

## Engineering Referral Response

<b>Application Number:</b>	DA2019/0509
<b>To:</b>	Maxwell Duncan
<b>Land to be developed (Address):</b>	Lot 1 DP 172127 , 52 Lauderdale Avenue FAIRLIGHT NSW 2094

### 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

In general, Development Engineering has no objection to the application.

However, there is a few issues shall be commented by Transport & Civil Infrastructure Asset in related to the proposed footpath and stair.

Development Engineering cannot provide the adequate conditions prior to the comment of Transport & Civil Infrastructure Asset on:

- 1 ) the design criteria of the proposed footpath over the new driveway crossing and the related supporting structure
- 2 ) the design of the new stair
- 3 ) the future maintenance of these footpath and stair (is any lease agreement required?).

Please refer the application back to Development Engineering after the comment from Transport & Civil Infrastructure Asset .

Further assessment

Development Engineering has no objection to the application subject to the following conditions.

### Referral Body Recommendation

Recommended for approval, subject to conditions

### Refusal comments

**Recommended Engineering Conditions:**

**FEES / CHARGES / CONTRIBUTIONS**

**Construction, Excavation and Associated Works Bond (Crossing / Kerb)**

A Bond of \$20000 as security against any damage or failure to complete the construction of any vehicular crossings, kerb and gutter and any footpath works required as part of this consent. Reason: Biodiversity/Vegetation Conservation and Management.

Reason: Protection of Council's Infrastructure.

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

**On-site Stormwater Detention Compliance**

Certification of Drainage plans detailing the provision of On-site Stormwater Detention in accordance with Northern Beaches Council's MANLY SPECIFICATION FOR ON-SITE STORMWATER MANAGEMENT 2003 and the concept drawing by RTS Civil Consulting, Job number 181204, drawing SW 100-104 dated 23/04/2019. Details demonstrating compliance are to be submitted to the Principal 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.

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

An Application for Works to be approved within Council Roadway, including engineering plans is 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 the retaining walls through the nature strip, driveway crossing and footpath which are to be generally in accordance with the Development Application and Council's specification for engineering works - AUS-SPEC #1 and/ or Council's Minor Works Policy. The plan shall be prepared by a qualified structural engineer. The design must include the following information:

- The proposed retaining wall shall be designed in complies with Australian Standard: Earth-retaining Structure AS 4678-2002
- An appropriate drainage system for the retaining wall shall be design and included on the drawing
- All Public and private utility services are to be located on the plan and cross-section plan. All costs related to any relocation of utility service shall be borne by the applicant.
- The proposed footpath must be designed with Council's standard and satisfaction

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 Certifying Authority prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

**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 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 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.

### **Vehicle Crossings**

The provision of one vehicle crossing 6 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/1 N and specifications. An Authorised Vehicle Crossing Contractor shall construct the vehicle crossing and associated works within the road reserve in plain concrete. All redundant laybacks and crossings are to be restored to footpath/grass. Prior to the pouring of concrete, the vehicle crossing is to be inspected by Council and a satisfactory "Vehicle Crossing Inspection" card issued.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To facilitate suitable vehicular access to private property.

### **Maintenance of Sediment**

Sedimentation and erosion controls are to be effectively maintained at all times during the course of construction and shall not be removed until the site has been stabilised or landscaped to the Principal Certifying Authority's satisfaction.

Reason: To ensure sediment controls are effective.

### **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**

### **Authorisation of Legal Documentation Required for Onsite Detention**

The original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) must be submitted to Council, with a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers certification and Compliance Certificate issued by an Accredited Certifier in Civil Works. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To create encumbrances on the land.

### **Registration of Encumbrances for On-site Stormwater Detention**

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for on-site storm water detention as to user is to be submitted. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To identify encumbrances on land.

### **On-Site Stormwater Detention Compliance Certification**

Upon completion of the on-site stormwater detention (OSD) system, certification from a consulting engineer and a "work as executed" (WAE) drawing certified by a registered surveyor and overdrawn in red on a copy of the approved OSD system plans are to be provided to Council.

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 stormwater disposal is constructed to Council's satisfaction.

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

A positive covenant shall be created on the title of the land requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant 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 NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release,

vary or modify such covenant.

A restriction as to user shall be created on the title over the on-site stormwater detention system, restricting any alteration to the levels and/or any construction on the land. The terms of such restriction are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Council prior to lodgement with NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such restriction.

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 the on-site detention and/or pump system is maintained to an appropriate operational standard.

## **CONDITIONS THAT MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF ANY STRATA SUBDIVISION OR SUBDIVISION CERTIFICATE**

### **Provision of Services for Subdivision**

The applicant is to ensure all services including, water, electricity, telephone and gas are provided, located and certified by a registered surveyor on a copy of the final plan. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To ensure that utility services have been provided to the newly created lots

### **Survey Plan - Construction Identification**

A declaration by a registered surveyor shall be provided to Council as evidence that all construction has been effected within the appropriate property, easement boundaries and rights of carriageway. This shall be in the form of a copy of the final subdivision or easement plan, with the distances from the boundaries to the edges of these structures endorsed in red thereon and signed by the surveyor. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To ensure accurate location of buildings, access and services.

### **Sydney Water Compliance Certification**

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Co-ordinator. Please refer to the Building Developing and Plumbing section of the web site [www.sydneywater.com.au](http://www.sydneywater.com.au) <<http://www.sydneywater.com.au>> then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance. Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Co-ordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To ensure compliance with the statutory requirements of Sydney Water

### **Release of Subdivision Certificate**

To enable the lodgement of the final plan at the NSW Land and Property Information Department the Subdivision Certificate shall not be issued until the Final Occupation Certificate for the approved development has been issued.

Reason: To ensure that the plans relate to approved development.

### **Subdivision Certificate Application**

Prior to the issue of the Subdivision Certificate, a completed Subdivision Certificate form, a final plan of subdivision prepared in accordance with the requirements of the Conveyancing Act 1919 are to be submitted to Council. Nine copies of the final plan of subdivision are to be submitted. All plans of survey are to show connections to at least two Survey Co-ordination Permanent Marks. The fee payable is to be in accordance with Council's fees and charges

Reason: Statutory requirement of the Conveyancing Act 1919

### **Title Encumbrances**

All easements, rights of carriageway, positive covenants and restrictions as to user as indicated on the plans and required by this consent are to be created on the title naming Northern Beaches Council as the sole authority empowered to release or modify. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To ensure proper management of land.