not comply with (1) above is a restricted discretionary activity.* *The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.*	The western end of the bridge is proposed to be constructed partially on private land (in the rural zone), which is affected as per this rule. The affected landholder is aware of the proposed bridge location, and direct consultation has begun with the affected party, and to discuss subdivision and land purchase of a small area. The relevant parcel of land is currently used for grazing stock.
4.7A Yards	*(1) For the avoidance of doubt, except where provided in Rule 4.7A.1(3)(a)(ii), all structures and parts of structures, including eaves, gutters and associated downpipes, on any building shall comply with Rule 4.7 Daylight Admission.* *(2) Rural Zones* *(a) Except as provided for in (b) below and subject to (c) – (e) below, all buildings shall be set back at least 6 metres from the property boundary.* *(b) Buildings of less than 10 square metres in area may be located no less than 2 metres from any property boundary, provided that no animals are housed within them.*	While the Gore District Plan does not provide a definition for a '*Building*', this rule has been applied to the proposed bridge for completeness. Please see the response to Rule 4.7 for further information.

	(c) Any building housing animals, or any building associated with agricultural use within which animals are present (including dairy sheds and shearing sheds), shall be located no closer than: *(i) 30 metres from a legal road boundary; and* *(ii) 50 metres to any other property boundary.* *(d) Dwellings shall be located such that they are no closer than 20 metres from a dwelling on an adjoining property.* *(e) Buildings shall be set back 6 metres from any waterway more than 2 metres in width.* *(3) Residential Zones:* *(a) The following yards shall be provided adjacent to property boundaries: Front Yard 4.5 metres Other Yards 1.0 metre Except that:* *(i) Eaves, gutters and associated downpipes on any building may project into a yard by up to 500 mm.* *(ii) In relation to yards, other than front yards, where buildings on an adjoining property have a common wall along the property boundary, no yard is required along that part of the boundary covered by such a wall.* *(iii) A carport or garage, either stand alone or attached to the dwelling, (including any eaves, gutters or downpipes) may be located up to 500 mm from the property boundary provided that the maximum length of the building adjacent to the property boundary does not exceed 6 metres.* *(b) In relation to a structure or part of a structure used for the parking of vehicles, an area of at least 4.5 metres long and 2.5 metres wide shall be provided on the site and immediately in front of the vehicle entrance to that structure for the manoeuvring or standing of vehicles.* *(c) Where the aggregate length along the external wall of a building exceeds 16 metres measured parallel to an internal boundary of a property:* *(i) except where provided for by 3(a)(ii) above, no more than 6 metres of that length*	

	may be located within 1 metre of the distance from the boundary required by Rule 4.7 Daylight Admission or 3(a) above, whichever is the greater. *(ii) within each one metre setback thereafter the maximum length of building that may be erected is six metres.* *(4) Any land use activity that does not comply with (2) or (3) above is a restricted discretionary activity.* *The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.*	
4.8 Height	*(1) No structure shall exceed the following heights:* *(a) In Residential Zones 8 metres* *(b) In Rural and Commercial Zones 12 metres* *(c) In Industrial Zones 15 metres* *(d) In Mixed Use Zone bounded by Lyne St, Ordsal St, Traford St and Hokonui Drive 12 metres* *(e) Other Mixed Use Zones 15 metres* *(2) Any land use activity that does not comply with (1) above is a restricted discretionary activity.* *The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.*	The mast of the bridge (and the attached guy wires), located on the western end of the bridge in the Rural Zone, will be approximately 40m high and is not compliant with the height restrictions for structures in the rural zone. The eastern end and total span of the bridge is less than 12m above the natural ground level and does not breach height restrictions. For those viewing the bridge, the mast will have a range of effects dependent on the point of view. The most impacted will be those who are located south/southeast of the bridge, where the mast of the bridge will contrast the rural landscape looking up the Mataura River towards the Waterfall Range, having moderate to high visual effects. From other viewpoints, the mast will have a lesser effect, given the existing built structures within the landscape.
4.11 and 4A.9 Natural Hazards within defined floodways	*(4.11) Refer to Section 4A.9.* *(4.A.9.1) Within areas shown as "Mataura River Floodway" on the Planning Maps and not classed as riverbed:* *(1) the erection or alteration of any structure;* *(2) storage of hazardous substances;* *(3) farm quarries and earthworks;*	The proposed activity will take place within the Mataura River Floodway, including the erection of the bridge, storage of hazardous substances, and earthworks. All machinery will be required daily to park in a nominated compound which is elevated from the flood plain at the end of Surrey Street, on the border of the Industrial and Rural

	(4) subdivision; *(5) forestry and shelter belts;* *(6) storage of floatables;* *(7) permanent fences;* *is a restricted discretionary activity. The matters over which Council shall exercise its discretion are the adverse effects of natural hazards on or by the proposed activity.*	Zones. All small machinery and equipment will also be removed from the flood plain daily and secured in the compound. Staff will always be available during the working week with the construction team living locally. One person will be available on standby and within 2 hours of the site during weekends where the construction team are not onsite. All machinery/equipment is mobile and can be walked or transported out of the flood way and onto the stopbanks within half a day. The temporary piles will be designed to withstand full flood loadings. Flood monitoring and evacuation procedures will be in place to ensure the floodway can be evacuated within 20 hours of a predicted highwater event. To mitigate the risk, weekly and daily monitoring of Metservice forecast and rain radar will be undertaken, along with any severe weather warnings are scrutinized to see if the programme needs to be adapted.
7.9.8 Utilities	*(8) Other utilities* *(a) Except as otherwise provided by Rule 7.9 (3)-(7) utilities are a permitted activity subject to the following standards:* *(i) Any support structure greater than 6 metres in height shall comply with Rule 4.7.1 Daylight Admission.* *(ii) All structures shall comply with Rule 4.8.1 Height* *(iii) Within Residential and Commercial Zones, no ground-mounted structure shall exceed a height of 2 metres and a ground coverage of 6 square metres.* *(iv) Within Rural, Industrial and Mixed Use Zones, no ground-mounted structure shall exceed a height of 3 metres or a ground coverage of 10 square metres.* *(b) Any other utilities that do not comply with any part of paragraph (8)(a) above are a*	As the bridge will have an attached water pipe, the bridge could be considered as a support structure. The mast height of the bridge is not compliant with the height restrictions within the Rural Zone, as described above.

	restricted discretionary activity. The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.	

Therefore, the resource consent required under the Gore District Plan is for a land use consent for the activities as described above as a **discretionary activity** overall.

4.1.2 Regional Plans

Environment Southland currently has two Regional Plans relating to bridges and other activities in stream beds:

- The *Regional Water Plan* (RWP), which became operative in 2010, and
- The *Proposed Southland Water and Land Plan* (WLP), the decisions version of which was released in April 2018. The WLP will replace the RWP once all appeals have been resolved.

Under the Resource Management Act, rules in a regional plan relating to water, air and soil have immediate legal effect once they have been notified, while the operative plan rules also still have effect. Because the WLP is very close to becoming fully operative, the following discussion of plan rules focusses on the WLP rules. In practice this is somewhat academic as none of the relevant rules have changed substantially and the status of each element of the proposal is the same under both plans. The proposed development involves a range of activities which are regulated in the WLP and RWP, as summarised in Table 8.

Table 8: Summary of activity status under Environment Southland Plans

Activity	Status under RWP	Status under WLP	Comments
ACTIVITIES TO OCCUR DURING CONSTRUCTION PERIOD ONLY			
Vehicle and machinery operations in a stream bed	**Restricted discretionary activity** under Rule 45(b)	**Restricted discretionary activity** under Rule 77(b)	For operation of machinery within the bed of the river.
ONGOING/PERMANENT ACTIVITIES			
Construction of a bridge	**Restricted discretionary activity** under Rule 26(b)	**Restricted discretionary activity** under Rule 57(b)	For the new bridge.
Erosion control structures	**Discretionary activity** under Rule 30(c)	**Discretionary activity** under Rule 61(c)	For rocks to be placed for the crane platforms and reused for the embankment at the western end of the bridge.

4.1.2.1 Permitted activities compliance

Table 9 sets out the general conditions that apply to many of the relevant rules under the WLP, and also the rules relating to the permitted activities involved in the works.

Table 9: General conditions and permitted activities under the WLP

Rules under the WLP	Provision	Assessment
Rule 55A – General conditions for activities in river and lake beds	*(a) Fish passage is not impeded as a result of the activity; and* *(b) There is no disturbance of roosting and nesting areas of the black fronted tern, black billed gull, banded dotterel or black fronted dotterel; and* *(c) Any activity in the water is kept to a minimum to avoid, as much as possible, discoloration of the water in the water bodies listed in the chapeau of the rule, including from any temporary sediment release; and* *(d) Any bed disturbance is kept to the minimum necessary to undertake the activity and the bed is returned as near as practicable to its original channel shape, area, depth, and gradient on completion of the activity (with the exception of revegetation); and* *(e) No fuel storage or machinery refuelling occurs on any area of the bed; and* *(f) No contaminants, other than sediment released from the bed, are discharged to water as a result of use of the structure unless allowed by a relevant permitted activity rule in this Plan or a resource consent; and* *(g) Before any equipment, machinery, or operating plant is moved to a new activity site it is effectively cleaned to prevent the spread of "pests" or "unwanted organisms" as defined by the Biosecurity Act 1993; and* *(h) All equipment, machinery, operating plant and debris associated with the*	There will be little, if any, impediment to fish passage as a result of the proposed works. All activities will be managed to avoid disturbance of any nesting areas of the birds referred to in condition (b). Bed disturbance and work in the water will be kept to a minimum to minimise sediment generation. No contaminants (other than potentially sediment) will be released by the use of the structure. Equipment will be cleaned as required before being removed from the site at the completion of the works, and the site will be left tidy. Neither the works, nor the resulting bridge are expected to result in significant erosion or deposition. The structure will be maintained in good repair. The area near the bridge is not whitebait habitat. The only condition with which the project does not comply is (e), as machinery will need refuelling within the riverbanks (not within the wetted bed) of the Mataura River. This will be managed as discussed in above. This general condition applies to a large number of the relevant rules, and therefore several activities which would otherwise be permitted require consent.

Rules under the WLP	Provision	Assessment
	structure or bed disturbance activity is removed from the site on completion of the activity; and *(i) The structure or bed disturbance activity does not cause significant erosion of, or deposition on, the surrounding bed or banks; and* *(j) Any build-up of debris against the structure which may adversely affect flood risk, drainage capacity or bed or bank stability is removed as soon as practicable; and* *(k) The structure is maintained in a state of good repair; and* *(l) From the beginning of November until the end of May, there is no disturbance of whitebait spawning habitat.*	
Rule 58(a) – cables, wires and pipes	*(a) The placement, erection or reconstruction of any cable, wire, pipe or pipeline (including any intake or discharge pipe or temporary gauging system) and associated safety signs or markers in, on, under or over the bed of a lake, river, modified watercourse or wetland and any associated bed disturbance and discharge resulting from the carrying out of the activity is a permitted activity provided the following conditions are met:* *(ia) the general conditions set out in Rule 55A; and* *(i) the structure does not have any support structures (for example, stays or piles) in the bed (other than if it is attached to a pre-existing structure, such as a bridge); and* *(ii) the structure does not cause a hazard to boating/navigation, or aircraft/aviation; and* *(iii) where the structure crosses over the bed, and is not a temporary structure, it does not impede the flow of water within the river channel; and* *(iv) where the structure crosses over the bed, and is designed to carry contaminants, it complies with the relevant construction standards imposed*	The bridge design incorporates two 350mm diameter water main pipes. These will not be an intake or discharge, and will not carry contaminants. These will be connected to the bridge and has no other support structures, and therefore poses no navigation hazard nor any impediment to flow. There are no known culturally significant sites near the bridge. The issues noted above for condition 55A(e) are not relevant to the installation of the pipe to the bridge, once completed, and therefore all conditions of Rule 55A are complied with in relation to the pipe installation.

Rules under the WLP	Provision	Assessment
	by a territorial authority under the Building Act; and *(v) where the structure crosses under the bed it is completely buried and remains buried, with the depth of burial being indicated on markers on either bank; and* *(vi) where the structure is an intake pipe, it has a screening device to prevent fish from entering the pipe in accordance with Appendix R; and* *(vii) where the structure is a discharge pipe, any discharge from the pipe does not cause significant erosion of, or deposition on, the surrounding bed or banks; and* *(viii) the structure is not within any mātaitai, nohoanga, or taiāpure.*	
Rule 15(a) - Discharge of stormwater	*(a) The discharge of stormwater onto or into land in circumstances where contaminants may enter water, or into a lake, river, artificial watercourse, modified watercourse or wetland, is a permitted activity provided the following conditions are met:* *(i) the discharge is not from a reticulated system; and* *(ii) the discharge does not originate from industrial or trade premises where hazardous substances are stored or used unless: … and* *(iii) the discharge does not contain any sewage, contaminants from on-site wastewater systems and mobile toilets, or agricultural effluent; and* *(iv) for discharges to a lake, river, artificial watercourse, modified watercourse or wetland, the discharge does not result in:* *(1) the production of any conspicuous oil or grease films, scums, foams or floatable or suspended materials; or* *(2) the rendering of freshwater unsuitable for the consumption by farm animals; or* *(3) significant adverse effects to aquatic life; or*	The stormwater discharge from the bridge will not use a reticulated system and will not be sourced from any industrial or trade premises. It will not contain any sewage, agricultural effluent etc, nor result in any of the effects described in (iv). The discharge will be from the surface of the bridge and will not cause any flooding, erosion or land instability. The conditions of Rule 11 of the RWP are essentially identical to these.

Rules under the WLP	Provision	Assessment
	(4) any conspicuous change in the colour or visual clarity of the receiving waters at the downstream edge of the reasonable mixing zone; and *(v) except for the discharge of stormwater from a roof, road or vehicle parking area, the discharge is not into water within natural state waters; and* *(vi) for discharges to land, the discharge does not cause flooding, erosion, or land instability to any other person's property.*	
Rule 57 – Bridges	*(c) The use of any bridge in, on or over the bed of a lake, river, modified watercourse or wetland is a permitted activity provided the following conditions are met:* *(ai) general conditions (a), (f), (i), (j) and (k) set out in Rule 55A; and* *(i) the structure is lawfully established.*	The ongoing use of the bridge will comply with all of these conditions.

4.1.2.2 Permitted baseline of non-permitted activities

Table 10 shows the permitted activities which the proposal is unable to comply with, and therefore in relation to which consent is required. In summary, consent is required for these works due to the inability for cranes and other equipment to refuel outside the riverbanks during works on the eastern side, because the proposed bridge has temporary piles and a small portion of the crane platform within the wetted bed.

Table 10: Summary of the permitted baseline for activities requiring consent

Rules under the WLP	Provision	Assessment
Rule 77(a) – vehicles and machinery	*(a) The entry into or passage across the bed of a lake, river or modified watercourse by any wheeled or tracked vehicle or machine and any associated bed disturbance and discharge resulting from carrying out the activity is a permitted activity provided the following conditions are met:* *(ai) the general conditions set out in Rule 55A other than conditions (a), (i), (j) and (k) of that Rule; and* *(i) there is no alteration to the original profile of the bed; and* *(ii) the activity is necessary for the purposes of crossing over the bed, or carrying out another permitted or consented activity within the bed.*	Vehicle and machinery access to the bed is necessary to carry out the other activities covered by this application. However, the bed profile will be altered by the formation of the causeway to allow access on the western side, and the general condition regarding refuelling cannot be complied with. **Note:** The proposed access to the site may not require a full causeway to be constructed. Temporary access may instead be gained utilising an existing track (a paper road) on the adjacent property, north of the proposed bridge location.
Rule 57(a) – Bridges	*(a) The placement, erection or reconstruction of any bridge in, on or over the bed of a lake, river, modified watercourse or wetland and any associated bed disturbance and discharge resulting from the carrying out of the activity is a permitted activity provided the following conditions are met:* *(ia) the general conditions set out in Rule 55A; and* *(i) there are no support structures (for example, piles) in the bed; and* *(ii) the bridge and its abutments do not increase the risk of flooding to surrounding land; and*	The proposal does not comply with general condition 55A(e), there are to be temporary piles constructed in the bed, and the edge of one crane platform in the wetted bed that will be removed in the later stages of the project. Otherwise, the permitted activity conditions are complied with.

