

Deferred Zone Infrastructure Background Report



PREPARED FOR: David Arseneau

PREPARED BY: Blake Brown

Tasman District Council



Revision Schedule

Revision No.	Date	Description	Prepared by	Quality Reviewer	Independent Reviewer	Project Manager Final Approval
1	20/09/2023	Draft Report	Blake Brown Charlotte Holland	Helen Lane	Avik Halder	
2	20/11/2023	Draft Report for comment	Blake Brown	Helen Lane	Avik Halder	Leslie Lyall
3	26/03/2024	Final	Blake Brown	Helen Lane	Avik Halder	Leslie Lyall

Disclaimer

The conclusions in the report are Stantec's professional opinion, as of the time of the report, and concerning the scope described in the report. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. The report relates solely to the specific project for which Stantec was retained and the stated purpose for which the report was prepared. The report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from the client and third parties in the preparation of the report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This report is intended solely for use by the client in accordance with Stantec's contract with the client. While the report may be provided to applicable authorities having jurisdiction and others for whom the client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.



Contents

Introduction	1
1. Scope	1
Infrastructure Assessment	2
2. Richmond	2
2.1 Richmond Infrastructure Requirements	8
2.1.1 RW1 and RW2	8
2.1.2 RW5	8
2.1.3 RW6	9
2.1.4 RW7 and RW8	9
2.1.5 Richmond South	10
3. Brightwater and Wakefield	10
3.1 Brightwater & Wakefield Required Infrastructure	13
3.1.1 Waimea Water Strategy Programme	13
3.1.2 Waimea Wastewater Strategy Programme	13
3.1.3 WK20	14
3.1.4 WK21	14
4. Mārahau	14
4.1 Mārahau Infrastructure Upgrade	15
4.1.1 Mārahau Water Upgrade	15
4.1.2 Mārahau Wastewater Upgrade	16
4.1.3 Mārahau Stormwater Upgrade	16
5. Patons Rock	16
5.1 Patons Rock Infrastructure Upgrade	17
5.1.1 Patons Rock Wastewater Upgrade	17
5.1.2 Patons Rock Potable Water Upgrade	17
6. Murchison	17
6.1 Murchison Infrastructure Upgrade	20
6.1.1 Hotham Street Wastewater Upgrade	20
6.1.2 Hotham Street Water Main Upgrade	20
7. Mariri	20
8. Recommendations	21



List of Appendices

Appendix A – Draft Meeting Minutes 31/08/2023



Introduction

Tasman District Council (TDC) is reviewing the status of locations across the region that are subject to a deferred zone under the Tasman Resource Management Plan (TRMP). The aim of the review is to assess if each location can have its land use zoning changed (to effectively uplift the deferral), and to provide greater detail about the infrastructure servicing required for the sites that cannot have the deferral uplifted. Part of this process considers the infrastructure available and required to service the areas of deferred zoned land.

There are several locations across the district that have previously been identified by TDC as areas for future development that have been deferred for various reasons. Often the reason for applying a deferred zone to a location has been due to a lack of infrastructure to properly service the land for development. The deferral remains in place until the infrastructure services that have been identified as required are provided either by TDC or the developer. The deferred zones are reviewed by TDC periodically in a cycle that aligns with the long-term planning process.

This report identifies and summarises infrastructure that is required to uplift a deferral and bring the new zoning into service. For example, for a location currently zoned as "Rural 2 Deferred Residential", this report will assess if the current infrastructure is able to service the area under "Residential" zoning. Where there are infrastructure restrictions due to capacity or other issues, this report will outline the required infrastructure upgrades required to service the area (whether this be upgrade of an existing assets or construction of new infrastructure).

This report focuses only on the high-level infrastructure requirements for each location and does **not** consider the impacts of any natural hazards such as coastal inundation or slope instability. It is recommended that TDC complete a natural hazards assessment on all locations mentioned in this report prior to making any further decisions and plan changes.

This report will identify the current TDC planning decision (status) for each deferred zoning location that is within the scope of the proposed plan change. There are currently four possible planning decisions considered by TDC which are outlined below:

Upzone: Rezone to the anticipated final zone. The new zoning can be brought into service and land is able to be developed in accordance with the new zoning. To change the land use zoning to the desired end use there will be no infrastructure restrictions either because the infrastructure has been built.

Retain deferral: The area is to retain the current deferred zoning. This may be due to infrastructure restrictions in the current system or delays/uncertainty on funding for required infrastructure projects. To remain deferred, funding for the infrastructure should be included in the TDC's Long Term Plan (LTP) within the next 1 to 10 years. The infrastructure upgrades required to service the area will be identified.

Downzone: This means that the area is rezoned back to its underlying (pre-deferral) zone and will no longer be considered for development at this time. This may be due to the feasibility of providing the required infrastructure or another reason outside the scope of this infrastructure assessment.

Rezone: This means that the location is not suitable for use as currently zoned but may be suitable for an alternative use, such as Unserviced Rural Residential instead of regular (i.e., serviced) Rural Residential.

1. Scope

Stantec has been engaged by TDC to provide a summary of the infrastructure considerations for the deferred locations undergoing review. Information on current infrastructure and future infrastructure planning has been provided by TDC. Information was gathered through a mixture of TDC planning reports and meeting with the Community Infrastructure Engineering Team. Draft minutes from this meeting are attached in Appendix A.

Locations in the following settlements were considered as part of the assessment as advised by TDC:

- Richmond
- Brightwater
- Wakefield
- Mārahau



- Mariri
- Paton's Rock
- Murchison

The scope excludes any locations in the following areas (as instructed by TDC):

- Māpua
- Motueka

Unless otherwise stated it is assumed that stormwater servicing can be provided through discharge to existing reticulation or receiving environment and may or may not require onsite detention to mitigate development effects as per the Nelson Tasman Land Development Manual (which would be assessed at the time that development occurs).

This report is intended to support TDC with the plan change process. It should be noted that this assessment only considers infrastructure and not the wider considerations given during a plan change process such as natural hazards.

This report is currently a high level assessment and is not a complete assessment of all deferred locations in the Tasman District. An update to this report by TDC is intended to be carried out following further TDC planning and infrastructure decisions.

Infrastructure Assessment

2. Richmond

Richmond is the largest urban centre in Tasman District. There are 18 deferred locations in the wider Richmond area which can be seen in Figures 1 and 2 below.

