

To: Minister for Canterbury Earthquake Recovery



IN CONFIDENCE

INITIAL PROCUREMENT OF ROCKFALL PROTECTION SYSTEMS FOR THE PORT HILLS

Date	08 May 2012	Priority	High
Report No	MI12/0371	File Reference	

Action Sought

		Deadline
Hon Gerry Brownlee <i>Minister for Canterbury Earthquake Recovery</i>	Sign and lodge this Cabinet Paper with the Cabinet office	17 May 2012

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1st Contact
Diane Turner	General Manager – Strategy, Planning & Policy	Withheld under section 9(2)(a)	<input checked="" type="checkbox"/>
John WA Scott	Senior Advisor - Strategy, Planning & Policy		<input type="checkbox"/>

Minister's office comments

<input type="checkbox"/> Noted <input type="checkbox"/> Seen <input type="checkbox"/> Approved <input type="checkbox"/> Needs change <input type="checkbox"/> Withdrawn <input type="checkbox"/> Not seen by Minister <input type="checkbox"/> Overtaken by events <input type="checkbox"/> Referred to	Comments
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CANTERBURY EARTHQUAKE RECOVERY: INITIAL PROCUREMENT OF ROCKFALL PROTECTION SYSTEMS FOR THE PORT HILLS

Purpose

1. This paper provides a summary of the proposal to spend up to \$5M to procure some rockfall protection systems for the Port Hills. Please also find attached the draft Cabinet paper associated with this proposal.

Executive summary

2. As a result of earthquakes in 2010 and 2011, parts of the Port Hills are now subject to an increased likelihood of rockfall, cliff collapse and debris inundation. These could be triggered by seismic events or other environmental factors (such as rainfall, frost and erosion).
3. CERA and CCC have commissioned technical reports on risks associated with, and (to some extent) options for managing, rockfall, cliff collapse and debris inundation. Four reports have now been received, which provide a clear picture for the highest risk areas in the Port Hills, and the few remaining reports required for the residential White Zone are due by end-May.
4. For rockfall areas, fences appear to be more cost-effective than retreat in protecting lives and critical infrastructure in at least some cases. For areas subject to significant cliff collapse and debris inundation, a retreat zone may be the best approach, as mitigation measures would likely be costly, unsafe to implement and of limited effectiveness.
5. It would be highly desirable for procurement of required materials to commence expeditiously. A long lead time is required to complete fences: the manufacturing, delivery and installation of one kilometre of fencing takes 2-3 months (and if a significant length of fence line is required then the elapsed time involved could be large).
6. Starting the procurement process early would ease future pressures significantly by testing CCC and CERA procurement and installation processes, and would allow residents to return to their properties earlier than would otherwise be the case.
7. We recommend that you seek authority from Cabinet to spend up to \$5M to procure materials (and incur associated costs) to allow the installation of rockfall protective systems in the Port Hills. CCC has indicated to CERA that it will match central government funds with its own \$5M contribution towards this initiative. (Note that the paper is seeking the ability to spend up to \$10M through an appropriation – with that \$10M being evenly split between the CCC and the Crown.)
8. CERA and CCC officials are undertaking a detailed study of Avoca Valley in the Port Hills. While Avoca Valley may not be the eventual pilot location, it presents a favourable comparison between the cost of fences and the likely reduction of life risk, vis-à-vis the capital value of affected properties and current risk levels.
9. Should Cabinet agree, this would be a delegated authority for yourself and the Minister of Finance to exercise, if you were convinced that expenditure in this area were desirable.

Consultation

10. Treasury, The Christchurch City Council, The Department of Building and Housing, The New Zealand Transportation Agency and the Department of the Prime Minister and Cabinet (DPMC) were provided with a draft of this paper.

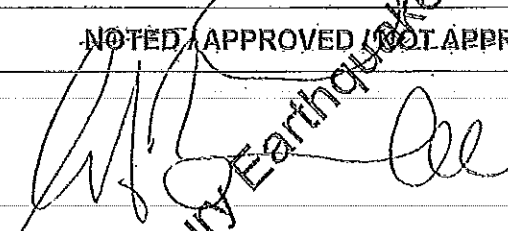
Recommendations

11. It is recommended that you:

1.	Sign and lodge this Cabinet Paper with the Cabinet office by Thursday 17 May.	Yes / No
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Diane Turner
General Manager – Strategy, Planning
and Policy

NOTED APPROVED NOT APPROVED

Hon Gerry Brownlee Minister for Canterbury Earthquake Recovery
Date: 07/05/2012

Released by the Minister for Canterbury Earthquake Recovery

Office of the Minister for Canterbury Earthquake Recovery

Chair, Cabinet Committee on Canterbury Earthquake Recovery

CANTERBURY EARTHQUAKE RECOVERY: INITIAL PROCUREMENT OF ROCKFALL PROTECTION SYSTEMS FOR THE PORT HILLS

Purpose

- 1 This paper seeks Cabinet agreement to commence the procurement of rockfall protection systems for the Port Hills, subject to agreement from the Minister of Finance and the Minister for Canterbury Earthquake Recovery.

