Water Management Referral Response

Application Number:	DA2020/1042

Date:	09/10/2020
To:	Rebecca Englund
Land to be developed (Address):	Lot 63 DP 6248 , 349 Barrenjoey Road NEWPORT NSW 2106

Reasons for referral

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

Officer comments

The applicant has not addressed the requirements of Council's Water Management for Development Policy, which has clear objectives in terms of Water Sensitive Urban Design. The following shows that the proposed stormwater treatment system does not comply with Council's policy. At the conclusion of this assessment, the required amendments to the design that will satisfy the objectives of the policy are provided.

Part 4.1 Stormwater Quality and Hydrology
Part 4.1.2 Standards of Design (Northern Beaches Council Water Management for Development Policy)
a) All stormwater treatment measures must be designed in accordance with the requirements of this Policy...
Please see below.

b) Stormwater treatment measures must be part of a unified design for the project and contribute to a positive urban design outcome...
Proposed stormwater treatment is a filter device and a pit basket and does not contribute to public or private amenity and urban design objectives, such as contributing to reducing urban heat island effects and providing green infrastructure.

c) Council does not support the use of proprietary devices for pollutant removal if they do not achieve natural water cycle processes such as infiltration, evaporation or transpiration; or have the potential to remove dissolved pollutants.
Proposed stormwater treatment is a proprietary device for pollutant removal. There are opportunities for irrigation of planter boxes using captured rainwater and passive irrigation of tree pits with stormwater, but these have not been taken up. There is also significant opportunity for reuse of rainwater by plumbing rainwater into toilets and laundries for six separate units. The incorporation of these options would make the proposed system satisfactory.

l) Development must reduce the impact of impervious surfaces that drain to the stormwater system where possible by:
i) disconnecting impervious surfaces and roof drains so that runoff is directed to stormwater harvesting devices, infiltration measures and grassed or other landscaped areas designed to accept these flows (disconnected areas of impervious pavement do not contribute to the calculation of site impervious area used for the assessment of water treatment or on-site detention)
ii) minimising the length and width of driveways, the size of parking spaces, and other pavements.
The proposed stormwater treatment does not replicate the natural water cycle by incorporating

infiltration or evaporation. While some planter boxes are provided, they are not connected to stormwater downpipes or to rainwater tanks and therefore will not help meet the objectives of replicating the natural water cycle. There is no reduction of connected impervious areas.

The proposal can satisfy the requirements of Council's Water Management for Development Policy if:
1. Planter boxes are connected to rainwater/stormwater downpipes/drainage.
2. Rainwater is connected to the toilets of all six units as a minimum, ideally to laundries as well.
3. Trees in the public domain are planted in tree pits, as described in Council's Public Domain Design Guidelines. The applicant is using Ocean Protect to provide stormwater devices - they have a modular tree pit that meets Council's requirements. The street gutter would need to feed the tree pits according to standards determined by the Development Engineers.
Use of proprietary filter devices for the removal of stormwater pollutants will be acceptable if the above requirements are met.
Council's policies may be found
at https://www.northernbeaches.nsw.gov.au/council/publications/policies-and-codes.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Water Management Conditions:

Nil.