

COUNCIL 25. 10. 2012

**ENVIRONMENT AND INFRASTRUCTURE COMMITTEE
4. 10. 2012**

**A meeting of the Environment and Infrastructure Committee
was held in the No. 1 Committee Room
on Thursday 4 October 2012 at 9am.**

PRESENT: Councillor Sue Wells (Acting Chair)
Councillors Sally Buck, Jimmy Chen, Barry Corbett.

APOLOGIES: Councillors Claudia Reid and Aaron Keown.

The Committee reports that:

PART A - MATTERS REQUIRING A COUNCIL DECISION

1. INFRASTRUCTURE REBUILD MONTHLY REPORT

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

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 A**) is the eleventh 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

It is recommended that the Council receives the Infrastructure Rebuild Monthly Report for September 2012.

COMMITTEE RECOMMENDATION

It is recommended that the Council receives the Infrastructure Rebuild Monthly Report for September 2012.

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ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 4. 10. 2012

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PART B - REPORTS FOR INFORMATION

2. DEPUTATIONS BY APPOINTMENT

Nil.

PART C - REPORTS FOR INFORMATION

3. RESOLUTION TO APPOINT A CHAIRPERSON

As both the Chairperson and the Deputy Chairperson were absent the Committee resolved to appoint Councillor Sue Wells as the Acting Chairperson for this meeting.

The meeting concluded at 9.10am.

CONSIDERED THIS 25TH DAY OF OCTOBER 2012

MAYOR



New Zealand Government

**INFRASTRUCTURE REBUILD PROGRESS REPORT
SEPTEMBER 2012**

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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 5) and work being delivered under business as usual (BAU) mechanisms (section 6).

2. ACTIVITIES FOR THE MONTH

On Friday 7th September the Infrastructure Rebuild Forward Programme of Works was officially launched by the Mayor and Minister at Pages Road pump station. The launch received a significant amount of publicity and overall was well received. This will now be followed up with a series of community board meetings to explain the programme and what it means for each ward. The public are being encouraged to visit the Stronger Christchurch website (www.strongerchristchurch.govt.nz) for further information.

The ramp up of work is continuing with SCIRT increasing the amount of work in the field. The total claim for SCIRT related infrastructure rebuild works in August was approximately \$33 million. Overall there has been an increase in the value of work delivered in the field of \$2.9m compared to July. It was good to see that one of the key messages for the public around the Infrastructure Rebuild Programme launch was that around increased congestion and disruption on the roads being a sign of progress. Although every opportunity is being taken to minimize impacts it will be a reality as activities continue to increase.

The overall programme estimate for the Horizontal Rebuild is on track to be complete in November. The certainty and confidence around the updated estimate will be significantly higher than the previous estimate in September 2011. However, asset investigation is not anticipated to be complete until September 2013 at which time a further programme estimate update will be required.

In anticipation of the continued ramp up of work, SCIRT are looking to start "Train.Work.Earn.FOR REAL!" a recruitment and training campaign to attract locals to the construction industry. In addition, SCIRT's internal training continues to expand, with the SCIRT Safety Passport being endorsed by Site

Safe and the Construction Safety Council (CSC), and development of an environmental training programme with Environment Canterbury. As well as working closely with organisations, such as Canterbury Earthquake Temporary Accommodation Services (CETAS), creating greater understanding which in turn enables SCIRT teams to refer people, which need support, to CETAS as they encounter them in the community.

3. COMMUNICATION AND COMMUNITY ENGAGEMENT

The forward programme of works for the rebuild was officially launched by the Mayor and Minister on 7 September. Information about the schedule, including a visualisation tool, map outlining the broad construction timeline for the next four years and a detailed six month schedule of upcoming projects are available online at www.strongerchristchurch.govt.nz. Another series of Community Board meetings are also starting now to outline the details of the schedule in their area.

There was significant media coverage of the launch and details of the schedule received a lot of publicity. Ongoing communication activity is now planned to highlight progress and keep residents informed about work that is underway. Opportunities to work with CERA community engagement team are also being looked at to hold community meetings around the Infrastructure Rebuild. Care is required to ensure any meetings are coordinated with other organisations/subjects areas to avoid information overload for people.

In August, the SCIRT communications team continued to keep residents informed of rebuild progress. During the month the team delivered 67 start work notices to more than 17,565 houses and carried out 578 face-to-face communications, largely through door-knocking. There were 73 web updates and four e-newsletters were distributed. SCIRT also attended CERA-organised TC3 meetings to address any infrastructure rebuild matters and made three school visits in areas where construction is underway.

4. FINANCIALS

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

These have been separated into rebuild activities being carried out by SCIRT (including NZTA State Highway rebuild work) and Council infrastructure rebuild activities being undertaken through Council business as usual mechanisms.

The reporting includes a breakdown for the current financial year as per the agreed SCIRT annual budget and the Council Annual Plan in section 4.1 and actual costs to date against the overall infrastructure rebuild estimate (plus additional projects) in section 4.2. For the purpose of this report all indirect costs have been allocated based on portion of the programme estimate per activity.

Table 1.1 summarises the year to date and life to date of the horizontal infrastructure rebuild activities performed by SCIRT, rebuild activities performed by others and other CCC renewal projects performed by SCIRT.

Table 1.1: Year to date and life to date of the horizontal infrastructure rebuild activities

FINANCE AS AT 31 AUGUST 2012					
Activity	Year to date 2012/2013		Life to date		
	Budget	Actual	Estimate	Actual	
Rebuild activities performed by SCIRT	\$ 440,000,000	\$ 63,496,553	\$ 1,751,095,238		333,718,068
Rebuild activities performed by others	\$ 115,546,187	\$ 3,415,113	\$ 307,306,057		65,855,694
Other activities performed by SCIRT	\$ 55,224,492	\$ 6,454,952	\$ 55,224,492		17,812,902
GRAND TOTAL	\$ 610,770,680	\$ 73,366,618	\$ 2,113,625,787		\$ 417,386,664

4.1 Annual Plan 2012/13 - Actual year to date cost against budget

The Council 2012/13 Annual Plan includes a budget for the infrastructure rebuild of \$544.6m. This relates to Council infrastructure rebuild activities being delivered by both SCIRT and Council business as usual mechanisms.

In addition to the Council infrastructure rebuild Annual Plan, the SCIRT budget for the year also includes NZTA Highway rebuild budget of \$10.9m. For the purpose of this monthly progress report, the total budget reported against for the year is therefore \$555.5m as outlined in Table 1.4.

4.1.2 SCIRT actual year to date costs

The approved annual budget for SCIRT rebuild activities is \$440m. This includes NZTA State Highway rebuild activities. Table 1.2 below presents the actual costs for each activity for the year to date reported against the agreed annual budget for SCIRT. These costs are up to the end of August 2012.

Table 1.2 Actual costs for year to date of rebuild works by SCIRT

FINANCE AS AT 31 AUGUST 2012					
SCIRT					
Activity	Description	2012/13 SCIRT Budget	Actual Cost YTD	Forecast Total Spend This Year	Year End Variance
Road Network	Roading	\$ 132,295,812	\$ 14,538,725	\$ 119,661,934	\$ 12,633,878
Wastewater Collection		\$ 230,200,000	\$ 41,477,034	\$ 266,012,797	-\$ 35,812,797
Water Supply	Water Supply	\$ 38,100,000	\$ 5,803,145	\$ 27,037,078	\$ 11,062,922
Waterways & Land Drainage	Stormwater	\$ 28,490,297	\$ 1,232,578	\$ 22,666,890	\$ 5,823,407
NZTA Highways		\$ 10,913,892	\$ 445,072	\$ 11,121,502	-\$ 207,610
TOTAL SCIRT INFRASTRUCTURE REBUILD PROGRAMME		\$ 440,000,000	\$ 63,496,553	\$ 446,500,200	-\$ 6,500,200

4.1.3 Non-SCIRT actual year to date costs

The balance of the annual plan budget for the infrastructure rebuild (\$115.5m) is being delivered by Council business as usual mechanisms. Table 1.3 below presents the actual costs for the year to date of the infrastructure rebuild performed by Council for each activity against the 2012/13 Annual Plan budget. These costs are up to the end of August 2012.