Rules under the WLP	Provision	Assessment
	(iii) the bridge and its bank abutments do not impede the flow of water within the river channel; and *(iv) the structure is not within any mātaitai, nohoanga, or taiāpure.*	
Rule 61(a) – erosion and sediment control	*(a) Notwithstanding any other rule in this Plan, the placement or reconstruction of rock rip rap, gabion baskets or anchored or layered trees in, on, under or over the bed of a lake, river or modified watercourse and any associated bed disturbance and discharge resulting from the carrying out of the activity, is a permitted activity provided the following conditions are met:* *(ai) the general conditions set out in Rule 55A; and* *(i) the work is not in a lake bed, national park, reserve or land in respect of which there is a covenant under the Conservation Act 1987, Queen Elizabeth the Second Trust Act 1977 or Reserves Act 1977; and* *(ii) any anchored or layered trees are anchored to the bed or banks so that they will not wash away in a 2% Annual Exceedance Probability flood event; and* *(iii) there is no planting of pest plant species as identified in the Regional Pest Management Strategy for Southland 2013 or any replacement plan prepared under the Biosecurity Act, or Biosecurity NZ Register of Unwanted Organisms, in circumstances where the planting of those pest plant species is restricted under the Biosecurity Act; and* *(iv) the structure is not within any mātaitai, nohoanga, or taiāpure.*	The work is not in a lake bed, national park, or covenanted area, nor any culturally significant site. There will be no anchored trees nor planting of pest species. The only matters of non-compliance are the in-bed fenced compound which will be situated on the edge of a reserve, and the refuelling within the riverbanks, one of the general conditions.

4.1.2.3 Consents required

Table 11 summarises the WLP rules under which consent is sought. A brief comment on the relevant WLP rule in comparison with the equivalent RWP rule is also provided.

Table 11: RWP Rules relating to the consents required

Rules under the WLP	Provision	Comments
Rule 57(b) – Bridges	*The placement, erection or reconstruction of any bridge in, on or over the bed of a lake, river, modified watercourse or wetland and any associated bed disturbance and discharge resulting from the carrying out of the activity that does not meet one or more of the conditions of Rule 57(a) is a restricted discretionary activity.* *The Southland Regional Council will restrict its discretion to the following matters:* *1. the design and location of the bridge;* *2. effects on flood risk, river morphology and dynamics (including erosion and deposition), aquatic and riverine ecosystems and habitats, the spiritual and cultural values and beliefs of the tangata whenua, taonga species, natural character and amenity values, outstanding natural features, public access and navigational safety;* *3. any conditions in Rule 57(a) that cannot be met.*	The wording of and matters for discretion under this Rule and RWP Rule 26(b) are virtually unchanged.
Rule 61(c) – erosion control	*The placement, erection or reconstruction of rock rip rap, gabion baskets or anchored or layered trees or pre-formed concrete in, on, under or over the bed of a lake, river or modified watercourse and any associated bed disturbance and discharge resulting from the carrying out of the activity, that does not that meet one or more of the conditions listed in Rule 61(a) or Rule 61(b) is a discretionary activity.*	There are no substantial changes between the wording of this Rule and that of RWP Rule 30(c).
Rule 77(b) – vehicles and machinery	*(b) The entry into or passage across the bed of a lake, river or modified watercourse by any wheeled or tracked vehicle or machine, and any associated bed disturbance and discharge resulting from the carrying out of the activity, that does not meet one or more of the conditions of Rule 77(a) is a restricted discretionary activity.* *The Southland Regional Council will restrict its discretion to the following matters:* *1. the location, type of vehicle or machine, and frequency and duration of the activity;*	The wording and matters for discretion under this rule are virtually identical to those under

	2. any effects on water quality, river morphology and dynamics (including erosion or deposition), taonga species, and aquatic and riverine ecosystems and habitat; *3. the conditions in Rule 77(a) that cannot be met.*	RWP Rule 45(b).

Therefore, the resource consent applications required are:

- A land use consent for the temporary activities described above.
- A land use consent for the continuing activities as described above.

Overall, the proposal is a **discretionary activity**.

5. ASSESSMENT OF ENVIRONMENTAL EFFECTS

In addition to the application being made in the prescribed forms and manner, Section 88 of the RMA also requires that every application for consent includes an assessment of the effects of the activity on the environment as set-out in Schedule 4 of the RMA.

The main areas of non-compliance with the permitted activity rules are the fact that some refuelling will occur in the stream bed, the presence of temporary piles and crane platform in the riverbed, and the height of the mast of the bridge. These specific matters of non-compliance with the respective permitted activity rules of the Gore District Council and Environment Southland are not considered to have any additional significant environmental effects, other than those described below.

5.1 Assessment of Alternatives

Under Section (6)(1) of Schedule 4 of the RMA an assessment of any possible alternative locations or methods to undertake the activity is only required if the activity will result in any significant adverse effects on the environment. However, in order to satisfy the concerns raised by nearby residents regarding the proposal, the below information has been included.

Attached in Appendix E is a brochure that has been prepared by Gore District Council to inform their consultation with the wider Gore residents for this proposal. It outlines the components of the water treatment plant upgrades, but also the alternative pipeline options that were assessed. Also attached in Appendix F is the business case put forward to Council around the available options for the implementing the Southland Cycling Strategy by providing a shared path across the Matāura River. The recommended location in this report is the proposed bridge site subject to this consent.

The costs of the proposed bridge option for which consent is being sought is $3.7 million, of which the Council will be responsible for $1.6 million due to the funding partnership with NZTA as this will provide significant improvements to the local walking and cycling network. This makes the proposed option the most cost effective for the Council and residents.

The alternative options are set out below, along with reasons they were discounted:

- Attaching the new pipelines to the existing traffic bridge
    - Cost - $4.5 million
    - Did not qualify for NZTA funding partnership
    - The age of the bridge
    - The bridge is not a Council-owned structure
- Building a standalone arch network pipe bridge on the shortest route between the East Gore water plan and Jacobstown

    - Cost - $4 million
    - As a standalone bridge, it did not qualify for NZTA funding partnership
    - The bridge's location was at the widest part of the Matāura River. This issue, combined with the significant earthworks required to raise the bridge level for flood protection, contributed to the high cost.
- Build an arch network pipe footbridge at the preferred location
    - Cost - $3.4 million
    - Delivers little additional value to the project
    - The arch network bridge was comparable in cost to the more aesthetic cable-stay structure
    - There were concerns about significant cost increases due to hydraulic and geotechnical inputs
    - The cable-stay design is considered to be less visually obtrusive than the alternative, more conventional arch design bridge. The Matāura River is an important part of the District, both in terms of the fishing and its aesthetics. This was a factor in the Council's decision to go with the more open style of the cable-stay bridge, as opposed to a more solid structure (refer to section 4.2 of the Landscape Assessment in Appendix F for more discussion on this)
- Placing the pipelines under the Matāura Riverbed
    - Not costed or taken any further as placing pipelines under the river is fraught with too many unknown factors and costs
    - The Council was presented with a geotechnical report by a specialist contractor, which set out its assessment of the geological challenges of drilling under the river. We also know that Mataura Valley Milk had a geotechnical report done before drilling their own pipes under the river. The lesson learned from others was that what is contained in a report and the reality can be significantly different. That could have a considerable impact on cost. The most recent local example of cost increases over the budgeted estimates was a clear indication that the Council should steer well away from drilling under the river.
    - The contractors couldn't provide the Council with a fixed cost to drill under the river.

The goals of the bridge project are to construct a cost effective, functional, low maintenance bridge that will carry new water pipelines.

The proposed bridge location is one of narrowest segments of the Matāura River through Gore. Relocation of the bridge upstream or downstream may require the purchase of private property and realignment of the road and would therefore cause additional disruption to the community and the environment for no obvious benefit. Prior to this proposal being put forward, Council have undertaken considerable stakeholder engagement with NZTA and key community members to determine a pedestrian movement strategy for the Gore township. The proposed bridge location has been determined by this process. Additionally, building a bridge in a different location increases the risk that the new bridge would adversely affect the existing river

flow regime or flooding risk in the wider catchment in unexpected ways.

The proposed bridge design is considered to represent the best practicable option to address the goals of the project, while developing the proposed walking and cycling network and utilising the natural narrowing of the river channel that occurs at the bridge site.

The proposed layout and construction sequence are considered to result in a practical minimum of disturbance to the riverbed, flow patterns and local wildlife.

5.2 Positive effects

Providing a way for new water pipes to cross the Matāura River will enable implementation of the Gore Water Treatment Plant Upgrade. This will provide a safe and reliable drinking water supply to urban residents in the Gore District. The Treatment Plant Upgrade will enable the Council to guarantee that the water coming out of the taps in Gore is free from contaminants and meets the New Zealand Drinking Water Standards (NZDWS).

In addition, at a community forum several years ago, a recurring theme was, Gore was a town that has turned its back on its river, and this needed to be turned around, alongside stimulating more activity around the Matāura River. Building a bridge that not only carries critical infrastructure, but also creates a cycling/walking link between East Gore and the centre of town, and the high schools in the west, will also provide several benefits and enable implementation of the Southland Cycle Strategy (2016-26).

These are:

- Bringing the New Zealand Transport Agency on-board as a 55% co-funder;
- Ensuring a safe walking and cycling link, which enhances active transport modes benefits especially for the students and elderly people who need to commute by other means than vehicles;
- Providing better connectivity between visitor attractions (e.g. the Maruawai heritage precinct and East Gore Arts Centre);
- Improving the attractiveness of the District to tourists/visitors as well as locals through the choice of a unique and aesthetically pleasing bridge design that adds value to the Rural City Living brand; and
- Creating a closer link for the community to the Matāura River and connection/access to other cycle tracks, fishing spots, swimming holes and heritage sites.

5.3 Hydrological effects

The effects of the new bridge design on the hydrology of the wider catchment (including flood risk) are likely

to be less than minor. Broadly speaking, three categories of effects should be considered:

- Long-term impacts on flood risk to nearby properties due to the new bridge geometry;
- Short-term impacts on flood risk to nearby properties due to the temporary works; and
- Other effects, such as scour and erosion.

Historical photos of previous floods show that the Matāura River can flood from stopbank to stopbank in high flow events, as shown in Figure 7. The western end of the bridge would be completely surrounded by water in any flood that breaches the main channel.

Figure 7: Historic flood photos of bridge location (approximate bridge located shown by red line) (Source: Environment Southland, 2019, Landpro, 2020 and ODT, 2020)

5.3.1 Long-term impacts on flood risk

As shown in Table 12, flood modelling results detailed in the *Geotechnical and Hydraulic Inputs* report (Appendix D) indicates that the construction of the bridge will cause a virtually insignificant increase (<1%) on water levels during potential flood events. Long-term impacts on flood risk to nearby properties due to the new bridge geometry are expected to be less than minor.

The bridge has been designed to a minimum 600mm above a 1 in 50 year flood event (plus allowance for future climate change) at the eastern stopbank. This is a very localised pinch-point to enable the bridge to land as closely as possible to existing stop bank levels. The bridge has significantly improved clearances of 2250mm and 12mm at midspan and the west embankment respectively. It is also noted that the "1 in 50 year + climate change" event is larger than the recent 2020 event (which was the largest on record). The minimum clearance of 600mm shown on the drawings would increase to 1500mm when considered for the 2020 event (and more than 3m and 2m at midspan and west embankment respectively).

Table 2.1 of the NZTA Bridge Manual provides recommendations for the AEP for design events. The proposed bridge is IL2 (Footbridge) per NZS1170.0, which corresponds to 2% AEP (SLS2 – sets bridge soffit) and 0.2% AEP (ULS - hydraulic/debris forces applied to the bridge). The SLS2 2% AEP flow peaks at 2,612m^3/s (includes 15% for climate change) which compares to 2,399m^3/s for the 2020 event. The 1% AEP without climate change is 2,737m^3/s. Section 4.2 of the *Geotechnical and Hydraulic Inputs* report provides discussion on the existing level of flood protection and implications on floodbank raising, noting that the Bridge Manual permits the bridge to be raised in future if required.

Table 12: Summary of results from Hydraulic Model (by Riley Consultants)

Event	Flow (m^3/s)	Maximum Flood level (RL m)		Comments
		Pre	Post	
1/50 without climate change	2,280	75.40	-	• Similar magnitude flood to Oct 1978 flood • Velocities up to 5.5m/s in main channel, 1.5-2.0m/s on floodplain (at bridge, less upstream) • Froude number about 0.7 in main channel and 0.4 on floodplain
SLS2 1/50	2,622	75.70	75.80	• Similar magnitude flood to Feb 2020 flood • Velocities up to 5.8 m/s in main channel, 2.0-2.5m/s on floodplain (at bridge, less upstream) • Froude number about 0.7 in main channel, 0.4 on floodplain • A minimum of 600mm above the 1/50 year event plus climate change has been adopted. This is 1500mm above the 2020 flood level.
ULS 1/500	4,802	77.05[1]	77.20[1]	• Velocities up to 6.8 m/s in main channel, 2.0-4.5m/s on floodplain (at bridge, less upstream) • Overtopping of stopbanks on both sides of between 0.3 to 0.5m predicted, likely to cause failure
1 Overtopping of stopbanks predicted				

5.3.2 Short-term impacts on flood risk

Likewise, the short-term impacts on flood risk are expected to be virtually insignificant. Flood monitoring and evacuation procedures will be used to ensure the flood path can be evacuated within 20 hours of a predicted highwater event. Weekly and daily monitoring of weather forecasts and rain radar will be undertaken, as well as daily monitoring of flow data of the Matāura River.

All machinery will be required to park in a compound elevated from the flood plain. All smaller machinery will be removed from the flood plain daily and stored in this compound as well. All machinery is mobile and can be removed out of the floodway and onto the stopbanks within half a day. Staff will always be available locally during the working week, and one person will be available on standby and within two hours of the site during weekends when staff are not onsite.

The temporary piles will be designed to withstand flood loading or removed during the 20 hour flood plain

evacuation timeframe.

Overall, the requirement to evacuate the flood plain prior to a large flood event, means that the short-term impacts on flood risk to nearby properties due to the temporary works is expected to be insignificant.

5.3.3 Scour and erosion

The foundation piles of the bridge will be embedded several metres below ground level into competent rock and are not considered to be at risk from scour. Both bridge abutments require protection to minimise erosion-related scour in future flood events. As a countermeasure, the following has been adopted for the bridge design:

1. Aligning the approach earthworks with the general flow direction;
2. Profiling/shaping the embankment into a teardrop shape; and
3. Providing an erosion-resistant surface for the inundated area.

Appropriately sized riprap will be used for the bridge abutments (refer Drawings S106 and S115 Rev D in Appendix A for design details of riprap).

Overall, based on the results of the hydraulic modelling undertaken by Rileys and detailed design, we consider that effects of the new bridge design and the temporary works on river morphology and the flood/erosion risk to surrounding land will be less than minor.

5.4 Sediment generation

While erosion and sediment are naturally occurring processes, construction activities can result in increased erosion and sedimentation where soil surfaces are exposed to rainfall or wind.

