

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 7 March 2011
SUBJECT: **Utilities Management Report – RESC-11-03-06-INF**
Report prepared for meeting of 17 March 2011

1 UTILITIES GENERAL

1.1 Contract 688

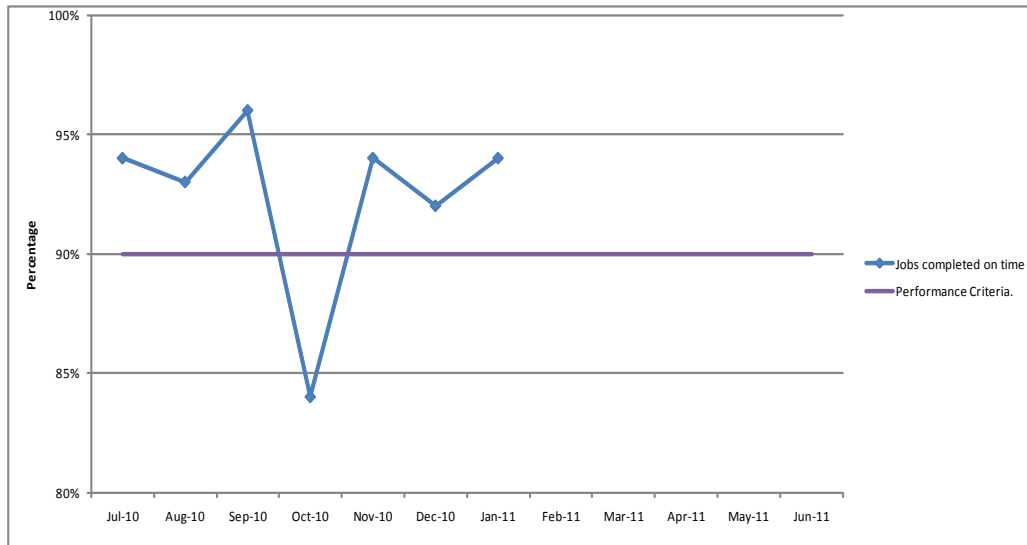
- 1.2 Councils Utilities maintenance contractor, Downer, are now eight months into their second operations period of Contract 688 and continue to perform well in the operation and maintenance of all utilities networks. They have undertaken all proactive, routine and non-routine maintenance on the water/wastewater treatment plants, pump stations, reservoir sites and stormwater assets as scheduled within their January 2011 programme.
- 1.3 The stormwater and wastewater networks have, on the whole, performed reasonably well. In line with their requirements, the contractor has undertaken significant pre-storm checks and clearance on all Council stormwater assets.
- 1.4 The vast majority of the wastewater networks have performed well during the last period. The dry warmer weather typically resulted in longer retention times and higher temperatures within the system and had the potential to cause typical odour issues. Chemical dosing of the Takaka/Pohara network continued in conjunction with the installation of carbon filter units at Burnside and Sunbelt pump stations, and this has significantly lowered the levels of hydrogen sulphide.
- 1.5 The majority of the water supply networks have also performed relatively well over the January-February period despite the fact that the dry weather has added extra demand. Most systems have kept up, with some breaks causing reservoirs to rapidly drop to minimum levels. Stage 1 water rationing has now been lifted (as of 7 March 2011).
- 1.7 A number of random audits were completed by MWH staff on the contractor's work sites as required within the contract. Typical results were proved and in line with performance expectations and above minimum targets.
- 1.8 The monthly contract meeting was held on 25 February. There were no health and safety issues to report.

1.9 Contractor Performance

Targets for Customer Services and requirements under Contract 688 are for the contractor to achieve 90% or above for jobs completed on time. There has been an improvement in the contractors score this month from 92% to 94% as shown below:

Contract 688 Performance Measurement scores achieved July 2010 to June 2011 - Jobs completed on time													
	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	
Jobs completed on time	94%	93%	96%	84%	94%	92%	94%						
Performance Criteria	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	

Tasman District Councils' customer service job completion on time target = minimum of 90%



1.10 MWH carried out audits on a regular basis across all areas of the network. Downer have performed well in the majority of cases and have achieved their performance based payments throughout the June to December 2010 period.

