

## Engineering Referral Response

<b>Application Number:</b>	DA2021/0268
<b>Date:</b>	25/06/2021
<b>To:</b>	Adam Mitchell
<b>Land to be developed (Address):</b>	<p>Lot 328 DP 16362 , 348 Whale Beach Road PALM BEACH NSW 2108</p> <p>Lot 330 DP 16362 , 352 Whale Beach Road PALM BEACH NSW 2108</p> <p>Lot 329 DP 16362 , 350 Whale Beach Road PALM BEACH NSW 2108</p> <p>Lot 327 DP 16362 , 346 Whale Beach Road PALM BEACH NSW 2108</p>

### 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 24/6/21

The reviewed the OSD/stormwater plans for the development and the OSD tank sizing is acceptable however the method of disposal is not . A level spreader at the top of the whale beach road reserve cliff is not acceptable .It is not a geotechnical sound approach to saturate a unstable rock face above Councils road carriageway.

The stormwater disposal is best directed to have 2 pipe outlets fixed to the rock face with an appropriate separation. The stormwater can then discharge to the table drain and which flows to councils piped culvert system beneath whale beach road.

A Section 138 Roads act condition will be required to ensure Councils stormwater disposal to Whale Beach road is suitable.

No objections subject to conditions.

**Previous comments**

A stormwater management plan detailing the provision of on site stormwater detention in accordance with Councils water management policy for development is to be submitted for review. The management plan is to detail the connection point to the street drainage system. Accordingly the application at this stage is not supported.

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 (Crossing / Kerb)**

The applicant is to lodge a Bond of \$30000 as security against any damage or failure to complete the construction of the vehicular crossing, stormwater drainage and associated road reserve works required 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.

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

A bond of \$50000 as security against damage to Council's road/road reserve fronting the site caused by the transport and disposal of materials and equipment to and from the site and any other construction activities.

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****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 JK Geotechnics dated 9 March 2021 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 Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

**Existing stairs with the road reserve**

The existing stair access within the road reserve is to be certified as structurally adequate for the design life of the building. Any rectification/reconstruction works are to form part of the Section 138A Roads Act application to Council and are include engineering plans prepared by a suitably qualified structural engineer.

Reason: Protection of Councils road reserve.

**Traffic Management and Control**

The Applicant is to submit an application for Traffic Management Plan to Council for approval prior to issue of the Construction Certificate. The Traffic Management Plan shall be prepared to RMS 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.

**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 Harris Page and Associates, drawing number 6651 SW03 Rev B, dated Feb 2020. 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) or RPENG (Professionals Australia) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. The proposed level spreader discharge device is to be deleted and replaced with 2 (No) 150mm outlets fixed to the existing rock face/cliff within the Whale Beach Road reserve. The outlets are to be suitable spaced and designed to prevent scour of the existing table drain.
- ii. **The stormwater outlets are to also be a pipe class suitable for the exposure classification**
- iii. 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 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 works include :

- 1) The two stormwater outlets which are to be attached to the existing rockface within the Whale Beach Road reserve. The outlets are to be suitable spaced and designed to prevent scour of the existing table drain.
- 2) The stormwater outlets are to also be a pipe class suitable for the exposure classification.
- 3) Construction of the vehicle crossing and reconstruction of the down stream table drain where required.
- 4) A geotechnical report is also to be prepared in relation to the impact of the garage structure /vehicle crossing on the existing cliff/rock face and whether any stabilisation works to the adjoining rock face are required within or adjoining Councils road reserve.

The application is to include four (4) copies of Civil Engineering plans for the design of stormwater

outlets and vehicle crossing and associated works 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 with NER or RPENG registration. 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.

### **Geotechnical Report Recommendations have been correctly incorporated into designs and structural plans**

The Applicant is to submit Form 2 of the Geotechnical Risk Management Policy for Pittwater (Appendix 5 of P21 DCP) and is to be completed and submitted to the Accredited Certifier, prior to issue of the Construction Certificate.

Reason: To ensure geotechnical risk is managed appropriately.

## **CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT**

### **Public Liability Insurance - Works on Public Land**

Any person or contractor undertaking works on public land must take out Public Risk Insurance with a minimum cover of \$20 million in relation to the occupation of, and approved works within Council's road reserve or public land, as approved in this consent. The Policy is to note, and provide protection for Northern Beaches Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public land.

Reason: To ensure the community is protected from the cost of any claim for damages arising from works on public land.

## **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 Roads Act 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.

### **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.

## **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 the approved Construction Certificate stormwater drainage plans and Councils water management policy by the design engineer. 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 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 Certifying Authority prior to the issue of final Occupation Certificate.

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

### **Post-Construction Road Reserve Dilapidation Report**

The applicant must bear the cost of all restoration works to Council's property damaged during the course of this development. All building work must have been carried out in accordance with the provisions of the Building Code of Australia

Note: Where by Council is not the Principal Certifying Authority, Refund of the trust fund deposit will also be dependent upon receipt of a final Occupation Certificate by the Principal Certifying Authority, Post Construction Dilapidation Report and infrastructure inspection by Council.

Reason: To ensure security against possible damage to Council property.

### **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.