10 May 2013

Hon Gerry Brownlee
Minister for Canterbury Earthquake Recovery
Parliament Buildings
WELLINGTON

Dear Minister Brownlee

In response to your queries following our meeting on Thursday 2 May 2013, please find attached:

- The minutes for the Port Hills Zoning Review Advisory Group meeting held on Friday 10 May 2013,
- A table outlining responses to your queries, raised in the meeting that I had with you on Thursday 2 May 2013.

The majority of queries raised were answered in the tables prepared in response to your letter of 12 March 2013. A small amount of additional information to provide clarity on issues raised at our meeting is provided in the final column of the table.

A further matter that the Advisory Group would like to clarify is in relation to the Group's approach to Crown and Council owned land. At its meeting the Group clarified its position and this is included in the minutes.

I would be happy to meet with you to brief you further on our response, if you think this would be helpful.

Yours sincerely

Keith Turner

CHAIR

PORT HILLS ZONING REVIEW ADVISORY GROUP

Released by the Minister for Canterbury Earthquake Recovery

Minutes

eleas



Meeting Friday 10 May 2013

Port Hills Zoning Review Advisory Group

Meeting	Participants
Friday 10 May 2013, 7.45am – 8.45am CERA offices, Christchurch Conference phone meeting Withheld	 Dr Keith Turner - Independent Chair (phone) Diane Turner - Deputy Chief Executive, Recovery Strategy, Planning and Policy, CERAD Kevin Locke - General Manager, Capital Programme, CCC (phone) David Jennings - Independent Geotechnical Engineer (phone) Patricia Noble - Senior Legal Advisor, CERA Attendees: Inder section 9(2)(a)
Introduction	- David Corlett – CERA The Chair opened the meeting and noted the purpose of the meeting was to discuss the following: • The additional information requested following his meeting with Minister Brownlee.
	 Further explanation around the Group's approach to Crown and Council owned properties The feedback from a Group member on the Gondola property on Bridle Path Road.
Additional information requested	A table was supplied prior to the meeting with draft answers to the queries. The Group worked through the table and agreed on the content, subject to discussed changes to be made by the secretariat.
	The Group agreed that there were no changes to its recommendations as a result of the queries.
Crown / Council owned properties	Prior to the meeting an explanation of the Group's approach to Crown and Council owned properties was circulated. The Group agreed that the general approach is as set out below:
	Unlike the flat land, for which an area wide approach was adopted, zoning decisions for properties in the Port Hills were made on an individual basis with the key consideration being life safety risk.
	The Port Hills area considered by the Advisory Group encompasses a number of Crown and Christchurch City Council owned properties interspersed among those in private ownership. The Group adopted as one of its guiding considerations the position that Crown and Council land should generally be recommended for green zoning. This is because most of those properties are non-residential (typically unoccupied land such as recreation reserves and infrastructure sites); whereas the GNS modeled life safety risk areas assume residential use.
	The guiding consideration referred to above is consistent with the Cabinet minute of 14 November 2011 [CAB Min (11) 41/10 refers] which "noted that

Minutes

Meeting Friday 10 May 2013



Port Hills Zoning Review Advisory Group

white (unzoned) non-residential properties in greater Christchurch, including... non-residential properties in the Port Hills and Lyttelton... can be zoned green to enable normal insurance and consenting processes to be used to determine where rebuilding and/or repairs can occur."

In almost all cases, therefore, the Group has applied the guiding consideration and recommended that Crown and Council owned properties are zoned green. This is because the Council and Crown owned properties in the Port Hills are not residentially owned.

For a few Crown and Council owned properties, the Group made a deliberate exception because it considered the level of life safety risk was more akin to that for privately-owned residential dwellings than for other (i.e. non-residential) Crown and Council owned properties. An example of this is the retirement village at 2 Truro Street: although the property is Council owned, the Group has recommended that it be zoned red. For this property the Group applied the Cabinet-agreed criterion that a rock roll affected property zoned for residential use would typically be recommended for red zoning if the dwelling was entirely within or substantially intersected by the 1 in 10,000 2016 Annual Individual Fatality Risk line as defined by GNS Science.

The Group did not carry out the review on the basis of ownership, and has not carried out an exhaustive search to identify all Crown and Council owned properties, and has no plans to do so. As a result, there may be other properties where the Group was unaware a red-zoned property is Crown or Council owned.