As detailed in Section 2.3, the construction methodology will reduce sediment generation. To reduce sediment runoff, the project aims to minimise disturbance to the waterway as much as possible, using best practice erosion and sediment control techniques. A formal Erosion and Sediment Control Plan will be provided as part of the Construction Management Plan and submitted to the consent authority at least 10 working days prior to the works commencing for approval. This will include the measures detailed below as a minimum.

Silt fences will be set up within 1m of the edge of the Matāura River and will extend 20m either side of the work area. Additional secondary protection will be installed in areas of high earthworks and groundwater controls and settlement ponds will be utilised where possible. To minimise sediment loss, stockpiles will be set back at least 5m from the edge of the river. Perimeter controls will be used to prevent clean water from crossing exposed areas, any off-site runoff will be diverted, and disturbed areas will be promptly stabilised using temporary and permanent techniques as appropriate.

Regular inspections and audits of erosion and sediment control measures will be undertaken, as well as

regular planning meetings and updating of plans to suit changing site conditions. Weather forecasts will be monitored daily to ensure works are undertaken during fine weather and suitable river conditions. In addition, the plan will be allowed to evolve in response to experience gained on site or due to new technologies.

The small scale of soil disturbance on the banks and the erosion and sediment control measures proposed will reduce the sediment load from activities on the bank. Nonetheless, some sediment release will be inevitable. This is expected to happen primarily during the earthworks at the beginning and end of the project, and during installation of the temporary piles and crane platforms.

Based on the water quality data available, any sediment which is generated by the works will be released into a river which already has a significant sediment load, and with relatively high flows. We therefore expect that sediment concentrations as a result of the work will not significantly exceed typical background levels. The proposed visual monitoring at the downstream end of the reasonable mixing zone will ensure that any exceptions to this are noted, and additional mitigation measures can then be put in place as appropriate.

Taking all of the above into consideration, we consider that the environmental effects of sediment released during the works will be no more than minor.

5.5 Effects on aquatic life

In addition to sediment generation, fish and other aquatic life could be affected by the release of cement, fuel or other contaminants into water, or burial during construction. The risk of a discharge of contaminants other than sediment to the river is considered to be very low. Best practice will be used to determine fuelling location, waste disposal, concrete placement wash, and earthworks.

Cement will be poured within pre-driven steel casings for the permanent piles which are located outside the riverbed but on the banks, and for the abutments themselves. Cement will also be poured for shear keys during construction of the bridge deck, and for the anchor deadmen. Similarly, refuelling will be carefully controlled to minimise the risk of any fuel being released to water.

All plant and equipment will be well maintained, and hoses checked daily for leaks. Spill kits will be maintained on site and a register of spills kept. All plant will be washed prior to arrival on site and kept clear of the river.

Front-loading skip bins with a fold down lid will be used on site during construction, with rubbish to be placed in the skip bin, with the lid being securely fixed at the end of each day. All building materials will be tidied away in the storage area.

The potential burial of small numbers of fish during construction of the western crane platform will be minimised by disturbing the area with noise, vibration, and potentially electrofishing before construction if required. In any case, the area to be covered by the crane platform and temporary piles of the bridge is insignificant in comparison to the Matāura riverbed, and fish are likely to themselves actively avoid this small

area of disturbance. Should there be any, fish losses from this activity are expected to be minimal. The new bridge will have no effects on fish passage as there are no permanent in water components.

Overall the effects of the works on aquatic life are considered to be no more than minor, because the effects that will occur will be short-term, limited in scale and size, and there will be no long-term effects.

5.6 Effects on terrestrial ecology

River 'islands' are potentially used by a number of species of rare native nesting birds. No nesting birds were observed within 100m upstream or downstream of the construction location during a recent site visit.

In the event that nesting birds are observed within 100m, any effects on these birds will be mitigated by carrying out monitoring by a suitably qualified person to check for the presence of the relevant species, and if nests are present, establishing an appropriate separation distance (approximately 50 m, subject to consultation with DOC) around these and keeping activities outside this area.

With these measures in place, effects on terrestrial ecology are considered to be no more than minor.

5.7 Noise

There is the potential for increased noise associated with the users of the proposed bridge structure. Some noise will be inevitable during bridge construction, with several noise and vibration generating machines operating on site. The major noise will be generated by hammers for driving pile sections, and earthmoving equipment such as excavators.

The true right side of the proposed bridge is relatively insensitive to noise, with the nearest buildings being approximately 200m away in the industrial area of Gore. Noisy activities such as machinery operations are a common and accepted part of operations of the industrial area and the surrounding farmland.

Residential properties are in closer proximity along the true left banks where noise will be minimised as far as practicable through the use of silent earthmoving plant and compressors. Noise will be monitored at the site boundary and at an equivalent distance to the nearest house to ensure no nuisance is being caused. These readings will be taken as part of the on-site auditing process. Regular contact with landowners will be carried out to ensure noise levels are not causing undue stress.

The noise making component of this proposal will be temporary in that once construction is completed, machinery noise will cease. The environmental effects of construction noise that will be generated by the activity on all receptors are considered to be minor.

Long-term noise concerns from the cables were raised during consultation with neighbouring residents. Noise effects are a result of wind vibrations on the cables. The cables have been designed for all vibration checks normally applicable for stay cables (including galloping effects, vortex induced oscillations, and rain

induced vibration). This work has also been independently peer reviewed and found to be satisfactory.

All design is in accordance with the internationally recognised design standard: Recommendations for Stay Cable Design, Testing, and Installation (Post Tensioning Institute, 2012). If noise is found to be an issue post-construction, dampers could be added to specific cables to change the natural frequency and/or modes of vibration (but this is not currently deemed necessary).

As a result of the appropriate design, the long-term noise effects of the bridge design are considered to be negligible.

5.8 Dust

Dust can affect human health, livestock, and plant life on the site and in the adjacent environment. Because the works involve limited soil disturbance, relatively little dust generation is expected.

The highest risk of dust generation is associated with earthworks. It is very unlikely that dust will be generated to an extent that would result in a discharge to private property, and if this did occur it would be to farmland or to the floodbank, both with a relatively low sensitivity to dust, and likely be no greater than the effects of a gravel road. Any effects of dust on wildlife will be significantly mitigated by the separation distance discussed in Section 5.5.

Dust will be regularly monitored during the course of the works. If dust is found to be developing from the works, a water cart will be used to damp down regularly to alleviate dust nuisance. The site supervisor will be responsible for monitoring this activity and ensuring the water cart is available.

Dust that will be generated by the works is therefore considered to have a negligible effect on the environment.

5.9 Public access and amenity value

The public currently have access to the Matāura River in the area surrounding the bridge. The primary use of this area is generally for public recreation with many people walking dogs or running along the banks of the river. Access to these areas will be temporarily restricted for a few months during the works (as illustrated by the location of fenced compound areas in Appendix C), but enhanced after the bridge is completed. The proposed bridge will greatly enhance pedestrian and cycle access within the surrounding area and specifically between the eastern and western sides of Gore. This would be the second crossing of the Matāura River within Gore, as an alternative to the State Highway One bridge.

Effects on amenity values are difficult to ascertain specifically as they are very subjective to the user of the area or nearby property owner. In order to appropriately assess the potential effects on visual and amenity values from the proposed bridge, an independent Landscape and Visual Assessment has been conducted by Align Limited. This is provided in Appendix G.

Align concluded that the amenity value of the area surrounding the bridge may have moderate to high effects overall. Visual impacts to amenity will mostly affect those located nearest to the bridge (specifically to the south and southeast), who would otherwise have an unobscured view of a wider rural landscape. It is notable that these will also be the same people who will likely have the most benefit from increased pedestrian and cycle access across the river.

Planting of vegetation, and design decisions on the lighting and paint used on the bridge, will be able to mitigate the visual impacts between the bridge and the surrounding area from the majority of viewpoints. However, the height of the mast will be difficult to screen, particularly for those located along the eastern embankment and as a result, visual amenity effects on those closest neighbours will likely be more than minor. These mitigation measures are proposed to be included as conditions of consent.

Similarly, noise and dust may affect amenity values for those nearest to the bridge, but these will be mitigated as discussed above.

As such, based on the independent expert landscape and visual assessment, we consider that any limitations on public access or wider catchment amenity value will largely be short term and minor overall, with the exception of more than minor visual amenity effects on those currently residing close to the proposed bridge.

5.10 Navigational safety

The bridge has been designed with a 1200mm freeboard from the 1 in 50 year flood level, with over 4 m in average flow conditions, and smaller boats will be able to pass beneath the bridge along the Matāura River. This access may be limited during periods of high flow. Having no piles located within the wetted bed (with the exception being the temporary piles on the water edges, and the edge of the western crane platform) also avoids any structures that may make the river more difficult to navigate for any recreational or other boats travelling along it.

Because there will be no reduction in navigability of the river, there will be no adverse effects on any existing consent holders who are authorised to use the river for their consented purposes (for example, the recent river rafting consent).

The constructed bridge height is 39.1m at the peak of the mast, well below the 60m height restriction as specified in Rule 77.5 of the Civil Aviation Authority's (CAA) Civil Aviation Rules. While the proposed activity is below their height restrictions, the CAA will be contacted to confirm that they accept the proposal.

5.11 Spiritual and cultural values

Rivers were traditionally transport routes in the past, so there is some risk that there may be an artefact in the area of works. As discussed in Section 3.2, the Matāura River catchment is of significance to local iwi generally and is a statutory acknowledgement area, and there are confirmed sites of cultural significance

(Maori ovens) in the immediate downstream vicinity of the proposed Longford Bridge. While the proposed works are not anticipated to disturb or have any effect on these sites, it is proposed to ensure that a suitably qualified archaeologist is present on site during the excavation phase to ensure that any currently known, and potentially as yet uncovered cultural sites are identified. A condition to this effect is proposed along with an accidental discovery protocol.

Potential effects of the work on water quality and ecology, which are also important to iwi, are discussed in Sections 3.4 and 3.5. A detailed assessment of the effects against tangata whenua values identified in the local iwi management plans is included in Section 7.2.4.

Communication between the Council and Hokonui Rūnanga on this proposal to confirm the above assessment is ongoing at the time of lodgement of this application.

5.12 Outstanding natural features

We are aware of no outstanding natural features in the vicinity of the works that may be affected, aside from the Matāura River itself. Effects on the water quality and ecology of the Matāura River are discussed in Sections 5.4 and 5.5 and 3.5.

5.13 Mitigation proposed

The following mitigation measures are proposed to be included as conditions of consent.

1. The location and design of the bridge authorised under this consent shall be generally in accordance with the plans in Appendix A.
2. The total dimensions of the mast shall not exceed 916mm diameter and 40m height.
3. The only works authorised in the riverbed shall be the construction of a temporary crane platform and temporary steel piles during construction and placement of rock riprap around the bridge abutments.
4. Temporary piles shall be removed from the bed completely upon completion of the works.
5. Construction shall be completed within the timeframe of 10 months from site establishment.
6. Any lighting installed shall be directed away from residential properties.
7. Paint treatment of the mast shall be undertaken in consultation with a suitably qualified landscape architect to ensure that recessive colours are used. This may include patterns.
8. A planting plan identifying suitable species and location of those plants in order to minimise the visibility of the bridge mast shall be prepared in consultation with a suitably qualified landscape architect and provided to the Consent Authority at least 10 days prior to construction commencing.
9. The consent holder shall ensure that:
   a) contaminants, other than sediment, but including cement and oil are prevented from entering the waterway during the construction works;

b) all reasonable steps shall be taken to minimise the release of sediment to water;

c) fish passage is not impeded as a result of the construction works;

d) all construction equipment, machinery, plant, and debris are removed from the site on completion of the works;

e) silt disturbance and instream works are kept to a minimum;

f) no washing of equipment occurs in the stream/river;

g) any stream banks disturbed or eroded during the construction works are to be restored and resown with pasture and/or native species upon completion of the works.

10. The consent holder shall notify the public through local papers one week prior to the commencement of any works and erect onsite signage in order to ensure safe navigation under and past the bridge during construction.
11. There shall be no disturbance of the roosting and nesting areas of the black fronted tern, black billed gull, and banded and black fronted dotterel, or the feeding areas of the banded and black fronted dotterel, as a result of the exercise of this consent.
12. In the event of any contamination of the watercourse the consent holder shall remove the contaminants immediately from the site and notify, without undue delay, the Consent Authority.
13. The consent holder shall take all reasonable precautions to minimise the spread of pest plants and aquatic weeds. In particular, the consent holder shall:

    a) remove any vegetation caught on the machinery;

    b) where necessary, clear vegetation from the site before gravel is extracted;

    c) avoid working in areas where aquatic weeds such as Lagarosiphon major are known to be present (for information, contact Environment Southland); and

    d) to avoid the spread of the didymosphenia geminata or any other pest plant, do not use machinery in the berm or bed of the river that has been used in any area where the pest plant(s) are known to be present in the previous 20 working days, unless it has been thoroughly cleansed.
14. If an event (such as contamination to water from a fuel or sediment discharge incident) occurs that may have significant adverse effect on water quality, particularly at the abstraction point of a registered drinking-water supply, the consent holder shall notify, as soon as reasonably practicable, the following:

    a) Environment Southland (ph 03 211 5115 or 03 211 5225 after hours); and

    b) Alliance Mataura Plant (ph 03 203 6500).
15. A suitably qualified archaeologist shall be present onsite during earthworks and supervise earthworks to ensure no existing or newly discovered site of cultural importance is disturbed.
16. In the event of a discovery, or suspected discovery, of a site of cultural importance (Waahi Taonga/Tapu) during the construction, the consent holder shall immediately cease operations in that location and inform the local iwi authority (Te Ao Marama Inc, phone 03 931 1242). Operations may recommence at a time as agreed upon in writing with the Consent Authority. The discovery of Koiwi (human skeletal remains) or Taonga or artefact material (e.g. pounamu/greenstone) would indicate

a site of cultural importance. Appendix A to this consent outlines the process that is to be followed in the event of such a discovery.

17. A Construction Management Plan shall be prepared by the Contractor and submitted to the Consent Authority for approval at least 10 working days prior to commencement of works. This shall include, but is not limited to:
    - Erosion and sediment control measures, including dust mitigation
    - Noise & vibration control
    - Communication with neighbouring residents prior to works and provision of contact details of site foreman
    - Establishment of a complaints register
    - Flood evacuation procedures
    - Locations of site fencing, storage compounds, and public access restrictions
    - Signage

6. NOTIFICATION & CONSULTATION

In respect of the consents required from Gore District Council, the applicant requests public notification.

For the consents required from Environment Southland, they have the discretion whether to publicly notify an application unless a rule or National Environmental Standard (NES) precludes public notification (in which case the consent authority must not publicly notify) or section 95A(2) applies.

The effects of the activities requiring consent from ES will be less than minor, the applicants do not request public notification of this component of the proposal and there are no rules or NES' which require the public notification of this part of the application. In addition, there are no special circumstances relating to the application. As such, public notification of the ES part of the application is not necessary.

Clause 6(1)(f) of Schedule 4 of the RMA requires the identification of, and any consultation undertaken with, persons affected by the activity.

The owners of properties in the immediate vicinity of the bridge are considered as potentially affected parties, given the height of the mast of the bridge. As such, an invitation to meet with Councillors and Council staff on Monday 15th June 2020 was provided to those residents in Huron St, River Terrace and Halton Street considered to be potentially affected by the proposal (as identified in Appendix B of the Landscape and Visual Assessment Report in Appendix F). They were also provided with an information brochure setting out details of the wider Water Treatment Plant Upgrade project which includes the need for the pipeline infrastructure to cross the Matāura River. A media release was subsequently sent out to the wider Gore community outlining the proposal on Wednesday 17th June 2020 and information is now available on the home page of the Councils website.

