

## Engineering Referral Response

<b>Application Number:</b>	DA2021/1744
<b>Date:</b>	28/03/2022
<b>To:</b>	Maxwell Duncan
<b>Land to be developed (Address):</b>	Lot 13 DP 300716 , 153 Queenscliff Road QUEENSCLIFF NSW 2096

### 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

#### 30/09/2021:

The development application is for alterations and additions to an existing dwelling including new concrete driveway, excavated garage, stairs to the street level, new studio with stairs, level grassed area with planting, front and rear decks and new retaining walls to front & rear yard with levelled grassed areas.

#### Stormwater

Stormwater from new roofed areas will be fed into the existing stormwater drainage system and piped to the street gutter.

#### Access

At present site is accessed via stairs to the front in Queenscliff Road.

Proposal is for new excavated garage & concrete driveway, storage in garage & pedestrian stairs to access the dwelling.

Driveway grades seems to be steep, and can be improved by slightly set back the garage.

Details indicates the removal of retaining wall and likely removal of street tree in the road reserve which contradicts comments of Council's Landscape Officer.

Development Engineer also supports the removal of retaining wall in the road reserve as it will greatly improve the sight distances for the proposed driveway and also for the neighbor driveway

( 155 Queenscliff Road ).

But before Development Engineer finalise their assessment, comments from Council's Road Team are requested.

**28/03/2022:**

Updated Plans are provided.

**Access**

Proposal is for new excavated garage, concrete driveway, & pedestrian stairs to access the dwelling, which further requires removal of retaining wall, kerb & gutter and hand rail from public road reserve. Proposed works will be assessed under Section 138A Road Act application for new driveway and associated works within public road reserve.

Materials to be in keeping with streetscape.

Plain concrete besser blocks are not supported.

**Stormwater**

Stormwater is shown as being connected to private stormwater pit within the adjoining property (155 Queenscliff Road), No evidence of any legal entitlement eg easement is shown/provided.

Applicant is advised to connect site stormwater to street kerb.

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:**

**FEES / CHARGES / CONTRIBUTIONS**

**Construction, Excavation and Associated Works Security Bond (Road works & Retaining Walls)**

The applicant is to lodge a bond with Council of \$20,000 .00 as security against any damage or failure to complete the construction of road pavement and retaining walls reconstruction works as part of this consent.

Details confirming payment of the bond are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

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

**Stormwater Disposal**

The applicant is to submit Stormwater Engineering Plans for the new development within this development consent, prepared 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 street kerb in Queenscliff Road.

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.

### **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.

### **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, retaining structures and kerb and gutter 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 and structural engineer. The design must include the following information:

As outlined in the Concept Drawing by Rapid Plans, Dated 04/05/2021, Rev 1 Drawing No. DA2001;

#### **1. Structural Engineering details relating to the**

- connection between retained section of existing western retaining wall and new proposed retaining wall with in public road reserve along frontage of site are to be submitted to Council prior to the release of the Construction Certificate.
- connection between retained section of existing eastern retaining wall and new retaining wall with in public road reserve along frontage of site are to be submitted to Council prior to the release of the Construction Certificate.

Each plan/sheet is to be signed by a qualified practicing Structural Engineer with corporate membership of the Institute of Engineers Australia (M.I.E) and has appropriate experience and competence in the related field.

2. Structural Engineer to provide details of stability and any rectifications required to the retained sections of existing retaining walls with in public road reserve along frontage of site.

3. At a minimum, the drawings must show the works in plan view, longitudinal sections and details at a relevant scale including all existing levels, any existing services/ infrastructure to be retained in the area of works.

4. All driveways gradients and safe sight distances etc. shall be designed comply with AS 2890.1:2004 (Off-street Parking Standards).

5. The proposed development involves the construction of subsurface structures and excavation that has potential to adversely impact neighboring property if undertaken in an inappropriate manner. To ensure there are no adverse impacts arising from such works, the applicant must engage a suitably qualified and practicing Civil or Structural Engineer specialising in geotechnical and the hydrogeological field to design.

6. Applicant is advised to connect site stormwater to street kerb.

7. Proposed works within the public domain must not affect existing services in the area. Any adjustment of services are to be approved by the relevant service authority with all costs associated borne by the applicant.

8. Vehicle crossing to be 4.5 metres wide at the kerb and the driveway profile to be in accordance with

Northern Beaches Council's standard Drawing No A4-3330/1.N

9. Provision of any vehicle gate or pedestrian gate on the public road reserve is not permitted.
10. Details of pedestrian access (stairs) to site are to be provided.
11. Materials to be in keeping with streetscape.
12. Plain concrete besser blocks are not supported.
13. All redundant pathways and railings along full frontage of site to be removed and the area to be secured for public safety.

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 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.

### **Vehicle Driveway Gradients**

The Applicant is to ensure driveway gradients within the private property are not to exceed a gradient of 1 in 4 (25%) with a transition gradient of 1 in 10 (10%) for 1.5 metres prior to a level parking facility. Access levels across the road reserve are to comply with the allocated vehicle profile detailed in this consent.

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

Reason: To provide public and private safety.

## **CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT**

### **Public Liability Insurance - Works on Public Land**

Any person or contractor undertaking works on public land must take out Public Risk Insurance with a minimum cover of \$20 million in relation to the occupation of, and approved works within Council's road reserve or public land, as approved in this consent. The Policy is to note, and provide protection for Northern Beaches Council, as an interested party and a copy of the Policy must be submitted to

Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public land.

Reason: To ensure the community is protected from the cost of any claim for damages arising from works on public land.

## **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 Certifying Authority 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**

### **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 Certifying Authority prior to the issue of Final Occupation Certificate.

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

### **Retaining wall**

The retaining wall works (**with in public road reserve along frontage of site**) 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 Certifying Authority prior to the issue of any Final Occupation Certificate.

A copy of the certification is to be submitted to Council prior issue of any Final Occupation Certificate.

Reason: Public and Private Safety

### **Certification of Civil Works and Works as Executed Data on Council Land**

The Applicant shall submit a suitably qualified Civil Engineer's certification that the completed works have been constructed in accordance with this consent and the approved Section 138 plans. Works as Executed data certified by a registered surveyor prepared in accordance with Council's 'Guideline for preparing Works as Executed data (details overdrawn on a copy of the approved civil plans) for Council Assets' in an approved format shall be submitted to Council for approval prior to the release of any security deposits.

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