

## Engineering Referral Response

<b>Application Number:</b>	DA2022/2230
<b>Proposed Development:</b>	Demolition works and construction of a dwelling house including swimming pool and garage
<b>Date:</b>	13/06/2023
<b>To:</b>	Megan Surtees
<b>Land to be developed (Address):</b>	Lot 6 DP 246526 , 1 Lanford Avenue KILLARNEY HEIGHTS NSW 2087

### 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

#### Engineering comments 17.05.23

Comments provided by van der meer dated 16 February 2023 are noted and in most parts supported, subject to further information being provided. The following amendments are required to the Stormwater plans by van der meer before conditions of consent can be provided:

1. Provide cross-sections through each proposed rainwater/ OSD tank with orifice and other levels showing how discharge from the on-site detention tank will drain to the street by gravity. Show orifice size. At present, the drawings do not show enough detail.
2. Amend plans to show roof areas draining to each OSD tank.
3. Show overland flow route from OSD tanks in the event of pipe blockage.
4. Provide DRAINS model of on-site detention calculations including pre and post development conditions.
5. The drawings need to show that no concentrated flows from impervious areas will be directed to the rear property.

#### Engineering comments 13.06.23

I have reviewed the amended stormwater plans and have no further objections to the proposal.

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**

#### **Stormwater Disposal**

The applicant is to submit Stormwater Engineering Plans for the new development within this development consent in accordance with AS/NZS 3500 and Council's Water Management for Development Policy, prepared by an appropriately qualified and practicing Civil or Hydraulic Engineer who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) , 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 street kerb in accordance with Stormwater Management plans by Van Der Meer Consulting Job No. SY212-054 dated 23.05.2023.**

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

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

#### **Geotechnical Report Recommendations have been Incorporated into Designs and Structural Plans**

The recommendations of the Geotechnical Report prepared by **Douglas Partners** dated **08.09.2022** are to be incorporated into the construction plans. Details demonstrating compliance are to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

#### **Vehicle Crossings Application**

The Applicant is to submit an application with Council for driveway levels to construct **one** vehicle crossing **3** metres wide in accordance with Northern Beaches Council Standard Drawing **A4/3330/1 N** in accordance with Section 138 of the Roads Act 1993.

Note, driveways are to be in plain concrete only.

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

A Council approval is to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To facilitate 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 Certifier 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.

### **Vehicle Crossings**

The Applicant is to construct **one** vehicle crossing **3** metres wide in accordance with Northern Beaches Council Drawing No A4-3330/ **1 N** and the driveway levels application approval. 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.

A copy of the vehicle crossing inspection form is to be submitted to the Certifier.

Reason: To facilitate suitable vehicular access to private property.

## 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 Certifier prior to the issue of an Occupation Certificate.

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

### **Reinstatement of Kerb**

The Applicant shall reinstate all redundant laybacks and vehicular crossings to conventional kerb and gutter, footpath or grassed verge as appropriate with all costs borne by the applicant.

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

Reason: To facilitate the preservation of on street parking spaces.

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

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, (available from Northern Beaches Council), 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 Certifier prior to the issue of an Occupation Certificate.

Reason: To ensure modification to the on-site stormwater detention structure is not carried without Council's approval.

### **Retaining wall**

The retaining wall works 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