1.11 There were only three out of a possible 96 occasions that they did not achieve the appropriate performance standard. These occurrences are detailed below:

Performance Standards - Contract 688 – 2010 – 2011												
	July 2010	Aug 2010	Sept 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	April 2011	May 2011	June 2011
Contract Management	Green	Green	Green/Red	Green/Red	Green	Green						
Water Supply Network	Green	Green	Green	Green	Green	Green						
Wastewater Network	Green	Green	Green	Green	Green	Green						
Stormwater Network	Green	Green	Green	Green	Green	Green						

Key: ■ Passed appropriate Performance Standard in accordance with C688
■ Not achieved appropriate Performance Standard in accordance with C688

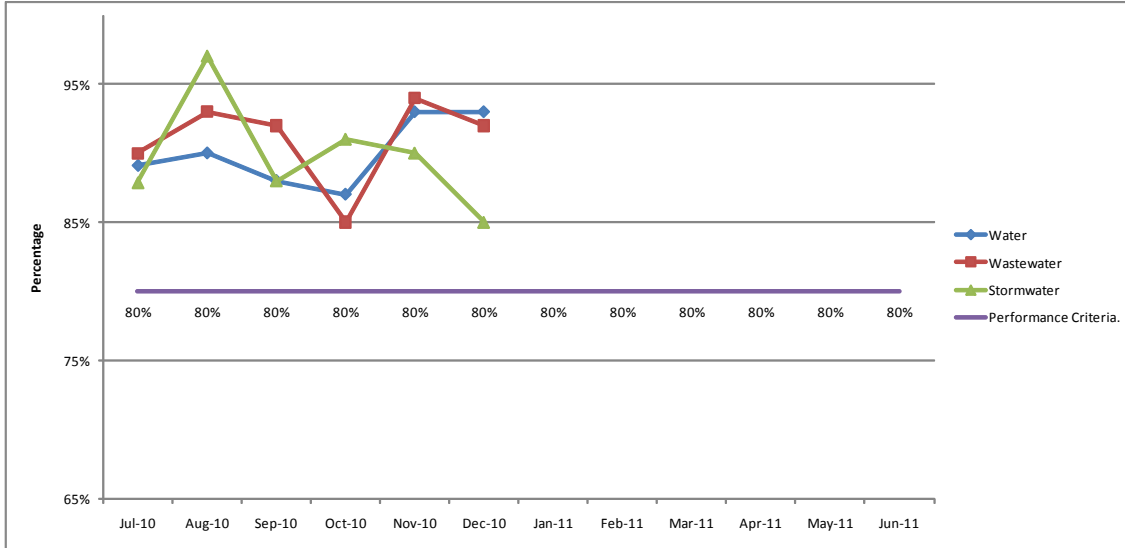
Date	Reason	Amount Deducted
Sep-10	Traffic management non compliance issues on Motueka sewer repairs undertaken within Contract 688.	\$408.90
Oct-10	CSR response times failed to achieved 90% criteria	\$1,635.52
Oct-10	Electrical / Telemetry projects not completed within agreed timeframes.	\$1,022.20
Total to date 2010 - 2011		\$3,066.62

Audit Score Summary

Contract 688 Performance Measurement Audit scores July 2010 to June 2011

	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
Water	89%	90%	88%	87%	93%	93%						
Wastewater	90%	93%	92%	85%	94%	92%						
Stormwater	88%	97%	88%	91%	90%	85%						
Performance Criteria	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

