

## Engineering Referral Response

<b>Application Number:</b>	DA2023/0007
<b>Proposed Development:</b>	Alterations and additions to a dwelling house including carport
<b>Date:</b>	24/04/2023
<b>To:</b>	Jordan Howard
<b>Land to be developed (Address):</b>	Lot 2 DP 23008 , 46 Narrabeen Park Parade WARRIEWOOD NSW 2102

### Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m2 or
- Alterations to existing or new driveways or
- Where proposals affect or are adjacent to Council drainage infrastructure incl. watercourses and drainage channels or
- Torrens, Stratum and Community Title Subdivisions or
- All new Commercial and Industrial and RFB Development with the exception of signage or
- Works/uses in flood affected areas

And as such, Council's development engineers are required to consider the likely impacts on drainage regimes.

### Officer comments

Development application is for alterations and additions to the existing dwellings, including carport.

Site is falling to rear, an onsite stormwater detention tank (OSD) is proposed in conjunction with level spreader for the disposal of stormwater. Before this, the stormwater drainage for the site shall demonstrate compliance with council's "Water Management for Development Policy", particularly Stormwater Drainage from Low Level Properties Technical Specification section 5.5.

a) As the subject site falls to the rear, an easement to drain water is to be created in favor of the subject site over the downstream properties. Evidence of the downstream property owner's consent shall be provided. The application shall be supported by long section of the inter-allotment drainage to the connection with council's road drainage system.

b) In case the applicant is unsuccessful in achieving the easement with downstream neighbor, evidence shall be submitted with the application. For sample letter refer to Appendix 2, Easement Letter of council's Water Management for Development Policy.

Further, it appears that mentioned 5 year ARI predevelopment discharge (35L/s) in the onsite detention report is very low. This flow has been estimated to be 18L/s. Please provide DRAINS model for the OSD design.

### Additional Information Provided on 18/4/2023

Easement refusal letters have been provided. However the submitted Drains model and stormwater plans are not satisfactory. The issues are as follows:

- The assumed time of concentration appears to be too low for the pervious areas.
- The 5 year ARI predevelopment discharge flow is too high. The PSD is approximately 18l/s.
- The plans show HED but this is not modelled. Also the storage is insufficient for the 1% AEP flows.
- The plans must reflect the parameters modelled.

Updated plans and model are to be submitted for further assessment.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

**Recommended Engineering Conditions:**

Nil.