

## Water Management Referral Response

<b>Application Number:</b>	DA2021/0053
<b>Date:</b>	16/07/2021
<b>To:</b>	Jordan Davies
<b>Land to be developed (Address):</b>	<p>Lot 7 DP 1251955 , 121 Dove Lane WARRIEWOOD NSW 2102</p> <p>Lot 1 DP 1266557 , 111 Dove Lane WARRIEWOOD NSW 2102</p> <p>Lot 4 DP 1251955 , 101 Dove Lane WARRIEWOOD NSW 2102</p>

### Reasons for referral

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

### Officer comments

The supplied documentation has been assessed satisfactory.

The proposed stormwater treatment chain includes rain water tanks (with reuse), proprietary pit gross pollutant trap and proprietary cartridges filters (inside OSD tank) prior to the connection to Fern Creek via a stormwater pipe system.

The proposed treatment chain size and location is satisfactory and meets the Council stormwater quality objectives.

Due to the sensitivity of the downstream environment it is imperative that an erosion and sediment management strategy is developed to ensure protection of this area. Construction activity and scheduling impacting on the downstream environment requires further assessment to determine acceptable water quality and water quantity thresholds during construction.

It is required that a project ecologist is involved before and during construction to ensure the sediment and erosion controls measure are suitable to guarantee the protection of the downstream environment with specific attention to preservation of possible **red-crowned toadlet** (*Pseudophryne australis*) population.

Should the applicant demonstrate that this is achieved, the application can be supported, and on this basis conditions of consent are provided.

The proposal is therefore supported.

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

### Detailed Design of Stormwater Treatment Measures - Major

A certificate from a Civil Engineer, stating that the stormwater treatment measures have been designed in accordance with the **engineering drawing set 251-20C-DA revision B 25.06.21** and Council's Water Management for Development Policy.

The certificate shall be submitted to the Certifying Authority prior to the release of the Construction Certificate.

Reason: Protection of the receiving environment.

### Soil and Water Management Plan

A Soil and Water Management Plan (SWMP) shall be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER3) and implemented onsite prior to commencement. The SWMP must meet the requirements outlined in the Landcom publication Managing Urban Stormwater: Soils and Construction - Volume 1, 4th Edition (2004) and Council's Water Management Policy. The SWMP must include the following as a minimum:

- Site boundaries and contours

- Vehicle access points, proposed roads and other impervious areas (e.g. parking areas and site facilities)

- Location of all drains, pits, downpipes and waterways on and nearby the site

- Planned stages of excavation, site disturbance and building

- Demonstrated staging of works including stormwater management and sediment control

- Stormwater management and discharge points

- Integration with onsite detention

- Sediment control basin locations and volume (if proposed)

- Proposed erosion and sediment controls and their locations

- Location of washdown and stockpile areas including covering materials and methods

- Vegetation management including removal and revegetation

- A schedule and programme of the sequence of the sediment and erosion control works or devices to be installed and maintained

- Inspection and maintenance program

All Site drainage and sediment and erosion control works and measures as described in the SWMP, and any other pollution controls, as required by these conditions, shall be implemented prior to commencement of any other works at the Site.

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

Reason: To promote the long-term sustainability of ecosystem functions.

### Environmental Management Plans (EMP)

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The applicant must provide an environmental management plan (EMP) to describe all the

environmental management activities and control measures that will be implemented to avoid environmental impacts. All potential off-site impacts should be considered prior to construction occurring and an effective plan should be developed to manage impacts on the natural environment, and to prevent foreseeable nuisance and health impacts on sensitive environments.

The EMP must demonstrate that the staging of works and erosion control measures mitigate the impacts to the downstream environment.

The EMP shall include the the Project Ecologist's (aquatic freshwater specialist) ecologist recommendations about regarding the management of the downstream environment, the Soil and Water Management Plan and proposed staging of works.