The Gondola at 10 Bridle Path Road

The Group noted that on 5 April they supplied information that the property on which the Gondola is located was owned by Christchurch City Council. Group member Patricia Noble brought to the Group's attention that this information was incorrect.

There are two property addresses (one commercial and one residential) on the land, which is comprised in one certificate of title. The Group confirmed the green zoning. The residential dwelling located at this site is not affected by the 1 in 10,000 at 2016 risk line, and the Group noted the Gondola itself has had treatment works (including the installation of rock roll protection structures) and reopened.

The Group agreed that Appendix A should read as follows:

Linkage to criteria: The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 risk levels as per the GNS Model

Guiding Consideration. Not applicable - see criterion"

Additional information: The dwelling on this property is outside the life safety risk line".

					red.					
					are drawn sensibly, 2 Avoca Valley Road and 275 Port Hills Road met the criteria to be zoned					
Recover	arthquake Recove	rbury E	Cante	or for	for this location, and the Group's mandate to ensure that boundary lines	the	0	(1)	6	
		***************************************			Due to inconsistency in the GNS Science model		The second secon			
The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to these properties.	GNS has advised that the rock roll model understates the life safety risk to this property and the property is in an elevated life risk area. Following ground truthing and a close examination of the model, it was determined that the dwellings at 4A, 4B and 6 Avoca Valley Road are exposed to an Annual Individual Fatality Risk of 1 in 10,000 or greater in 2016.	Not applicable – see criterion.	The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 levels as per the GNS model.	Noted that risk line understated around properties. 6, 4A, 4B, 2, and 275. Need to make sure minutes are clear on this point.	Following a close examination of the GNS Science rock roll model it was determined that the dwellings at 4A, 4B and 6 Avoca Valley Road are exposed to an Annual Individual Fatality Risk of 1 in 10,000 or greater in 2016.	Rec: Green >	Avoca Valley	ത	Avoca Valley Road	N
The property that has asked for a review is 2 View Terrace.	Not relevant to this query.	Not relevant to this query.	Not relevant to this query.	What is the number of property, as it is unclear on the map?		Remain Green	Centaurus Road	ω	2 View Terrace) <u> </u>
Supplementary information provided post 2 May	Additional information supplied 5 April	Guiding consideration	Linkage to criteria	Query	Reasons as per Minutes supplied 5 April	Recommended zoning	Area	p Ma	Address	
	Requested At Meeting 2 May 2013	mation Requested At N	Table 1: Port Hills Zoning Review Advisory Group: Supplementary Information	dvisory Group:	tills Zoning Review A	Table 1: Port				

					red.				
e Recove	arthquake	rbury I	r Canterb	er fo	A Avoca Valley Road and 275 Port Hills Road met the criteria to be zoned	y the	0	30	69
The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to these properties.	This property has been recommended for red zoning, consistent with the Group's mandate to ensure that zoning boundaries are drawn sensibly.	Not applicable – see criterion.	The zoning of this property is an anomaly because the boundary lines have not been drawn sensibly.		Following a close examination of the GNS Science rock roll model it was determined that the dwellings at 4A, 4B and 6 Avoca Valley Road are exposed to an Annual Individual Fatality Risk of 1 in 10,000 or greater in 2016. Due to inconsistency in the GNS Science model for this location, and the Group's mandate to ensure that boundary lines are drawn sensibly.	Rec: Green > Red	Avoca Valley	თ	2 Avoca Valley Road and 275 Port Hills Road
Supplementary information provided post 2 May	Additional information supplied 5 April	Guiding consideration	Linkage to criteria	Query	Reasons as per Minutes supplied 5 April	Recommended zoning	Area	p Ma	Address
	A J 156 15 15	Cuiding	commended Doctors of the Commended Doctors of	0	ם אפרים	Recommended	\dashv	No.	ddress

