COUNCIL 30. 5. 2013

ENVIRONMENT AND INFRASTRUCTURE COMMITTEE
9 MAY 2013

A meeting of the Environment and Infrastructure Committee was held in the No. 1 Committee Room on Thursday 9 May 2013 at 11.32am.

PRESENT: Councillor Claudia Reid (Chairperson)
Councillors Sally Buck, Jimmy Chen, Barry Corbett, Aaron Keown, and Sue Wells.

IN ATTENDANCE: Councillors Beck, Johanson and Livingstone in attendance for clauses 4, 5 and 6.

APOLOGIES: Nil.

The Committee reports that:

PART A - MATTERS REQUIRING A COUNCIL DECISION

1. CYCLE LANES ON MAIN ROADS

General Manager responsible:	General Manager, City Environment DDI 941-8608
Officer responsible:	Unit Manager, Asset and Network Planning
Author:	Michael Ferigo, Transport Planner – Cycling and Pedestrians

PURPOSE OF REPORT

1. The purpose of this report is to seek the Council's approval to support the use of cycle lanes as one of a number of options for providing a base level of safety on collector, arterial or equivalent main roads in Christchurch. This is in response to the Committee's question at the 4 April 2013 Committee meeting on the Cycle Design Guidelines: "What is the base level of safety / provision for cyclists the Council will endorse on main roads which are not part of the cycle network as defined in the Christchurch Transport Strategic Plan?".

EXECUTIVE SUMMARY

What is the effect of cycle lanes on cycle safety and numbers?

2. Local evidence comparing pre and post cycle lane provision on Christchurch's collector and arterial roads, show that cycle crashes at the studied sites on average reduced by 23 percent (Parsons and Koorey, 2013). This is supported by multiple overseas research studies that show roads with cycle lanes characteristically produce levels of safety improvement from 15 per cent to 30 per cent.

3. Local research (Parsons and Koorey, 2013) also indicates that the cycle lanes studied have caused a measurable effect on increasing cycle counts. International research is mixed in showing the effects of cycle lanes on ridership levels. One Copenhagen study by Jensen (2008) indicates that there is a modest increase (around 5 per cent) in cycle levels when cycle lanes are introduced and a greater increase (20 per cent) when off road facilities are introduced. Their introduction of the off road facilities also resulted in a 10 per cent decrease in motor vehicle usage. Another study by Buehler and Pucher (2011) analysed 90 cities in America, this showed that both cycle lanes and cycle paths encourage higher cycling numbers.

1 Cont'd

4. Whilst surveys have shown that most people prefer off road or separated cycle facilities compared to painted cycle lanes there is, however, still strong support for providing cycle lanes on roads over no specific cycle provision. Cycle lanes are a relatively efficient and effective use of resources to provide a level of improved safety for people cycling on main roads. In Christchurch, a survey of Lyttelton Street (a Collector Road) after its upgrade, which included the introduction of painted cycle lanes resulted in:

   (a) 96 per cent of residents, 96 per cent of cyclists and 89 per cent of motorists wanting to see the concept of Lyttelton Street developed in similar streets in Christchurch.

   (b) 90 per cent of cyclists stating that they would like to see cycle lanes developed in busier streets in Christchurch such as Lincoln Road or Riccarton Road (Arterial Roads).

5. Further information on the numbers of fatalities and injuries for cyclists will be brought to the committee meeting and references will be available on request.

What do national and international traffic engineer guidelines recommend?

6. Contemporary traffic engineering guidelines include the option to introduce painted cycle lanes on typical urban arterial roads. They may vary in the detail and the thresholds that trigger various applications of cycle provision but all recommend and recognise the benefits of cycle lanes to provide a basic level of safety. Notably many European cities have significant proportions of their cycle networks provided via painted cycle lanes, even Copenhagen renowned for its high levels of cycle safety and cycle numbers has developed it with around 5 per cent of its cycle network as painted cycle lanes.

What do the City Plan and Infrastructure Design Standards currently say?

7. The City Plan currently includes a cycle network map and policy 7.4.5 to *"develop a clearly identified cycle network throughout the city by:*

   (a) Providing safe, convenient cycle routes for school children;

   (b) Using the secondary road network and using and creating vehicle free routes where possible;

   (c) Making special provision for cycle commuters on some arterial roads to allow direct access to the central city; and

   (d) Selecting cycle routes and enhancing additional routes to increase the safety and pleasantness of the network."

8. The Infrastructure Design Standards currently *"make provision for on-street and off-street cycle facilities, where required by the City Plan or indicated on the cycle network plan in the cycling strategy, to facilitate an alternative to the car for short to medium length trips. Consider installing cycle parking facilities near bus stops, to ease the transfer between transport modes…Provide continuous on-street cycle lanes on all collector and arterial roads. For local urban roads, cycle facilities may be provided through wide kerbside lanes."*

1 Cont'd

What is the base level of safety the Council will endorse on main roads?

9. In light of the above evidence staff recommend that cycle lanes have a role in providing a base level of safety on collector and arterial roads which are not part of the defined cycle network. This supports the concept that all streets can be used by cyclists and that residents expect a reasonable level of safety on our roads for all modes. The future cycle network as defined in the Christchurch Transport Strategic Plan provides for a higher level of service and priority on some streets to encourage more people to cycle more often. However, main roads should still provide a base level of service for all road users, including cyclists, to ensure their safety and a consistent level of service; this service on some occasions will be delivered through cycle lanes.

FINANCIAL IMPLICATIONS

10. Approval of the staff recommendation is not a commitment to the delivery of any cycle lane project. Future cycleway projects and associated budgets will be determined through the Three Year Plan, future Long Term Plans and Annual Plans.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

11. Yes, the recommendation will assist in achieving a number of the Community Outcomes under the LTCCP and support the Council's recovery programme for transport infrastructure and cycle projects in the draft Council Three Year Plan.

LEGAL CONSIDERATIONS

12. The recommendation will assist the Council in carrying out its functions under the Local Government Act 2002. As noted above, approving the recommendation does not create an obligation on the Council to deliver any cycle project, or to make specific provision for any projects in the Three Year Plan, or future Long Term Plans.

Have you considered the legal implications of the issue under consideration?

13. Yes. As noted above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

14. The recommendation aligns with the active transport activity in the current LTCCP (2009-19), and the draft Council Three Year Plan.

15. The recommendation aligns with the following draft 2013 Community Outcomes:

    (a) **Liveable City:** providing a system that offers transport options to meet the needs of people and businesses; providing people with access to economic, social and cultural activities; promoting an increase in journeys made by foot, cycle and public transport; facilitating streetscapes that enhance the look and function of the city.

    (b) **Strong Communities**: improving the safety of the transport system and encouraging physical activity through active transport.

Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

16. The recommendation will assist in achieving a number of Council outcomes under the LTP and Levels of Service within the Streets and Transport activity.

1 Cont'd

ALIGNMENT WITH STRATEGIES

17. The recommendation aligns with the implementation of the Christchurch Transport Strategic Plan.

Do the recommendations align with the Council's strategies?

18. Yes, see above.

CONSULTATION FULFILMENT

19. The recommendation does not require consultation at this stage.

STAFF RECOMMENDATION

That the Council support the use of cycle lanes as one of a number of options for providing a base level of safety on collector, arterial or equivalent main roads in Christchurch.

COMMITTEE RECOMMENDATION

That the staff recommendation be adopted.

2. EASEMENT CONSENT – 142 CAMBRIDGE TERRACE

General Manager responsible:	General Manager City Environment Group, DDI 941-8608
Officer responsible:	Unit Manager, Transport and Greenspace
Author:	Dan Egerton – Property Consultant

PURPOSE OF REPORT

1. The purpose of this report is to seek the Council's approval to grant an easement for the right to locate and maintain an underground storm water pipe in a portion of land administered by the Christchurch City Council under the Reserves Act 1977, but held under the Christchurch City Reserves and Empowering Act 1971. The land is located at 142 Cambridge Terrace and is on the north eastern corner of the Cambridge Terrace and Worcester Street intersection as shown on **Attachment 1**. The Council is only being asked to consider the drain as shown on the property adjoining Worcester Street.

EXECUTIVE SUMMARY

2. Following the earthquakes various pipes have been replaced and upgraded within various roads. The pipe that is the subject of this report replaces an existing overflow pipe that, due to the increased capacity of the replacement pipes, is now too small. The right for the existing pipe was not provided for by way of an easement. Hence the requirement for an easement in respect of the new replacement pipe.

3. It is intended that this pipe will only come into use if the existing pump station, and a new pump station both fail for extended periods of time.

FINANCIAL IMPLICATIONS

4. The land in question through which the pipe and easement run is held by the Council as reserve under the Christchurch City Reserves Empowering Act 1971. Due to the fact that the pipe work will be owned by the council and the easement in favour of the Council no compensation will therefore be payable for the benefit of the easement.

2 Cont'd

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

5. Not applicable. The works budget for the related works will form part of the Infrastructure Rebuild Programme.

LEGAL CONSIDERATIONS

6. The land in question whilst under the Christchurch City Reserves and Empowering Act is administered under the Reserves Act 1977. Due to this the consent of the Minister of Conservation will be required and the requirements of Section 48 of the Reserves Act have been considered. It is not deemed that there is any negative impact on the public's ability to enjoy the reserve.

7. Section 48 of the Reserves Act 1977 provides that the administering body, with the consent of the Minister and on such conditions as the Minister thinks fit, may grant rights of way and other easements over any part of the reserve for in this case (1)(f).

8. Subsection 2 provides that before granting a right of way or an easement under subsection (1) over any part of a reserve vested in it, the administering body shall give public notice in accordance with section 119 specifying the right of way or other easement intended to be granted, and shall give full consideration, in accordance with section 120, to all objections and submissions received in respect of the proposal under that section.

9. Further subsection (3) states Subsection (2) shall not apply in any case where:

   (a) The reserve is vested in an administering body and is not likely to be materially altered or permanently damaged; and

   (b) The rights of the public in respect of the reserve are not likely to be permanently affected by the establishment and lawful exercise of the right of way or other easement.

10. This application falls within the provisions of Subsection 3 as the rights of the public are not likely to be permanently affected (the services are underground) and accordingly public notice is not required.

11. The Council has the authority to approve the granting of easements pursuant to Section 48 (1) of the Reserves Act 1977, subject to the Minister of Conservations approval.

Have you considered the legal implications of the issue under consideration?

12. Refer above. Legal services will be involved in the final documentation of the easement.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

13. Not applicable. Arises from earthquake exigencies.

Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

14. Not applicable. Arises from earthquake exigencies.

ALIGNMENT WITH STRATEGIES

15. Supports the Council's surface water strategy.

Do the recommendations align with the Council's strategies?

16. Supports the Council's surface water strategy.

2 Cont'd

CONSULTATION FULFILMENT

17. Not required. Refer legal section above.

STAFF RECOMMENDATION

That the Council:

(a) Approve an easement pursuant to Section 48 (1) (d) of the Reserves Act 1977 for the right to locate and maintain a stormwater drain on and over portion of Reserve land located at 142 Cambridge Terrace on the North Eastern Corner at the intersection of Cambridge Terrace and Worcester Streets:

(i) the restoration of the Reserve to the condition it was in prior to the commencement of the works and to the satisfaction of the Parks Operations Manager;

(ii) the consent of the Department of Conservation is sought.

(b) Delegate authority to the Corporate Support Unit Manager to finalise and conclude the granting of the easement.

COMMITTEE RECOMMENDATION

That the staff recommendation be adopted.

3. INFRASTRUCTURE REBUILD MONTHLY REPORT

General Manager responsible:	General Manager Capital Programme, DDI: 941-8235
Officer responsible:	Infrastructure Rebuild Client Manager
Author:	Will Doughty, Infrastructure Rebuild Leader

PURPOSE OF REPORT

1. To provide the Council with a monthly update on the infrastructure rebuild.

EXECUTIVE SUMMARY

2. At its April 2011 meeting, the Council gave approval for an Alliance to be formed to deliver the reinstatement of the City's damaged infrastructure. It was also agreed that the Chief Executive would report regularly to the Council on progress with regard to the reinstatement work.

3. The report (**Attachment 1**) is the sixteenth of what will be a regular monthly report that is provided to the Environment and Infrastructure Committee, Council and the Canterbury Earthquake Recovery Authority (CERA).

STAFF RECOMMENDATION

That the Council receive the Infrastructure Rebuild Monthly Report for April 2013.

COMMITTEE RECOMMENDATION

That the staff recommendation be adopted.

PART B - REPORTS FOR INFORMATION

4. DEPUTATIONS BY APPOINTMENT

Nil.

