

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee

FROM: Utilities Asset Manager, Jeff Cuthbertson

REFERENCE:

DATE: 19 April 2006

SUBJECT: UTILITIES MANAGEMENT REPORT

1. CAPITAL WORKS PROJECTS

The following summarises progress on capital projects:

- a) Richmond Trunk Sewer main upgrade project – contractor continues to make steady progress along Beach Road toward Queen Street.
- b) Takaka Sewer Upgrade – Project is nearing Practical Completion.
- c) Wensley Road Watermain Replacement – Practical Completion certificate has been issued.
- d) Murchison Reservoirs –additional storage work is complete.
- e) Murchison WWTP Upgrade – budget \$800,000. Work has been granted approval to proceed following issue of resource consent.
- f) Aranui Road, Mapua – Upgrading of existing stormwater pipework in lower Aranui Road –. The tenders for this contract closed 26 April.
- g) Borck's Creek widening (lower end). Widening work is substantially complete and steel special water main installation is to be completed by the end of April.
- h) Jefferies Stream Upgrading Work – tenders have closed.
- i) Brightwater Water Reservoir (additional reservoir); investigations continue.

2. WATER

2.1 General

The Variable Speed Drive (VSD) in River Road pump station, Riwaka, failed causing fuse breaks. Newpower Electrical collected a Drive Dynamics VSD at Springs Junction in the early hours of the morning to enable the system to be recommissioned as soon as possible. This along with VSD failure at Goodman Park Pump station has highlighted the vulnerability and risks to such schemes and the acquisition of a spare VSD of appropriate size to accommodate any Utility site, has been arranged.

Recent power supply interruptions have caused outages at water and wastewater sites throughout Brightwater, Wakefield, Richmond, Mapua and Motueka. The outages varied in duration but did not cause any significant lasting effects to levels of service, and most

importantly no sewerage overflows occurred. This would not have been the situation if the power outages had occurred during peak loading times in the morning or evenings.

Major water valving installations have been completed in Lord Rutherford Road South, Starveall Street, and Beach Road, Richmond.

Waimea Wells numbers 5 & 6 had temporarily been shut down due to saltwater intrusion, but have since been reactivated due to the flushing effects of the recent rain events and confirmation that salt concentrations have reduced to acceptable levels.

The Old Coach Road Reservoir site has suffered from a spate of vandalism. Pipework is damaged, concrete lids were removed and damaged, and rubbish deposited into the reservoir. Fortunately the inlet/outlet pipework and telemetry had not been targeted and supply has not been interrupted. Measures including replacing existing lids with lockable lids and security fencing are to be carried out. (Please refer to attached photos).

The Pinehill Heights system continues to experience operational difficulties, with another telemetry Simplex failure. These difficulties are limited to radio signal interference. Some upgrading is required and is under investigation.

The upgrade to the Utility site security/access system is near completion. Abloy locks have been installed on most Utility sites and keys issued to specific individuals allowing access to appropriate parts of the network relevant only to the specific requirements of each individual. The response to the new system has on the whole, been very positive.

Main Road Hope – a further break on the 200mm main occurred after the supply was fed from Brightwater during the dry weather period when water restrictions had significant impact on the Richmond Supply. Now that restrictions have been lifted, the supply to the Hope main can be fed from the lower and even pressured Richmond supply. The Hope main is due for upgrade from 1 July 2006.

2.2 Brightwater Reservoir

On further investigation, the site offered by the developer as a first option for the location of up to two new reservoirs, has proven less than satisfactory due to slope and property boundary constraints. Two other sites, both closer in location to the existing reservoir, are currently under consideration. The replacement main is complete and has passed testing requirements and some valving work remains to be completed.

2.3 Wensley Road Water Main Upgrade

The Practical Completion Certificate for this project has been issued at the end of March, falling within the project timeline. The project included some difficult working conditions, installing new pipe adjacent to existing live and brittle high pressure mains. The overall result is more than satisfactory and the project total cost is well within budget.

The section of main between Chelsea Avenue and Bateup Road is currently being installed in conjunction with the roading upgrade project.

2.4 Murchison Reservoir

The installation of additional storage at the Murchison Reservoir site is now complete. The first portion of the pipework upgrade in Hotham Street is about to commence and the

pipework is to be installed alongside a low voltage power cable to supply the reservoir telemetry.

RURAL SCHEMES

2.5 Dovedale Rural Water Supply

Since the recommissioning of the lower Humphries Creek intake, the scheme has had sufficient supply to keep up with demand. Extra valves and meters have also been installed at strategic points on the system to aid monitoring of flows and demand.

2.6 88 Valley Rural Water Supply

A camlock fitting was discovered on the bleedpoint at the truckwash site. The bleedpoint has now been isolated in the meter chamber and chamber lids locked to prevent unauthorised water use.

A further chlorinator fault had resulted in a bacto transgression, however further testing showed a clear result. Remote monitoring of residual chlorine is under investigation. This would allow any faults to be detected as they occur.

2.7 Redwoods

A further break occurred in the Redwoods 80mm AC line. This was repaired quickly and minimal disruption occurred. Some alteration and adjustment to pipework and valves had caused some temporary disruptions but these were minimal and the system was soon back to normal operation.