-		The state of the s	
Valley	T	4 26 and 26A Bridle Path Road	Address
Ö		ω	Ma
Valley	d by	Bridle Path Road 1	Area
Green v		Remain Green	Recommended zoning
This property is owned by CCC.			commended Reasons as per Query Linkage to criteria Guidir Consider April
Why is rezoning from red to green recommended?	er for	Why are 26 and 26A recommended to remain green when surrounding properties are red?	Query
See Guiding Consideration.	Cante	The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 levels as per the GNS model.	Linkage to criteria
All Crown and CCC land be recommended for green zoning.	rbury E	Not applicable – see criterion	Guiding consideration
Nane requested or supplied.	arthquake	26: None requested or supplied 26A: The dwelling on this property is outside the life safety risk line	Additional information supplied 5 April
Crown and CCC land is generally recommended for green zoning. This property is not residential. This property provides access to 70A Morgans Valley (which is also owned	Expert advice provided to the group indicated that this is not the case for 26 and 26A Bridle Path Road. The dwellings at 28 and 28A Bridle Path Road are impacted by the risk lines.	The property at 26 is entirely outside the risk line. The property at 26A is impacted by the risk line, but the dwelling is not. The titles of 24 and 28 Bridle Path Road include access ways which border 26 and 26A, but are well outside the risk boundary. The Minutes say the dwelling at 24 Bridle Path Road is clipped by the 1 in 10,000 2016 AIFR line as defined by GNS science risk modelling. The Group accepted the expert advice that the model is slightly anomalous in this instance, and the risk to occupants may be higher.	Supplementary information provided post 2 May

						Cabinet.					
he top of to the (cliff top s s not to the cliff os s s not to the cliff os s not top	This property sits at the top of a cliff and is exposed to the risk of cliff recession (cliff top collapse). The cliff was not included in the GNS cliff collapse model and is exhibiting significant instability. 2/51A and 51C are cross-leased properties.	Group indicated that this property is exposed to the potential-for immediate land damage with an associated risk to life as a result of the earthquakes. A loess (soil) cliff affects this property which has significant land cracks. In addition to earthquake induced land damage a significant rainstorm could cause collapse. GNS did not include this area in their models because it was not assessed as being a former coastal cliff (a key criterion for inclusion).	Where properties did not strictly meet the red zoning criteria, but the intent of the criteria was met, the Group has recommended that these properties be zoned red.	determined that the infent of the infent of the infent of the following criterion had been met: There is the potential for immediate cliff collapse as assessed by GNS caused or accentuated by the Canterbury earthquakes with associated risk to life.	viny is rezoning from green to red recommended? Is it due to mass land movement and the absence of a defined geotechnical model, and hence a real life safety risk if further failure occurs?	expert advice indicated that this property is exposed to the potential for immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the intent of the red zoning criteria	Red The	MI Pleasailt		St Andrews Hill Road CO	
S S S S S S S S S S S S S S S S S S S	Crown and CCC land is generally recommended for green zoning. This property is not residential. This property provides access to 70A Morgans Valley (which is also owned by CCC). Expert advice provided to the Group indicated that the GNS model overstates the risk to this property as it doesn't sufficiently reflect variation in the local topography. This property partially sits on higher ground than the adjacent red-zoned property at 56 Morgans Valley.	None requested or supplied.	All Crown and CCC land be recommended for green zoning.	See Guiding Consideration.	54 is recommended to be rezoned from red to green. Need to explain the information the Advisory Group took into account.	This property is owned by CCC.	Rec: Red > Green	Morgans Valley	10	54 Morgans Valley *note this property is also in table 2 below.	o o
rmation	Supplementary information provided post 2 May	Additional information supplied 5 April	Guiding consideration	Linkage to criteria	Query	Reasons as per Minutes supplied 5 April	Recommended zoning	Area	РМа	Address	
		reducated or meeting a may acre				0 400 000 000 000 000 000 000 000 000 0	The second of the second of the second			North Control of the	T

¹ Note this property was incorrectly referred to in Appendix B supplied on 5 April as 2/51 St Andrews Hill Road (an address point which does not exist).

