# STAFF REPORT

**TO:** Chairman and Members Engineering Services Committee

**FROM:** Peter Thomson

REFERENCE: A503

**DATE:** 14 October, 2010

SUBJECT: Asset Management Report

#### **6 ASSET MANAGEMENT REPORT**

# 6.1 Roading

## 6.1.1 Regional Cycle Forum

Engineer Steve Elkington and Road Safety Coordinator Kirsty Barr have attended regional cycle forums along with other representatives from Land Transport NZ, Strategic Traffic Unit, ACC, Health Promotion, cycle advocates, Transit NZ, MWH, councillors, NCC and Opus. These quarterly meetings are an opportunity to coordinate information between wide ranging agencies, cycle advocates and other cycling representatives. The cycling forum has:

- Established Terms of Reference and agreed on a philosophical goal that we aim to work collaboratively towards.
- Been key in developing 0800 cycle crash facility. This aims to capture more
  comprehensive data on near misses and cycle crashes to help inform on education,
  enforcement and engineering resources (current estimates are that as little as 20% of
  cycle crashes are currently reported). Initial feedback around this pilot has been very
  positive and data has proved to be informative. It is expected the pilot will extend for a
  further 6 months.
- The forum enables organisations and groups to share information about engineering works and educational campaigns which impact on or improve cycling in the region.
- Crash statistics provide an opportunity to discuss possible funding options or educational avenues that can be pursued to address specific issues

While there are many different views and experiences represented by the different members, the forums are a valuable opportunity for a wide range of groups and people to come together under one topic and discuss what each agency is currently working on and ways in which organisations can work together towards common goals. Continued quafterly cycle forums are planned, with the next meeting to be held in May 2005.

## 6.1.2 Hamama Road - Sealing and New Water Main

Tenders for this work closed on Wednesday 2 February 2005. The tender price for sealing the road matches that budgeted, unfortunately the water main and trenching costs were

above budget and therefore the work has not yet been awarded whilst further negotiations are in progress. It is hoped to have this resolved in the first week of March 2005 after which a report for Tenders Committee will be prepared.

It has been agreed that the trench excavation and back-filling will be paid for under the roading budget. It is the intention to relocate the Telecom Cable by laying it in the same trench as the water main.

### 6.1.3 Fairfax St Murchison - Car Park

The contract for this work was awarded to Works Infrastructure. The car park is being constructed on Council land on which the new toilet block was built.

# **6.1.4 Minor Safety Contract**

This Contract has recently been tendered and closes on Wednesday 2 March 2005. There are six separate sites proposed for treatment, being:

- Waimea West Road Brightwater threshold treatment ie gateway signage;
- Proposed entrance and associated road widening for the new Moutere Hills Community Centre and Sports Complex on the Moutere Highway. This work is not being paid for from Council's Minor Safety Budget, but the job was of a relatively small nature that it was worth including to get a competitive price;
- Upgrade of the intersection of Moutere Highway and Harley Road Improved layout to reduce speed and confusion including improvements to the vertical alignment;
- Intersection improvement of Moutere Highway and Neudorf Roads Associated road widening including turning lanes;
- Intersection improvement of Queen Victoria Street, Hursthouse Street and Wildman Road – Associated road widening including turning lanes, this job is one of Council's Capital Safety Projects justified by the high number of crashes over the last five years;
- Intersection Improvement of College and Chamberlain Streets Associated road widening and splinter-island required due to high crash rate.

# 6.1.5 New Stock Control Bylaw

A new draft bylaw for stock control including droving on council roads is presently being prepared. This will need to go for public consultation before being approved by Council.

# 6.1.6 Speed Limit Review

As part of the Speed Limit Rule introduced last year, whereby Council passed a new Speed Limit Bylaw, a review of all existing speed limits will need to be undertaken in the near future. This review has started in the Golden Bay Ward and should be completed in March 2005. Any new or proposed changes will need to go through the Special Order Process, involving public consultation.

