

Water Management Referral Response

Application Number:	DA2021/2039
Date:	21/06/2022
To:	Alex Keller
Land to be developed (Address):	Lot 808 DP 752038 , 70 A Willandra Road NARRAWEENA NSW 2099

Reasons for referral

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

Officer comments

The proposal was assessed under the current creek and water management legislation framework, the relevant parts of the LEP, DCP and Council Water Management for Development Policy. The supplied reports, plans and documentation were reviewed and the submissions considered.

Water Quality

The Biodiversity Management Plan provided indicates the development is near Coastal Upland Swamp Threatened Ecological Community. The nature of water movement in the area is critical to this kind of community, and the applicant must demonstrate a "no impact" on the water cycle. The following objectives are applicable (Table 4 of the water management policy)

- Stormwater quality (no impact on a pre/post development water quality model assessment)
- Disturbance to stream and wetland sediments is to be minimised by regulated discharge of stormwater and dissipation of flows at discharge locations. Runoff from the development must be retained at natural discharge rates and sediments controlled at the source.
- Stormwater and groundwater flow is to mimic natural conditions and ensure a dispersed pattern of flow, avoiding centralised or concentrated discharge points into the wetland or waterway. Natural flow regimes must be retained. The reduction or increase in flows, alteration in seasonality of flows, changes to the frequency, duration, magnitude, timing, predictability and variability of flow events, altering surface and subsurface water levels and changing the rate of rise or fall of water levels must be avoided.

The proposed stormwater system is proposing a rainwater tank, vegetated swales and level spreader.

Dewatering

Tailwater (surface water, rainwater, minor seepage): Please contact catchment@northernbeaches.nsw.gov.au for advice on Council's water quality requirements for a single instance of dewatering tailwater that collects in an excavation during works. A Council dewatering permit application must be made for expected multiple instances or continuous dewatering of tailwater.

Sediment management

Due to the sensitivity of the downstream environment it is imperative that an erosion and sediment management strategy is developed and implemented to ensure protection of this area during construction.

The APZ treatment is modifying the vegetation structures, the risk of soil erosion in APZ managed area

should be addressed.

The proposal is not demonstrating that the water quality and quantity management is adequate.

A water quality model is to be supplied to Council (refer policy standard of design and Council WSUD/Music guidelines) to demonstrate the Policy objectives are met.

Additional details as to how the proposed water management (quality/quantity) measures will mimic the current upper catchment hydrology is required.

Additional details on the sediment management of the APZ managed area are to be provided.

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:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Erosion and Sediment Control Plan

An Erosion and Sediment Control Plan (ESCP) shall be prepared by an appropriately qualified person and implemented onsite prior to commencement. The ESCP must meet the requirements outlined in the Landcom publication Managing Urban Stormwater: Soils and Construction - Volume 1, 4th Edition (2004). The ESCP must include the following as a minimum:

- Site Boundaries and contours
- Approximate location of trees and other vegetation, showing items for removal or retention (consistent with any other plans attached to the application)
- Location of site access, proposed roads and other impervious areas (e.g. parking areas and site facilities)
- Existing and proposed drainage patterns with stormwater discharge points
- Locations and methods of all erosion and sediment controls that must include sediment fences, stabilised site access, materials and waste stockpiles locations, location of any stormwater pits on the site and how they are going to be protected.
- North point and scale.

Details demonstrating compliance are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: Protection of the receiving environment.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Installation and Maintenance of Sediment and Erosion Controls

Council proactively regulates construction sites for sediment management.

Sediment and erosion controls must be installed in accordance with Landcom's 'Managing Urban Stormwater: Soils and Construction' (2004), and an Erosion and Sediment Control Plan prepared by an appropriately qualified person, prior to commencement of any other works on site.

Erosion and sediment controls are to be adequately maintained and monitored at all times, particularly after periods of rain, and shall remain in proper operation until all development activities have been completed and vegetation cover has been re-established across 70 percent of the site, and the remaining areas have been stabilised with ongoing measures such as jute mesh or matting.

Reason: Protection of the receiving environment.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Stormwater Treatment Measures Operation and Maintenance Plan

An Operation and Maintenance Plan is to be prepared to ensure the proposed stormwater treatment measures remain effective.

The Plan must be attached to the Positive Covenant (and the community or strata management statement if applicable) and contain the following:

1. Detail on the stormwater treatment measures:
 - a) Work as executed drawings
 - b) Intent of the stormwater treatment measures including modelled pollutant removal rates
 - c) Site detail showing catchment for each device
 - d) Vegetation species list associated with each type of vegetated stormwater treatment measure
 - e) Impervious area restrictions to maintain the water balance for the site
 - f) Funding arrangements for the maintenance of all stormwater treatment measures
 - g) Identification of maintenance and management responsibilities
 - h) Maintenance and emergency contact information
2. Maintenance schedule and procedure - establishment period of one year following commissioning of the stormwater treatment measure:
 - a) Activity description, and duration and frequency of visitsAdditionally for vegetated devices:
 - b) Monitoring and assessment to achieve an 80 percent survival rate for plantings
 - c) Management of weeds, pests and erosion, with weed and sediment cover limited to a maximum of 5 percent of the total area of the stormwater treatment measure
3. Maintenance schedule and procedure - ongoing
 - a) Activity description, and duration and frequency of visits
 - b) Routine maintenance requirements
 - c) Work Health and Safety requirements
 - d) Waste management and disposal
 - e) Traffic control (if required)
 - f) Renewal, decommissioning and replacement timelines and activities of all stormwater treatment measures (please note that a DA may be required if an alternative stormwater treatment measure is proposed)
 - g) Requirements for inspection and maintenance records, noting that these records are required to be maintained and made available to Council upon request.

Details demonstrating compliance shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate.

Reason: Protection of the receiving environment.

Installation of Rainwater Tanks

Rainwater tanks shall comply with the following:

- a) Be fitted with a first-flush device that causes initial rainwater run-off to bypass the tank and must drain to a landscaped area. The first flush device will not be permitted to connect to the stormwater system
- b) Have a sign affixed to the tank stating the contents is rainwater
- c) Be constructed or installed in a manner that prevents mosquitoes breeding, such as the use of mesh to protect inlets and overflows
- d) Have its overflow connected to an existing stormwater drainage system that does not discharge to an adjoining property, or cause a nuisance to adjoining owners
- e) Pumping equipment must be housed in a soundproof enclosure
- f) Where the rainwater tank is interconnected to a reticulated water supply, it must be installed in accordance with Plumbing Code of Australia, particularly backflow/cross connection prevention requirements

A certificate from a licenced plumber shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate.

Reason: To conserve potable water.