Rebuilding the streets of Kaiapoi after the Canterbury Earthquake (s)

Jeanette Ward – IPENZ Transport Conference 2011

Today
- The earthquake (4 September)
- The road damage
- The recovery team & process
- Funding the rebuild
- Scheme design & consultation
- Design outcomes so far
- Conclusions
- Engineers role in the recovery

The earthquake (4 Sept)

The damage
The damage

The infrastructure recovery unit

- Asset Unit
- Community Services
- Planning
- Parks
- The Streetscape Team
- Sewer and water
- Stormwater
- Lane Rehabilitation
- Governance

United parties
- EDC
- DOC
- Contractors
- Regional Recovery HQ
- Funding

External parties

The recovery team at the Hub

The recovery process

- Damage Assessment
- Scheme Design
- Streetscape Plan for each area
- Detailed design
- Procure the works (state based)

Global Consents and prepare Environmental Management Plans
- Oct 2010 to March 2011

- Build it!
- Replace sewer
- Demolish houses
- Remediate land
- Build perimeter walls
The recovery areas

Funding (~ $15mill)
- Damaged roads
  - NZTA Emergency Reinstatement Funding (~ 80-90%)
  - Council existing budgets/rates increase (~ 10-20%)
- Opportunities within and adjacent to damaged roads
  - Council Minor Improvements, Drainage renewals etc

Assessing the damage
- Kerb and channel - Topo survey and water tanker
- Pavement – Falling weight deflectometer (FWD)

Scheme design approach
- Why not rebuild as it is now? PROSPERITY!
- How to tackle this given not all damage known?
- Need to be flexible so new will fit with old
- Asset management considerations
- Walking and Cycling Strategy etc
- Town Centre project
Consultation approach

- Issues with timing— in the right headspace?
- Consultation / information overload?
- Absentee residents because house damaged
- Decided to engage as much as possible

Scheme design – East area

- Test the proposed Selwyn District local road hierarchy
- Ask the people what they want at Street Ideas BBQs (next slide)
- Develop typical design template for each street type
- Apply template once extent of damage known
- Good alignment with NZS 4404
Scheme design – East area

- Asked for preference on ideas for different road types

Consultation feedback

- People embraced the chance to be involved
- Education opportunity at Street Idea BBQs
- Desire to address issues through rebuild
  - Sense of ‘place’ – liveability
  - Speed
  - Severance
  - Walking and cycling environment
  - Lots of mobility scooters
- Allowed design objectives to be set
- Input to ‘Streetscape Plans’

Design outcomes so far

- Reinforce low speed environment – narrower roads, better intersections, traffic calming features
- Future proofing potential bus routes and 40km/h speed limit zones, neighbourhood gateways
- Potential link between cul de sac and Kirk St

Design outcomes so far

- Off road cycle paths - better access to schools
Conclusions

- Very rare opportunity to rebuild on such a scale
- Required fast track process – consider risks
- A template approach worked well for Kaiapoi East
- Consulting on concepts rather than detail gets better buy-in
- Key opportunities - addressing speed, better walking & cycling environment, accessibility and attractive streets

Transport Engineers role in the recovery

- Leadership roles?
- Work with other disciplines
- Technical direction - advise
- What about the IPENZ Transportation Group?
- Watch this space!

Any questions?

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