

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 – Drain Surgeons 2012 - various initiatives

Story: Bill Perry Safety Awards

Theme: Programme Management

A document which outlines several of Drain Surgeons' safety initiatives; developed when carrying out CCTV operations.

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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Bill Perry Quarterly Safety Award

Nomination Form

Criteria:

- A quarterly award to recognise the performance of an individual project team.
- The award criteria would consider the leading safety KRA's that Bill originally helped to set up.
 - The award would be determined based on the quantity and quality of these indicators.
(Safety conversations, near miss reporting, hazard reports, safe acts audits and safety initiatives)
 - Alternatively, the award could be given to any team for any outstanding safety initiatives which have been successfully implemented and have the potential to impact across the Alliance or wider industry.
 - **NB: for a nomination to be considered you need to attach evidence/examples that the Project Team/ Sub-Contractor has demonstrated completing the KRA's or has implemented a Safety Initiative.**
 - The IST SQE Team, in combination with the Alliance Manager will overview the award process.



NB: PLEASE ATTACH Evidence/Examples to Nomination Form!

Delivery Team:	Citycare
Nominated by:	Toni Stephens, Deane Spiers
H+S Advisor:	
Contact Phone#:	
Project Team/ Sub-Contractor: (being nominated)	Drain Surgeons
Current Site Address:	Various sites
Contact Person:	Alistair Sisson
Contact Phone #:	

Details of Nomination:



Drain Surgeons Ltd

ALL ASPECTS OF DRAINAGE WORK UNDERTAKEN

Your First Aid for Blocked Drains
www.drainsurgeons.co.nz

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Site Visit Completed:	Location:	Date:
Comments:		

Nominator Comments

Drain Surgeons has been undertaking CCTV operations as one of City Care's main contractors from the outset of the SCIRT contract. This includes investigative work, videoing the sewer and storm water systems, identifying issues caused by the earthquakes in preparation for the delivery teams to carry out repairs. This work is often carried out through 24 hour operations on multiple sites, most often in the middle of the road.

From the outset of this contract Drain Surgeons has shown themselves to be receptive to the standards set out by the SCIRT H&S Management Plan. They have striven hard to meet and exceed the KPI requirements and return excellent results every month with a high rate of documented safety conversations. They have developed a strong culture of reporting incidents within their team and are generally prompt in reporting this through to City Care management to upload to SCIRT.

Drain Surgeons has also been the front runner of the CCTV teams in proactively looking for ways to better their operations, making it safer for their teams and lifting the standard overall across the teams by sharing their ideas, each month they put forward a number of new initiatives and have looked 'outside the box' for innovative ideas for their teams to work safer and smarter.

Toni Stephens

Health and Safety Manager



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Nominator Comments

Drain Surgeons have provided site investigation and cleaning service for City Care CCTV division over the last 12 months

All access to the pipelines is typically through manholes found in many residential streets, almost every aspect of Drain Surgeons work is subject to traffic management and pedestrian access/egress over a 24hr period.

Drain Surgeons have developed numerous innovations to either eliminate or isolate their staff and the public from these hazards. I am particularly impressed with how these innovations have also managed to remain consistent and in many cases increase the safety of their personnel. Individually each is impressive – collectively they contribute significantly to a safe and efficient programme of work. This is recognised by their outstanding safety record, outstanding site audits and willingness to share their innovations with other companies in the pipe investigation and assessment industry.

Drain Surgeons have embraced the behaviours and principles that SCIRT values and for these reasons the City Care CCTV Team nominate Drain Surgeons for the Bill Perry Safety Award.

Deane Spiers

Health & Safety advisor

City Care Ltd

Below are our innovations we would like to submit.

- 1. A Wheeled manhole lifter to eliminate back strain and provide a solution for opening seized manhole lids.**
- 2. A Manhole grate placed over an open manhole that still allows CCTV access and preventing a fall hazard.**
- 3. Manhole grates are now used when a job is completed to wash down CCTV equipment to reduce contamination.**
- 4. A roller to be placed over manhole to reduce stress on flushing hoses and stop the hose leaving the manhole**
- 5. A flushing hose attached to a snowboard giving the ability to travel over silt without bogging down enabling us to connect a rope for boating lines.**

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1. Wheeled Manhole Lifter

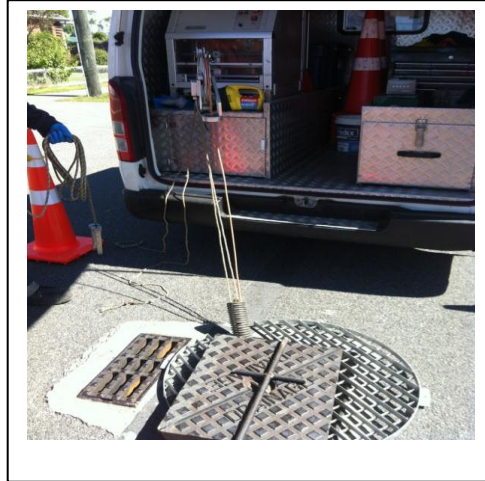
This innovation is a manhole lifter capable of exerting a 1000kg's of force lifting the manhole lid straight up. With the design of this lifter back strain is significantly reduced. Once the lifter is in position the handle to the side is pushed in a downward motion causing the lifting eye to move upwards. This particular manhole shown below was going to have to have the surround smashed off it or the lid broken as it was seized on, this lifting mechanism has reduce the need for that and increased productivity. Once the lid is free it can be rolled to the side with minimum effort. City Care Field Manager Tehan Riley has requested that this lifter is now used onsite whenever exposing a buried manhole.