Feedback received from the immediate neighbours indicates opposition to the proposed form and location of the bridge. Discussion with neighbours has included primarily the following:

- Selection of the bridge option due to its visual prominence rather than directional drilling under the riverbed;
- Construction duration;
- Concern about potential noise of the bridge cable stay elements during the wind;
- Design options of the bridge – cable stay versus arch network bridge; and
- Bridge level and designed freeboard in respect of flooding risks.

These concerns have been addressed in earlier sections of this application and conditions to manage the effects proposed where appropriate. Further one-on-one discussions with affected residents will continue after lodgement, however this will not change the pathway being sought of public notification for the GDC consents.

For activities involving riverbed structures and discharges to water in Southland, the Department of Conservation, Hokonui Rūnanga and Fish and Game are commonly considered to be interested in such activities, as well as Environment Southland in terms of their flood management responsibilities and the landowner on the western side, Ben Abernethy. Consultation has commenced with these parties with the view to seeking their written approval. In response to consultation to date with Hokonui Rūnanga, a condition requiring earthworks be supervised by a suitably qualified archaeologist has been proposed.

No other parties are considered to be affected by the required ES consents.

7. STATUTORY CONSIDERATIONS

Schedule 4 of the RMA requires that an assessment of the activity against the matters set out in Part 2 and any relevant provisions of a document referred to in Section 104 of the RMA is provided when applying for a resource consent for any activity. These matters are assessed as follows.

7.1 Part 2 of the RMA

The proposal is consistent with the purpose and principles of the RMA, as outlined above. Providing the proposed bridge will enable the community to provide for their social, economic, and cultural well-being and for their health and safety through provision of a safe water supply for the Gore residents whilst also benefitting the social well-being of the community through enhanced walking and cycling access between East and West Gore and along the Matāura River. The proposal will enable the Matāura River to meet the reasonably foreseeable needs of future generations, whilst sustaining the life-supporting capacity of the River and associated ecosystems. The proposal ensures that adverse effects on the environment are largely avoided, remedied or mitigated.

The key matters of national importance under Section 6 of the RMA to be recognised and provided for this proposal are:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers;

(h) the management of significant risks from natural hazards.

The proposed bridge design will enhance public access along the margins of the Matāura River (d) and has been designed to avoid any increased risk of flooding (h). There will be some effect on the natural character of the river margins resulting from the proposed bridge, however, this is not an "inappropriate" use or development based on the community health and safety need and benefits afforded through provision of a safe drinking water supply.

The proposal is also generally consistent with the requirements of Section 7 of the RMA which must be given regard to, including in particular intrinsic values of ecosystems, maintenance and enhancement of the quality of the environment, and the protection of the habitat of trout and salmon. In terms of maintenance and enhancement of amenity values, the effects on the closest neighbours have been considered as they will be adversely affected by the proposed bridge, however, in the broader context of balancing overall effects of the activity, there are wider positive benefits of locating the bridge here associated with the provision of safe drinking water to the Gore community and for local walking and cycling connections. Regarding Section 8, the proposed activity is not inconsistent with the principles of the Treaty of Waitangi.

Overall, the activity is considered to be broadly consistent with Part 2 of the RMA, given the nature of the activities and the proposed mitigation.

7.2 Section 104(1)(b) of the RMA

In accordance with Schedule 4 of the RMA, an assessment of the activity against the relevant provisions of a document referred to in 104(1)(b) of the RMA must be included in an application for resource consent. Documentation in this section are noted as being:

(i) a National Environmental Standard;

(ii) other regulations;

(iii) a National Policy Statement;

(iv) a New Zealand Coastal Policy Statement;

(v) a Regional Policy Statement or Proposed Regional Policy Statement;

(vi) a plan or proposed plan.

Under the RMA, regional plans need to give effect to NPSs, NESs and RPSs. For an application of this scale, an assessment of the application against the district and regional plans is adequate as these plans ultimately give effect to the higher order statutory instruments.

7.2.1.1 Gore District Plan Objectives and Policies

Below are a list of the relevant Objectives and Policies of the District Plan, followed by an assessment of the proposal against them.

Table 13: Relevant objectives and policies of the Gore District Plan

Objectives	Policy	Assessment
2.4.3 – Objective - Margins of rivers and streams *(1) To preserve the natural character of the margins of the Mataura River.* *(2) To provide public access along the margins of the Mataura River where this is practical and can be safely undertaken without adversely affecting the use of adjoining land.*	*2.4.4 – Policy - Margins of rivers and streams* *(1) Control the adverse effects of land use activities on the margins of the Mataura River.* *(2) Maintain and enhance public access to and along the Mataura River except where this will affect public health or safety, or where site security would be compromised.*	The proposal will affect only a small area of the margins of the Matāura River, preserving the natural character as much as possible in the surrounding area, while greatly improving public access along the margins of the Matāura River.
3.3 – Objective - Land Use Activities *(1) Maintain and enhance the amenity values of the various localities within the District whilst respecting the different values and characteristics that exist within each area.* *(2) Ensure that the effects of land use activities do not adversely affect the quality of the environment and are compatible with the characteristics and amenity values of each locality.* *(3) Ensure that signs do not give rise to adverse effects on traffic safety, cause a danger to pedestrians, or impact adversely on amenity values.* *(4) Refer to Section 4A.3* *(5) Refer to Section 4A.3*	*3.4 – Policy - Land Use Activities* *(1) Establish zones that reflect the characteristics and amenity values of the area.* *(2) Control the adverse effects of land use activities on the environment.* *(3) Provide for traffic management signs, directional signs and public information signs erected by the road controlling authority.* *(4) Enable advertising and other such signage, except where this will give rise to adverse effects on traffic safety, cause a danger to pedestrians, or impact adversely on amenity values.* *(5) Refer to Section 4A.4* *(6) Refer to Section 4A.4*	The proposal will have a varying effect on amenity values of immediate residents, being dependent on the location from the bridge, as described in above. The proposal will have minor or less than minor effects on the quality of the environment, use signs that minimise or are devoid of any adverse effects, and will ensure that the effects of earthworks are mitigated through best practice erosion and sediment control techniques.

Objectives	Policy	Assessment
(7) Ensure that the effects of earthworks and other land disturbance are avoided, remedied or mitigated. *(8) Avoid where practical the adverse effects of land use activities upon infrastructure.*	*(7) Refer to Section 4A.4* *(8) Refer to Section 4A.4* *(10) Recognise that earthworks and disturbance of the ground is a necessary part of undertaking many activities.* *(11) Ensure that the effects of earthworks and other land disturbance are avoided, remedied or mitigated.* *(12) Require any adverse effects of land use activities upon infrastructure to be rectified.*	
4A.3 – Objective - Natural Hazards *(1) Ensure the public is aware of the likelihood and consequences of natural and man-made hazards within the District.* *(2) Minimise the risk to people and property from inundation.*	*4A.4 – Policy - Natural Hazards* *(1) Promote public awareness of natural and man-made hazards.* *(2) On sites subject to actual or potential flooding, promote:* *(a) identification and use of elevated ground for those activities that could be adversely affected by flooding; and* *(b) elevated floor levels within any buildings.* *(3) Control activities and subdivision where this is necessary to avoid the adverse effects of natural and man-made hazards (refer to section 8 Subdivision of Land).* *(4) Within areas shown as "Subject to Actual or Potential Inundation" on the District Plan Maps the Gore District Council will:* *(a) with the exception of the urban area of Gore*	The proposal will minimise the risk to people during flood events by being constructed on raised embankments and with a bridge deck well above the 1 in 50 year flood level. Gore District Council will manage the bridge while identifying and managing areas of at-risk infrastructure during high flow events, which would include public awareness campaigns.

Objectives	Policy	Assessment
	shown as lime green on the District Plan maps, refer all resource, subdivision and building consents to Environment Southland for comment prior to determining whether to approve or issue those consents. *(b) in respect of any development in the urban area of Gore shown as lime green on the District Plan maps, encourage:* *(i) the adoption of flood proofing techniques or other measures to avoid the adverse effects of flooding on the activity,* *(ii) measures to avoid the adverse effects of the activity on other property during a flood.* *(c) in respect of areas of Mataura shown as red, lime green or purple on the District Plan maps, require any buildings accommodating people to be built with their floor levels at least 300 mm above the 1978 flood level.* *(d) in respect of areas of the District subject to actual or potential inundation*	

Objectives	Policy	Assessment
	as shown on the District Plan maps, other than those described in (b) and (c) above, require any buildings accommodating people to be built with their floor levels at least 600 mm above the level of past flooding or for sites for which there is no record of past flooding, 600 mm above ground level. *(e) where any building consent is issued, the Gore District Council will, pursuant to section 73 of the Building Act 2004, notify the Registrar General of Land of that consent together with a project information memorandum identifying the natural hazard concerned.*	
6.3 – Objective - Hazardous Substances *(1) Prevent or mitigate adverse environmental effects and risks associated with the use, storage, transportation and disposal of hazardous substances.*	*6.4 – Policy - Hazardous Substances* *(1) Limit the quantities of hazardous substances stored at sites to a level that is appropriate to the activities undertaken on that site and appropriate to the environment of that locality.* *(2) Encourage alternatives to the use of hazardous substances.* *(3) Minimise the risks associated with the transportation of hazardous substances.* *(4) Avoid, where practical, the disposal of hazardous*	The proposal will mitigate adverse effects from hazardous substances by using pre-driven casings for pouring concrete into permanent piles, proper management of refuelling and storing of hazardous substances, regular machinery checks and maintenance, and use of spill kits if required.

Objectives	Policy	Assessment
	substances within the Gore District. *(5) Ensure that any disposal of hazardous substances undertaken is in such a manner as to avoid any actual or potential adverse environmental effects.*	
7.3 – Objective - Utilities *(1) To ensure that utilities are provided for so as to meet the economic, social, health and safety needs of individuals and the community.* *(2) To ensure that the location and design of utilities avoids significant adverse effects on:* *(a) the natural character of wetlands, and lakes and rivers and their margins;* *(b) outstanding natural features and landscapes;* *(c) areas of significant indigenous vegetation and significant habitats of indigenous fauna;* *(d) the maintenance and enhancement of public access to and along lakes and rivers;* *(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, waahi tapu, and other taonga;* *(f) historic heritage.* *(3) Subject to Objective (2), to avoid where practical,*	*7.4 – Policy - Utilities* *(1) To recognise the benefits, and necessity, to individuals and the community from the provision of utilities.* *(2) To require the underground placement of network utilities within the commercial zone at Gore, and promote their underground placement in other areas. where this is economically viable and technically feasible.* *(3) To encourage the use of utility corridors, co-location or sharing of facilities where this is feasible and practical.* *(4) To protect:* *(a) the natural character of wetlands, and lakes and rivers and their margins;* *(b) outstanding natural features and landscapes;* *(c) areas of significant indigenous vegetation and significant habitats of indigenous fauna;* *(d) public access to and along lakes and rivers;* *(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, waahi*	The proposal will ensure that the utilities are provided to meet the needs to the community, will be constructed as part of the bridge to minimise the adverse effects of constructing a separate water pipe crossing on the margins of the Matāura River, will protect the water infrastructure of Gore through increasing the quality of the piped services network, and will be appropriately located.

Objectives	Policy	Assessment
remedy or mitigate the adverse effects of the provision of utilities. *(4) To avoid adverse effects of land use activities on the operation of the utilities of the District.* *(5) To protect the existing infrastructure of the District.* *(6) To ensure development is not inappropriately located near infrastructure, such as high voltage electricity lines.*	*tapu, and other taonga; and* *(f) historic heritage; from the adverse effects of utilities.* *(5) To encourage a design and location of utilities that minimises adverse visual effects, where this can be achieved without compromising operation or efficiency.* *(6) In considering subdivision and land use activities, to take into account any adverse effects of those activities on the operation of the existing and the foreseeable utilities of the District.* *(8) To minimise risks to health and safety that can arise as a result of the location of other activities in close proximity to utilities, including transmission lines.*	

Overall, it is considered that the proposal as a whole with its mitigating measures is not contrary to the relevant objectives and policies of the Gore District Plan.

7.2.1.2 Southland Water and Land Plan and Regional Water Plan

As discussed above, the WLP is still subject to appeal, but nonetheless has greater weight than the RWP overall. Consequently, the following assessment focusses primarily on the WLP policies. The following policies, which give effect to the plan's objectives, are most relevant to this application for resource consent.

Table 14: Relevant policies of the Southland Water and Land Plan

Objectives	Assessment
Policy 1 - Enable papatipu rūnanga to participate Enable papatipu rūnanga to effectively undertake their kaitiaki (guardian/steward) responsibilities in freshwater and land management through the Southland Regional Council: 1. providing copies of all applications that may affect a Statutory Acknowledgement area, tōpuni (landscape features of special importance or value), nohoanga, mātaitai or taiāpure to Te Rūnanga o Ngāi Tahu and the relevant papatipu rūnanga; 2. identifying Ngāi Tahu interests in freshwater and associated ecosystems in Murihiku (includes the Southland Region); and 3. reflecting Ngāi Tahu values and interests in the management of and decision-making on freshwater and freshwater ecosystems in Murihiku (includes the Southland Region), consistent with the Charter of Understanding.	This proposal is currently being discussed with Ngāi Tahu (represented by Hokonui Rūnanga), and a copy will be provided to them for further discussion. The relevant iwi management plan is discussed in Section 7.2.4.

Objectives	Assessment
Policy 2 – Take into account iwi management plans Any assessment of an activity covered by this Plan must: 1. take into account any relevant iwi management plan; and 2. assess water quality and quantity, taking into account Ngāi Tahu indicators of health.	Refer to response to Policy 2.
Policy 3 – Ngāi Tahu ki Murihiku taonga species To manage activities that adversely affect taonga species, identified in Appendix M.	Some of the fish and bird species potentially affected by the works are listed as taonga species. Management of the works to minimise any adverse effects is discussed above.
Policy 20 – Management of water resources Manage the taking, abstraction, use, damming or diversion of surface water and groundwater so as to: 1A. recognise that the use and development of Southland's land and water resources, including for primary production, can have positive effects including enabling people and communities to provide for their social, economic and cultural wellbeing; 1. avoid, remedy or mitigate adverse effects from the use and development of surface water resources on: (a) the quality and quantity of aquatic habitat, including the life supporting capacity and	The instream crane platform involved in this application will not adversely affect any of the listed matters.

Objectives	Assessment
ecosystem health and processes of waterbodies; (b) natural character values, natural features, and amenity, aesthetic and landscape values; (c) areas of significant indigenous vegetation and significant habitats of indigenous fauna; (d) recreational values; (e) the spiritual and cultural values and beliefs of tangata whenua; (f) water quality, including temperature and oxygen content; (g) the reliability of supply for lawful existing surface water users, including those with existing, but not yet implemented, resource consents; (h) groundwater quality and quantity; (j) mātaitai, taiāpure and nohoanga; 2. avoid, remedy or mitigate significant adverse effects from the use and development of groundwater resources on: (a) long-term aquifer storage volumes; (b) the reliability of supply for lawful existing groundwater users, including those with existing, but not yet implemented, resource consents;	

Objectives	Assessment
(c) surface water flows and levels, particularly in spring-fed streams, natural wetlands, lakes, aquatic ecosystems and habitats (including life supporting capacity and ecosystem health and processes of waterbodies) and their natural character; and (d) water quality; 3. ensure water is used efficiently and reasonably by requiring that the rate and volume of abstraction specified on water permits to take and use water are no more than reasonable for the intended end use following the criteria established in Appendix O and Appendix L.4.	
<u>Policy 26A – Infrastructure</u> Recognise and provide for the effective development, operation, maintenance and upgrading of regionally significant, nationally significant and critical infrastructure in a way that avoids where practicable, or otherwise remedies or mitigates, adverse effects on the environment.	We consider that the bridge is locally significant, and that the adverse effects of construction will be mitigated as far as is practicable.
<u>Policy 28 – Structures and bed disturbance activities of rivers (including modified watercourses) and lakes</u> Manage structures, bed disturbance activities and associated discharges in the beds and margins of lakes, rivers and modified watercourses, to avoid, remedy or mitigate adverse effects on: 1. water quality and quantity; 2. habitats, ecosystems and fish passage;	All of these issues are discussed above. The relevant effects of the activity are considered to have been adequately avoided/remedied/mitigated, as appropriate. Measures have been put in place to manage the effects on both aquatic and terrestrial life.

