

Date: 15th April 2019

No. Pages: 3

Project No.: 2019-055

Jodbin Pty Ltd
76 Arnhem Road
Allambie Heights
N.S.W. 2100

Preliminary Landslip Risk Assessment for 76 Arnhem Road, Allambie Heights

This letter report details the results of a preliminary landslip assessment required by Northern Beaches (Warringah) Council 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 in-situ 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 primarily located within Landslip Risk Class "B" which is classified as Flanking Slopes of between 5° and 25°.

2. Site Location:

The site, 76 Arnhem Road is located on the high north side of the road, within gently east dipping topography. It is a long, rectangular shaped block with a front south boundary of approximately 15.275m, rear north boundary of 15.240m, east side boundary of 44.625m and west side boundary of 45.635m as referenced from the provided site plan.

3. Proposed Development:

It is understood that the proposed works involve demolition of the shed and construction of a new two storey, garage with granny flat above, structure at the rear of the site. It appears that the development requires no bulk excavation and will require only minor footing excavations.

4. Existing Site Description:

The site is located on a south-west plunging ridge line that falls towards Manly Reservoir. It is located on the south side of the ridge towards the crest of the ridge.

The site is located on the north side of Arnhem road, which is gently east dipping and formed with a bitumen pavement and concrete kerb and gutter with similarly sloping lawn verge where it passes the site. There were no signs of excess deformation or cracking in the pavement or reserve to indicate deep seated instability.

At the front of the site is small raised lawn retained by a low (<0.50m) timber log retaining wall on the east side which is in good condition with no obvious signs of any rotation or settlement. A concrete paved pathway along the west side of the house provides access to a small garden within the front south western portion of the site and to a single storey brick house located at the centre of the front half of the site. A near level concrete paved driveway along the east side boundary provides access to the rear of the site where there is a shed with metal roof located in the north western site corner. The shed is surrounded by concrete

paved areas except a narrow unpaved strip at the rear that extends to the rear north boundary. The concrete paved areas around the shed contain minor age related cracks.

There is a brick paved patio with a slightly uneven surface adjacent to the north western portion of the house with a raised lawn adjacent to the rear north side. The raised lawn at the rear of the house is supported by <1.00m high brick retaining walls along the east and north sides with minor cracks within the wall structure. The site house appears to be approximately 75 years of age with extensive renovations at later stages of development and is in good condition for its age with no signs of significant settlement or cracking on its exterior walls.

There were no indicators of previous or impending landslip instability and no signs of excess surface stormwater flow, seepage or erosion. The existing house and surrounding pavements are in good condition.

5. Neighbouring Property Conditions:

The adjoining property to the west (No. 78 Arnhem Road) contains a two storey brick house with tiled roof located at the front of the block, with a small lawn at the front and a densely vegetated backyard. The building structure appears to be approximately 60 years old and is in good condition with no signs of any settlement or cracking on its exterior walls. The ground level of the property is at a slightly higher (<0.50m) ground level to the site along the common boundary.

The property to the east (No. 74 Arnhem Road) contains a single storey rendered house at front of the property, with a driveway along the east side boundary and an in-ground swimming pool with a paved backyard at the rear. The building structure appears to be approximately 20 years old and is in good condition with no signs of any settlement or cracking on its external walls. The ground level of the property within the front half of the property is at a slightly lower (<0.50m) ground level to the site along the common boundary, whilst the ground level with the rear half is approximately 2.00m lower than the site. The in-ground pool located within the north eastern portion of the property appears to be excavated into the underlying rock with a paved backyard in the north western portion.

The property to the north (No. 252 Allambie Road) contains a commercial property with a number of warehouses with concrete paved parking areas covering most of the property area. The unpaved area of the property adjacent to the common boundary with the site is densely vegetated and the conditions of the existing building structures could not be observed from within the site area. The ground level of the property is approximately 1.00m lower than the site along the common boundary.

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 | No |
| • Natural Cliffs >3m | No |

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

7. Date of Assessment:

10th April 2019.

8. Assessment by:



Shahzada Rizvi
Senior Engineering Geologist

9. References:

- Architectural Drawings – Designs at M, Job No.: 19-010, Drawing No.: DA01 to DA03, DA05, DA06 and DA07, Dated: March 2019
- Survey Drawing – unknown boundary sketch, Reference: 97673