5. BRIEFINGS

5.1 Parklands Wastewater System

Mark Christison and Jane Parfitt from City Environment Group summarised what has happened to date with regard to the installation of pressurised wastewater systems. A presentation was given which covered a review of damaged areas and land risks, extra operating costs post earthquakes and examples of the application of pressure sewers in New Zealand and Australia.

COMMITTEE CONSIDERATION

During the discussion following the briefing, the Committee agreed to formulate a response to the community concerns and questions that have been raised regarding the installation of pressurised wastewater systems in Parklands through a sub-committee of Councillors Reid, Keown and Wells. Committee members were requested to forward any additional questions regarding pressurised wastewater systems to Councillor Reid by 10 May 2013.

PART C – DELEGATED DECISIONS

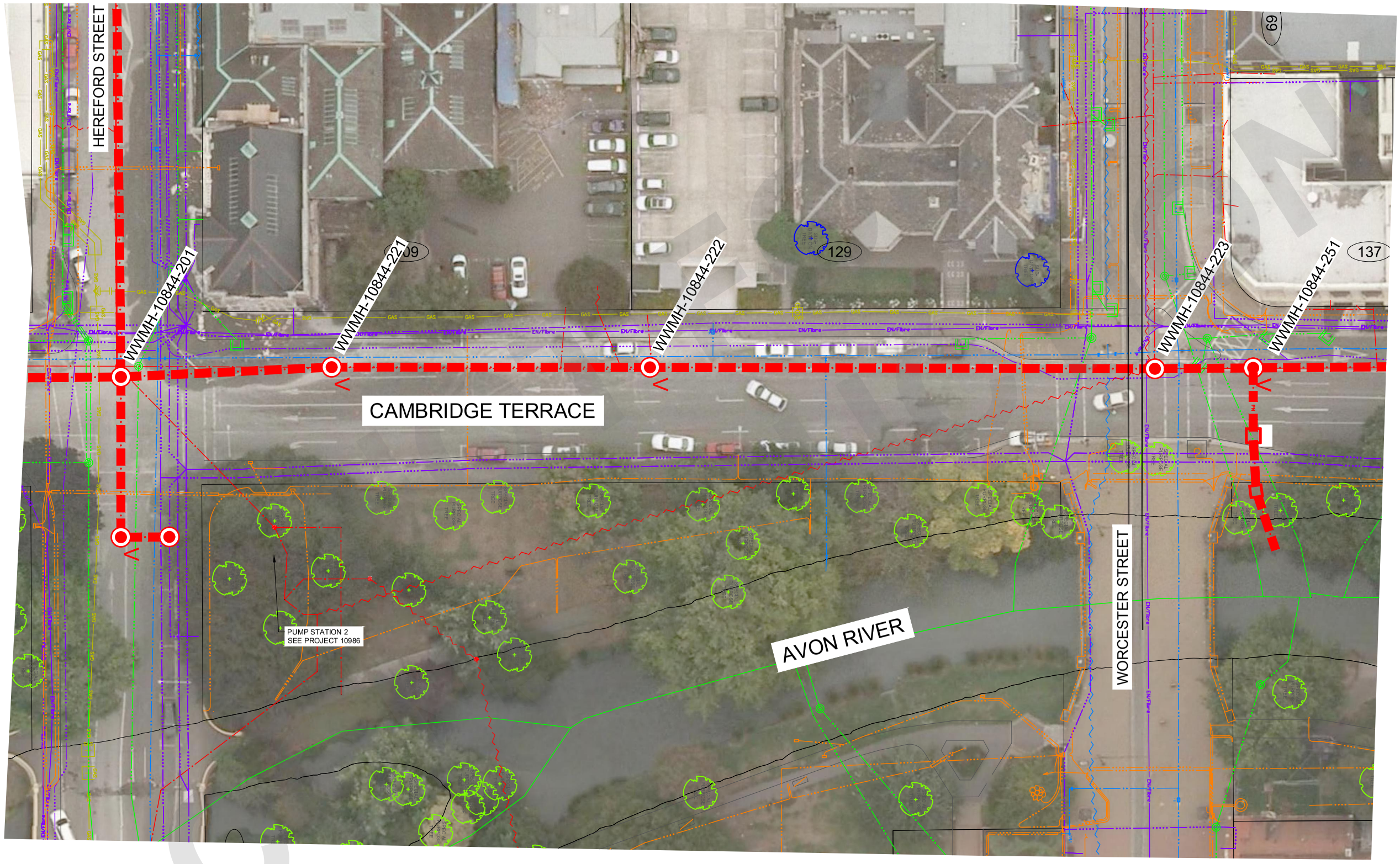
6. APOLOGIES

Nil.

The meeting concluded at 2.50pm.

CONSIDERED THIS 30TH DAY OF MAY 2013

MAYOR



LEGEND

SERVICES
- WASTEWATER
- WASTEWATER (PRESSURE)
- WASTEWATER PREV. ABANDONED
- WATER SUPPLY
- WATER SUPPLY PREV. ABANDONED
- STORMWATER
- POWER (& High Voltage Indicated)
- TELECOMS
- FIBRE OPTIC NETWORK
- GAS
- POWER POLE
- WATER SUPPLY VALVES
- FIRE HYDRANT
- MANHOLES
- SINGLE SUMP (SS), DOUBLE SUMP (DS)
- WWMH 17900 MANHOLE ID

WASTEWATER DESIGN
- WASTEWATER
- WASTEWATER (PRESSURE)
- WASTEWATER LINE TO BE ABANDONED
- MANHOLE, VENTED MANHOLE

LONG SECTION VIEW
- WASTEWATER EXISTING
- WASTEWATER DESIGN
- EXISTING SURFACE
- DESIGN SURFACE

THE DESIGNER IS TO PROVIDE COORDINATES FOR THE LOCATION OF SUMPS, MANHOLES AND OUTLETS AS REQUIRED, AT THE TIME OF CONSTRUCTION

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE

ATTACHMENT 1 TO CLAUSE 2
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 9. 5. 2013

Original size mm 0 10 30 50 100 150 200 300

New Zealand Government
Christchurch City Council

	NAME	SIGNED	DATE
DESIGNED			
DES. REVIEW			
DRAWN			
DRW. CHECK			
FILE LOCATION	C:\Users\parkinsonr\Desktop		
SKETCH.dwg			

APPROVED
FOR RECOMMENDATION — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

CONSULTANT: SCIRT Rebuilding Infrastructure
CONSULTANT FILE REF.

PROJECT TITLE: INFRASTRUCTURE REBUILD
PS2 CATCHMENT
CENTRAL CITY

DRAWING TITLE: WASTEWATER
PLAN CAMBRIDGE
TERRACE

SCIRT PROJECT REF. 10844	ORIGINAL SHEET SIZE A1	SCALES
CPG CAD DRAWING FILE REF. --		
CPG PROJECT FILE NUMBER --		DRAWING No. SKETCH

Christchurch City Council

New Zealand Government

INFRASTRUCTURE REBUILD PROGRESS REPORT

APRIL 2013

TABLE OF CONTENTS

1. INTRODUCTION

The purpose of this report is to provide Council, CERA and NZTA an update on the horizontal infrastructure rebuild. For this month, and going forward, progress on all horizontal infrastructure rebuild work is reported. This includes the work activity being delivered by SCIRT (section 4.1) and work being delivered under business as usual (BAU) mechanisms (section 4.2).

2. ACTIVITIES FOR THE MONTH

The fine warm weather continued throughout March which has enabled solid work volumes in all phases of the SCIRT work programme. In March SCIRT delivered $42 million of work of which over $26 million was delivered in the field. At the end of March, SCIRT had achieved a year to date total of $330m against a revised target budget of $490 million. In the field there is continued focus on safety, quality and environment areas on getting the basics right and ensuring consistency across these areas with every contractor and sub contractor.

Community and stakeholder liaison remains a high priority with the increase in work sites across the city. The recent results from stakeholder surveys outlined in the communications section highlight good satisfaction with overall achievement levels but also highlights the focus required around traffic management and ensuring the public are well informed around what is happening on the roads. SCIRT is working very closely with the Christchurch Transport Operations Centre (CTOC) in this area. Impacts to the network are inevitable as the scale of work sites increase across the city but the challenge remains to ensure progress whilst minimising as far as possible the impacts to the public. There is also significant ongoing community engagement around the installation of new resilient pressure wastewater systems around the city

Discussions between Central Governement and CCC around the overall funding framework for the Horizontal infrastructure rebuild programme are ongoing in order to help finalise and adopt the draft Three Year plan.

3. FINANCIALS

Below is a summary of the financials for the horizontal infrastructure rebuild.

This report includes a breakdown for the current financial year to date as per Council Annual plan and the agreed SCIRT performance target in section 3.1 and actual life to date costs against the overall infrastructure rebuild estimate (plus additional projects) in section 3.2. For the purpose of this report all indirect costs have been allocated based on portion of the programme estimate per activity.

3.1 Infrastructure rebuild activities actual year to date costs

3.1.1 Actual year to date costs - Council infrastructure rebuild activities

Table 1.1 below summarises the year to date costs of Council infrastructure rebuild activities. These activities are delivered by SCIRT as well as through business as usual mechanisms.

Council 2012/13 infrastructure rebuild budget is $553m, consist of base annual plan ($521.9m), carry forwards from 2011/12 ($21.6m) and approved plan changes ($9.5m) made during the year. The activities are forecast to be $19.7m under budget by year end, including $18.2m to be carried forward to next financial year.

Table 1.1 Council infrastructure rebuild activities, actual year to date costs reported against Council budget

FINANCE AS AT 31 MARCH 2013

Council Infrastructure Rebuild Programme

Activity	2012/13 CCC Budget *	Actual Cost YTD	Year End Forecast	Year End Forecast Variance
SCIRT				
Road Network	$ 147,667,000	$ 92,151,832	$ 143,159,176	$ 4,507,824
Wastewater Collection	$ 235,174,000	$ 211,515,461	$ 291,009,763	($ 55,835,763)
Water Supply	$ 55,473,000	$ 15,923,265	$ 25,169,255	$ 30,303,745
Waterways & Land Drainage	$ 22,978,107	$ 7,068,456	$ 12,046,292	$ 10,931,815
COUNCIL INFRASTRUCTURE REBUILD PROGRAMME BY SCIRT	**$ 461,292,107**	**$ 326,659,014**	**$ 471,384,486**	**($ 10,092,379)**
Non SCIRT				
Road Network	$ 1,456,542	$ 465,079	$ 1,704,040	($ 247,498)
Wastewater Collection	$ -	$ 1,637,890	$ 1,637,890	($ 1,637,890)
Parks & Open Spaces	$ 9,754,101	$ 3,948,374	$ 9,427,381	$ 326,720
Refuse Minimisation & Disposal	$ 11,111,615	$ 2,428,144	$ 10,076,614	$ 1,035,001
Wastewater Treatment & Disposal	$ 29,398,854	$ 13,927,488	$ 21,508,741	$ 7,890,113
Water Supply	$ 34,425,173	$ 2,459,207	$ 3,319,209	$ 31,105,964
Waterways & Land Drainage	$ 5,579,000	$ 2,292,323	$ 3,755,463	$ 1,823,537
COUNCIL INFRASTRUCTURE REBUILD PROGRAMME BY OTHERS	**$ 91,725,285**	**$ 27,158,504**	**$ 51,429,338**	**$ 40,295,947**
TOTAL COUNCIL INFRASTRUCTURE REBUILD PROGRAMME	**$ 553,017,392**	**$ 353,817,518**	**$ 522,813,824**	**$ 30,203,568**

*** CCC Budget Reconciliation**	
2012/13 CCC Annual Plan	$ 521,900,000
Carry Forwards ex 2011/12	$ 21,586,522
2012/13 Approved Plan Changes	($ 2,822,000)
Budget transferred from improvements allowance	$ 12,352,870
2012/13 CCC Budget	**$ 553,017,392**

3.1.2 Actual year to date costs - Infrastructure rebuild activities being undertaken by SCIRT

Table 1.2 below presents actual year to date costs for Council and NZTA rebuild activities being undertaken by SCIRT. These costs are reported against SCIRT performance target.

Current SCIRT performance target is $490m, including Council rebuild activities ($481.9m) and NZTA State Highway rebuild activities ($8.1m). The SCIRT performance target for Council rebuild activities varies from Council annual plan as the target is based on subsequent cash flow forecast.