The EMP is to be submitted to the certifying authority for approval prior to the release of the Construction Certificate.

Reason: To protect native vegetation, wildlife, habitats and receiving waterways.

## **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), the Erosion and Sediment Control Plan and the Stormwater Management Plan 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.

The discharge of sediment-laden waters from the site may result in clean-up orders and/or fines under Council's Compliance and Enforcement Policy and legislation including Protection of the Environment Operations Act 1997 and Contaminated Lands Act 1997.

Reason: Protection of the receiving environment.

### **Substitution of Stormwater Treatment Measures**

The substitution of an "equivalent" device for the stormwater treatment measure approved under the Development Consent must submitted to the Principal Certifying Authority for approval prior to installation.

Reason: To ensure stormwater is appropriately managed and in accordance with the Water Management for Development Policy.

### **Dewatering Management**

Tailwater (surface water and rainwater): Please contact [catchment@northernbeaches.nsw.gov.au](mailto: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 dewatering permit application must be made for expected multiple instances or continuous dewatering of tailwater.

Groundwater: A permit from Council is required for any dewatering of groundwater. An application for interference with an aquifer is required to the Natural Resources Access Regulator. Contact [catchment@northernbeaches.nsw.gov.au](mailto:catchment@northernbeaches.nsw.gov.au) for more information about permits.

The groundwater/tailwater to be discharged must be compliant with the General Terms of Approval/Controlled Activity permit issued by WaterNSW (if applicable), Landcom's 'Managing Urban Stormwater: Soils and Construction' (2004) (Blue Book), Council's Compliance and Enforcement Policy and legislation including Protection of the Environment Operations Act 1997 and Contaminated Lands Act 1997.

All approvals, water discharges and monitoring results are to be documented and kept on site. Copies of all records shall be provided to the appropriate regulatory authority, including Council, upon request.

Reason: Protection of the receiving environment and groundwater resources.

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

#### **Positive Covenant, Restriction as to User and Registration of Encumbrances for Stormwater Treatment Measures**

A positive covenant shall be created on the title of the land requiring the proprietor of the land to maintain the stormwater treatment measures in accordance with the standard requirements of Council, the manufacturer and as required by the Stormwater Treatment Measures Operation and Maintenance Plan.

A restriction as to user shall be created on the title over the stormwater treatment measures, restricting any alteration to the measures.

The terms of the positive covenant and restriction as to user are to be prepared to Council's standard requirements (available from Council) at the applicant's expense and endorsed by the Northern Beaches Council's delegate prior to lodgement with the Department of Lands. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction as to user is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: To identify encumbrances on land, ensure ongoing maintenance, and ensure modification to the stormwater treatment measures is not carried out without Council's approval.

#### **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 referenced in 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 visits Additionally 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.

### **Works as Executed Drawings - Stormwater Treatment Measures**

Works as Executed Drawings for the stormwater treatment measures must be prepared in accordance with Council's Guideline for Preparing Works as Executed Data for Council Stormwater Assets.

The drawings 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.

**Community Title Management Statement**

The Community Management Statement must specifically list the stormwater treatment measures that will be maintained under community title. The statement must also include the Stormwater Treatment Measure Operation and Maintenance Plan.

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

Reason: To ensure maintenance of all stormwater management assets and protection of the receiving environment.

**ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES****Maintenance of Stormwater Treatment Measures**

Stormwater treatment measures must be maintained at all times in accordance with the Stormwater Treatment Measure Operation and Maintenance Plan, manufacturer's specifications and as necessary to achieve the required stormwater quality targets for the development.

Where replacement cartridges or other necessary components for the system become unavailable, an alternative system is required to be retrofitted into the development to achieve an equivalent pollutant reduction outcome. Evidence supporting the replacement must be retained on site and made available to Council as required.

Northern Beaches Council reserves the right to enter the property and carry out appropriate maintenance of the device at the cost of the property owner.

Reason: Protection of the receiving environment.