

Water Management Referral Response

Application Number:	DA2020/0272
Date:	30/09/2020
To:	Lashta Haidari
Land to be developed (Address):	Lot 1 DP 166322 , 691 Pittwater Road DEE WHY NSW 2099

Reasons for referral

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

Officer comments

Comments based on updated plans and Stormwater Report dated 10 August 2020.

The applicant has provided a revised sediment and erosion control plan that addresses stabilised site access.

Stormwater treatment is provided via a SPEL filter system, with 75sqm of planter boxes and a 27,000L rainwater tank for non-potable domestic re-use.

It is accepted that the applicant has reduced stormwater runoff from the existing site, and while a green infrastructure option would have been preferred for stormwater treatment, the solution proposed is acceptable.

As a basement is proposed, a dewatering condition has been placed.

Previous comments 15/5/20 - request for further information

This application was assessed for how it has addressed Water Sensitive Urban Design objectives, and controls associated with stormwater quality, groundwater and sediment and erosion.

1. No basement is proposed. If any excavation takes place greater than 1.5m below ground level, a geotech report is required to identify whether any groundwater is present, as dewatering conditions would apply.
2. The sediment and erosion control plan must be updated to show where the stabilised access for the site will be located and how sediment will be controlled around this access.
3. The applicant is providing for stormwater quality treatment by installing a SPEL filter system. While these systems remove particulate pollutants, they don't remove dissolved nitrogen and phosphorus, and they don't allow for infiltration that contributes significantly to water quality issues in waterways. The roof garden and urban farm are good water sensitive urban design initiatives that contribute to reducing runoff and evaporation, but the 3kL rainwater tank proposed is the equivalent of that installed on most single dwellings.

Due to the high impervious area of this site and the need to include canopy in landscaped areas, the use of the SPEL filter system will be accepted if the applicant reduces stormwater runoff discharged from the site so that post-development stormwater volumes during an average rainfall year are 70% of the volume if no measures were applied. There is significant potential for rainwater capture and re-use within this building given the large number of occupants and the predicted water use. The target mentioned could be achieved by connecting rainwater to toilets and laundry facilities in the building, and

using it for irrigation of landscaped areas.

The applicant must revise their sediment control plan and demonstrate how they will reduce stormwater runoff volumes.

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

A certificate from a Civil Engineer, stating that the stormwater treatment measures have been designed in accordance with the plans prepared by Taylor Consulting 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

Substitution of Stormwater Treatment Measure

The substitution of an "equivalent" device for the stormwater treatment measure approved under the Development Consent must first be approved by the Principal Certifying Authority.

Details 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.

Installation and Maintenance of Sediment and Erosion Controls

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 prepared by Taylor Consulting 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

Dewatering Management

Council proactively regulates construction sites for sediment management.

Where a one-off instance of dewatering of groundwater or tailwater is required during works, Council's Catchment Team must be notified of your intention to discharge. Discharges should meet the water quality requirements below. Notification must be via the Team's email address - catchment@northernbeaches.nsw.gov.au.

If continuous dewatering or dewatering on multiple events is expected, a dewatering permit is required from Council's Catchment Team at catchment@northernbeaches.nsw.gov.au.

To obtain a permit, the following information must be contained in a dewatering management plan and provided to Council's Catchment Team. The dewatering management plan must be certified by a suitably qualified civil engineer who has membership of Engineers Australia and appears on the National Engineering Register (NER).

1. Preliminary testing of groundwater/tailwater must be conducted by a NATA accredited laboratory to establish a correlation between NTU and TSS. This will allow the use of grab sampling at short notice prior to planned discharges.
2. Grab samples must be collected within 1 hour before planned discharge that comply with the parameters in the table below.
3. The groundwater/tailwater to be discharged must be compliant with the water quality requirements below, 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.

Water Quality (<one hour of planned discharge)

Oil and grease, not visible

pH, 6.5-8.5

Total Suspended Solids (TSS), <50mg/L NTU from a meter/grab sample

4. 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.

5. Tailwater must be discharged to the nearest stormwater pit in accordance with Council's Auspec1 Design Manual and must not spread over any road, footpath and the like. Discharge to the kerb and gutter will not be accepted. Where there is no stormwater pit within 100 metres of the site, Council's Catchment Team must be contacted to discuss alternative arrangements.

On receipt of a satisfactory dewatering management plan, Council's Catchment Team will issue a permit that will allow dewatering for up to one year. This permit should be provided to WaterNSW for their permit. Once a permit has been received from WaterNSW, dewatering may commence.

Reason: Protection of the receiving environment

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 plans prepared by Taylor Consulting. 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 interim / final 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 Measure 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 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

Boarding House Management Statement

The strata/Boarding House Management Statement must specifically list the stormwater treatment measures that will be maintained. 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.

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