Table 1.2 Rebuild activities performed by SCIRT, year to date costs reported against SCIRT performance target

FINANCE AS AT 31 MARCH 2013

Infrastructure Rebuild Programme by SCIRT

Activity	2012/13 SCIRT Performance Target	Actual Cost YTD	Year End Forecast	Year End Forecast Variance
Road Network	$ 146,294,048	$ 92,151,832	$ 143,159,176	$ 3,134,872
Wastewater Collection	$ 297,555,995	$ 211,515,461	$ 291,009,763	$ 6,546,232
Water Supply	$ 25,735,435	$ 15,923,265	$ 25,169,255	$ 566,180
Waterways & Land Drainage	$ 12,317,272	$ 7,068,456	$ 12,046,292	$ 270,980
NZTA Highways	$ 8,147,522	$ 3,758,377	$ 7,968,276	$ 179,246
TOTAL INFRASTRUCTURE REBUILD PROGRAMME BY SCIRT	**$ 490,050,272**	**$ 330,417,391**	**$ 479,352,762**	**$ 10,697,510**

3.2 Overall Infrastructure Rebuild estimate - actual life to date costs

The Current approved estimate for the overall rebuild of the City's horizontal infrastructure is $2.015 billion (excluding contingency and escalation), plus $16.4m project budget not included in the horizontal infrastructure cost estimate. In addition to the above there is an estimate of $25m for NZTA State Highways rebuild. For the purpose of this monthly progress report the current overall estimate reported against is therefore $2.057 billion.

The infrastructure rebuild estimate has been updated for incorporation in the draft three year plan. The updated estimate will be reported against once the draft three year plan has been finalised.

3.2.1 SCIRT actual life to date against estimate

Table 2.1 includes the overall life to date costs against the current estimate for the SCIRT performed rebuild of the City's infrastructure. SCIRT is performing $1.7b of Council infrastructure rebuild, plus $25m NZTA Highways rebuild.

Table 2.1 SCIRT Actual life to date costs against estimate

SCIRT

Activity	Description	Estimate	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost LTD	Forecast Total Spend	Programme Variance
Road Network	Roading	$ 814,857,143	$ 11,812,105	$ 71,944,425	$ 92,151,832	$ 175,908,362	$ 814,857,143	$ -
Wastewater Collection	Wastewater	$ 714,095,238	$ 10,376,296	$ 129,686,110	$ 211,515,461	$ 351,577,867	$ 714,095,238	$ -
Water Supply	Water Supply	$ 128,142,857	$ 1,857,860	$ 35,385,420	$ 15,923,265	$ 53,166,545	$ 128,142,857	$ -
Waterways & Land Drainage	Stormwater	$ 69,000,000	$ 999,542	$ 6,505,956	$ 7,068,456	$ 14,573,954	$ 69,000,000	$ -
NZTA Highways		$ 25,000,000	$ -	$ 2,176,046	$ 3,758,377	$ 5,934,423	$ 25,000,000	$ -
TOTAL		**$ 1,751,095,238**	**$ 25,045,803**	**$ 245,697,957**	**$ 330,417,391**	**$ 601,161,151**	**$ 1,751,095,238**	**$ -**

3.2.2 Non-SCIRT actual life to date against estimate

Table 2.2 includes the overall life to date costs against the current estimate for infrastructure rebuild activities being delivered by Council business as usual mechanisms. This table also includes $16.4m budget from Earthquake Building/Infrastructure Shortfall Allowance for the Waste Water Treatment Plant.

Table 2.2 Non-SCIRT Actual life to date costs against estimate

Non SCIRT

Activity	Description	Estimate	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost LTD	Forecast Total Spend	Programme Variance
Road Network	Roading	$ 77,761,905	$ 848,201	$ 692,114	$ 465,079	$ 2,005,394	$ 77,761,905	$ -
Wastewater Collection	Wastewater	$ -	$ 1,634,066	$ 13,757,590	$ 1,637,890	$ 17,029,547	$ -	$ -
Parks & Open Spaces	Greenspace	$ 56,952,381	$ 611,310	$ 1,835,060	$ 3,948,374	$ 6,394,744	$ 56,952,381	$ -
Refuse Minimisation & Disposal	Solid Waste	$ 8,761,905	$ 2,076,017	$ 3,091,587	$ 2,428,144	$ 7,595,747	$ 8,761,905	$ -
Wastewater Treatment & Disposal	WW Treatment Plant	$ 96,356,381	$ 4,488,038	$ 13,249,043	$ 13,927,488	$ 31,664,569	$ 96,356,381	$ -
Water Supply	Water Supply	$ 24,095,238	$ 4,266,124	$ 830,545	$ 2,459,207	$ 7,555,876	$ 24,095,238	$ -
Waterways & Land Drainage	Stormwater	$ 41,619,048		$ 13,960,259	$ 2,292,323	$ 16,252,582	$ 41,619,048	$ -
TOTAL		**$ 305,546,857**	**$ 13,923,757**	**$ 47,416,198**	**$ 27,158,504**	**$ 88,498,458**	**$ 305,546,857**	**$ -**

4. COMMUNICATIONS

4.1 Strategic Communications

Encouraging public feedback was received in SCIRT's latest survey of residents. Draft results out at the beginning of April found:

- 89% satisfied with progress on the infrastructure rebuild
- 93% believe work is in the correct order
- 78% tolerant of roadworks
- 88% willing to take short term pain for long term pain
- 74% traffic management is effective
- 89% say speed limits in roadworks appropriate
- 53% information about roadworks readily available.

Public release of this information was being planned at the time of writing this report.

Road conditions have continued to be an issue of significant public interest this month. Communicating with the public and key stakeholders about road works, traffic management and road safety around the city is an important part of strategic and operational communications activities for the infrastructure rebuild. The aim is to encourage road users to play their part in the rebuild by sharing the responsibility for road safety. With road works a reality across the city for years to come, messaging reminds road users that we all have a part to play in making our roads safe. Encouraging patience, reminding drivers that construction sites are places of work, showing road works as a sign of progress and rewarding good driving behaviours are the strategic messages behind all communications.

Messaging is being coordinated through the Infrastructure Rebuild Communications Working Group and, through regular meetings of key agencies, draws on information about work within the Council, NZTA (through the Christchurch Transport Operations Centre), SCIRT and police.

In early April, an advertising campaign was launched to give residents and visitors information about how the rebuild is progressing. This includes messaging about patience around road works and the tag line: road cones = progress. Billboards, bus backs and ad shells are now up around the city.

The last of the quarterly Community Board briefings were completed in early April and good feedback continues to be received about progress and information availability in the various city wards.

4.2 Operational Communications

SCIRT has now produced over 1,250 individual work notices which have been distributed to more than 320,000 residences. The team has held nearly 7,300 face-to-face interactions and conducted 42 school visits. Media coverage continues to be more positive than negative. The introduction of pressure wastewater systems in certain areas of the city continues to create media interest.

Communications activity around road works has included the roll-out of 'Project Chocolate Fish' (where motorists are delivered a flier thanking them for patience and a chocolate fish) at four traffic hot spots with great feedback. The key messages are being carried through in SCIRT advertising and client strategic communication.

SCIRT will have a significant presence at the CERA rebuild expo in April.

5. ENVIRONMENT

5.1 Key Outcomes

- Two new Archaeological Authorities have been granted for works on private land in Lyttelton and Christchurch.
- A nomination has been submitted for the Ministry for the Environment's Green Ribbon Awards and for an NZPI Planning Practice Award. These nominations recognise the leadership of key SCIRT staff in obtaining global consents for the SCIRT programme and bring regulators, contractors and clients into the close working relationships that currently exist.
- ECan visited three SCIRT sites this month (Avondale Bridge, Opawa Bridge, Bridge St Bridge) as a training exercise for 11 compliance officers. Positive feedback was received from ECan staff.

5.2 Upcoming Priorities

- The need for another global consent from ECan has been identified to authorise the discharge of hydro excavation slurry back into land. This could add significant value, potentially reducing truck movements and the amount of waste produced.

5.3 Environmental Statistics

Description	March 2013	LTD
Environmental Hazards	127	1,401
Environmental Opportunities	473	1,879
Environmental Team Initiatives	7	104
Community Organised Events	2	33
Number of Environmental Incidents	52	474
Infringement Notices	-	-
Abatement Notices	-	-
% of waste reduced, re-used, recycled	5	2

Data from SCIRT Operational report – April 2013

6. PROGRAMME

6.1 SCIRT Work Activity

6.1.1 Achievement Report

The progress report for this month includes an achievement report which outlines progress made by the construction projects against key metrics for each asset type.

Asset Type	Unit	Network Total	Identified Damaged	Of Total	Completed	Of Damaged	Completed in March
WASTEWATER							
Reticulation	KM	1,613	659	41%	144	22%	17.7
Pump Station	No	164	69	83%	39	28%	-
WATER SUPPLY							
Reticulation	KM	2,843	69	2%	22	32%	0.056
Pump Station	No	107	103	96%	6	6%	-
Reservoirs	No	113	113	100%	3	3%	-
STORM WATER							
Reticulation	KM	329	26	8%	9	35%	1.95
Pump Station	No	38	15	39%	2	14%	-
ROADING							
Roading	m^2	11,671,807	1,320,375	11%	182,235	14%	17,863
Storm water	KM	621	135	22%	-	0%	-
Bridges	No	224	244	100%	10	4%	-
Retaining Walls	No	490	141	29%	-	0%	-

All data for the SCIRT Work Activity Section was sent from SCIRT – Received April 2013

6.1.2 Number of Ongoing SCIRT Projects

The following table is a summary of the programme pipeline as at March 31st 2013. It shows how many projects and the total value at each stage of the project lifecycle.

Project Lifecycle Stage	February Estimate	March Estimate	February Estimated Construction Cost	March Estimated Construction Cost
Investigation (Asset Assessment)	10	12	$23.8m	$243m
Concept Design	118	113	$603.5m	$578m
Detailed Design	58	67	$349.4m	$379m
Construction	154	160	$577.8m	$589m
Handover	248	250	$23.7m	$115m
Grand Total	**589**	**602**	**$1,665.2**	**$1,902m**

Data sent from SCIRT – Received April 2013

In the table above, the previous monthly report totals have also been included to show the change in activity.

6.1.3 Ongoing Projects by Ward

6.1.3.1 Introduction

The progress report this month includes a summary of all SCIRT projects that are currently either in detailed design or construction separated on a Ward basis. A separate table has been included specifically for projects either in detailed design or construction within the central city (within the four avenues). This has been created to assist in the coordination with the Central City Recovery Plan and vertical infrastructure rebuild going forward.

For projects in construction – estimated construction cost (Target Outturn Cost) has been included together with actual Life to Date Costs as at the end of March 2013.

6.1.3.2 Burwood / Pegasus

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10620	Pages Rd Bridge	Repair to Pages Rd Bridge, including road network connecting to roundabout on North end of bridge.
10796	NZTA Anzac Bridge Repairs	Ground improvements, removal of landward bridge spans, demolish and rebuild abutments, repair piers, approaches and underpasses
10866	Catchment Study - Burwood Catchment Rebuild NE8 (WS,SW,RD)	Full One Pass rebuild within the Burwood Catchment Area - SW, RD, WS Elements, with construction projects estimated in the region of $30,000,000 resulting from this catchment study.
10869	Catchment Study - New Brighton, South New Brighton & South shore NE1, NE2, & NE3 (WS,SW,RD)	Overall Catchment scope to link multiple projects and release projects on hold for a full one pass rebuild of the above area. Includes RD, SW & WS elements. - Linked to Project #10861. Construction projects to the value of $15M expected to result.
10959	Aranui Catchment NE4 Vacuum Pump Station, Pages Road (WW)	Construction of a vacuum pump station to service the Aranui catchment including an above ground, architecturally designed pump station building, biological filter bed, shared generator building with PS36 and an access road. This pump station is located at the same site as PS36 and has some shared facilities.
10964	Aranui Catchment NE4 Vacuum Arm 5 and 6: Portchester Street Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10975	NE12 - North New Brighton Wastewater Catchment Repairs (WW)	Repair of the Wastewater network within the North New Brighton area.
11020	Keyes Road Catchment - New Brighton and Frosts Road - Roading Stormwater and Water Supply (WS,SW,RD)	Repair of Earthwork damage to Stormwater, Roading and Water Supply for the Areas including Frosts Road, Travis Drive, Bower Avenue, Palmers Road and Baker Street. Stormwater issues may be affected by the adjacent New Brighton Road Project.
11032	Parklands East (RD, SW, WS)	Repairs to roading, stormwater and water supply assets.
11033	Parklands West (RD, SW, WS)	Repairs to roading, stormwater and water supply assets
11034	Parklands South (RD, WS, SW)	Repairs to roading, stormwater and water supply assets
11035	North New Brighton and North Shore (RD, WS,SW)	Repairs to roading, stormwater and water supply assets