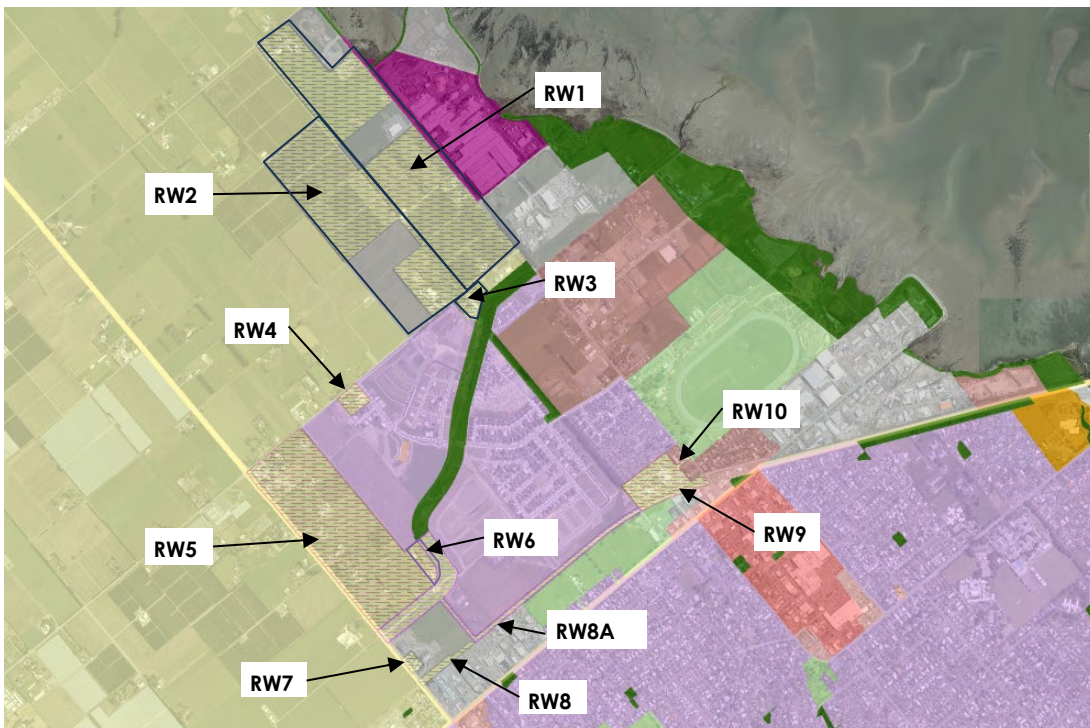


Figure 1 - Richmond West deferred zone locations



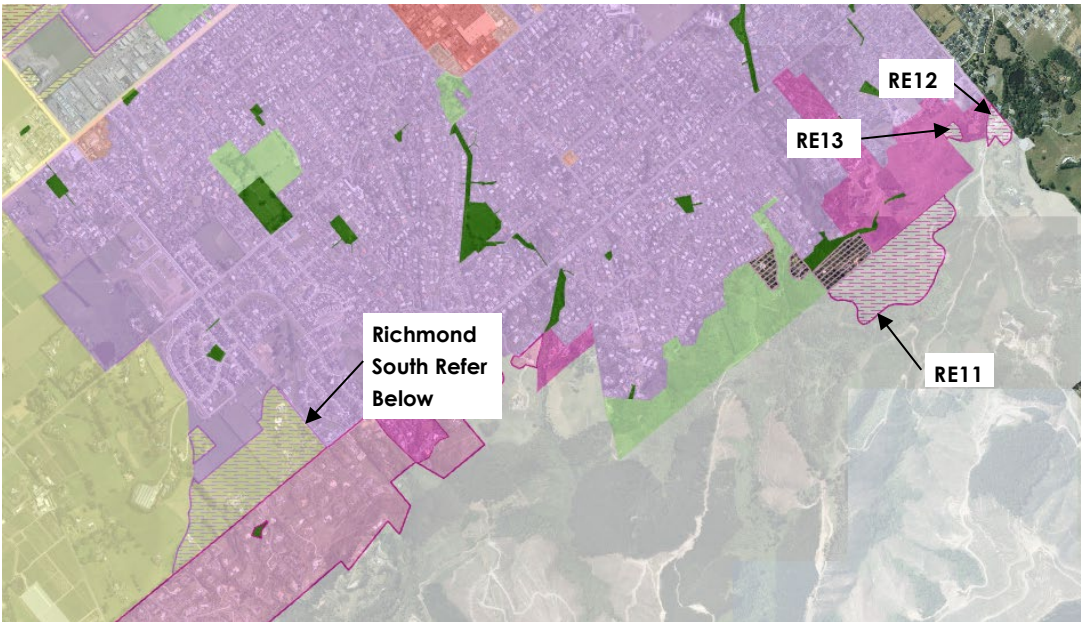


Figure 2 - Richmond East deferred zone locations

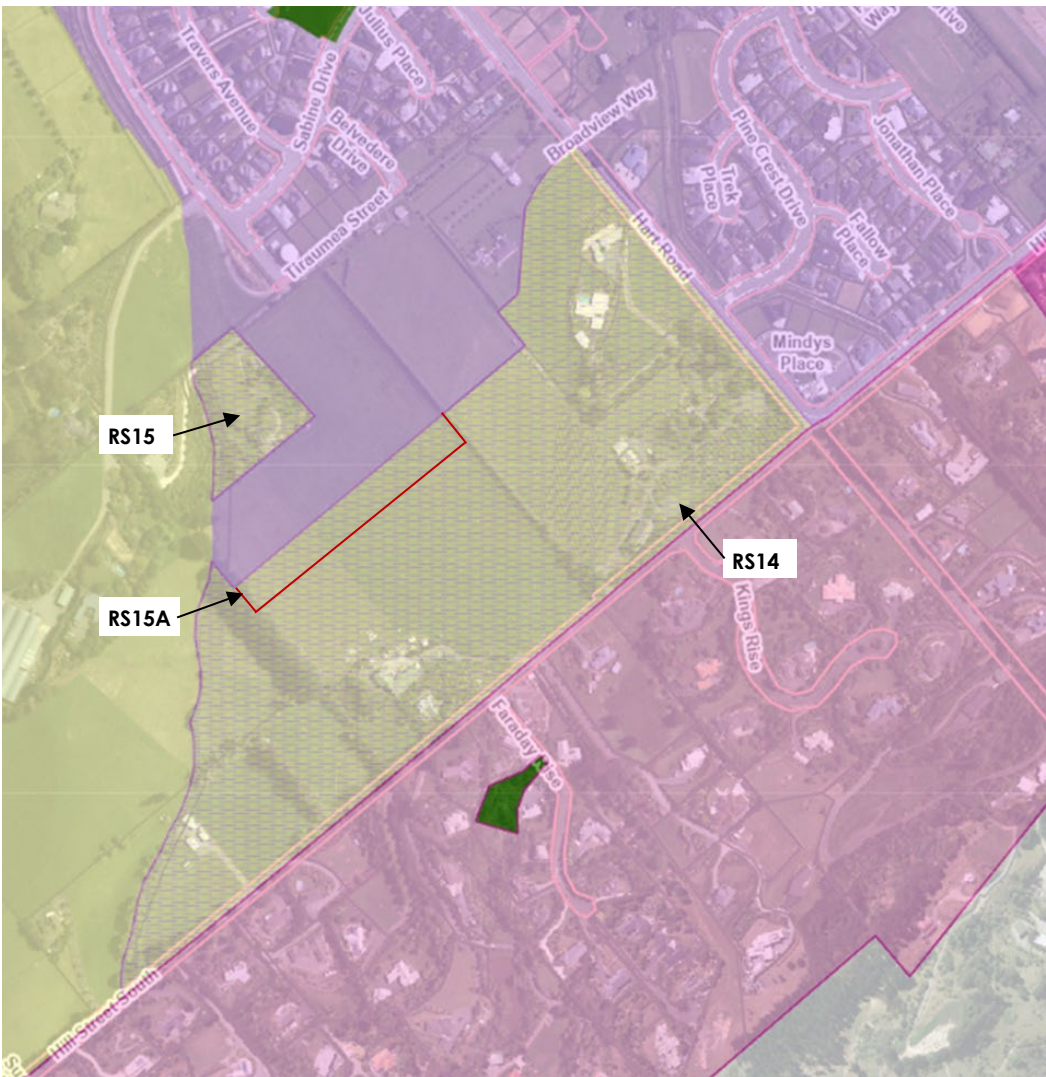


Figure 3 - Richmond South deferred zone locations



Each location has been assessed by the TDC Community Infrastructure Team to identify infrastructure constraints on changing the current deferred zones or to retain the deferral status. A summary of the infrastructure assessment for each location in Richmond is provided in Table 1 below.

