

Programme Update #3 Jan-Feb 2019

Key capital projects in #thebigwaterstory

-  Otane Alternative Drinking Water Supply
-  Otane Wastewater Treatment Plant Upgrade
-  Waipukurau and Waipawa Wastewater Treatment Plant Upgrades
-  Waipawa Sewer Trunk Main Renewal
-  Waipukurau 2nd Drinking Water Supply
-  Takapau Wastewater Treatment Plant Upgrade
-  Takapau Drinking Water Treatment Improvement



-  Porangahau Drinking Water Treatment Improvement
-  Porangahau Wastewater Treatment Plant Upgrades
-  Te Paerahi Wastewater Treatment Plant Upgrades

There are many other smaller projects within the 10 year budget which will improve firefighting capability improvements, water reticulation resilience, water renewals and stormwater improvements.

Total budget on 3 Waters

Capital projects for next 10 years

Water.....	\$21m
Wastewater.....	\$8m
Stormwater.....	\$3m
Total.....	\$32m



15km of pipe to be laid

Otane Alternative Water Supply
approximately 5kms

Waipukurau 2nd Water Supply
approximately 10kms



Expected Growth in CHB

10 years: 535 households

30 years: 1025 households

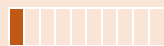



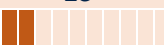

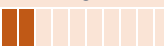









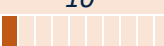



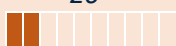





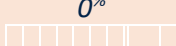





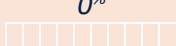

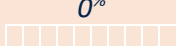

Planned Improvements

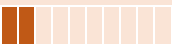



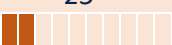

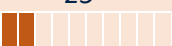

-  6 WASTEWATER TREATMENT PLANTS TO BE UPGRADED
-  5-6 DRINKING WATER TREATMENT IMPROVEMENTS
-  MANY FIREFIGHTING IMPROVEMENTS
-  2 SECOND OR ALTERNATIVE WATER SUPPLIES

2018/19 PROGRAMME UPDATE

Updated: 28th Feb 2019

WATER						
PROJECT	STATUS	TIMELINE		PROGRESS	BUDGET	RISK LEVEL
		START	END		TOTAL	
Otane Alternate Water Supply	Design	Aug 2018	June 2020	15% 	\$2.6m	
Waipukurau 2nd Water Supply	Design and Build	Aug 2018	June 2020	15% 	\$5.6m	
Waipukurau SH2 Bore Upgrade	Tender	June 2018	July 2019	25% 	\$850k	
Waipukurau Firefighting and Shortfalls Improvements (Year 1-3)	Design	Aug 2018	June 2021	20% 	\$307k	
Otane Land Development (Water and Wastewater)	Complete	March 2018	Dec 2018	100% 	\$355k	
Waipukurau – Porritt Place Water Main Renewal	Complete	Dec 2018	Mar 2019	100% 	\$65k	
Porangahau Water Treatment Plant Upgrade	Contract Negotiations	Nov 2018	Oct 2019	15% 	\$1.03m	
Takapau Water Treatment Plant Upgrade	Contract Negotiations	Nov 2018	June 2019	15% 	\$680k	
Waipukurau – Mackie / Mclean St Water Main Renewal	Tender	Nov 2018	June 2018	10% 	\$241k	

WASTEWATER						
PROJECT	STATUS	TIMELINE		PROGRESS	BUDGET	RISK LEVEL
		START	END		TOTAL	
Waipawa Trunk Sewer Main Renewal	Design	Aug 2018	June 2020	20% 	\$1.77m	
CHB Wastewater Treatment Plants Project (Phase 1)	Community Consultation & BPO	June 2018	June 2019	60% 	\$300k To June 2019	
CHB Wastewater Treatment Plants Project (Phase 2 - Design & Consent)	Not Started	July 2019	Dec 2020	0% 	\$1.8m	
CHB Wastewater Treatment Plants Project (Phase 3 - Build)	Not Started	Jan 2021	TBC	0% 	TBC	
Otane Wastewater Treatment Plant Upgrade	On Hold*	Apr 2018	TBC	40% 	\$1.47m	
Takapau Wastewater Resource Consent Extension	Part 1 - complete	Aug 2018	June 2021	50% 	\$100k	
Takapau Wastewater Treatment Plant Upgrade	Not Started	2021	TBC	0% 	\$831k	
Porangahau/ Te-Paerahi Wastewater Treatment Plant Upgrade	Not Started	2019	2022	0% 	\$1.85m	

STORMWATER						
PROJECT	STATUS	TIMELINE		PROGRESS	BUDGET	RISK LEVEL
		START	END		TOTAL	
Waipukurau Stormwater Improvements - Service Lane Overflow	Design	Aug 2018	June 2019	20% 	\$132k	
Waipukurau Stormwater Improvements - Savage/ Churchill/ Carpenter - Woburn/ Wilder	Design	Aug 2018	June 2019	20% 	\$481k	
Waipukurau Stormwater Helicoil Upgrades Jellicoe to Tavistock	Contract Negotiations	Aug 2018	Aug 2019	25% 	\$211k	
Waipukurau Stormwater Helicoil Upgrades Francis Drake Street	Contract Negotiations	Aug 2018	Aug 2019	25% 	\$233k	

