

Engineering Referral Response

Application Number:	DA2019/0645
To:	Claire Ryan
Land to be developed (Address):	Lot CP SP 15752 , 26 Whistler Street MANLY NSW 2095

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 applicant proposed an absorption tank to discharge the on site stormwater into underground.

The consultant stated that the absorption tank was designed in accordance with a infiltration rate from the submitted geotechnical report.

In the report, the suggested infiltration rate is between 0.001 to 0.0001 m/s which is vary by factor of 10 time.

And the consultant did not specific the infiltration rate which governed the design.

It means the volume of the tank may be 10 times bigger than the proposed design when applying a different filtration rate.

It impacts the basement structures of the proposed building.

Secondly, the ground water table level RL 1.1 m to 1.3 m is only an estimation.

The ground water table level must be identified based on an on site infiltration testing/ monitoring.

It is because the ground water level is the one of the critical factors in the design of the absorption system and the building.

Furthermore, the additional water discharge from the proposed absorption tank into the underground may cause an significant impact and change to the ground water table level.

It means the surrounding buildings and infrastructures may be influenced by the changing of the ground water level.

A geotechnical report must investigate the possible impact on the surrounding properties and infrastructures due to the possible change on ground water level and recommend an appropriate methodology in design and construction of the building with protection on these surrounding properties and infrastructure.

As such, Development Engineering cannot support the application with insufficient information on ground water issue in accordance with Section 6.4 of Council's Manly DCP 2013.

An amended geotechnical report and absorption design with supportive information must be submitted for assessment.

Referral Body Recommendation

Recommended for refusal

Refusal comments**Recommended Engineering Conditions:**

Nil.