Table 1.3 Actual costs for year to date of non-SCIRT rebuild works

FINANCE AS AT 31 AUGUST 2012						
Non SCIRT						
Activity	Description	Approved Budget	Actual Cost YTD	Year End Forecast	Year End Variance	
Road Network	Roading	\$ 16,541,503	\$ 32,341	\$ 16,541,904	-	401
Wastewater Collection		\$ 0	\$ 2,979	\$ 2,979	-	2,978
Parks & Open Spaces	Greenspace	\$ 13,554,101	\$ 51,594	\$ 13,554,101	-	0
Refuse Minimisation & Disposal	Solid Waste	\$ 5,105,263	\$ 852,390	\$ 5,105,263		0
Wastewater Treatment & Disposal	WW Treatment Plan	\$ 29,020,147	\$ 367,161	\$ 29,020,147	-	0
Water Supply	Water Supply	\$ 51,325,173	\$ 1,195,734	\$ 32,498,294		18,826,879
Waterways & Land Drainage	Stormwater	\$ 0	\$ 912,914	\$ 12,530,914	-	12,530,914
TOTAL NON-SCIRT INFRASTRUCTURE REBUILD PROGRA		\$ 115,546,187	\$ 3,415,113	\$ 109,253,602	\$	6,292,585

4.2 Overall Infrastructure Rebuild estimate - actual life to date costs against current infrastructure rebuild estimate.

The current estimate for the overall rebuild of the City's horizontal infrastructure is \$2.015 billion (including contingency and excluding escalation), plus \$18.163m 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 \$2.058 billion as outlined in Table 2.3.

It is anticipated that a revised programme estimate will be completed in Q4 of calendar year 2012 to help inform the long term planning process.

4.2.1 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	Current Estimate of Cost				Total Actual Cost	Forecast Total Spend		Programme Variance
			Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13				
Road Network	Roading	\$ 814,857,143	\$ 11,812,105	\$ 71,701,403	\$ 14,538,725	\$ 98,052,233	\$ 814,857,143	\$ -	
Wastewater Collection		\$ 714,095,238	\$ 10,376,296	\$ 129,473,139	\$ 41,477,034	\$ 181,326,469	\$ 714,095,238	\$ -	
Water Supply	Water Supply	\$ 128,142,857	\$ 1,857,860	\$ 35,347,203	\$ 5,803,145	\$ 43,008,208	\$ 128,142,857	\$ -	
Waterways & Land Drainage	Stormwater	\$ 69,000,000	\$ 999,542	\$ 6,485,377	\$ 1,232,578	\$ 8,717,497	\$ 69,000,000	\$ -	
NZTA Highways Rebuild		\$ 25,000,000		\$ 2,168,590	\$ 445,072	\$ 2,613,662	\$ 25,000,000	\$ -	
TOTAL		\$ 1,751,095,238	\$ 25,045,803	\$ 245,175,712	\$ 63,496,553	\$ 333,718,068	\$ 1,751,095,238	\$ -	

4.2.2 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. The table also includes three projects and their budgets, not included in the current cost estimate, totalling of \$18.163m.

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

NON-SCIRT										
Activity	Description	Current Estimate of Cost	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost	Forecast Total Spend	Programme Variance		
Road Network	Roading	\$ 78,589,305	\$ 848,201	\$ 1,792,740	\$ 32,341	\$ 2,673,282	\$ 78,589,305	\$ -		
Wastewater Collection		\$ -	\$ 1,634,066	\$ 13,757,590	\$ 2,979	\$ 15,394,636	\$ -	\$ -		
Parks & Open Spaces	Greenspace	\$ 57,884,181	\$ 611,310	\$ 1,835,060	\$ 51,594	\$ 2,497,964	\$ 57,884,181	\$ -		
Refuse Minimisation & Disposal	Solid Waste	\$ 8,761,905	\$ 2,076,017	\$ 3,091,587	\$ 852,390	\$ 6,019,994	\$ 8,761,905	\$ -		
Wastewater Treatment & Disposal	WW Treatment Plant	\$ 96,356,381	\$ 4,488,038	\$ 13,249,043	\$ 367,161	\$ 18,104,243	\$ 96,356,381	\$ -		
Water Supply	Water Supply	\$ 24,095,238	\$ 4,266,124	\$ 830,545	\$ 1,195,734	\$ 6,292,402	\$ 24,095,238	\$ -		
Waterways & Land Drainage	Stormwater	\$ 41,619,048	\$ -	\$ 13,960,259	\$ 912,914	\$ 14,873,173	\$ 41,619,048	\$ -		
TOTAL		\$ 307,306,057	\$ 13,923,757	\$ 48,516,824	\$ 3,415,113	\$ 65,855,694	\$ 307,306,057	\$ -		

4.2.3 Horizontal Infrastructure – SCIRT and Non-SCIRT actual life to date against estimate

Table 2.3 presents the reconciliation of the budgets. \$2.015b horizontal infrastructure cost estimate, the 18.163m of other Council budgets and SCIRT performed NZTA Highways (\$25 million).

Table 2.3 SCIRT and Non-SCIRT actual life to date against estimate

Activity	Description	Current Estimate of Cost	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost	Forecast Total Spend	Programme Variance		
Council Rebuild		\$ 2,033,401,295	\$ 38,969,560	\$ 291,523,946	\$ 66,466,594	\$ 396,960,100	\$ 2,033,401,295	\$ -		
NZTA Highways Rebuild		\$ 25,000,000	\$ -	\$ 2,168,590	\$ 445,072	\$ 2,613,662	\$ 25,000,000	\$ -		
TOTAL		\$ 2,058,401,295	\$ 38,969,560	\$ 293,692,536	\$ 66,911,666	\$ 399,573,762	\$ 2,058,401,295	\$ -		

5. SCIRT WORK ACTIVITY

5.1 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.

The information collection process and the key metrics are still being developed in conjunction with SCIRT and the three client organisations and so will continue to be refined.

Asset Type	Asset Sub-Type	Unit	July	August	Life To Date
Storm Water Pump Stations	Pump Station	#	0	0	0
Storm Water Reticulation	Drainage	m	1,280	675	3,353
Transport - Roading	Bridges	%	0.75	0.2	95
	Pavement	m ²	11,617	11,809	76,486
	Retaining Walls	#	188	59	293
Waste Water Pump Stations	Pump Station	%	247	97	886
Waste Water Reticulation	Reticulation	m	12,057	9,811	48,240
	Manhole/chamber	#	55	46	112
Water Supply Pump & Reservoir Stations	Pump Station	%	82	142	349
	Reservoir	%	0	0	283
Water Supply Reticulation	Reticulation	m	1,870	1,505	18,108
	House connections	#	134	3	137

5.2 Number of Ongoing SCIRT Projects

The following table is a summary of the programme pipeline as at August 31st 2012. It shows how many projects and the total value at each stage of the project lifecycle.

Project Lifecycle Stage	July Estimate	August Estimate	July Estimated Construction Cost	August Estimated Construction Cost
Investigation (Asset Assessment)	40	53	\$21.7m	\$44.2m
Concept Design	63	76	\$532.3m	\$703.9m
Detailed Design	80	94	\$365.8m	\$429.1m
Construction	83	87	\$185.4m	\$207.6m
Handover	195	202	\$75.3m	\$76.0m
Grand Total	511	512	\$1,219.7m	\$1,460.8m

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

5.3 Ongoing Projects by Ward

5.3.1 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 August 2012.

