

Engineering Referral Response

Application Number:	DA2018/1968
To:	Georgia Quinn
Land to be developed (Address):	Lot 5 DP 17704 , 16 Cabarita Road AVALON BEACH NSW 2107

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

The proposed development proposes to excavate adjacent to an existing Council pipeline and easement. The applicant has provided suitable evidence to ensure the proposed structure will be clear of the stormwater infrastructure and conditions and a bond to ensure its integrity have been included. The submitted 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:

FEES / CHARGES / CONTRIBUTIONS

Construction, Excavation and Associated Works Bond (Drainage)

A Bond of \$15,000 as security against any damage to Council's Stormwater drainage infrastructure that burdens the site, as part of this consent.

Reason: Protection of Council's Infrastructure

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 25 October 2018 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.

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.

Sub-Soil Seepage

All sub-soil seepage drainage shall be discharged via a suitable silt arrester pit, directly to Council's nearest stormwater drainage line being the 600mm diameter pipeline traversing the site and is to be carried out in accordance with relevant Australian Standards. (Note: At the time of determination the following (but not limited to) Standards applied:

- Australian/New Zealand Standard AS/NZS 3500.3 - 2003 Plumbing and drainage - Stormwater drainage
- Australian/New Zealand Standard AS/NZS 3500.3 - 2003 / Amdt 1 - 2006 Plumbing and drainage - Stormwater drainage.)
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Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure appropriate drainage and Stormwater management on site to protect amenity of residents.

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.

Stormwater Drainage Application

A Stormwater drainage application under Section 68 of the Local Government Act 1993 is to be submitted to Council for approval. The submission is to include four (4) copies of engineering plans for the design of the following.

1. The proposed method of structural support of the existing Council pipeline adjacent to the proposed boat shed for the required excavation.
2. The proposed waterproofing details for all of the walls to the proposed boat shed to ensure no seepage from the stormwater drainage trench enters the structure.
3. The proposed connection of stormwater from the boat shed including any sub-soil drainage.

The form can be found on Council's website using the following link.

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/pdf-forms/stormwater-drainage-approval/4022-stormwater-drainage-approval.pdf>

The fee associated with the assessment and approval of the application is to be in accordance with Council's Fees and Charges.

The Council approval is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and Stormwater management arising from the development.

Pre-Construction Stormwater Assets Dilapidation Report

Survey a pre-construction / demolition Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset, to record the existing condition of the asset prior to the commencement of works. Council's Guidelines are available at:

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf>

The pre-construction / demolition dilapidation report must be submitted to Council for approval and the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's Infrastructure

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

The stormwater drainage works shall be certified as compliant with all relevant Australian Standards and Codes by a suitably qualified Consulting Engineer. Details including photographic evidence of the placement of the approved water-proofing membrane, connection of drainage from the proposed structure and sub-soil drainage around the perimeter of the excavation are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To ensure appropriate provision for the disposal of stormwater arising from the development.

Certification of Structures Located Adjacent to Council Pipeline or Council Easement

All structures are to be located clear of any Council pipeline or easement. Footings of any structure adjacent to an easement or pipeline are to be designed in accordance with Council's Pittwater 21 DCP 2014 Clause B5.12. Any proposed landscaping within a Council easement or over a drainage system is to consist of ground cover or turf only (no trees are permitted). Structural certification prepared by a suitably qualified Consulting Engineer demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Protection of Council's Infrastructure

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.

Post-Construction Dilapidation Survey

A post-construction Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset in order to determine if the asset has been damaged by the works. Council's Guidelines are available at

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf>

The post construction dilapidation report must be submitted to the Council for review and the Council's approval issued to the Principal Certifying Authority prior to the issue of the Occupation Certificate. Any damage to Council's stormwater infrastructure is to be rectified in accordance with Council's technical specifications prior to the release of the security bond.

Reason: Protection of Council's Infrastructure