

Engineering Referral Response

Application Number:	DA2019/0263
To:	Rebecca Englund
Land to be developed (Address):	Lot 3 DP 1115877 , 53 B Warriewood Road WARRIEWOOD NSW 2102 Lot 3 DP 942319 , 53 Warriewood Road 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

The stormwater drainage plans which detail the provision of treatment of upstream catchment flows, site storm water drainage and the provision of on site stormwater detention are not supported for the following reasons;

· It appears that the proposed kerb alignment within Warriewood Road does not match into the existing. An appropriately designed kerb transition should be provided and extend past the temporary accessway. The v- grate Pit 2/2 is to be deleted and upgraded to a letter box type pit and consideration should be given to inlet capacity and blockage factor.

· Stormwater flows within Warriewood Road that bypass existing Pit 2/1 are considered unsafe and a hazard to both pedestrians and vehicles. Accordingly the upstream pipe flows up to the 1 in 100 year ARI event are to be piped across Warriewood Road to an upgraded downstream drainage system between (Pit 2/1 and 2/10), to reduce flows in Warriewood Road to safe levels. Additionally bolt down lids are not to be installed and the system is to feature grated inlet pits for future council maintenance and inspections.

· It is considered that the proposed retaining wall on the western boundary of the site may impede upstream overland sheet flows.

· The proposed surrogate sag within the Lorikeet Grove extension is considered unsatisfactory. The existing sag within Lorikeet Grove should be maintained and the proposed road drainage within Lorikeet Grove redesigned/regraded to suit.

- The existing sag pit on the northern side of Lorikeet Grove is proposed to be modified to a butterfly grate. This impact has not been considered or modelled with respect to inlet capacity or blockage factor.
- The access to the proposed GPT conflicts with the lintel for proposed Pit 1/16. The access should be amended to be a minimum 1m clear of any stormwater lintel.
- Section C of the proposed Basin indicates that a 30mm freeboard is proposed over the emergency weir, which is considered inadequate.
.The proposed ungraded Council stormwater line (refer to section A) needs to be a minimum of 1m from any proposed retaining wall footings . Easements widths are to comply with Councils DCP.

Referral Body Recommendation

Recommended for refusal

Refusal comments

Recommended Engineering Conditions:

Nil.