

Engineering Referral Response

Application Number:	DA2018/1993
To:	Renee Ezzy
Land to be developed (Address):	<p>Lot 9 DP 629464 , 104 Cabarita Road AVALON BEACH NSW 2107</p> <p>Lot 8 DP 629464 , 102 Cabarita Road AVALON BEACH NSW 2107</p> <p>Lot 15 DP 858130 , 100 Cabarita Road AVALON BEACH NSW 2107</p> <p>Lot 14 DP 858130 , 96 Cabarita Road AVALON BEACH NSW 2107</p>

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 dwelling relies upon the creation of the lot in the current subdivision application at the same address. This application has some issues with respect to the road design in terms of grades and cross falls of the common access road. The dwelling proposed in this application relies upon this road for access and as such until the issue with the road design has been resolved, the assessment of the access to this property cannot be finalised.

The submitted Geotechnical report has been assessed and is satisfies the relevant DCP controls and the stormwater management for the site is also satisfactory.

Development Engineers do not support the application due to insufficient information to address the driveway in accordance with Clauses B6.1 and B6.2 of Pittwater 21 DCP 2014.

Additional Information Submitted 27/09/2019

The driveway issue has been addressed by the applicant's Civil Engineer in a meeting held with the applicant.

The subject site is adjacent to a Council pipeline and as such this asset must be protected during the

works. Suitable conditions for this requirement have been included.

The approval must be deferred subject to the registration of the lot. Provided that a suitable condition is provided for this requirement, Development Engineering raise 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 \$5,000 as security against any damage or failure to Council's stormwater drainage infrastructure as part of this consent.

Reason: Protection of Council's Infrastructure.

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

Stormwater Disposal

Engineering Plans in accordance with the requirements of section 3.1.2 Drainage of the Building Code of Australia Housing Provision and AS/NZS 3500.3.2:1998 - Stormwater Drainage – Acceptable solutions are to be submitted and certified by an appropriately qualified and practicing Civil Engineer, indicating all details relevant to the collection and disposal of stormwater from the site, buildings, paved areas and where appropriate adjacent catchments. Stormwater shall be conveyed from the site to the inter-allotment drainage system provided as part of the subdivision of the lot.

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

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

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 GK Geotechnics dated 30 November 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 Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

Traffic Management and Control

The Applicant is to submit an application for Traffic Management Plan to Council for approval prior to issue of the Construction Certificate. The Traffic Management Plan shall be prepared to RMS standards by an appropriately certified person.

Reason: To ensure appropriate measures have been considered for site access, storage and the operation of the site during all phases of the construction process.

Structures Located Adjacent to Council Pipeline or 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. A statement of compliance is to be prepared by a suitably qualified Structural Engineer and submitted to Council for approval. The approval from Council is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's Infrastructure.

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.

Pre-Construction Stormwater Assets Dilapidation Report

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 approval submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's Infrastructure.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Traffic Control During Road Works

Lighting, fencing, traffic control and advanced warning signs shall be provided for the protection of the works and for the safety and convenience of the public and others in accordance with RMS Traffic Control At Work Sites Manual (<http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/tcws-version-4/tcwsv4i2.pdf>) and to the satisfaction of the Principal Certifying Authority. Traffic movement in both directions on public roads, and vehicular access to private properties is to be maintained at all times during the works

Reason: Public Safety

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.

Protection of Adjoining Property - Excavation

Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must preserve and protect the building from damage and, if necessary, underpin and support the adjoining building in an approved manner.

Reason: To ensure private and public safety

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

Stormwater Disposal

The stormwater drainage works shall be certified as compliant with all relevant Australian Standards and Codes by a suitably qualified person. 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 appropriate provision for the disposal of stormwater arising from the development.

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.

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.

A statement of compliance is to be prepared by a suitably qualified Structural Engineer and submitted to Council and Council's acceptance of the certification is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Protection of Council's Infrastructure.

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/engineeringspecifications/](https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineeringspecifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf)

[2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf](https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineeringspecifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf)

The post-construction dilapidation report must be submitted to Council for review and Council's acceptance of the report issued to the Principal Certifying Authority prior to the issue of the Construction Certificate. Any damage to Council's stormwater asset 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.