5.3.2 Burwood / Pegasus

DETAILED DESIGN		
Reference	Project	Project Description
10415	Pump Station PS63 (PS)	New replacement PS63 at Beach Road. This project is linked to 10926 for the approximately 4Km long 700mm pressure main.
10585	PS25 - Catchment Vacuum Solution (WW)	Wastewater design for Pumping station 25 Catchment. This area includes sections of Banks Ave and Achilles 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.
10620	Pages Rd Bridge	Repair to Pages Rd Bridge, including road network connecting to roundabout on North end of bridge.
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.
10796	NZTA Anzac Bridge Repairs	Ground improvements, removal of landward bridge spans, demolish and rebuild abutments, repair piers, approaches and underpasses
10809	PS28 Catchment RD SW and WS Repairs	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with some associated stormwater and water supply works in streets situated in the area from Woodham Rd/Pages Rd north to Wainoni Rd/Breezes Rd. This work will follow construction of wastewater repairs/replacement.
10819	Keyes Road Catchment (RD,SW)	Repair and reinstatement of roads and underground services (excluding wastewater).
10840	PS37 Catchment RD SW WS	Linked to Project 10318 WW for the RD WS and SW elements
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.
10900	New Brighton NE6&NE7 Catchment Rebuild (WW)	Full, one pass rebuild of the New Brighton Catchment Area (Waste Water Element)
10926	PM63 (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

DETAILED DESIGN		
Reference	Project	Project Description
		constructed under the project number 10415.
10946	PS25 Replacement VS5001 (WW, PS)	Replacement of the existing wet well pump station that is fed by the existing gravity sewer network with a vacuum pump station that will be fed by the new vacuum sewer network.
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.
10960	Aranui Catchment NE4 Vacuum Arm 1: Rowses Road 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.
10961	Aranui Catchment NE4 Vacuum Arm 2: Pages Rd West 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.
10962	Aranui Catchment NE4 Vacuum Arm 3: Shortland 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.
10963	Aranui Catchment NE4 Vacuum Arm 4: Marlow Road 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.
10964	Aranui Catchment NE4 Vacuum Arm 5: 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.
10965	Aranui Catchment NE4 Pressure Sewerage System - East Avondale centred on Cowes Street (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.
10973	Water Supply - Lamorna Road Renewal (WS)	325m of Water main renewal. Existing pipe currently overlaid as a temporary measure.
10975	NE12 - North New Brighton Wastewater Catchment Repairs (WW)	Repair of the Wastewater network within the North New Brighton area.

DETAILED DESIGN	
Reference	Project Description
10976	NE13 - Beach Road & Bower Ave Wastewater Catchment Repairs (WW) Wastewater replacement in the Beach and Bower Ave Catchment within Parklands East.
10977	NE13 - Parklands East Wastewater Catchment Repairs (WW) Replacement of the Wastewater system in the Parklands East area.
10978	NE13 - Parklands West Wastewater Catchment Repairs (WW) Wastewater repairs to the Parklands West catchment 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.	5/03/12	29/11/12	\$5,243,792	\$4,251,823
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.	3/05/12	21/03/13	\$4,289,815	\$1,675,222
10335	PS54 - Catchment	A large waste water catchment of approx 12 streets which all drain to Pump Station 54 in Avondale.	2/11/11	13/10/12	\$10,893,000	\$6,604,413
10359	PS54 - Niven St (WW)	Minor works on pump station 54 as described in an IRMO report from	25/10/11	24/10/12	\$22,100	\$62,282
10363	PS108 Catchment (old PS39 Catchment)	A large waste water catchment of approx 12 streets which all drain to Pump Station 54 in Avondale.	11/11/11	13/09/12	\$5,306,865	\$4,346,290
10416	PS37	Repairs to existing PS37, including new pump intakes and repairs to yards.	30/11/12	5/02/13	\$247,891	\$681,824
10421	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WW)	Estuary Road from Beatty Street to Bridge Street is undergoing the installation of a new deep gravity sewer main. Installation is required as a result of extensive earthquake damage on the existing main, allowing infiltration.	16/09/11	10/09/12	\$2,110,000	\$2,403,436

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 Emllyn 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.	23/07/12	25/07/13	\$15,841,952	\$153,702
10532	Cnr Pages & Cuff - Emergency Repair	A large waste water renewal to a section of gravity pipe in Pages Rd.	30/01/12	28/09/12	\$945,238	\$2,102,461
10557	Gayhurst Road Roothing (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 Roothing, Storm Water and Water Supply. This work follows wastewater repairs/replacement.	16/07/12	15/05/13	\$2,747,247	\$384,215
10577	PS106 - Woolley	Minor new pump station.	2/07/12	28/11/12	\$428,800	\$174,886
10651	Keyes Rd Watermain (WS)	Watermain renewal in Keyes Road between Pratt Street and Hawke Street.	30/03/12	13/09/12	\$168,994	\$192,237
10681	Bower Avenue Watermain & Submains (WS)	Minor new pump station.	27/02/12	13/09/12	\$553,869	\$458,760
10765	PS 108 New Pump Station	CCC capital works programme rebuilding project for the Keyes Water Pumping Station. Initial design was carried out by CPG, and URS are also involved with the geotechnical investigation and report.	15/11/12	27/03/13	\$1,056,159	\$10,427
10769	CCC - Keyes Pumping Station (WS)		25/06/12	21/11/12	\$2,915,195	\$1,047,973

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10786	PS108 Catchment Stormwater, Water Supply and Rooding 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.	2/07/12	15/05/13	\$1,915,621	\$135,387
10802	PS54 Stage 1 - Northern Rooding 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).	10/09/12	23/04/13	\$3,782,598	\$35,527
10803	PS54 Stage 1 Southern Rooding 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.	2/07/12	21/02/13	\$900,394	\$549,753
10806	Pages & Cuffs Emergency Repair Rooding (RD)	Road design for short section of dual carriageway on Pages Road. Rectification involves re-surfacing with new asphalt and minor adjustments to vertical profile and also a short stormwater pipe to connect to new low point in kerb.	7/05/12	29/10/12	\$433,037	\$269,656
10846	Water Main Replacement Projects - Feb 2012	Water Main replacement projects for: Vivian St, Admirals Way, Pine Ave. Other streets have been moved to other projects: Port Hills Rd and Flavell St to 10681. Keyes Road to 10314. All others removed.	28/05/12	28/09/12	\$705,367	\$691,809
10859	CCC - Private Laterals Keyes Road (WW)	Investigation and repair of private laterals to valid EQC claimants (pilot project). There is no design work associated with this project and TOC allocated. All costs are directly returned to CCC with no Limb 3 allocation. Therefore project is grouped with other	18/06/12	1/10/12	\$100,000	\$39,352

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		CCC BAU capital projects.				
10882	Emergency Work - Beatty Street	Emergency relay of a collapsed sewer on Beatty Street	13/08/12	10/09/12	\$161,561	\$2,223
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.	14/08/12	31/10/12	\$223,084	\$18,339
10898	Minor Works - Medway Footbridge Removal	Removal and make safe of the footbridge. Store off site until a decision is made regarding the structure	1/10/12	12/10/12	\$82,348	\$5,047

5.3.3 Fendalton / Waimairi

DETAILED DESIGN	
Reference	Project Description
10894	Bridge Repair Package (Minor Repairs) Repair of 14, moderately damaged bridges within the western quarter of the city. Package 1 of 4

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10425	Glandovey/Bryndw r 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	5/11/12	3/09/13	\$2,817,756	\$59,340
10485	Merivale WW	Approximately 9km of WW gravity system, one new pump station.	14/05/12	30/08/13	\$14,263,822	\$2,575,517
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 western end of Normans Rd and 150 m of the eastern end of Mays Rd.	15/05/12	3/07/13	\$4,795,898	\$1,313,665
10595	Wairakei Road (WW)	Replacement of the deep 225 mm sewer main and the construction of new 150 mm sewer rider mains	2/08/12	25/01/13	\$1,004,979	\$10,991

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		over the deep main. The wastewater works are from Aorangī Street to Idris Road.				
10852	Minor Works - Casebrook Block	Minor footpath, ramp and pavement repairs	31/05/12	12/11/12	\$226,107	\$59,763
10857	Minor Works - Bridge Minor Works Project Package 02	Minor repair works to 55 bridges that suffered low levels of damage during the EQ events. Delivery team led with input from SCIRT Design teams where required.	27/07/12	13/09/12	\$29,231	\$74,977

5.3.4 Central City

DETAILED DESIGN	
Reference	Project Description
10464	F106 Antigua St Footbridge
10465	F105 Bridge of Remembrance
10467	R114 Colombo St (North) Bridge
10468	R115 Armagh St Bridge
10482	Triumphal Arch
10844	Central City Pump Station PS2 Catchment (WW)