DETAILED DESIGN		
Reference	**Project**	**Project Description**
11040	PS 56 - Burwood North Wastewater (WW)	Wastewater Repair/Renewal within the Burwood North area
11041	Burwood East Wastewater (WW)	Replacement of the Wastewater System in the Burwood East Area
11042	Burwood West Wastewater & Trunk Sewers (WW)	Replacement of Wastewater system within the Burwood West Area

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10314	Keyes Road Catchment (WW, WS)	Repair and/or reinstatement of wastewater system.	26/03/2012	17/06/2013	$10,126,000	$9,643,894
10318	PS37 North Catchment (WW)	Wastewater repairs and renewal for northern half of PS37 catchment. Includes one new pump station and approximately 100 pressure sewer pumps.	30/04/2012	03/07/2013	$6,530,000	$6,219,211
10363	PS 108 Catchment (old PS39 Catchment)	A large waste water catchment of approx 12 streets which all drain to Pump Station 54 in Avondale.	14/11/2011	06/05/2013	$5,307,000	$5,238,434
10415	PS 128 (formerly PS 63) (PS)	New replacement PS63 at Beach Road. This project is linked to 10926 for the approximately 4Km long 700mm pressure main.	01/10/2012	03/02/2014	$8,240,000	$2,379,787
10416	PS37 (PS)	Repairs to existing PS37, including new pump intakes and repairs to yards.	01/05/2013	17/07/2013	$926,000	$719,692
10429	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WS,SW,RD)	Repairs to roads, stormwater and water in Estuary Road between Bridge Street and Beatty Street.	01/10/2012	11/06/2013	$1,711,000	$1,629,936

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10430	PS28 - Catchment	PS 28 catchment services residential and industrial land loosely bounded by Pages Rd, Cuffs Rd, Wainoni Rd and Shortland St in the suburb of Wainoni. Other pockets of land are also serviced including 650 m of Wainoni Rd north of Shortland St and 240 m of Breezes Rd, an area west of Wainoni Rd including a portion of Avonside Dr, Newport St, Tenby Pl and Emlyn Pl, 350 m of Wainoni Rd south of Cuffs Rd and an area south of Pages Rd including Price Pl, 180 m of Kearneys Rd and Mecca Pl.	24/07/2012	13/12/2013	$15,122,000	$5,484,310
10553	Avondale Road Bridge Works (RD)	Retrofit repair to bridge involving new abutments, piles, wingwalls and associated road approaches and services.	24/09/2012	29/10/2013	$2,768,000	$1,547,704
10557	Gayhurst Road Roading (RD)	Design for road reconstruction to repair moderate to severe earthquake damage to carriageway, kerb and channel, and footpaths from Dallington Bridge northwards to Mundys Road. This project will become part of PS108 Catchment Phase 1 Roading, Storm Water and Water Supply. This work follows wastewater repairs/replacement.	16/07/2012	13/09/2013	$2,869,000	$1,913,217
10585	PS25 - Catchment Vacuum Solution (WW)	Wastewater design for Pumping station 25 Catchment. This area includes sections of Banks Ave and Achillies Street that will be diverted into PS 108. This area also includes the Strathmore Gardens area. The majority of the catchment requires replacement of WW lines.	19/04/2013	24/03/2014	$6,603,000	$1,737,413
10694	PS36 Renewal (WW)	New PS36 to replace existing PS36. New station capacity approximately 900 L/S. This project covers all design for the project and construction for above ground activities. A related project covers 2M of below ground construction works required.	22/06/2012	01/07/2013	$12,738,000	$5,482,343
10705	Owles Tce (WW)	Project released from hold March 2012.	06/11/2012	20/12/2013	$7,360,000	$1,890,404
10724	Bridge St bridge and approaches	Replace damaged bridge abutments and approaches with new structure including roadworks and services reinstatement.	21/08/2012	07/07/2014	$10,021,000	$4,166,886
10765	PS 108 New Pump Station	Minor new pump station.	15/10/2012	12/04/2013	$1,102,000	$1,018,006

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10786	PS 108 Catchment Stormwater, Water Supply and Roading Renewals (SW,WS,RD)	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with associated storm water and water supply works in 11 streets situated immediately to the east and west of Gayhurst Rd from McBratneys Rd northwards to Mundys Rd. This work will follow construction of wastewater repairs/replacement.	03/10/2012	05/06/2013	$1,916,000	$1,297,059
10800	PS 108 Phase 2 Waste Water	Detailed Design of remediation works for wastewater catchment 108.	14/08/2012	26/04/2013	$4,542,000	$4,494,657
10801	PS108 Phase 2 Roading and Storm Water Renewals (RD,SW,WS)	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with associated storm water and water supply works in 10 streets situated immediately to the east and west of Gayhurst Rd - generally south of Strathfield Ave in the west and McBratneys Rd in the east. This work will follow construction of wastewater repairs/replacement.	15/02/2013	06/06/2013	$2,693,000	$847,132
10802	PS54 Stage 1 - Northern Roading Renewals Incl Breezes Road	Road design for 8 roads in Avondale. New pipe systems are needed in multiple roads requiring asset managers understanding and buy-in. Includes stormwater full dynamic modelling with probable need to restore capacity by optioneering new components (new basin and/or pump upgrading).	10/09/2012	03/10/2013	$3,926,000	$2,905,515
10803	PS54 Stage 1 Southern Roading Renewals (South of Breezes Road)	Road design for Pembroke St and Horton Place in Avondale. A new pipe system is needed on Horton St requiring asset managers understanding and buy-in.	02/07/2012	12/05/2013	$1,224,000	$1,165,577
10861	New Brighton, South New Brighton & Southshore NE1, NE2 & NE3 Area Rebuild (WW)	Overall Catchment scope to link multiple projects and release projects on hold for a full one pass rebuild of the above area. Includes WW elements. Projects for construction to the value of $15M are expected from this concept study.	28/02/2013	05/05/2015	$15,247,000	$819,327

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10896	Minor Works - Demolition of Porrit Park and Snells Footbridges, PS26 and PS27 Pump Stations	Demolition and make safe work for Porrit Park Footbridge, Snells Footbridge, PS26 and PS27. Rebuild of the bridges to be undertaken in separate standard projects.	27/08/2012	11/04/2013	$223,000	$221,212
10898	Minor Works - Medway Footbridge Removal	Removal and make safe of the footbridge. Store off site until a decision is made regarding the structure	11/02/2013	11/04/2013	$117,000	$111,349
10921	North Parade & Banks Ave Wastewater Pressure System (WW)	Separation of catchment works included in 10812, 10585 and 10800 for a defined project area for the construction of a new pressure system.	02/04/2013	19/07/2013	$776,000	$99,490
10926	PM 63 (WW)	The 700mm pressure main 63 will run for 4km generally following the route of Anzac Drive from Parklands to Bexley. It will connect to pump station 63 which is being designed and constructed under the project number 10415.	07/01/2013	13/09/2013	$7,301,000	$3,201,650
10932	PM136 New Pressure Main for PS36 (WW)	Construction of an additional Pressure Main from Pump Station 36 to provide resilience in the system. The existing asset will remain as PM 36 and the new pressure main will be known as PM 136.	11/03/2013	24/10/2013	$4,829,000	$1,545,796
10956	NZTA - Travis Road & Anzac Drive Repairs - Stage 1 (RD)	Repairs to the State Highway	25/03/2013	05/07/2013	$1,067,000	$233,458
10965	Aranui Catchment NE4 Pressure Sewerage System - East Avondale (WW)	Construction of a pressure sewerage system including individual pump station units in private property, laterals, boundary kits and pressure mains. The pressure main from the catchment then runs along Anzac Drive and discharges to a new inlet manhole (by others) near the junction of Anzac Drive and Bexley Road.	02/04/2013	07/02/2014	$6,606,000	$159,288

6.1.3.3 Fendalton / Waimairi

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10968	Bridge Repair - Carlton Mill Footbridge - F110 (RD)	Bridge inspection and deign of repairs for damage sustained during earthquakes. Limited geotechnical investigation, analysis and reporting.

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10425	Glandovey/Bryndwr Cluster	Design for repair to severe earthquake damage to wastewater and minor damage to carriageways, kerbs and channels, and footpaths (severity yet to be confirmed) storm water and water supply. This cluster incorporates the 9 streets immediately adjacent to and including Glandovey Road between the Wairarapa Stream and Strowan Road	10/12/2012	11/07/2013	$2,856,000	$1,826,510
10485	Merivale WW	Approximately 9km of WW gravity system, one new pump station.	14/05/2012	17/07/2013	$15,035,000	$14,319,436
10575	Papanui Rd - Knowles to May (WW)	The area has been broken into wastewater sub-catchments in order to determine the best catchment wide solution. 10575 therefore includes Browns Rd north of Mansfield Ave, McDougal Ave east of Murray Pl, Murray Pl, Innes Rd between Papanui Rd and Browns Rd, Heaton St east of Circuit St, Papanui Rd between Innes Rd and Mays Rd, approximately 230 m of the eastern end of Knowles St, Weston Rd and Chapter St, Approximately 280 m of the wetern end of Normans Rd and 150 m of the eastern end of Mays Rd.	17/05/2012	26/04/2013	$4,895,000	$4,892,112
10595	Wairakei Road (WW)	Replacement of the deep 225 mm sewer main and the construction of new 150 mm sewer rider mains over the deep main. The wastewater works are from Aorangi Street to Idris Road.	02/08/2012	02/05/2013	$1,602,000	$1,525,760

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10839	Merivale Catchment RD SW WS	Linked to #10485 for the RD SW and WS elements of the One Pass Projects	18/02/2013	22/08/2013	$883,000	$288,275
10852	Minor Works - Casebrook Block	Minor footpath and pavement repairs	24/05/2012	16/04/2013	$226,000	$111,744
10884	Merivale Pumping Station (PS)	New Pumping station for the Merivale Catchment Project. Linked to Project #10485	02/04/2013	22/07/2013	$895,000	$197,040

6.1.3.4 Central City

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10466	R109 Fitz Twin Bridges	Ground improvements and major structural repair/bridge replacement of twin bridges
10469	R702 Moorhouse Ave Overbridge	Major structural repair works
10952	Central City South of the Avon - Central Core Wastewater (WW)	Repair of the wastewater network within the Central City - Stage 3 of the Implementation Plan
10954	Central City South of the Avon - Eastern Area Wastewater (WW)	Preliminary Investigation and design work within the Central City
10966	Bridge Repair - Armagh Street - R122 (RD)	Bridge inspection and design of repairs for damage sustained during the earthquakes. Limited geotechnical investigation, analyses and reporting.
11029	Catchment Study - Central City northeast of Avon River (WW)	WW design to complete the Central City 4 Ave work north and east of the Avon River

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10401	Moorhouse Brick Barrel 01 (SW)	Repair of a failed stormwater Brick Barrel pipe on Moorehouse Ave under the Colombo St over bridge	28/03/2013	28/05/2013	$486,000	$103,900
10465	F105 Bridge of Remembrance	Major structural repair works	27/06/2013	10/11/2014	$629,000	$207,363
10482	Triumphal Arch	All works related to both temporary bracing to arch to support the structure and all permanent repair works. In CBD, Heritage structure.	01/05/2013	10/10/2014	$3,319,000	$696,163
10844	Central City Pump Station PS2 Catchment (WW)	Repair/replacement of wastewater system in the north west of the CBD. Excludes WW Brick barrel which is considered under Project 10845.	01/02/2013	23/04/2014	$7,230,000	$2,058,309
10845	Central City - Brick Barrel Assessment, Relining and Repairs	Full assessment, relining and repair works for the Brick Barrel Trunk network within the CBD Catchment. Includes all WW and SW Brick Barrels. A separate Project has been	21/05/2012	14/06/2013	$18,687,000	$15,653,293

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
		created for the Kilmore St Brick Barrel and concept / detailed design should be undertaken in conjunction with this work.				
10893	Minor Works- Bridge Minor Works Project Package 01 Bridging	Minor repairs to bridges requiring little design input. Project to be led by SCIRT Project Manager and Delivery teams	23/07/2012	30/04/2013	$222,000	$147,642
10936	Fast Track - Central City - New Regent Street Wastewater Repair (WW,WS,SW,RD)	Accelerated repair of the 150 dia WW pipework to provide service to businesses on New Regent Street, an area under development supported by the CCC as a 'Restart' Area.	16/10/2012	11/04/2013	$632,000	$601,906
10985	Central City - Kilmore Street Catchment Area SW Brick Barrel (SW)	Repairs to SW brick barrel along Kilmore Street, from Durham Street to Colombo Street in the north west of the CBD. During Concept, this was part of the Kilmore Street Catchment Area Project (Project #10844).	21/01/2013	10/04/2013	$506,000	$476,066