222	Address	10 76 McCormacks Bay Road												T.	N.	н	r.	н	*
3	Ma p	14													4				
A	Area	Maffeys Road																	
Table 1: Port H	Recommended zoning	Rec: Green > Red																	
iills Zoning Review A	Reasons as per Minutes supplied 5 April	Further consideration and expert advice	indicated that the	property is exposed	to the notential for	to the botternarion	immediate land	immediate land damage with an	immediate land damage with an associated risk to	immediate land damage with an associated risk to life as a result of the	immediate land damage with an associated risk to life as a result of the earthquakes.	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the intent of the red	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the intent of the red zoning criteria	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the intent of the red zoning criteria agreed to by	immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the intent of the red zoning criteria agreed to by Cabinet.
Advisory Group:	Query	Need to make sure that minutes make	clear why 76	McCormacks	Rd is		recommended	recommended to be zoned	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red	recommended to be zoned red
Table 1: Port Hills Zoning Review Advisory Group: Supplementary Information	Linkage to criteria	The Group determined that the intent of the	following criterion	had been met:	!	There is the	There is the potential for	There is the potential for immediate cliff	There is the potential for immediate cliff collapse or land slip	There is the potential for immediate cliff collapse or land slip as assessed by	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury earthquakes with	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Cantrbury earthquakes with associated risk to	There is the potential to immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury earthquakes with associated risk to life.	There is the potential cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury earthquakes with associated risk to life.	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury earthquakes with associated risk to life.	There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury earthquakes with associated risk to life.
rmation Requested At M	Guiding consideration	Where properties did not strictly meet the	the intent of the criteria	was met, the Group		has recommended	has recommended that these properties	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.	has recommended that these properties be zoned red.
Requested At Meeting 2 May 2013	Additional information supplied 5 April	Expert advice provided to the Group indicated that the property is exposed to the potential for	immediate land damage with an	associated risk to life as a result	of the sealing the	of the earthquakes. The sub-	vertical loess slope immediately	vertical loess slope immediately upslope of this property shows	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as	vertical loess slope immediately upsilope of this property shows signs of ongoing distress (as evidenced by ground cracking),	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is	vertical loss slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is considered to pose a direct life	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is considered to pose a direct life safety risk to occupants. Ground	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is considered to pose a direct life safety risk to occupants. Ground damage is earthquake	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is considered to pose a direct life safety risk to occupants. Ground damage is earthquake exacerbated, though not	vertical loess slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is considered to pose a direct life safety risk to occupants. Ground damage is earthquake exacerbated, though not necessarily earthquake caused.	or the earthquakes. The sub- vertical loss slope immediately upslope of this property shows signs of ongoing distress (as evidenced by ground cracking), suggestive of ongoing ground movement. There is a high possibility of collapse which is considered to pose a direct life safety risk to occupants. Ground damage is earthquake exacerbated, though not necessarily earthquake caused, and mitigation options are
	Supplementary information provided post 2 May	The detail provided in the Minutes and Appendices A	explains the Group's	recommendation in relation to	このでは、これには、日本のでは、日本のでは、日本のでは、日本のできるというできる。	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.	these properties.

Released by the Minister for Canterbury Earthquake Recovery

7.20	7	T	12
Address	4 and 8 Moncks Spur	9	Road Road
p Ma	17	S	5
Area	Redcliffs 2	0	Moncks Bay
Recommended zoning	Rec: Green > Red	the	Rec: Red > Green
commended Reasons as per Query Linkage to criteria Guidir Minutes supplied 5 April Consideration	Further consideration and expert advice indicated that these properties are exposed to the potential for immediate land damage with an associated risk to life as a result of the earthquakes. Accordingly, it was considered that this recommendation is consistent with the intent of the red zoning criteria agreed to by Cabinet.	Minister	The Group agreed that the GNIS Science rock roll model has overestimated the risk for this property. Thus, it is judged that the dwelling on this property is expossed to an Annual Individual Fatality Risk of less than 1 in 10,000 in 2016 due to rock roll.
Query	Not clear why these properties are being recommended to be rezoned red.	er for	Why is rezoning from recommended to green recommended?
Linkage to criteria	The Group determined that the intent of the following criterion had been met: There is the potential for immediate cliff collapse or land slip as assessed by GNS caused or accentuated by the Canterbury earthquakes with associated risk to life.	Cante	The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 risk levels as per the GNS model.
	Where properties did not strictly meet the red zoning criteria, but the intent of the criteria was met, the Group has recommended that these properties be zoned red.	rbury E	Not applicable - see criterion.
Additional information supplied 5 April	The eight metre near vertical loess cliff adjacent to the properties at 4 and 8 Moncks Spur Lane was not included in the GNS model as it generally included sea-cut rock cliffs only. Expert advice provided to the Group indicated that these properties are exposed to the group indicated that these properties are exposed to the potential for immediate land damage with an associated risk to life as a result of the earthquakes. The advice indicated that the loess cliff presented an immediate life safety hazard, caused or accentuated by the earthquakes. In several areas the cliff failed and impacted the dwellings at 4 and 8 Moncks Spur. Remediation of the cliff	would require both buildings to be demolished. On balance, the Group agreed that while the properties did not meet the red zoning criteria, they did meet the intent of the criteria and the risk to life is such that the panel recommended they be rezoned from green to red	Expert advice provided to the Group indicated that the GNS model overstates the life safety risk to this property because it does not take into account the completed treatment of the rockfall source at number 9 Red Rock Lane and the southeastern gully behind number 67A Bay View Road.
Supplementary information provided post 2 May	The properties in question are 4 and 8 Moncks Spur Road. The '4' is missing off the map.	Recove	The rockfall sources identified by the GNS Science model as posing a risk to this property have been modified and treated.