Programme Overview

January and February 2019, has seen the progression of a number of projects from design to tender phase. We expect the next two months will continue this trend and in turn from tender to commencement of physical construction

Some key milestones and focus items over the last two months;

- Complete the Porritt Place water renewal project
- Release the following projects to the market for tender;
 - o Porangahau and Takapau water treatment plant upgrades
 - o Waipukurau Stormwater Helicoil Project
 - o Waipukurau Mackie/ Mclean St – Water Renewal
 - o Waipukurau Water SH2 Borefield Upgrade
- Identified preferred suppliers for;
 - o Porangahau and Takapau water treatment plant upgrades
 - o Waipukurau Stormwater Helicoil Project
- Received a 3 year extension to the discharge resource consent for Takapau WWTP
- Commenced exploratory drilling for Waipukurau 2nd Water Supply

Below are some photos that were taken at #thebigwaterstory launch on the 23rd August 2018.



PROJECT: Otane Alternate Water Supply Project

Tidy completed site at the Higginson/ White Road intersection following the connection of the new water mains to the existing network

To install a 150-200mm PE pipeline approx. 5.2km from Sh2/ Racecourse Road intersection into new network at the intersection of Knorp Street and White Road

Reviewed and approved the concept design for this project, completed a safety in design workshop and commenced the detailed design for the project (due 1 April 2019)

Finalise and complete the detailed design for the project, present a procurement plan to council to release the tender for this project and release tender to market in mid April 2019.

There are some unknown risks on this project, namely around construction;

- Unknown ground conditions
- Location of existing services
- Crossing Kiwirail railway crossing on Racecourse road
- Working the plan to deliver the physical works with a contractor over our 2 year budget

Device / Attachment	Access	Device Type	
			 <div>   </div> <div> <p>Wellington Office +64 4 471 7000</p> <p>P.O. Box 12 033, Thorndon Wellington 6140 New Zealand</p> </div>

PROJECT: Waipukurau Second Water Supply

STATUS	DESIGN & BUILD	
TIMELINE	AUG 2018 START DATE	JUNE 2020 END DATE
PROGRESS	15%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$5.6m TOTAL PROJECT	\$116k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

To install a new water source bore near the Tukituki River, to the east of Waipukurau, pipe a rising main to a reservoir on Mangatarata Road hill site (Proposed), and provide treatment and gravity feed back into Waipukurau to supply a second water supply.

ACHIEVEMENTS

Commenced drilling of test bore #1, no water found at 15m, continued exploratory bore to 45m, subsequently bore was found to be 'dry'.

Seismic water bearing testing of area undertaken to identify water bearing ground, and surrounding bores checked to confirm flows match bore logs.

Additional two resource consents for further bores submitted to HBRC, and planned to be drilled early March 2019.



PLANNED

Once sufficient water confirmed, progress the proposal to install an approx. 4000m³ reservoir on Mangatarata with Hawkes Bay Regional Council who own the land.

Meet with centralines to discuss power requirements at bore site

RISKS

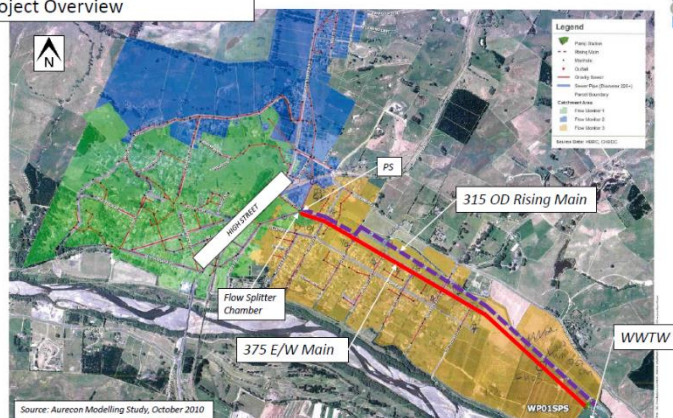
Some early risk identified within this project;

- Power Supply to bore site
- Approval for reservoir site
- Timeframes to build reservoirs
- Water quality and flow from test bores

PROJECT: Waipawa Trunk Sewer Main Renewal

STATUS	DESIGN	
TIMELINE	AUG 2018 START DATE	JUNE 2020 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$1.7m TOTAL PROJECT	\$76k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

Project Overview



SCOPE

To renew approx. 2200m of 375mm glazed earthenware pipe that is known to have poor leaking joints and allows a great deal of infiltration into the pipework through tree root intrusion and cracks along the pipeline, council preferred solution would be to relin/ replace as much of the pipeline as possible, three priority areas have been identified to start with.

ACHIEVEMENTS

Concept design reviewed and approved, procurement plan presented and approved by council on 28th Feb 2019.

PLANNED

Finalise detailed design and release tender to market approx.. 15 March 2019.