Table 1 - Richmond Infrastructure Requirements Summary

Site location Code	Current Zone	Reasons for Deferral (per TRMP)	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
RW1	Rural 1 deferred Light Industrial (parts Light Industrial)	Reticulated water, wastewater and stormwater services required	TDC planning decision to be confirmed	No constraints. Required water and wastewater infrastructure in place for development. Onsite stormwater solution to be determined by developer.	TDC planning decision to be confirmed and undertake natural hazards assessment. Infrastructure suitable for upzoning to Light Industrial.
RW2	Rural 1 deferred Light Industrial (parts Light Industrial)	Reticulated water, wastewater and stormwater services required	TDC planning decision to be confirmed	No constraints. Required water and wastewater infrastructure in place for development along McShane Road, connection to be provided by developer. Onsite stormwater solution to be determined by developer.	TDC planning decision to be confirmed and undertake natural hazards assessment. Infrastructure suitable for upzoning to Light Industrial.
RW3	Rural 1 deferred Light Industrial	Reticulated water, wastewater and stormwater (Borck Creek construction) services required	Upzone to Light Industrial zone	Water and wastewater connections available in McShane Road. Stormwater to be routed to Borck Creek at rear of property.	Upzone to Light Industrial.
RW4	Rural 1 deferred Mixed Business	Reticulated water from Richmond South High-Level Reservoir, wastewater, stormwater (Borck Creek construction) services required	Upzone to Mixed Business	Water and wastewater connection available in Berryfield Drive. Stormwater to be routed to Borck Creek using existing reticulation and overland flow paths; onsite detention and treatment required for mixed business land use.	Upzone to Mixed Business
RW5	Rural 1 deferred	Reticulated water from Richmond	Retain deferral	Requires the construction of a new trunk watermain	Retain deferral



Site location Code	Current Zone	Reasons for Deferral (per TRMP)	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
	Mixed Business	South High-Level Reservoir, wastewater, stormwater (Borck Creek construction) services required		<p>through the mixed business area, including connection to existing 200mm watermain under Borck Creek at end of Summersfield Blvd, prior to uplifting deferral. (2.1.2)</p> <p>Wastewater trunk available for discharge along rail corridor south of RW5 area, developer must pump sewage to that point. Requires the construction of a new trunk pressure main along indicative road layout prior to uplifting deferral.</p> <p>New indicative road layout and walking/cycling connections provided by TDC.</p> <p>Stormwater detention and treatment required for mixed business land use as per NTLDM; stormwater to be directed to Borck Creek through upgraded 1200mm pipe on Rosalies Street.</p>	
RW6	Rural 1 deferred Mixed Business	Reticulated water from Richmond South High-Level Reservoir, wastewater, stormwater (Borck Creek construction) services required	Rezone to Residential	<p>Requires the provision of water and wastewater servicing from Summersfield Blvd or Hanworth Road; connections are available nearby.</p> <p>Stormwater to be directed to Borck Creek adjacent to property.</p>	Rezone to Residential



Site location Code	Current Zone	Reasons for Deferral (per TRMP)	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
RW7	Rural 1 deferred Light Industrial	Stormwater service required	Upzone to Light Industrial	No constraints. Required infrastructure in place for development: water service off Appleby Highway, wastewater service from trunk mains along old railway reserve, stormwater detention and treatment to be provided per NTLDM and to be directed to Borck Creek.	Upzone to Light Industrial
RW8	Rural 1 deferred Light Industrial	Stormwater service required	Rezone to Open Space.	N/A as being changed to Open Space zone.	Rezone to Open Space.
RW8A	Rural 1 deferred Residential	Stormwater service required	Rezone to Open Space.	N/A as being changed to Open Space zone.	Rezone to Open Space
RW9	Rural 1 deferred Mixed Business	Stormwater service required	Rezone to Open Space	N/A as being changed to Open Space zone.	Rezone to Open Space
RW10	Rural 1 deferred Mixed Business	Stormwater service required	Upzone to Mixed Business	No constraints. Required infrastructure in place for development using existing water and wastewater connections off Lower Queen Street. Stormwater to be managed by developer with discharge available to Poutama Stream at rear or property. Stormwater detention and treatment required for mixed business land use.	Upzone to Mixed Business
RE11	Rural 2 deferred Rural Residential Serviced	At Champion Road, reticulated wastewater service required; above the 62.5 metre contour (Secs	Upzone to Rural Residential Serviced	Wastewater upgrade currently required, existing capacity for up to 40 lots off of Champion Road main, connection to be provided by developer.	Upzone to Rural Residential Serviced with maximum capacity of 40 lots.



Site location Code	Current Zone	Reasons for Deferral (per TRMP)	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
		1, 3 and 7 SO452872) reticulated water supply service required			
RE12	Rural 2 deferred Rural Residential Serviced	At Champion Road, reticulated wastewater service required; above the 62.5 metre contour (Secs 1, 3 and 7 SO452872) reticulated water supply service required	Upzone to Rural Residential Serviced	No constraints. Water and wastewater connection available in Champion Road, to be done by developer.	Upzone to Rural Residential Serviced
RE13	Rural 2 deferred Rural Residential Serviced	At Champion Road, reticulated wastewater service required; above the 62.5 metre contour (Secs 1, 3 and 7 SO452872) reticulated water supply service required	Upzone to Rural Residential Serviced	TDC Community Infrastructure indicates no underground infrastructure will be provided to this site due to high slope stability hazard.	Downzone
RS14	Rural 1 deferred Residential	Reticulated water supply	Retain deferral	Richmond High level reservoir construction, or equivalent measure to provide adequate level of service for water supply, required prior to the development of this location.	Retain deferral
RS15	Rural 1 deferred Residential	Reticulated water supply	Upzone to Residential	Sufficient water and wastewater capacity available to service this	Upzone to Residential



Site location Code	Current Zone	Reasons for Deferral (per TRMP)	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
				area from Sabine Drive and Tiraumea Street.	
RS15A	Rural 1 deferred Residential	Reticulated water supply	Upzone to Residential	Sufficient water and wastewater capacity available to service this area through planned connections for Oregon Land Limited development, which is already zoned Residential.	Upzone to Residential

2.1 Richmond Infrastructure Requirements

2.1.1 RW1 and RW2

TDC planning decision to be confirmed, due to presence of natural hazards related to sea level rise and coastal inundation; TDC staff to complete assessment of these hazards. Required infrastructure in place to support intended light industrial use, with RW1 areas accessing water and wastewater servicing from Lower Queen Street, and RW2 areas accessing water and wastewater servicing from McShane Road with connection provided by the developer. Both RW1 and RW2 require stormwater controls as per the NTLDM and assessment of downstream/upstream effects to other properties.

2.1.2 RW5

RW5 borders SH60 and McShane road. For this area to change planning zone significant infrastructure upgrades are required. A new water trunk main is required through the mixed business area, including connection to the existing watermain located under Borck Creek at the end of Summersfield Blvd. There is a connection available to the wastewater trunk main to the south but this would need to be pumped until the connection point due to the topography and existing pipe depth. A stormwater connection is required to Borck Creek as well as treatment and detention. This stormwater connection is to be directed to Borck Creek through an upgraded pipe on Rosalies St. TDC have provided an indicative road layout for this area.