Background

- 2 As a result of earthquakes in 2010 and 2011, parts of the Port Hills are now subject to an increased likelihood of rockfall, cliff collapse and debris inundation. These could be triggered by seismic events or other environmental factors (such as rainfall and frost).
- 3 Land zoning announcements on 23 June 2011 included "white" areas, which referred to land yet to be assessed (e.g., the Central Business District (CBD), Port Hills, and Banks Peninsula) as well as non-residential land outside the CBD that will not be assessed.
- 4 On 5 September 2011, the Minister for Canterbury Earthquake Recovery announced that 9,700 properties were zoned from white to green, leaving 3,700 properties in the Port Hills White Zone. On 19 December 2011, it was announced that a further 1,600 properties had been zoned from white to green, leaving 2,100 residential properties in the Port Hills White Zone.
- 5 In order to protect life in the short term, the Christchurch City Council (CCC) has placed section 124 (s124) Building Act notices on approximately 530 properties to prohibit entry (and habitation) of dangerous buildings. Most of these are in the White Zone.

Process and Progress thus far

- 6 The Canterbury Earthquake Recovery Authority (CERA) and the CCC have commissioned a series of technical reports on risks associated with, and (to some extent) options for managing, rockfall, cliff collapse and debris inundation. Although this series of reports is not yet complete, they provide invaluable information on future likelihood of rockfall, cliff collapse and debris inundation in the Port Hills, as well as estimating annual individual fatality risk (i.e. risk to life) from these hazards. The results received to date suggest that in some areas, there is a relatively high risk to life, implying the consideration of some form of policy response.
- 7 For rockfall areas, protection systems in the form of protective fences appear to be more cost-effective than retreat in protecting lives and critical infrastructure in at least some cases. The analysis behind this is not yet fully complete so this conclusion should be seen as an initial viewpoint only. For areas subject to significant cliff collapse and debris inundation, a retreat zone may be the best approach, as mitigation measures would likely be costly, unsafe to implement and of limited effectiveness.
- 8 It is anticipated that by 30 June 2012 it will be possible to make final Port Hills zoning decisions (with the potential exception of those relating to properties at risks from landslips). This will provide property owners in rockfall and cliff collapse areas with a

high level of certainty regarding their future. Further consideration is being given to options relating to properties affected by landslips (full geotechnical information for landslips will not be available by the end of June).

Comment

- 9 CERA and CCC are working together to determine the best approach to Port Hills rockfall hazard management. At this stage, **it appears likely that constructing rockfall protection systems will be appropriate in some instances**, taking into account factors such as engineering feasibility and cost-effectiveness.
- 10 The analysis required must also take into account broader factors such as whether insurance companies are likely to cover properties behind protective fences, whether the CCC feels sufficiently comfortable with the protection provided to lift any s124 notices on properties, and whether building consents will be issued for properties behind the fences. It is important to note that rockfall fences will not remove all risk, but can substantially reduce risk, based on the strength and height of the fence.
- 11 Assuming that the results of this work support building at least some rockfall fences, it would be highly desirable for procurement of required materials to commence expeditiously. A long lead time is required to complete fences: the manufacturing, delivery and installation of one kilometre of fencing takes 2-3 months (and if a significant length of fenceline is required then the elapsed time involved could be large). Especially if it turns out that a significant length of protective fenceline is required, starting the procurement process early would ease future pressures and would allow residents to return to their properties earlier than would otherwise be the case. (As part of any procurement arrangements, some providers have indicated that the Crown may be able to negotiate with suppliers for the return of any unused materials.)
- 12 In addition to the inconvenience and frustration associated with property owners being unable to enter their properties, there are real costs involved. Of the (roughly) 530 property owners with s124 Building Act notices, approximately 350 are unable to live in their homes due to rockfall risk. In the 12 months following the 22 February 2011 earthquake, the majority of insured property owners with s124 Building Act notices had access to temporary accommodation allowances from their insurance providers. In most cases this allowance has now expired, and the only financial support property owners can access is the Canterbury Earthquake Temporary Accommodation Service (CETAS), which provides approximately \$300 per week (\$15,000 per year) to eligible recipients. This situation has placed many homeowners in financial difficulty.
- 13 I am seeking authority from Cabinet to spend up to \$5 million to procure materials (and incur associated costs) to allow the installation of rockfall protective structures. Should Cabinet agree, this would be a delegated authority for myself and the Minister of Finance to exercise, if we were convinced that expenditure in this area were desirable. CCC has indicated to CERA that it is willing to contribute half of this amount. We will ensure there is full consideration of the relevant issues (such as long-term ownership of, and responsibility for, the fences), and appropriate discussions with the CCC.