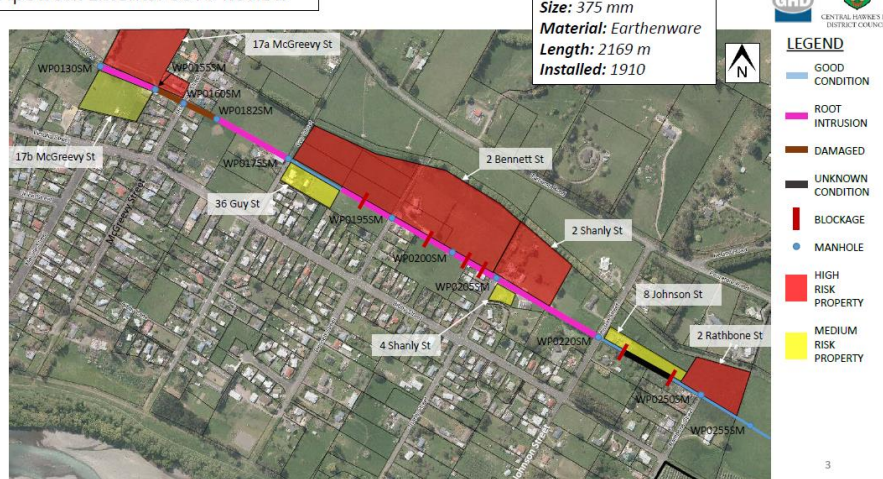
Undertake extensive stakeholder engagement with the stakeholders that may be affected by the renewal works.

RISKS

Some early risk identified within this project;

- Unknown current condition (structure) of the pipeline
- Physical contractor and the tendering market
- Lack of easement over the pipeline
- Pipeline situated through private property
- Landowner consent

Pipework Extents: CCTV Review



PROJECT: Waipukurau SH2 Drinking Water Bore Upgrade

STATUS	TENDER	
TIMELINE	AUG 2018 START DATE	JUNE 2019 END DATE
PROGRESS	25%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$850k TOTAL PROJECT	\$118k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

To upgrade the bores and electrical configuration at the SH2 water source that supplies Pukeora reservoir and Waipukurau. The scope involves upgrading and refurbishing 4 bores, pipework configuration, the electrical components, transformer, fencing and a tank for surplus water.

Additional components are to install flow and turbidity meters to contribute towards drinking water standard New Zealand (DWSNZ) compliance. This is a historic project that has carried forward to #thebigwaterstory.

ACHIEVEMENTS

Detailed design completed, released to open market mid-February 2019. Assessed and re-developed Bores A and B, pump assessments completed.

Meeting held with centralines to discuss relocating and upgrading transformer, as well as fencing contractor to firm up estimates to undertake these pieces of work. Land purchase 95% complete with HBDHB.

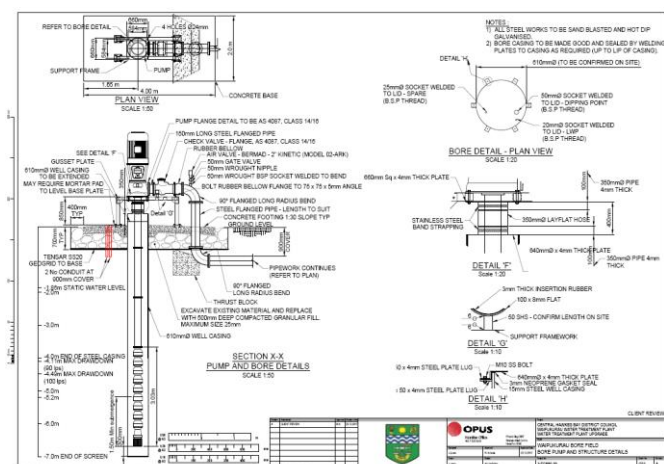
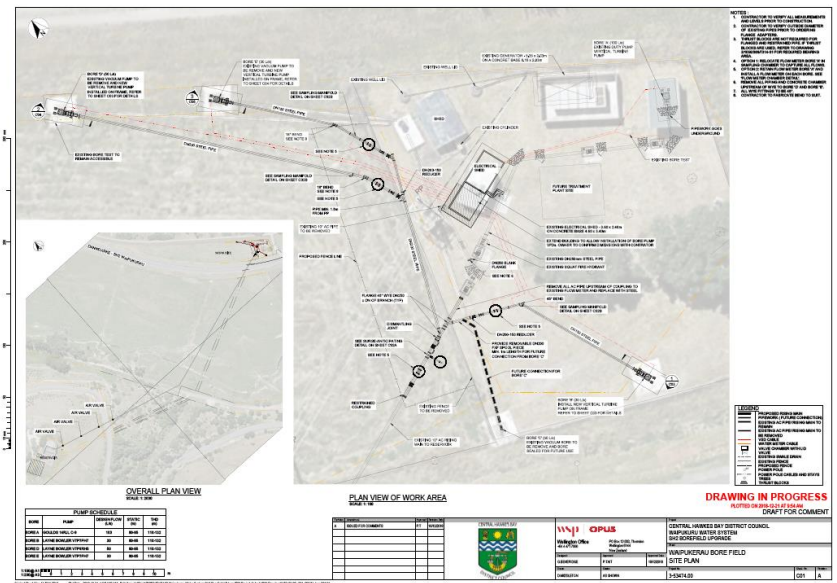
PLANNED

Undertake Casing assessments of Bore C,D, E prior to ordering of pumps to ascertain the integrity of the structures, plan to also take a sample of the AC rising main, to understand rating and class of main and how it will fare with upgrades. Submit contingency resource consent for Bore D and E.

RISKS

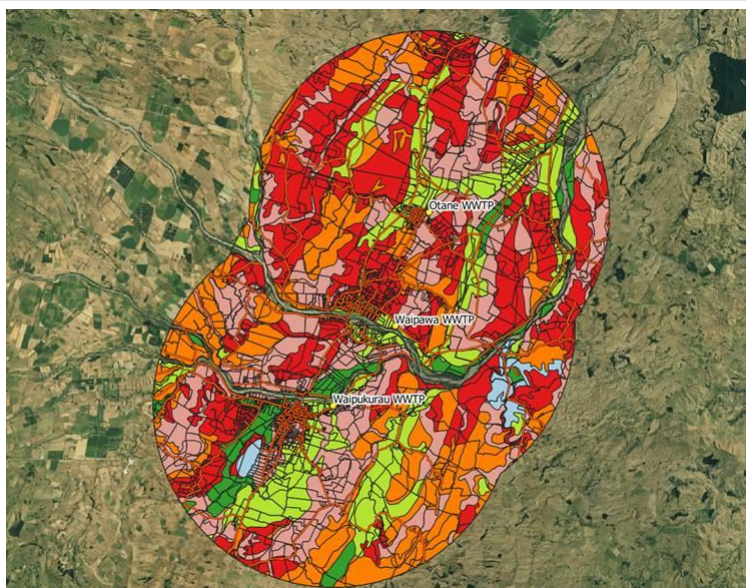
Some early risk identified within this project;

- Budget
- Timing of equipment
- Contractor to undertake physical works
- Existing bore structure
- Performance of Pump A



PROJECT: CHB Wastewater Treatment Plants Upgrade (Phase 1)

STATUS	CONSULTATION	
TIMELINE	JUNE 2018 START DATE	TBC END DATE
PROGRESS	60%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	TBC TOTAL PROJECT	\$187k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



Topographic land study of Waipukurau, Waipawa and Otane land suitability

SCOPE

Phase 1 : To work with the community to set criteria and work towards a preferred solution or Best Practicable Option (BPO) for the future of Waipukurau, Waipawa and recently the introduction of Otane into the project scope by Apr 2019 and to provide a report to the environment court and HBRC by 30 Jun 2019

Phase 2: To design, consent and fund the future works

Phase 3: To build and upgrade the plant(s)

ACHIEVEMENTS

Held community reference group meeting #5 on 5th Feb 2019, with two new members joining the group including local iwi. Planning session and meeting held with HBRC during Jan/ Feb 2019.

Community survey completed with over 80 community members taking part.

Funding options underway and research/ engagement with many parties completed

PLANNED

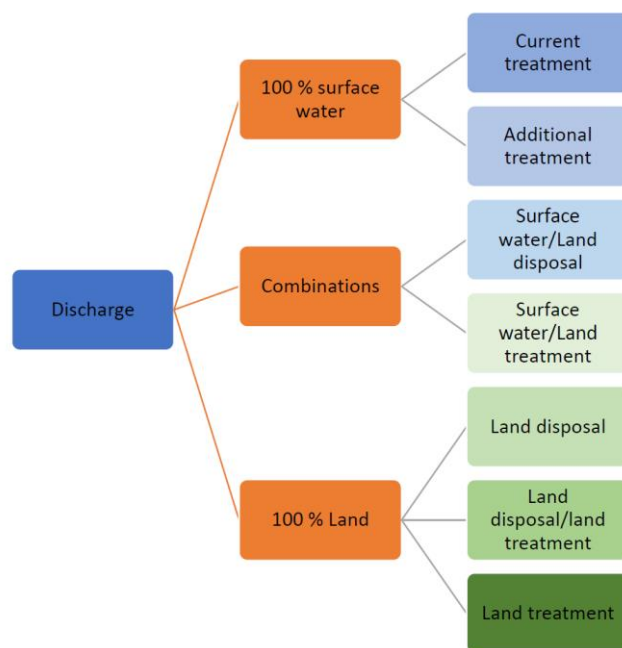
6th community reference group meeting planned for 12th March 2019.

Continue to work with local and regional iwi to create a maori world view

Present to council draft report content on 10th April 2019.

RISKS

- Engagement with all parties (iwi, Otane community, wider community)
- Funding
- HBRC council expectations



PROJECT: Otane Wastewater Treatment Plant Upgrade

STATUS	ON – HOLD *	
TIMELINE	APRIL 2018 START DATE	TBC END DATE
PROGRESS	40%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$1.47m* TOTAL PROJECT	\$181k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

To upgrade the wastewater treatment plant in Otane to meet new resource consent requirements due by 31 March 2019.

***Note:** the project is currently on hold, awaiting a resource consent extension to 31 March 2021.

ACHIEVEMENTS

Submitted a resource consent application to Hawkes Bay Regional Council (HBRC) on 1 November 2018, two rounds of questions have been returned including a comprehensive I&I mgmt. plan.

All affected party approvals sent, draft consent returned to CHBDC on 28 Feb 2019 for review.

