

Engineering Referral Response

Application Number:	REV2025/0005
Proposed Development:	Review of Determination of Application DA2024/0303 for Demolition of existing structures, removal of trees and subdivision of one lot into three lots
Date:	03/06/2025
To:	Maxwell Duncan
Land to be developed (Address):	Lot 5 DP 222134 , 337 Lower Plateau Road BILGOLA PLATEAU NSW 2107

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

Updated comments 3/6/25

The DRAINS model has been reviewed and is consistent with the stormwater management plan that details the provision of on site stormwater detention. Additionally Barrenjoey consulting engineers have demonstrated in relation to the required Flood Planning levels the architectural plan detailing the dwelling footprints detail the watercourse 1/100 AEP water surface levels adjacent to the proposed floor levels having a minimum 500mm freeboard . No objections to the proposed subdivision subject to conditions.

Previous comments

The stormwater management report dated 31 October 2024 as prepared by Barrenjoey Consulting Engineers (BCE) is generally supported and partially addresses Councils previous concerns however the following supporting information is required to be able to provide conditions of development consent>

1) The report states that the on site detention volumes for the right of accessway have been upsized to 8m³, 5m³ and 3m³ respectively however the stormwater management plans are to be amended to reflect these new OSD volumes. Additionally the DRAINS model that reflects these new OSD Tank

volumes is to be submitted to Council for review.

2) In relation to the required Flood Planning levels the architectural plan detailing the dwelling footprints is to be amended to detail the watercourse 1/100 AEP water surface levels adjacent to the proposed floor levels demonstrating that a minimum 500mm freeboard has been achieved. The relevant sections of the BCE Flood Risk and Inundation and Risk report are to be referenced and the plan certified by BCE.

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(s)

The applicant is to lodge a bond with Council for the following:

Crossing / Kerb & Gutter / Footpath Works

As security against any damage or failure to complete the construction of the vehicular crossings, kerb and gutter, and removal of any redundant driveways required as part of this consent a bond of \$15000.

Security Bond

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 a bond of \$20000

Details confirming payment of the bond(s) are to be submitted to the Principal Certifier prior to the issue of the Subdivision Works Certificate.

Reason: Protection of Council's infrastructure.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE SUBDIVISION WORKS CERTIFICATE

On-Site Stormwater Detention

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 Water Management for Development Policy and Councils Auspec One Design Specification , and generally in accordance with the concept drainage plans prepared by Barrenjoey Consulting Engineers, drawing number 211203 SW 1 and SW2, dated 31/10/2024. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. **Provision of a stormwater drainage longsection for the proposed stormwater line located within the right of way . Details are also to include hydraulic grade line analysis and the proposed pipe sizing.**

Detailed drainage plans, including engineering certification, are to be submitted to the Certifier 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.

Utilities Services

Prior to the issue of the Subdivision Works Certificate, written evidence of the following service provider requirements must be provided to the Principal Certifier:

- a) a letter from Ausgrid demonstrating that satisfactory arrangements can be made for the installation and supply of electricity,
- b) a response from Sydney Water as to whether the proposed works subject to this consent would affect any Sydney Water infrastructure, and whether further requirements need to be met, and
- c) other relevant utilities or services - that the development as proposed to be carried out is satisfactory to those other service providers, or if it is not, the changes that are required to make the development satisfactory to them.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Works Certificate.

Reason: To ensure relevant utility and service providers' requirements are provided to the Principal Certifier.

Submission of engineering plans for the internal right of way and drainage works.

The Applicant is to submit civil engineering plans for the internal concrete right of way and associated stormwater drainage works for approval. Engineering plans

The Civil Engineering plans for the design of right of way and a associated stormwater drainage works which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1 . The plans shall be prepared by a qualified Civil Engineer and the approved consent plans.

The design must include the following information:

- 1. Driveway longsections and cross sections at appropriate chainages. Please note the minimum width of the right of way located within the existing access handle is to be 4m.
- 2. Stormwater catchment and hydraulic calculations.

An approval is to be submitted to the Certifier prior to the issue of the Subdivision Works Certificate

Reason: To ensure engineering works are constructed in accordance with relevant standards and Council's specification.

Geotechnical Report recommendations have been correctly 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 Crozier Geotechnical Consultants dated October 2022. are to be

incorporated into the construction plans. Prior to issue of the Subdivision Works 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 Certifier prior to the issue of the Subdivision Works Certificate.

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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 Subdivision Works Certificate. The Traffic Management Plan shall be prepared to TfNSW 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.

Vehicle Crossings Application

The Applicant is to submit an application with Council for driveway levels to construct one vehicle crossing 5[m at the kerb line and 4.5m at the boundary in accordance with Northern Beaches Council Standard Drawing Normal 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 Subdivision Works Certificate.

Reason: To facilitate suitable vehicular access to private property.

