

Engineering Referral Response

Application Number:	DA2023/0894
Proposed Development:	Demolition works and construction of a dwelling house including swimming pool
Date:	20/09/2023
To:	Alex Keller
Land to be developed (Address):	Lot 292 DP 16362 , 18 Rock Bath Road PALM BEACH NSW 2108

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 proposal includes the demolition of the existing dwelling and construction of a new dwelling. The new dwelling includes a garage with a turn table to permit vehicles to enter and exit in a forward direction. There is currently no vehicular access to the site. The proposal includes the construction of a new driveway within the unformed section of Rock Bath Road.

The submitted stormwater management plans include the collection of stormwater from the proposed driveway and disposal via a spreader device within the site which is acceptable subject to conditions.

The proposed driveway crossing exceeds the maximum grade of 1 in 4 for some sections however a Traffic Report supporting the variation in accordance with DCP has been provided and is acceptable subject to conditions. The driveway includes a parking area for 16 Rock Bath Road to replace the existing parking area. It is noted that Council's Traffic Engineer requires further swept path analysis to demonstrate vehicles using these spaces can exit in a forward direction. The existing turning area is shown to be within the proposed driveway area and it is considered that this can be accommodated with some minor widening.

The submitted Geotechnical report includes forms 1 and 1A and complies with the objectives of the DCP controls. It is noted that further geotechnical assessment of the road reserve will be required prior to the approval of the Roads Act application for the driveway works which is conditioned.

Development Engineering support the proposal, subject to conditions as recommended.

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/Driveway Works

As security against any damage or failure to complete the construction of the vehicular crossing and removal of any redundant driveways required as part of this consent a bond of \$230,000.

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 \$20,000.

Details confirming payment of the bond(s) are to be submitted to the Principal Certifier 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

Stormwater Disposal

The applicant is to submit Stormwater Engineering Plans for the new development within this development consent in accordance with AS/NZS 3500 and Council's Water Management for Development Policy, prepared by an appropriately qualified and practicing Civil Engineer who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG), indicating all details relevant to the collection and disposal of stormwater from the site, buildings, paved areas and where appropriate adjacent catchments. Stormwater shall be conveyed from the site to a suitably designed level spreader. The design is to be certified by a Geotechnical Engineer to ensure the discharge does not cause any scouring or instability downstream of the spreader.

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

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

Geotechnical Report Recommendations have been 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 22 June 2023 are to be incorporated into the construction plans and documentation. Prior to issue of the Construction 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 Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

Submission Roads Act Application for Civil Works in the Public Road

The Applicant is to submit an application for approval for infrastructure works on Council's 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 Civil Engineering plans for the design of the driveway crossing and access driveway which are to be generally in accordance with the concept design by TEF Consulting, drawing numbers 22031/01, 02, 03, 04, 05 and 06, Revision G dated 21/06/2023 and Council's specification for engineering works - AUS-SPEC #1. The plans shall be prepared by a qualified Civil Engineer. The design must include the following information:

1. Long sections and cross sections including existing and proposed levels.
2. Barriers in accordance with AS/NZS2890.1:2004.
3. A passing bay clear of the proposed parking area for 16 Rock Bath Road.
4. Turning paths for vehicles entering and exiting 18 Rock Bath Road.
5. Turning paths for vehicles entering and exiting the parking area for 16 Rock Bath Road.
6. Structural details including specifications for the driveway crossing, driveway slab, retaining walls and associated footings.
7. Services plan.
8. Concurrence from all relevant service authority(s) for any services affected by the proposal including relocation and adjustment to suit the proposal.
9. Adjustment and provision of the pedestrian access from the existing public pathway to 16 and 18 Rock Bath Road.
10. Geotechnical report including recommendations.
11. Stormwater design for the collection and disposal of stormwater.

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 Principal Certifier prior to the issue of the Construction Certificate.

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

Utilities Services

Prior to the issue of the Construction 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 Construction Certificate.

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

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.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Certification of Civil Works and Works as Executed Data on Council Land

The Applicant shall submit certification by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) that the completed works have been constructed in accordance with this consent and the approved Section 138 plans. Works as Executed data certified by a registered surveyor prepared in accordance with Council's 'Guideline for preparing Works as Executed data (details overdrawn on a copy of the approved civil plans) for Civil Assets' in an approved format shall be submitted to Council for approval prior to the release of any security deposits.

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

Stormwater Disposal

The stormwater drainage works shall be certified as compliant with all relevant Australian Standards and Codes by a suitably qualified Civil Engineer.

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.

Geotechnical Certification Prior to Occupation Certificate

The Applicant is to submit the completed Form 3 of the Geotechnical Risk Management Policy (Appendix 5 of P21 DCP) to the Principal Certifier prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

On-Going Maintenance of Driveway and Associated Structures in the Public Road Reserve

The driveway and associated structures in the public road reserve approved under Section 138 of the Roads Act are to be maintained in perpetuity by the property owners benefiting from the structures in accordance with the requirements of Section 142 of the Roads Act 1993.

Reason: To ensure on-going maintenance of the driveway access in the public road reserve.