An overview of quarry and tsunami response planning for road operations

REAAA Roadshow – 18th August 2017

Richard Mowll
Presentation overview

- NZTA Quarry plans
- WREMO earthquake road prioritisation plan
- NZTA-led tsunami ‘road block’ plan
NZTA Quarry plans
The organisations that have signed up to this Memorandum of Understanding (MoU) agree to the following:

1. Coordination
   - Each signatory to this MoU will have their own emergency response plan.
   - In the event of a failure (collapse) of the State Highway 1 Otaki River Bridge, from an event such as an earthquake, storm or tsunami event, each organisation:
     - will appoint a specific person for coordinating activities with other parties to this MoU.
     - Be in contact with the organisations to this MoU, as required.
   - NZTA and Kiwirail will coordinate overall activities with CDEM, specifically the Lifelines Utilities Coordinator.

2. The New Zealand Transport Agency (NZTA) will:
   - In the event of an emergency, provide specific instructions regarding the strategy for actions relating to the State Highways.
   - NZTA’s ‘Network Contractor’ will:
     - Negotiate terms with any organisations that will perform physical work on the State Highway network.
     - Apprise, as for any subcontractor on the State Highway, the works of that subcontractor.

3. Kiwirail will:
   - In the event of an emergency, outline its strategy for works, including whether encroachment onto the rail corridor is acceptable, and if so, under what conditions.

4. It is suggested that anticipated/likely actions of the various organisations are:
   - Winstone Aggregates will contact the NZTA Network Maintenance Contractor to liaise on works as a potential subcontractor.
   - Stresscrete will contact the NZTA Network Maintenance Contractor to liaise on potential supply of culvert sections for the construction of a causeway. On demolition of the causeway, the NZTA Network Maintenance Contractor will consider re-use or removal to the Stresscrete yard of the culvert sections.

5. Reviews of this plan:
   - This MoU will be reviewed, with the respective signatories, every two years.
   - Reviews of this MoU will be coordinated by the NZTA.

6. Organisational structure
   - The organisational structure in an emergency is as shown below. No other contractual or operational arrangements should be made in an emergency situation until the structure below is confirmed or adapted, as confirmed by the senior staff at each organisation.
WREMO earthquake road prioritisation plan
Wellington Region – major earthquake road response plan

Response Memoranda of Understanding (plans) – locations, resource and likely 'zones of influence'

DRAFT

- Otaki River MoU (Winstone Aggs and Strescrete)
- Transmission Gully plant/equipment (no MoU exists)
- Porirua area (no MoU exists, however Downer, Higgins Concrete and Spicer's Landfill may have available plant)
- Ngauranga MoU (Kiwit Point Quarry, Allied & Higgins Concrete & Downer)
- Horokiri MoU (Horokiri Quarry)
- Hutt Valley MoU (Dry Creek and Belmont Quarries)
- Seaview Marina MoU (Winstone Aggs Sandcrete)

See overleaf for activation plan/actions overview
Road prioritisation – EXAMPLE – major earthquake scenario
Road prioritisation – EXAMPLE – major earthquake scenario
NZTA-led tsunami ‘road block’ plan
Tsunami DISTANT
SOURCE road block MoU
Conclusions / thoughts...

- NZTA Quarry plans – ‘quick’ means of setting expectations on emergency responses
- WREMO earthquake and road prioritisation plan – VERY scenario specific, but necessary for specific earthquake planning
- NZTA-led tsunami ‘road block’ plan – detailed planning required between stakeholders...
Questions?

richard@mowll.com