

Engineering Referral Response

Application Number:	DA2020/0246
Date:	19/10/2020
To:	Kent Bull
Land to be developed (Address):	Lot 132 DP 24360 , 132 Elanora Road ELANORA HEIGHTS NSW 2101 Lot 133 DP 24360 , 130 Elanora Road ELANORA HEIGHTS NSW 2101

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 provision of a new common vehicular access driveway to provide access to two new allotments at the rear of the two existing allotments at 130 and 132 Elanora Road.

Vehicle Access

A review of the proposed driveway indicates that the existing dwellings, which are to remain, will both overhang the proposed driveway. This is not acceptable as this will limit the type of vehicles that will be able to use the driveway in the future. The proposed driveway also requires some filling in the nature strip and retaining walls within the property to achieve the required levels. No details of these works have been provided to assess the impact on the road reserve and the existing dwellings. The grade of the driveway is satisfactory however there is no detail of the proposed parking for the existing dwelling at number 130. The proposed driveway grade may need to be altered to suit.

Parking

As discussed above, there is no parking spaces shown for number 130. The existing dwelling is to remain and this will require 2 parking spaces to be provided as part of the proposal. The two parking areas shown on the two rear proposed lots have insufficient detail. The applicant must demonstrate how vehicles can enter and exit in a forward direction. This may require splays to be provided to accommodate these maneuvers. The right of way is to be amended to suit. As the parking areas are elevated, barriers will be required to be shown in accordance with AS/NZS 2890.1:2004. Also as these spaces are elevated, retaining walls are to be shown.

Stormwater

The submitted stormwater plan is vague and is not to scale. The plan does not show the proposed stormwater for the site including the connection of the existing dwellings. It is considered the stormwater plan be prepared by the Hydraulic Engineer with details of all the collection and connections from the site and downstream properties up to the connection to Council's drainage system. The plans must detail the required pits, grates and pipes for the access driveway.

Subdivision Plan

The subdivision plan is to be amended to include any changes to the right of way and drainage easements including the drainage for the existing dwellings and new access driveway.

Development Engineers cannot support the application due to insufficient information to address Clauses B5.10, B6.1 and B6.2 of Pittwater 21 DCP 2014.

Additional information submitted 9/06/2020

Vehicle Access

The revised driveway plan gaining access to proposed lots 11 and 14 still shows that the driveway structure crosses through the existing dwelling on proposed lot 12 with no details of the proposed alteration of the dwelling to accommodate the conflict provided by the applicant. It appears that the structure is the existing garage which may compromise the requirement to provide 2 parking spaces for this lot. It appears that the dwelling on lot 13 may overhang the proposed kerbs of the driveway only but this must be confirmed by the applicant via a cross section at each of the points of overhang.

The proposed driveway grades are satisfactory however the proposal requires excavation which exceeds 1 metre in some locations adjacent to structures which are to remain. As a result a Geotechnical report and certified forms as set out in Council's Geotechnical Risk Management Policy for Pittwater is required.

The proposed parking bay does not meet the objectives of the DCP in terms of the length which must be 10 metres long within the property boundary. This issue is to be assessed by Council's Traffic Engineers to determine if the design meets the DCP in this regard.

The applicant has included an additional driveway crossing for lot 13 on the eastern side of the frontage. This driveway crossing is not supported as the frontage of the site is less than 30 metres and in accordance with Clause B6.1 of the DCP, only one driveway crossing is permitted. In this regard it may be necessary for the proposed parking for this lot to be provided off the proposed access road to lots 11 and 14 at the rear of the existing dwelling. This will require modifications to the grade of the access driveway to accommodate the required transitions for the access.

The proposed parking space and turning areas on lots 11 and 14 must include some fall to ensure adequate drainage of these areas.

Parking

The proposal is deficient in parking for lots 11, 13 and 14 and it is unclear if the existing parking space within the garage on lot 12 will comply with AS/NZS 2890.1:2004 once it is altered for the construction of the access driveway to lots 11 and 14.

In this regard it is considered that 2 parking spaces which meet the requirements of AS/NZS 2890.1:2004 must be provided for the proposal. The proposed parking space on lot 13 is not supported as detailed above and an amended parking design is required to satisfy the parking requirements for this lot.

Stormwater

The submitted stormwater plan indicates connection of the site into an existing stormwater easement which connects to Council's drainage system in Iluka Ave which is satisfactory.

A review of the proposed impervious area for each lot indicates that on-site stormwater detention (OSD) is required for each lot as part of the proposal. No details of the required OSD system has been submitted with the application.

Subdivision Plan

As the stormwater will cross over both lots 12 and 13 down the driveway, a reciprocal easement to drain water over the driveway is required to be added to the plan of subdivision.