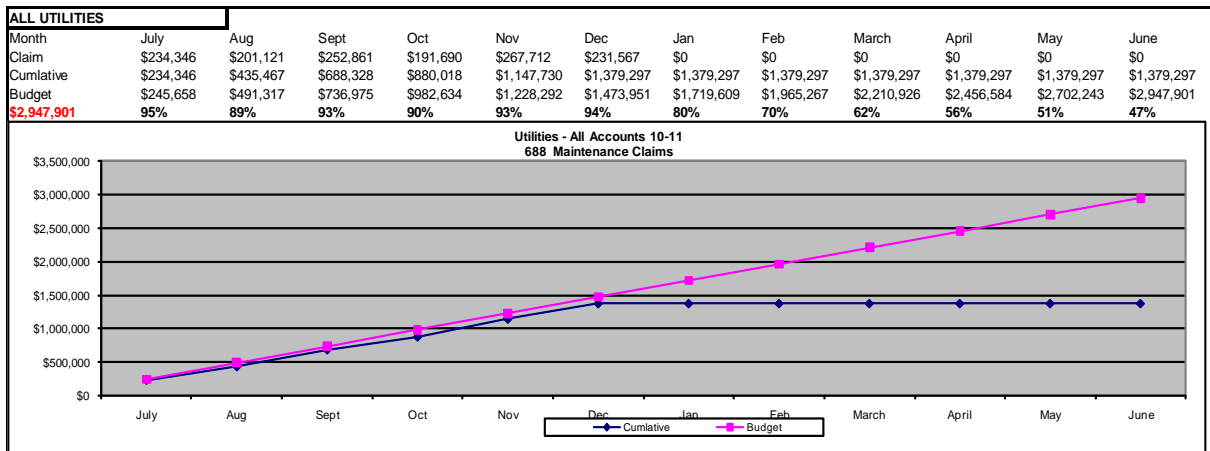
Contract performance standard measurement target requirement is to achieve a minimum score of 80% in any one discipline.



1.12 The recorded dip in stormwater performance was due to a site in Golden Bay assessed as not maintained adequately, however only three stormwater sites are audited monthly therefore one low score can bring the average down considerably.

1.13 Financial Performance

The budget data below indicates the overall maintenance contractor spend for “Utilities all accounts” 2010/11. This data is compiled using the contractor’s monthly claim information. It includes all maintenance activities carried across the various Utilities budgets. The overall budget is currently tracking at 94% which is an appropriate level, and has remained consistent around this mark for the first six months of the financial year.



2 WASTEWATER NETWORKS

2.1 Exceptions

- 05/01/11 Murchison Wastewater Treatment Plant – top motor bearing seized on Aerator #4; Leachate pump - faulty mechanical seal, was removed and repaired
- 28/01/11 Tarakohe Sewage Pumpstation. Network Tasman had power failure to transformer. Back-up generator was required and site monitored for 2-3 days.

2.2 Sewer Blockages/Overflows

- 15/01/11 Abel Tasman Drive, burst sewer main, spill isolated, pipe repaired and cleanup completed.

2.3 Wastewater Treatment Plants (WWTP)

- 2.4 Environmental and performance monitoring was routinely undertaken at all Council-operated WWTPs during January/February 2011.
- 2.5 Electronic monitoring of the flows from the Takaka system is complete, with the findings yet to come.

2.6 Wastewater Capital works

- 2.7 Motueka Pipeline renewals - Ching Contracting have successfully completed this work and have attained Practical Completion for the contract which now enters the defects liability period.
- 2.8 Takaka Wastewater Treatment Plant Upgrade – This project is currently in the detailed design phase. A meeting with the Golden Bay Community Board was held at the site of the existing plant on 24 January 2011 and also included inspection of the area proposed for the future infiltration basins. The working group met on 21 February 2011.
- 2.9 The Motueka Wastewater Treatment Plant Rapid Infiltration Basin (RIB) trial continues to show encouraging results with the RIB performing well and still showing little detectable impact on the groundwater environment.
- 2.10 Contract 816 (Motueka Stormwater Improvements - High Street) is currently out for tender and closes 9 March. The works will include replacement of some sewer mains in High Street (between Poole and Parker Streets) and in Eginton Street. The work is expected to commence in late March.
- 2.11 Sewer renewals contracts for Richmond and Motueka are to be tendered prior to June 2011.

- 2.12 The Murchison sewer renewals contract is ready to go out to tender, and just awaits the outcome of Waller Street pump station site land negotiations.
- 2.13 Pohara Sewer Gravity Main upgrade contract is in its final design phase and is due to be tendered this month.
- 2.14 Mapua Wharf Wastewater Pump station Upgrade – The detailed design is underway for this project in conjunction with obtaining the appropriate resource consents. It is anticipated that the tender will be let in June 2011.

3 WATER NETWORKS

- 3.1 Overall the water supply networks continued to operate satisfactorily during the last period. The dry weather caused some extra demand on rural networks, however on the whole the systems managed to keep up with the added demand. Some users on the Dovedale scheme reported some issues at times of peak demand, in each case the system recovered overnight.
- 3.2 The operational issues were as described below.