PLANNED

An I&I study will be commissioned in March 2019 to identify the issues and a plan to rectify and reduce the volume of unnecessary wastewater the plant is required to treat.

Continue to assess and develop options for the future of the Otane wastewater network in conjunction with the CHB wastewater project.

RISKS

Some early risk identified within this project;

- I&I issues found and the subsequent works to rectify
- Cost blow outs from future tender results



Layout of the Otane wastewater network



Otane Wastewater Network Inflow and Infiltration Reduction Management Plan - Final

Prepared by
Veolia Water Services (ANZ) Pty Ltd ("Veolia")
December 2018

PROJECT: Otane Land Development (Water and Wastewater)

STATUS	BUILD	
TIMELINE	MARCH 2018 START DATE	JUNE 2020 END DATE
PROGRESS	100%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$355k TOTAL PROJECT	\$289k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



New wastewater pump station chamber in Otane land development

SCOPE

To install a water and wastewater pipeline to serve the new development within Otane, this involves installation of a new pump station (photo), hydrants, valves and laterals to serve the development and support the growth in Otane.

ACHIEVEMENTS

Completion of all physical works, all network laid, commissioned and backfilled.

Wastewater pump commissioned and handover completed with maintenance contractor.

Final reinstatement completed.

PLANNED

Contractor to supply as-builts to update our GIS system.

Asset handover report to be completed for operations

RISKS

Most risks have been mitigated due to progress of project;

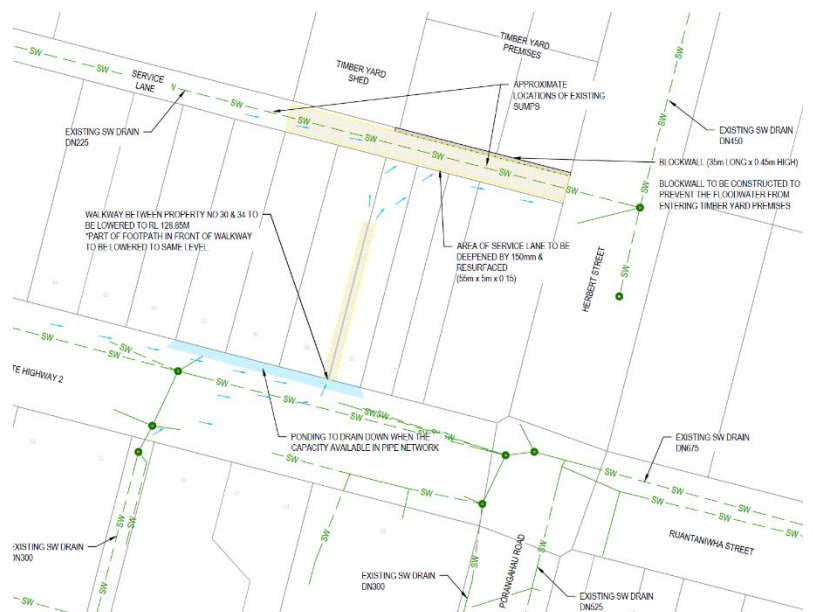
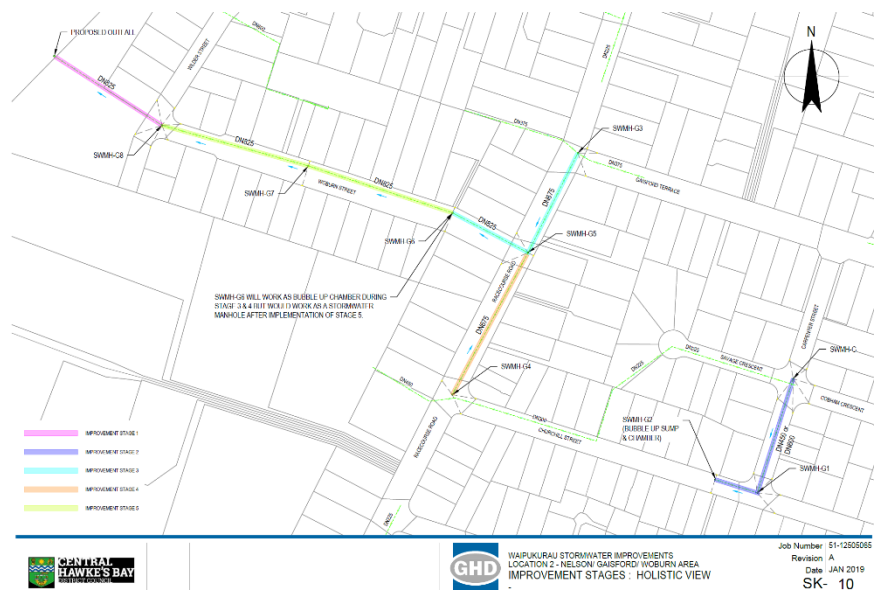
- Contractor completing works to council expected timeline



Technicians connecting pump station to power network



New fire hydrant on water network on White Road, Otane



STATUS	CONTRACT NEGOTIATIONS	
TIMELINE	AUGUST 2018 START DATE	JUNE 2019 END DATE
PROGRESS	25%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$449k TOTAL PROJECT	\$7k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



The stormwater network within Waipukurau is suffering from poor Helicoil – aluminium ribbed pipeline corroding and creating voids within the road network. These projects are to replace the failing Helicoil network in 2 areas.