Objectives	Assessment
3. indigenous biological diversity; 5. the spiritual and cultural values and beliefs of the tangata whenua; 6. mātaitai and taiāpure; 7. public access (except in circumstances where public health and safety are at risk) and amenity values; 8. natural character values and outstanding natural features; 9. river morphology and dynamics, including erosion and sedimentation; 10. flood risk; 11. infrastructural assets; 12. navigational safety; and 13. landscape values.	
Policy 32 – Protect significant indigenous vegetation and habitat Protect significant indigenous vegetation and significant habitats of indigenous fauna associated with natural wetlands, lakes and rivers and their margins.	Refer to response to Policy 28.

Objectives	Assessment
Policy 40 – Determining the term of resource consents When determining the term of a resource consent consideration will be given, but not limited, to: 1. granting a shorter duration than that sought by the applicant when there is uncertainty regarding the nature, scale, duration and frequency of adverse effects from the activity or the capacity of the resource; 2. relevant tangata whenua values and Ngāi Tahu indicators of health; 3. the duration sought by the applicant and reasons for the duration sought; 4. the permanence and economic life of any capital investment; 5. the desirability of applying a common expiry date for water permits that allocate water from the same resource or land use and discharges that may affect the quality of the same resource; 6. the applicant's compliance with the conditions of any previous resource consent, and the applicant's adoption, particularly voluntarily, of good management practices; and 7. the timing of development of FMU sections of this Plan, and whether granting a shorter or longer duration will better enable implementation of the revised frameworks established in those sections.	The consents sought are for temporary, construction-related activities, and most of these factors are of limited relevance. The works are intended to be completed in the next 6 months.

Objectives	Assessment
Policy 41 – Matching monitoring to risk Consider the risk of adverse environmental effects occurring and their likely magnitude when determining requirements for auditing and supply of monitoring information on resource consents.	The monitoring measures proposed in relation to sediment and the presence of birdlife are considered to be in proportion to the magnitude of the effects.

In addition to the above, we have considered policies from the RWP, where either there is no corresponding WLP policy, or the corresponding policies are significantly different between the two plans. The number of RWP policies listed is small, as many of the relevant policies are identical (or near-identical) to one of the policies listed above:

Table 15: Relevant policies of the Regional Water Plan

Policy	Assessment
RWP - Policy 3 – No reduction in water quality Notwithstanding any other policy or objective in this plan, allow no discharges to surface water bodies that will result in a reduction of water quality beyond the zone of reasonable mixing, unless it is consistent with the promotion of the sustainable management of natural and physical resources, as set out in Part 2 of the Resource Management Act 1991, to do so.	The discharge of sediment to water will be monitored to ensure that the effects are insignificant beyond the reasonable mixing zone. A 200 m reasonable mixing zone is proposed. This is based on the WLP definition, but is also considered reasonable based on these factors.

Policy	Assessment
RWP - Policy 9 – Zone of reasonable mixing When determining the size of the zone of reasonable mixing, minimise the size of the area where the relevant water quality standards are breached. Consideration should be given to, but not be limited to, the following matters: (a) the aquatic ecosystem values in the affected reach; (b) the need for fish passage; (c) the uses of the water body adjacent to and downstream of the point of discharge	*Refer to response to Policy 3.*

Overall, it is considered that the proposal as a whole with its mitigating measures is not contrary to the relevant policies of the WLP and RWP.

7.2.2 Mataura Water Conservation Order

The site is part of the "protected waters" under the Mataura Water Conservation Order (WCO), which are defined as:

(a) the Mataura River from its source (approximate map reference NZMS 260 E42:502333) to its confluence with the sea (approximate map reference NZMS 260 F47:877946); and

(b) the Waikaia River and its tributaries, the Otamita Stream, and all other tributaries of the Mataura River upstream of its confluence with the Otamita Stream (approximate map reference NZMS 260 F45:881582); and

(c) the Mimihau Stream and the Mokoreta River and each of their tributaries.

The reason given for the special status of the River is its "outstanding fisheries and angling amenity features."

The WCO imposes minimum flow conditions, and prohibits damming, neither of which are relevant to the proposed activity. There are also some provisions relating to discharges, with the relevant ones being:

- *any discharge is to be substantially free from suspended solids, grease, and oil, and*
- *after allowing for reasonable mixing:*
    - *the waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours*
    - *there must not be any destruction of natural aquatic life by reason of a concentration of toxic substances*
    - *the natural colour and clarity of the waters must not be changed to a conspicuous extent*

The proposed discharges associated with this activity will essentially be limited to sediment, primarily from the riverbed itself. This will occur as a result of relatively minor disturbance of the riverbed, and monitoring will be undertaken to ensure that there is no visible sediment plume below the reasonable mixing zone. As such, the discharges associated with the activity will comply with all of the above requirements. We also note that there is an exemption for "the construction, maintenance, or protection of roads, bridges, pylons, and other necessary public utilities.".

In summary, we consider that the proposal is consistent with the requirements of the WCO.

7.2.3 Iwi Management Plan

The Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 is entitled Te

Tangi a Tauira ('The Cry of the People', referred to in this Section as "the Plan"). The site is within the Southland Plains (Te Ra or Takitimu) area of interest in the Plan. The relevant section of the Plan does not contain any policies specifically relating to bridges but does comment on some relevant issues such as stream bed activities generally, earthworks, water quality and rivers. The policies which are most relevant to the works (in our opinion) are presented below.

Table 16: Relevant policies of the Iwi Management Plan

Policies	Provision	Assessment
Earthworks – 7	Where practical, indigenous vegetation that is removed or damaged as a result of earthworks activity should be recovered and returned or replaced.	As detailed in Section 3.5, the works will not damage any ecologically significant area of native vegetation.
Earthworks – 9	Any earthworks or roadworks near rivers must have appropriate measures in place to avoid contaminants (including dust, sediment run-off from stockpiles or any hazardous substance) from entering waterways that may cause contamination, discolouration, or siltation in such waterways.	The concerns raised in this policy are considered to have been adequately addressed by the proposed construction methodology, as detailed in Sections 2.3 and 5.4.
Water – 3	Protect and enhance the mauri, or life supporting capacity, of freshwater resources throughout Murihiku.	Effects on the life-supporting capacity of freshwater resources are considered to be no more than minor.
Rivers – 10	Ensure that all native fish species have uninhibited passage from the river to the sea at all times, through ensuring continuity of flow *ki uta ki tai*.	The new bridge and temporary works will not inhibit fish passage.
Discharge to water – 3	Consider any proposed discharge activity in terms of the nature of the discharge, and the sensitivity of the receiving environment.	The proposed bridge construction may involve an incidental discharge of sediment to a receiving environment which already has moderate suspended sediment concentrations. Nonetheless, native and other

Policies	Provision	Assessment
		fish are known to be present, and the proposed management measures are considered sufficient to prevent any significant adverse effects on those species.
Discharge to water – 7	Any discharge activity must include a robust monitoring programme that includes regular monitoring of the discharge and the potential effects on the receiving environment.	The proposed visual monitoring is considered to be sufficient, given the low level of risk posed by the discharge.
Water Quality – 7	When assessing the effects of an activity on water quality, where the water source is in a degraded state, the effects should be measured against the condition that the water source should be, and not the existing condition of the water source (see text box on this page).	The assessment of the water quality effects of the proposal has generally considered the present state of the Mataura River. However, even if the background effects of human activities in the catchment are ignored as per this policy, the effects of temporary discharges associated with bridge construction would in our opinion still be minor.
Stream bed activities - 13	Require that the placement of culverts and other flood works activities in the beds or margins of waterways occurs in a manner that minimises disturbance to the streambed.	Stream bed disturbance will be kept to a practical minimum during culvert installation and removal. **Note:** The proposed access to the site may not require a culvert. Temporary access may instead be gained utilising an existing track on the adjacent property, north of the proposed bridge location.

Policies	Provision	Assessment
Stream bed activities - 16	Require that short term effects on water quality and appearance are mitigated during culvert or flood works construction, and for a settling period following. For example, straw bales may be used to minimise turbidity, and contain discolouration and sedimentation.	The proposed works are expected to generate relatively small amounts of sediment. Use of straw bales is not considered practical given the size and flow rate of the river. Instead, the discharge (which will be primarily associated with the formation of the causeways) will be minimised by taking care in constructing the causeways (and similarly for other works with the potential to generate sediment), as described above.

Section 3.5.11 of the Plan also sets out the stream health indicators used by tangata whenua. Of these, the following indicators have the potential to be affected by the proposed work:

- **Shape of the river** (will be temporarily altered in flood events by the construction of the western causeway, and by the corner of the temporary piles and crane platform).
- **Sediment in the water, water quality in the catchment and clarity of the water** (temporary discharges will occur during construction, with management measures in place to ensure that the effects are no more than minor).
- **Flow characteristics and variations, and flood flows** (minimal long-term effects due to the new bridge being built over the regular flowing river. Some temporary localised variation to flow patterns may occur in the vicinity of the temporary piles and crane platform during the works).

Table 3 of the Plan outlines key cultural and other values of major Southland Rivers, including the Matāura. These include associations with the Matāura held by important Ngāti Māmoe and Ngāi Tahu tupuna, native fishery values, and the freshwater mātaitai reserve which was the first in New Zealand. Most of these values are associated specifically with the main stem of the Matāura River, and have therefore been summarised below. "Protection of culturally significant sites in the catchment" is also raised as a significant issue.

Table 17: Major river catchments of the Southland Plains: Ngāi Tahu ki Murihiku cultural associations and significant resource management issues

Cultural Associations	Significant Resource Management Issues
• Descendents of Ngati Mamoe rangatira Parapara Te Whenua traditionally used the resources of the river; • Tuturau (once a Ngai Tahu fishing village) was the site of the last inter-tribal Maori war, in 1863; • The Mataura was noted for its customary native fishery, of which Inanga remains an important resource on the river; • Mataura Falls are an important cultural landscape feature of the river; • The Mataura River has a freshwater mataitai reserve for customary food gathering; • The Catlins and Tautuku areas have important mahinga kai for Ngati Mamoe and Ngai Tahu kainga; • The river is noted for kanakana fishery, weka, and other manu.	*Water quantity and quality* • Water abstractions and used as a point of discharge for historical and current industrial activities; • Intensive land use impacts on river health; *Mahinga kai and Biodiversity* • Impacts on fish passage at Matāura Falls, where some fish species have difficulty getting upstream from the falls; • Protection of the Mataitai on the Matāura; • The river is an important brown trout fishery – need to ensure that customary native fishery is not compromised by the trout fishery; *Tourism* • Pressures on the river from tourism activities; *Wahi Tapu* • Protection of culturally significant sites in the catchment.

As discussed above we consider that the proposed activities have taken account of all of these issues and are consistent with all the relevant Iwi Management Plan policies.

7.3 Sections 105 and 107 of the RMA

Section 105(1) of the RMA states that:

If an application is for a discharge permit or coastal permit to do something that would contravene section 15 or section 15B, the consent authority must, in addition to the matters in section 104(1), have regard to—

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(a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and

(b) the applicant's reasons for the proposed choice; and

(c) any possible alternative methods of discharge, including discharge into any other receiving environment.

The sensitivity of the receiving environment is described in Section 3.4 and considered elsewhere in this report. The only significant discharge will be the incidental release of bed sediment into the river, and as such there are no alternative receiving environments. The adverse effects of these discharges will be insignificant. Overall, we consider that there are no viable and safe alternatives to forming temporary causeways to facilitate machinery access to the construction area.

Section 107(1-2) states that:

(1) Except as provided in subsection (2), a consent authority shall not grant a discharge permit or a coastal permit to do something that would otherwise contravene section 15 or section 15A allowing—

(a) the discharge of a contaminant or water into water; or

….

if, after reasonable mixing, the contaminant or water discharged (either by itself or in combination with the same, similar, or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters:

(c) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials:

(d) any conspicuous change in the colour or visual clarity:

(e) any emission of objectionable odour:

(f) the rendering of fresh water unsuitable for consumption by farm animals:

(g) any significant adverse effects on aquatic life.

(2) A consent authority may grant a discharge permit or a coastal permit to do something that would otherwise contravene section 15 or section 15A that may allow any of the effects described in subsection (1) if it is satisfied—

(a) that exceptional circumstances justify the granting of the permit; or

(b) that the discharge is of a temporary nature; or

(c) that the discharge is associated with necessary maintenance work—

and that it is consistent with the purpose of this Act to do so. [emphasis added]

As discussed above, we consider that the effects of the discharge will be no more than minor, and will comply with conditions 1(c)-1(g) above, with (d) and (g) being most relevant.

We note that the temporary discharges of sediment could result in a localised short-term conspicuous change in the visual clarity of water. However, Section 107 (2)(b) provides for such a discharge permit to be granted if the discharge is of a temporary nature and it is consistent with the purpose of the Resource Management Act to grant the discharge permit. We consider that this proposal is entirely consistent with that provision.

8. Consent Duration, Review and Lapse

The works are intended to take place in 2020/21. However, a four-year consent term is requested for the temporary activities so that, in the unlikely event that the works cannot proceed as planned (e.g. due to extremely wet weather which makes construction in the river unsafe), they can be completed in one of the following years without the need to reapply for consent. Accordingly, a three year lapse period is requested. Because of the long-term nature of the bridge the long-term land use consent would be of unlimited duration.

The works involve the Gore District Council and NZTA as well as the applicant. There is political will and financial backing to see the works proceed successfully, and there is virtually no risk of aspects of the work being left incomplete. Accordingly, we consider there is no need for a bond.

9. CONCLUSION

This proposal is a significant step towards developing a safer community water supply for Gore residents. By providing a publicly accessible bridge between East and West Gore, not only is there is a suitable crossing for the water pipes, but the added benefit of enhancing the walking and cycling access across and along the Mataura River.

The above assessment indicates that overall the effects of the proposal are likely to be minor or less than minor, with the exception of effects on amenity values on some of the residents living in close proximity to the proposed bridge.

The Council request that the Gore District part of this application be notified to allow for full public input into the proposal.

Appendix A: Detailed Design Plans

Appendix B: Preliminary Shared Path Design

Appendix C: Construction Methodology and Plans

Appendix D: Geotechnical and Hydraulic Inputs Report - Longford Shared Path, Gore

Appendix E: Community Consultation Brochure

Appendix F: Longford Shared Path Business Case

Appendix G: Landscape and Visual Assessment

Written Approvals

Department of Conservation
Te Papa Atawhai

DOC Ref: RC850

Date: 27 July 2020

Gore District Council
Landpro,
PO Box 302
Cromwell, 9342

Dear Gore District Council,

Request for Approval s95E Resource Management Act 1991:
Application from Gore District Council to seek DOC's written approval of a resource consent application to construct a bridge across the Mataura River.

I have considered your request for written approval in terms of s95E of the RMA and am pleased to advise that I grant my approval as an affected person. This approval is granted on the basis that the proposal is as described, for the purposes described, and will have the effects on the Department of Conservation's interests as described in the application dated 07 July 2020. This approval is limited to the likely adverse effects of the proposal on the Department's interests and should not be construed as approval to effects on the environment generally.

This approval is specific to the above application and is for the purposes of s95E of the RMA only. It is not indicative of any associated concession or other statutory approval which may be required from the Department relating to this proposal. This approval will be rendered null and void if the proposal to which it refers is changed between the date of this letter and its consideration by the consent authority without referral back to me for my further assessment.