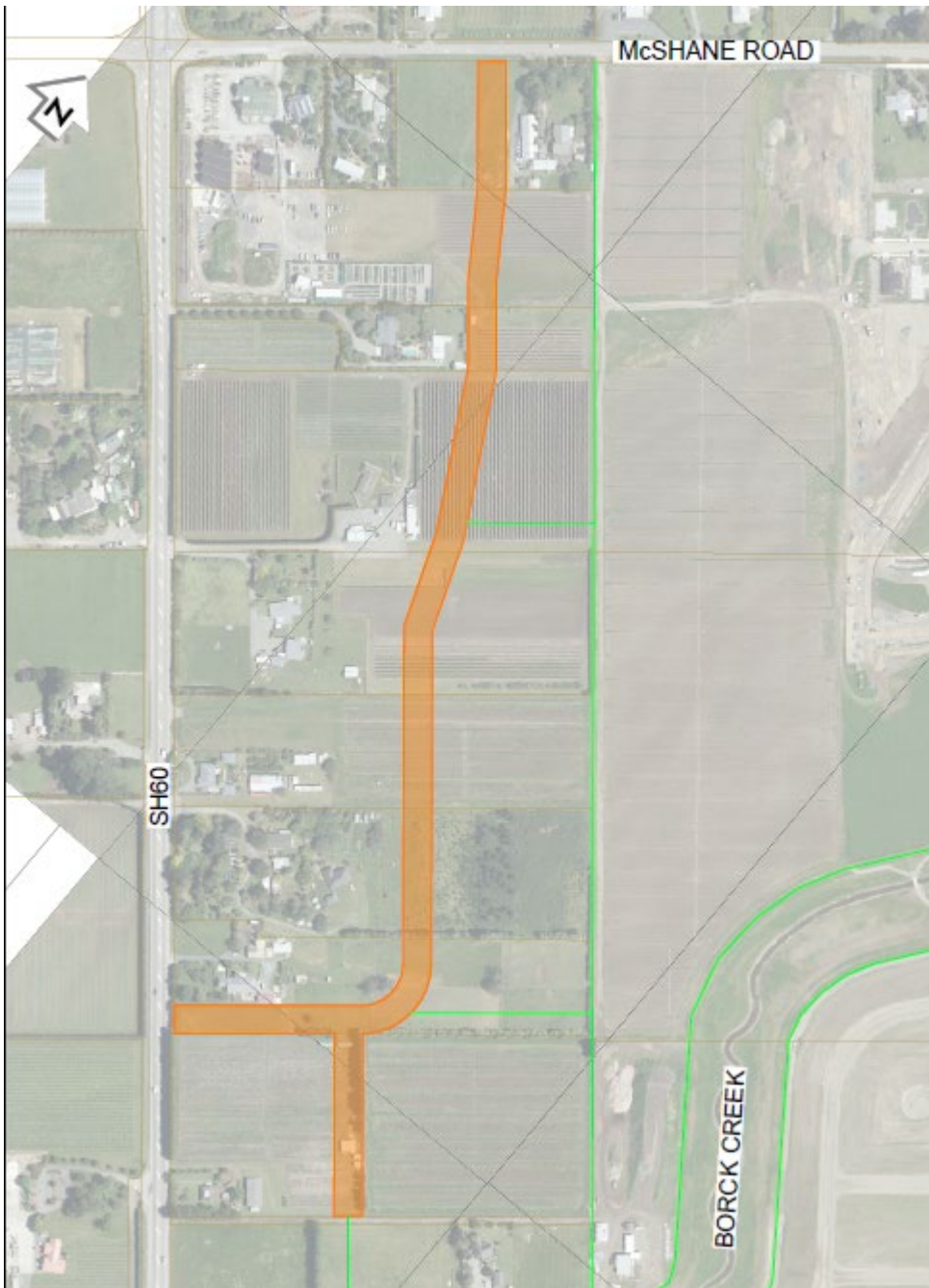


Figure 4 - RW5 Indicative Road Layout

2.1.3 RW6

RW6 is located between Chesterfield Drive and SH60 and is currently zoned Rural 1 Deferred Mixed Business. Before the deferral can be uplifted, roading access needs to be provided off Summersfield Blvd. Water and Wastewater connections can be made from Summersfield Blvd or Harnworth Rd. Stormwater is to be directed to Borck Creek.

2.1.4 RW7 and RW8

RW7 and RW8 are two locations which are located near the Northern corner of the SH6 and SH60. There are several land designations in the vicinity of these locations with the Waka Kotahi designation overlaying a significant portion. Waka Kotahi has designated land for a future upgrade of the SH6 overpass/bypass.



Due to this designation and due to the presence of the Tasman Great Taste Trail, TDC has decided to downzone land within the Waka Kotahi designation from the current 'Rural 1 deferred Light Industrial' zoning to 'Open Space' to allow for these future works. The remaining land outside of the designation has no infrastructure restrictions as it connects to the adjacent WW gravity main and Water pipe can have the deferral zone uplifted. Waka Kotahi are agreeable to the small area of RW7 that is within the designation to be upzoned to Light Industrial.



Figure 5 - DA43 Waka Kotahi Designation

2.1.5 Richmond South

Richmond South is made up of three areas including RS14, RS15 and RS15A, of which the latter two are subsets of the primary RS14 Richmond South deferred zone area. Areas are currently zoned 'Rural 1 Deferred Residential'. Currently there is inadequate capacity in the network to provide pressurised water reticulation to service the entirety of this area. To provide full water reticulation to these areas, construction of the Richmond South Low-Level Reservoir (which is identified in the Long term Plan) is required to lift the deferral.

Several small subsets of this area (RS15 and 15A) have been investigated by the respective landowners for inclusion in adjacent development networks. Sufficient capacity in the nearby water and wastewater networks was identified and approved by TDC, allowing these areas to be rezoned to Residential land use.

Council has purchased land at 520 Hill Street for the future construction of the Richmond South Low-Level Reservoir. The reservoir site is intended to include two concrete tanks and a pump station that will service the locations in the future but this will be confirmed at detailed design. The site will enable the development of Richmond West and low levels of Richmond South. This project is in the current 2021 Tasman District Long Term Plan (LTP) and is currently budgeted for \$7.1 million with estimated completion in 2030.

3. Brightwater and Wakefield

Brightwater and Wakefield are located on the Waimea plains southeast of Richmond. There are two deferred locations in Brightwater and two in Wakefield that can be seen in Figures 4 and 5 below.





Figure 6 Brightwater Deferred Zone Locations



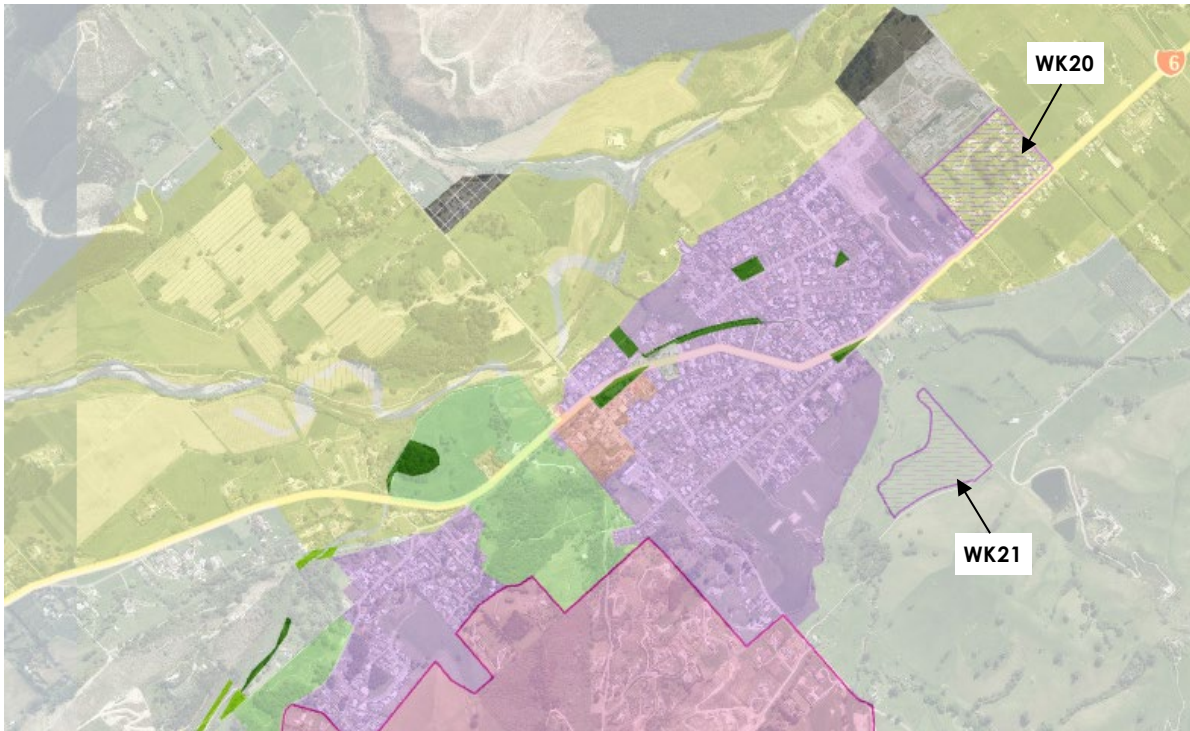


Figure 7 Wakefield Deferred Zone Locations

A summary of the infrastructure assessment for Brightwater and Wakefield is presented in Table 2 below.