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10445	Fitzgerald Ave Wall and Roading	The works include the replacement of a failed retaining wall and carriageway. Ground stabilization is also being installed with stone columns 12 meters deep.	15/06/11	30/01/13	\$3,130,000	\$3,917,309
10506	Hagley Syphon	Open trenching through Avon and sewer works in North Hagley Park.	23/04/12	18/09/12	\$450,006	\$568,843
10867	Fitzgerald Ave Retaining Wall Footpath	Footpath element of the Retaining Wall project. Linked to Project #10445	10/05/12	11/09/12	\$604,414	\$545,735
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	23/07/12	28/09/12	\$221,172	\$33,761

5.3.5 Hagley / Ferrymead (*excludes central city)

DETAILED DESIGN		
Reference	Project	Project Description
10347	Gayhurst Rd (Bridge Works - EW)	Retrofit repair to bridge involving new abutments, piles, wingwalls and associated road approaches and services.
10405	Stadium Package 01	Repair of road and all buried services along a section of Ferry Rd and Moorehouse Ave, near the AMI stadium
10449	St Johns (WW)	
10462	Site 228 Rangatira Tce Retaining Wall (RW)	
10584	PS27 Catchment Area (WW)	Assessment and repairs/relay of wastewater services in the catchment of the old pump station 27 on Avonside Drive.
10795	PS57 McCormacks Bay Rd Pump Station Repairs (PS)	Repairs to building at existing pump station.
10798	NZTA Port Hills Overpass Bridges	Pier column refinement, subject to ground investigation results
10824	Beachville Catchment Area including Beachville Road & Celia Street (WW,WS,SW,RD)	Full one pass rebuild of the catchment area. Project Includes PS30, WW, SW, RD and Sea Wall assets. Projects already existing in this area which this catchment study will relate to are: 10600 - PS30, 10619 - Beachville Road Eastern Seawall, 10677 - Beachville Watermain WS.
10832	PS15 - Alport Place Pump Station Replacement (PS)	Construct a new Pump Station; tie in works, odour control system and demolition of existing PS15.
10836	PS27 Catchment Area (RD,SW,WS)	Roading, Stormwater and Water Supply for a one pass approach for the PS27 Catchment. Linked to Project 10584.
10850	Cannon Hill Cres Retaining Walls (RW)	Renewal of 2 collapsed retaining walls on Cannon Hill Road
10855	PS8 Catchment WS, SW & RD	Water Supply, Storm Water and Rooding elements for the one pass rebuild of the PS8 WW Catchment
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.
10875	Catchment Study - Avonside & Linwood Area CE5,6,7,9,10,11,12 (WW)	Full one pass rebuild of the Avonside and Linwood catchment areas - WW Element

DETAILED DESIGN	
Reference	Project Description
10876	Catchment Study - Avonside & Linwood Area CE5,6,7,9,10,11,12 (RD, SW & WS)
10895	CCC - PM11 Randolph Phase 5 (WW)
10911	Fast Track - Te Awakura Terrace Stormwater Repairs
10931	Retaining Wall - Site 182 & 183 - Glenstrae Road (RW)

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	4/02/13	28/05/13	\$458,381	\$2,475
10306	CCC - PM11 Randolph (WW)	3.6km, 1.2m dia WW pressure main	5/03/12	24/04/13	\$12,831,040	\$7,306,139
10307	173 Maffey's Road retaining wall (RW)	Repair of retaining wall in Maffey's Rd, along with associated buried services	10/09/12	20/12/12	\$1,505,281	\$26,776
10317	Heberden Ave Permanent Solution (WW)	New gravity sewer diversion to replace broken sewer down Scarborough Cliffs.	8/04/13	31/05/13	\$256,733	\$385,988
10356	Woodham Rd (PS5 east of river)	The project scope requires replacement of 960m of damaged waste water from Linwood Ave to Ngarimu St. Road refurbishment will follow sewer works. Traffic diversions are required for this work to be completed safely.	14/11/11	31/10/12	\$3,095,185	\$2,485,045

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10388	Richardson Clarendon Syphon	The extent of this work for this work package is the replacement of the 144 Richardson Terrace / 121	1/11/12	7/01/13	\$473,489	\$7,037
10403	Barbour St Water (WS)	Replacement of water mains in two streets to the south and east of AMI Stadium, Waltham.	31/01/13	2/05/13	\$174,742	\$1,325
10459	Lower Richmond-Stanmore to Fitzgerald (WW)	Approximately 5km of WW, gravity system; requiring 2 new pump stations	20/03/12	30/05/13	\$11,833,107	\$5,283,269
10472	Charleston	Approx 2.9km WW enhanced gravity system, 1 new pump station; 0.3km SW; 8600m2 carriageway reconstruction, and 1830m2 localised repairs	7/05/12	1/02/13	\$3,737,683	\$1,465,706
10483	Lower Richmond (Southern Section) WS, SW, RD	Full reconstruction of intersection (80m), and localised repairs on remaining streets; 86m of SW replacement	24/09/12	11/12/12	\$316,261	\$6,719
10541	PS11 - Randolph		5/06/12	27/03/13	\$475,000	\$657,676
10548	Gloucester Street	Design for Wastewater, Stormwater, Water & Roding along Gloucester Street between Woodham Road and Avonside Drive. Close to complete replacement of all WW and Roding assets. Stormwater is reasonably intact.	26/06/12	9/11/12	\$1,078,084	\$813,481
10578	PS107	Minor new pump station.	17/09/12	21/01/13	\$563,749	\$21,708
10634	Main Road (Mt Pleasant - Beachville) Summer Causeway (RD)	Repairs to main road causeway including replacement of estuary seawall and minor cross culverts and carriageway repairs.	16/10/13	12/12/13	\$1,189,803	\$ -
10679	Moncks Spur No. 3	Repair and retrofit of reservoir.	12/04/12	5/10/12	\$217,591	\$210,869

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10680	Clifton No. 4 Reservoir	Repair and retrofit of reservoir.	21/03/12	11/12/12	\$437,673	\$281,321
10716	PM 34 Sumner - Replacement		5/03/12	13/09/12	\$1,300,000	\$1,510,898
10770	Linwood Ave / Humphrys Dr Retaining Wall Emergency Permanent Repairs (RW)	8m replacement and 8m extension of retaining wall at the City outfall drain to the estuary	14/08/12	30/10/12	\$397,365	\$145,068
10820	McCormacks Bay Reservoir Stages 3,4 and 5	Tank 1 and 2 and access reinstatement.	1/06/12	18/06/13	\$1,106,431	\$325,443
10822	McCormacks Bay Reservoir Stage 2 Walls	Retaining walls and rockfall protection works at reservoir site.	24/11/11	28/05/13	\$1,549,159	\$1,065,034
10841	Charleston Catchment Area (RD,SW,WS)	Linked to Project 10472 WW for the RD SW and WS elements.	26/10/12	24/06/13	\$1,399,044	\$2,385
10843	Lower Richmond Catchment RD SW WS	Linked to #10459 for the RD SW and WS elements of the project	26/10/12	24/06/13	\$1,573,629	\$9,063
10853	McCormacks Bay Reservoirs - Rock Face Protection Work	Rock protection work to facilitate the repairs to the reservoir tanks	29/03/12	31/10/12	\$1,231,910	\$926,330
10863	Charleston Waste Water Pump Station	Pumps Station Construction	3/09/12	20/12/12	\$503,092	\$7,526
10864	Woodham Road (SW,RD,WS)	Storm water and water supply elements linked to project 10356 WW & RD	29/03/12	26/09/12	\$441,840	\$467,310

5.3.6 Lyttelton / Mt Herbert

DETAILED DESIGN	
Reference	Project Description
10818	<p>NZTA Norwich & Gladstone Quay State Highway Repair (RD, WW, SW, WS)</p> <p>Repairs to state highway adjacent to the Port of Lyttelton</p>

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.	16/05/12	8/11/12	\$1,482,372	\$453,474
10400	RW Package 08 - Lyttelton non-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	18/06/12	5/11/12	\$589,801	\$453,002
10424	Sumner Rd Retaining Wall L	Stage one of new 450m long modular block retaining wall.	25/11/11	11/02/13	\$1,658,595	\$832,747
10427	035 Cunningham Tce retaining wall (RW)	Repair of retaining wall in Cunningham Tce, along with associated buried services	4/05/12	29/05/13	\$1,785,393	\$300,076
10475	Site 079 Coleridge/Dublin St Ret. Walls	200m replacement retaining wall and road reinstatement in Lyttelton	4/12/12	23/09/13	\$1,607,135	\$154,092
10905	Sumner Rd Retain Wall L-Stage 2 Wall & Stage 1&2 Rd(RW, RD)	Stage two of new 450m long modular block retaining wall.	5/12/12	18/07/13	\$2,054,487	\$662

5.3.7 Riccarton / Wigram

DETAILED DESIGN	
Reference	Project Description
10920	CCC - PS105 Pump Station (WW, PS) Construction of PS105, a CCC Capital Works Project. Linked to Project #10793 for critical path construction scheduling.

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10383	PS73 Kennedys Bush	Repair of wastewater PS 73	22/05/12	30/09/12	\$86,242	\$97,371
10409	Halswell WW Package 03	Repair wastewater along a section of Halswell Rd, O'Halloran Dr, & within private properties behind Muir Ave.	4/07/12	7/01/13	\$1,516,362	\$751,206
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.	30/04/12	28/05/13	\$4,524,196	\$782,909
10909	Minor Works - Port Hills Package 01	Minor road repairs within the Port Hills	3/07/12	25/10/12	\$178,770	\$50,605

5.3.8 Shirley / Papanui

DETAILED DESIGN	
Reference	Project Description
10858	Minor Works - Pump Station Demolition and Repairs (WW)
10883	Emergency Repair - Northern Relief Sewer Hills & Dudley
10944	Edgeware Road (WS, SW, RD)
10974	Pump Station PS121 and Rising Main - Guild Street (PS7 Phase 4 Catchment PS)

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10344	Edgeware Road - Emergency Works	A large complex repair to a sewer trunk main in Edgeware Rd.	22/09/11	13/09/12	\$1,734,794	\$2,041,234
10457	Purchas & Madras (Bealey - Edgeware)	WW, SW and roading repairs. Includes traffic calming on Purchas St to conform to IDS and City Plan requirements for Local Road widths.	8/11/11	20/12/12	\$2,962,824	\$3,973,022
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 1920's and 1930's. This material has not performed well in other areas therefore it is anticipated some form of	26/07/12	17/06/13	\$9,215,965	\$52,946

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		repair or replacement will be required for the majority of the network.				
10535	Rutland Rd - subcatchment	Wastewater repair along a single street east of Papanui. This project area is lightly to be revised.	20/04/12	16/11/12	\$1,556,699	\$1,049,373
10810	PS7 Catchment Phase 1 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapleton's Road and Shirley Road which bisect the catchment. (Area 1 of 4, south of catchment)	28/05/12	26/04/13	\$4,521,962	\$1,084,100
10812	PS7 Catchment Phase 2 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapleton's Road and Shirley Road which bisect the catchment. (Area 2 of 4, eastern quarter of catchment)	18/06/12	5/04/13	\$5,394,690	\$807,606
10814	PS7 Catchment Phase 3 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapleton's Road and Shirley Road which bisect the catchment. (Area 3 of 4, north western quarter of catchment)	20/07/12	14/06/13	\$6,094,133	\$235,208
10856	Minor Works - Northwood Block	Footpath, ramp and pavement repairs.	31/05/12	27/09/12	\$176,033	\$64,310
10899	Minor Works - Lower Styx Road & Turners Road	Pavement repairs	28/08/12	19/12/12	\$150,763	\$ -
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).	31/07/12	3/12/12	\$985,228	\$9,110

5.3.9 Spreydon / Heathcote

DETAILED DESIGN	
Reference	Project Description
10871	Opawa, Hillsborough Catchment SE11 (South) (WW) Full one pass rebuild of the catchment area - WW element
10872	Opawa, Hillsborough Catchment SE11 (South) (RD,WS,SW) Full one pass rebuild of the catchment area - RD,WS & SW elements
10879	Durham Street Overbridge Repairs Repairs to the Overbridge

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
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)	18/04/12	11/06/13	\$3,151,988	\$945,346
10379	Fisher Ave & Eastern Tce Syphon (WW)	Repair of Syphon near Fisher Ave	4/05/12	1/11/12	\$455,870	\$523,055
10385	Bewdley Evesham and Dellow	Repair of road and all buried services along Bewdley St, Eversham Cres & Dellow Pl.	20/04/12	5/10/12	\$1,374,176	\$1,434,705
10404	Hollis Ave Water (WS)	The works consist of the replacement of approximately 330 m of existing 100 mm AC water main in Holliss Avenue with 125 mm PE100 PN16 pipe.	6/07/12	4/09/12	\$135,869	\$152,824
10407	St Martins Package 02 (WW,WS,SW,RD)	Repair of road and all buried services within the St Martins loop, north of Centaurus Rd.	6/08/12	16/12/13	\$8,385,354	\$14,763
10410	Hollis Ave WW	Repair of wastewater along a section of Holliss Ave between Gunns Cres & Centaurus Rd.	19/04/12	10/09/12	\$643,868	\$820,135

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10520	Hoon Hay Package 01	Repair of road and all buried services along a section of Hoon Hay Rd (between Halswell & Sparks), including Penny In, Weir Pl, McBeath Ave, Muirson Ave & Greenpark St.	23/07/12	8/04/13	\$6,767,934	\$386,816
10785	Holliss Ave / Glamis Place - All Services (WW,WS,SW,RD)	Repair of water mains; roading along a section of Holliss Ave (between Gunns & Centaurus) and all services within Glamis Pl.	3/09/12	28/10/12	\$287,051	\$2,442
10821	Huntsbury Reservoir Tank No 2 & demolition	New reservoir tank (no.2) constructed in NE corner of old reservoir.	2/02/12	16/01/13	\$3,458,765	\$3,196,248

5.4 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	July Number of Projects	August Number of Projects	July Projects Life To Date Cost	August Projects Life To Date Cost
Burwood-Pegasus	80	82	\$23,235,813	\$23,293,817
Fendalton-Waimari	3	3	\$209,784	\$210,717
Central City	5	6	\$178,156	\$368,266
Hagley-Ferrymead	62	65	\$18,937,501	\$19,356,956
Lyttelton-Mt Herbert	5	5	\$461,668	\$462,580
Riccarton-Wigram	6	6	\$4,808,733	\$4,808,736
Shirley-Papanui	19	21	\$3,914,020	\$6,613,553
Spreydon-Heathcote	16	16	\$6,320,447	\$6,325,170
Total	196	204	\$58,066,121	\$61,439,795

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

5.4.1 List of Projects Complete by Ward

Ward	Reference	Project	Project Life to Date Cost
Burwood-Pegasus	10312	Rowes/Tomrich Street Watermain	\$264,247
	10321	PM51 Emergency Repair	\$1,510
	10325	Cresswell Avenue - Watermain	\$148,731
	10327	Pembroke Street	\$146,277
	10328	De Ville Place	\$107,535
	10331	PM39 - Gayhurst Rd	\$1,594,111
	10332	PM54 - Niven-Avonside	\$375,476
	10338	Wainoni Road (WW EW - Ottawa to Avonside)	\$908,330
	10339	Woodham Road (Temp Repairs)	\$4,146,744
	10340	Ottawa Road Sewer Emergency Repair	\$517,444
	10342	Avondale Road (Bridge Emergency Works)	\$ -
	10343	PM16 - Oakmont Green	\$4,287
	10346	Fleete Street - Emergency Repair	\$9,243
	10349	PS39 - Birchfield Avenue WW EW	\$218,674
	10351	Ardrossan Street - Temp. Solution	\$347,571
	10355	Landy Street	\$18,738
	10364	Shortland Street	\$343,883
	10366	McBratneys Road - WM	\$348
	10376	PM28	\$1,499,119
	10384	Pacific_Tedder Watermain Replacement	\$528,152
	10440	PS 25C	\$ 702,670
	10443	PM38_Beach Rd	\$596,770
	10484	Pump Station 25 connection repair	\$8,977
	10551	Avondale Rd (Temp Repair)	\$ -
	10576	PM106 - Woolley	\$ 1,466
	10604	PM 45	\$324,122
	10605	Sylvia Street watermain	\$134,293
	10606	Chadlington Street Water Mains	\$35,376
	10607	PM 37 (WW)	\$1,908,421
	10608	PM 35	\$1,087,648
10614	Aldershot Street watermain (WS)	\$255,436	
10615	Willryan Avenue Watermain	\$237,336	
10616	Flemington and Ascot Ave Watermains	\$525,892	

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Ward	Reference	Project	Project Life to Date Cost
	10617	PM46	\$5,913
	10621	Chartwell Street Water Mains	\$384,531
	10638	630 Pages Road 450mm (WW)	\$25,397
	10639	23 Leaver Tce WW	\$62,858
	10641	Kirner St WW	\$21,497
	10645	Inwoods Close 450mm WW	\$128,404
	10647	Travis Rd watermains and submains	\$215,845
	10649	Corhampton St watermains and submains	\$261,190
	10650	Water Main on Bridge Street Bridge (WS)	\$207,907
	10664	Saltaire (Bower to Marriots Rd) (WS)	\$69,096
	10665	Sinclair (keyes to Rawson) - WS	\$250,841
	10669	Palmers Rd PS Stabilisation	\$16,065
	10670	Major flooding Pratt St.	\$295,425
	10671	Owles Tce Temp. (WW)	\$113,618
	10676	Marine Parade Watermain	\$153,358
	10682	Briarmont St watermain	\$ 87,815
	10683	Cowes St Watermain and Submains (WS)	\$107,789
	10684	Gresham Terrace Watermain and Submains (WS)	\$161,116
	10685	Inverell Pl Watermain and Submains (WS)	\$63,517
	10686	Orrick St Watermain and Submains (WS)	\$83,284
	10688	Blake St Watermain (WS)	\$343,340
	10689	Pegasus Ave Watermain	\$168,650
	10690	Bassett St Watermain (WS)	\$225,196
	10691	Falcon St Watermain	\$180,732
	10692	Beach Rd Watermain	\$138,143
	10695	Allstone Watermain	\$90,800
	10696	Marriotts Road Watermain	\$36,116
	10700	Hulverstone Drive Emergency Repair	\$22,188
	10702	Rawhiti Water Well Stormwater Outfall	\$147,524
	10706	Bowhill Watermain (WS)	\$149,728
	10708	Rookwood Ave Watermain	\$174,380
	10711	Waitaki St Temp. Sewer	\$ -
	10714	Kate Sheppard Emergency Repair (Barkers Lane Temp Works) (WW)	\$187,534
	10723	Merrington Cres Watermain	\$183,621

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Ward	Reference	Project	Project Life to Date Cost
	10728	Rowan Ave Emergency Work WW	\$447,340
	10744	PS 36 Gravity Main (Pages Rd)	\$579
	10749	Beach Rd Gravity Sewer (WW)	\$67,291
	10752	Desal plant long term storage (WS)	\$82,908
	10756	PM39 Temp Overland Pipe (PM)	\$7,828
	10760	Pages Road	\$44,999
	10789	Woodham Road Water Supply Pumping Line Renewal	\$83,862
	10794	Pratt Street (Keyes Road) Water Main from Pumping Station	\$222,864
	10833	Fast Track - PS36 Sewerage Overflow Repairs Pages/Waitaki (WW)	\$20,798
	10834	Minor Works - Stage 1 Schools	\$ 7,185
	10838	Minor Works - Banks Avenue	\$117,445
	10315	Ferner Street - Emergency Works	\$223,901
	10336	Kingsford & Liggins Streets (Projects 10336 & 10885)	\$204,574
	10873	Catchment Study - PS36 Catchment, Area NE4 split into 10959-65 (WW)	\$ -
	10903	Catchment Study - Parklands & North New Brighton split into 10975-78 NE12, NE13 (WW)	\$ -
Fendalton-Waimari	10354	Papanui Road - Emergency Work	\$53,511
	10480	R126 Monavale Footbridge	\$31,575
	10590	Thornycroft Street - Pri4 WM	\$125,632
Central City	10447	Fitzgerald Ave Temp Sewer Replacement (WW)	\$22,117
	10455	Fitzgerald Ave Twin Bridges Temp Repairs	\$ -
	10726	Stormwater Pump Station 203	\$44,715
	10764	PM3 Temporary Repair (Complex Emergency)	\$3,365
	10790	Liverpool Street Water Main (CBD)	\$107,959
	10880	Kilmore St Brick Barrel Repair - Emergency Work (WW)	\$190,110
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	\$1,505,496
	10326	Retreat Road	\$678,774

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Ward	Reference	Project	Project Life to Date Cost
	10333	PM57 - Replacement (Stage 2 March)	\$2,075,207
	10337	Avonside - WW Trunk Sewer	\$204,090
	10341	River Road - Siphon (WW)	\$665,921
	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
	10358	PS57 - McCormacks Bay Rd Sewer Overflow Renewal	\$170,231
	10361	PS54 Catchment Temp. Solutions	\$878,397
	10362	PS5 - Glade	\$ -
	10372	Dacre Street	\$125,100
	10386	St Andrews Hill Rd Sewer (Major Hornbrook)	\$70,826
	10391	Stevens St Watermain	\$164,811
	10402	Moorhouse SW BB 02	\$72,671
	10406	226 Main Road SW	\$4,627
	10411	Clifton Reservoir 3	\$360,172
	10417	Upper Balmoral Reservoir	\$407,316
	10422	PM 31 Renewal Works (WW)	\$1,591,347
	10431	PS15 Alport	\$1,282,063
	10434	PS12 Smith	\$545,970
	10441	Ferry Road 873	\$366,749
	10442	PS15 Gould Cres Overflow Structure	\$210,429
	10448	PM 12	\$710
	10451	Manning-Ferry	\$16,641
	10452	WW No Service Grafton	\$134,202
	10454	225 Linwood Ave	\$74,062
	10458	31 Stanmore Road	\$49,088
	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	\$8,795
	10479	F806 McCormacks Bay 2 Footbridge	\$7,959
	10481	R223 Heathcote Barrage	\$5,703
	10496	PS13 Tilford	\$10,073
	10497	PS10 Linwood WW	\$13,921
	10499	Saxon Street Waste Water	\$15,687

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Ward	Reference	Project	Project Life to Date Cost
	10505	Stanmore Road Lateral	\$ -
	10537	Patten Street	\$633,749
	10539	Brittan Street	\$564,450
	10586	PM107	\$261,078
	10609	PM 47	\$24,815
	10612	McCormacks Bay Reservoir No 2-2	\$692,090
	10613	Mt Pleasant Reservoir 2/2	\$95,660
	10618	Beachville Road Pressure + Gravity Main	\$476,693
	10629	McCormacks Bay Rd WR mains and submains (WS)	\$2,181,377
	10644	55 Clark St WW	\$759
	10666	Head Street - Esplanade to Nayland (WS)	\$78,803
	10677	Beachville Watermain (WS)	\$248,863
	10687	Wakefield Ave Watermain (WS)	\$156,900
	10729	WW, Gravity Bridal Path and Cannon	\$250,799
	10734	WW, 262 Main Road	\$ -
	10739	Heberden Ave Temporary Solution (WW)	\$102,792
	10743	281 River Rd Siphon (WW)	\$ -
	10746	Ruru Ave Repair PM 11	\$42,191
	10747	Bromley Waste Water Treatment	\$23,860
	10753	WW No Service Glendevera (WW)	\$2,081
	10763	Monks Bay Walkway - Temp Repairs	\$45,416
	10779	CCC - Linwood Avenue Water Main	\$453,547
	10782	15 Dunoon Place Emergency Stabilisation / Sewer Repair	\$179,641
	10792	Truro Street Emergency Waste Water Sewer Renewal (Van Asch School)	\$174,220
	10830	Minor Works - Bridge Minor Works Project Package 01 Roding	\$ -
	10835	Minor Works - Avonside Girls High School	\$78,494
	10772	Monks Bay Main Road Emergency Repair (WW)	\$15,503
Lyttelton-Mt Herbert	10382	Lyttelton Treatment Plant Access	\$ -
	10636	Priority Roads - Governors Bay Road Rebuild	\$387,073
	10672	Sutton Quay Retaining wall 441	\$39,384