3.3 Water Supply Exceptions

- | | |
|----------|--|
| 08/01/11 | Wins Valley – power outage caused disruption to supply |
| 12/01/11 | Teapot Valley Road, Brightwater – burst pipe disrupted supply. Further investigation is underway to determine if pumps are over-pressurizing the system. |
| 14/01/11 | Fitting blew off the chlorine pump, at Dovedale Pump Station which also damaged the VSD. Configuration is under review. |
| 17/01/11 | 88 Valley Scheme - Intermittent supply issues, filters and screen cleared. |
| 19/01/11 | Burst main in Churchill Avenue, Richmond, repair made difficult by unusual sized fittings |

3.4 Water Capital Projects

- 3.5 Queen Street and Valhalla Reservoirs – Planning and design is underway for the installation of seismic control valving on the Richmond trunk main near the Upper Queen Street reservoir and also Valhalla reservoirs.
- 3.6 The Tapawera Rising Main Replacement contract has commenced on site. The work is expected to be completed by the end of April 2011.
- 3.7 Land negotiations for the Richmond East Reservoir and Pipework have continued and are showing some progress. Resource consents and detailed reservoir design are underway.
- 3.8 Land negotiations for the Richmond South Reservoir are ongoing, and following preliminary design to determine the extent of the preferred site and pipe routes, agreement in principle can be reached to enable valuations to be progressed.

- 3.9 Takaka CBD Firefighting Water Scheme is well underway. The drilling of the supply bore is complete and Ching Contracting continue to make steady progress in Takaka's main street.
- 3.10 Richmond Water Treatment Plant – detailed design and investigation is underway including survey and geotechnical work. The Richmond and Waimea Public Health Risk Management Plans have been submitted to the Ministry of Health.
- 3.11 Water consent renewals for Waimea and Redwoods have been submitted in accordance with the requirements of TRMP.
- 3.12 Motueka Water Supply – Subsidy Application
Staff reported to the Engineering Services Committee on 3 February 2011 regarding the proposal to make an application to the Ministry of Health for a Drinking Water Subsidy for the proposed Motueka township water supply.
- 3.13 Following that meeting, Cr Norriss and the Utilities Asset Manager presented the report to the Motueka Community Board.
- 3.14 The Community Board unanimously supported Council's proposal to apply for the Ministry of Health Drinking Water Subsidy. With this support the application and the Public Health Risk Management Plan (PHRMP) documents have been completed. The PHRMP has been submitted to the Ministry of Health for approval. Once it is approved the completed application will be submitted to the Ministry of Health.

4 STORMWATER NETWORKS

4.1 General

- 4.2 January and February have generally been dry months up until late February. For any forecast heavy rain events, pre-event checking ensured inlets, outlets and dams were fully operational. The contractor's response has been excellent to these events and their ongoing programme of drain clearance has been on track.
- 4.3 Minor projects identified this year and underway or completed are detailed below, including a description of the work and current status.

Location	Description	Status
Lammas Drain	New outlet flap gate	Under action
25-27 Trewavas Street, Motueka	Replacement of last 8m of pipe	At resource consent application stage
Wharf Road flood gates	Gates in need of replacement	Dependent on budget availability
Reservoir Creek (ASB Aquatic Centre)	Drain vegetation and debris clearance	Under action
Bolitho Drain (Borck Creek)	Drain vegetation and debris clearance	Completed
21A Blair Terrace	Open piping and realignment to resolve safety issue	Completed

4.4 Stormwater Capital Projects

4.5 Richmond (Reservoir Creek Dam)

A resource consent for this work has been granted. Detailed design and tender documents are essentially complete, awaiting only landowner negotiations.

4.6 Ruby Bay (Tait Street and Stafford Drive)

Consent has now been granted for a new stormwater outfall to the coast at Tait Street. Agreement has been reached in principle with one landowner and two further landowners are in discussion with Council regarding proposed stormwater works. Detailed design for this work is in progress, with tenders expected to be advertised in April.

