Stormwater Design Certificate – Revision D

Date: 07 April 2021

Job No. 201104 Engineer: KO

Client: George Elias

Engineer: K

Site: 30 Beatrice Street, Clontarf

Northern Beaches Consulting Engineers P/L has designed the Stormwater Management System for the above project (Job No: 201104, Dwg No's: D01C, D02C, D03C and D04C).

The subject site is a battle-axe block and the single-lane driveway is a shared access handle with the neighbor No. 28 Beatrice Street therefore On-Site Detention (OSD) is required.

Based on preliminary assessment, the OSD tank should be located at the low point of the driveway in order to achieve compliance with Council requirements.

NBCE is of the opinion that locating the OSD tank at the bottom of the driveway would be impractical and therefore we recommend an alternative location within the extent of the proposed development this ultimately be more economical for the client.

To achieve compliance with the alternate location of the OSD tank, we have considered a reduced site area for our calculations. More specifically, the driveway area has been excluded. The area considered on our calculations for the OSD design are set out below and they are detailed on the OSD summary table of Drawing D01A.

- Total Site Area: 898m2
- Considered Site Area (driveway excluded): 612m2

We note, that for the **considered** area (612m2) the design is in general compliance with Northern Beaches Council's (Manly area) "Specification of On-site Stormwater Management 2003" and Specification for Stormwater Drainage 2003" and AS3500.3.

In addition and as requested from Council, a 24-hour access hatch to the OSD tank has been provided. The 900x600 grated OSD access is proposed to be located on the driveway and outside the proposed garage, according to the architectural drawings provided there are no walls, gates or fencing to the driveway which would obstruct 24/7 access.

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

NORTHERN BEACHES CONSULTING ENGINEERS P/L

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Stewart McGeady BE UNSW MIEAust Director

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