

## Engineering Referral Response

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| <b>Application Number:</b>             | Mod2024/0048   |
| <b>Proposed Development:</b>           | Modification of Development Consent DA2018/1166 granted for Demolition Works and Construction of a Boarding House development                                  |
| <b>Date:</b>                           | 29/11/2024   |
| <b>To:</b>                             | Anne-Marie Young   |
| <b>Land to be developed (Address):</b> | Lot 8 DP 22384 , 615 Pittwater Road DEE WHY NSW 2099<br>Lot A DP 400997 , 613 Pittwater Road DEE WHY NSW 2099<br>Lot 2 DP 22384 , 11 May Road DEE WHY NSW 2099 |

### Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m<sup>2</sup> 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

I have reviewed the Stormwater Management Plans by ING Consulting Engineers, Project No. 416092023S455 dated 13.12.23. My contentions are as follows:

1. The on-site detention system has been designed and sized to attenuate the post-development discharge from the site back to the existing discharge. This is not in accordance with Council policy. Section 9.3.2.6 of Council's Water Management for Development Policy Version 2, 26 February 2021 (WMfDP) states that: "For all developments except single residential dwelling developments the PSD is to be calculated on the maximum allowable impervious fraction of 0%. That is, discharge off the site is to be restricted to the "state of nature" condition". The submitted design thus provides 27 m<sup>3</sup> of on-site detention storage. It should be noted that the Court approved on-site detention size for the site under DA2018/1166 was 58.4 m<sup>3</sup>. This on-site detention system was designed in accordance with Council policy, whereby the pre-development impervious fraction was assumed to be 0%. The on-site detention design needs to be amended to attenuate post development flows from the site back to a State of Nature condition. Provide a DRAINS model to Council for perusal
2. Provide a Catchment Plan showing all flows into the on-site detention system and any by-pass flows.

3. Provide longitudinal section from last pit on private property to proposed pit on Council's road. Show all crossing services with levels.

I have reviewed the Architectural plans by Marcellino Sain Architects dated 19.12.23.

The following additional information is required:

1. Provide proposed vehicle crossing widths in accordance with Table 3.1 and Table 3.2 of AS/NZS 2890.1:2004. The vehicle crossing dimensions should generally comply with the minimum requirements for width in order to limit on-street parking loss, preserve pedestrian safety and limit increase in impervious areas.
2. Provide longitudinal sections for proposed vehicle crossings and internal driveways. The headroom requirements need to comply with Section 5.3 of AS/NZS 2890.1:2004

#### **Engineering Comments 07.11.24**

Stormwater plans by ING Consulting Engineers Pty Ltd, project no. 416092023S455 dated 28.10.2024:

OSD sizing has been amended to 62.3 cubic metres which is supported.

Provide longitudinal section of main OSD tank through longest and shortest dimension with levels

Provide longitudinal section of OSD under ramp.

Provide longitudinal section of 300 diameter pipe from private property to proposed pit on road. Show proposed pit invert level. Show all crossing services (water, Telstra etc.) with levels.

Improve drafting quality. All text should be a minimum of 1.5mm as printed on A3 paper.

I have reviewed the Architectural plans by Marcellino Sain Architects dated 19.12.23.

The following additional information is required:

1. Provide proposed vehicle crossing widths in accordance with Table 3.1 and Table 3.2 of AS/NZS 2890.1:2004. The vehicle crossing dimensions should generally comply with the minimum requirements for width in order to limit on-street parking loss, preserve pedestrian safety and limit increase in impervious areas.
2. Provide longitudinal sections for proposed vehicle crossings and internal driveways. The headroom requirements need to comply with Section 5.3 of AS/NZS 2890.1:2004

#### **Engineering Comments 29.11.24**

Development engineering raises no further objections to the proposed development, subject to conditions.

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:

#### **Drainage Works**

As security against any damage or failure to complete the construction of stormwater drainage works required as part of this consent a bond of \$30,000.00.

**Crossing / Kerb & Gutter / Footpath Works**

As security against any damage or failure to complete the construction of any vehicular crossings, kerb and gutter, any footpath works and removal of any redundant driveways required as part of this consent a bond of \$120,000.00.

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****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 ING Consulting Engineers, project number 416092023S455, dated 14.11.2024. 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:

- Provision of a minimum of 60.8 cubic metres of on-site detention storage, with flows attenuated by a 234mm diameter orifice.