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2. Manhole Grate

Needing to access manholes for CCTV surveying left us with a major safety problem where the manhole was exposed for lengths of time and therefore unsafe, to address this area of concern we created a manhole cover which gave us the flexibility of surveying through a manhole without the safety issues, significantly reducing the hazard and increasing productivity.



3. Manhole Grate being used for wash down

A natural extension of the above innovation is that we have now gained a perfect platform to clean the CCTV equipment.

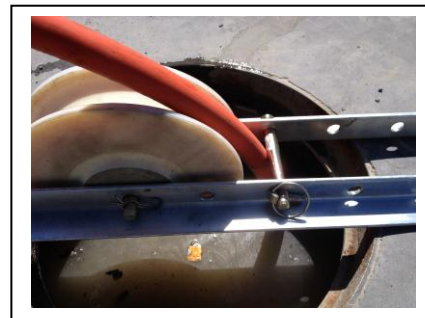
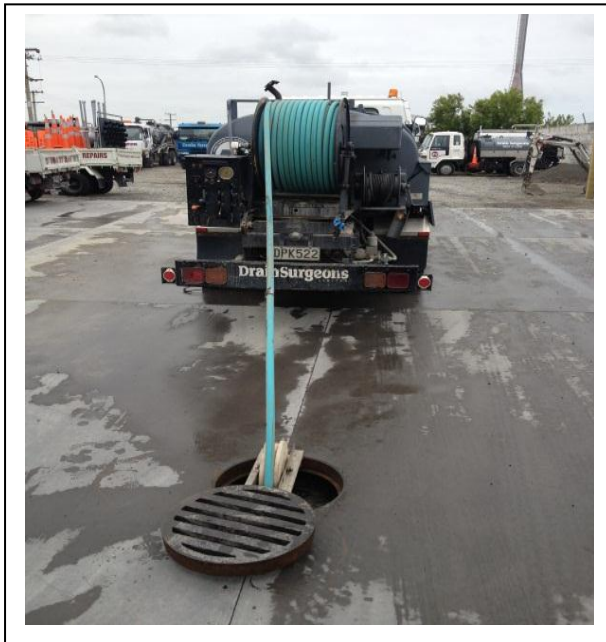
With the camera situated on top of the grate all of the contaminated product collected when the camera is in use can now be washed back into the drainage system reducing contamination of the surrounding area. This innovation increases productivity by speeding up the way we clean gear and significantly reduces hazards on site by keeping contaminants contained and providing a high level of hygiene .



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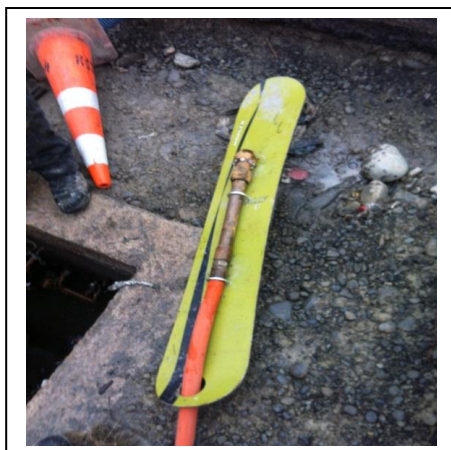
4. Hose Roller

By using this roller the amount of stress put on the hose is greatly reduced. This also has the additional benefit of providing a barrier between the operator and the end of the flushing hose increasing safety, when using the design shown below if an incident occurs where the jetter head comes out of a line being flushed the roller and locking pin will reduce the occurrence of the hose leaving the manhole.



5. Snowboard float

This innovation came from the need to be able to get hydro hoses up a heavily silted line without burying itself in the silt which in turn would bury the rope attached which we use when CCTV surveying a line by boat. The snowboard design enables us to keep the hydro hose and rope above the silt by riding on top of it. This has reduced the time spent on site dramatically.



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Nominee Comments

Drain Surgeons have provided support and services to the people of Christchurch since the September 2010 earthquake including assisting CERA and SCIRT in the most recent years with the Christchurch rebuild project.

As a company we pride ourselves in our commitment to safety, hazard identification and creating / implementing initiatives to further improve our standards already in place, as a result of this we were very pleased to receive an email from the SQE Manager of SCIRT, Mr Greg Slaughter commending us for our works thus far, see below.

"Your hard work in the area of safety, has be recently been recognised by the SCIRT Safety Leadership Team and your efforts are much appreciated.

It's especially pleasing to hear of Drain Surgeons commitment to the timely and thorough reporting of near misses & incidents on the CCTV programme. The positive way you dealt with the hose joint issue - an unidentified hazard shared by contractors across the CCTV programme with the potential for serious harm is acknowledged"

Drain Surgeons strive to continuously improve procedures and practices ensuring the highest of standards are carried out at all times in an aim to raise the health and safety standards across the CCTV industry. We believe that safety conversations and reporting are a major tool to be used within the company and ensure transparency across all incidents to allow them to be recognised and used to identify hazards or unsafe conditions before they become a serious issue.

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