	13	4	55	=	16
Address	6 Red Rock Lane	106, 108 and 112 Wakefield Avenue	1/6 and 8 Finnsarby Place		1 Finnsarby Place
o Ma	18	22	D 23	0	22
Area	Moncks Bay	Wakefield 2	Wakefield 2		Wakefield 2
Recommended zoning	Remain Green	Remain Green	Remain Green	=	Remain Green
ning Reasons as per Query Linkage to criteria Guidir Consider April					
Query	Not clear why 6 is recommended not to change.	Why is the property recommended to stay green when it is intersected by the risk line?	Why is the property recommended to stay green when it is intersected by the risk line?		Why is the property recommended to stay green when it is intersected by the risk line?
Linkage to criteria	See Guiding Consideration	The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 risk levels as per the GNS model.	The annual individual fatality risk associated with the residential dwelling is less than 10,000 at 2016 risk levels as per the GNS model	the GNS model.	The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 risk levels as per the GNS model.
Guiding consideration	See comment under Additional Information	Not applicable - see criterion.	Not applicable - see criterion.	FIDUIY	Not applicable - see criterion.
Additional information supplied seration 5 April	Expert advice provided to the Group indicated that the rockfall source impacting this property is fully contained on the property.	The dwelling on this property is outside the life safety risk line.	Expert advice provided to the group indicates that the GNS model overstates the life safety risk to this property due to the presence of the road. (In most circumstances the presence of a flat area such as a road	carriageway or building platform tends to reduce the rockfall risk for properties located below the flat area.)	The dwelling on this property is outside the life safety risk line.
Supplementary information provided post 2 May	The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to this property.	The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to these properties.	The de Minute and B explair recomithese J	VACOVE	The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to this property.

		17	18	19	20	21
Address		1/104, 2/104 and 106 Sumnervale Drive	Relea	1	37 Ross Terrace	62 Hawkhurst Road
Ma	ס	23	S (27	28	ట	<u>3</u>
Area	1	Sumnervale	Taylors Mistake Road	Hobsons Bay	Endeavour Place	Hawkhurst Road
Recommended	zoning	Rec: Green > Red	the		Rec: Green >	Remain Green
commended Reasons as per Query Linkage to criteria Guidin	Minutes supplied 5 April	Further consideration and expert advice indicated that the GNS Science rock roll model for this area may have underestimated the risk for these dwellings through suburb-wide averaging. The dwellings on these properties are exposed to an Annual Individual Fatality Risk of 1 in 10,000 in 2016 or greater due to rock roll.	atsini M		This property is exposed to an annual individual fatality risk of 1 in 10,000 in 2016 due to rock roll as defined by GNS science risk modelling.	
Querv	Muciy	Why is the property recommended to be rezoned from green to red?	Is the name of the map accurate?	Is the name of the map accurate?	Why is rezoning from green to red recommended , when property to the north (18 Somes Road) is recommended to remain green??	Clarification around recommendation
Linkage to criteria	riinage to ciliena	The annual individual fatality risk associated with the residential dwelling is greater than 1 in 10,000 at 2016 risk levels as per the GNS model.	Cante	The state of the s	See guiding consideration.	The annual individual fatality individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 risk levels as per the GNS model.
	consideration	Not applicable - see criterion.	rbury E		In applying the Port Hills zoning criteria to vacant residential lots the Group exercised judgement in relation to lots intersected by the life safety risk line and applied reasonableness test to achieve a sensible outcome.	Not applicable - see criterion
Additional information supplied	5 April	Expert advice provided to the Group indicated that the model significantly understates risk due to suburb wide averaging and different rockfall sources. The advice indicated that the road between this property and the cliff provides a bench, but the group is not convinced it provides sufficient protection. (In most circumstances the presence of a flat area such as a road carriageway or building platform tends to reduce the rockfall risk for properties located below the flat area but the Group does not consider this to be sufficient for this property.)	arthquake		None requested or supplied.	The dwelling at this property is outside the life safety risk line.
3.50	provided post 2 May	Despite the presence of the road, significant boulders were mapped beyond the risk line.	We think the name accurately reflects the area that the map covers.	We think the name accurately reflects the area that the map covers.	37 Ross Terrace is entirely within the risk zone. The property to the north (18 Somes Road) is Crown/CCC owned. It is a scenic reserve. Crown and CCC land is generally recommended for green zoning as it is not residential.	The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to this property.