If you have any questions regarding this approval, please contact RMA@doc.govt.nz

Yours sincerely

Amy Robinson
RMA Manager

Fish & Game
NEW ZEALAND

3 August 2020

Landpro
PO Box 32
Cromwell

Attention: Brodie Costello – Resource Management Planner

Dear Brodie

Resource consent application by Gore District Council to Gore District Council and Environment Southland for Longford Bridge and Pathway

Thank you for your e-mail of 20 July 2020 providing an electronic link to an application by Gore District Council to Gore District Council and Environment Southland for consent to construct a bridge across the Mataura River at Gore.

I understand that:

1. The proposed bridge (measuring 39m high x 90m wide) will be located approximately 650m upstream of the existing traffic bridge at Gore.

2. The proposed bridge has dual purposes to:

   a. Provide a shared link for cyclists and pedestrians, connecting the residential area of Gore to the CBD and schools located in West Gore; and

   b. Attach proposed new water pipes linking East Gore with the Jacobstown Wells and Hilbre Avenue reservoir.

3. Proposed works include the bridge construction itself and temporary works to construct two crane platforms and install temporary piles.

I have considered the application, including the proposed construction methodology. In response, I advise that Fish & Game is agreeable to providing its written approval for the proposed activity. Please accept this letter as providing Fish & Game's approval in relation to the consents sought from both Gore District Council and Environment Southland.

Yours sincerely

Jacob Smyth
Resource Management Officer
Fish & Game New Zealand – Southland Region

Statutory managers of freshwater sports fish, game birds and their habitats

Technical Assessment

ASSESSMENT OF EFFECTS ON AVIFAUNA FOR THE PROPOSED LONGFORD SHARED PATHWAY OVER THE MATAURA RIVER, GORE

providing
outstanding
ecological
services to
sustain
and improve our
environments

Wildlands
R5580

ASSESSMENT OF EFFECTS ON AVIFAUNA FOR THE PROPOSED LONGFORD SHARED PATHWAY OVER THE MATAURA RIVER, GORE

Contract Report No. 5580

October 2020

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CONTENTS

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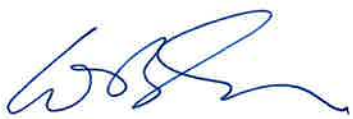

W.B. Shaw
Director/Lead Principal Ecologist
Wildland Consultants Ltd

1. INTRODUCTION

Londpro Ltd is reviewing the potential effects on birds, including taonga species, in relation to the construction of the Longford shared pathway for pedestrians and cycleway bridge over the Matāura River, in the township of Gore.

The Longford shared pathway will cross the Matāura River 500 metres north of the State Highway 1 road bridge and will connect the East Gore bank (Church and Huron streets) with the west bank of the town (Surrey Street), allowing easy access to the CBD and schools, while providing a safe river crossing for walking and cycling (Figure 1). The proposed bridge is a cable-stay design and will be 39 metres high, 90 metres long, and three metres wide. A circular steel mast (32 metres high, 916 millimetres diameter), to be positioned on the western bank, will suspend high-strength spiral strand cables (26.4 millimetres) to support the bridge. The western side of the river is largely undeveloped land (mainly stock grazing), and the eastern side of the river is an earthfill stopbank; approximately four metres high with a steep slope. The bridge will cross the river at one of the narrowest points, where the river is approximately 55 metres wide. This site will minimise effects on the river flow and flood risk. The proposed layout should result in minimal riverbed disturbance. From viewing the site in Google Earth, the proposed area has few trees, extensive open grassland, and a small shingle island on the northwestern side of the river channel.

Gore District Council commissioned Wildland Consultants to provide a desktop ecological assessment of the potential effects of the proposed bridge on avifauna. The purpose of this desktop ecological assessment is to:

- Identify and describe avifauna values in the bridge footprint and wider project area.
- Describe the potential effects of the bridge on avifauna arising from construction, operation and maintenance.
- Provide an ecological assessment of avifauna that addresses the proposed bridge's effects on bird flight paths.
- Identify measures to avoid, remedy, or mitigate potential adverse effects.

2. METHODS

This project was undertaken as a desktop assessment. Relevant literature, reports, and data sets were utilised to provide a basis for the evaluation of the relative significance of avifauna present within *c.*10 kilometres of the site. These information sources included:

- The eBird database maintained by Cornell University, which has bird records for sites within New Zealand.
- Indigenous and exotic bird and indigenous species records in the on-line iNaturalist database, which is maintained by the California Academy of Science and the National Geographic Society.

Figure 1. Proposed location of the Longford Bridge spanning the Matāura River, Gore

- National threat classification lists for birds (Robertson *et al.* 2017).
- Field Guide to the Birds of New Zealand (Heather and Robertson 2015).

A desktop evaluation was undertaken of the current state of knowledge of birds in the Gore area. The eBird database and iNaturalist were searched for bird records within a 10 kilometre radius of the site, and additional species were identified from Heather and Robertson (2015).

3. SPECIES RECORDS

Within a 10 kilometre radius, 53 species of avifauna were identified through eBird and iNatuaralist. In addition to various common species, these records include five Threatened species and 11 At Risk species (Table 1):

- Threatened species include: Australasian bitten (*Botaurus poiciloptilus*), banded dotterel (*Charadrius bicinctus bicinctus*), black-billed gull (*Larus bulleri*), black-fronted tern (*Chlidonias albostriatus*), and Caspian tern (*Hydroprogne caspia*).
- At Risk species are: black shag (*Phalacrocorax carbo novaehollandiae*), black-fronted dotterel (*Elseyornis melanops*), New Zealand pipit (*Anthus novaeseelandiae novaeseelandiae*), pied shag (*Phalacrocorax varius varius*), red-billed gull (*Larus novaehollandiae scopulinus*), South Island pied oystercatcher (*Haematopus finschi*), marsh crake (*Porzana pusilla affinis*), spotless crake (*Porzana tabuensis tabuensis*), Australian coot (*Fulica atra australis*), long-tailed cuckoo (*Eudynamys taitensis*), and eastern falcon (*Falco novaeseelandiae novaeseelandiae*).

The species observed most commonly within one kilometre of the site - identified through eBird – are listed in Table 1. Of these, the following Theatened and At Risk species were found in eBird observations between 2017 to 2019:

- Thirty-nine observations of black-billed gulls ranging between one individual and a flock of 3,750 birds. Approximately 3,750 black-billed gulls were observed (-46.098765E, 168.9492651N) flying south downriver towards a roost, away from the main highway bridge (30 August 2017) and approximately 1,300 birds were observed (-46.0980434E, 168.9490317N) coming in to roost. but the actual roost site location was not identified (27 September 2018).
- Black-fronted tern were observed in 2018 (1-18 individuals, three observations) and a single bird in 2019. The flock of 18 birds were onserved flying down river (10 April 2018; -46.0980434E, 168.9490317N).
- An average of five red-billed gulls (range 2-16, eight observations 2018), two South Island pied oystercatcher (range 1-3, seven observations 2017-2018), a black shag (four observations during 2018), and a single black-fronted dotterel (28 February 2018; -46.0955733E, 168.9493525N), and banded dotterel (20 February 2019; -46.0987923E, 168.9487824N).

Table 1: Bird species recorded in eBird, iNaturalist, and/or identified in Heather and Robertson (2015). Common names, species names, threat classification are from Robertson *et al.* (2017), and the habitat of the bird species, whether their habitat occurs near the proposed bridge, and sightings with one kilometre of the proposed bridge site.

Common Name	Scientific Name	Threat Classification 2016	Status	Habitat	Observed within 1km	Habitat in Vicinity of Bridge
Australasian bittern	*Botaurus poiciloptilus*	Threatened-Nationally Critical	Native	Wetland	N	N
Black-billed gull	*Larus bulleri*	Threatened-Nationally Critical	Native	Rivers, lakes, coastal	Y	Y
Black-fronted tern	*Chlidonias albostriatus*	Threatened-Nationally Endangered	Native	Riverbed, coastal	Y	Y
Banded dotterel	*Charadrius bicinctus bicinctus*	Threatened-Nationally Vulnerable	Native	Beaches, braided rivers, estuaries, lake margins and short grassland	Y	Y
Caspian tern	*Hydroprogne caspia*	Threatened-Nationally Vulnerable	Native	Beaches, braided rivers, estuaries, and harbours	Y	N
Marsh crake	*Porzana pusilla affinis*	At Risk-Declining	Native	Wetland	N	N
New Zealand pipit	*Anthus novaeseelandiae novaeseelandiae*	At Risk-Declining	Native	Open country, riverbed and farmland	N	Y
Red-billed gull	*Larus novaehollandiae scopulinus*	At Risk-Declining	Native	Coastal, estuaries, lakes	Y	N
South Island pied oystercatcher	*Haematopus finschi*	At Risk-Declining	Native	Riverbeds, farmland and estuaries	Y	N
Spotless crake	*Porzana tabuensis tabuensis*	At Risk-Declining	Native	Wetland	N	N
Australian coot	*Fulica atra australis*	At Risk-Naturally Uncommon	Native	Lakes	N	N
Black shag	*Phalacrocorax carbo novaehollandiae*	At Risk-Naturally Uncommon	Native	Rivers, streams, lakes	Y	N
Black-fronted dotterel	*Elseyornis melanops*	At Risk-Naturally Uncommon	Native	Riverbeds, gravel pits and bare ground	Y	Y
Long-tailed cuckoo	*Eudynamys taitensis*	At Risk-Naturally Uncommon	Native	Native and exotic forest	N	N
Eastern falcon	*Falco novaeseelandiae novaeseelandiae*	At Risk-Recovering	Native	Forest, bush, orchards and tussock land	Y	N
Pied shag	*Phalacrocorax varius varius*	At Risk-Recovering	Native	Lakes, lagoons	Y	N
Australian magpie	*Gymnorhina tibicen*	Introduced and Naturalised	Exotic	Farmland, forests, gardens and parks	Y	N
Blackbird	*Turdus merula*	Introduced and Naturalised	Exotic	Forest, farmland, parks and gardens	Y	N
California quail	*Callipepla californica*	Introduced and Naturalised	Exotic	Open country	N	N
Canada goose	*Branta canadensis*	Introduced and Naturalised	Exotic	Lakes, rivers, lagoons, pasture	N	N
Chaffinch	*Fringilla coelebs*	Introduced and Naturalised	Exotic	Forests, farmland, parks and gardens	Y	N
Dunnock	*Prunella modularis*	Introduced and Naturalised	Exotic	Forests, parks and gardens	Y	N
Feral (greylag) goose	*Anser anser*	Introduced and Naturalised	Exotic	Lakes, estuaries, farmland	N	N
Goldfinch	*Carduelis carduelis*	Introduced and Naturalised	Exotic	Farmland, parks and gardens	Y	N
Greenfinch	*Carduelis chloris*	Introduced and Naturalised	Exotic	Farmland, parks and gardens	Y	N
House sparrow	*Passer domesticus*	Introduced and Naturalised	Exotic	Farmland, cities and forests	Y	N
Mute swan	*Cygnus olor*	Introduced and Naturalised	Exotic	Lakes	N	N

Common Name	Scientific Name	Threat Classification 2016	Status	Habitat	Observed within 1km	Habitat in Vicinity of Bridge
Redpoll	*Carduelis flammea*	Introduced and Naturalised	Exotic	Farmland, forests, scrub, parks and gardens	Y	N
Rock pigeon	*Columba livia*	Introduced and Naturalised	Exotic	Parks, gardens and farmland	Y	N
Skylark	*Alauda arvensis*	Introduced and Naturalised	Exotic	Open country	Y	N
Song thrush	*Turdus philomelos*	Introduced and Naturalised	Exotic	Forest, farmland, parks and gardens	Y	N
Starling	*Sturnus vulgaris*	Introduced and Naturalised	Exotic	Farmland, forests, parks and garden	Y	N
Yellowhammer	*Emberiza citrinella*	Introduced and Naturalised	Exotic	Open country, farmland, parks and gardens	Y	N
Little pied cormorant	*Phalacrocorax melanoleucos melanoleucos*	Non-resident Native - Vagrant	Native	Lakes, rivers, streams and estuaries	Y	Y
Australasian shoveler	*Anas rhynchotis*	Not Threatened	Native	Wetlands and estuaries	Y	N
Bellbird	*Anthornis melanura melanura*	Not Threatened	Native	Native and exotic forest, parks and gardens	Y	N
Black swan	*Cygnus atratus*	Not Threatened	Native	Lakes, estuaries	N	N
Grey duck - mallard hybrid	*Anas superciliosa × platyrhynchos*	Not Threatened	Native	Wetlands, estuaries, rivers	Y	Y
Grey teal	*Anas gracilis*	Not Threatened	Native	Lakes, lagoons, estuaries	Y	N
Morepork	*Ninox novaeseelandiae novaeseelandiae*	Not Threatened	Native	Foest, open country, parks and gardens	N	N
Kereru	*Hemiphaga novaeseelandiae*	Not Threatened	Native	Forest, rural and city parks	N	N
Paradise shelduck	*Tadorna variegata*	Not Threatened	Native	Lakes, ponds, rivers	Y	Y
Pied stilt	*Himantopus himantopus leucocephalus*	Not Threatened	Native	Riverbeds, lake margins	Y	N
Pukeko	*Porphyrio melanotus melanotus*	Not Threatened	Native	Wetland, estuaries, parks and pasture	N	Y
Shining cuckoo	*Chrysococcyx lucidus lucidus*	Not Threatened	Native	Forest, parks and gardens	N	N
Silvereye	*Zosterops lateralis lateralis*	Not Threatened	Native	Forest, scrub, parks and gardens	Y	N
South Island fantail	*Rhipidura fuliginosa fuliginosa*	Not Threatened	Native	Forest, scrub, river margins, parks and gardens	Y	N
Southern black-backed gull	*Larus dominicanus dominicanus*	Not Threatened	Native	Rivers, coastal, lakes	Y	Y
Spur-winged plover	*Vanellus miles novaehollandiae*	Not Threatened	Native	Grassland, farmland, wetlands and estuaries	Y	Y
Swamp harrier	*Circus approximans*	Not Threatened	Native	Farmland, tussock land, swamps and forest edges	Y	N
Tui	*Prosthemadera novaeseelandiae novaeseelandiae*	Not Threatened	Native	Forest, farmland, parks and gardens	N	N

Common Name	Scientific Name	Threat Classification 2016	Status	Habitat	Observed within 1km	Habitat in Vicinity of Bridge
Welcome swallow	*Hirundo neoxena neoxena*	Not Threatened	Native	Open country near water	Y	N
White-faced heron	*Egretta novaehollandiae*	Not Threatened	Native	Estuaries, lagoons, rivers	N	N

- New Zealand falcon (1 May 2017; -46.0980434E, 168.9490317N) have also been noted within one kilometre of the bridge.

The bridge is likely to only affect species that use riparian or river habitat, so this assessment focusses on these species, as set out in Table 1.

4. POTENTIAL ECOLOGICAL EFFECTS

4.1 Overview

Potential effects are addressed below under the following headings for each bird species observed within the area and with habitat near the proposed bridge:

- Construction disturbance.
- Operation.
- Maintenance.
- Flight paths.
- Lighting.

4.2 Construction disturbance

The proposed 10 month construction phase could potentially disturb foraging and roosting birds through the movement of trucks and machinery. Potentially-affected species could include:

- Grey duck-mallard hybrid (*Anas superciliosa* ×*platyrhynchos*, Not Threatened), and paradise shelduck (Tadorna variegata, Not Threatened), both of which require cover to breed.

- Spur-winged plover (*Vanellus miles novaehollandiae*, Not Threatened) will nest in open areas with a clear view.