Completed internal design, procurement plan and request for tender documentation.

FRANCIS DRAKE ST MANHOLE LAYOUT DETAIL

PROPOSED 180mm PE WATER MAIN DETAILS

Design drawings

RISKS

- Pipeline through private property
- Suitable lining methods
- Weather delays

PROJECT: Takapau and Porangahau Water Treatment Upgrade

STATUS	CONTRACT NEGOTIATIONS	
TIMELINE	AUGUST 2018 START DATE	OCTOBER 2019 END DATE
PROGRESS	15%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$1.7m TOTAL PROJECT	\$91k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

To improve the water supply system in Takapau and Porangahau to remove iron and manganese, and hardness in Porangahau whilst ensuring we meet DWSNZ compliance. The project will also be looking to improve security of supply and storage whilst meeting the long-term needs and addressing the community concerns.

ACHIEVEMENTS

Tenders closed 21st Feb 2019, evaluation completed and supplier recommendation presented to full council on 28th Feb 2019. Preferred supplier nominated and council planned pre-contract meeting with preferred supplier for 5 March 2019.

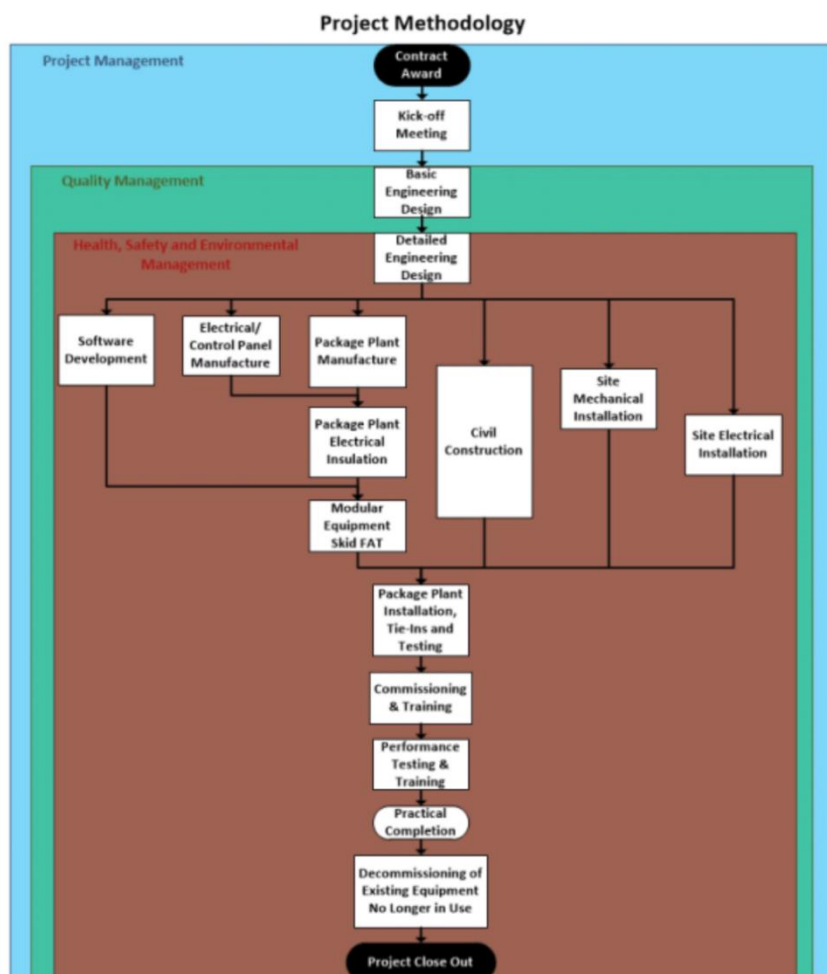
PLANNED

Continue contract negotiations and award contract by 18 March 2019, contract to commence from 1 April 2019, and concept design due with CHBDC by 30 April 2019. Community engagement sessions planned for

RISKS

Some early risk identified within this project;

- Time delays with equipment procurement
- Adverse weather conditions



Approaches / Activities	Project Phase			Communication Method			
	Design	Construction	Post Construction	Face to Face	Writing	Video Call	Phone and/or Email
Stakeholder engagement meetings and community consultation meeting	✓			✓			
Staged design approval by Engineer to the Contract, and CHBDC	✓				✓		✓
Fortnightly reporting meeting with Engineer to the Contract, CHBDC, Veolia project team (and communities' representatives when relevant)	✓	✓		✓		✓	
Fortnightly community bulletin published in local news and/or community forums	✓	✓			✓		
A social media account (Facebook or similar) to share key information, photographs and progress updates		✓	✓		✓		✓
Phone & email responding to community queries	✓	✓					✓
Locally based Contractor's Representative communicating with Engineer to the Contract, and CHBDC	✓	✓		✓			
Locally based construction manager responding to community queries		✓		✓			✓
Periodic site audit by Engineer to the Contract, CHBDC's representatives, Veolia's representatives		✓		✓			
Community open day			✓	✓			

PROJECT: CHB Water Renewal – Porritt Place, Waipukurau

STATUS	COMPLETE	
TIMELINE	DEC 2018 START DATE	FEB 2019 END DATE
PROGRESS	100%	<div><div></div></div>
BUDGET	\$62k TOTAL PROJECT	\$51k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

To replace approx. 170m of aging 50mm PVC watermain with new 63mm PE watermain, change over 15 connections to the new watermain. Install three new service valves and reinstate all surfaces. The works will be undertaken in the footpath, the roadway and the grass berm.