Table 2 - Brightwater and Wakefield Infrastructure Requirements Summary

Site location Code	Current Zone	Reasons for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
BW16	Rural 1 deferred Residential	Reticulated water supply	Change to Conservation Zone	N/A as being changed to Conservation zoning. If remaining deferred residential, implementation of the Waimea Water and Wastewater strategies is required.	Change to Conservation Zone
BW17	Rural Residential deferred Residential	Reticulated water supply. Stormwater and water supply required.	Retain deferral	Implementation of the Waimea Water and Wastewater strategies Stormwater discharge to Pitfure Stream available, but flood setbacks and mitigation required (to be demonstrated at time of development).	Retain Deferral
WK20	Rural 1 deferred Residential	Stormwater services; reticulated water supply upgrade; and roading improvements to Bird Lane and the	Retain Deferral	Roading upgrade to Bird Lane and SH60 intersection A stormwater discharge pathway to the Wai-iti River or Pitfure Stream is required Implementation of the Waimea Water and Wastewater strategies.	Retain Deferral



Site location Code	Current Zone	Reasons for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
		intersection with SH6			
WK21	Rural 2 deferred Rural Residential	Previous to PC 79 - Deferred for Higgins Rd upgrade south of the Pitfure Bridge to ensure access in a Q100 event. And pedestrian /cycle link over the Pitfure Stream to Ryeland Avenue. Reticulated wastewater, stormwater, and water supply required.	Retain deferral	Bridge upgrade on Higgins Road over Pitfure Stream for flood access Implementation of the Waimea Water and Wastewater strategies.	Retain Deferral

3.1 Brightwater & Wakefield Required Infrastructure

3.1.1 Waimea Water Strategy Programme

The water reticulation network for Brightwater and Wakefield is currently serviced from the Wakefield and Brightwater bore fields which are nearing capacity and decreasing in output.

The completion of the Waimea Water Strategy Programme is required to uplift the deferral of BW17 in Brightwater and WK21 in Wakefield. The construction of this programme is included in the 2021 LTP and has an estimated budget of \$34 million and has a start date of 2024 and completion date of 2031. This programme comprises the following projects:

- New source bore field and water treatment plant at Clover Road
- Water reticulation
- Water storage reservoirs
- Potable water pump stations

The Waimea water network capacity upgrades includes the construction of new source bores and a water treatment plant near Brightwater. The upgrades are intended to enable growth and improve water resilience for Wakefield, Brightwater, and Hope. Increased capacity will allow the transfer of water between Wakefield, Brightwater, and Hope, allowing better balance of supply and demand. These improvements will provide additional capacity for growth by enabling the extraction of a greater volume of higher quality water and water security, augmented by the recently completed Waimea Dam.

3.1.2 Waimea Wastewater Strategy Programme

Currently the Brightwater and Wakefield wastewater network is near capacity and upgrades to the network are required to uplift the deferral of BW17 in Brightwater and WK20 & WK21 in Wakefield.

TDC Community Infrastructure have scoped the Waimea Wastewater Strategy, which involves the following network upgrades to add capacity to the wastewater network in both Brightwater and Wakefield.

- Construction of a new wastewater pumpstation in Wakefield with a new rising main to bypass the existing Brightwater wastewater pumpstation. This rising main would cross the Wairoa River before reconnecting with the



existing gravity network. This would remove loading from the Brightwater pumpstation and allow for development in both Brightwater and Wakefield.

In the 2021 LTP there is provision for building a new wastewater pumpstation at Lord Rutherford Road however TDC Community Infrastructure indicated that the above solution would supersede this if implemented.

3.1.3 WK20

WK20 is located in Wakefield, bounded by Bird Lane and SH6.

An upgrade is required to create a safe intersection between SH6 and Bird Lane for the 147 proposed lots. Any design proposals would need to be approved by NZTA Waka Kotahi as it involves a state highway intersection.

A stormwater upgrade is required to enable development of this area. There is currently no stormwater outlet from the area to either the Wai-iti River or Pitfure Stream, which would require full retention of all stormwater on site, which is not considered feasible. A stormwater discharge pathway to the Wai-iti River or Pitfure Stream is required to be identified and enabled by the developer.

3.1.4 WK21

This site is the subject of a separate plan change (PC76) which proposes to change the zone to Rural 1 deferred Residential. That plan change will supersede this plan change, and will update the servicing requirements in the TRMP.

4. Mārahau

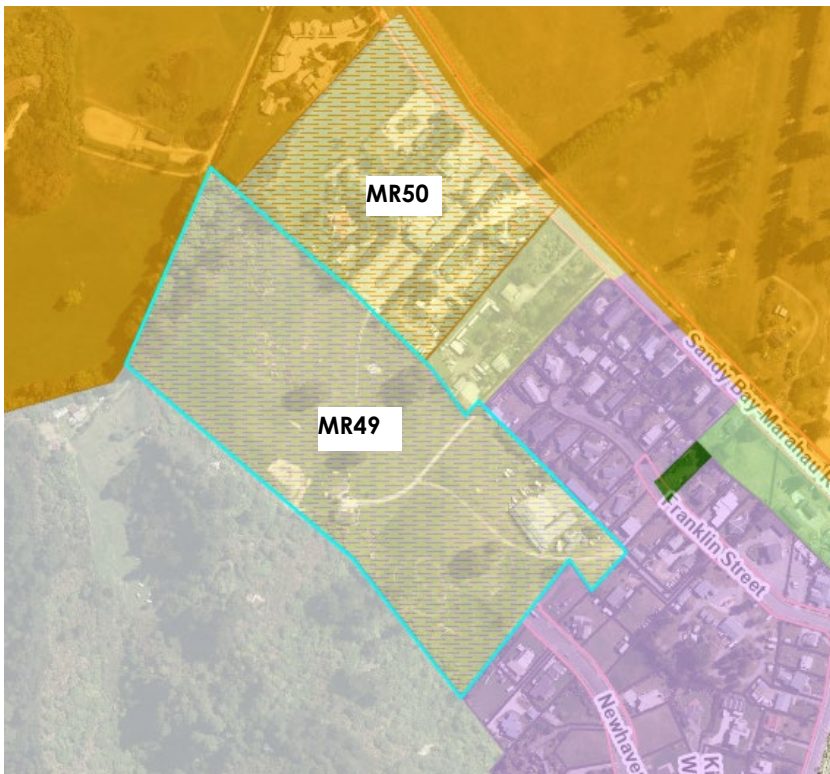


Figure 8 Mārahau Deferred Zone Locations

There are two zones in northwestern Mārahau (shown below) that are currently zoned deferred, these are on low lying ground adjacent to the sea and make up approximately 105,051m² of land.



A summary of the infrastructure assessment for Mārahau can be seen in Table 4 below.

