

Engineering Referral Response

Application Number:	DA2019/0836
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То:	Phil Lane
Land to be developed (Address):	Lot 78 DP 12228, 23 Greenwood Avenue NARRAWEENA NSW 2099

Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m2 or
- Alterations to existing or new driveways or
- Where proposals affect or are adjacent to Council drainage infrastructure incl. watercourses and drainage channels or
- Torrens, Stratum and Community Title Subdivisions or
- All new Commercial and Industrial and RFB Development with the exception of signage or
- Works/uses in flood affected areas

And as such, Council's development engineers are required to consider the likely impacts on drainage regimes.

Officer comments

Comments for Development Engineers:

- 1. An OSD system is required as the proposed impervious area exceeds 40% of the site area. The proposed OSD volume seems to be sufficient. However, the OSD system design needs to be modified.
- 2. Council's Normal Profile is to apply.

No objection to approval, subject to conditions as recommended.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Engineering Conditions:

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

On-site Stormwater Detention

An On-site Stormwater Detention system must be designed and constructed in accordance with

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Northern Beaches Council's Warringah WATER MANAGEMENT POLICY PL850.

Detailed drainage plans are to be prepared by a qualified experienced practicing Civil Engineer, with Corporate membership of the Institute of Engineers Australia (M.I.E.) or who is eligible to become a Corporate member and has appropriate experience and competence in the related field.

The drainage plans must address the following:

- i): The HED chamber design shall be deleted.
- ii): The control pit on the northern side of the OSD tank must be relocated outside of the garage to provide external access to the proposed OSD tank.
- iii): The proposed Grated Access Hatch to the OSD tank must be changed into a sealed Access Hatch inside the proposed garage.
- iv): Overflow from the OSD tank shall be piped into the outlet pipeline from the OSD tank.

The drainage plans are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for the disposal of storm water and storm water management arising from the development.

Structural Adequacy and Excavation Work

Excavation work is to ensure the stability of the soil material of adjoining properties, the protection of adjoining buildings, services, structures and / or public infrastructure from damage using underpinning, shoring, retaining walls and support where required. All retaining walls are to be structurally adequate for the intended purpose, designed and certified by a Structural Engineer, except where site conditions permit the following:

- (a) maximum height of 900mm above or below ground level and at least 900mm from any property boundary, and
- (b) Comply with AS3700, AS3600 and AS1170 and timber walls with AS1720 and AS1170. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

Vehicle Crossings Application

A Driveway Levels and Formwork Inspections Application shall be made with Council subject to the payment of the fee in accordance with Council's Fees and Charges. The fee includes all Council inspections relating to the driveway construction and must be paid.

Approval of the application by Council is to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Vehicle Crossings

The provision of one vehicle crossing 3.5 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/1 N and specifications. An Authorised Vehicle Crossing Contractor shall construct DA2019/0836



the vehicle crossing and associated works within the road reserve in plain concrete. All redundant laybacks and crossings are to be restored to footpath/grass. Prior to the pouring of concrete, the vehicle crossing is to be inspected by Council and a satisfactory "Vehicle Crossing Inspection" card issued.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To facilitate suitable vehicular access to private property.

Maintenance of Road Reserve

The public footways and roadways adjacent to the site shall be maintained in a safe condition at all times during the course of the work.

Reason: Public Safety.

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

Registration of Encumbrances for On-site Stormwater Detention

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for on-site storm water detention 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 interim / final Occupation Certificate.

Reason: To identify encumbrances on land.

Positive Covenant and Restriction as to User for On-site Stormwater Detention

A positive covenant shall be created on the title of the land requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Northern Beaches Council's delegate prior to lodgement with NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

A restriction as to user shall be created on the title over the on-site stormwater detention system, restricting any alteration to the levels and/or any construction on the land. The terms of such restriction are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Council prior to lodgement with 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 interim / final Occupation Certificate.

Reason: To ensure the on-site detention and/or pump system is maintained to an appropriate operational standard.

Authorisation of Legal Documentation Required for Onsite Detention

An application for the authorization of legal documents is to be submitted to Council for approval. The application is to include the original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) with a copy of the Works-as-Executed plan(details overdrawn on the copy of the approved drainage plan), hydraulic engineers certification and photographs of the completed system.

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

Reason: To create encumbrances on the land.

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