

Water Management Referral Response

Application Number:	DA2020/1453
Date:	13/09/2021
To:	Lashta Haidari
Land to be developed (Address):	Lot 1 DP 881326 , 4 Collaroy Street COLLAROY NSW 2097 Lot CP SP 5367 , 1 Alexander Street COLLAROY NSW 2097

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 proposed development triggers specific water quality requirements to install a filtration device that removes organic matter and coarse sediments from stormwater prior to discharge from the land. The treatment measures must be designed in accordance with the requirements of this Policy and Northern Beaches Council's WSUD and MUSIC Modelling Guidelines.

Stormwater treatment measures must be part of a unified design for the project and contribute to a positive urban design outcome, visually and physically integrated with the adjacent built and natural environment. Council may approve the use of proprietary devices where alternatives are limited. Evidence is to be provided to demonstrate the performance of the system.

The proposal is satisfactory, subject to conditions.

Superseded

The applicant has proposed a Water Sensitive Urban Design strategy for stormwater management that includes a 20KL rainwater tank and 2 stormfilter cartridges located in the on-site detention tank. We generally only accept stormfilter cartridges of this form when there is evidence of complementary actions such as reducing the quantity of stormwater runoff through efficiency and reuse and addressing infiltration/evaporation where possible. To satisfy this requirement, the applicant simply needs to tell us how the water collected in the 20KL tank will be used, because the application has no information about this at all. Given there are planters throughout and potential for tree pits in the courtyard, there are also opportunities to connect stormwater downpipes via these planters to provide direct irrigation.

The applicant should provide a statement addressing how the water in the 20KL tank will be used in and around the building.

The applicant has not provided the MUSIC model file (.sqz) for our review, only a printout. This should be provided.

These are simple requests and a response will be prioritised once the additional information is received.

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:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Temporary Dewatering

Discharge must achieve the following water quality targets in addition to any conditions/documentation of this consent, any requirements of the General Terms of Approval/Controlled Activity permit issued by DPI Water, and legislation including Protection of The Environment Operations Act 1997 and Contaminated Lands Act 1997.

Parameter	Criterion	Method	Time Prior to Discharge
Oil and grease	None visible	Visual inspection	<1 hour
pH	6.5- 8.5	Probe/meter	<1 hour
Total Suspended Solids (TSS)	<50mg/L	Meter/grab sample measured as NTU	<1 hour

Note: The correlation between NTU and TSS must be established by a NATA accredited laboratory prior to the commencement of dewatering activities.

Dewatering must not occur until the above water quality parameters are met.
All records of 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.

Tailwater must be discharged to a stormwater pit and not spread over any road, footpath and the like.

Reason: Protection of the receiving environment

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

Detailed Design of Stormwater Quality System

A certificate from a Civil Engineer, stating that the stormwater quality management system has been designed and the Council's Water Management Policy.

The certificate shall be submitted to the Principal 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 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

Where a one-off instance of dewatering of groundwater or tailwater is required during works, Council's Catchment Team must be notified of the 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 a dewatering management plan is to be provided and approved by 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).

Reason: Protection of the receiving environment.

Installation and Maintenance of Sediment and Erosion Control

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.

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 the site is sufficiently stabilised with vegetation.

Reason: To protect the surrounding environment from the effects of sedimentation and erosion from the site.

Dewatering Management

Discharge of tailwater must not occur until the above water quality parameters are met.

Parameter	Criterion	Method	Time Prior to Discharge
Oil and grease	No visible	Visual inspection	<1 hour
pH	6.5- 8.5	Probe/meter	<1 hour
Total Suspended Solids (TSS)	<50mg/L	Meter/grab sample measures as NTU	<1 hour

NOTE: The correlation between NTU and TSS must be established by a NATA accredited laboratory prior to the commencement of dewatering activities.

All records of 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.

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.

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 Quality System

A certificate from a Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER-3) shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate, stating that the stormwater quality management system has been installed and Council's Water Management Policy.

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

Reason: Protection of the receiving environment.

Positive Covenant for Stormwater Quality System

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

The terms of the positive covenant 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. The Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any final Occupation Certificate.

Reason: To ensure ongoing maintenance of the on-site stormwater detention system.

Registration of Encumbrances for Stormwater Quality System

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for stormwater quality system as to user is to be submitted.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any final Occupation Certificate.

Reason: To identify encumbrances on land.

Restriction as to User for Stormwater Quality System

A restriction as to user shall be created on the title over the stormwater quality system, restricting any alteration to system. The terms of such restriction are to be prepared to Council's standard requirements, (available from Northern Beaches Council), at the applicant's expense and endorsed by Council prior to lodgement with the NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such restriction.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any final Occupation Certificate.

Reason: To ensure modification to the on-site stormwater detention structure is not carried without Council's approval.

Stormwater Quality Operation and Maintenance Plan

An Operation and Maintenance Plan is to be prepared to ensure proposed stormwater quality system remain effective.

The Plan must contain the following:

- a) Maintenance schedule of all stormwater quality treatment devices
- b) Identification of maintenance and management responsibilities
- c) Maintenance requirements for establishment period
- d) Routine maintenance requirements
- e) Inspection and maintenance record and reporting
- f) Funding arrangements for the maintenance of all stormwater quality treatment devices
- g) Vegetation species list associated with each type of vegetated stormwater treatment device
- h) Waste management and disposal
- i) Traffic control measures (if required)
- j) Maintenance and emergency contact information
- k) Renewal, decommissioning and replacement timelines and activities of all stormwater quality treatment devices
- l) Work Health and Safety requirements

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 Quality System

Works as Executed Drawings for the stormwater quality system 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 Water Efficient Fittings

The following Water Efficiency Labelling and Standards (WELS) Scheme rated fittings must be installed:

- a) 4 star dual-flush toilets
- b) 3 star showerheads
- c) 4 star taps (for all taps other than bath outlets and garden taps)
- d) 3 star urinals
- e) 3.5 star washing machines
- f) 4 star dishwashers

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

Reason: To conserve potable water.

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.

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 manufacturer's specifications and as necessary to achieve the required stormwater quality targets for the development.

Reason: Protection of the receiving environment.