Table 3 Mārahau Infrastructure Requirements Summary

Site location Code	Current Zone	Reasons for deferral	TDC Intended Zoning Intention 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
MR49	Rural 1 deferred residential, New Haven Crescent	Reticulated wastewater	Downzone to Rural 1	No reticulated wastewater, no intention from TDC to provide wastewater servicing to Marahau in the long-term. Previous investigations have identified no feasible alternative solution for onsite wastewater. Exposure to natural hazards (sea level rise) suggests development not suitable in this location – natural hazards assessment completed by others but stated here for context on recommendation.	Downzone to Rural 1
MR50	Rural 1 deferred Tourist Services	Reticulated wastewater and water supply services	Rezone from Rural 1 deferred Tourist Services to Tourist Services - Closed	No Infrastructure in place to service area. Potable water source required, and on-site wastewater treatment required. Exposure to natural hazards (sea level rise) suggests development not suitable in this location – natural hazards assessment completed by others but stated here for context on recommendation.	Rezone from Rural 1 deferred Tourist Services to Tourist Services – Closed. To be confirmed by TDC Community Infrastructure.

4.1 Mārahau Infrastructure Upgrade

These zones would require new potable water and wastewater services and a stormwater upgrade or construction to uplift their deferrals. See details of upgrades required below.

4.1.1 Mārahau Water Upgrade

There is no viable water source that could be used to supply this area with potable water. Existing groundwater sources are contaminated with iron. It is an expensive process to treat water with high levels of contaminants. The closest potable



water source is Riwaka or Kaiteriteri which is already near capacity and would be cost prohibitive to connect reticulated supply to Mārahau.

4.1.2 Mārahau Wastewater Upgrade

The existing properties in the area are on private septic tank systems due to no reticulated wastewater in the area. It is costly to build new septic tank systems in this area due to tidally influenced groundwater. Alternatives to septic tanks such as constructing a reticulated wastewater network and treatment plant are also cost prohibitive.

4.1.3 Mārahau Stormwater Upgrade

Both zones require stormwater upgrades to protect from tidal inundation and sea level rise, this could involve increasing the height of the existing sea wall to provide adequate protection, raising the existing ground levels to counteract sea level rise or other stormwater management measures, all of which are expensive to construct and maintain.

5. Patons Rock

There is one deferred zone located to the southwest of Patons Rock that is made up of light rolling semi-intensive farmland. This area is approximately 115,806m².



Figure 9 Patons Rock Deferred Zone Location

A summary of the infrastructure assessment for Patons Rock can be seen in Table 5 below.

Table 4 Patons Rock Infrastructure Requirements Summary

Site location Code	Current Zone	Reason for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Restrictions	Assessment – based on Infrastructure Requirements



PR51	Rural 2 deferred Residential	Reticulated wastewater service required	Rezone to Rural Residential (Unserviced)	Currently no services in the area to connect to. Highly unlikely this area will ever have services supplied, and currently no TDC intention to bring wastewater services here. Services not required for rural residential unserviced.	Rezone to Rural Residential (Unserviced)
------	------------------------------	---	--	--	--

5.1 Patons Rock Infrastructure Upgrade

5.1.1 Patons Rock Wastewater Upgrade

To allow for further development of the above zone a reticulated wastewater network would need to be developed. Currently there is no wastewater services to this area and a treatment scheme would need to be constructed or property owners would need to invest in private septic tank systems. Alternatively, if the zoning became rural or rural residential septic tanks could be used to hold/treat wastewater. The nearest connection point for pumped wastewater is Takaka 10km away. It would be a significant cost to install a new wastewater pipeline along this route.

5.1.2 Patons Rock Potable Water Upgrade

There is no existing water supply to Paton's Rock. Currently residents are on private potable water tanks. The nearest connection for water is Tākaka which is a non-potable source. There are no new projects identified in the LTP to extend or build new potable water infrastructure to Patons Rock.

6. Murchison

There are five current deferred locations in Murchison. These are typically adjacent to the existing township and are currently a mix of rural and semi-rural land uses that will be utilised for residential purposes.



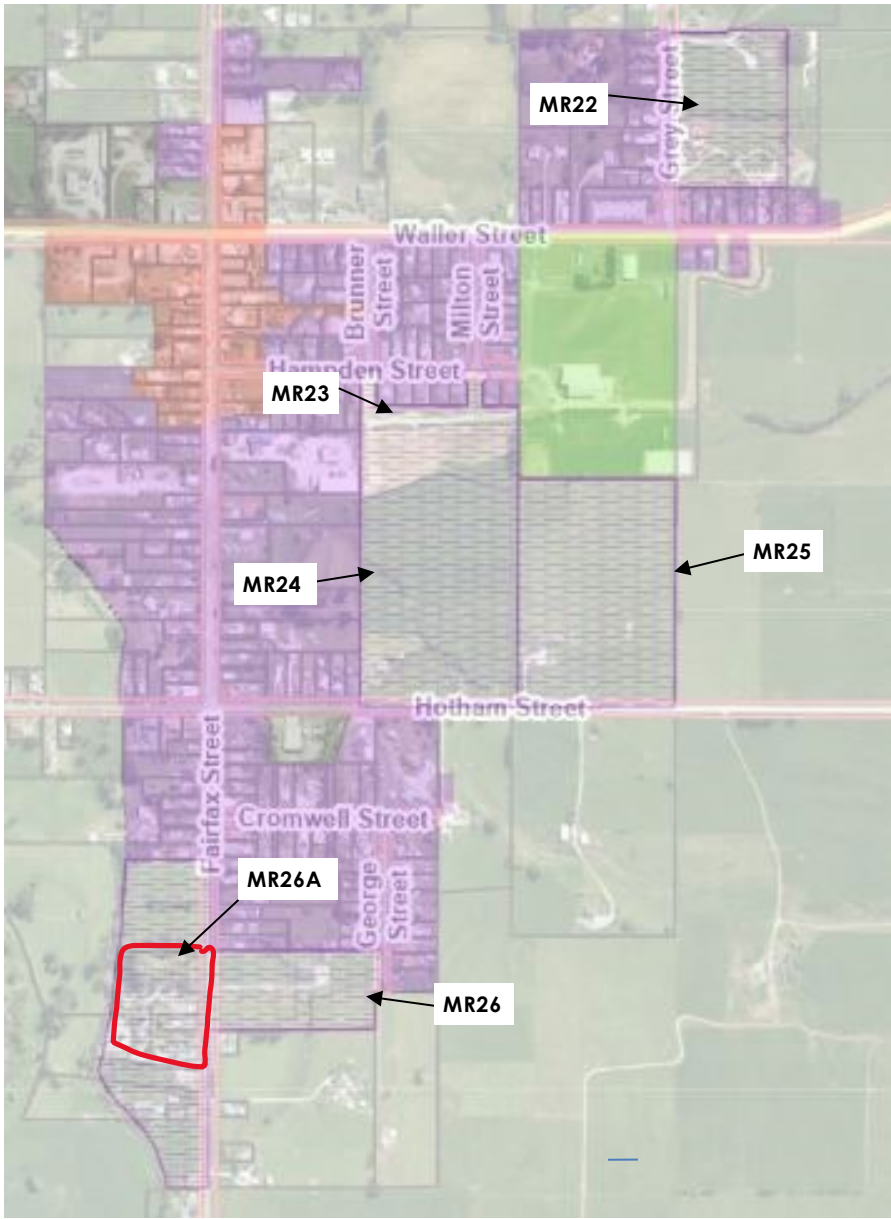


Figure 10 Murchison Zoning and Development Areas

A summary of the infrastructure assessment for Murchison can be seen in Table 6 below.

