

## Engineering Referral Response

<b>Application Number:</b>	DA2019/0860
<b>Date:</b>	08/05/2020
<b>To:</b>	Alex Keller
<b>Land to be developed (Address):</b>	Lot 52 DP 881594 , 24 Darley Street East MONA VALE NSW 2103

### 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

Development engineering comments 8/5/20

No objections to the residential aged care facility subject to conditions.

Development Engineering Comments 21/4/20

#### Driveway

The development is not supported for the following reasons.

- The driveway entry and vehicle crossing details are inconsistent. The maximum width of the vehicle crossing is to be 4m from the side boundary and the driveway extent is to be clearly shown on the site plan which also is to include the location of the passing bay . A passing bay on the front boundary will not be permitted .
- Additionally any proposed boundary retaining walls to support the access driveway are to be detailed on the plan. The bin storage area doors cannot open onto the access driveway.
- The architectural plans detail a vehicle passing bay on Council's footpath area which needs to be fully located within the development site.

### Stormwater

The stormwater drainage concept plan which details the provision of On-site stormwater detention is satisfactory.

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 Bond (Drainage works)**

The applicant is to lodge a bond of \$40000 as security against any damage or failure to complete the construction of stormwater drainage 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 demonstrate how stormwater from the new development within this consent is disposed of to an existing approved system or in accordance with Northern Beaches Council's **PITTWATER DCP21, MANAGEMENT 2003**. Details by an appropriately qualified and practicing Civil Engineer demonstrating that the existing approved stormwater system can accommodate the additional flows and the compliance with the Council's specification 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 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 White Geotechnical dated 26/7/19 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 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.

### **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 **PITTWATER DCP21**, and generally in accordance with the concept drainage plans prepared by Barrenjoey Consulting Engineers, drawing number SW1DA and SW2DA, dated 24/6/19. 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.

Detailed drainage plans, including engineering certification, are to be submitted to the Certifying Authority 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**

An Application for the stormwater drainage works to be approved within Darley Street 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 and driveway crossing which are to be generally in accordance with the Development Application, Concept Drainage Plan by Barrenjoey Consulting Engineers (SW1DA, SW2DA) 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 civil engineer. The design must include the following information: 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.

### **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.

### **Vehicle Crossings Application**

A Driveway Levels and Formwork Inspections Application shall be made with Council subject to the payment of the fee in accordance with Council's Fees and Charges. The fee includes all Council inspections relating to the driveway construction and must be paid.

Approval of the application by Council is to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

**Geotechnical Report Recommendations have been correctly incorporated into designs and structural 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.

Reason: To ensure geotechnical risk is managed appropriately.

**Pre-commencement Dilapidation Report**

The applicant must prepare and submit a pre-commencement dilapidation report providing an accurate record of the existing condition of adjoining public and private properties and public infrastructure (including roads, gutter, footpaths, etc). A copy of the report must be provided to Council, any other owners of public infrastructure and the owners of adjoining and affected private properties.

Reason: Protection of Council's and Private Party's Infrastructure during construction.

**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.

**Notification of Inspections**

Council's Development Engineer is to be given 48 hours notice when the works reach the following stages: (a) Installation of Silt and Sediment control devices

- (b) Prior to backfilling of pipelines
- (c) Prior to pouring of stormwater gully pits
- (d) Prior to pouring of kerb and gutter
- (e) Subgrade level / basecourse level / subbase
- (f) Sealing road pavement

NOTE: Any inspections carried out by Council do not imply Council approval or acceptance of the work, and do not relieve the developer/applicant from the requirement to provide an engineer's certification. Council approval or acceptance of any stage of the work must be obtained in writing, and will only be issued after completion of the work to the satisfaction of Council and receipt of the required certification

Reason: To ensure new Council infrastructure is constructed to Council's requirements.

### **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

### **Vehicle Crossings**

The provision of one vehicle crossing 4 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/ Normal High 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 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.

### **Temporary Sediment**

Temporary sedimentation and erosion controls are to be constructed prior to commencement of any work to eliminate the discharge of sediment from the site.

Reason: To reduce erosion and prevent sediment runoff into public assets

### **Site Entry Access way**

An all-weather access way at the front of the property consisting of 50-75mm aggregate or similar material at a minimum thickness of 200mm and 15metres long laid over geotechnical fabric is to be constructed prior to commencement of works and maintenance over the works period.

Reason: To reduce sediment being taken offsite

### **Cleaning of Vehicles Leaving Site**

Adequate measures shall be undertaken to remove clay from vehicles leaving the site so as to maintain public roads in a clean condition.

Reason: To reduce sediment being taken offsite

### **Stormwater Pipeline Construction**

Where connection to Council's nearest stormwater drainage system is required, being Darley Street, the applicant shall construct the pipeline in accordance with AUSPEC specification for engineering

works (see [www.northernbeaches.nsw.gov.au](http://www.northernbeaches.nsw.gov.au)) and shall reconstruct all affected kerb and gutter, bitumen reinstatements, adjust all vehicular crossings for paths, grass verges and household stormwater connections to suit the kerb and gutter levels. All works shall be undertaken at the applicant's cost, and upon completion certified by an appropriately qualified and practicing Civil Engineer. Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

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

## **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 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.

Works as executed drawings and the design engineers certification of the On site stormwater detention system is to be provided with the submission of the Legal Documents approval 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 the on-site detention and/or pump system is maintained to an appropriate operational standard.

### **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.