Detailed drainage plans, including engineering certification, are to be submitted to the Certifier for approval prior to the issue of the Construction Certificate.

**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 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.

**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 or Hydraulic 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 Council's stormwater pipe on Pittwater Road via an on-site detention system.

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 identified in the Geotechnical Report referenced in Condition 1 of this consent are to be incorporated into the construction plans. 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.

### **Vehicle Crossings Applications**

The Applicant is to submit an application with Council for driveway levels to construct one vehicle crossing on the May road frontage of site 6.0 metres wide in accordance with Northern Beaches Council Standard Drawing A4 3330/1 N in accordance with Section 138 of the Roads Act 1993.

The Applicant is to submit an application with Council for driveway levels to construct one vehicle crossing on the Pittwater Road frontage of site a maximum of 7.0 metres wide in accordance with Northern Beaches Council Standard Drawing A4 3330/4 EH 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 Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

### **Off Street Parking Design**

The Applicant shall submit a design for the parking facility in accordance with the relevant provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular Section 2.4.5 Physical Controls and Section 2.6 Design of Domestic Driveways.

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

Reason: Compliance with this consent.

### **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 construction of footpath and private

stormwater connection into Council's pipe 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. The design must include the following information:

1. The design of a 1.5 metre wide footpath from the frontage of 11 May Road to its intersection with Pittwater Road. The design is to include a longitudinal section and is to be in accordance with Council's Standard Drawings for roads - Drawing No. TCI-Standard\_Drawing-0100-Final8, rev 5 dated 08.12.23.

A copy of the standard drawings is to be requested from Council prior to the commencement of design works.

2. The design of a 1.5 metre wide footpath from the frontage of 613 Pittwater Road to its intersection with May Road. The design is to cater for the complete re-construction of the path to provide a minimum width of 1.5 metres width from the back of kerb. The design is to include a longitudinal section and is to be in accordance with Council's Standard Drawings for roads - Drawing No. TCI-Standard\_Drawing-0100-Final8, rev 5 dated 08.12.23.

A copy of the standard drawings is to be requested from Council prior to the commencement of design works.

3. The design of a stormwater connection from private property into Council's existing stormwater pipe on the development site frontage. The design is to include an 1.8 metre lintel, a longitudinal section showing all surveyed crossing services (potholed), and is to be in accordance with Council's Standard Drawings for stormwater - S1001 to S1020, rev A dated 15.03.21. The lintel shall be located a minimum of 1 metre clear of any existing or proposed vehicle crossings. A copy of the standard drawings is to be requested from Council prior to the commencement of design works.

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.

### **Tanking of Basement Level**

The basement area is to be permanently tanked. The Applicant is to submit structural details of the tanking, prepared by a suitably qualified Engineer. Where temporary dewatering works are required on the development site during construction, the developer/applicant must apply for and obtain a bore license from the NSW Office of Environment and Heritage. The bore license must be obtained prior to commencement of dewatering works. All requirements of Water NSW are to be complied with and a copy of the approval must be submitted to the Certifier.

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

Reason: To prevent ingress of sub-surface flows into the basement area and to comply with State Government Requirements.

### **Shoring of Council's Road Reserve (Temporary road anchors)**

Should the proposal require shoring to support an adjoining property or Council land, the Applicant shall provide the adjoining properties with engineering drawings, detailing the proposed shoring works for their consideration and approval.

Written approval from Council under Section 138 of the Roads Act 1993 is required if temporary ground anchors are to be used within Council's road reserve. The Owner's approval is to be submitted to the Principal Certifier prior to the issue of the Construction Certificate.

Reason: To ensure that owners consent is obtained for ancillary works, and to ensure the protection of adjoining properties and Council land.

### **Pre-Construction Stormwater Assets Dilapidation Report**

The Applicant is to submit a pre-construction / demolition 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, 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/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf>

The pre-construction / demolition Dilapidation Report must be submitted to Council for approval and the Principal Certifier prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

### **Pre-Commencement Dilapidation Report**

The applicant must prepare and submit a dilapidation report providing an accurate record of the existing condition of adjoining public property and public infrastructure (including roads, gutter, footpaths, etc). A copy of the report must be provided to Council, any other owners of public infrastructure and the owners of adjoining and affected private properties.