In addition due to site findings an additional 90 mtrs and 3 service laterals are now included in the scope.

ACHIEVEMENTS

Completed the physical works, final reinstatement and the additional scope of works.

PLANNED

Contractor to supply as-builts to update our GIS system.

Asset handover report to be completed for operations

RISKS

Risk identified within this project are;

- Quality issues post completion



PORRITT PLACE (WATER RENEWAL PROJECT) – Update: 21 Jan 2019



PORRITT PLACE (WATER RENEWAL)

SCOPE

The project commenced on Monday 3rd December 2018, with the scope to renew approx. 170mtrs of existing water network in Porritt Place, Waipukurau. Upon excavation and exposing the network, it was found we needed to replace an additional 90mtrs of aging network, and an additional 3 laterals to be changed over to the new network.

In total 265mtrs of pipeline was due to be replaced and 18 laterals changed over to the new main.

PROGRESS AND ACHIEVEMENTS

The team have progressed well and as of Monday 21st January 2019 the network component is complete, the only physical works that remain is to complete road reinstatement on the final road crossing connection completed on 14 Jan 2019.

PLANNED WORKS

PROGRESS 90% COMPLETE

Only road carriageway reinstatement is required to be completed. We are anticipating all works to be completed by the end of Jan 2019.

PROGRESS PHOTOS – 21 Jan 2019

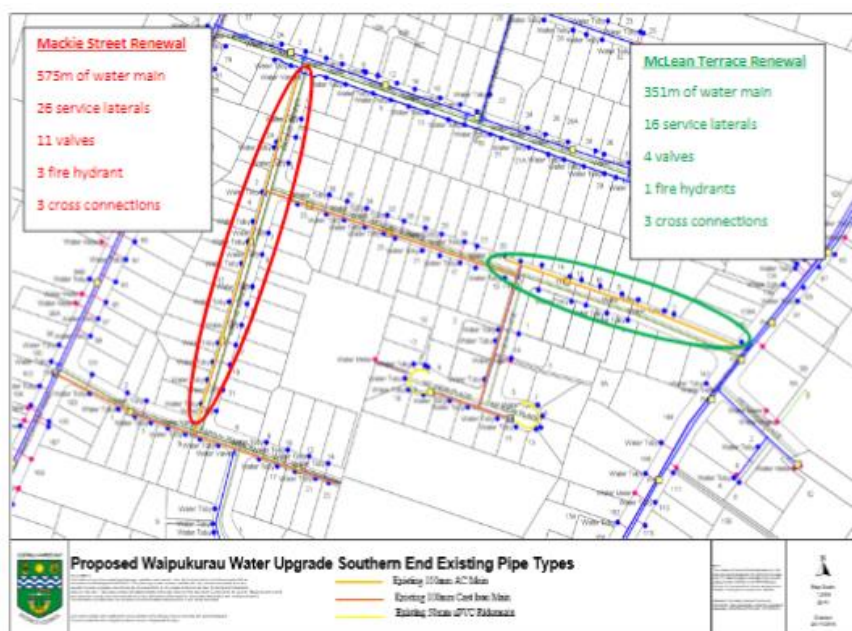


Thank you for your patience and understanding as we undertake these works!



PROJECT: CHB Water Renewal – Mackie/ Mclean, Waipukurau

STATUS	TENDER	
TIMELINE	DEC 2018 START DATE	JULY 2019 END DATE
PROGRESS	10%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$3k TOTAL PROJECT	\$241k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

To replace approx 926m of failing AC water main, and 42 laterals across two streets within Waipukurau as part of the FY18/19 water main renewals, this work was initiated due to ongoing issues raised by our operations and maintenance contractor through 2017 and 2018. Council continues to work on long term forward works plan for water renewals.

ACHIEVEMENTS

Procurement plan approved by tenders committee and released to the market in early Feb 2019, basic design completed.

