Engineering Referral Response

Application Number:	DA2020/1489

Date:	30/12/2020
To:	Anne-Marie Young
Land to be developed (Address):	Lot 1 DP 5055 , 8 Forest 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 proposal for a 18 Lot (Stage one) community lot subdivision and associated road and drainage infrastructure is not supported for the following reasons:

Stormwater Drainage and On Site Stormwater Detention.

1) A DRAINS model has not been submitted for Councils review together with the catchment/modelling information summary detailing input data/parameters used for the model.
2) The stormwater management plan proposes to divert upstream catchment overland flows around the development site via a 1500mm RCP pipe to Narrabeen Creek . This will prevent overland flows affecting the proposed community title subdivision which are currently identified by the Pittwater Overland Flow Study.

The applicant has not submitted an Overland Flow study to determine the sizing of the diversion pipe, inlet pits and the catch drain. An overland flow study using to DRAINS program is to be prepared to determine all upstream flow entering the site to a 100 year AEP and is to include the sizing of all the inlet pits using appropriate blockage factors and the diversion pipe. Calculations are to be provided for the the upstream catch drain also.

Please note a climate change factor is to be used for all pit and pipe designs.

Details are also to be provide as to the sizing and design of the outlet structure proposed with the creek so Council can determine the impacts on the creek and riparian areas.

Details of the splitter pit operation that separates OSD flows from upstream catchment flows are also to

be provided.

Subdivision Layout and Design

1) Cut and fill depths are to be shown on a plan as an exact figure and not a range of values. Cross sections through all subdivision lots and the perimeter road are to to be provided together with all retaining wall heights including the interface with the Bert Close estate. Typical retaining wall details are to be provided .

2) The minimum width of the access road within the subdivision is to be 7.5m with a 12.5m road reserve width featuring 2.5m wide verges . This is required by the Warriewood Valley Roads Masterplan dated June 2018.

3) The perimeter road is also to be 7.5m wide with a 16m road reserve featuring 4.25m verges.

Community Title Subdivision

1) A draft community management plan is to be prepared to accompany the subdivision plan and is to feature bi-laws on water quantity and quality management.

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.