### 6.2 Rivers

## 6.2.1 Lower Motueka Stopbank Review

Consultant MWH is working on a study to provide a detailed scope of the extent and

design of the proposed Lower Motueka Scheme along with any previous studies and reviews since the scheme was built. Expected completion date is 31 March 2005.

# 6.2.2 Riwaka Stopbank Review Stage 4

Detailed preparation of a task plan for this work is close to agreement with MWH. The project requires about 2 years to progress through to start construction and the fees for this are in the order of \$135,000 for detailed research, public consultation and resource consent issues, \$110,000 for detailed design and contract documentation, with an estimate of \$120,000 for contract supervision during construction (Total \$365,000). Some of this budget is for TDC staff time.

These fees have been programmed as: 2004/2005 \$55,000, 2005/2006 \$110,000 (in negotiation) and 2006/2007/2008/2009 \$120,000 (estimate)

## 6.2.3 Redwood and Eves Valley Streams

Mr Bruce Moseley's committee list of \$10,000 desirable works needed to make their sections of the catchment more efficient and effective during high rainfall events have been checked. All tasks, with the exception of a short section of flood bank extension are acceptable maintenance works and will be completed towards the end of the 2004/2005 year or early in 2005/2006 within the contractor's standard works programme.

#### 6.2.4 Willow Protection Modification

The need to replace much of the tall willow works along 850 km of river bank needs to be addressed. The magnitude of the problem suggests that a 10 year programme needs to be set up. The River Works budget has not changed during the last 5 years and a backlog of front line willow protection upgrading is now necessary. At the present time willow clearance maintenance accounts for more than \$470,000 of the annual budget. The estimates include a first year target increase of \$131,000. Current method of willow clearance work will be modified to eradicate the regrowth that has followed, combined with a programme of replanting of more appropriate species.

### 6.2.5 River Rating

Two current issues suggest a review of the River Rating system is called for.

The need to modify the willow clearance methods requires us to operate in many "River Z" areas where the success of removal and replanting with other species necessitates doing the work over predetermined sections of river bank.

The change of protection species needs to be dealt with in a planned manner that cannot easily start and stop on individual title boundaries. Getting agreements with groups of landowners and expecting them to accept the "River Z" cost sharing policy will jeopardise progress. A review of the "River Y" area to cover a greater number of river kilometres will provide the control and the funding basis for future works programmes. This does not challenge the present benefits-based policy of river rating.

The events experienced in Tasman and Redwood areas with quick runoff and higher peak flows in small catchments suggests that there are a range of catchments that need to be rezoned so that changes of land use in the upper parts of these catchments will attract some of the costs of the effects downstream. One solution is rezoning total catchment areas into the "River Y" area and provides both a higher funding base and more equitably shares the costs between cause and effect. This challenges the purely benefit-based system.

There are other options that need to be explored and it is intended that this be undertaken during the next 12 months and reported back to Council.

Instigation of a National Flood Mitigation Protocol later this year will require us to manage the asset with due consideration of equitable risk management. A timely rating review is recommended to address the current inequities and be in place for the 2006/2007 year.

### 6.3 Water

# 6.3.1 Wai-iti Augmentation Irrigation Dam

The dam construction is picking up progress with Taylors Contracting established on site. Taylors expect to have additional heavy earthmoving gear onsite during the next week or two. Some minor problems in classifying borrow materials and installing foundation cut off trenches are being solved. The contractor has established their commitment to meeting the completion of earthworks date of 20 May 2005, but this will depend to a greater extent on what type of weather arrives.

The returns from committed irrigators has taken up all of the additional 400 ha water allocation available.

#### 6.3.2 Hamama Water Scheme

The preferred tender for the upgrade of the Hamama water scheme, to be carried out in conjunction with Hamama road upgrade included for the pricing of two pipe size options for the water main, 100 mm and 150 mm diameter. Following meetings with the Hamama Water Committee, it has been agreed that the 100 mm diameter option is to be adopted.