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

Vehicle Crossings Application

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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 Subdivision Works 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.

Property Boundary Levels

The Applicant is to maintain the property boundary levels. No approval is granted for any change to existing property alignment levels to accommodate the development.

Details demonstrating compliance are to be submitted to the Principal Certifier.

Reason: To maintain the existing profile of the nature strip/road reserve.

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 Transport for NSW 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.

Site filling - Virgin Excavated Natural Material (VENM)

Where site fill material is necessary, fill materials must:

1. Be Virgin Excavated Natural Material (VENM) only, as defined in The Protection of the Environment Operations Act 1997.
2. Be free of slag, hazardous, contaminated, putrescibles, toxic or radioactive excavated material and soil, rock or similar material. Putrescibles and non-putrescibles solid waste (including demolition material) is not permitted.

The Applicant shall provide certification by a N.A.T.A. approved laboratory to the Principal Certifier for approval prior to importation of material.

Reason: To ensure protection of the natural environment.

CONDITIONS THAT MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF ANY STRATA SUBDIVISION OR SUBDIVISION CERTIFICATE

Easement Creation

The Applicant shall create an easement for drainage (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision, to accompany the Section 88B instrument to ensure all drainage infrastructure is located within the appropriate easement(s).

The Applicant shall create an easement for services (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision, to accompany the Section 88B instrument to ensure all utility services are located within the appropriate easement(s).

The Applicant shall create an easement to drain water in favour of Council over the channel/floodway to encompass the 1 in 100 year recurrence frequency predicted water surface level, including a 500mm freeboard and a 500mm minimum margin in plan. The easements are to be detailed on the final plan of subdivision.

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

Reason: Council's Subdivision standards and statutory requirements of the Conveyancing Act 1919.

Positive Covenant for On-site Stormwater Detention

A positive covenant (under the provisions of Section 88B of the Conveyancing Act 1919) is to be created on the final plan of subdivision and accompanying 88B instrument, 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, which are available from Northern Beaches Council. Northern Beaches Council shall be nominated as the sole authority empowered to release, vary or modify such covenant.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Subdivision Certificate

Reason: To ensure ongoing maintenance of the on-site detention system.

Provision of Services for Subdivision

The applicant is to ensure all services including water, electricity, telephone and gas are provided, located and certified by a registered surveyor on a copy of the final plan of subdivision.

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

Reason: To ensure that utility services have been provided to the newly created lots.

Right of Carriageway

The Applicant shall create a right of carriageway (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument, to include all vehicular access and manoeuvring areas.

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

Reason: Council's subdivision standards and the statutory requirements of the Conveyancing Act 1919.

Restriction as to User (On-site Stormwater Detention)

The Applicant shall create a restriction as to user (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument for the on-site stormwater detention system, restricting any alteration or additions to the system. The terms of such restriction are to be prepared to Council's standard requirements. 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 the Subdivision Certificate.

Reason: To ensure no modification to the on-site stormwater detention structure without Council's approval.

Certification of On-site Detention System (New Subdivision)

A Certificate is to be submitted by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) and has appropriate experience and competence in the related field confirming to the satisfaction of the Principal Certifier that the on-site stormwater detention systems within the right of carriageway has been constructed in accordance with the approved subdivision works certificate and relevant conditions of Development Consent. The Subdivision Certificate will not be released until this certification has been submitted and the Principal Certifier has confirmed that this condition has been satisfied.

Reason: To ensure the On-site Detention System has been built to the appropriate standard.

Sydney Water Compliance Certification

The Applicant shall submit a Section 73 Compliance Certificate under the Sydney Water Act 1994 issued by Sydney Water Corporation. Application must be made through an authorised Water Servicing Co-ordinator. Please refer to the Building Developing and Plumbing section of the web site www.sydneywater.com.au <<http://www.sydneywater.com.au>> then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and fees to be paid. Please make early contact with the coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

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

Reason: To ensure compliance with the statutory requirements of Sydney Water.

Subdivision Certificate Application

The Applicant shall submit a Subdivision Certificate Application to Council, which is to include a completed Subdivision Certificate form and checklist, a final plan of subdivision prepared in accordance with the requirements of the Conveyancing Act 1919, the final plan of subdivision and all relevant documents including electronic copies. This documentation is to be submitted to Council prior to the issue of the Subdivision Certificate. All plans of survey are to show connections to at least two Survey Co-ordination Permanent Marks. The fee payable is to be in accordance with Council's fees and charges.

Reason: Statutory requirement of the Conveyancing Act 1919.

Title Encumbrances

The Applicant shall ensure all easements, rights of carriageway, positive covenants and restrictions as to user as detailed on the plans and required by the development consent are to be created on the title naming Council as the sole authority empowered to release or modify.

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

Reason: To ensure proper management of land.