6.1.3.5 Hagley / Ferrymead (*excludes central city)

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10347	Gayhurst Rd Bridge (BR)	Retrofit repair to bridge involving new abutments, piles, wingwalls and associated road approaches and services.
10563	Retaining Wall Area 2 - Clifton Retaining Walls	Design and delivery of the repairs required to retaining walls.
10564	Retaining Wall Area 2 - Galilee Lane (RW)	Collapsed retaining wall design and repair.
10565	Retaining Wall Area 3 - Seamount Tce Retaining Walls (RW)	Retaining wall design and construction. Includes walls with RAMM id's of: 1207, 1208, 1212, 1213, 1217, 1214, 1216, 1218, 1219.
10631	Clifton No.1 Pump Station and Clifton No 1 to Clifton No.2 Watermain (WS)	Repair of Clifton 1 Reservoir and renewal/relocation of the watermain and pump station. Existing route within areas of large land movement and rockfall inundation areas. Pump station is undamaged but at high risk if cliff face collapse therefore is a resilience issue. PS location may need funding decision from CCC.
10795	PS57 McCormacks Bay Rd Pump Station Repairs (PS)	Repairs to building at existing pump station.
10823	St Johns (SW,WS,RD)	Catchment study for a full one pass rebuild of remaining services within the catchment area. Refer to Project 10449 for WW assets in this area.
10827	Mt Pleasant No 3 Reservoir Repairs (WS)	Mt Pleasant Reservoir suffered minor damage during the Christchurch Earthquakes, Initial assessments recommend that the connections between walls and floors/roofs should be investigated as strengthening will probably be required (dowels/ring beams/etc.)
10902	Bridge Repair Package 04 - Southern Area	Repair of 13 bridges within the southern area of the city.
10907	Site 226 Soleares Ave	Stabilisation of rock face and re instatement of the access road damaged in Feb 2011 earthquake
10916	Bromley & Woolston PS15 North (WW)	Full catchment rebuild - WW Elements
10917	PS15 Central (SW,WS,RD)	Full catchment rebuild - SW,WS and RD elements
10924	Catchment Study - Ferrymead to Sumner SE4 & SE6 (RD,WS,SW)	Renewal / repair of infrastructure to the flat area at the base of the Porthills between Ferrymead bridge to Sumner township (Exclusive of the Sumner area) - RD,WS,RD Elements RD - $7.8M; WS - $1.1M; SW - $3.8M

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10925	Catchment Study - Ferrymead to Sumner SE4 & SE6 (WW)	Renewal / repair of infrastructure to the flat area at the base of the Porthills between Ferrymead bridge to Sumner township (Exclusive of the Sumner area) - WW Element
10979	CCC - Main Road 3 Laning - Capital Project (RD)	CCC Capital project for the 3 laning of Main Road. To be completed in conjunction with the SCIRT earthquake repair job of10634, and the culvert replacement CCC project 10908.
10997	Avonside Linwood Stage 3 (WW,WS,SW,RD)	One pass approach renewing wastewater, roading and stormwater assets within stage three of the Avonside Linwood Catchment. Standard project resulting from Catchment Studies 10875 and 10876.

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10303	Site 229 Mt Pleasant Rd Retaining Wall (RW)	60m replacement retaining wall and road reinstatement, in Mt Pleasant	13/06/2013	30/09/2013	$458,000	$105,001
10306	PM11 Randolph (WW)	3.6km, 1.2m dia WW pressure main	05/03/2012	28/06/2013	$17,446,000	$16,615,083
10307	173 Maffeys Road Retaining Wall (RW)	Repair of retaining wall in Maffeys Rd, along with associated buried services	08/10/2012	28/06/2013	$1,505,000	$1,434,475
10317	Heberden Ave Permanent Solution (WW)	New gravity sewer diversion to replace broken sewer down Scarborough Cliffs.	09/04/2013	17/05/2013	$508,000	$483,351
10459	Lower Richmond-Stanmore to Fitzgerald (WW)	Approximately 5km of WW, gravity system; requiring 2 new pump stations	20/03/2012	30/07/2013	$11,992,000	$11,313,384
10462	Rockface stabilisation above Mt Pleasant 1 Reservoir (RW)		14/03/2013	21/11/2013	$956,000	$300,392
10472	Charleston	Approx 2.9km WW enhanced gravity system, 1 new pump station; 0.3km SW; 8600m2 carriageway reconstruction, and 1830m2 localised repairs	07/05/2012	21/05/2013	$4,157,000	$3,959,308

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10483	Lower Richmond (Southern Section) WS,SW,RD	Full reconstruction of intersection (80m), and localised repairs on remaining streets; 86m of SW replacement	01/05/2013	30/07/2013	$316,000	$163,881
10498	Woolston South 1	5km WW gravity system and 1 new pump station with associated rising main, and individual pressure pumps for industrial properties; roading repair works with design for 1 road; approximately 350m new WS, and currently unknown extent of SW	11/02/2013	17/12/2014	$9,734,000	$1,225,791
10541	PS 11 - Randolf		11/06/2012	10/06/2013	$925,000	$881,080
10548	Gloucester Street	Design for Wastewater, Stormwater, Water & Roading along Gloucester Street between Woodham Road and Avonside Drive. Close to complete replacement of all WW and Roading assets. Stormwater is reasonably intact.	26/06/2012	06/05/2013	$1,415,000	$1,348,018
10578	PS 107	Minor new pump station.	01/11/2012	03/05/2013	$827,000	$787,862
10579	PS5 - Catchment (West of river)	Pump Station 5 catchment originally serviced an area either side of the Avon River at the northern end of Linwood Avenue and south eastern edge of lower Richmond. Pump Station 5 was badly affected in the series of earthquakes. A proposal to split the PS5 catchment either side of the river to enable removal of pump station from close proximity of the river has received informal agreement among CCC Asset and technical representatives. This project relates to the reinstatement of sewer services to the portion of the original PS5 catchment to the west of the Avon River. Initial assessment of condition suggests that the entire sewer network requires replacement, due to gross and differential land settlement and consequential adverse impact on sewer grades, in addition to physical damage to the predominantly earthernware piping. Reinstatement options will consider the range of options allowed under the technical standards and will likely require a new pump station or siphon crossing beneath the Avon river.	15/10/2012	07/06/2013	$2,315,000	$938,051

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10582	PS8 - Catchment	Design for repair to severe earthquake damage to wastewaster within Pump Station 8 catchment green zone. The green zone is located to the north-west of the Avon River and generally bounded by Flesher Ave to the east and south, Chrystal St to the west and Medway St to the north.	04/02/2013	28/08/2013	$2,974,000	$559,056
10584	PS27 Catchment Area (WW)	Assessment and repairs/relay of wastewater services in the catchment of the old pump station 27 on Avonside Drive.	15/01/2013	26/07/2013	$1,910,000	$1,051,600
10634	Main Road (Mt Pleasant - Beachville) Sumner Causeway (RD)	Repairs to main road causeway including replacement of estuary seawall and minor cross culverts and carriageway repairs.	01/07/2013	04/11/2013	$1,190,000	$239,156
10680	Clifton No. 4 Reservoir	Repair and retrofit of reservoir.	26/03/2012	25/11/2018	$438,000	$375,440
10799	NZTA Horotane Overpass Bridges (RD)	Propping system between piers, subject to ground investigation results	22/11/2012	27/11/2013	$1,614,000	$456,473
10820	McCormacks Bay Reservoir Stages 3,4 and 5	Tank 1 and 2 and access reinstatement.	01/06/2012	03/07/2013	$1,207,000	$1,149,716
10822	McCormacks Bay Reservoir Stage 2 Walls	Retaining walls and rockfall protection works at reservoir site.	30/01/2012	07/02/2014	$1,549,000	$1,245,618
10841	Charleston Catchment Area (RD,SW,WS)	Linked to Project 10472 WW for the RD SW and WS elements.	26/10/2012	25/07/2013	$1,399,000	$613,226
10843	Lower Richmond Catchment RD SW WS	Linked to #10459 for the RD SW and WS elements of the project	25/01/2013	19/09/2013	$1,495,000	$418,268
10850	Cannon Hill Cres Retaining Walls (RW)	Renewal of 2 collapsed retaining walls on Cannon Hill Road	05/04/2013	01/07/2013	$664,000	$191,837

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10853	McCormacks Bay Reservoirs - Rock Face Protection Work	Rock protection work to facilitate the repairs to the reservoir tanks	07/05/2012	25/09/2013	$1,232,000	$1,191,007
10860	PS18 Rebuild SE11 North (WW)	Full area rebuild of the northern area of the PS18 catchment - WW element. Expected projects in the region of $10M should result.	27/03/2013	11/11/2014	$12,857,000	$1,065,413
10862	Lower Richmond Pump Stations - Avalon and Haywood	Pump station construction in conjunction with the Richmond project.	01/11/2012	21/05/2013	$1,325,000	$1,128,890
10863	Charleston Waste Water Pump Station	Pumps Station Construction	04/03/2013	26/06/2013	$503,000	$146,804
10895	PM11 Randolph Phase 5 (WW)	All remaining design works for the design and delivery of the 3.6km, 1.2m waste water pressure main. This is a CCC business as usual project and is the fifth phase. Phases one to four are included under project number 10306.	25/02/2013	18/02/2014	$906,000	$280,303
10911	Fast Track - Te Awakura Terrace Stormwater Repairs (SW)	Investigation of this badly damaged asset for repair or potential relining. Due to the condition, this work needs to be fast tracked through the SCIRT process, requested by the CCC.	30/04/2013	27/05/2013	$186,000	$177,117
10931	Retaining Wall - Site 182 & 183 - Glenstrae Road (RW)	Repair of the retaining wall	15/04/2013	18/06/2013	$196,000	$186,376
10980	NZTA - Dyers Road Repairs (Metro Pl to Bridge St) (RD)	Repairs to the State Highway between Metro Place and Bridge Street (through the treatment ponds area).	02/04/2013	25/03/2014	$941,000	$72,572
11022	Emergency Repair - Southern Relief Sewer - Worcester Street (WW)	Emergency Repair for the 1525mm Dia Trunk Sewer. Currently reported by Operational Team as high risk of imminent failure. Depressions forming at road level around manhole. Falls within existing Project Area # 10995	12/04/2013	14/01/2014	$500,000	$393,738

6.1.3.6 Lyttelton / Mt Herbert

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10704	Retaining Wall Area 5 - Dyers Pass Lower to Governors Bay Rd (RW, RD, WW, SW, WS)	Design and delivery of the repairs required to retaining walls, roading, wastewater, stormwater and water supply (one-pass).
10981	Retaining Wall Area 1 - Lyttelton 1A Brittan Terrace (RW)	Design and construction of multiple soil retaining walls from Lyttelton town centre west towards Diamond Harbour Blvd.
10983	Retaining Wall Area 1 - Lyttelton 2A Cunningham Terrance (RW)	Design of multiple soil retaining walls along Cunning Terrace.
11005	Retaining Wall Area 1 - Simeon Quay (RW)	Stabilise face or provide new retaining wall at Simeon Key, Lyttelton

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10394	RW Package 05 - Canterbury Stone Walls (RW)	Project to design three replacement retaining walls on Canterbury Street and one wall on Ripon Street, Lyttelton. The walls are up to 4.5m high and are of high heritage value.	21/05/2012	09/04/2013	$2,190,000	$2,085,953
10399	RW Package 07 - Lyttlelton Stone	Design three replacement retaining walls on London Street, St Davids Street and Ticehurst Road, Lyttelton. The walls are up to 4m high and are of high heritage value. Two of these walls (London Street and St Davids Street) are located within the white zone.	17/08/2012	20/08/2013	$735,000	$700,015
10400	RW Package 08 - Lyttelton on-stone (RW)	Design five replacement retaining walls on London Street, Canterbury Street, Hawkhurst Road and Ticehurst Road. Sections of these walls are of high heritage value. The walls on London Street and Canterbury Street are located within the white zone.	11/06/2012	26/09/2013	$944,000	$899,106

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10424	Sumner Rd Retaining Wall L (RW)	Stage one of new 450m long modular block retaining wall.	17/01/2012	20/05/2013	$2,454,000	$2,337,114
10427	035 Cunningham Tce Retaining Wall (RW)	Repair of retaining wall in Cunningham Tce, along with associated buried services	07/05/2012	22/04/2013	$2,151,000	$2,048,335
10475	Site 079 Coleridge/Dublin St Ret. Walls	200m replacement retaining wall and road reinstatement in Lyttelton	01/05/2013	20/02/2014	$1,607,000	$128,228
10511	RW Package 06 - Selwyn and Ross	Five retaining walls on Selwyn Street and Ross Terrace, Lyttelton. The walls range in height from 1.5m to 3m, and are of high heritage value.	21/01/2013	01/05/2013	$226,000	$215,450
10818	NZTA Norwich & Gladstone Quay State Highway Repair (RD, WW, SW, WS)	Repairs to state highway adjacent to the Port of Lyttelton.	11/02/2013	17/05/2013	$1,102,000	$338,336
10905	Sumner Rd Retaining Wall L - Stage 2 Wall and Stage 1 and 2 Roads (RW, RD)	Stage two of new 450m long modular block retaining wall.	07/01/2013	12/09/2013	$2,054,000	$845,267

6.1.3.7 Riccarton / Wigram

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10831	CCC - PS60 (PS)	Upgrade of pump station 60 and pressure main 60 to ensure increased flows can be managed in the short term.

