

## Engineering Referral Response

<b>Application Number:</b>	DA2018/1997
<b>To:</b>	Nick England
<b>Land to be developed (Address):</b>	Lot 9 DP 629464 , 104 Cabarita Road AVALON BEACH NSW 2107 Lot 8 DP 629464 , 102 Cabarita Road AVALON BEACH NSW 2107 Lot 15 DP 858130 , 100 Cabarita Road AVALON BEACH NSW 2107 Lot 14 DP 858130 , 96 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 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 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 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:**

## **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 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 JK 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.

### **Vehicle Driveway Gradients**

Driveway gradients within the private property are not to exceed a gradient of 1 in 4 (25%) with transition gradients in accordance with AS/NZS 2890.1:2004. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure suitable vehicular access to private property.

### **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.

## **CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK**

### **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.

### **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

### **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.