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Engineering Geologists & Geotechnical Engineers

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Date: 12th August 2015

No. Pages: 2

Project No.: 2015-177

Mr. Kim Burk
35 Earl Street,
Beacon Hill.
N.S.W. 2100.

Preliminary Landslip Risk Assessment for 35 Earl Street, Beacon Hill.

This letter report details the results of a preliminary landslip assessment required by Warringah Council as part of their 2011 LEP to accompany all new Development or Building Certificate Applications. It is a review of the design plans followed by a walk over visual assessment of the stability of the existing property, no insitu testing was undertaken.

The assessment follows the guidelines as set out in Section E10-Landslip Risk of Warringah Councils 2011 LEP Planning Rules.

1. Landslip Risk Class:

The site is located within Landslip Risk Class "B" which is classified as Flanking Slopes of between 5° and 25°.

2. Site Location:

The site, 35 Earl Street is located on the low south side of the road, not far from the intersection with Mary Street at Beacon Hill. It is essentially a trapezoidal shaped block with long west side boundary of 40.21m and north street front boundary of 31.06m.

3. Proposed Development:

It is understood that the proposed works involve sub-division of the existing block of land into two individual building lots.

4. Existing Site Description:

The site is located near the crest of a large south east striking ridge line that starts at Frenchs Forest and falls to the east towards Narraweena. It is located on the south side of the ridge just below the crest, with average slope angle of about -8° towards 158° magnetic north

The road pavement is in fair condition, it is bitumen and east sloping (-4°) where it passes the site. The road reserve then contains a gentle south-east sloping (-5°) grass verge to the front boundary of the property which is defined by a 0.6m high brick fence that occupies the western 12m of the boundary. There is a 6m wide driveway entrance to the east of this brick fence while a 1.8m high timber fence defines the eastern half of the front boundary. The gentle sloping (-2° to -4°) concrete driveway provides access to a two car carport that abuts the north-east corner of the house. The front yard adjacent to the house comprises a gentle sloping (-3°) manicured lawn area lined around the perimeter with garden beds and hedge. There is a concrete pathway that leads from the driveway to an elevated tiled terrace and house entry.

The existing partly raised single storey tiered brick house with skillion roof abuts the west boundary of the site and a Public Access way. The front half of the house is elevated above the ground with basement level. The back half of the house is formed as two partly elevated levels that join onto the back of the main house



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with wide (4m) timber decks to the east. There are some minor settlement cracks in the lower south-east corner of the house from possible footing settlement.

The backyard which comprises the eastern half of the site is generally gentle sloping (-8°) lawn which has been terraced. There is a narrow (3m) terrace down slope of the front boundary fence then a similar width batter slope (-12° to -18°) down slope of the terrace that is landscaped as a garden bed with a few trees. A low (0.4) dry stacked boulder wall marks the lower side of this garden area and also runs along the side of the carport and house. There is a near level (-2°) 6m deep lawn terrace with narrow garden bed to the south abutting the boulder wall with a number of trees adjacent to the north-east corner of the timber deck. The southern 15m of the backyard is gentle sloping (-9°) formed by manicured lawn with garden beds and shrubs adjacent to the timber boundary fences.

The house externally appears to be in fairly good condition. The roof has gutters and downpipes that are mostly connected to a sub-surface stormwater system. There were no signs of erosion or slope instability within the site.

5. Neighbouring Property Conditions:

The neighbouring property to the east, Number: 39 Earl Street, contains a partly raised single storey weatherboard cottage with tiled roof located across the middle of the site. The front yard of the property is gentle sloping and lawn covered with no front boundary fence. There is a concrete driveway adjacent to the west side boundary that leads to a single car garage at the western end of the house. The site and weatherboard house appear to be in fairly good condition with roof guttering and downpipes that are connected to an underground stormwater system. Access to the property and backyard was not available.

There is a Public Access way along the west side of the site.

The neighbouring property to the west (No: 33) is a two storey weatherboard residence raised above ground level in the south. Access to the property and backyard was not available.

A limited inspection of these neighbouring properties did not identify any signs of previous or impending landslip instability.

6. Assessment:

Based on the above items and on Councils flow chart check list (Page: 2 of 2 in Section E10), i.e., does the present site or proposed development contain:

- | | |
|--------------------------------|-----|
| • History of Landslip | No |
| • Proposed Excavation/Fill >2m | No |
| • Site developed | Yes |
| • Existing Fill >1m | No |
| • Site Steeper than 1V:4H | No |
| • Existing Excavation >2m | No |
| • Natural Cliffs >3m | No. |

It is considered that a detailed Landslip Risk Assessment is not required for this Development.

7. Date of Assessment: 11th August 2015

8. Assessment by:

Peter Crozier
Principal

9. References:

Survey by Bee & Lethbridge Pty. Ltd., Reference Number: 19519, Dated: 3-07-2015.