

## Engineering Referral Response

<b>Application Number:</b>	DA2022/1399
<b>Date:</b>	02/12/2022
<b>To:</b>	Brittany Harrison
<b>Land to be developed (Address):</b>	Lot 1 DP 1104192 , 62 Chisholm Avenue AVALON BEACH NSW 2107 Lot 2 DP 1104192 , 60 Chisholm Avenue 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 proposal includes the construction of a new garage and driveway, extinguishment of existing easements and creation of new easements. The new driveway alignment and traffic report are acceptable subject to conditions.

#### Easements

The submitted architectural plans indicates the existing easements are to be extinguished and new easements created. However it is unclear which easements are proposed to be extinguished. The applicant shall provide a draft plan prepared by a registered surveyor detailing the existing easements, proposed easements and the easement to be extinguished. The type of easements to be created are to be shown on plan.

#### Stormwater

The stormwater plan proposes to discharge to Chisholm Avenue via an OSD system. The proposed OSD volume appears low for an increase in 200m<sup>2</sup> of impervious area. the discharge to a rock gabion in the road reserve is not supported.

The stormwater plan shall be amended to reflect the new alignment of the driveway. The plan must include calculations for the predeveloped and post developed flows. Details of the bypass flows and flows from the OSD are to be shown for all storms.

It is recommended that the discharge be piped along the driveway to the dish drain in Chisholm Avenue.

Additionally as the proposed driveway alignment is within No.62 (lot 1) an easement for drainage must be created.

### **Additional Information Provided on 17/11/2022**

The amended survey and stormwater plan have been reviewed. No objections to approval subject to conditions as recommended.

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

### **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 dated 4/3/2021 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 Certifier 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 TfNSW 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.

### **On-site Stormwater Detention Details**

The Applicant is to provide a certification of drainage plans detailing the provision of on-site stormwater detention in accordance with Northern Beaches Council's Water Management for Development Policy, and generally in accordance with the concept drainage plans prepared by Barrenjoey Consulting Engineers, job number 201206, drawing number SW1 to SW3, dated 16/11/2022. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. Stormwater shall be discharged along the driveway to the dish drain in Chisholm Avenue. Detailed drainage plans, including engineering certification, are to be submitted to the Principal Certifier for approval prior to the issue of the Construction Certificate.

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

### **Submission Roads Act Application for Civil Works in the Public Road**

The Applicant is to submit an application for approval for infrastructure works on Council's roadway. Engineering plans for the new development works within the road reserve and this development consent are to be submitted to Council for approval under the provisions of Sections 138 and 139 of the Roads Act 1993.

The application is to include four (4) copies of Civil Engineering plans for the design of vehicular crossing and associated works on the road reserve which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. The plan shall be prepared by a qualified civil engineer. The design must include the following information:

1. A vehicular crossing 3.6 meters wide to be constructed in accordance with concept plans by Andy Lehman Design, drawing number SK 02, dated November 2022 and council specifications.
2. Details of any retaining structures in the road reserve.
3. Demolition and reconstruction of the existing stone retaining wall bordering the existing Turn - Around zone.
4. Engineering long section on both edges of the proposed driveway.
5. Geotechnical Engineer to assess all proposed works including road works, retaining walls and the proposed demolition of the existing retaining wall. Form 2 shall be submitted.
6. Structural Engineer's certification for the design of all retaining walls.
7. A services plan indicating all services in the road reserve. Where any services are to be adjusted as a result of the works, approval from the relevant service authority is to be provided.

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

An approval is to be submitted to the Principal Certifier 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.

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

Reason: To provide public and private safety.

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

### **Road Reserve**

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

Reason: Public safety.

### **Civil Works Supervision**

The Applicant shall ensure all civil works approved in the Section 138 approval are supervised by an appropriately qualified and practising Civil Engineer.

Details demonstrating compliance are to be submitted to the Principal Certifier and/or Roads Authority.

Reason: To ensure compliance of civil works with Council's specification for engineering works.

### **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 Roads 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.

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

### **Positive Covenant and Restriction as to User for On-site Stormwater Disposal Structures**

The Applicant shall lodge a Legal Documents Authorisation Application with Council. The application is to include the original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) and a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan by a Registered Surveyor) and Hydraulic Engineers' certification for the completed on-site stormwater detention system works. A guide to the process can be found on Council's website using the following link.

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/pdf-forms/legal-documents-authorisation-on-site-stormwater-detention-systems/guide-submitting-ldaa-nov19.pdf>

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

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/pdf-forms/legal-documents-authorisation-on-site-stormwater-detention-systems/4023-legal-documents-authorisation-oct19.pdf>

The Applicant shall create on the Title a positive covenant in respect to the ongoing maintenance and restriction as to user over the on-site stormwater detention system within this development consent.

The terms of the positive covenant and restriction 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 the NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant. A copy of the certificate of title demonstrating the creation of the positive covenant and restriction as to user for the on-site stormwater detention system is to be submitted.

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

Reason: To ensure the on-site stormwater detention system is maintained to an appropriate operational standard and not altered.

### **Retaining wall**

The retaining wall works in the road reserve shall be certified as compliant with all relevant Australian Standards and Codes by a Structural Engineer. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

Reason: Public and Private Safety

### **Geotechnical Certification Prior to Occupation Certificate**

The Applicant is to submit the completed Form 3 of the Geotechnical Risk Management Policy (Appendix 5 of P21 DCP) to the Principal Certifier prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

### **Creation of Easements**

The Applicant shall create easements for Drainage, Right of Carriageway, Rights of Footway, Easement to Permit Encroaching Structure (under the provisions of Section 88B of the Conveyancing Act) generally in accordance with the plan by Clarke Dowdle & Associates, drawing title Plan Showing Proposed Easements, revision B, dated 27/10/2022.

The Applicant is to ensure all structures are located within the appropriate easement(s).

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

Reason: Statutory requirements of the Conveyancing Act 1919.