# **Lianne Darby**

From: Lianne Darby

**Sent:** Wednesday, 13 July 2016 09:56 a.m.

To: Lianne Darby

**Subject:** FW: 82 Riccarton Road - SUB-2016-28 & LUC-2016-169

Attachments: RE: LUC 2006-369887/A - 82 Riccarton Rd - Request for Comment; RE: 82 Riccarton

Rd [with report] - RMA-2006-369887/A - Variation to Consent; 82 riccarton slip

features.bmp.jpg

From: Z1649206 MWH Hazards Team [mailto:SM-AP-NZ-MWHHazardsTeam@mwhglobal.com]

**Sent:** Thursday, 12 May 2016 8:48 a.m.

To: Lianne Darby

Subject: RE: 82 Riccarton Road - SUB-2016-28 & LUC-2016-169

Hello Lianne

We have assessed the application in relation to the hazard register, street files and available aerial photography. We have visited the site in the past.

We have the following comments to make regarding the application.

## **Proposal**

The proposed activity is to subdivide 82 Riccarton Road East, Mosgiel, into three lots, and to establish residential activity on each of the new lots.

Site investigation reports have been provided from Jon Lindqvist ref Geotechnical Assessment of Lot-3, part 82 Riccarton Road East, Dunedin, dated 11 April 2016

Plans for the proposal are provided within the application

### Hazards

The Hazards Register shows this land as being subject to 10116 – Land Stability (land movement), and 11589 – Land Stability (land movement).

The north facing slopes have been mapped on the McKellar geological map as subject to slips. The GNS Landslide mapping classifies this as with unknown activity, likely certainty and resulting moderate to high sensitivity

The western portion is 10351 – Contaminated land.

### **Global Setting**

Approximately two-thirds of the site is on a north-facing slope above State highway 1, up to a ridgeline, and then the site slopes southwards.

There are two barns on-site, one of which is used as a temporary house.

- Slopes over the "suitable building area" on proposed Lot 3 are moderate to steep, at 3.4h:1v (16.5°) according
  to DCC LIDAR Contours
- Slopes just to the north and south of the "Existing Building Platform" on proposed Lot 2 are steep, to very steep, at 1.5h and 1.6h:1v (32-34°), but the building platform itself is set upon a raised flat surface. Whilst there are obvious signs of soft and more recent slumping on the north facing slope, the crests of these features appear to lie further than 10m away from the proposed platform.
- Slopes to the east of the proposed dwelling platform on Lot 1 are steep, but have been addressed by Dr Lindqvist following earlier advice from MWH (attached for information)

## **Earthworks / Excavations / Retaining Structures**

The scale of earth work is un-detailed in the application, but we do not anticipate significant work required to further develop in the proposed areas.

Normal conditions will apply to work.

### Discussion

We have reservations over development on steep slopes, particularly where there are previous mapped signs of instability

Lindvist has undertaken detailed walkover reconnaissance, and has mapped individual slide scarps. We disagree with his interpretation that these are distinct failures, and we agree more with the McKellar mapping that these are more likely to be the lateral scarps of a much larger feature extending upslope to within 15m of the existing building platform on proposed Lot 2. Ideally Dr Lindvists report should be amended to include the presence of the larger failure feature.

Notwithstanding this, the application acknowledges the risks, and proposes situation of a suitable building platform on the NE corner of Lot 3, clear of any previous signs of instability.

Whilst this is suitable, we would be reticent to entertain further subdivision of Lot 3 in the future.

The existing Building Platform on proposed Lot 1 may have previously been delegated, but remains at some risk, due to the proximity of steep slopes exhibiting signs of previous movement. However, this platform appears to be set back approximately 10m or more from the existing scarp featrues.

The proposed 20x15m building platform on proposed Lot 2 has previously been discussed and confirmed as suitable.

#### **Advice**

We recommend that advice be made to the effect:-

This property is affected by obvious previous land movement, and development should be set suitably distant from any signs of instability.

- The Lindqvist report be amended to reflect the presence of the greater landslide feature
- Development on proposed Lot 2 must be setback a minimum of 10m from any existing scarps or depressions in the steep slopes to the north or south.
- The proposed Building on proposed Lots 1 and 3 are suitably distant from the landslide feature
- Any earth fill over 0.6m thick supporting foundations must be specified and supervised by a suitably qualified person in accordance with NZS 4431-1989 Code of Practice for Earthfill for Residential Development
- Slopes may not be cut steeper than 1:1 (45°) and 2.0m high without specific engineering design and construction
- Slopes may not be filled steeper than 2h:1v (27°) without specific engineering design and construction

Please give me a call if you want to discuss Regards Lee

## **Conditions**

We recommend that the following conditions be required:-

Deal breakers – further information needed / professional supervision required etc.

# **Lianne Darby**

From:

Lee Paterson < Lee.M.Paterson@mwhglobal.com>

Sent:

Thursday, 28 January 2016 03:56 p.m.

To:

Jeremy Grey

**Subject:** 

RE: 82 Riccarton Rd [with report] - RMA-2006-369887/A - Variation to Consent

## Hello Jeremy

Dt Lindqvist has clearly captured my concerns and addressed them On this basis, I am satisfied that, from the perspective of natural hazards, the occupancy of the site need not be "temporary". I would support the applicant seeking a permanent residence at this location

#### Regards

Lee

## ----Original Message----

From: Jeremy Grey [mailto:Jeremy.Grey@dcc.govt.nz]

Sent: Thursday, 28 January 2016 12:32 p.m.

To: Lee Paterson

Subject: FW: 82 Riccarton Rd [with report] - RMA-2006-369887/A - Variation to Consent

Hi Lee,

Please find attached an additional report in response to your previous advice. Could you please advise as to whether this satisfies your concerns by Thursday 4 February?

## Regards,

Jeremy

## ----Original Message-----

From: Craig Horne [mailto:crhorne@xtra.co.nz] Sent: Wednesday, 27 January 2016 10:07 a.m.

To: Jeremy Grev

Subject: 82 Riccarton Rd [with report]

## Hi Jeremy

Attached is the additional reporting from Jon Lindquist for the Kelliher consent. I trust this is sufficient for you to grant consent.

Regards Craig Horne Craig Horne Surveyors Ltd Ph (03) 4847008 Mob (0274) 792382 Email crhorne@xtra.co.nz

----Original Message-----

From: Jon Lindqvist [mailto:jonlind@ihug.co.nz] Sent: Monday, 11 January 2016 9:21 a.m.

To: Chris Kelliher Cc: Craig Horne

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Subject: Riccarton Rd [with report]

Dear Chris & Craig,

I have attached an addendum to my earlier report in response to the concerns from DCC.

In case you wish to discuss this, I will be away for 5-6 days in South Westland from Wednesday of this week. Will be unreachable for much of the time.

Best wishes, Jon

Dr Jon Lindqvist Geological Consultant 76 Passmore Crescent Dunedin 9010

Phone 03 4640183

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