The dilapidation report must be submitted to Council for written approval and the written approval is then to be submitted to the Certifier prior to the issue of the any Construction Certificate and the commencement of any works including demolition.

Reason: Protection of Council's infrastructure during construction.

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

### **Utilities Services**

Prior to the commencement of demolition works, 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 commencement of demolition works.

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.

### **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 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**

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

The Applicant shall submit a post-construction 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 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 Certifier prior to the issue of the Occupation Certificate.

Reason: Protection of Council's infrastructure.

### **Certification of Civil Works and Works as Executed Data in accordance with Road Act Approval**

The Applicant shall submit a 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 and/or Construction Certificate plans. Works as Executed data certified by a registered surveyor in relation to boundaries and/or relevant easements, prepared in accordance with Council's 'Guideline for

preparing Works as Executed data for Council Assets' in an approved format shall be submitted to the Principal Certifier for approval prior to the issue of the Occupation Certificate.

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 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.

### **Reinstatement of Kerb**

The Applicant shall reinstate all redundant laybacks and vehicular crossings to conventional kerb and gutter, footpath or grassed verge as appropriate with all costs borne by the applicant.

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

Reason: To facilitate the preservation of on street parking spaces.

### **Positive Covenant for the Maintenance of Stormwater Pump-out Facilities**

The Applicant shall lodge the Legal Documents Authorisation Application with Council. The application shall include the original completed request forms (NSW Land Registry standard forms 13PC) and a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), and Civil Engineers' certification.

The Applicant shall create on the Title a positive covenant in respect to the ongoing maintenance of the pump-out facility on the property being developed. Northern Beaches Council shall be nominated in the instrument as the only party authorised to release, vary or modify the instrument. Northern Beaches Council's delegate shall sign these documents prior to the submission to the NSW Land Registry Services. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

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 adequate provision is made for the stormwater pump out system to be maintained to an appropriate operational standard.

### **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), and Civil 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.

### **Certification of Off Street Parking Works**

The Applicant shall submit a certificate from a suitably qualified person certifying that the parking facility was constructed in accordance within this development consent and the relevant provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular Section 2.4.5 Physical Controls and Section 2.6 Design of Domestic Driveways.

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

Reason: Compliance with this consent.

### **Post-Construction Dilapidation Report (Major Development)**

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

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

### **Sydney Water**

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from 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) <<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 charges to be paid. Please make early contact with the Co-ordinator, 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 Certifying Authority prior to the issue of any interim / final Occupation Certificate.

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

**Unit Numbering for Multi-Unit Developments (Residential, Commercial and Industrial)**

The units within the development are to be numbered in accordance with the Australia Post Address Guidelines ([https://auspost.com.au/content/dam/auspost\\_corp/media/documents/Appendix-01.pdf](https://auspost.com.au/content/dam/auspost_corp/media/documents/Appendix-01.pdf)).

In this regard, the numbering is to be as per the Unit Numbering for Multi-Unit Development Table available on Council's website

(<https://www.northernbeaches.nsw.gov.au/sites/default/files/documents/pdf-forms/unit-numbering-multiunit-developments-residential-commercial-and-industrial-form/unit-numbering-multi-unit-developmentsresidential-commercial-and-industrial-form.pdf>).

External directional signage is to be erected on site at driveway entry points and on buildings and is to reflect the numbering in the table provided. Unit numbering signage is also required on stairway access doors and lobby entry doors.

It is essential that all signage throughout the complex is clear to assist emergency service providers in locating a destination within the development with ease and speed, in the event of an emergency.

Details are to be submitted with any Interim/Final Occupation Certificate or Strata Subdivision Certificate

certifying that the numbering has been implemented in accordance with this condition and the Unit Numbering for Multi-Unit Development Table.

Reason: To ensure consistent numbering for emergency services access. (DACPLF05)

**Consolidation of Lots**

Lot 2 in DP 22384 (11 May Road), Lot 8 in DP 22384 (615 Pittwater Road), and Lot A in DP 400997 (613 Pittwater Road) must be consolidated as one (1) allotment and registered on a survey plan (prepared and signed by a Registered Surveyor) with the NSW Land & Property Information Service (NSW Department of Lands). 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 development is not constructed over property boundaries