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10409	Halswell WW Package 03	Repair wastewater along a section of Halswell Rd, O''Halloran Dr, & within private properties behind Muir Ave.	02/07/2012	19/04/2013	$2,384,000	$2,270,511
10768	CCC - Wilmers Road Water Pumping Station (WS, PS)	New water source and pumping station to cater for projected growth in the western area of Christchurch.	30/04/2012	02/05/2013	$4,524,000	$4,315,480
10909	Minor Works - Port Hills Package 01	Minor road repairs within the Port Hills	16/07/2012	11/04/2013	$314,000	$298,741
10920	CCC - PS105 Pump Station (WW, PS)	Construction of PS105, a CCC Capital Works Project. Linked to Project #10793 for critical path construction scheduling.	29/10/2012	28/01/2014	$5,821,000	$2,810,191

6.1.3.8 Shirley / Papanui

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10858	Minor Works - Pump Station Demolition and Repairs (WW)	Minor repair works to slightly damaged Pump Stations that require no major works during the rebuild programme. Demolition of 3 PS buildings to make safe in Red Zones. Project led by the delivery team with a SCIRT Design input and coordination. Close liaison with CCC Operations team (Graeme Black) required throughout the project.
10914	Shirley NW2 Wastewater Gravity Network (WW)	Full catchment rebuild (WW elements)

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10457	Purchas & Madras (Bealey - Edgeware)	WW, SW and roading repairs. Includes traffic calming on Purchas St to conform with IDS and City Plan requirements for Local Road widths.	08/11/2011	30/04/2013	$5,721,000	$5,449,044
10534	Innes & Knowles - subcatchment	The local wastewater reticulation on Innes Rd and Knowles St between Philpotts Rd and Bretts Rd suffered earthquake induced damage during the recent seismic events. Some liquefaction and land settlement was recorded in the area. Investigations continue however much of the network is made up of Earthenware pipe laid during the 1920s and 1930s. This material has not performed well in other areas therefore it is anticipated some form of repair or replacement will be required for the majority of the network.	10/08/2012	18/11/2013	$9,590,000	$6,356,927
10535	Rutland Rd - subcatchment	Wastewater repair along a single street east of Papanui. This project area is lightly to be revised.	10/04/2012	17/05/2013	$1,591,000	$1,537,827
10812	PS7 Catchment Phase 2 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 2 of 4, eastern quarter of catchment)	21/05/2012	27/05/2013	$5,597,000	$5,157,206

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10814	PS7 Catchment Phase 3 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 3 of 4, north western quarter of catchment)	23/07/2012	16/07/2013	$6,260,000	$4,726,730
10816	PS7 Catchment Phase 4 Waste Water Renewals	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 4 of 4, central/western quarter of catchment)	11/03/2013	15/01/2014	$3,188,000	$333,297
10886	Innes & Knowles Pump Station 118 and 119 (PS)	New pump station for the waste water reticulation system in the region of Innes Rd and Knowles St. This projects covers the pump station only, with the waste water system being undertaken under the SCIRT project number 10534.	21/01/2013	14/05/2013	$802,000	$585,304
10899	Minor Works - Lower Styx Road & Turners Road	Pavement repairs	08/10/2012	01/05/2013	$209,000	$199,226
10930	PS7 Phase 3 Pump Station Shirley Road (PS)	New wastewater Pump Station in the PS7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment (area 3 of 4, north western quarter of catchment).	31/07/2012	16/05/2013	$1,217,000	$1,158,651
10935	Colombo Street Wastewater Upgrade and Repair (WW)	The existing 375mm wastewater line along Colombo Street is damaged, and requires replacement. It is proposed that the 375mm wastewater line will be replaced with a 600mm main to also provide the ability to divert flow from the Northern Relief for maintenance, reconstruction and maintenance of service during interruption of service	01/05/2013	02/04/2014	$2,495,000	$69,349
10944	Edgeware Road (WS, SW, RD)	Road and Storm water repair following WW project 10536	23/10/2012	29/05/2013	$2,429,000	$462,898
10974	PS121 and Rising Main - Guild Street (PS7 Phase 4 Catchment PS)	New pump station (PS121) and rising main to service the newly formed PS121 catchment formerly part of PS7 catchment. Linked to project 10816.	21/01/2013	17/05/2013	$520,000	$495,586

6.1.3.9 Spreydon / Heathcote

DETAILED DESIGN		
Reference	**Project**	**Project Description**
10623	Worsleys Rd No.1 and No.2 Reservoir Repair (WS)	Work to reinstate the water proofing properties of the roof structures (to prevent ingress of rainwater), and seal gaps between walls and roof structures.
10888	Hillmorton & Hoonhay S-7 (WW)	Full one pass rebuild of this catchment area - Waste Water Element
10889	Hillmorton & Hoonhay S-7 (WS,SW & RD)	

CONSTRUCTION						
Reference	**Project**	**Project Description**	**Estimated Start**	**Estimated Finish**	**Estimated Cost**	**Life To Date**
10310	Milton St and Frankleigh St Wastewater Reconstruction (WW)	Repair of road and all buried services along Milton and Frankleigh Streets, including the section of Lyttelton either side of the intersection	07/02/2013	14/11/2013	$4,353,000	$1,042,847
10311	Antigua St / Burke St Arterial Roads (WW,WS,SW,RD)	Repair of road and all buried services along Antigua St (between Moorehouse & Brougham) and Burke St (between Selwyn & Montreal)	18/04/2012	17/07/2013	$3,802,000	$3,621,358

6.1.4 Projects Complete by Ward

The following section outlines the projects within each ward that have been completed since SCIRT was established on 1st September 2011. It includes both a summary of numbers of projects as well as a list of specific projects. It is anticipated that the completed projects for the last quarter will be reported on a monthly basis.

Ward	February Number of Projects	March Number of Projects	February Projects Life To Date Cost	March Projects Life To Date Cost
Burwood-Pegasus	98	98	$45,696,072	$46,139,279
Fendalton-Waimari	4	5	$389,208	$593,167
Central City	9	9	$7,043,830	$7,053,795
Hagley-Ferrymead	73	73	$27,112,421	$27,119,216
Lyttelton-Mt Herbert	4	4	$599,781	$605,867
Riccarton-Wigram	8	8	$5,270,384	$5,270,753
Shirley-Papanui	24	25	$10,360,437	$14,606,430
Spreydon-Heathcote	22	22	$11,713,950	$11,762,399
Total	**242**		**$108,459,084**	

Data sent from SCIRT – Received April 2013

In the table above, the previous monthly report totals have also been included to show the change in activity.

6.1.4.1 List of Projects Complete by Ward

Ward	Reference	Project	Project Life to Date Cost
Burwood-Pegasus	**10312**	Rowes/Tomrich Street Watermain	$264,371
	10315	Ferner Street - Emergency Works	$226,236
	10321	PM 51 Emergency Repair	$1,510
	10325	Cresswell Avenue - Watermains (WS)	$148,731
	10327	Pembroke Street	$146,897
	10328	De Ville Place (WS)	$107,810
	10331	PM 39 - Gayhurst Road	$1,600,571
	10332	PM54 - Niven-Avonside	$375,476
	10335	PS54 - Catchment	$6,755,554
	10336	Kingsford & Liggins Streets (Projects 10336 & 10885)	$204,574
	10338	Wainoni Road (WW EW - Ottawa to Avonside)	$908,330
	10339	Woodham Road (Temp Repairs)	$4,235,444
	10340	Ottawa Road Sewer Emergency Repair	$517,444
	10343	PM16 - Oakmont Green	$4,287
	10346	Fleete Street - Emergency Repair	$9,791
	10349	PS39 - Birchfield Avenue WW EW	$235,089
	10351	Ardrossan Street - Temp. Solution	$347,571
	10355	Landy Street	$19,322
	10359	PS54 - Niven Street (WW)	$62,282
	10364	Shortland Street	$345,061
	10366	McBratneys Road - WM	$17,612
	10376	PM 28	$1,499,953
	10384	Pacific_Tedder Watermain Replacement	$529,142
	10421	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WW)	$2,625,472
	10440	PS 25C	$703,935
	10443	PM 38 Beach Rd	$571,784
	10484	Pump Station 25 connection repair	$8,977
	10532	Cnr Pages & Cuff - Emergency Repair	$2,832,202
	10547	New Brighton Road	$46,450
	10576	PM 106 - Woolley	$4,364
	10577	PS 106 - Woolley	$750,539
	10604	PM 45 (WW)	$324,352
	10605	Sylvia Street watermain (WS)	$134,753
	10606	Chadlington Street Water Mains	$38,448
	10607	PM 37 (WW)	$1,910,857
	10608	PM 35	$1,087,993
	10614	Aldershot Street watermain (WS)	$255,415
	10615	Willryan Avenue Watermain	$241,522
	10616	Flemington and Ascot Ave (WS)	$529,188
	10617	PM 46	$55,868
	10621	Chartwell Street Water Mains	$385,049

Ward	Reference	Project	Project Life to Date Cost
	10638	630 Pages Road 450mm (WW)	$25,397
	10639	23 Leaver Tce WW	$62,983
	10641	Kirner St WW	$21,497
	10645	Inwoods Close 450mm WW	$128,404
	10647	Travis Rd watermains & submains	$217,197
	10649	Corhampton Street watermains and submains	$261,372
	10650	Water Main on Bridge Street Bridge (WS)	$162,633
	10651	Keyes Road Watermain (WS)	$196,795
	10664	Saltaire (Bower to Marriots Rd) (WS)	$69,544
	10665	Sinclair (Keyes to Rawson) - WS	$251,723
	10669	Palmers Road PS Stabilisation	$16,065
	10670	Major flooding Pratt St.	$295,425
	10671	Owles Tce Temp. (WW)	$114,950
	10676	Marine Parade Watermain	$153,534
	10681	Bower Avenue Watermain and Submains (WS)	$475,384
	10682	Briarmont Street watermain (WS)	$88,373
	10683	Cowes St Watermain and Submains (WS)	$107,955
	10684	Gresham Terrace Watermain and Submains (WS)	$161,638
	10685	Inverell Pl Watermain and Submains (WS)	$63,648
	10686	Orrick St Watermain & Submains (WS)	$84,547
	10688	Blake St Watermain (WS)	$344,751
	10689	Pegasus Ave Watermain	$169,225
	10690	Bassett St Watermain (WS)	$225,196
	10691	Falcon St Watermain	$180,732
	10692	Beach Rd Watermain	$138,848
	10695	Allstone Watermain	$90,800
	10696	Marriotts Road Watermain	$36,064
	10700	Hulverstone Drive Emergency Repair	$22,188
	10702	Rawhiti Water Well Stormwater Outfall	$147,524
	10706	Bowhill Watermain (WS)	$150,141
	10708	Rookwood Ave Watermain (WS)	$174,096
	10711	Waitaki St Temp. Sewer	$3,360
	10714	Kate Sheppard Emergency Repair (Barkers Lane Temp Works) (WW)	$187,764
	10723	Merrington Cres Watermain	$184,198
	10728	Rowan Ave Emergency Work WW	$458,135
	10744	PS 36 Gravity Main (Pages Rd)	$226,756
	10749	Beach Rd Gravity Sewer (WW)	$67,291
	10752	Desal plant long term storage (WS)	$79,908
	10756	PM39 Temp Overland Pipe (PM)	$7,828
	10760	Pages Road	$69,558
	10769	Keyes Pumping Station (WS)	$3,448,829

