

Water Management Referral Response

Application Number:	DA2019/1072
To:	Renee Ezzy
Land to be developed (Address):	Lot 1 DP 219265 , 1797 Pittwater Road MONA VALE NSW 2103 Lot 2 DP 219265 , 38 Park Street MONA VALE NSW 2103 Lot 4 DP 76695 , 1795 Pittwater Road MONA VALE NSW 2103

Reasons for referral

Council's Water Management Officers are required to consider the likely impacts.

Officer comments

Second review comments:

The applicant has not provided sufficient water quality treatment to satisfy Pittwater 21 DCP B5.9 requirements.

The applicant has provided a MUSIC model. On review of the MUSIC model:

1. we find that while the Filterra Bioscape System has been designed with a high-flow bypass but the MUSIC model does not include a bypass, claiming that the bio-retention will treat 100% of flows. We recommend a high flow bypass for the 3-month ARI flow.

2. The saturated hydraulic conductivity is way too high and significantly lifts the performance of the basin beyond what could possibly be achieved. The figure used is 3550mm/hr. Northern Beaches Council allows up to 250mm/hr. When the figure is adjusted in the model, the targets for sediment, nitrogen and phosphorus removal are not met.

Treatment efficiencies need to be improved to meet our targets (see below). It may help if additional treatment is considered for the bypass area, which is over 400sqm and only has baskets proposed.

First round of comments:

The applicant was provided with information on water quality requirements at the PLM, and notes provided to the planner on 13/08/2019.

The proposed solution is inadequate and does not meet Pittwater 21 DCP B5.9 requirements.

Development Location/Type

What catchment is the development sited? Mona Vale Creek > Pittwater

What type of development is proposed? Subdivision

What is the size of the development? 2399.12sqm

Water Conservation and Reuse

Is the development subject to BASIX? Yes

Is a rainwater tank proposed? Yes

Stormwater Quality

Does Stormwater Quality requirements apply to the development? Yes

Which Stormwater Quality Targets Apply?

Pittwater 21 DCP B5.9 - tertiary treatment that removes both particulate and dissolved pollutants and no increase in pollutants to waterways. We accept treatment that meets the targets of post development load reductions (compared to pre-development) of GP 90%, TSS 85%, TP 65% and TN 45%.

1. Stormwater treatment measures must be included in the Stormwater Management Plan, with detail provided of each measure.
2. The treatment train should include some form of infiltration basin and a gross pollutant trap, but can otherwise include any other Water Sensitive Urban Design measure that will achieve the treatment objectives. This can include green roofs, green walls, stormwater reuse, pervious paving etc. Use of filtration cartridges is not supported for this development due to the need for infiltration.

Has a water quality model been submitted? No

Comment: A MUSIC model file must be provided with the DA to allow Council to review the model and parameters used.

Have water quality treatment devices been proposed? A sediment sump and screen in the boundary pit.

Comment: This solution is not acceptable.

Is the development likely to increase runoff? Yes

Is a positive covenant required? Yes

Comment: 5. A restriction as to user and positive covenant will be placed over the asset(s) and the applicant is required to provide an operation and maintenance plan for each asset. The responsibilities of the strata association in terms of maintaining and replacing the stormwater treatment measures must be made clear in the appropriate documents. (provided at CC)

Is an Operation and Maintenance Plan required? Yes

Comment: See above

Groundwater Management

Does the development potentially impact on Groundwater? Yes

Is it Integrated Development? No

Has a Geotechnical assessment being provided? Yes

Comment: The geotechnical report provided has satisfactorily addressed groundwater, and groundwater management will not be required.

Is the site potentially contaminated? No

Will groundwater be discharged from the site? No

Sediment and Erosion Control

A satisfactory sediment and erosion control plan has been provided.

Referral Body Recommendation

Recommended for refusal

Refusal comments

Recommended Water Management Conditions:

Nil.