

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.

Christchurch Natural Disaster Response and Recovery presentation

Story: Asset Assessment

Theme: Programme Management

A PowerPoint presentation made for the Water Services Association of Australia conference about SCIRT's approach to asset investigation after the Canterbury earthquakes of 2010 and 2011.

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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WATER SERVICES
ASSOCIATION OF AUSTRALIA

Christchurch Natural Disaster Response & Recovery

John Moore, Manager Planning and Delivery, 3 Waters and Waste

WATER SERVICES ASSOCIATION OF AUSTRALIA_VISION & OUTCOMES TO 2030

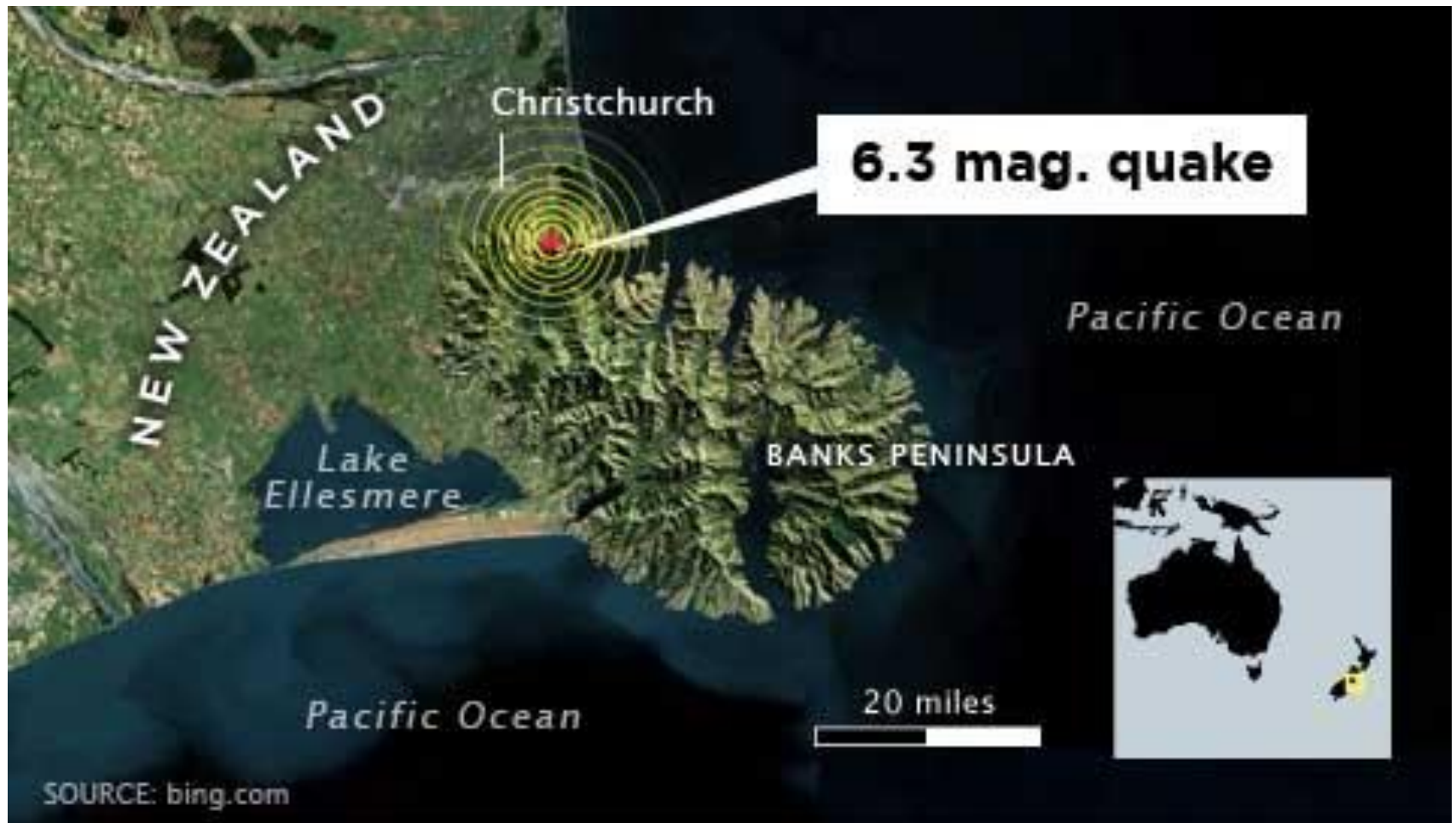
CUSTOMER DRIVEN, ENRICHING LIFE

2030

AECOM

ch2m.
SM

Christchurch February 2011



Introduction & LP Context

- Location: Christchurch City Council, New Zealand.
- Size: Population 360,000, 1600km gravity sewer pipes and 900km of gravity stormwater pipes.
- Scope: Pipe Assessment Waste water and stormwater pipes.