Table 5 Murchison Infrastructure Requirements Summary

Site location Code	Current Zone	Reasons for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
MR22	Rural 2 deferred Residential	Stormwater service required	Retain deferral	Upgrade to Hotham Street wastewater pump station required, and new rising main to wastewater treatment plant.	Retain Deferral



Site location Code	Current Zone	Reasons for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
				<p>Upgrade to Hotham Street watermain required.</p> <p>Requirement for stormwater servicing to be removed; solution to be provided by developer at time of development.</p>	
MR23	Rural 2 deferred Residential	Stormwater service required	Rezone Open Space	Not Applicable – No infrastructure requirements for Open Space.	Rezone to Open Space
MR24	Rural 2 deferred Residential	Stormwater service required	Retain deferral	<p>Upgrade to Hotham Street wastewater pump station required, and new rising main to wastewater treatment plant.</p> <p>Upgrade to Hotham Street watermain required.</p> <p>Requirement for stormwater servicing to be removed from deferral; solution to be provided by developer at time of development.</p>	Retain Deferral
MR25	Rural 2 deferred Residential	Deferred for water, stormwater and wastewater	Retain Deferral	<p>Upgrade to Hotham Street wastewater pump station required, and new rising main to wastewater treatment plant.</p> <p>Upgrade to Hotham Street watermain required.</p> <p>Requirement for stormwater servicing to be removed from deferral; solution to be provided by developer at time of development.</p>	Retain Deferral



Site location Code	Current Zone	Reasons for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
MR26	Rural 2 Deferred Residential	Deferred for water, stormwater and wastewater	Retain deferral	Upgrade to Hotham Street wastewater pump station required, and new rising main to wastewater treatment plant. Upgrade to Hotham Street watermain required. Requirement for stormwater servicing to be removed from deferral; solution to be provided by developer at time of development.	Retain Deferral
MR26A	Rural 2 Deferred Residential	Deferred for water, stormwater and wastewater	Upzone to Residential	Existing holiday camp at 170 Fairfax Street has existing wastewater connections in place which may be utilised by new dwellings	Upzone to Residential

6.1 Murchison Infrastructure Upgrade

6.1.1 Hotham Street Wastewater Upgrade

The wastewater network in Murchison is currently near capacity due to the capacity of Waller Street Wastewater Pump Station. The Waller Street Wastewater Pump Station collects all wastewater from the eastern side of the Matakītaki River and pumps it from the East side to the West to be treated at the wastewater treatment plant.

For future development to occur in Murchison the Hotham Street Wastewater Pump Station needs to be upgraded and rising main realigned to bypass the Waller Street Pump Station. This upgrade would take pressure off the Waller Street Pump Station. This upgrade would enable development in all deferred locations provided potable water services are upgraded concurrently. A portion of the deferred zone location MR26, being the holiday camp at 170 Fairfax Street, is an exception due to the existing water and wastewater connections that are in place to service the existing cabins.

6.1.2 Hotham Street Water Main Upgrade

For the development of all proposed lots, the DN150 Hotham Street water main needs to be upgraded to meet the town's supply demands. This upgrade would need to be from Fairfax Street to the existing reservoir located on the hillside adjacent to Chalgrave Street. An upgrade to the water treatment plant is also required, this is scheduled to begin in 2025 with completion in 2026.

7. Mariri

There is one deferred zone location in Mariri. The location is currently made up of rolling hills with rural lifestyle as the predominant current land use. This area of land mentioned is approximately 688,659m².



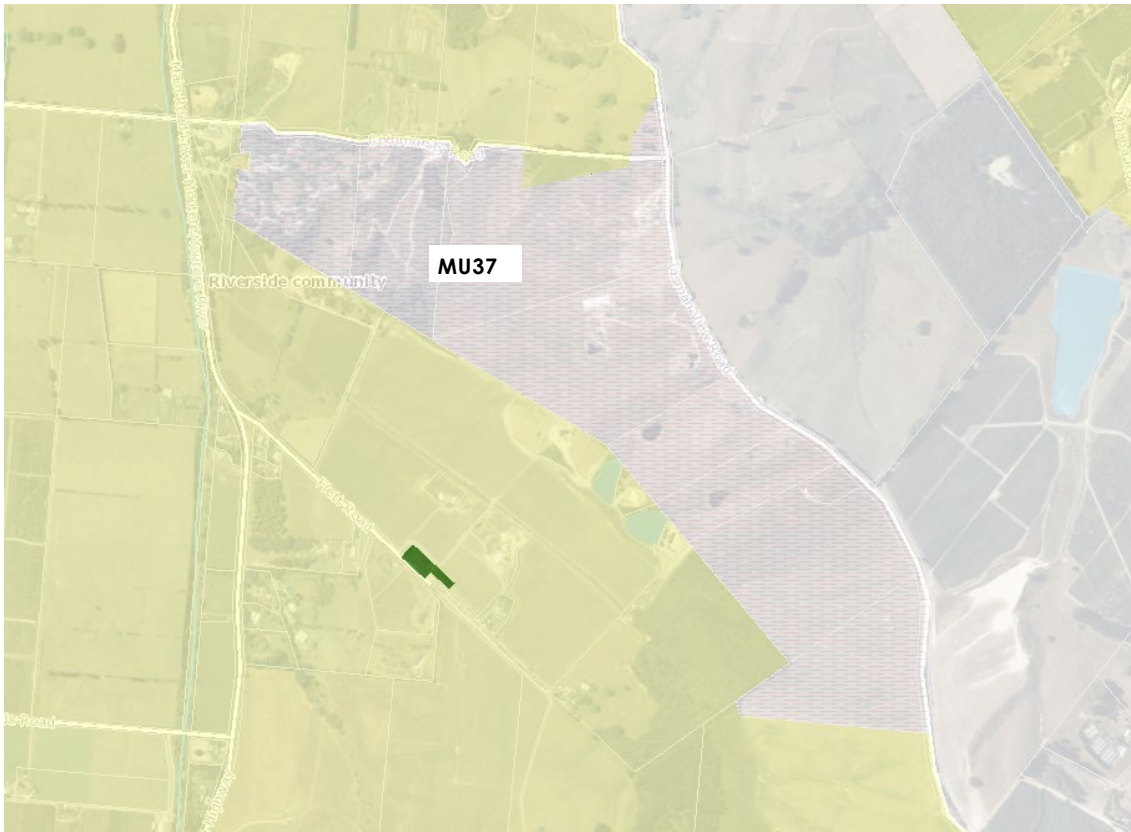


Figure 11 Mariri Deferred Zone Location

A summary of the infrastructure assessment for Mariri can be seen in Table 7 below.

Table 6 Mariri Infrastructure Requirements Summary

Site Code	Current Zone	Reason for deferral	TDC Intended Zoning Decision 28.06.2023	Infrastructure Requirements	Assessment – based on Infrastructure Requirements
MU37	Rural 2 deferred Rural Residential	Road upgrading required once the existing tree crop has matured and been harvested.	Change zoning to Rural Residential (Unserviced)	Currently there are no services in the area to connect to. Highly unlikely this area will ever have services supplied. Services not required for rural residential un-serviced.	Rural Residential (Unserviced)

8. Recommendations

This high-level infrastructure assessment has been completed based on information provided by the TDC Community Infrastructure team. The following items are recommended to be completed by TDC following the submission of this report.

1. Review and update this report at the mid 2024 to reflect updates to TDC infrastructure and planning decisions as well as aligning with the Long Term Plan Infrastructure priorities.
2. TDC Community Infrastructure Team to review restrictions/requirements for each zone.
3. Review all Natural Hazards that were previously excluded from this report before advancing decisions.



4. Review planning decisions in light of recently released Ministry for the Environment ' Coastal hazards and climate change guidance.
5. Complete further cost estimates on projects to assist with work staging.
6. Hydraulic modelling of water and wastewater networks to confirm infrastructure requirements.
7. Add specific infrastructure projects to the LTP 2024.





