

Crozier Geotechnical Consultants Unit 12/42-46 Wattle Road Brookvale NSW 2100

ABN: 96 113 453 624 Phone: (02) 9939 1882 Fax :(02) 9939 1883

Crozier Geotechnical Consultants is a division of PJC Geo-Engineering Pty Ltd

Date: 7th June 2017 **No. Pages:** 2 **Project No.:** 2017-119

Mrs Anna McDonald 31 Robert Street, Frenchs Forest. N.S.W. 2086.

Preliminary Landslip Risk Assessment for 31 Robert Street, Freshwater.

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 "A" and part within Class "B". Landslip Risk Class "B" is classified as Flanking Slopes of between 5° and 25°.

2. Site Location:

The site, 31 Robert Street is located on the low north side of the road, not far from the intersection with Waratah Street at Freshwater. It is a rectangular shaped block with east side boundary of 45.11m and southern street front boundary of 15.24m onto Robert Street.

3. Proposed Development:

It is understood that the proposed works involve modernising the internal layout of the existing house to creating open plan living, and to build a new carport at the northern end of the existing driveway. This work will involve removing the bedrooms on level 2 and creating an open plan kitchen, living room, dining and rumpus rooms. Minimal excavation will be required for the new carport footings.

4. Existing Site Description:

The site is located at mid slope level on an east to west striking ridge line that is located between the suburbs of Brookvale and south Curl Curl beach. It is located on the north side of the ridge and overlooks Curl Curl Lagoon, the site has an average slope angle of about -6° towards 032° magnetic north.

The road pavement is bitumen with concrete kerb, it is gentle sloping to the east (-3°/090° mN) and in fairly good condition where it passes the site. The road reserve contains gentle sloping (-5°) grass verge with a 1.7m high brick fence defining the front property boundary. A concrete driveway provides access from the road to a parking area adjacent to the east side of the house. There is a paved walkway from the end of the driveway past a brick granny flat to the backyard.

The front yard comprises an inground swimming pool that has been excavated into the hillside with 1.2m high retaining wall around the perimeter of the paved pool surround. This retaining wall supports a gentle sloping (-6°) lawn and garden to the west and south. There is a partly raised timber deck and Pergola between the north end of the pool and the house.

Access to the house is via a tiled pathway that leads from the driveway to an elevated tiled porch and front entry on the south-east corner of the house.

The house which is located centrally on the site is a 1950's style part elevated single storey red brick and tiled roof residence with brick basement to the rear. The residence has undergone some renovations in the recent past with a fairly new covered timber entertaining deck on the north-east corner. As the sites surface



falls to the north-east, the house floor level in the front south-west corner is 0.2m above ground level while the back north-east corner is about 1.7m above ground level. The basement level has been excavated by about 1.1m depth below the middle of the house.

The backyard is small comprising gentle sloping (-3°) lawn with wide gardens beds adjacent to perimeter fences that are planted out with Lili Pillies and Pine trees that create a dense hedge for privacy. There were no signs of erosion or instability in the backyard.

The exterior of the house and footings are in fairly good condition, the roof has gutters and downpipes that are connected to a sub-surface stormwater system.

5. Neighbouring Property Conditions:

The property upslope to the west Number: 33 Robert Street contains a new partly elevated single storey metal and weatherboard clad residence located on the middle of the site with two car garage occupying the front south-west corner. A single lane lap pool occupies the west side of the house down slope of the garage. The front yard comprises manicured lawn with driveway adjacent to the west boundary. The house structure is new and in very good condition.

The neighbouring property to the east, Number: 29 Roberts Street contains a part elevated two storey brick and rendered residence with tiled roof located centrally on the site. There is a concrete driveway adjacent to the east boundary that leads to a single car garage adjacent to the back of the house. The front boundary is marked by a 1.5m high brick fence with manicured lawn in front of the house.

A limited inspection of these neighbouring properties from within the site and public roadway reserve 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	Yes
•	Natural Cliffs >3m	No

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

P Rogin

7. Date of Assessment: 5th June 2017.

8. Assessment by:

Peter Crozier Principal

9. References:

Design plan by Claire Meller Architect, Drawing Numbers: 02-01-02 & 02-02-02,

Project Number: 1605, Dated: 12-05-17.

Survey by C.M.S. Surveyors Pty. Limited, Reference Number: 14811, Dated: 10/05/16

2017-119 Freshwater