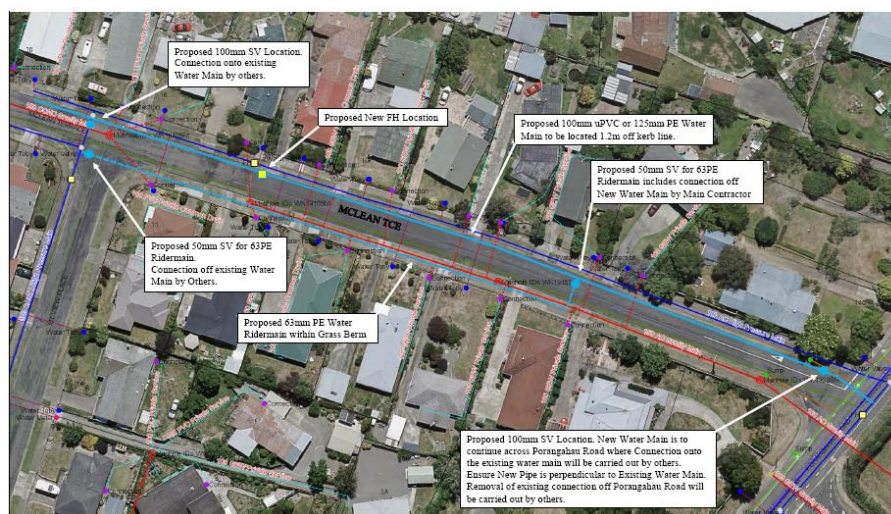
PLANNED

Tenders close on the 7th March 2019, and evaluation will take place approx.. 14th March 2019, with the tender team presenting a supplier recommendation to Tenders committee on 26th March 2019. Council plans to commence construction with the relevant contractor at the end of April 2019.

RISKS

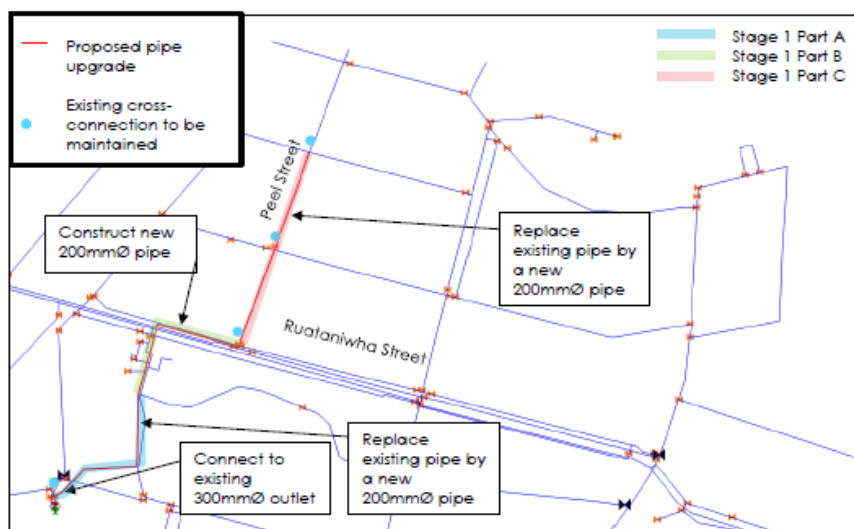
Risk identified within this project are;

- Unknown GIS
- Network integrity
- Market interest



PROJECT: Waipukurau Water Firefighting/ Pressure Improvements (Yr1-3)

STATUS	DESIGN	
TIMELINE	DEC 2018 START DATE	JUNE 2021 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$307k TOTAL PROJECT	\$71k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

Central Hawkes Bay District Council plans to create a 7 year works programme with the budget set aside in the 2018-28 long term plan, the programme will;

- Develop a high level cost estimate;
- Prioritise the upgrade works; and
- Prepare a work programme for the next 7 years.

Plan works for the Years 1 to 3 and review the improvements and effect on the network.

ACHIEVEMENTS

Completed development of a 7yr works programme to improve firefighting and network shortfalls within the Waipukurau water network.

Modelled the original water model to confirm firefighting and network pressures

PLANNED

Commence detailed design drawings in preparation for tender release in early April 2019. Procurement Plan to tenders committee in late March 2019. Review of works on other assets planned work (roading)

RISKS

Risk identified within this project are;

- Insufficient budget to fully deliver the upgrades required
- Network integrity
- Impacts of improvements

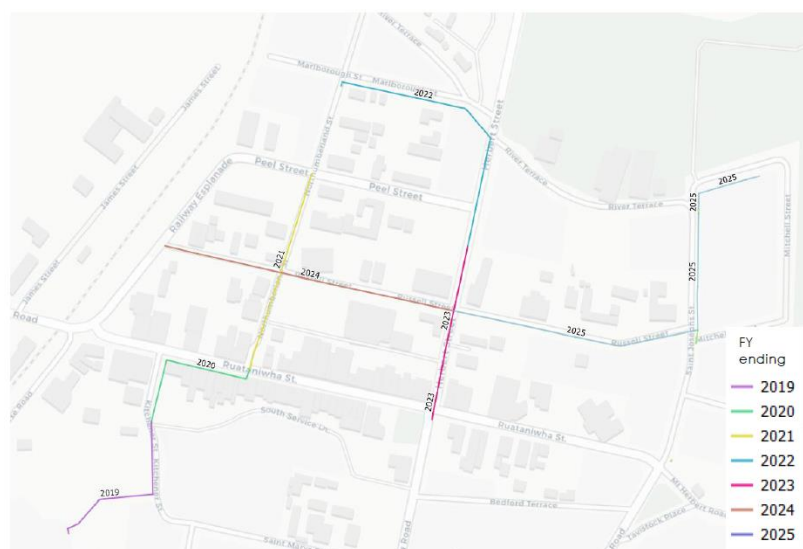


Figure 4-2: Overview of the upgrades completed with the 7 year programme