4.7 Mapua (Seaton Valley Stream)

Work on a third new culvert on the Seaton Valley Stream (Contract 799) is now largely complete, with only road surfacing and reinstatement remaining. All in-stream works were completed with consenting timeframes, despite site complications.

4.8 Further stream widening works are programmed for the coming year and will be subject to ongoing landowner negotiations. Staff will also be liaising with Community Services staff for progress on local walkways.

4.9 Motueka (High Street)

Tenders have been advertised for construction of a new stormwater main between Poole Street and Parker Street (Contract 816) and close on 9 March. The works are expected to commence in late March and finish in late June and will include selected wastewater sewer renewals.

4.10 Further work is scheduled for the next financial year in Poole Street.

5 TELEMETRY

5.1 Analogue Telemetry

The analogue network is performing and even though a major storm event occurred at the end of December, the stations performed well within the designed parameters.

5.2 Base Station SCADA Server

The historical database will be improved over the coming months. The volume of data coming back from remote sites will be reduced to cover more real time events. Statistical and historical information will be created and stored locally at the Base Station Server.

5.3 The digital telemetry network is running well. The sites that have been switched over are performing as expected.

5.4 The process to use upper Valhalla Reservoir as a repeater site is almost complete. This will improve the signal strength and reliability in the telemetry network around Richmond, Brightwater, Wakefield, Waimea, Dovedale, Motueka and Kaiteriteri.

5.5 A new backbone station is planned for Murchison in conjunction with the sewer pump station upgrades. There are no further issues to report at this time.

6 SOLID WASTE

6.1 Kerbside recycling and bag collection

Kerbside collections have returned to pre-Christmas levels, with an on-going high level of service from the contractor. Colour sorting of glass has now commenced at Richmond and Mariri Resource Recovery Centres. The first export of glass to Auckland is scheduled for this month.

6.2 An extension of time to Contract 613 has been granted to Smart Environmental for kerbside collections and Resource Recovery Centres, to 30 September 2012.

6.3 Resource Recovery Centres

6.4 On 28 February two tenders were awarded for a significant upgrade of the Richmond Resource Recovery Centre (Contract 814) and for a new waste compactor and replacement bins (Contract 811).

6.5 Works are scheduled to commence in mid-March and conclude in August 2011. The works will include:

- A new entrance to the site from Fittall Street;
- Provision of a new carpark to provide access to the coastal walkway (funded separately by community services);
- Construction of a new recycling drop-off facility for the public;
- Installation of a new kiosk and transfer of the existing weigh-bridge;
- Construction of a temporary waste tipping pit; and
- Refurbishment of the existing waste tipping pit, and
- Installation of a new waste compactor.

6.6 The scope of works for each contract has been reduced to keep contract costs within available funding.

6.7 The works, when complete, will significantly improve health and safety, public convenience, traffic flow and scope for diversion of waste from landfill. Councillors are invited to a preconstruction inspection of the on Thursday 17 March, following the committee meeting.

6.8 Contract arrangements for Contract 652 (Murchison Resource Recovery Centre and Refuse Haulage) are discussed in a separate paper to the committee.

6.9 Eves Valley Landfill

6.10 Waste volumes to Eves Valley landfill have continued to decline, with provisional data for February indicating a reduction of waste at all sites other than Richmond. Special waste, in particular, continues to decline. While this reduction in waste to landfill is pleasing, it reduces income for what is a largely fixed cost activity. Staff are currently

considering budget implications if these reductions continue.

6.11 Additional fencing, tree clearing and planting has been undertaken on site, and further work is scheduled for March and April. This work will increase screening of the site and improve litter control.