	23	23	24
Address	64 Hawkhurst Road	66 Hawkhurst Road	73 Hawkhurst Road* Note: this approperly is not 73 Tunnel Road
ρMa	ω	34	34
Area	Hawkhurst Road	Hawkhurst Road	Road Name of the Road N
Recommended zoning	Remain Green	Rec: Red > Green	Part green and partired (no changes recommended)
Reasons as per Minutes supplied 5 April		This property is exposed to an Annual Individual Fatality Risk less than 1 in 10,000 in 2016 due to rock roll as defined by GNS Science risk modelling.	The property located at 73 Hawkhurst Road Deing the portion of Part RS 266 having the area of 0.4046 hectares more or less, contained in certificate of title CB2C/1236) is exposed to an Annual Individual Fatality Risk of 1 in 10,000 or greater in 2016 due to rock roll as defined by GNS Science risk modelling. A separation enables an offer to be made for the residential portion on this title
Query	Clarification around recommendati on	Why is rezoning from red to green recommended ?	The owner has requested rezoning from red to green but the map indicates the property is already green. Why is this?
Linkage to criteria	The annual individual fatality risk associated with the residential dwelling is less than 1 in 10,000 at 2016 risk levels as per the GNS model.	See guiding consideration. ³	Cante
Guiding consideration	Not applicable - see criterion	In applying the Port Hills zoning criteria to vacant residential lots the Group exercised judgement in relation to lots intersected by the life safety risk line and applied reasonableness test to achieve a sensible outcome.	Not applicable.
Additional information supplied 5 April	The dwelling at this property is outside the life safety risk line.	The dwelling at 64 Hawkhurst Road is built across the boundary and is outside the life safety risk zone, 66 Hawkhurst is a vacant section.	None requested or supplied. This is a large property title comprising three lot see attached title. The lot containing the dwelling is zoned red; the remaining lots are zoned green. Withheld under section 9(2)(a) The Group has recommended that the zonings remain unchant contingent on a separate certificate of title being is for the green zoned lots. Withheld under section 9(2)
Supplementary information provided post 2 May	The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to this property.	There is a garage on this property but not a dwelling.	This is a large property in one title comprising three lots—see attached title. The lot containing the dwelling is zoned red; the remaining lots are zoned green. The Group has recommended that the zonings remain unchanged, continger on a separate certificate of title being issued for the green zoned lots.

^a Appendix A of the table supplied on 5 April erroneously referred to the criteria for residential dwellings in the information supplied for this property.

⁴ Note the owner of this property uses the address of 71 Hawkhurst Road (his neighbour at 71 Hawkhurst Road on the map uses the address 69 Hawkhurst Road).

