

## Engineering Referral Response

Application Number:	DA2019/0261
To:	Phil Lane
Land to be developed (Address):	Lot 43 DP 6195 , 33 Hillcrest Avenue MONA VALE NSW 2103

### Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m<sup>2</sup> 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

The proposed method of stormwater disposal is satisfactory. The proposed driveway is also satisfactory. The Geotechnical report addresses the relevant DCP controls. 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**

### Geotechnical Report Recommendations have been Incorporated into Designs and Structural Plans

The recommendations of the risk assessment required to manage the hazards as identified in the Geotechnical Report prepared by White Geotechnical Group dated 19 November 2019 are to be incorporated into the construction plans. Prior to issue of the Construction Certificate, Form 2 of the Geotechnical Risk Management Policy for Pittwater (Appendix 5 of P21 DCP) is to be completed and

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

Reason: To ensure geotechnical risk is mitigated appropriately.

### **On-site Stormwater Detention Compliance**

Drainage plans detailing the provision of On-site Stormwater Detention in accordance with Northern Beaches Council's Pittwater 21 DCP 2014 Clause B5.7 and B5.10 and the concept drawing by Barrenjoey Consulting Engineers Pty Ltd, drawing number 181103 SW1A and SW2 A dated 12.04.2019. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure engineering works are constructed in accordance with relevant standards and Council's specification.

### **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.

### **Shoring of Adjoining Property**

Should the proposal require shoring to support an adjoining property or Council land, owner's consent for the encroachment onto the affected property owner shall be provided with the engineering drawings.

Council approval is required if temporary ground anchors are to be used within Council land. A Temporary Ground Anchors (Road Reserve) Application is to be submitted with Council for assessment and approval subject to Council's Fees and Charges. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate

Reason: To ensure that owners consent is obtained for ancillary works, and to ensure the protection of adjoining properties and Council land.

### **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.

**Encroachment Agreement**

An Encroachment Application is to be submitted to Council for approval in relation to the proposed stair access to the property on Council's Road Reserve in accordance with Council's Pittwater 21 DCP 2014 Clause B6.1, prior to issue of the Construction Certificate. All costs associated with these works are to be borne by the applicant.

The applicant is to enter into any appropriate agreements with Council, such as Deeds and Leases and pay any associated fees, in accordance with the above Policy.

A letter from Council indicating this condition has been satisfied is to be submitted to Certifying Authority prior to the issue of the Construction Certificate.

Reason: Ensure compliance with Council Encroachments/ Constructions & Road Reserve Lease Requirements

**Existing Drainage System Certification**

A certificate is to be provided to the Certifying Authority with the Construction Certificate application 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 that the existing storm water system in the inter-allotment drainage line benefiting the site performs satisfactorily and is capable of serving the proposed additions in accordance with the requirements of section 3.1.2 Drainage of the Building Code of Australia Housing Provision and AS/NZS 3500.3.2 - Stormwater Drainage.

Reason: To ensure that the existing storm water system is able to manage storm water discharge to an appropriate standard.

**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 A4-3330/5 EL and specifications. An Authorised Vehicle Crossing Contractor shall construct 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**

**Authorisation of Legal Documentation Required for Onsite Detention**

The original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) must be submitted to Council, with a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan) and hydraulic engineers certification. 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.

**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.

**Certification Elevated Parking Facility Work**

An appropriately qualified and practicing Structural Engineer shall certify to the Council / Principal Certifying Authority that the elevated parking facility was constructed in accordance with this consent and the provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular Section 2.4.5 Physical controls. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

Reason: Safety and compliance with relevant standards.

**Geotechnical Certification Prior to Occupation Certificate**

Prior to issue of the Occupation Certificate, Form 3 of the Geotechnical Risk Management Policy is to be completed and submitted to the Principal Certifying Authority.

Reason: To ensure geotechnical risk is mitigated appropriately.