## 6.3.3 Redwood Rural Water

Work has been completed on the upgrade to the Redwood Rural Water Scheme. Redwoods 1 booster pump station upgrade has been completed and the Golden Hills Road portion has also been flushed and commissioned. Practical Completion has been granted.

## 6.3.4 Coastal Pipeline

#### Water Extraction

The site flow testing, drawdown tests and investigation work at the Motueka extraction bore site and potential water take is completed. Initial results are very positive.

## 6.3.5 Hydraulic Modelling – Data Capture

Tenders have been received for the data capture contract. Truebridge Callender Beach (Wellington) have been awarded preferred tenderer status whilst some contract details are confirmed.

The data will be captured in a form that can be installed into Council's Asset Management (Confirm) database with the minimum of effort.

It will also enable staff to predict what real effect future developments will have on existing infrastructure and identify what infrastructure will need replacing to allow development to continue and provide the level of service to our existing customers.

Ultimately all water supplies will be modelled.

#### 6.3.6 Firewells in Motueka and Takaka

The replacement of the Parkers Road firewell in Motueka has been completed. Progress is being made on the cleaning out of all firewells in each of the townships. In early March 2005 the flow testing of all firewells in Motueka and Takaka will commence. This timing is to allow for completion of flow testing of the Motueka extraction bore.

# 6.3.7 Murchison Water Leakage Study

Monitoring on the water use in Murchison is complete. Results indicate that daily usage is at an appropriate level, at approximately 450m³/day but lower than the peak 550m³/day during similar months a year ago. The new consent limit is 600m³/day (previously 1150m³/day). The breakages are commonly and regularly occurring in the 40mm lines. These are repaired quickly and associated water losses are minimal. Feasibility of replacement of these lines will be determined, but likely to be economically viable versus the ongoing maintenance costs of repair.

#### 6.4 Stormwater

## 6.4.1 Borck's Creek

Negotiations are continuing with the new owners of the land needed for the widening of Borck's Creek adjacent to Lower Queen Street and Headingly Lane.

A design of the proposed works is being undertaken in an effort to enhance the ecology and capacity of the waterway.

## 6.4.2 Hydraulic Modelling – Data Capture

A similar data capture/modelling exercise is being undertaken in the stormwater area as detailed in the water section(refer 6.3.6).

#### 6.5 Wastewater

### 6.5.1 Pohara Stage 3

Ching Contracting Ltd continue to progress steadily through the Central Takaka Road and Dodson Road portions of the upgrade. The Park Avenue portion is complete, and the remaining work in Motupipi will follow on after Central Takaka Road.

Councillors and Council staff met with property owners in Takaka recently to discuss connection costs and options for payment. The meeting was well attended and overall feedback was positive.

# 6.5.2 Tapu Bay Crossing

The contractor has completed work on site at Riwaka and the Tapu Bay portion has been successfully installed. The Tapu Bay portion remains to be connected into the existing system. The connection of this new main to render the old mains redundant will be several months away.

## 6.5.3 Hydraulic Modelling – Data Capture

Survey data capture/modelling exercise is being undertaken in wastewater as detailed in water(refer 6.3.6)

#### 6.5.4 Wastewater Treatment Plants

Several wastewater treatment plant operations are being reviewed at present.

Some plants have not had/produced good effluent for some time and need upgrading to conform to the discharge consents.

The plants presently being reviewed are Murchison, Tapawera, Motueka, Takaka and Upper Takaka.

Remedial maintenance works have commenced at Motueka sewerage ponds.

#### 6.5.5 Richmond Trunk Main

Work is progressing on this project with an expectation that tenders will be out for pricing in March 2005.

#### 6.6 Tenders

No Contract Name No Successful Highest TDC Budget Amount tenders tenderer Amount **Estimate** received \$ \$ <sup>1</sup>Fairfax Street Car Park 63.400 639 Works 72,429 74,532 53,000 Upgrade Infrastructure

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<sup>&</sup>lt;sup>1</sup> Scope of project extended and includes some additional work which will be paid for by others.