

Date: 1st November 2019 **No. Pages:** 3 **Project No.:** 2019 – 186

Harrington Investment Trust Pty Ltd 6 / 226 Condamine Street, Manly Vale, NSW 2093

Preliminary Landslip Assessment for 107 Griffiths Street, Balgowlah, NSW.

This letter report details the results of a preliminary landslip assessment required by Northern Beaches 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 insitu testing was undertaken.

The assessment follows the guidelines as set out in Manly Council – Manly Development Control Plan 2013 (Amendment 11).

1. Landslip Risk Class:

The site is located within Landslip Risk Class "G4" which is classified as Ridge crests, major spur slopes and dissected plateau areas (Manly DCP – Schedule 1 Map C).

2. Site Location:

The site, 107 Griffiths Street, Balgowlah is located on the high south side of the road, with Condamine Street passing along its western boundary. It is a rectangular shaped block with rear south boundary of 13.51m and eastern side boundary of 36.576m for a total land area of 494.1m², as referenced from the supplied survey drawing.

3. Proposed Development:

It is understood that the proposed works involve demolition of the existing house, sub-division of the land and construction of two townhouse structures with a common dividing wall striking north. The development involves a garage with Finished Floor Level (FFL) at R.L. 24.98 at the northern end of the block and a house ground floor level and rear courtyard level at R.L. 26.99.

The supplied design drawing and survey indicate the garage is located within an area that rises up to R.L. 26.50 therefore an excavation to 1.72m depth (R.L. 24.78) will be required to allow construction of the floor slab. The garage excavation will be located \geq 1.5m from each side boundary and will reduce the existing garage excavation proximity to the eastern boundary.

The ground floor level will require an excavation to approximately R.L. 26.79 to achieve house and rear courtyard floor slab construction, with this level expected to rise slightly for the rear lawn terrace. The excavation appears to extend to each side boundary and will increase to approximately 1.24m depth at the southern end except where site levels step up to approximate R.L. 28.7 at the southern boundary due to a series of rendered retaining walls. As such the excavation at the rear southern boundary will be up to 1.80m in depth for the proposed rear lawn.

The site and neighbouring property to the south are raised above the level of Condamine Street therefore the excavation adjacent to the Condamine Street road reserve will be up to 1.10m depth maximum at the southern end of the site.



4. Existing Site Description:

The site is located at mid-slope level within gently north dipping topography that falls from a high of approximately R.L. 28.70 at the rear south-east corner to a low of R.L. 24.98 at the north-east corner, within the existing garage location. The southern end of the site and adjacent properties to the east are raised up to approximately 1.20m above the Griffiths Street road reserve with the site supported via rendered masonry retaining walls. These walls also extend along the Condamine Street road reserve and reduce to nil at the southern end of the house due to the natural ground surface slope. A wall which also acts as retention then supports the sites rear garden up to 0.70m above the Condamine Street road reserve at the southern boundary. The boundary retaining walls show signs of deterioration and cracking/deformation that appears related to tree/plant growth and construction style.

The front of the site contains the remnants of a garage including the concrete floor and external side walls acting as retention. These retaining walls are up to 1.20m in height and are located on the eastern side boundary and within the site and are formed of cut sandstone blocks. The remainder of the front yard is then formed as gently north dipping lawns with small trees. The eastern boundary block retaining wall is deformed/cracked, though this may be due to removal of the previous garage walls.

The existing site house is a single level rendered masonry residential structure that is formed on the rear half of the block. The house is raised above ground surface levels at the front due to the natural ground surface slope. The house appears in reasonable condition with only deterioration and minor cracking evident on external walls.

The rear of the site contains a timber deck and then narrow garden beds supported by low (<0.70m) rendered masonry retaining walls. Further detailed inspection of this area was not undertaken.

5. Neighbouring Property Conditions:

The property to the east, Number 105 Griffiths St, contains a two storey residential house on the centre of the block with gently sloping lawns and gardens at the front and rear. The house appears to have had several phases of development with the lower level formed of brick walls over sandstone block footings whilst the upper level is of timber construction. The house is located approximately 3.0m off the common boundary with the site.

The neighbouring property to the south, Number: 144, contains a two storey brick house located on the centre of the block and extending to within 1.0m of the common boundary with the site. A narrow garden and pathway is formed along the boundary at a similar level to the sites rear garden beds.

A limited inspection of these neighbouring properties from within the site and public roadway reserve was possible however it did not identify any signs of previous or impending landslip instability.



6. Assessment:

Based on the above items and Councils DCP Schedule 11 – Suggested Checklist For Preliminary Assessment - does the present site or proposed development contain:

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٠	History of Landslip	No
٠	Proposed Excavation/Fill >2m	No
•	Site developed	Yes
٠	Existing Fill >1m	Possible at front southern end
•	Site Steeper than 1V:4H	No
٠	Existing Excavation >2m	No
٠	Natural Cliffs >3m	No

In accordance with the Manly Council DCP – preliminary checklist - a <u>detailed</u> Site Stability Report <u>is not</u> required for this Development.

However, the bulk excavation at the rear southern end of the site will be up to 1.80m depth and maintenance of the boundary and protection of the neighbouring property and residential house structure, in accordance with Section 177 of the NSW Conveyancing Act – 1919, will require engineering design of suitable retention systems and sensible excavation methodology. Crozier Geotechnical Consultants can be engaged to provide further detail in this regard.

- 7. Date of Assessment: 29th October 2019.
- 8. Assessment by:

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Troy Crozier Principal. MAIG. RPGeo. – Geotechnical and Engineering Reg. No.: 10197

9. References:

Design plans by Rapid Plans, Project No.: RP0518HAR, Drawing No.: DA1001, Dated: 14/02/2019.

Survey by Total Surveying Solutions. Job No.: 161552, Dated: 13/12/2016.