Ward	Reference	Project	Project Life to Date Cost
	10789	Woodham Road Water Supply Pumping Line Renewal	$84,995
	10794	Pratt Street (Keyes Road) Water Main from Pumping Station	$221,993
	10806	Pages & Cuffs Emergency Repair Roading (RD)	$484,878
	10833	Fast Track - PS36 Sewerage Overflow Repairs Pages/Waitaki (WW)	$26,019
	10834	Minor Works - Stage 1 Schools	$7,871
	10838	Minor Works - Banks Avenue	$132,029
	10846	Water Main Replacement Projects Vivan St, Admirals Way, Pine Ave (WS)	$923,774
	10859	CCC - Private Laterals Keyes Road (WW)	$55,311
	10865	Catchment Study - Burwood Rebuild NE8 (WW) - 11040, 11041, 11042, 11043	$312,366
	10873	Catchment Study - PS36 Catchment, Area NE4 split into 10959-65 (WW)	$382,785
	10874	Catchment Study - PS36 Catchment, Area NE4 (RD,SW,WS)	$1,197,538
	10882	Emergency Work - Beatty Street	$221,040
	10903	Catchment Study - Parklands & North New Brighton split into 10975-78 NE12, NE13 (WW)	$541,204
	10904	Catchment Study - Parklands & North New Brighton (RD,WS,SW) spilt to 11032, 11033, 11034, 11035	$913,350
	10928	Emergency Works - Merrington Crescent (WW)	$117,141
	10973	Water Supply - Lamorna Road Renewal (WS)	$74,506
Fendalton-Waimari	**10354**	Papanui Road - Emergency Work	$54,652
	10480	R126 Monavale Footbridge	$37,775
	10590	Thornycroft Street - Pri4 (WS)	$127,548
	10857	Minor Works - Bridge Minor Works Project Package 02	$169,233
	10894	Fendalton Bridge Repair Package - Minor Repairs (RD)	$203,959
Central City	**10445**	Fitzgerald Ave Wall and Roading	$5,208,446
	10447	Fitzgerald Ave Temp Sewer Replacement (WW)	$22,117
	10506	Hagley Syphon	$647,951
	10726	Stormwater Pump Station 203	$44,715
	10764	PM 3 Temporary Repair (Complex Emergency)	$55,524
	10790	Liverpool Street Water Main (CBD)	$115,675
	10867	Fitzgerald Ave Retaining Wall Footpath	$728,437
	10880	Kilmore St Brick Barrel Repair - Emergency Work (WW)	$190,110
	10941	Minor Works - 789 Colombo Street	$40,820

Ward	Reference	Project	Project Life to Date Cost
		(WS)	
Hagley-Ferrymead	**10301**	CCC - Tanner Street Replacement Well (WS)	$15,792
	10319	St Martins Package 01 (WW) Wilsons Rd South, St Martins Rd and Gamblins Rd	$1,388,228
	10326	Retreat Road	$686,204
	10333	PM 57 - Replacement (Stage 2 March)	$2,075,207
	10337	Avonside - WW Trunk Sewer	$205,110
	10341	River Road - Siphon (WW)	$676,309
	10350	Avonside Drive/Retreat - Gravity Sewer Repair	$93,588
	10352	Avonside Drive/Morris Bowie - Gravity Sewer Temp. Solution	$86,006
	10353	294 Avonside Drive - Temp. Solution	$241,562
	10356	Woodham Rd (PS5 east of river)	$3,209,299
	10358	PS57 - McCormacks Bay Rd Sewer Overflow Renewal	$175,999
	10361	PS54 Catchment Temp. Solutions	$924,921
	10362	PS5 - Glade	$545
	10372	Dacre Street	$128,612
	10386	St Andrews Hill Rd Sewer (Major Hornbrook)	$70,183
	10391	Stevens St Watermain	$165,913
	10402	Moorhouse SW BB 02	$73,019
	10403	Barbour St Water (WS)	$147,111
	10406	226 Main Road SW	$4,627
	10411	Clifton Reservoir 3	$405,877
	10417	Upper Balmoral Reservoir	$481,323
	10418	Lyttelton Dyers Road Pump Station (WS, PS)	$7,029
	10422	PM 31 Renewal Works (WW)	$1,598,048
	10428	RW Mt Pleasant Rd Wall 156 (RW)	$240,107
	10431	PS15 Alport	$1,383,442
	10434	PS 12 Smith	$546,893
	10441	Ferry Road 873	$366,749
	10442	PS15 Gould Cres Overflow Structure	$214,274
	10448	PM 12	$710
	10451	Manning-Ferry	$17,158
	10452	WW No Service Grafton	$134,202
	10454	225 Linwood Ave	$74,062
	10458	31 Stanmore Road	$49,606
	10463	Hamner Street - waste water relay	$72,948
	10471	33 River Terrace	$38,939
	10473	Wickham St Watermain Replacement	$307,303
	10478	F805 McCormacks Bay 1 Footbridge	$10,689
	10479	F806 McCormacks Bay 2 Footbridge	$8,722
	10481	R223 Heathcote Barrage	$9,929

Ward	Reference	Project	Project Life to Date Cost
	10496	PS13 Tilford	$10,687
	10497	PS 10 Linwood WW	$14,699
	10499	Saxon Street Waste Water	$15,687
	10537	Patten Street	$638,489
	10539	Brittan Street	$578,080
	10586	PM 107	$273,496
	10609	PM 47	$24,815
	10612	McCormacks Bay Reservoir No 2-2	$1,039,138
	10613	Mt Pleasant Reservoir 2/2	$107,113
	10618	Beachville Road Pressure + Gravity Main	$478,131
	10629	McCormacks Bay Rd WR mains and submains (WS)	$2,191,655
	10644	55 Clark St WW	$1,561
	10666	Head Street - Esplanade to Nayland (WS)	$79,566
	10677	Beachville Watermain (WS)	$250,873
	10679	Moncks Spur No. 3	$281,531
	10687	Wakefield Ave Watermain (WS)	$156,967
	10716	PM 34 Sumner - Replacement	$1,665,142
	10729	WW, Gravity Bridal Path and Cannon	$301,973
	10739	Heberden Ave Temporary Solution (WW)	$109,222
	10746	Ruru Ave Repair PM 11	$42,191
	10747	Bromley Waste Water Treatment	$25,345
	10753	WW No Service Glendevere (WW)	$2,081
	10763	Moncks Bay Walkway - Temp Repairs	$45,416
	10770	Linwood Ave / Humphrys Dr Retaining Wall Emergency Permanent Repairs (RW)	$497,241
	10772	Monks Bay Main Road Emergency Repair (WW)	$15,503
	10779	CCC - Linwood Avenue Water Main	$456,743
	10782	15 Dunoon Place Emergency Stabilisation / Sewer Repair	$179,641
	10792	Truro Street Emergency Waste Water Sewer Renewal (Van Asch School)	$221,329
	10830	Minor Works - Bridge Minor Works Project Package 01 Roading	$82,626
	10835	Minor Works - Avonside Girls High School	$80,299
	10836	PS27 Catchment Area (RD)	$78,195
	10864	Woodham Road (SW,RD,WS)	$526,839
	10875	Catchment Study - Avonside & Linwood Area CE-5,6,7,9,10,11,12 (WW)	$73,385
	10876	Catchment Study - Avonside & Linwood Area CE5,6,7,9,10,11,12 (RD, SW & WS)	$237,312
Lyttelton-Mt	**10636**	Priority Roads - Governors Bay Road	$475,638

Ward	Reference	Project	Project Life to Date Cost
Herbert		Rebuild (RD)	
	10672	Sutton Quay Retaining wall 441 (RW)	$41,391
	10878	Minor Works - Cunningham Terrace & Sumner Rd Temp Access Works	$37,427
	10940	Retaining Walls - Delivery Plan Area 4	$51,412
Riccarton-Wigram	**10309**	Halswell Minor Roading Works - All Areas	$338,476
	10380	Halswell WW Package 02	$2,104,576
	10383	PS73 Kennedys Bush	$160,662
	10387	Townshend Crescent Wastewater	$48,809
	10389	Sparks Rd Watermain	$177,705
	10392	Halswell WW Package 1 (WW)	$2,118,825
	10408	Glovers Street water (WS)	$147,859
	10912	Sparks Road Pavement Repairs	$173,841
Shirley-Papanui	**10308**	Riselaw Street	$92,150
	10313	PM 6 - Harrison St	$221,306
	10322	Ranfurly Street (WS)	$118,878
	10323	Chrystal Street (WS)	$83,953
	10329	Hope Street	$146,273
	10330	Orontes Street - WS	$90,091
	10334	PM 7 - Stapletons Road	$244,594
	10344	Edgeware Road - Emergency Works	$2,940,666
	10345	Nancy Ave / Weston Road	$16,297
	10348	Shirley Road - Wastewater (Emergency Repair)	$8,629
	10369	Orion Street	$41,907
	10435	Temporary Gravity Sewer Lower Styx Road	$1,092,409
	10437	PM 40 Marshlands	$585,684
	10439	Heyders 29-65 (WW)	$320,151
	10446	Brooklands Roading - Temporary Repairs	$364,289
	10453	PS78 Heyders (PS)	$50,363
	10460	449 Durham Street North	$313,618
	10536	Edgeware Rd - WW	$1,852,258
	10555	Madras Street / Forfar Wastewater	$604,788
	10581	Catchment Study - PS7 (10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817)	$141,301
	10805	Madras Street Road, Storm Water & Water Supply Repairs	$427,650
	10810	PS7 Catchment Phase 1 Waste Water Renewal	$4,236,084
	10837	Minor Works - Shirley Boys High School	$115,425
	10851	Minor Works - Marshland Road & Belfast Road	$376,431
Spreydon-Heathcote	**10320**	Murray Aynsley Reservoir 2	$155,007

Ward	Reference	Project	Project Life to Date Cost
	10379	Fisher Ave & Eastern Tce Syphon (WW)	$1,440,035
	10381	Rydal St (WW)	$939,464
	10390	Centaurus Rd Watermain	$145,542
	10393	Smartlea WW Emergency Repair	$109,989
	10396	75 Wilsons Emergency Repair	$825
	10397	Glenelg Spur 01	$166,121
	10404	Hollis Ave Water (WS)	$180,650
	10410	Hollis Ave WW	$1,004,069
	10432	PS19 Beckford	$3,201
	10433	PS20 Locarno	$49,164
	10476	F207 Aynsley Tce Footbridge	$23,100
	10477	F212 Sloan Tce Footbridge	$15,899
	10545	PS19 - Syphon	$357
	10597	Huntsbury Reservoir (WS)	$4,684,686
	10717	Colombo St (South) Bridge - Concept only, no construction work undertaken (RD)	$80,730
	10745	CCC - Sydenham Stn Replace Wells (WS)	$236,486
	10755	PS19 Fifield - 171 Fifield - Sheetpiling protection of riverbank	$114,715
	10785	Holliss Ave / Glamis Place - All Services (WW,WS,SW,RD)	$343,207
	10787	Rydal Street Water Supply, Storm Water and Roading Renewals (SW,WS, RD)	$426,384
	10829	CCC - Victoria Reservoir Replacement (WS)	$1,546,316
	10913	Retaining Wall - Site 349 Major Aitken Road (RW,WW,SW,WS,RD)	$96,454

Data sent from SCIRT – Received April 2013

6.2 NON-SCIRT Work Activity

6.2.1 Introduction

The following section of the report included a progress report against infrastructure and other associated rebuild projects that are not being delivered by SCIRT. It includes a report on progress on Greenspace projects, Christchurch Wastewater Treatment Plant and Organics Processing Plant, Burwood Landfill and Water Supply Wells.

