

Engineering Referral Response

Application Number:	DA2018/1692
To:	Alex Keller
Land to be developed (Address):	Lot 810 DP 752038 , 810 / Willandra Road NARRAWEENA NSW 2099

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

No objection to approval, subject to conditions as recommended.

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 \$5000 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: 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.

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.

Pump-Out System Design for Stormwater Disposal

The design of the pump-out system for Stormwater disposal will be permitted for drainage of hard surfaces areas such as driveways and basement pavement areas only, and must be designed in accordance with AS/NZS 3500. Engineering details demonstrating compliance with this requirement and certified by an appropriately qualified and practising hydraulic engineer.

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

Reason: To ensure adequate provision is made for the discharge of Stormwater from the excavated parts of the site.

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 footpath, driveway crossing and the drainage system 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 Policy. The plan shall be prepared by a qualified Civil engineer. 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 provide public and private safety.

Vehicle Driveway Gradients

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 Council's Policy. Details demonstrating compliance are to be submitted to the Certifying Authority 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 Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

Construction Management Program

An application for Traffic Management Plan is to be submitted to Council for approval. The Traffic Management Plan shall be prepared to RMS standard by an appropriately certified person. An approval is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

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 in a manner that respects adjoining owner's property rights and protects amenity in the locality, without unreasonable inconvenience to the community

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

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.

Footpath Construction

The applicant shall extend the existing footpath to the southern edge of the proposed crossing 1.5 metres wide. The works shall be in accordance with the following:

- (a) All footpath works are to be constructed in accordance with Council's Policy.
- (b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Council's specification for footpath.

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

Reason: To ensure compliance of footpath works with Council's specification for engineering works.
(DACENE07)

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 Crossing

The provision of one vehicle crossing 5 metres wide at the boundary to 6 metres wide at the kerb 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.

Notification of Inspections

Council's Development Engineer is to be given 48 hours notice when the works reach the following stages:

(a) Prior to pouring concrete for the footpath and the vehicle crossing.

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.

**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 Certifying Authority prior to the issue of any interim / final Occupation Certificate.

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

Positive Covenant for the Maintenance of Stormwater Pump-out Facilities

A Positive Covenant (under the provisions of Section 88B of the Conveyancing Act 1919) is to be created on the property title to ensure the on-going maintenance of the stormwater pump-out facilities

on the property being developed.

Northern Beaches Council shall be nominated in the instrument as the only party authorised to release, vary or modify the instrument. Northern Beaches Council's delegate shall sign these documents prior to the submission to NSW Land Registry Services.

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 adequate provision is made for the stormwater pump out system to be maintained to an appropriate operational standard. (DACENF11)

Pump-out System Compliance Certification

Upon completion of the Pump-out 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 Pump-out 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.