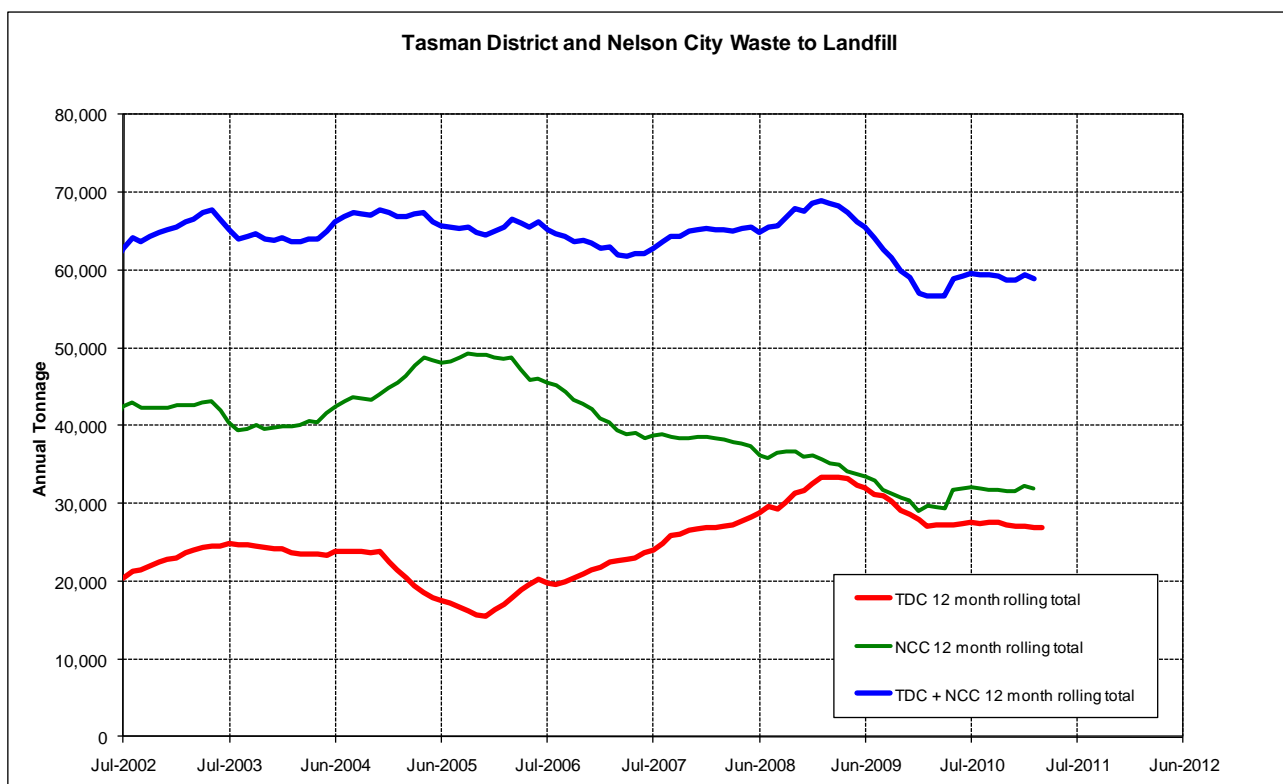
6.12 Improvements to stormwater control are also scheduled for late March and April this year. The work will include improvement to the stormwater ponds and vegetating areas of the site outside operational areas. This work will augment recent re-routing of the western stormwater cut-off drain and improvements to the landfill working area.

6.13 Stage 1 of groundwater and geotechnical investigations for Stage 3 of the landfill are now complete, with further fieldwork being considered for March and April.

6.14 Regional Waste Minimisation

6.15 A report outlining governance options for future landfill management has been recently distributed to members of the joint Tasman District Council/Nelson City Council Waste Working Party.

6.16 Regional waste quantities indicate an on-going, gradual decline in waste to landfill.



6.17 A pilot waste minimisation initiative is proposed in Golden Bay in the coming months. “Second-hand Sunday” is a project where residents can offer surplus material free of charge to the local community. Materials are placed within the owners’ property on an agreed date, much like a garage sale without any money changing hands. Staff will consult with the Golden Bay Community Board on this initiative.

8 TENDERS

8.1 The following tenders have been awarded since the previous Engineering Services Committee meeting:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	Council estimate	Budget for this item	Comment
811	Richmond RRC Waste Compactor & Bins	2	BJ Scarlett	\$403,150	-	\$410,000		Part of total budget for Richmond RRC Upgrade
814	Richmond RRC Upgrade & Site Development Works	3	Fulton Hogan	\$1,332,428	\$1,335,328	\$1,167,087	-	Part of total budget for Richmond RRC Upgrade

9 RECOMMENDATION

THAT the Utilities Management Report, RESC-11-03-06-INF be received by the Engineering Services Committee.

Jeff Cuthbertson
Utilities Asset Manager