



## Engineering Referral Response

<b>Application Number:</b>	DA2019/1157
<b>Date:</b>	09/07/2020
<b>To:</b>	Claire Ryan
<b>Land to be developed (Address):</b>	Lot 66 DP 6248 , 353 Barrenjoey Road NEWPORT NSW 2106 Lot 65 DP 6248 , 351 Barrenjoey Road NEWPORT NSW 2106 Lot 64 DP 1090224 , 351 Barrenjoey Road NEWPORT NSW 2106

### 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 9/7/2020

The amended architectural plans have been reviewed and accordingly the stormwater drainage concept plans need to be amended to reflect the changed roof level plans.

#### Development Engineering comments 26/5/20

The amended stormwater plan have been reviewed and is acceptable with minor amendments which will be conditioned.

The basement pump out discharge line is to be directly connected to Councils stormwater inlet pit in Robertson road.

No objection to the development subject to conditions.

The updated stormwater drainage plans prepared by Demlakian Engineers have not addressed the previous comments.

The 225mm stormwater outlet pipe which is proposed to run under the footpath landscape and stand of palm trees is not supported. An alternative solution for the stormwater outlet is to be required which will not be in conflict with the footpath landscaping.

Also any alternative arrangement is to be supported by a long section through the Council footpath detailing the location of all utility services in relation to the proposed stormwater outlet.

### **Previous comments**

The stormwater drainage concept plan is not supported for the following reasons :

- 1) The 225mm stormwater outlet pipe is proposed to be placed under a stand of palm trees that forms part of the existing streetscape landscaping. An alternative discharge point to the next council gully pit in Barrenjoey Road is required to avoid impacts on the stand of palm trees.
- 2) The design engineer is to provide a long section through the Council footpath detailing the location of all utility services in relation to the proposed stormwater outlet.

The proposal is therefore unsupported.

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 (Road and Footpath paving works)**

The applicant is to lodge a bond with Council of \$75000 as security against any damage or failure to complete the construction of road pavement reconstruction works, kerb and gutter and footpath paving works (Robertson Road) and required by 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.

### **Construction, Excavation and Associated Works (Security Bond)**

A bond of \$30000 as security against damage to Council's road and footpath area 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.

### **Construction, Excavation and Associated Works Bond (Maintenance for civil works)**

The developer/applicant must lodge with Council a maintenance bond of \$20000 for the reconstruction of footpath paving, kerb and gutter and half road paving in Robertson Road. The maintenance bond will only be refunded upon completion of the six month maintenance period, if work has been completed

in accordance with the approved plans and to the satisfaction of Council. The maintenance bond is to be paid prior to Council issuing practical completion.

Reason: To ensure adequate protection of Council infrastructure.

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

### **Stormwater drainage plans**

The Applicant is to provide detailed drainage plans detailing the provision of stormwater drainage in accordance with Northern Beaches Council's **PITTWATER DCP21**, , and generally in accordance with the concept drainage plans prepared by Demlakian Engineering, drawing number SW02 P5, SW03 P3, SW04 P4, SW05 P1. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer.

The drainage plans must address the following: i. Detail the connection of the basement pump out discharge line to the Councils stormwater inlet pit in Robertson Road  
ii. All stormwater outlets to the kerb and gutter in Robertson and Pittwater Roads are to be a minimum 200 x100mm Galvanised RHS.

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**

The Applicant is to submit an application for approval for Infrastructure works on Councils roadway. Engineering plans for the new development works within the road reserve and this development consent are 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 kerb and gutter, half road construction and footpath paving in Robertson Road, which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. The plan shall be prepared by a qualified civil engineer. The design must include the following information:

- 1) Details of the basement pump out discharge line connected to Councils inlet pit in Robertson road.
- 2) Reconstruction of the footpath paving in Robertson Road to match the existing paving on the opposite side of the road
- 3) Half road construction and new kerb and gutter (Roberstson Road) to the existing pedestrian threshold .

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 ensure engineering works are constructed in accordance with relevant standards and

Council's specification.

### **Tanking of Basement Level**

The basement area is to be permanently tanked. The Applicant is to submit structural details of the tanking, prepared by a suitably qualified Engineer. Where temporary dewatering works are required on the development site during construction, the developer/applicant must apply for and obtain a bore license from the NSW Office of Environment and Heritage. The bore license must be obtained prior to commencement of dewatering works. All requirements of the NSW Office of Water are to be complied with and a copy of the approval must be submitted to the Certifying Authority. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To prevent ingress of sub-surface flows into the basement area and to comply with State Government Requirements.

### **Shoring of Council's Road Reserve (Temporary road anchors)**

Should the proposal require shoring to support an adjoining property or Council land, the Applicant shall provide the adjoining properties with engineering drawings, detailing the proposed shoring works for their consideration and approval.

Written approval from Council under Section 138 of the Roads Act 1993 is required if temporary ground anchors are to be used within Council's road reserve and is subject to Council's fees and charges.

The Council Road Anchors approval is to be submitted to the 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**

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.

### **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 property 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.

The pre-construction / demolition dilapidation report must be submitted to Council records and then submitted to the Certifying Authority prior to the issue of the any Construction Certificate and the commencement of any works including demolition.

Reason: Protection of Council's Infrastructure during construction.

## 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.

### Civil Works Supervision

The Applicant shall ensure all civil works approved in the Section 138 approval are supervised by an appropriately qualified and practising Civil Engineer.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority and/or Roads Authority.

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

### Notification of Inspections (Infrastructure works to be handed over to Council)

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

- a) Prior to pouring of kerb and gutter
- b) Subgrade level / basecourse level / subbase
- c) 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.

Reason: To ensure new Council infrastructure is constructed in accordance with Auspec 1 Council's design and specification standards.

### 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 5.5 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 and Half Road Construction

The Applicant is to construct kerb and gutter and reconstruct the half road along the entire Robertson Road frontage of the site in accordance with Northern Beaches Councils standard Engineering Drawings. 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 all relevant Australian Standards and Codes, Council water management policy 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**

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 positive covenant in respect to the ongoing maintenance of the pump-out facility 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 the NSW Land Registry Services. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

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 adequate provision is made for the stormwater pump out system to be 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.