

Engineering Referral Response

Application Number:	DA2021/0199
Date:	18/05/2021
To:	Lashta Haidari
Land to be developed (Address):	Lot B DP 402309 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 1 DP 595298 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 7 DP 455967 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 6 DP 8561 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 5 DP 8561 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 4 DP 654321 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 6 DP 737137 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 8 DP 455967 , 4 Jacksons Road WARRIEWOOD NSW 2102 Lot 3 DP 8561 , 2 Jacksons Road WARRIEWOOD NSW 2102 Lot 2 DP 8561 , 2 Jacksons Road WARRIEWOOD NSW 2102 Lot 1 DP 8561 , 2 Jacksons Road WARRIEWOOD NSW 2102 Lot 15 DP 26902 , 2 Jacksons Road WARRIEWOOD NSW 2102

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

The stormwater management plan details the provision of on site stormwater detention in above ground

storages (2 no) located in the carparking areas.

A review of the submitted DRAINS model and report has demonstrated the post development discharges from the site are less than the pre developed site discharges.

The normally required frontage works are listed in councils capital works programs. These works include the provision of kerb and gutter in Boondah Road and roundabout upgrade works (Jacksons Road).

No objections to the development subject to conditions.

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)

A bond of \$20000 as security against damage to Council's roads fronting the site caused by the transport and disposal of materials and equipment to and from the site.

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

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 **WARRINGAH WATER MANAGEMENT FOR DEVELOPMENT POLICY**, and generally in accordance with the concept drainage plans prepared by Warren Smith Consulting Engineers, drawing number **C6.01 Issue 2, C6.02 Issue 2, C6.03 Issue 1, C6.04 Issue 2, C6.05 Issue 2, C6.06 Issue 2, C6.07 Issue 2**, dated April 2021. 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 (NER) or RPENG (Professionals Australia) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. **An additional grated drain is to be provided at the property boundary and vehicle crossing and connected into the new Boondah road kerb.**
- ii. 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.

Vehicle Crossings Application

The Applicant is to submit an application for driveway levels with Council in accordance with Section 138 of the Roads Act 1993. 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 facilitate suitable vehicular access to private property.

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.

Progress Certification (Road & Subdivision)

The applicant shall provide written certification is to be provided by a suitably qualified engineer upon completion and/or as and when requested by the [DELETE ONE Principal Certifying Authority / Roads Authority] for the following stages of works:

- (a) Silt and sediment control facilities
- (b) Laying of stormwater pipes and construction of pits
- (c) Proof Roll
- (d) Sub-grade trimmed and compacted **
- (e) Base-course laid and compacted **
- (f) Kerb and gutter construction
- (g) Pavement
- (h) Landscaping and vegetation
- (i) Clean-up of site, and of adjoining Council roadway and drainage system.

(**To be tested by a recognised N.A.T.A. approved laboratory).

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

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

Footpath Construction

The applicant shall construct a 1.5m wide concrete footpath along the Boondah Road frontage in accordance with Councils standard engineering details.

- (a) All footpath works are to be constructed in accordance with a detailed design plan prepared by a suitably qualified engineer.
- (b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Councils specifications. 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.

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.

Vehicle Crossings

The Applicant is to construct one vehicle crossing 6 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/ Normal 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 Principal Certifying Authority.

Reason: To facilitate suitable vehicular access to private property.

Kerb and Gutter Construction

The Applicant is to construct kerb and gutter and associated works along the entire Boondah Road frontage of the site in accordance with Northern Beaches Council Standard Engineering Drawings. Engineering plans/details are to be prepared by a design engineer with NER or RPENG accreditation. Prior to the pouring of concrete, the works are to be inspected by Council and an approval issued.

The approval is to be submitted to the Principal Certifying Authority.

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

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 the approved construction certificate plans and Councils water management policy for development by the design engineer. 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.

Post-Construction Road Reserve Dilapidation Report (Major Development)

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

Reason: To ensure security against possible damage to Council property.

Positive Covenant and Restriction as to User for On-site Stormwater Disposal Structures

The Applicant shall lodge the Legal Documents Authorisation Application with the original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) to Council and a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers' certification.

The Applicant shall create on the Title a restriction on the use of land and a positive covenant in respect

to the ongoing maintenance and restriction of the on-site stormwater disposal structures within this development consent. The terms of the positive covenant and restriction 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 the NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

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 final Occupation Certificate.

Reason: To ensure the on-site stormwater disposal system is maintained to an appropriate operational standard.

Post-Construction Dilapidation Report (Major Development)

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

Reason: To ensure security against possible damage to Council property.