C	7
*	-
C	2
000	V
- 12	2
	ğ
- 5	5
-	-
C	2
5	-
ć	
	-
.7	2
- 3	_
ш	L

1000	NVAS CONTRACTOR OF THE		0		10
Supplementary information provided post 2 May	The Group considered the Port area (irrespective of the land ownership) as a separate item and did not consider zoning. The yacht club was considered as a special case as it is a community building with the potential for high occupancy. There was no evidence concerning the accuracy of the risk line discussed by the Group.	The detail provided in the Minutes and Appendices A and B on 5 April 2013 fully explains the Group's recommendation in relation to this property.	e Recove		Crown and CCC land is generally recommended for green zoning. This property is not residential.
Additional information supplied 5 April	None requested or supplied.	Not applicable	Earthquake		Not applicable
ccommended Reasons as per Query Linkage to criteria Guiding Additional inform ning Minutes supplied 5 April consideration 5 April	The Group has considered the Port area (irrespective of the land ownership) as a separate item. See further explanation under Reasons as per Minutes supplied 5 April".	Properties that are zoned rural under CCC's City Plan and the Banks Peninsula District Plan are generally	recommended for green zoning. Rural properties have been	recommended for red zoning where they are included in the GNS Science rock roll or cliff collapse models, are part of the residential settlement pattern for the area, have met the red zoning criteria, and the Group has applied its guiding considerations in a consistent manner.	All Crown and CCC land be recommended for green zoning.
Linkage to criteria	See comment under Guiding Considerations	See Guiding Consideration	Cante		See Guiding Consideration
Query	These properties are zoned green and recommended to remain so. Is this because they are in the Port area and the risk line level of risk?	Not clear why property is remaining green.	er for		Not clear why property is remaining green.
Reasons as per Minutes supplied 5 April	The Group noted that parts of Lyttelton Port area are exposed to the potential for immediate debris inundation from cliff collapse, and carry an associated risk to life. The Group did not make zoning recommendations for anything in the Port area.		Ministe		
Recommended zoning	Remain green	Remain green	y the		Remain green
Area	Naval Point	Governors Bay Road	000		Maori Gardens
Ma	37	40	S		14
Address	Industrial properties along the foot of the cliff that runs out to the yacht club	460 Governors Bay Road	Relea		522 Governors Bay Road *note this property is also in table 2 below.
	25	26	Providence .		27

(0)
-
0
3
-
a
-0
2
0
-
-
\rightarrow
m
77
.≃
-
ш.

	Supplementary information provided post 2 May	The dwelling at 58 Zephyr Terrace is located approximately under the '58' annotated on the map. The dwelling is exposed to an annual individual fatality risk of 1 in 10,000 in 2016 and therefore meets the criteria for red zoning. 42 Hays Rise: The dwelling on this property is outside the life safety risk line. 42A Hays Rise: This property is a small parcel of land approximately 36m². 571 Dyers Pass Road: This is	significant proprion is outside the life safety risk line. 571A Dyers Pass Road: This property is a small triangular lot of land (approximately 260m²) outside the life safety risk line. 1051B Dyers Pass Road: This is a large property and a significant portion is outside the life safety risk line. 1051A Dyers Pass Road: The dwelling on this property is outside the life safety risk line.
Reeting 2 May 2013	Additional information supplied 5 April	None requested or supplied.	Earthquake
nation Requested At N	Guiding consideration	Properties that are zoned rural under the CCC's City Plan and the Banks Peninsula District Plan are generally recommended for green zoning. Rural properties have been recommended for red zoning where they are included in the GNS Science rock roll or cliff collapse models, are part of the residential settlement pattern for the area, have met the red zoning criteria, and the Group has applied its	guiding considerations in a consistent
Table 1: Port Hills Zoning Review Advisory Group: Supplementary Information Requested At Meeting 2 May 2013	Linkage to criteria	The annual individual fatality risk associated with the residential dwelling is greater than 1 in 10,000 at 2016 risk levels as per the GNS model.	Cante
	Query	Why is rezoning from green to red recommended when 42 and 42A Hays. Rise and 571, 571A, 1051B and 1051B Dyers Pass Road are not recommended for change?	er for
	Reasons as per Minutes supplied 5 April	The dwelling on this property is exposed to an Annual Individual Fatality Risk of 1 in 10,000 in 2016 due to rock roll as defined by GNS Science risk modelling.	Ministe
Table 1: Port	Recommended zoning	Red Sreen >	y the
	Area	Тептасе	0
	Ма	24	S
	Address	58 Zephyr Terrace	Releas
		58	