3. STORMWATER

3.1 General

In spite of some recent significant and heavy bursts of rain there have been few incidences of significant flooding. This is partly due to the brief duration of the events, however if the falls had continued with the same intensity there may have been more instances of significant flooding.

3.2 Aranui Road Upgrade

The tender for this contract closes on 26 April. The works include pipework ranging in diameter from 600mm to 1200mm as well as some significant manholes and outlet structure. Due to the low-lying nature of the location the pipework is to be laid at very shallow depths with minimal cover. This project may be held up if a resource consent is needed for the construction of a new head well.

3.3 Borcks Creek/Headingly Lane

The widening of Borcks Creek in the lower end of Headingly Lane is practically complete. Recent wet weather has made progress difficult. The installation of the steel special and cut-in on the existing Waimea Water Supply main is to be completed by end of April. A break on the existing main caused temporary disruptions. Industries were supplied from the Richmond supply while the main was repaired and re-livened.

3.4 Hunt/Lowry Stormwater Upgrade

Five tenders were received for the contract to upgrade the stormwater network between Hunt/Lowry Streets and Gladstone road via the Holiday Park. The lowest conforming tender was received from Works Infrastructure. The work is programmed to be carried out during the period in May-June that will cause the least impact on the Holiday Park

3.5 Jeffries Stream Upgrade

The upgrading work from Lord Rutherford Road to the State Highway 6 culvert and associated works has recently been tendered. The tenders are presently under review.

Work on the Jeffries Stream improvement above Lord Rutherford Road is presently on hold.

4. WASTEWATER

4.1 General

Blockages occurred and were rectified at the following locations:

- Rowling Road, Little Kaiteriteri: overflow was confined to immediate area
- Warren Place, Mapua: no overflow occurred
- Motupipi Street Takaka: Overflow was confined
- Atkins Street, Motueka: No overflow occurred
- Higgs Road pump station, Mapua - pump fault at caused an overflow, confined to immediate area
- Langford drive, Mapua, overflow was confined to immediate area
- Everett Street pump station: electrical fault caused effluent to back up through the system, no overflows were reported

4.2 Motueka Wastewater Treatment Plant Upgrade

The work involved with the upgrading of the aeration lagoon and the installation of the screen to capture incoming debris, has now been completed.

Only one incident of an odour complaint has been received since the work was completed. The reason for this incident is being investigated.

4.3 Collingwood Wastewater Treatment Plant

The installation of the ultra-violet (UV) disinfection unit is complete. Electrical control systems and the control building have also been installed and there remains only minor site cleanup works to complete. The control building requires fitting of a ventilation system to prevent overheating.

4.4 Murchison Wastewater Treatment Plant

Resource consent has now been granted for the upgrading of the wastewater plant. Whitakers Contracting from New Plymouth have been awarded the contract. Work in relation to the removal of sludge from the pond will commence shortly.

All work is expected to be completed by 30 June 2006.

4.5 Richmond Trunk Sewer Upgrade

The contractor is continuing to proceed along Beach Road, and is making good progress. A demonstration day was held by the contractor to showcase the hydraulic trench support system purchased for use in this project. The contract is on schedule for a mid-June completion.

4.6 Takaka Sewerage Upgrade

The current project is now substantially complete and nears Practical Completion. There remains some site tidy-up work, landscaping and finishing of prior to official commissioning.

Council has received notification that its application for government subsidy for the upgrade of the Wastewater Treatment Plant is provisionally approved.

4.7 Tapawera Ponds

Following installation of the new aerator, some operational issues were noted. The aerator was deactivated and the condition of the pond deteriorated. Some influent was also noted that was uncharacteristic. Some redirection of overhead power supply has also been undertaken.

5. REFUSE

5.1 Bag Collection

The refuse bag collection for the period had no substantial problems. However, problems have been occurring at Kaiteriteri in regard to large number of bags being dumped outside of regular pick up times at Honeymoon Bay and the cutting at Little Kaiteriteri. Over the Easter period a number of residents above the Honeymoon Bay roadway, where the bags are dumped, contacted staff and voiced their displeasure at this continuing problem.

A representative of these residents has been invited to outline their concerns at the Public Forum of the Engineering Services Committee meeting on 27 April 2006.

5.2 Richmond Resource Recovery Centre

Site works to clean up and remove surplus materials for this site are nearing completion.

5.3 Glass Crushing

A substantial amount of the present glass stockpile has been crushed by Oldfields Ltd. Streetsmart and Council have come to an arrangement regarding the shared cost for this glass crushing exercise. A long-term arrangement has not been found, however Streetsmart are researching options.

6. TENDERS

No.	Contract name	No. of tenders received	Successful tenderer	Amount	Highest amount	TDC estimate	Comment
656	Murchison Wastewater Treatment Plant Upgrade	2	Whitaker Civil Engineering	\$398,442	\$567,299	\$348,945	Budget also includes for pond desludging.
676	Hunt/Lowry Stormwater Project	5	Works Infrastructure	\$100,680	\$141,287	\$159,965	

RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager