

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

Bill Perry Safety Award submission - City Care 2016 - Good to Go safety video

Story: Bill Perry Safety Awards

Theme: Programme Management

A document which explains the rationale behind and development of City Care's Good to Go safety video.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

For more information about this document, visit www.scirtlearninglegacy.org.nz



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Background

At a strategic workshop held in late 2015, City Care recognised that our key critical risk was service strikes and we had a brainstorming session to come up with ideas on how we could make a big difference in controlling that risk. Feedback from the field and our crews was that they received a lot of presentations and safety alerts with key messaging sometimes getting lost in noise / the wall of paper. We needed a better communication medium to get the message across.

The field teams worked with management to come up with an innovative solution to the problem and the outcome was the “Good to Go” safety video. The team came up with the idea of creating a video using the best practice guide for content and a City Care crew as actors to help get the message through.

Earlier that year, City Care had led a group which included Downer, Fletcher and an IST safety representative in writing up a delivery guide on the best practice steps involved in working safely around services. This was published as a SCIRT wide delivery guide.

How we did it

A professional film company, Hound & Stead were engaged to manage the filming, editing and voiceover content with City Care providing the site, crew and equipment. The video was based upon the working around services guide and the screen shots were based on the same sequence of steps defined in the guide to ensure that all our messaging on this matter was consistent. Filming took place on a site on Aranui Arm 2 on a real task to install a waste water lateral.

We chose a crew who had a great record with regards to working safely around services because we wanted the content and the people to be consistent with our message.

The roll out

In January 2016 we rolled out the initiative to our active work sites on St Johns, Aranui and Alport Place as part of a targeted safety action plan to help improve our performance in this area. As part of that roll out we also presented the foreman and manager of each site with a printed reference guide which provides the site team with a handy reference guide to supplement the video content. The guide includes all the appropriate published material on how to work safety around services.

The results so far

We strongly believe that this initiative will make a real difference and will get the message through to more of our field staff and sub-contractors than any power point or safety alert ever will. We have had great feedback which supports that view.

Feedback from operational staff

So far, feedback from the ground has been very encouraging.

“The new City Care (SCIRT) Service strike safety video was an innovative way of showing roading and drainage crews the SOP (standard operating procedures) for avoiding underground and overhead service strikes on our worksites. Using an actual City Care drainage crew in the video to go through these procedures with site management showed to everybody watching the importance of following the right steps in the right sequence to comply with company policies and to identify and safely negotiate services in our worksite.

Using footage of the crew and site management sitting down together having a morning toolbox and safety meeting was a clever way of showing staff, that communication is the start to a safe worksite. This video is a fantastic tool to teach staff the importance of keeping our service infrastructure from being damaged when we work around it and more importantly keeping our people safe when we work around it.

Regards

Nigel Parkes – Roading foreman – Aranui Roading crew”

We presented the safety video to Trueline this week and we are already seeing the results. The field team were really receptive to the video content and we had a great discussion afterwards. There were a couple of “ahah moments” and we could all see that the penny dropped for the Trueline foreman. It was a pleasure to see. This video and presentation has facilitated a great discussion with our subcontractor and helped communicate our best practice message to them in a clear and easy to understand way. I wish we had this at the start of the job.

Gabrielle Ranford

Site Manager – St Johns

City Cares safety goal to finish strong

One indicator of how important we feel this is the teams buy in to our safety goal for this year. This is a real breakthrough goal and will take some really huge effort from everybody but we are putting it out there.

From 1st March until 23rd Dec 2016

We will work safely around every service that is marked and correctly drawn on utility plans. No known strikes.

We are preparing posters and key messaging around this goal so please watch this space and support us in our own breakthrough safety challenge.

SCIRT Board mandate

At the Feb 16 board meeting, the SCIRT board acknowledged that service strikes were a serious critical risk warranting board oversight.

“The Board noted that it’s not about more procedures; it’s about getting all of our people following the procedures already in place all of the time.”

Minute extract.

2	Safety	
2(a)	Safety Moment	<p>Rob said it was great to see the TRIFR down to 4.5 which compares well with 2014 when it was 9.5. He noted the issue of service strikes (three 11kvs this month) and a couple of near misses with electrical cables. Service strikes are high public profile and the rebuild needs to be seen to be doing all it can to minimise risks to the public and team members. It was noted that there is a change in how steel crow bars are used on SCIRT sites and that they have been restricted to above ground. SCIRT might have achieved a low TRIFR but one bad service strike could result in a fatality.</p> <p>David Hanham (SQE Manager) was invited to join the meeting at this point. It appears that both failure to follow procedures and lack of supervision are the main contributors to the three cable strikes. David said that a lot of tool boxes are being run in the teams on these issues. The Board noted that it’s not about more procedures; it’s about getting all of our people following the procedures already in place all of the time.</p> <p>Action:</p> <ol style="list-style-type: none">1. The NOPs to raise the issue of cable location with industry representation bodies, ie CCNZ.2. Utilities coordinators to be invited to make suggestions in terms of what we can take to the industry – key learnings.