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Ward	Reference	Project	Project Life to Date Cost
		(RW)	
	10878	Minor Works - Cunningham Terrace & Sumner Rd Temp Access Works	\$35,211
	10418	Lyttelton Dyers Road Pump Station (WS, PS)	\$912
Riccarton-Wigram	10309	Halswell Minor Roothing Works - All Areas	\$319,312
	10380	Halswell WW Package 02	\$2,031,254
	10387	Townshend Crescent Wastewater	\$46,679
	10389	Sparks Rd Watermain	\$175,935
	10392	Halswell WW Package 1 (WW)	\$2,110,120
	10408	Glovers St water (WS)	\$125,435
Shirley-Papanui	10308	Riselaw Street	\$91,424
	10313	PM6 - Harrison St	\$206,843
	10322	Ranfurly Street	\$118,626
	10323	Chrystal Street	\$83,927
	10329	Hope street	\$145,208
	10330	Orontes Street - WS	\$90,022
	10334	PM7 - Stapletons Rd	\$242,909
	10345	Nancy Ave / Weston Rd	\$16,297
	10348	Shirley Road - Wastewater (Emergency Repair)	\$696
	10369	Orion Street	\$41,881
	10435	Temporary Gravity Sewer Lower Styx Road	\$969,051
	10437	PM 40_Marshlands	\$585,684
	10439	Heyders_29-65_WW	\$320,151
	10446	Brooklands Roothing - Temporary Repairs	\$364,289
	10460	449 Durham Street North	\$304,376
	10536	Edgeware Rd - WW	\$1,735,335
	10555	Madras Street / Forfar Wastewater	\$588,121
	10805	Madras Street Road, Storm Water & Water Supply Repairs	\$340,520
	10837	Minor Works - Shirley Boys High School	\$110,055
	10851	Minor Works - Marshland Road & Belfast Road	\$257,041
	10581	Catchment Study - PS7 (10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817)	\$1,098
Spreydon-Heathcote	10320	Murray Aynsley Reservoir 2	\$148,173
	10381	Rydal St (WW)	\$921,753

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Ward	Reference	Project	Project Life to Date Cost
	10390	Centaurus Rd Watermain	\$143,772
	10393	Smartlea WW Emergency Repair	\$109,991
	10396	75 Wilsons Emergency Repair	\$825
	10397	Glenelg Spur 01	\$141,527
	10432	PS19 Beckford	\$3,201
	10433	PS20 Locarno	\$19,259
	10476	F207 Aynsley Tce Footbridge	\$8,319
	10477	F212 Sloan Tce Footbridge	\$593
	10545	PS19 - Syphon	\$ -
	10597	Huntsbury Reservoir	\$4,065,017
	10717	Colombo St (South) Bridge - Concept only, no construction work undertaken (RD)	\$2,207
	10745	CCC - Sydenham Stn Replace Wells (WS)	\$236,486
	10755	PS19 Fifield - 171 Fifield - Sheet piling protection of riverbank	\$114,715
	10787	Rydal Street Water Supply, Storm Water and Roading Renewals (SW,WS, RD)	\$409,332
Grand Total			\$61,439,795

6. NON-SCIRT WORK ACTIVITY

6.1 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 Greenspace

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
Banks Peninsula Wards	WP0000537	PARKS Marine Structures Repairs	Marine Structures Repairs	13	CONSTRUCTION	01/08/2011	30/06/2013	\$462,000
	WP0000551	PARKS Marine Structures Assessments	Marine Structures Assessments	10	COMPLETE	01/08/2011	30/11/2011	\$60,000
	WP0000783	B/P Retaining Walls	Retaining wall repairs in parks and cemeteries on Banks Peninsula	4	INVESTIGATION	01/07/2012	30/06/2013	\$241,000
Burwood Pegasus	WP0000251	PARKS CEAF 1.1 Sth New Brighton CAPEX	Hard surface and playground under surfacing renewals	4	CONSTRUCTION	01/10/2011	30/06/2013	\$227,000
	WP0000257	PARKS CEAF 1.2 B/P CAPEX	Bexley, Avondale and Burwood Parks hard surfacing renewals	3	COMPLETE	01/09/2011	31/10/2011	\$60,200
	WP0000258	PARKS CEAF 1.2 B/P OPEX	Hard surface repairs	11	COMPLETE	01/10/2011	29/02/2012	\$131,000
	WP0000284	PARKS CEAF 2.6 TRAVIS CAPEX	Hard surface renewals	5	COMPLETE	01/12/2011	29/02/2012	\$175,500
	WP0000285	PARKS CEAF 2.7 AVON PARK CAPEX	Hard surface renewals	3	INVESTIGATION	01/03/2012	30/06/2013	\$290,550
	WP0000286	PARKS CEAF 2.8 ESTUARY CAPEX	Hard surface renewals	1	INVESTIGATION	01/03/2012	30/06/2013	\$300,000
City wide	WP0000177	PARKS Playground Softfall - CAPEX	Replacement of contaminated soft fall to playgrounds	24	COMPLETE	01/08/2011	30/11/2011	\$358,460
	WP0000206	PARKS Playground Softfall - OPEX	Repairs to playground under surfacing	8	COMPLETE	01/08/2011	20/12/2011	\$46,500
	WP0000269	PARKS CEAF 2.2 S/P, F/W, R/W, L/M OPEX	Hard surface and minor structural repairs	11	COMPLETE	01/03/2012	31/05/2012	\$54,500
	WP0000312	PARKS Hard Surface Nthn & Sthn - OPEX	Hard surface repairs	58	CONSTRUCTION	01/03/2012	30/04/2013	\$127,950
	WP0000313	PARKS Hard Surfaces Nthn & Sthn CAPEX	Hard surface renewals	14	CONSTRUCTION	01/03/2012	30/04/2013	\$204,600
	WP0000318	PARKS Hard Surfaces	Hard surface renewals	24	CONSTRUCTION	01/03/2012	30/04/2013	\$902,450

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction on Finish	Estimated Cost
		Eastern CAPEX						
	WP0000321	PARKS Hard Surface Eastern - OPEX	Hard surface repairs	76	CONSTRUCTION	01/03/2012	30/04/2013	\$227,900
	WP0000323	PARKS City Wide Turf Repairs - OPEX	Repairs to non sports turf surfaces	110	COMPLETE	01/11/2011	31/05/2012	\$393,050
	WP0000357	PARKS Retaining Walls CAPEX	Minor retaining wall renewals	6	CONSTRUCTION	01/08/2011	30/06/2013	\$262,000
	WP0000358	PARKS Retaining Wall Repairs	Minor retaining wall repairs	26	CONSTRUCTION	01/08/2011	30/06/2013	\$203,150
	WP0000376	PARKS Minor Structures CAPEX	Minor structures renewals	9	INVESTIGATION	01/08/2011	30/06/2013	\$206,000
	WP0000377	PARKS Minor Structures Repairs	Minor structures repairs	64	CONSTRUCTION	01/08/2011	30/06/2013	\$275,150
	WP0000571	PARKS 2012 Sports Fields Repairs	Repairs to sports turf 2011/12	45	COMPLETE	01/09/2011	31/03/2012	\$496,614
	WP0000768	PARKS Mature Tree Replacements	Tree renewals at Hagley Park and Sth Brighton Domain	2	CONSTRUCTION	01/03/2012	30/06/2013	\$100,000
	WP0000769	PARKS Port Hills Restoration	Port Hills rock fencing and planting	2	INVESTIGATION	01/07/2012	XXXX	\$200,000
	WP0000205	PARKS Sports Fields Repair - Moderate	Repairs to sports turf	19	COMPLETE	01/05/2011	31/07/2011	\$254,000
	WP0000207	PARKS Sports Fields Repair - Minor	Repairs to sports turf	23	COMPLETE	01/05/2011	31/07/2011	\$122,550
	WP0000779	Structural	Bridge repairs on Parks City wide	15	INVESTIGATION	01/07/2012	30/06/2014	\$816,200
	WP0000780	Regional Parks	Repairs to structures and hard surfaces	6	INVESTIGATION	01/07/2012	30/06/2013	\$465,000
	WP0000781	Trees	City wide tree renewals	1	INVESTIGATION	01/07/2012	30/06/2013	\$500,000
	WP0000782	Ponds	Repairs to small ponds and outflows in parks	2	ON HOLD	XXXX	XXXX	\$50,000
	WP0000784	Cemeteries - Operational	Repairs and make safe work to headstones in Operational cemeteries	18	CONSTRUCTION	01/12/2011	30/06/2013	\$250,000