Appendices

Appendix A Draft Meeting Minutes 31/08/2023



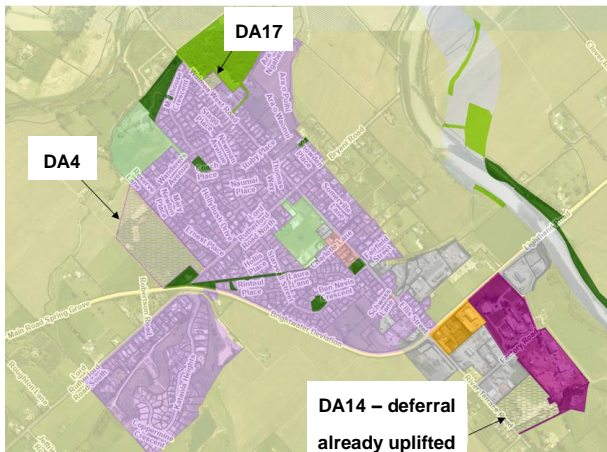
DATE: 31st August 2023
 TIME: 10am – 11:30am

SUBJECT:	Deferred Zoning Infrastructure Projects
PRESENT:	Jeff Cuthbertson (Tasman District Council – Community Infrastructure Team), Charlotte Holland (Stantec), Blake Brown (Stantec)
APOLOGIES:	None

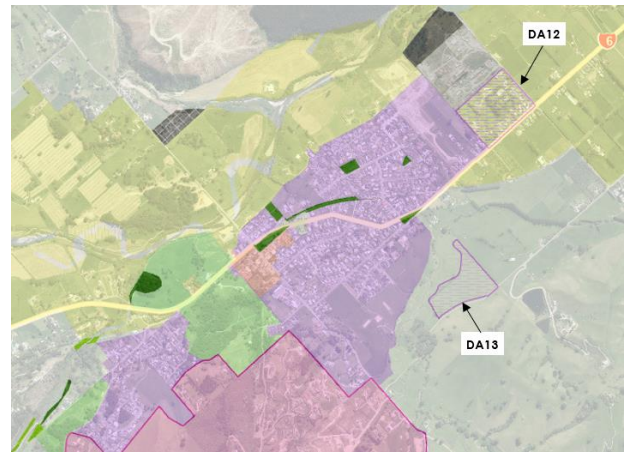
DETAIL:
 Meeting to discuss infrastructure projects required for deferred zone changes.

Item
<p>1 Introductions</p> <ul style="list-style-type: none"> Confirm objective of the meeting is to identify key projects that would allow uplifting of deferrals. Stantec will provide meeting minutes for review and confirmation by Jeff. <p>2 Richmond</p> <p>DA9 & DA69 at SH60 and McShane Rd</p> <ul style="list-style-type: none"> JC confirmed there is currently enough water and wastewater network capacity for mixed business development but not for residential development. If servicing for residential development is required, then infrastructure upgrades to both the water and wastewater networks is needed to adequately service this area. The required upgrades would be: <ul style="list-style-type: none"> Wastewater – extension of the DN 150 McShane Road wastewater rising main would be required. There is also the alternative option of running a wastewater pipe alongside SH60 to the main gravity line next to the Appleby Overpass. Water – the preferred option is to construct new watermain along McShane Road from SH60 to the treatment plant. Alternatively, upgrade of the existing DN50 line along SH60 between McShane Road and the Richmond South watermain to a larger diameter pipe size. <p>DA27 at Hill St South and Sabine Drive</p> <ul style="list-style-type: none"> The proposed Hill Street Reservoir is intended to service an additional 2,500 new lots. This reservoir will include pump station to service DA27, DA28, DA26 and DA 67 (Areas above hill street) and existing. The pump station is required to provide enough water pressure to the two-pressure zone area.

3 Brightwater/Wakefield



Brightwater



Wakefield

JC confirmed that the current water and wastewater networks in Brightwater and Wakefield do not have the capacity to accommodate further serviced residential zoning.

Currently wastewater from Wakefield is conveyed by gravity pipeline to join the Brightwater gravity network. Wastewater is then pumped from the Brightwater pumpstation across the Wairoa River to Burkes Bank. Currently the Brightwater pump station that collects wastewater from both Wakefield and Brightwater is nearing capacity.

DA17 & DA4 - Brightwater

DA12 & DA13 - Wakefield

- To uplift the existing serviced residential deferrals in the Brightwater and Wakefield areas to provide for uplifting residential deferrals are:
 - The Waimea Water Network upgrade – including provisioning of new extraction bores and watermain across the Wairoa River to connect with the existing network.
 - Wakefield wastewater pumpstation to create a bypass that conveys Wakefield's wastewater across the Wairoa River without entering the Brightwater network. This project would include a new wastewater pumpstation to be constructed in Wakefield and a rising main from Wakefield, past Brightwater and across the Wairoa River where it would connect back into the existing gravity main. This would remove loading from the Brightwater pumpstation and allow for development in both Brightwater and Wakefield. This work is not in the current Long Term Plan.

DA12 at Bird Lane and SH6

- Confirmed that stormwater upgrade is a TDC responsibility and needs to be completed prior to uplifting deferral. The best solution for providing for stormwater is currently unknown however is likely to require land acquisition to create an overland flow path.

4 Murchison

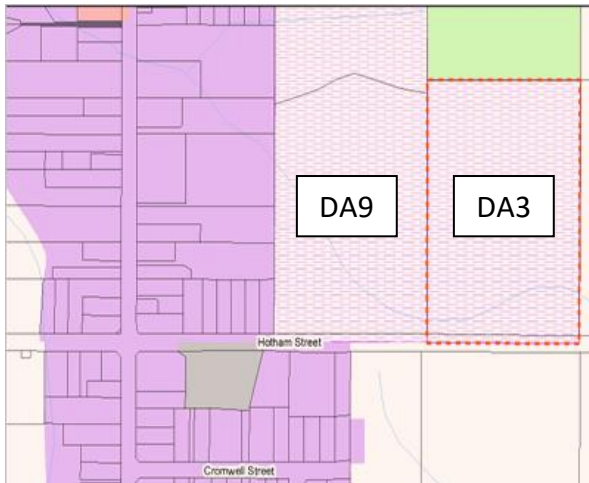
Wastewater in Murchison is nearing capacity due to the Waller Street wastewater pumpstation that pumps wastewater from the town over the Matakaitaki River to the treatment plant.

DA11 Fairfax Street

- This is currently a campground and has existing approved connections to the water and wastewater networks. Uplifting the deferral on this area is not expected to increase the loading significantly on the water or wastewater networks.

DA3 & DA9

Item



- Wastewater – There are no projects outlined in the current Long-Term Plan. Council has included in a future Long-Term Plan two options that would allow for development of these areas:
 - Upgrade of the Waller Street pump station to increase flow capacity and storage or;
 - Upgrade and divert the Hotham Street pump station with a new rising main that injects downstream of the Waller Street Pump Station. This would separate the Hotham catchment from the Waller Street pumpstation therefore allowing additional connections to both catchments.
- DA3 Water – Upgrade to the existing Hotham St watermain to increase flow capacity. The upgrade would likely be from along Hotham Street from Fairfax Street to the existing reservoir on the hillside adjacent to Chalgrave Street.
- DA9 Water – This site has accessibility to connect to the watermain on Hampden Street which has capacity to service this area. DA9 is not constrained by water supply.

Stantec New Zealand
Level 1, 66 Oxford Street, Richmond 7020

PO Box 13-052, Armagh, Christchurch 8141
Tel +64 3 546 8728



Connect with us



stantec.com