Issues yet to be Resolved

- 14 Assuming that the initial analysis is confirmed and that it is appropriate to build protective fences in at least some parts of the Port Hills to reduce risks associated with rockfall, there are a number of issues to be addressed. These include (inter-alia):

- Who should pay for, and who should be responsible for, the construction maintenance and repair of the fences?
 - Who assumes long-term ownership of the fences?
 - Where it is appropriate to build the fences on private land, should that land be acquired, or should an interest in the land such as an easement be acquired?
 - Whether any explicit provisions to manage any liabilities that might arise are made to protect various parties in the event that the protective structures fail?
- 15 In some cases, the answers to these questions appear to be relatively clear-cut. For example, CERA will not exist as a permanent entity so long-term maintenance most realistically would be the responsibility of the CCC. Associated with that long-term maintenance most likely would be long-term ownership of any fences that are built. At the other end, it may be appropriate to utilise the skills and expertise in CERA's operations teams to assist in the construction of any fences that are needed.
- 16 One weakness of gaining the ability to spend money at this point is that these issues have not yet been worked through. I am heartened however by the indication from CCC that they will match the Crown contribution in this case. I am also heartened by the co-operative spirit with which CCC and CERA officers and officials are working together in this complex area.

Consultation

- 17 The CCC, the Treasury and New Zealand Transport Agency were consulted in the preparation of this paper. The Department of the Prime Minister and Cabinet were informed.

Financial implications

- 18 I am seeking to spend up to \$5 million for the procurement of rockfall protection systems in the 2011/12 financial year to be funded from the Canterbury Earthquake Recovery Fund. These costs are proposed to be shared with CCC, with each party contributing \$5 million.

Human rights, gender and disability implications

- 19 There are no human rights, gender or disability implications associated with the proposals in this paper.

Legislative implications, regulatory impact analysis and Publicity

- 20 There are no legislative implications arising from the proposals in this paper, and no publicity is planned. A regulatory impact analysis is not required.

Recommendations

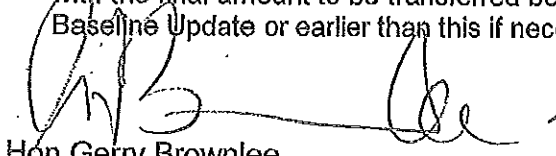
- 21 It is recommended that Cabinet:

1. **note** that it appears that the appropriate policy response in the Port Hills white zone will involve a mix of green zoning some properties, retreat from some unsafe land, and the construction of rock fall protection structures (fences) in at least some areas;
2. **note** that analysis on the Port Hills white zone is not yet complete but that in the event of decisions being made to build fences early procurement of materials is desirable;
3. **agree** to fund the initial procurement of rockfall protection systems for the Port Hills, to a total value of \$5 million;
4. **authorise** Joint Ministers being the Minister for Finance and the Minister for Canterbury Earthquake Recovery to make final decisions on whether to proceed with this procurement;
5. **note** that the costs above are proposed to be shared evenly between the Christchurch City Council and the Crown, should expenditure be incurred;
6. **agree** to establish a new Non-Departmental Other Expense appropriation "Procurement of Rockfall Protection Systems" with this appropriation to be the responsibility of the Minister for Canterbury Earthquake Recovery;
7. **agree** that the scope of this appropriation be "This appropriation is limited to costs associated with the procurement of rockfall protection systems for the Port Hills.";
8. **approve** the following changes to appropriations to provide for the decision in recommendation 3 with a corresponding impact on the operating balance:

Vote Canterbury Earthquake Recovery Minister for Canterbury Earthquake Recovery	\$m – increase/(decrease)				
	2011/12	2012/13	2013/14	2014/15	2015/16& Outyears
Departmental Other Expense: Procurement of Rockfall Protection Systems	5.000	-	-	-	-

9. **agree** that the proposed changes to appropriations in recommendation 8 above for 2011/12 be included in the 2011/12 Additional Supplementary Estimates and that, in the interim, the increase be met from Imprest Supply;
10. **agree** that the funding be met from the Canterbury Earthquake Recovery Fund established as part of Budget 2011; and

11. **authorise** the Minister for Finance and the Minister for Canterbury Earthquake Recovery jointly to transfer any underspend in the Non-Departmental Other Expense Procurement of Rockfall Protection Systems from 2011/12 to 2012/13, with the final amount to be transferred being confirmed as part of the 2012 October Baseline Update or earlier than this if necessary.



Hon Gerry Brownlee
Minister for Canterbury Earthquake Recovery

11/05/2012

Released by the Minister for Canterbury Earthquake Recovery