- Black-billed gulls (*Larus bulleri*, Threatened-Nationally Critical), banded dotterel (*Charadrius bicinctus bicinctus*, Threatened-Nationally Vulnerable), black-fronted dotterel (*Elseyornis melanops*, At Risk-Naturally Uncommon), black-fronted tern, and southern black-backed gulls (*Larus dominicanus dominicanus*, Not Threatened) will nest and roost on shingle sections, riverbed islands and may be found within the riverbed adjacent to the structure or upriver from the site.

Although this may be a short-term effect, construction can displace birds. Construction effects can be avoided by:

- Checking bird use of the area prior to construction.
- Avoiding the bird breeding season.

The proposed bridge will cross a deep channel and a small area of gravel on the western bank. It is possible that the gravel bank could be used by endemic braided river bird species, and this area should be checked if construction is undertaken during the breeding season.

Avoidance of the release of sediment is essential as this will affect the river ecosystem and potential food resources for the aquatic foraging birds (Glenjarmon 2017; Matthaei *et al.* 2006). Suspended sediment increases turbidity and reduces visibility for foraging birds, which will impact aquatic species in the area and downstream from the construction site.

Noise levels should be kept as low as possible, and activities should be confined to day-time hours. As this is a populated urban area, the bird species within the immediate construction site will be familiar with anthropogenic disturbance (c.f. Parris and Schneider 2008). Levels of potential disruption should be minor during the construction phase.

If impacts on breeding Threatened or At Risk braided river bird species are avoided the effects of bridge construction will be less than minor. Any impacts on breeding Threatened braided river bird species would be considered to comprise more than minor adverse effects.

4.3 Operational

Upon completion of the Longford bridge, types and levels of activity in the area will be predominantly pedestrian and cycling use. In general, the level of disturbance will be higher than previously, as this is a new public facility, but the overall impact on relevant bird species will be less than minor. Signage should be installed advising that all dogs should remain 'under control at all times'(Dog Control Policy 2004), to avoid chasing or displacing birds that are foraging or roosting.

4.4 Maintenance

General maintenance under and around the bridge is unlikely to result in significant disturbance. As the structure is to be used as a high human traffic area for movement between the two sides of the township, it is unlikely that many bird species will take up roosting or nesting sites around the structure's footprint, e.g. grey duck-mallard hybrid, paradise shelduck, spur-winged plover, pukeko. However, welcome swallow (*Egretta novaehollandiae*, Not Threatened), house sparrow (*Passer domesticus*, Introduced and Naturalised), and starling (*Sturnus vulgaris*, Introduced and Naturalised) may nest within the support structures under the bridge. Many species start laying eggs from August though to November-December (Heather and Robertson 2015). Any maintenance should be undertaken outside of the breeding season, to prevent issues with potential nest abandonment. To minimise nesting birds under the bridge structure, bird exclusion netting could be considered to prevent nest establishment.

Any maintenance that requires vehicle or heavy machinery access into the river bed should be undertaken outside the braided river bird breeding season. If this is not possible, a survey should be undertaken by a suitably qualified ecologist and appropriate avoidance measures should be addressed, if required, as described in Section 4.1.

4.5 Flight paths

Birds will use various flight paths depending on the species, destinations, and flight heights, e.g. starling <173 metres, plover (*Vanellus* spp.) <428 metres, gull (*Larus* ssp.) <575 metres (Shamoun-Baranes *et al.* 2006). Waterbirds will predominantly associate with the river area and use the banks for roosting or nesting. Flight movements during the day will be marginally affected once the structure is completed, and some disturbance or displacement will occur during the construction phase. During daylight hours, most bird species will be able to avoid the steel mast and spiral strand cables due to the visibility and size of the structures. However, issues or strikes could potentially occur during low light or poor weather conditions, especially during foggy conditions or at night (Ashley Rakahuri Rivercare Group 2020; Shamoun-Baranes *et al.* 2006, Manville 2005). In addition, many bird species fly at night, e.g. spur-winged plover, black-backed gulls, banded dotterel and pukeko (Bell and Harborne 2018, Heather and Robertson 2015; Rohweder and Lewis 2004). For example, 20 black-billed gulls were found dead under powerlines on the Ashley River, presumably due to hitting the wires during flight (Ashley Rakahuri Rivercare Group 2020).

Nevertheless, flight behaviour of ducks and geese which were tracked migrating through an offshore wind farm found that less than 1% of birds flew close enough to the turbines to be at risk of a collision with the structure or turbine blades (Desholm and Kahlert 2005). As the proposed Longford shared pathway is a static structure, there is a minor risk of bird strike with the bridge structure for waterfowl as they are slow-flying. Faster-flying species, including passerines, could potentially have a higher strike rate risk, especially during conditions of low visibility. However, the general illumination of the township, lighting on the bridge structure, and previous experience of the bridge structure by birds will help these species to avoid the structure (c.f. Desholm 2006).

The high-strength spiral strand cables could pose a risk as these support wires will be mostly invisable to birds, especially at night. To aid birds identifying and avoiding these structures UV lights (Leber 2019), luminous tape or spherical aerial markers could be used.

4.6 Lighting

Many bird species fly at night, and some species can become disorientated or are attracted to lights, which can lead to injury or death through collision with structures (Horton *et al.* 2019). Downward-facing lights which illuminate the steel mast will operate between 6 am and 11 pm, which will help to reduce any strike hazard at night due to lighting (C Perkins, Landpro Ltd, pers. comm.). Also, artificial lighting along the pathway should be visible in a vertical spill onto the bridge structure and with minimal illumination in a horizontal plane (c.f. Gehring, Kerlinger and Manville 2009; Gauthreaux and Belser).

5. OPTIONS TO AVOID OR MITIGATE POTENTIALLY ADVERSE EFFECTS

Construction of the bridge should, if possible commence outside of the breeding season for braided river birds (July-March). This would help to avoid disturbance or displacement of birds in the immediate area. If this is not possible a suitably qualified ecologist should survey the area no sooner than five days prior to the commencement of works and identify whether or not any nesting is occurring, and if so, whether avoidance measures should be implemented.

To ensure that the bridge will have less than minor effects on avifauna, the following steps should be implemented:

- Construction work should not commence until a survey has been undertaken to determine whether there are any nests of ground-nesting indigenous species within the bridge footprint area.
- Best practice measures should be implemented to avoid or minimise sediment entering the waterway as this will potentially affect river fauna and birds that forage in-stream.
- Noise levels should be kept as low as possible during construction as disturbance may cause bird species to leave the area.
- To avoid displacement or disturbance of foraging or roosting birds, all dogs should remain under effective control at all times.
- Maintenance should generally be undertaken outside of the breeding season, to reduce disturbance, or alternatively, any nests should be identified and avoided.
- To reduce the potential for bird strikes and bird attraction to the bridge structure, all lighting should be downward-facing with minimal horizontal spill. Birds can be attracted to or disorientated by lighting. Similarly, the spiral strand cables could be made more visible to birds flying by the use of UV lights, luminous tape, or aerial markers.

6. CONCLUSION

The proposed Longford shared path will cross the Matāura River and will connect the East Gore bank (Church and Huron streets) with the west bank of the town (Surrey Street), allowing easy access to the township and schools, while providing a safe river crossing for pedestrians and cyclists. The proposed bridge is a cable-stay design and will be 39 metres high, 90 metres long and three metres wide. The circular steel mast (32 metres high, 916 millimetre diameter), positioned on the western bank, will suspend high strength spiral strand cables (26.4 millimetre) to support the bridge.

The construction phase should preferrably be implemented outside of the nesting period, to minimise potential disturbance or displacement of bird species. However, construction probably cannot avoid the breeding period, in which case, an ecologist should be commissioned to undertake a survey and advise on nest avoidance, if

required. General use and public movement through and around the area upon completion should have only very minor effects on bird species, and any maintenance should follow the protocols identified for bridge construction. Birds will become accustomed to the presence of the bridge, and it is unlikely to have an adverse effects on bird flight paths.

ACKNOWLEDGMENTS

Claire Perkins of Landpro Ltd provided contract management, information on the Longford shared path development and access to reports, and useful feedback on a draft report.

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Technical Comments

From: Lyndon Cleaver
Sent: Thursday, 23 July 2020 3:50 pm
To: Jade McRae
Subject: RE: GDC Longford Bridge

Hi Jade,

I have no navigation safety concerns with the proposed bridge design.

Lyndon

From: Jade McRae
Sent: Thursday, 23 July 2020 3:34 PM
To: Lyndon Cleaver <Lyndon.Cleaver@es.govt.nz>
Subject: GDC Longford Bridge

Hi Lyndon

Attached is an application from Gore District Council to construct a pedestrian/cycle bridge over the Mataura River in Gore.

Please let me know if you have navigational safety concerns around the proposal.

Thanks
Jade

From: Colin Young
Sent: Friday, 17 July 2020 1:32 pm
To: Jade McRae
Subject: RE: GDC Longford Bridge

Hi Jade,

I need additional information regarding the eastern abutment of the bridge.

The design diagram shows the soffit at a level of 76.4m(plan S101) , but the abutment set out plan shows a level 76.269m.(SOP-EA1) plan S111

Would accept the 76.4m abutment level.

Think we need to make it clear to GDC that no authorisation has been given at present for works associated to the cycleway/walkway in the floodway or stopbank.

Cheers Colin

From: Jade McRae
Sent: Thursday, 9 July 2020 9:15 am
To: Colin Young <colin.young@es.govt.nz>
Subject: GDC Longford Bridge

Hi Colin

GDC have submitted their application for the Longford Bridge in Gore, see attached.

Let me know if any of your pre-app concerns have not been covered.

Thanks
Jade

From: Colin Young
Sent: Thursday, 23 July 2020 1:42 pm
To: Jade McRae
Subject: RE: Request for further information on resource consent application - s92(1) - APP-20202268

Hi Jade,

I am happy with the clarification on the East abutment and the bylaw understanding.

Cheers Colin

From: Jade McRae
Sent: Thursday, 23 July 2020 11:59 am
To: Colin Young <colin.young@es.govt.nz>
Subject: FW: Request for further information on resource consent application - s92(1) - APP-20202268

Hi Colin

Please see GDC's response to my request for further info which included your concerns relating to the inconsistent construction levels of the eastern abutment.

Let me know if the response satisfies your concerns.

Thanks
Jade

From: Claire Perkins [mailto:Claire@landpro.co.nz]
Sent: Thursday, 23 July 2020 11:35 AM
To: Jade McRae <Jade.McRae@es.govt.nz>
Cc: rsharma@goredc.govt.nz; Planning <Planning@goredc.govt.nz>; Hashem Ramezan-zadeh <HRamezan-zadeh@goredc.govt.nz>
Subject: RE: Request for further information on resource consent application - s92(1) - APP-20202268

Hi Jade,

Please find attached a response to your request for further information.

Feel free to get in touch if you want to discuss further.

Regards,
Claire

Claire Perkins
Senior Planner / Team Leader
027 445 6897

From: Jade McRae <Jade.McRae@es.govt.nz>
Sent: Tuesday, 21 July 2020 4:04 PM
To: Claire Perkins <Claire@landpro.co.nz>

Cc: rsharma@goredc.govt.nz; Planning <Planning@goredc.govt.nz>
Subject: Request for further information on resource consent application - s92(1) - APP-20202268

Tēnā koe Claire,

Thank you for applying for resource consent to disturb the bed of the Mataura River to construct a pedestrian and cycle bridge across the Mataura River in Gore. The application has been formally received. However I will need further information from you before your application can progress.

This email outlines the information I am requesting, the reasons for the request, your options and how they affect you. **Please read the points below carefully or have someone explain them to you.**

I will need the information requested below to decide whether there are any affected parties and whether the application needs to be publicly notified. The information I am requesting is:

1. In depth details on paint colour and lighting to be used on the bridge. In particular, but not limited to, what colour of paint, what type of lighting, how many lights will be installed, what height they will be installed at and what direction they will face. I am requesting this information because the visual effects are of a concern at present and little detail has been supplied in the application regarding paint and lights.
2. Confirmation of the eastern abutment construction level. The design diagram shows the soffit at a level of 76.4m(plan S101), but the abutment set out plan shows a level 76.269m (SOP-EA1) plan S111. I am requesting this information because Council's Engineer has some concerns relating to the inconsistent construction levels of the eastern abutment.
3. Confirmation that no work associated with the cycleway/walkway in the floodway or stopbank will be undertaken until authorization under the Southland Flood Control and Drainage Management Bylaw 2020 has been granted.

You must, by 11th August 2020 either:

- Provide the information, or
- Agree to provide the information, or
- Refuse to provide the information.

Please consider what to do carefully. Your decision is important because:

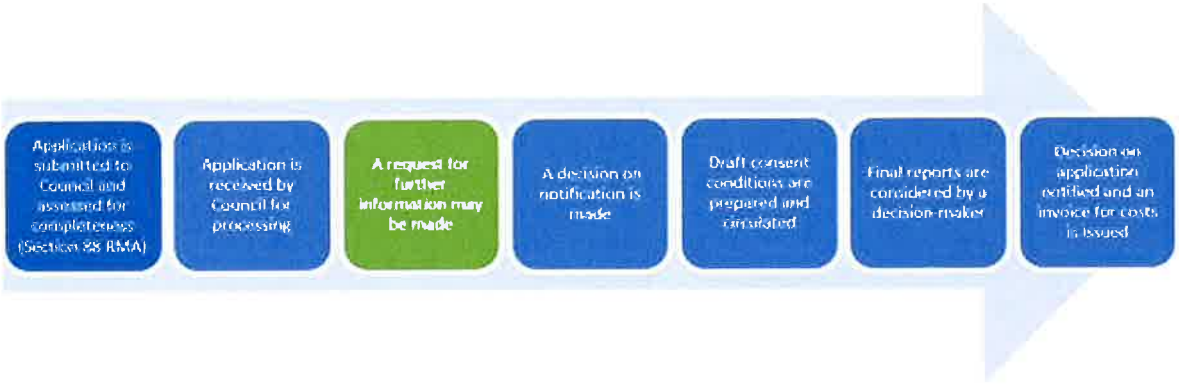
- If you provide the information we will proceed with processing your application.
- If you agree to provide it we will continue processing your application when we receive the information. We may set a deadline for providing the information and may grant or decline the application after that date with or without the new information.
- If you refuse, or do not provide the information before the agreed timeframe we must publicly notify the application. Public notification means the public may make submissions on the application and there may be a hearing to determine it. Additional payments are required for notified applications.
- We can decline the application if we have insufficient information to grant it.

The time taken between this email and our receipt of the information will not be included in our total processing time for the application.

Please contact me if you have any questions. I can be contacted by phone at Environment Southland Monday-Friday 8.00–4.30pm on 0800 76 88 45 or this email address any time. Otherwise, if you need more information:

- go to es.govt.nz/environment/consents or
- go to mfe.govt.nz/rma/rma-processes-and-how-get-involved/resource-consent-processes

Ngā mihi



Jade McRae
Consents Officer
Environment Southland *Te Taiao Tonga*

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Water Conservation Order

Appendix F – Water Conservation Orders

Water Conservation (Mataura River) Order 1997

SR 1997/126

PURSUANT to Sections 214 and 423 of the Resource Management Act 1991, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, and on the recommendation of the Minister for the Environment made in accordance with the report of the Environment Court following an inquiry by that Court, makes the following order.

Analysis
(List of Sections)

Orders

1. **Title and commencement—**

   (1) This order may be cited as the Water Conservation (Mataura River) Order 1997.
   (2) This order comes into force on the 28th day after the date of its notification in the Gazette.

