

Engineering Referral Response

Application Number:	DA2022/2245
Proposed Development:	Alterations and additions to a dwelling house
Date:	15/03/2023
To:	Gareth David
Land to be developed (Address):	Lot 8 DP 202494 , 4 Stinson Place FORESTVILLE NSW 2087

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

As per provided stormwater plan, the subject property is proposed to be drained against the direction of natural catchment. The applicant needs to provide gutter flow analysis and information regarding the flow (discharge) to be discharged to Stinson Place.

Alternatively, the stormwater drainage needs to be designed in accordance with section 5.5, "Stormwater Drainage from Low Level Properties" of council's "Water Management for Development Policy.

For the design of On-site absorption system, the geotechnical report with details such as depth of water table and depth of rock needs to be provided as per appendix 3 of council's "Water Management for Development Policy. The applicant also needs to provide DRAINS model for absorption trench design.

Further, the maximum gradient within proposed carport shall be 5% measured parallel to angle of parking.

The application cannot be supported due to lack of information to assess clause C4 of the DCP.

22/02/2023

Information regarding water table and rock and DRAINS model were provided. Following information are yet to be provided by applicants:

1. Gutter flow analysis as mentioned in previous comments.
2. Geotechnical report including borehole logging is required to check the feasibility of absorption trench

at the rear of the property. The report shall include recommendation regarding stormwater disposal from the property.

3. Amended plan to show that grade of the proposed carport is less than 5% as mentioned in previous comments.

15/03/2023

The amended plans, gutter flows analysis and geotechnical report was provided.

The Development Engineering supports the application subject to conditions recommended.

As such Development Engineering cannot support the application.

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:

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

Stormwater Disposal from Low Level Property

The applicant is to demonstrate how stormwater from the new development within this consent shall be disposed of to an existing approved system or in accordance with Northern Beaches Council's "Water Management for Development Policy" in particular the Stormwater Drainage from Low Level Properties Technical Specification. Details demonstrating that the existing approved system can accommodate the additional flows or compliance with the Northern Beaches Council's "Water Management for Development Policy" are to be submitted to the Certifier for approval prior to the issue of the Construction Certificate.

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

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 "Water Management for Development Policy", and generally in accordance with the concept drainage plans prepared by Engineering Studio, Job number 220742, drawing C02.1 and C02.02, issue D, dated 14.03.23. 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.

The drainage plans must address the following:

- i. The front part of the roof needs to be discharged to kerb in stinson place in accordance with provided concept drainage plan
- ii. The level spreader needs to be designed in accordance with appendix 4 of council's " Water Management for Development Policy"

iii. 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.

Vehicle Driveway Gradients

The Applicant is to ensure driveway gradients within the private property are in accordance with requirement of AS/NZS 2890.1:2004.

Details demonstrating compliance are to be submitted to the Certifier for approval prior to the issue of the Construction Certificate.

Reason: To ensure suitable vehicular access to private property.

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 Certifier 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.

Vehicle Crossings

The Applicant is to construct one vehicle crossing 3 metres wide in accordance with Northern Beaches Council Drawing Normal Low (NL) profile 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 Certifier.

Reason: To facilitate suitable vehicular access to private property.

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 Certifier prior to the issue of an Occupation Certificate.

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

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 Certifier prior to the issue of an Occupation Certificate.

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