• Key: business drivers:

1. Good quality information.
2. Sufficient information available to allow designers to commence work.
3. Getting information on time.

Post the M6.3 earthquake of February 2011, near Christchurch city centre, the Stronger Christchurch Infrastructure Rebuild Team (SCIRT) was formed as an alliance contract of 3 funding agencies and five contractors.

SCIRT needed to:

- Decide what criteria to use to assess the condition of assets.
- Agree investigation tools to collect asset condition data.
- Store, analysis and make information available to designers and asset owners.

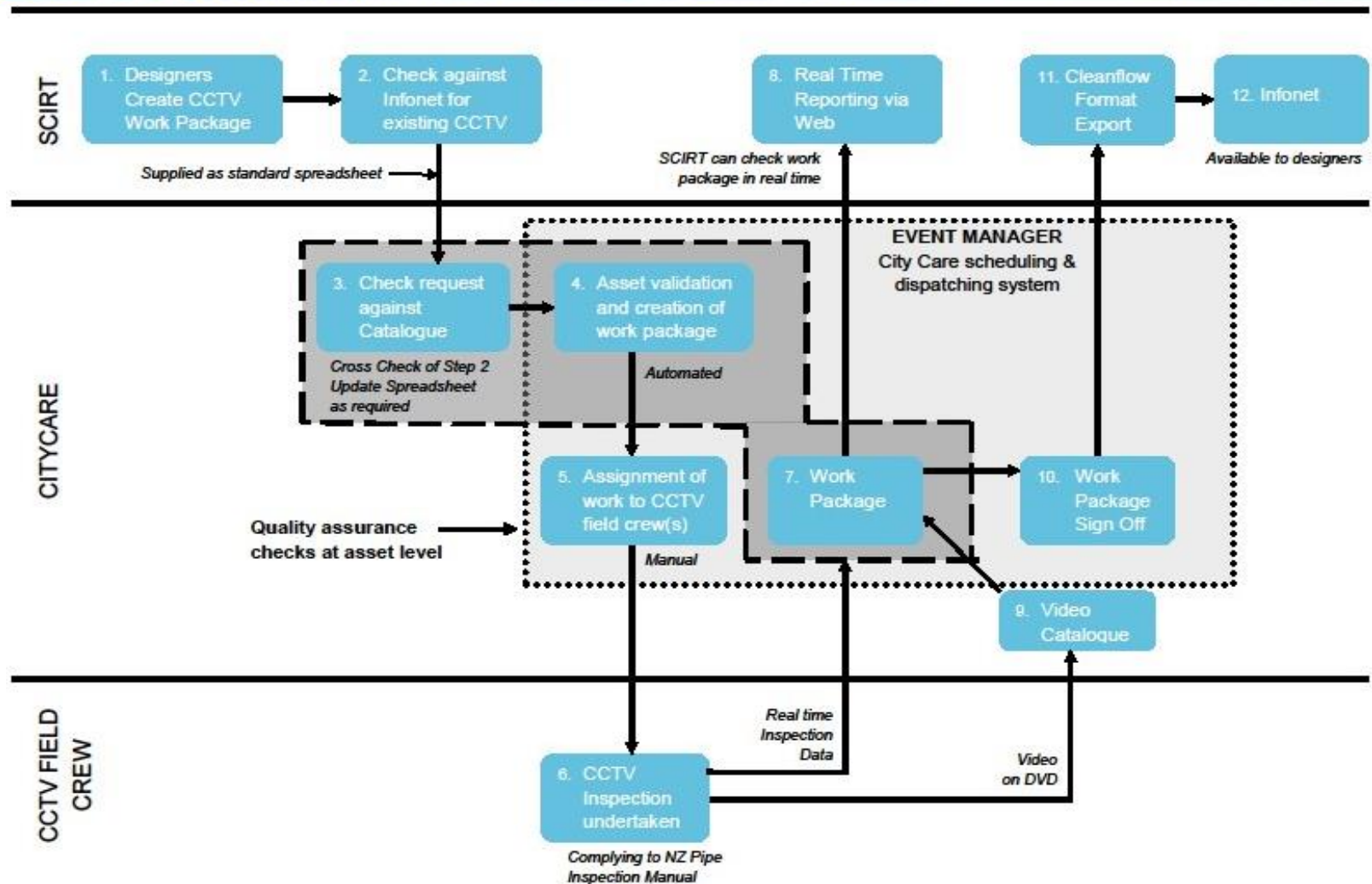
Establishing Condition of the Asset



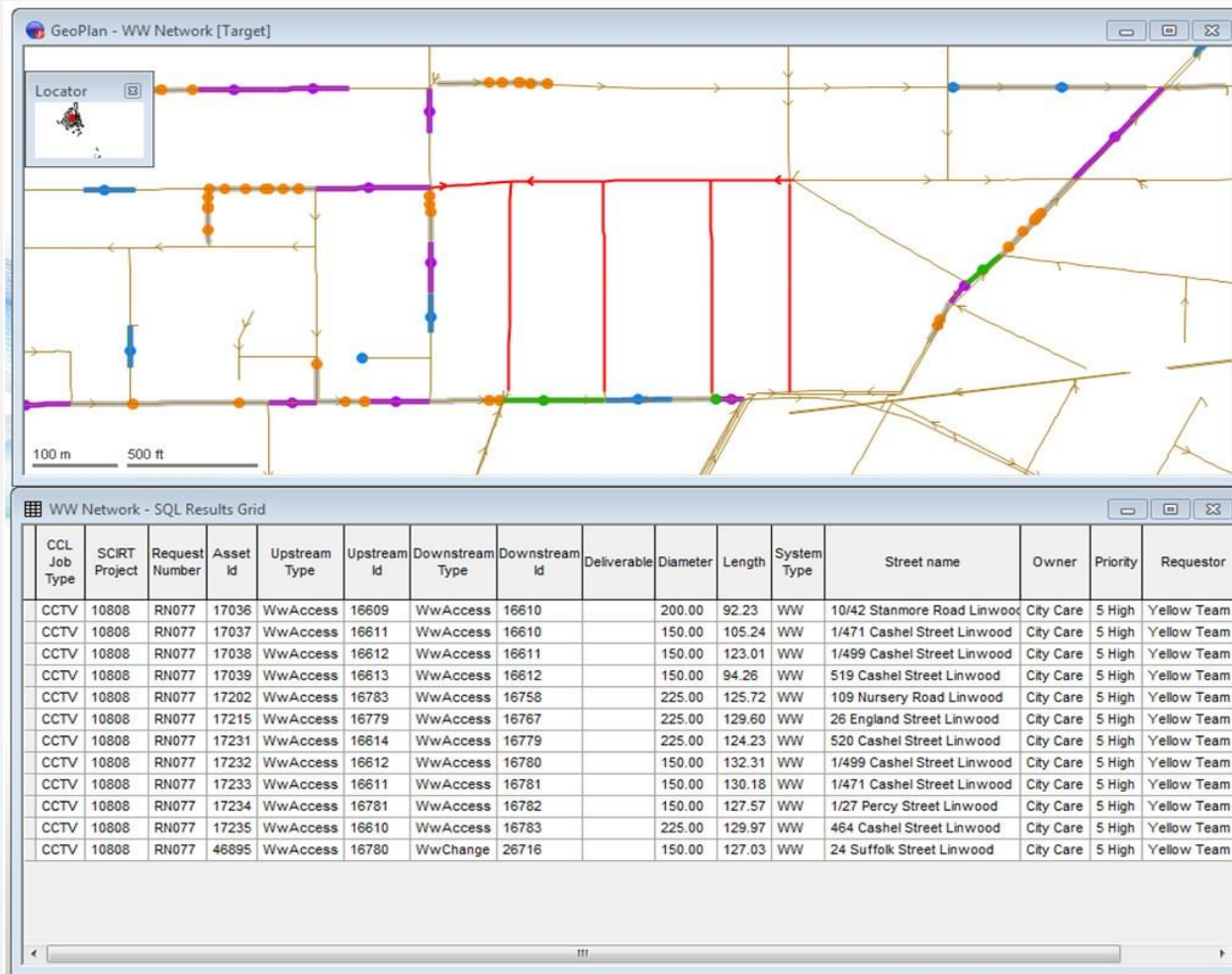
Condition assessment logistics



CCTV – What we developed (3 months)



Scheduling CCTV, Pole Cam and Profilometer surveys



- Scheduling surveys in work packages
 - Pole Cam
 - CCTV
 - Profileometer
- Automation of export to the City Care in house online
- CCTV logging system
- Tracking of package progress and geographic display

Key Outcomes

- Consistent information that could be relied on
- Sufficient information to produce designs
- Systems in place to allow access to information
- Good as built information



Top lessons learnt

- Cost of CCTV very high post earthquake.
- QA of CCTV
- Implement systems early to limit escalation.
- Monitor contractor performance (especially in no risk contracts).



Questions?

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