2. **Interpretation—**

   In this order, unless the context otherwise requires,—

   "Act" means the Resource Management Act 1991:

   "Authorised inflows" means discharges of water or water containing waste into protected waters pursuant to a discharge permit:

   "Protected waters" means—
   (1) the Mataura River from its source (approximate map reference NZMS 260 E42:502333) to its confluence with the sea (approximate map reference NZMS 260 F47:877946); and
   (2) the Waikaia River and its tributaries, the Ōtamita Stream, and all other tributaries of the Mataura River upstream of its confluence with the Ōtamita Stream (approximate map reference NZMS 260 F45:881582); and
   (3) the Mimihau Stream and the Mokoreta River and each of their tributaries.

3. **Outstanding features —**

It is declared that the protected waters include outstanding fisheries and angling amenity features.

4. **Rates of flow in Mataura River and Waikaia River** —

(1) Because of the outstanding features specified in clause 3, the rates of flow in the Mataura River and in the Waikaia River must not be reduced, by the grant or exercise of water permits, below the minimum rate of flow specified in subclauses (2) and (3).

(2) The minimum rate of flow at any point in the Mataura River and the Waikaia River above the Mataura Island Road Bridge (approximate map reference NZMS 260 F46:850158), where the flow is estimated by the Southland Regional Council from measurements taken at that point, must be 95% of —

(a) the flow so estimated by the Southland Regional Council at that point; plus

(b) water taken in accordance with the Act from the protected waters upstream of that point and not returned to the protected waters —

less authorised inflows upstream of that point which did not have their source in the protected waters.

(3) The minimum rate of flow at any point in the Mataura River below the Mataura Island Road Bridge (approximate map reference NZMS 260 F46:850158), where the flow is estimated by the Southland Regional Council from measurements taken at that point, must be 90% of—

(a) the flow so estimated by the Southland Regional Council at that point; plus

(b) water taken in accordance with the Act from the protected waters upstream of that point and not returned to the protected waters—

less authorised inflows upstream of that point which did not have their source in the protected waters.

5. **General provisions relating to water permits, discharge permits, and regional plans—**

(1) A water permit or a discharge permit must not be granted under Part 6 of the Act and a regional plan must not be made under Part 5 of the Act in respect of any part of the protected waters if such a permit or plan would contravene the provisions of this order.

(2) The prohibitions in subclause (1) do not apply to water permits or discharge permits granted or regional plans made in respect of any part of the protected waters for all or any of the following purposes:

(a) research into, and enhancement of, fisheries and wildlife habitats;

(b) the construction, maintenance, or protection of roads, bridges, pylons, and other necessary public utilities;

(c) soil conservation and river protection and other activities undertaken pursuant to the Soil Conservation and Rivers Control Act 1941;

(d) stock water and stock-water reservoirs.

6. **Water permit to dam not to be granted, etc—**

(1) A permit to dam the Mataura River from its source to the sea and the Waikaia River from its source to its confluence with the Mataura River must not be granted under Part 6 of the Act.

(2) A permit to dam any tributary of the Waikaia River or the Mataura River which forms part of the protected waters must not be granted under Part 6 of the Act if the dam would harm salmonid fish-spawning or prevent the passage of salmonid fish.

(3) The prohibition in subclause (1) does not apply to water permits in respect of the weir at approximate map reference NZMS 260 F46:912385 if the water permits are granted

or renewed subject to similar terms and conditions to which the former permits were subject.

7. Provisions relating to discharges

(1) A discharge permit must not be granted and a regional plan must not be made for any discharge into the protected waters if the effect of the discharge would be to breach the following provisions and standards:

(a) Any discharge is to be substantially free from suspended solids, grease, and oil:

(b) After allowing for reasonable mixing of the discharge with the receiving water in that part of the protected water between map references NZMS 260 F45:967503 to F45:963508 (Mataura River), —

(i) the natural water temperature must not be changed by more than 3 degrees Celsius;

(ii) the acidity or alkalinity of the waters as measured by the pH must be within the range of 6.0 to 8.5, except when due to natural causes;

(iii) the waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours;

(iv) there must not be any destruction of natural aquatic life by reason of a concentration of toxic substances;

(v) the natural colour and clarity of the waters must not be changed to a conspicuous extent;

(vi) the oxygen content in solution in the waters must not be reduced below 6 milligrams per litre;

(vii) based on not fewer than 5 samples taken over not more than a 30-day period, the median value of the faecal coliform bacteria content of the water must not exceed 2000 per 100 millilitres and the median value of the total coliform bacteria content of the water must not exceed 10,000 per 100 millilitres;

(c) After allowing for reasonable mixing of the discharge with the receiving water in that part of the protected waters between map references —

(i) NZMS 260 F45:894581 to F45:885584 (Mataura River); and

(ii) NZMS 260 F46:917391 to F46:924396 (Mataura River),—

(A) the natural water temperature must not be changed by more than 3 degrees Celsius;

(B) the acidity or alkalinity of the waters as measured by the pH must be within the range of 6.5 to 8.3, except when due to natural causes;

(C) the waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours;

(D) there must not be any destruction of natural aquatic life by reason of a concentration of toxic substances;

(E) the natural colour and clarity of the water must not be changed to a conspicuous extent;

(F) the oxygen content in solution in the waters must not be reduced below 6 milligrams per litre;

(G) based on not fewer than 5 samples taken over not more than a 30-day period, the median value of the faecal coliform bacteria content of the waters must not exceed 200 per 100 millilitres:

(d) After allowing for a reasonable mixing of the discharge with the receiving waters in those parts of the protected waters other than the parts specified in paragraphs (b) and (c),—

(i) the natural water temperature must not be changed by more than 3 degrees Celsius;

(ii) the acidity or alkalinity of the waters as measured by the pH must be within the range of 6.0 or 9.0, except when due to natural causes;

(iii) the waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours;

(iv) there must not be any destruction of natural aquatic life by reason of a concentration of toxic substances;

(v) the natural colour and clarity of the waters must not be changed to a conspicuous extent;

(vi) the oxygen content in solution in the waters must not be reduced below 5 milligrams per litre.

(2) Where it is impracticable, because of emergency overflows or the carrying out of maintenance work or any other temporary situation, to require compliance with the relevant provisions of subclause (1), water permits and discharge permits may be granted by the Southland Regional Council.

8. **Scope of this order**—

Nothing in this order limits the effect of Section 14(3)(b) and (e) of the Act relating to the use of water for domestic needs, for the needs of animals, or for fire-fighting purposes.

Marie Shroff
Clerk of the Executive Council.

Explanatory Note

This note is not part of the order, but is intended to indicate its general effect.
This order declares that the Mataura River and the Waikaia River and various other rivers, streams, and tributaries include outstanding fisheries and angling amenity features.
The order includes various provisions to preserve and protect these features.

Issued under the authority of the Acts and Regulations Publication Act 1989.
Date of notification in Gazette: 10 July 1997.
This order is administered in the Ministry for the Environment.

Draft Consent Conditions

environment SOUTHLAND REGIONAL COUNCIL
Te Taiao Tonga

Cnr North Road and Price Street
(Private Bag 90116
DX YX20175)
Invercargill

Telephone (03) 211 5115
Fax No. (03) 211 5252
Southland Freephone No. 0800 76 88 45

Land Use Consent

Pursuant to Section 104B of the Resource Management Act 1991, a resource consent is hereby granted by the Southland Regional Council to **Gore District Council** of **PO Box 8, Gore 9740** from **Date Granted 2020.**

Please read this Consent carefully, and ensure that any staff or contractors carrying out activities under this Consent on your behalf are aware of all the conditions of the Consent.

Details of Permit

Purpose for which permit is granted:		To disturb the bed of a river, and erect a bridge structure over the bed of a river.
Location	- site locality	Near the intersection between Church and Huron Streets, on the east bank and Surrey Street on the west bank
	- map reference	NZTM2000 1287103E 4887653N
	- catchment	Mataura River
Legal description of land at the site:		Section 80 Blk XVI, HYDRO and Road Reserve
Expiry date:		Date 2024

Schedule of Conditions

1. This consent authorises the erection of a new bridge, over the bed of the Mataura River, at the location specified above, as described in the application for resource consents dated 8 July 2020 and further information dated 23 July 2020. The works authorised by this resource consent include:
   a) Construction, and later removal, of a causeway in the true right riverbed;
   b) Disturbance of the riverbed by vehicles;
   c) Disturbance of the riverbed to drill holes for temporary piles;
   d) Construction of a new bridge structure over the riverbed; and
   e) Placement of rock riprap to protect the abutments of the new bridge.

2. The consent holder shall ensure that:

a) contaminants, other than sediment, but including cement and oil are prevented from entering the waterway during the construction works;
b) all reasonable steps shall be taken to minimise the release of sediment to water;
c) no discharge of sediment shall be visible beyond the zone of reasonable mixing (200m);
d) fish passage is not impeded as a result of the construction works;
e) all construction equipment, machinery, plant, and debris are removed from the site on completion of the works;
f) silt disturbance and instream works are kept to a minimum;
g) no washing of equipment occurs in the river;
h) any river banks disturbed or eroded during the construction works are to be restored and resown with pasture and/or native species upon completion of the works.

3. Any temporary bridge support piles are to be removed entirely from the river bed, so as to not create a navigation safety hazard.

4. The consent holder shall notify the public through local papers one week prior to the commencement of any works and erect onsite signage in order to ensure safe navigation under and past the bridge during construction.

5. The consent holder shall notify the Consent Authority in writing no less than three working days prior to the commencement of construction works.

6. There shall be no disturbance of the roosting and nesting areas of the black fronted tern, black billed gull, and banded and black fronted dotterel, or the feeding areas of the banded and black fronted dotterel, as a result of the exercise of this consent.

7. In the event of any contamination of the watercourse the consent holder shall remove the contaminants immediately from the site and notify, without undue delay, the Consent Authority.

8. The consent holder shall take all reasonable precautions to minimise the spread of pest plants and aquatic weeds. In particular, the consent holder shall:

a) remove any vegetation caught on the machinery;
b) avoid working in areas where aquatic weeds such as *Lagarosiphon major* are known to be present (for information, contact Environment Southland); and
c) to avoid the spread of the *didymosphenia geminata* or any other pest plant, do not use machinery in the berm or bed of the river that has been used in any area where the pest plant(s) are known to be present in the previous 20 working days, unless it has been thoroughly cleansed.

9. The Consent Holder shall submit a Construction Flood Management Plan to the Consent Authority (EScompliance@es.govt.nz) for approval at least 10 working days prior to the first exercise of this consent. The Construction Flood Management Plan shall:
a) provide concise and clear direction to the Person in Charge and other staff on the construction plan;
b) identify environmental risks of the bridge construction specific to the construction site including, but not limited to, erosion and sediment control;
c) identify how the above environmental risks are avoided;
d) describe any safeguards that have been implemented and how these will be maintained;
e) describe any protocols for flood warnings; and
f) describe any protocols for incident management responses.

10. If an event (such as contamination to water from a fuel or sediment discharge incident) occurs that may have significant adverse effect on water quality, particularly at the abstraction point of a registered drinking-water supply, the consent holder shall notify, as soon as reasonably practicable, the following:

    a) Environment Southland (ph 03 211 5115 or 03 211 5225 after hours); and
    b) Alliance Mataura Plant (ph 03 203 6500).

11. A suitably qualified archaeologist shall be present onsite during the earthworks phase and supervise earthworks to ensure no existing or newly discovered site of cultural importance is disturbed.

12. In the event of a discovery, or suspected discovery, of a site of cultural importance (Waahi Taonga/Tapu) during the construction, the consent holder shall immediately cease operations in that location and inform the local iwi authority (Te Ao Marama Inc, phone 03 931 1242). Operations may recommence at a time as agreed upon in writing with the Consent Authority. The discovery of Koiwi (human skeletal remains) or Taonga or artefact material (e.g. pounamu/greenstone) would indicate a site of cultural importance. Appendix A to this consent outlines the process that is to be followed in the event of such a discovery.

13. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, or on receiving monitoring results, for the purposes of:

    a) determining whether the conditions of this permit are adequate to deal with any adverse effect on the environment, including cumulative effects, which may arise from the exercise of the permit, and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the permit;
    b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or Policy Statement;
    c) amending the monitoring programme to be undertaken; or
    d) adding or adjusting compliance limits.

Notes:

1. *Avoid spreading Didymo – Environment Southland strongly recommends that the consent holder, and any person or contractor engaged by the consent holder to carry out the works authorised by this consent, use the "check, clean, dry" management approach as set out in the Biosecurity Management Guidelines (available at www.biosecurity.govt.nz or from Environment Southland) when entering and leaving the river environs.*

2. *For the purposes of this Resource Consent, "per year" is the 12 month period beginning from the date the consent was granted.*

Appendix A: ***Protocol in the event of a discovery, or suspected discovery, of a site of cultural importance (Waahi Taonga/Tapu)***

1. ***Kōiwi tangata accidental discovery***

If Kōiwi tangata (human skeletal remains) are discovered, then work shall stop immediately and the New Zealand Police, Heritage New Zealand (details below) and Te Ao Marama Inc (Ngai Tahu (Murihiku) Resource Management Consultants) shall be advised. Contact details for Te Ao Marama Inc are as follows:

Te Ao Marama Inc
Murihiku Marae, 408 Tramway Road, Invercargill
P O Box 7078, South Invercargill 9844
Phone: (03) 931 1242

Te Ao Marama Inc will arrange a site inspection by the appropriate Tangata Whenua and their advisers, including statutory agencies, who will determine how the situation will need to be managed in accordance with tikanga māori.

2. ***Archaeological Sites***

Archaeological sites are protected under the Heritage New Zealand Pouhere Taonga Act (2014), and approval is required from Heritage New Zealand before archaeological sites can be modified, damaged or destroyed.

Not all archaeological sites are known or recorded precisely. Where an archaeological site is inadvertently disturbed or discovered, further disturbance must cease until approval to continue is obtained from Heritage New Zealand. As stated above, the New Zealand Police and Te Ao Marama Inc also need to be advised if the discovery includes kōiwi tangata/human remains.

Heritage New Zealand
C/- Dr M Schmidt, Regional Archaeologist Otago/Southland
PO Box 5467, Dunedin 9058
Phone: (03) 470 2364 Mobile 027 240 8715 mschmidt@heritage.org.nz

3. ***Taonga or artefact accidental discovery***

If taonga or artefact material (e.g. pounamu/greenstone artefacts) other than kōiwi tangata is discovered, disturbance of the site shall cease immediately and Southland Museum and Te Ao Marama Inc shall be notified of the discovery by the finder or site archaeologist in accordance with the Protected Objects Act 1975. All taonga tuturu are important for their cultural, historical and technical value and are the property of the Crown until ownership is resolved.

4. ***In-situ (natural state) pounamu/greenstone accidental discovery***

Pursuant to the Ngai Tahu (Pounamu Vesting) Act 1997, all natural state pounamu/greenstone in the Ngai Tahu tribal area is owned by Te Runanga o Ngai Tahu. Ngai Tahu Pounamu Management Plans provide for the following measures:

- **any *in-situ* (natural state) pounamu/greenstone accidentally discovered should be reported to Te Runanga o Ngai Tahu staff as soon as is reasonably practicable. Te Runanga o Ngai Tahu staff will in turn contact the appropriate Kaitiaki Papatipu Runanga;**

- **in the event that the finder considers the pounamu is at immediate risk of loss such as erosion, animal damage to the site or theft, the pounamu/greenstone should be carefully covered over and/or relocated to the nearest safe ground.**

The find should then be notified immediately to the Programme Leader – Ohanga, at Te Rūnanga o Ngāi Tahu. Their details are as follows:

Te Rūnanga o Ngāi Tahu
C/- Programme Leader - Ohanga
Te Whare o Te Wai Pounamu
15 Show Place, P O Box 13-046, Otautahi/Christchurch 8021
Phone: (03) 366 4344 Web: www.ngaitahu.iwi.nz