

Engineering Referral Response

Application Number:	DA2023/0313
Proposed Development:	Construction of a dwelling house including swimming pool
Date:	16/06/2023
To:	Dean Pattalis
Land to be developed (Address):	Lot 29 DP 23447 , 67 Woolgoolga Street NORTH BALGOWLAH NSW 2093

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

The proposal is for the construction of a new dwelling.

The site falls to the rear and as such stormwater design shall be in accordance with Section 5.5 of Council's Water Management for Development Policy. Easement refusal letters have been submitted.

The submitted stormwater plan proposing an OSD system discharging via a level spreader is unsatisfactory. The issues to be addressed are:

- The OSD tanks are located in an enclosed space which is not acceptable. The OSD system shall have 24/7 access for ventilation and maintenance purposes. The tanks must not be located under habitable areas.
- It is unclear if the bypass area of 306.95m² has been included in the discharge calculations. The design of the level spreader must be in accordance with Appendix 4. Total discharge including bypass flows and controlled flows through the level spreader must not exceed the 20% AEP state of nature storm event. The plans are to be amended to clearly show discharge flows from level spreader as well as bypass areas.
- Drains model shall be provided for assessment.

Additional Information Provided on 7/6/2023

The amended stormwater plan and Model have been reviewed. The amended stormwater plans are unsatisfactory. The OSD tank has been relocated to to the front of the site and hence a majority of the site bypasses. Based on the Site Areas plan 285m² bypasses and an area 213m² is left out of the

calculations which totals an area of approximately 500m². The flows from this area far exceeds the PSD of 23l/s previously calculated which is not acceptable. The proposed volume of OSD is not sufficient.

The plans are to be amended as follows:

- The OSD tank is to be relocated to the rear of the property, recommended under the pool deck.
- All pervious and impervious areas upstream of the OSD tank shall be directed to the tank.
- Areas downstream of the tank can be considered as bypass.
- Previously calculated PSD of 23l/s is accepted.
- All flows including bypass flows and from the OSD shall be limited to the PSD for all storms.

The Drains model shall be updated to:

- include preburst rainfall data
- correct values for depression storages
- the bypass is to be modelled separately to the OSD system.
- The overflow from the OSD tank is to be included.

Amended 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.