

Engineering Referral Response

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| Application Number: | DA2021/0395 |
| Date: | 29/07/2021 |
| To: | Adam Mitchell |
| Land to be developed (Address): | Lot 5 DP 16260 , 1 Yachtview Avenue 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 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 submitted plans have only provided a long section along the low side of the proposed driveway crossing and not on the high side where the transition grades will exceed Council's maximum allowable grades and as a result vehicles will scrape when using the crossing. Also the crossing proposes a retaining wall on the low side to support the elevated driveway which may reduce the sight distance for vehicles using the adjoining driveway and conflict with an existing Council stormwater pipeline located within the nature strip. In this regard it will be necessary for the driveway crossing to be reduced in width and relocated towards the intersection of Wallumatta Rd to reduce the level difference between the kerb and boundary for each side of the crossing. The crossing must rely upon batters to natural ground and not retaining walls to improve the sight distance and impact upon Council's pipeline. Engineering long sections and cross sections are to be provided for assessment. Where this cannot be achieved, it may be necessary to relocate the proposed garage within the site utilising the existing driveway crossing levels.

Development Engineers cannot support the application due to insufficient information to assess vehicular access in accordance with Clause B6 of Pittwater DCP.

Additional information submitted 21/06/2021

The revised plans and information submitted has been reviewed and the proposal is not satisfactory. The grade of the driveway on the high side is acceptable using Council's maximum low profile however the width of the crossing is too wide and due to the proposed level of the garage at the boundary, a retaining wall is indicated along the low side of the driveway which is not acceptable. In order for the crossing to be considered, the width is to be a maximum of 4 metres at the kerb to 5 metres at the

boundary and the low side of the driveway is to be a minimum of 1.5 metres from the side boundary to permit a batter from the driveway edge to the side boundary. It is considered that a retaining wall is to be provided along the frontage of the property between the edge of the driveway and the side boundary to permit a suitable batter along this edge. The kerbs are to be deleted from the edges of the driveway crossing and batters are to be included on the plans to suit.

Development Engineers cannot support the application due to insufficient information to assess vehicular access in accordance with Clause B6 of Pittwater DCP.

Amended plans submitted 28/07/2021

The amended driveway position and width including the battering of the sides to suit the new levels is satisfactory. Road Assets have included a condition for the stair construction. Conditions for the protection of Council's stormwater infrastructure have been included.

No objection to approval, 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 Bond (Drainage works)

The applicant is to lodge a bond of \$10,000 as security against any damage to Council's stormwater infrastructure, located in the footpath area under the proposed pedestrian stairs and driveway crossing, as part of 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.

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 Policy in particular Section 5.5 Stormwater Drainage from Low Level Properties. Details demonstrating that the existing approved system can accommodate the additional flows or compliance with the Northern Beaches Council's Water Management Policy are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and 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 Geotechnical Consultants Australia dated 16 December 2020 are to be incorporated into the construction plans. 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 Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

Structures Located Adjacent to Council Stormwater Assets

All structures are to be located clear of any Council stormwater assets. The Applicant is to ensure footings of any new development within this development consent adjacent to a pipeline or other stormwater assets are to be designed in accordance with Northern Beaches Council's Water Management Policy.

Details and certification prepared by a suitably qualified Structural Engineer demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's Infrastructure.

Structural Adequacy and Excavation Work

Excavation work is to ensure the stability of the soil material of adjoining properties, the protection of adjoining buildings, services, structures and / or public infrastructure from damage using underpinning, shoring, retaining walls and support where required. All retaining walls are to be structurally adequate for the intended purpose, designed and certified by a Structural Engineer, except where site conditions permit the following:

- (a) maximum height of 900mm above or below ground level and at least 900mm from any property boundary, and
- (b) Comply with AS3700, AS3600 and AS1170 and timber walls with AS1720 and AS1170.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

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-Construction Stormwater Assets Dilapidation Report

The Applicant is to submit a pre-construction/demolition Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset, to record the existing condition of the asset prior to the commencement of works. Council's Guidelines are available at:

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/preparingdilapidationsurveyforcouncilstormwaterassets.pdf>

The pre-construction/demolition dilapidation report must be submitted to Council for written approval and the written approval is then to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

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 4 metres wide at the kerb to 5 metres wide at the boundary in accordance with Northern Beaches Council Drawing No A4-3330/7 ML 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 kerb and 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.

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 Certifying Authority prior to the issue of the Occupation Certificate.

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

Certification of Structures Located Adjacent to Council Stormwater Assets

The Applicant shall submit a suitably qualified Structural Engineer's certification that the completed footing works adjacent to Council's stormwater assets, have been constructed in accordance with this consent, Northern Beaches Council's Water Management Policy and the approved Construction Certificate plans.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Protection of Council's Infrastructure.

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 Certifying Authority prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

Post- Construction Stormwater Assets Dilapidation Report (Council stormwater assets)

The Applicant shall submit a post-construction Dilapidation Survey of Council's Stormwater Assets prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset in order to determine if the asset has been damaged by the works. Council's Guidelines are available

at <https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/preparingdilapidationsurveyforcouncilstormwaterassets.pdf>

The post-construction / demolition dilapidation report must be submitted to Council for review and approval. Any damage to Council's stormwater infrastructure is to be rectified prior to the release of any Drainage security bonds. Council's acceptance of the Dilapidation Survey is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Protection of Council's infrastructure.