

## Water Management Referral Response

<b>Application Number:</b>	DA2020/1756
<b>Date:</b>	29/09/2021
<b>To:</b>	Jordan Davies
<b>Land to be developed (Address):</b>	Lot 66 DP 6248 , 353 Barrenjoey Road NEWPORT NSW 2106 Lot 65 DP 6248 , 351 Barrenjoey Road NEWPORT NSW 2106 Lot 64 DP 1090224 , 351 Barrenjoey Road NEWPORT NSW 2106

### Reasons for referral

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

### Officer comments

The development application has been amended with a water quality treatment chain. The project is satisfactory and present low environmental risk during the operational stage. Sedimentation and erosion control shall be in place during all construction and landscape establishment period. The development application is supported subject to conditions.

#### ~~Superseded~~

~~The review application relates to the refused development application under DA2020/1756. The amended documentation was assessed under the appropriate water management legislation framework, the relevant parts of the LEP, DGP.~~

~~The project is not addressing the requirements of the Council Water Management for Development Policy:~~

~~The Stormwater Quality and Hydrology objectives should as minimum target:-~~

- ~~-Total Phosphorous 65% reduction in the post development mean annual load~~
- ~~-Total Nitrogen 45% reduction in the post development mean annual load~~
- ~~-Total Suspended Solids 85% reduction in the post development mean annual load~~
- ~~-Gross Pollutants 90% reduction in the post development mean annual load (for pollutants greater than 5mm in diameter)~~
- ~~-pH 6.5 - 8.5~~
- ~~-Hydrology The post-development peak discharge must not exceed the pre-development peak discharge for flows up to the 50% AEP~~

~~Note that the percentage reduction in the post development mean annual loads are relative to the loads from the proposed development without treatment applied.~~

~~The project is not satisfactory in term of water management objectives. The proposal is therefore unsupported.~~

### Summary:

~~1. The applicant must address the objectives and requirements of the Water Management for Development Policy.~~

2. They must provide a MUSIC model file (.sqz), updated stormwater plans and a water management report that demonstrates how they have complied.
3. Further groundwater studies must be completed as recommended in the geotechnical report and as part of the waterNSW general terms of approval.

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#### Superseded

This development application has not addressed the requirements of the Water Management for Development Policy:

1. There is no stormwater treatment to remove pollutants apart from a gross pollutant trap. Targets for sediment, phosphorus and nitrogen removal have not been met.
2. A 10,000 litre tank is proposed, however it appears to be simply functioning as an OSD and is not connected to any facilities for the purpose of irrigation or reuse.
3. It is not clear how the quantity of stormwater runoff is being reduced although the proposed rooftop garden would assist with this somewhat, however is of limited size, with significant remaining roof space.
4. The development will intercept groundwater from 1.1m depth and the geotech report identifies significant risks to surrounding developments and the stability and water quality of the groundwater aquifer as a result of this development. The report identifies that the constraints may be too significant to support this development. A groundwater management plan from an appropriately qualified and registered engineer will be required to get a dewatering permit from Council that must be provided along with an application to WaterNSW for approval to intercept an aquifer and dewater. Continuous drawdown of the groundwater aquifer through pumping/dewatering of basements will not be allowed by Council or by WaterNSW. Dewatering of aquifers connected to seawater increased seawater intrusion and can impact the health of nearby brackish water systems.

#### Summary:

1. The applicant must address the objectives and requirements of the Water Management for Development Policy.
2. They must provide a MUSIC model file (.sqz), updated stormwater plans and a water management report that demonstrates how they have complied.
3. Further groundwater studies must be completed as recommended in the geotechnical report. It is highly recommended that the applicant consider a development that does not incorporate the basement levels to avoid the likely significant groundwater impacts.

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

#### 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.

#### **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 [Water Management Report \(REF: 219120rpt20210914\\_AM\)](#), [Stormwater Plan SW02 rev P7](#) 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.

### **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 the Erosion and Sediment Control 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.

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 be 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

### **Certification for the Installation of Stormwater Treatment Measures**

A certificate from a Civil Engineer, who has membership to Engineers Australia and the National Engineers Register must be provided, stating that the stormwater treatment measures have been installed in accordance with the engineering plans and manufacturer specifications. The certificate must confirm that stormwater treatment measures are completed, online, in good condition and are not impacted by sediment. Vegetated measures must exhibit an 80 percent survival rate of plantings.

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

Reason: Protection of the receiving environment.

### **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 any 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 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 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 Subdivision/Occupation ~~DELETED ONE~~ 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.

### **Strata Management Statement**

The Strata Management Statement must specifically list the stormwater treatment measures that will be maintained under strata 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 - Major**

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.

Vegetated stormwater treatment measures must maintain an 80 percent survival rate of plantings and limit weed cover to no more than 10 percent of the total area of the stormwater treatment measure.

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.