Development Engineers cannot support the application due to insufficient information to address Clauses B5.7, B6.1, B6.2 and B8.1 of Pittwater 21 DCP 2014.

Additional Information Submitted 14/08/2020

Vehicular Access

The amended plans adequately address the previous issues raised with respect to this item and the passing bay, driveway width and grades to the rear lots are acceptable.

The proposal includes two stacked parking bays at the rear of proposed lot 13. Accessing these spaces is via the 1 in 4 section of the common access driveway which will not permit adequate transitions for vehicles to exit the site in a forward direction without scrapping. It is considered that these spaces should be relocated to be square to the common driveway and be set back adequately to permit suitable transitions and the common driveway grade be reduced adjacent to these parking spaces to permit vehicles to enter and exit in a forward direction.

Parking

As outlined above the proposed parking spaces for lot 13 do not allow both vehicles to enter and exit in a forward direction due to both design and driveway grades. A revised design as outlined above is recommended.

Stormwater

The submitted stormwater design including the proposed OSD systems is satisfactory.

Subdivision Plan

The submitted subdivision plan is satisfactory.

Geotechnical Report

The submitted Geotechnical report addresses the relevant DCP controls.

Development Engineers cannot support the proposal due to insufficient information to address Clauses B6.1 and B6.2 of Pittwater 21 DCP 2014.

Additional Information Submitted 3/09/2020

The amended Civil Engineering plans have been assessed and it is considered that the proposed transition grades for the inside radius of the access driveway leading to the proposed parking spaces at the rear of 130 Elanora Rd do not provide adequate transitions and will cause vehicles to scrap. Also the section shown on drawing C3.0 indicates that a vehicle will scrap and it is considered that the grade change will be worse at the rear of the parking structure as the approach grade will be steeper. Also a review of the super elevation for vehicles turning into and out of the parking area exceeds the maximum

allowable grade of 5%.

Development Engineers cannot support the proposal due to insufficient information to address Clauses B6.1 and B6.2 of Pittwater 21 DCP 2014.

Amended plans received 17/09/2020

The amended plans for the common driveway and parking area for proposed lot 13 has been reviewed and is acceptable.

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:

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.

Progress Certification (Road & Subdivision)

The applicant shall provide written certification is to be provided by a suitably qualified engineer upon completion and/or as and when requested by the Principal Certifying Authority for the following stages of works:

- (a) Silt and sediment control facilities
- (b) Laying of stormwater pipes and construction of pits
- (c) Proof Roll
- (d) Sub-grade trimmed and compacted **
- (e) Base-course laid and compacted **
- (f) Kerb and gutter and driveway construction
- (g) Pavement
- (h) Landscaping and vegetation
- (i) Clean-up of site, and of adjoining Council roadway and drainage system.

(**To be tested by a recognised N.A.T.A. approved laboratory).

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

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

Civil Works Supervision

The Applicant shall ensure all civil works approved in the Subdivision Works Certificate and Section 138 approval are supervised by an appropriately qualified and practicing 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.

Notification of Inspections (infrastructure works to be handed over to Council)

Council's Development Engineer is to be given 48 hours notice when the works reach the following stages:

- (a) Installation of Silt and Sediment control devices
- (b) Prior to backfilling of pipelines
- (c) Prior to pouring of stormwater gully pits
- (d) Prior to pouring of kerb and gutter and driveway crossing

NOTE: Any inspections carried out by Council do not imply Council approval or acceptance of the work, and do not relieve the developer/applicant from the requirement to provide an engineer's certification.

Reason: To ensure new Council infrastructure is constructed in accordance with Auspec 1 Council's design and specification standards.

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.

Vehicle Crossings

The Applicant is to construct one vehicle crossing 5.5 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/3 NL 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 Principal Certifying Authority.

Reason: To facilitate suitable vehicular access to private property.

Site filling - Virgin Excavated Natural Material (VENM)

Where site fill material is necessary, fill materials must:

1. Be Virgin Excavated Natural Material (VENM) only, as defined in: The Protection of the Environment Operations Act 1997
2. Be free of slag, hazardous, contaminated, putrescibles, toxic or radioactive excavated material and soil, rock or similar material. Putrescibles and non-putrescibles solid waste (including demolition material) is not permitted.
3. The Applicant shall provide certification by a N.A.T.A. approved laboratory to the Principal Certifying Authority for approval prior to importation of material.

Reason: To ensure protection of the natural environment.

**CONDITIONS THAT MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF ANY STRATA
SUBDIVISION OR SUBDIVISION CERTIFICATE**

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

The Applicant shall submit a suitably qualified Civil Engineer's certification that the completed works have been constructed in accordance with this consent and the approved Subdivision Works Certificate and Section 138 approval 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 Certifying Authority for approval prior to the issue of the Subdivision Certificate.