6.2.2 Greenspace

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
Banks Peninsula Wards	WP0000551	PARKS Marine Structures Assessments	Marine Structures Assessments	10	COMPLETE	01/08/2011	30/11/2011	$50,000
Burwood Pegasus	WP0000257	PARKS CEAF 1.2 B/P CAPEX	Bexley, Avondale and Burwood Parks hard surfacing renewals	5	COMPLETE	01/09/2011	31/10/2011	$100,400
	WP0000258	PARKS CEAF 1.2 B/P OPEX	Hard surface repairs	10	COMPLETE	01/10/2011	29/02/2012	$141,500
	WP0000284	PARKS CEAF 2.6 TRAVIS CAPEX	Hard surface renewals	5	COMPLETE	01/12/2011	29/02/2012	$340,500
	WP0000285	PARKS CEAF 2.7 AVON PARK CAPEX	Hard surface renewals	2	COMPLETE	01/03/2012	30/06/2013	$63,850
City wide	WP0000177	PARKS Playground Softfall - CAPEX	Replacement of contaminated softfall to playgrounds	28	COMPLETE	01/08/2011	30/11/2011	$365,755
	WP0000205	PARKS Sports Fields Repair - Moderate	Repairs to sports turf	19	COMPLETE	01/05/2011	31/07/2011	$244,000
	WP0000206	PARKS Playground Softfall - OPEX	Repairs to playground undersurfacing	7	COMPLETE	01/08/2011	20/12/2011	$53,200
	WP0000207	PARKS Sports Fields Repair - Minor	Repairs to sports turf	23	COMPLETE	01/05/2011	31/07/2011	$122,550
	WP0000269	PARKS CEAF 2.2 S/P,F/W,R/W,L/M OPEX	Hard surface and minor structural repairs	9	COMPLETE	01/03/2012	31/05/2012	$86,500
	WP0000312	PARKS Hard Surface Nthn & Sthn - OPEX	Hard surface repairs	44	COMPLETE	01/03/2012	30/04/2013	$247,400
	WP0000313	PARKS Hard Surfaces Nthn & Sthn CAPEX	Hard surface renewals	14	COMPLETE	01/03/2012	30/04/2013	$224,000
	WP0000318	PARKS Hard Surfaces Eastern CAPEX	Hard surface renewals	17	COMPLETE	01/03/2012	30/04/2013	$451,781
	WP0000321	PARKS Hard Surface Eastern - OPEX	Hard surface repairs	69	COMPLETE	01/03/2012	30/04/2013	$452,410
	WP0000323	PARKS City Wide Turf Repairs - OPEX	Repairs to non sports turf surfaces	102	COMPLETE	01/11/2011	31/05/2012	$324,400
	WP0000571	PARKS 2012 Sports	Repairs to sports turf 2011/12	43	COMPLETE	01/09/2011	31/03/2012	$677,814

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
		Fields Repairs						
	WP0000768	PARKS Mature Tree Replacements	Tree renewals at Hagley Park and Sth Brighton Domain	2	COMPLETE	01/03/2012	30/06/2013	$100,000
	WP0000782	Ponds	Repairs to small ponds and outflows in parks	2	COMPLETE			$11,000
	WP0000784	Cemeteries - Operational	Repairs and make safe work to headstones in Operational cemeteries	18	COMPLETE	01/12/2011	30/06/2013	$250,000
Hagley Ferrymead	WP0000252	PARKS Victoria Lake CAPEX	Relining Victoria lake	1	COMPLETE	01/07/2011	29/02/2012	$500,000
	WP0000253	PARKS CEAF 1.3 Hagley Pk/Bot.Gdns CAPEX	Hard surface and playground undersurfacing renewals	4	COMPLETE	01/09/2011	29/02/2012	$183,000
	WP0000254	PARKS CEAF 1.4 Hagley Pk North CAPEX	Irrigation and Turf renewals	2	COMPLETE	01/07/2011	31/07/2011	$30,000
	WP0000263	PARKS CEAF 1.6 H/F CAPEX	Hard surface renewals	5	COMPLETE	01/10/2011	29/02/2012	$230,500
	WP0000264	PARKS CEAF 1.6 H/F OPEX	Hard surface, track and minor structure repairs	18	COMPLETE	01/10/2011	29/02/2012	$107,000
	WP0000265	PARKS CEAF 1.8 BOT. GARDENS CAPEX	Playground undersurfacing repairs	1	COMPLETE	01/10/2011	29/02/2012	$50,000
	WP0000287	PARKS CEAF 2.9 VICTORIA SQUARE CAPEX	Hard surface, track and minor structure renewals	5	COMPLETE	01/12/2012	30/06/2013	$217,000
	WP0000288	PARKS CEAF 2.10 CENTRAL CITY PARKS CAPEX	Hard surface renewals	2	COMPLETE	XXXX	XXXX	$13,000
	WP0000767	PARKS Sumner/Scarborough Restoration	Hard surface renewals	8	COMPLETE	01/12/2011	30/04/2013	$167,650
Shirley Papanui	WP0000255	PARKS CEAF 1.5 Groynes CAPEX	Car Park, Driveway, Turf, Track and Jetty renewals	6	COMPLETE	01/08/2011	30/09/2011	$96,000
	WP0000268	PARKS CEAF 2.1 English Park CAPEX	Car Park renewal	1	COMPLETE	01/08/2011	30/10/2011	$247,500
	WP0000277	PARKS CEAF 2.3 S/P OPEX	Hard surface and track repairs	5	COMPLETE	01/03/2012	31/05/2012	$20,500

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
	WP0000278	PARKS CEAF 2.3 S/P CAPEX	Hard surface renewals	3	COMPLETE	01/03/2012	31/05/2012	$100,000
	WP0000778	Roto Kohatu	Repairs to bankworks at Roto Kohatu Reserve	1	COMPLETE	01/02/2011	30/04/2011	$200,000
Spreydon Heathcote	WP0000279	PARKS CEAF 2.4 S/H OPEX	Hard surface and minor structural repairs	11	COMPLETE	01/11/2011	31/03/2012	$152,115
	N/A	Green Asset package	Cracks and slumping in turf	15	COMPLETE			$20,250
		ACC: Auckland City Council grant						
		CEAF: Canterbury Earthquake Appeal fund						
		NOTE: Canterbury Earthquake Appeal Fund projects are billed directly to Dept. Internal Affairs.						
		CCC labour costs to design, project manage and supervise these projects are charged to 721/120 codes depending on the asset type						
		Status Summary						
				303	**Investigation**	**$11,351,403**		
				72	**Build**	**$2,373,400**		
				517	**Complete**	**$6,641,575**		
				147	**On Hold**	**$4,631,700**		
						$24,998,078		

Data from Asset and Network Planning Unit, Christchurch City Council

6.2.3 Wastewater Treatment Plant and Organics Processing Plant

Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
Clarifiers	C4 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new structure. C3 - New structural bottom - CIPP repairs to influent pipe. - Modify Arms to suit new structure C1 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new Structure	Complete Complete Complete	Nov 11 24 Jan 12 July 12	3 Feb 12 30 June 12 28 Feb 13	$9,432,768
Civil & Structural	• Paving • C2 water • Crack repairs to structures. • Reclad Digester 2 • PST & Grit Tank Repairs • SCT Tank Repairs	Complete Complete Complete Complete Complete Construction	Oct 11 Oct 11 April 11 Sept 11 Aug 12 Jan 13	Sept 12 Feb 12 Nov 12 Dec 11 Feb 13 July 13	**$4,914,760**
CWTP Contaminated Sand Disposal Point	• Repair after hours access road & improve for increased traffic movements. • Repair and strengthen dump point into Lagoon 2.	Complete Complete	Oct 12 Oct 12	Jan 13 Jan 13	$1,500,000
Oxidation Ponds	• Transfer structures 1-4 • Transfer Structure 4-5. • Pond banks strengthen and reinstate to design levels. • Estuary outfall structure • Dyers Road transfer structure	Complete Complete Complete Complete Construction	Oct 11 Dec 11 Jan 12 July 12 Oct 12	Feb 12 Mar 12 Feb 13 Dec 12 April 13	$16,250,000
Galleries	• South Gallery – drainage and structural *Proposed repair strategy unsuccessful, redesign underway* • North Gallery – drainage & joints • Diagonal Gallery – drainage & joints • Pump Stn A – drainage & joints • Sludge Rm A – drainage & joints	Design Complete Complete Design Design	**TBA** June 12 Jan 13 May 13 May 13	**TBA** Jan 13 Mar 13 Aug 13 Aug 13	$1,353,550

Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
CWTP Trickling Filters Stage 1	• External Repairs to Trickling Filter 1 • External Repairs to Trickling Filter 2	**Design/ Procurement** **Design/ Procurement**	**July 13** **July 13**	**Dec 13** **Dec 13**	$6,850,000
Stage 2	• Investigate and repair any damage to Trickling Filter internal structure	Loss Adjusters	2020		
Mechanical & General Repairs	• Digesters 2 • Digesters 1 • Digester 4 • Digester 3 • Digesters 5 • Digester 6 • Buffer Tank • Primary Sedimentation Tanks • Bio- Solids Holding Tank	Construction Construction Investigation Investigation Investigation Investigation Complete Complete Loss Adjusters	Oct 11 Nov 12 May 13 Aug 13 Jan 14 July 14 Nov 11 June 11 **TBA**	April 13 July 13 Sept 13 Jan 13 July 14 Dec 14 Jan 12 July 12 **TBA**	$6,600,000
Organics Processing Plant	• Demolish & Reconstruct Tunnels • Repair & Strengthen Process Hall • Repair Hard Standing	Construction	Mar 12	**Oct 13**	$9,518,133
Facilities	• Laboratory • Control Room • Workshops • Offices/ Cafeteria/ Mtg Room	**Design** **Design** Investigation **Design**	**TBA** **TBA** Feb 13 **TBA**	**TBA** **TBA** June 13 **TBA**	$6,000,000
Outlet Structure	• Replace Broken Outlet Pipes • New Outlet Structure • Decommission Broken Pipes	**Construction**	**Mar 13**	**Sept 13**	$2,300,000
	TOTAL				**$64,719,211**

Data from Project Management Unit, Christchurch City Council

In the table above, the bolded text identifies a change in activity since the previous monthly report.

6.2.4 Burwood Landfill

Project	Description	Material Received (tonnes)	Material Processed (tonnes)	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
Burwood Landfill Liquefaction and Infrastructure Rebuild Waste Disposal	• Prepare areas for disposal • Operate and maintain disposal site • Restoration and landscaping • Resource consent application • Consultation documents to affected parties • Consultation Feedback documents to affected parties • Consents granted	**394,700**	**394,700**	Complete Operation Operation Completed Complete Complete Complete	Feb 11 Feb 11 Jan 12 Jan 12 Apr 12 Jun 12 Jul 12	Jan 12 Dec 17 Dec 17 Aug 12 Jul 12 Jul 12 Sep 12	Self Funded
Burwood Landfill Residual Demolition Waste Disposal	• Design of new cell for residual waste • Cell construction • Operate and maintain disposal site • Restoration and landscaping • Resource consent application • Consultation documents to affected parties • Consultation Feedback documents to affected parties • Consents granted	0	0	Complete Construction **Operating** Design Complete Complete Complete Complete	Oct 11 Mar 12 Mar 13 Jul 17 Oct 11 Apr 12 Jul 12 Jul 12	Jun 12 Mar 13 Dec 17 Dec 17 Aug 12 Jul 12 August 12 Sep 12	To be funded by Transwaste Canterbury
Burwood Resource Recovery Park Demolition Sorting and Processing Facility	• Construct areas for storage of material and associated roading • Design of sorting plant • Construction of sorting plant • Sorting operation • Rehabilitation and landscaping • Resource consent application • Consultation documents to affected parties • Consultation Feedback documents to affected parties • Consents granted	**395,000**	0	Complete Complete Commenced **Operating** Design Completed Completed Completed Completed	Feb 11 Mar 11 Jul 12 Mar 13 Jul 17 Oct 11 Apr 12 Jun 12 Jul 12	Jun 11 Jun 12 Mar 13 Dec 17 Dec 17 Aug 12 Jul 12 Jul 12 Sep 12	To be funded by Transwaste Canterbury
	TOTAL	**789,700**	**394,700**				

Data from City Water and Waste Unit, Christchurch City Council

6.2.5 Wells

The damage to wells has been reported separately from the remainder of the non-SCIRT infrastructure rebuild because much of the wells repair work is reactionary due to the ongoing aftershocks.

Forward programming is limited by the reactionary work and the operational requirements of the water supply network, meaning that each package of work is programmed "on the fly" on a prioritised basis before it is issued.

The programme of work must be kept flexible in order to keep as many damaged wells operational as possible while at the same time moving forward with the repair and replacement programme. Only a limited number of wells can be taken out of service at one time to avoid affecting the demand on water supply network, and to minimise water restrictions.

	February At Ground Level	March At Ground Level	February Below Ground Level	March Below Ground Level	February Totals	March Totals
Total number of active wells					154	154
Wells yet to be repaired+*	33	33	29	23	62	56
Cost Estimate all repairs+	$4,692,000	$4,692,000	$19,355,000	$19,414,000	$24,047,000	$24,106,000
Wells repaired to date+*	69	72	111	112	180	184
Cost to date+	$3,212,062	$3,331,264	$7,392,271	$7,870,871	$10,604,333	$11,202,135

Data from Capital Delivery Team, Christchurch City Council

+ includes replacement wells

* some wells are damaged both at and below ground level