



Flood Certificate

Date: 21 February 2020 Job No. 200261
Client: Simon Schultheiss Engineer: MW

Site: 2 Herbert Street, Manly

Michael Wachjo of Northern Beaches Consulting Engineers P/L carried out a site inspection at the above property on the 20 February 2020. The purpose of the visit was to inspect and comment on the anticipated overland flow extent through the property and if this extent will be adversely affected the proposed retaining wall works.

The assessment consisted of a walk over style inspection of the site and roadway above. Below is a summary of the findings.

- Overland flows affecting the subject property are expected to originate either from the upstream catchment as surface runoff or as surcharge water from the kerb-inlet-pit within Herbert Street. The hydraulic catchment is approximately four hectares in area and will result in flows in excess of 1500L/s in the 1% AEP event.
- These flow are expected to briefly pond within the localized depression in the roadway between the properties of #2 and #4 Herbert Street, before travelling down the respective driveways.
- Flows within both properties will likely continue falling towards the eastern boundary of #4 Herbert Street. This is due to the grade of the terrain and configuration of masonry fences between the two properties.
- Flows will likely continue down past the right-side of the garage of the subject property and partially extend into the property of #83 Birkley Road. The portion of flows within the subject property will discharge into an existing gully adjacent to the north eastern corner of the property. This gully will surcharge in heavy storm events and flows are expected to spread into the property of #85 Birkley Road before continuing downstream.

The new retaining wall works are proposed to be entirely outside of the drainage easement extent. The proposed wall location, extent, heights and resulting landscape terrace levels are not expected to exacerbate the existing overland flow path regime.



Note: This certification does not alleviate the responsibility of the owners of the property to properly maintain the existing overland flow path and ensure it is always clear of debris and potential blockages.

We trust that this certificate meets with your requirements. Please contact the author if further clarification is required.

NORTHERN BEACHES CONSULTING ENGINEERS P/L

Rick Wray

Principal Engineer | B.E. CPEng, NER, MIEAust, Director

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