DAY.	Address	Map	Area	Recommended	Reasons as per Minutes	Query following	Linkage to	Guiding	Additional	Supplementary
IT		5	Morron	n 2000	1	meeung	Criteria	Consideration	information supplied 5 April	Information provided post 2 May 2013
		2	Valley	green	ine properties at 27 and 54 Morgans Valley Road are CCC owned	I he Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear	See Guiding Consideration	All Crown and CCC land be recommended for green zoning.	None requested or supplied	See item 6 on table 1. Crown and CCC land generally recommended for green zoning as it is not residential.
ட (6	Morgans Valley	Remain green	Not applicable	The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.	See Guiding Consideration	All Crown and CCC land be recommended for green zoning.	Not applicable	This property is owned by CCC and is a large area of undeveloped land. Crown and CCC land generally recommended for green zoning as it is not a second to generally recommended for green zoning as it is not a second to generally recommended for green zoning as it is
5	130 and 130A Main Road Note: is this 136C Main Road?	ō	Kedcliffs 1	Remain green	Not applicable	The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.	See Guiding Consideration	All Crown and CCC land be recommended for green zoning.	Not applicable	These properties are part of Redeliffs School. The whole school is zoned green. Crown and CCC land generally recommended for green zoning as it is
I		18			n n n n n n n n n n n n n n n n n n n				•	not residential
T <		ž) (Terrace Pirhwood	Remain green	Not applicable STEF TO	The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.	See Guiding Consideration	All Crown and CCC land be recommended for green zoning.	24A Kinsey Terrace is a narrow strip of land owned by CCC outside of the event lines. (The small tringle of adjacent land is part of the title for 28 Kinsey Terrace.)	This property is CCC owned. It is used for infrastructure. Crown and CCC land generally recommended for green zoning as it is not residential.
	Ave 117F Wakefield	3 2	Hill Road	Nemain red	Not applicable	The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.		,	None requested or supplied	This property is the Sumner Croquet Club. The land is owned by CCC (unsure about the buildings).
1		ā l	מאס	Nemain 160	лот арріїсавіе п	I he Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.			None requested or supplied	This property is 7m ² and owned by CCC. There is likely an Orion power box (or similar) on the property.
a	3c Finnsarby Place	22	Wakefield 2	Remain red	Not applicable	The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.			None requested or supplied	This property is 6m² and owned by CCC. There is likely an Orion power box (or similar) on the property.

3
Ξ
×
.,
a
Σ
0
~
-
a
O
-
II.

This property is part of Van Asch School and is Crown owned. The whole school is zoned green Crown and CCC land generally recommended for green zoning as it is not residential	Note that there are other baches treated the same on maps 30 and 41. Note the address points on the maps are used on the maps are used for the baches and do not denote individual parcels of land.	Recove	See item 27 on table 1. This property is owned by CCC. Crown and CCC land generally recommended for green zoning as it is
Not applicable	None requested or supplied	nguake	Not applicable
All Crown and CCC land be recommended for green zoning.	4	_	All Crown and CCC land be recommended for green zoning.
See Guiding Consideration		rbury	See Guiding Consideration
The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.	Partial red zoning of the CCC land the baches are on. The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.	r Cante	The Advisory Group's approach to making recommendations for rezoning in relation to CCC and Crown land is unclear.
Not applicable	30, 31, 32 and 33 Taylors Mistake Bay: The geotechnical data shows that these structures are exposed to an Annual Individual Fatality Risk of 1 in 10,000 or greater in 2016 due to rock roll as defined by GNS Science risk modelling. 30 Taylors Mistake Bay is also exposed to the potential for immediate debris inundation from cliff collapse, and suries an immediate debris inundation from cliff collapse, and	structure is located on a clift top, and is exposed to the potential for immediate cliff collapse, and carries and immediate risk to life. 55, 56, 57, 58, 59, 60, 62, 63, 64, 67, 68 and 69 Taylors Mistake Bay: These structures are exposed to the potential for immediate debris inundation from cliff collapse, and carry an exclusion of the carry an exclusion of the collapse.	Not applicable
Remain green	Rec: green > red	/ the	Remain green
Heberden 1	Hobsons Bay and Taylors Mistake Bay	0 0	Maori Gardens
24	28 29 29	S	14
38B Truro Street	Taylors Mistake baches	8 <u>6</u> <u>6</u> <u>8</u>	522 Governors Bay Read
	24 Heberden 1 Remain green Not applicable approach to making recommendations for recommendations for recommended for recommended for CCC and Crown land is unclear.	24 Heberden 1 Remain green Not applicable approach to making recommendations for recommendations for recommendations for recommendations for recommendations for recommended for CCC and Crown land is unclear. 28 Hobsons Rec: green > 30, 31, 32 and 33 Taylors Mistake Bay: The geotechnical data shows that these structures are on. 29 Taylors Ristake Read on Annual Individual Read on a proceed to an Annual Individual Read on a proceed to a	24 Heberden 1 Remain green Not applicable approach to making Consideration CCC land the recommendations for recommendations for recommendations for resoning in relation to CCC land the benevation of th