Contents of the guide and sequence followed in the movie.

1. Process map for working safely around services (see appendix 1 for a larger version)
2. A1 Risk assessment process
3. C1 Risk assessment briefing
4. A2 Request service drawings that are <30 days
5. B1 Locate and mark services
6. A3 Authorisation to break ground
7. C2 Positively identify service location in the identified area
8. G1 Walkover of specific area planned for excavation
9. C4. Work within permitted area
10. G2. How we deal with service strikes

Appendix 1 - Overall process – working safely around services

Appendix 2 - A1 Risk assessment process & C1 risk briefing

Appendix 3 - B1 Locate and mark services

Appendix 4 - A3 Authorisation to break ground – permit

Appendix 5 - C2 Positively identify all service locations

Appendix 6 - G1 Walkover of specific area planned for excavation

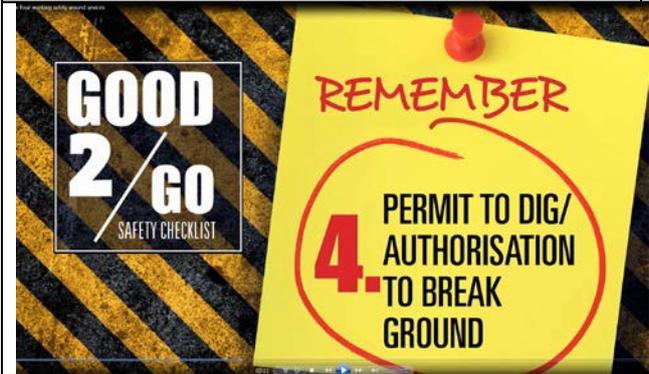
Appendix 7 - C4 Work within permitted area

Appendix 8 - G2 How we deal with service strikes

Appendix 9 – NOR0023 including utility contact details

Movie screen shots







Job Safety Environmental Analysis (JSEA)
Company Form

This form is to be completed by a group of personnel who are involved in performing the same task when:

- a JSEA has not been developed for the task, or
- conditions identified in the JSEA have changed.

ADMINISTRATIVE DETAILS

Task Name: _____ Date: _____
 Location: _____ Number: _____
 Permit required: Yes No
 Approved by: _____ Signature: _____ Date: _____
 Name: _____
 Do personnel performing work need a license/skill/trade skill? Yes No

Personal Protective and Safety Equipment required (circle all appropriate boxes)

Hi-Vis vest
 Safety boots
 Eye protection
 Hard hat
 Hand protection
 Ear protection
 Life jacket
 Protective clothing
 Dust mask
 Fall protection
 Face protection
 Rescuer
 Gas detector
 Tripod (Conf space)

List all plant and equipment to be used:

Issue Date: 8/29/2015 Page 1 of 1



Permit to Dig
Company Form

Site Location covered by this Permit: 6 McNeill St, Inverhuron Event ID Number: 75412
 Brief Description of Work: (pipe line digging, under bore, testing, etc) Remove & Replace Stormwater
 Start Date of Work: 27 March Permit Expiry Date: 30 March
 Project Manager or Supervisor: Doug McLeod Site Person in Control: Tim Smith

The Permit to Dig form is to be filled out by the Project Manager / Supervisor or Site Person in Control.
 Any questions or doubts must be discussed and addressed with Manager and Person in Control before digging.

Checks to be made BEFORE digging

Check	Y/N/A	By/Person	Response	Supplier of Info / Comment
1. Before 'Dig' request logged? (request signed)	N		✗	PM logged.
2. Are all underground utility and service plans on file and understood by the person in charge?	Y		✗	On file
3. Have all hazards been identified and understood?	Y		✗	Koreman
4. Has a cable detector, service locator or GPR been used to scan the work area?	Y		✗	OK by me / PM
5. Have all known underground services been clearly marked on site and accounted for?	Y		✗	Kadan Pote
6. Is the outline of the proposed trench or excavation marked out on site?	Y		✗	Koreman
7. Has a site walkover been done with all staff involved in the excavation?	Y		✗	Site Engineer / PM