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
	WP0000785	Cemeteries - Heritage	Repairs and make safe work to headstones in Heritage cemeteries	3	INVESTIGATION	01/07/2012	30/06/2015	\$250,000
	N/A	On Hold	Projects on hold due to them being in Red Zoned areas, cordons, rock fall risk etc. Depending on land decisions some of these repairs/renewals may become redundant in the future.	141	ON HOLD	XXXX	XXXX	\$6,133,100
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	5	COMPLETE	01/09/2011	29/02/2012	\$295,000
	WP0000254	PARKS CEAF 1.4 Hagley Pk North CAPEX	Irrigation and Turf renewals	2	COMPLETE	01/07/2011	31/07/2011	\$90,000
	WP0000263	PARKS CEAF 1.6 H/F CAPEX	Hard surface renewals	5	COMPLETE	01/10/2011	29/02/2012	\$103,500
	WP0000264	PARKS CEAF 1.6 H/F OPEX	Hard surface, track and minor structure repairs	20	COMPLETE	01/10/2011	29/02/2012	\$178,499
	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	4	INVESTIGATION	01/12/2012	30/06/2013	\$727,000
	WP0000288	PARKS CEAF 2.10 CENTRAL CITY PARKS CAPEX	Hard surface renewals	3	ON HOLD	XXXX	XXXX	\$15,000
	WP0000289	PARKS CEAF 2.10 CENTRAL CITY PARKS OPEX	Hard surface, track and minor structure repairs	10	ON HOLD	XXXX	XXXX	\$14,100
	WP0000767	PARKS Sumner/Scarborough Restoration	Hard surface renewals	9	CONSTRUCTION	01/12/2011	30/04/2013	\$187,000

6.3 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.	Complete	Nov 11	3 Feb 12	
	C3 - New structural bottom - CIPP repairs to influent pipe. - Modify Arms to suit new structure	Complete	24 Jan 12	30 June 12	
	C1 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new Structure	Construction	July 12	21 Dec 12	
	C2 - Verify that emergency repairs have returned asset to pre-EQ functionality and asset condition.	Investigation			\$9,432,768
Civil & Structural	<ul style="list-style-type: none"> • Paving • C2 water • Crack repairs to structures. • Reclad Digester 2 • PST/SCT & Grit Tank Repairs 	Construction Complete Construction Complete Construction	Oct 11 Oct 11 April 11 Sept 11 Aug 12	Sept 12 Feb 12 Nov 12 Dec 11 Jan 13	\$4,514,760
	<ul style="list-style-type: none"> • Transfer structures 1-4 • Transfer Structure 4-5. • Pond banks strengthen and reinstate to design levels. • Estuary outfall structure • Cuthberts Road transfer structure 	Complete Complete Construction	Oct 11 Dec 11 Jan 12	Feb 12 Mar 12 Nov 12	
	<ul style="list-style-type: none"> • South Gallery – drainage and structural 	Construction Design	July 12 Sept 12	Sept 12 Dec 12	
	<ul style="list-style-type: none"> • <i>Proposed repair strategy unsuccessful, redesign underway</i> 	Design	Sept 12	Dec 12	\$18,122,788
	<ul style="list-style-type: none"> • North Gallery – drainage & joints • Diagonal Gallery – drainage & joints • Pump Stn A – drainage & joints • Sludge Rm A – drainage & joints 	Construction Design Design Design	June 12 Aug 12 Sept 12 Oct 12	Aug 12 Sept 12 Oct 12 Nov 12	
CWTP Trickling Filters	<ul style="list-style-type: none"> • Trickling Filter 1 • Trickling Filter 2 	Investigation Investigation	Aug 12 Nov 12	Nov 12 Mar 13	\$1,353,550

Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
	<ul style="list-style-type: none"> TF 2Outflow Pipe Repair 	Design	Jan 13	May 13	\$1,000,000
Mechanical & General Repairs	<ul style="list-style-type: none"> Digesters 2 Digesters 1 Digester 4 Digester 3 Digesters 5 Digester 6 Buffer Tank Primary Sedimentation Tanks Bio- Solids Holding Tank 	<ul style="list-style-type: none"> Construction Investigation Investigation Investigation Investigation Investigation Complete Construction Design 	<ul style="list-style-type: none"> Oct 11 Sept 12 Sept 12 Nov 12 April 13 July 13 Nov 11 June 11 Jan 13 	<ul style="list-style-type: none"> Sept 12 Nov 12 Jan 13 April 13 July 13 Oct 13 Jan 12 July 12 May 13 	\$4,088,195
Organics Processing Plant	<ul style="list-style-type: none"> Demolish & Reconstruct Tunnels Repair & Strengthen Process Hall Repair Hard Standing 	Construction	Mar 12	July 13	
Facilities	<ul style="list-style-type: none"> Laboratory Control room Workshops Offices/ Cafeteria/ Mtg room 	<ul style="list-style-type: none"> Investigation Investigation Investigation Investigation 	<ul style="list-style-type: none"> Feb 13 Feb 13 Feb 13 Feb 13 	<ul style="list-style-type: none"> June 13 June 13 June 13 June 13 	\$9,518,133
Outlet Structure	<ul style="list-style-type: none"> Replace Broken Outlet Pipes New Outlet Structure Decommission Broken Pipes 	Design	Nov 12	Mar 13	
	TOTAL				\$51,292,951

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

6.4 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	<ul style="list-style-type: none"> 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 	366,660	366,660	Completed Operation Investigation Investigation Completed Investigation Application	Feb 11 Feb 11 Jan 12 Jan 12 Apr 12 Jun 12 July 12	Jan 12 Dec 13 Dec 13 Aug 12 Jul 12 Jul 12	Self Funded
Burwood Landfill Residual Demolition Waste Disposal	<ul style="list-style-type: none"> 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	Design Design Design Design Submitted Completed Completed Application	Oct 11 Mar 12 Sep 12 Jul 17 Oct 11 Apr 12 Completed Aug 12	Jun 12 Dec 12 Dec 17 Dec 17 Aug 12 Jul 12 Aug 12	To be funded by Transwaste Canterbury
Burwood Resource Recovery Park Demolition Sorting and Processing Facility	<ul style="list-style-type: none"> 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 	334,000	0	Complete Complete Construction Operation Design Submitted Completed Completed Application	Feb 11 Mar 11 Jul 12 Dec 12 Jul 17 Oct 11 Apr 12 Jun 12 Jul 12	Jun 11 Jun 12 Dec 12 Dec 17 Dec 17 Aug 12 Jul 12 Jul 12	To be funded by Transwaste Canterbury
	TOTAL	700,660	362,850				

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

6.5 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.

	July At Ground Level	August At Ground Level	July Below Ground Level	August Below Ground Level	July Totals	August Totals
Total number of active wells					154	154
Wells yet to be repaired ⁺⁺	32	33	43	42	75	75
Cost Estimate all repairs ⁺	\$4,692,000	\$4,692,000	\$17,368,000	\$17,923,000	\$22,060,000	\$22,615,000
Wells repaired to date ⁺ *	70	69	90	92	160	161
Cost to date ⁺	\$2,747,585	\$2,778,609	\$5,912,434	\$6,029,818	\$8,660,019	\$8,808,427

+ includes replacement wells

* some wells are damaged both at and below ground level