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

Positive Covenant for On-site Stormwater Detention

A positive covenant (under the provisions of Section 88B of the Conveyancing Act 1919) is to be created on the final plan of subdivision and accompanying 88B instrument, requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant are to be prepared to Council's standard requirements, which are available from Northern Beaches Council. Northern Beaches Council shall be nominated as the sole authority empowered to release, vary or modify such covenant. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate

Reason: To ensure ongoing maintenance of the on-site detention system.

Provision of Services for Subdivision

The applicant is to ensure all services including water, electricity, telephone and gas are provided, located and certified by a registered surveyor on a copy of the final plan of subdivision. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To ensure that utility services have been provided to the newly created lots.

Right of Carriageway

The Applicant shall create a right of carriageway (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument, to include all vehicular access, passing bay and maneuvering areas. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: Council's subdivision standards and the statutory requirements of the Conveyancing Act 1919.

Restriction as to User (On-site Stormwater Detention)

The Applicant shall create a restriction as to user (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision and accompanying 88B instrument for the on-site stormwater detention system, restricting any alteration or additions to the system. The terms of such restriction are to be prepared to Council's standard requirements. Council shall be nominated as the party to release, vary or modify such restriction.

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

Reason: To ensure no modification to the on-site stormwater detention structure without Council's approval.

Restriction as to User (Vehicular Access)

The Applicant shall submit a restriction as to user (under the provisions of Section 88B of the Conveyancing Act) to be incorporated on the title of Lot 13. The restriction shall preclude that lot from utilising its frontage for vehicular traffic except for the section created as a Right of Carriageway. The wording of the restriction of use is to be prepared by a surveyor, with terms acceptable to Council. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To ensure compliance with Council policy for vehicular access.

Services

The Applicant shall ensure all utilities/services and street lighting is installed. The Applicant is to submit a Certification stating the above requirement has been complied with by the relevant authority(s) and/or authorised contractor.

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

Reason: To ensure services have been provided in accordance with the relevant authorities requirements.

Certification of On-site Detention System (New Subdivision)

A Certificate is to be submitted by a qualified experienced practicing Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a Corporate member and has appropriate experience and competence in the related field confirming to the satisfaction of the Principal Certifying Authority that the on-site stormwater detention has been constructed in accordance with the plans nominated on the Development Consent and relevant conditions of Development Consent. The Subdivision Certificate will not be released until this certification has been submitted and the Principal Certifying Authority has confirmed that this condition has been satisfied.

Reason: To ensure the On-site Detention System has been built to the appropriate standard

Sydney Water Compliance Certification

The Applicant shall submit a Section 73 Compliance Certificate under the Sydney Water Act 1994 issued by 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>> 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 fees to be paid. Please make early contact with the coordinator, 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 the Subdivision Certificate.

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

Easement for Drainage

The Applicant shall create an easement for drainage (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision, to accompany the Section 88B instrument to ensure

all drainage infrastructure is located within the appropriate easement(s).

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

Reason: Council's Subdivision standards and statutory requirements of the Conveyancing Act 1919.

Easement for Services

The Applicant shall create an easement for services (under the provisions of Section 88B of the Conveyancing Act) on the final plan of subdivision, to accompany the Section 88B instrument to ensure all utility services are located within the appropriate easement(s).

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

Reason: Council's Subdivision standards and statutory requirements of the Conveyancing Act 1919.

Release of Subdivision Certificate

The final plan of subdivision will not be issued by Council until the development has been completed in accordance with terms and conditions of the development consent.

Reason: Council's subdivision standards and the statutory requirements of the Conveyancing Act 1919.

Subdivision Certificate Application

The Applicant shall submit a Subdivision Certificate Application to Council, which is to include a completed Subdivision Certificate form and checklist, a final plan of subdivision prepared in accordance with the requirements of the Conveyancing Act 1919, four copies of the final plan of subdivision and all relevant documents including electronic copies. This documentation is to be submitted to Council prior to the issue of the Subdivision Certificate. All plans of survey are to show connections to at least two Survey Co-ordination Permanent Marks. The fee payable is to be in accordance with Council's fees and charges.

Reason: Statutory requirement of the Conveyancing Act 1919.

Geotechnical Certification Prior to Subdivision 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 Subdivision Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

Title Encumbrances

The Applicant shall ensure all easements, rights of carriageway, positive covenants and restrictions as to user as detailed on the plans and required by the development consent are to be created on the title naming Council as the sole authority empowered to release or modify.

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

Reason: To ensure proper management of land.