Traffic Engineer Referral Response

Application Number:	DA2024/1009
Proposed Development:	Construction of a Residential Flat Building
Date:	30/09/2024
Responsible Officer	
Land to be developed (Address):	Lot 25 DP 7002 , 67 Pacific Parade DEE WHY NSW 2099

Officer comments

This development application proposes the construction of a five storey residential flat building. The proposal provides a total of 9 units comprising 2 x 2-bedroom units, and 7 x 3-bedroom units. The development includes the allocation of 2 units as affordable housing, G01 and 101, of which G01 is also adaptable.

A Parking and Traffic Impact Assessment (PTIA) has been prepared by Stanbury Traffic Planning (dated 24th July 2024), with respect to parking and traffic generation impacting the road network.

Traffic Generation

The future traffic generation has been assessed in accordance with Roads and Maritime Services (RMS) 'Guide to Traffic Generating Developments'. The PTIA states that the proposed development is projected to generate 6 vehicle trips during the weekday peak hours. The additional traffic represents 1 vehicle movement every 10 minutes, and is unlikely to result in any significant impacts to the local road network.

Access and vehicle lift system

Vehicular access to the basement parking area is off Pacific Parade, via a two-way driveway, 3m roadway widths separated by a 0.6m intercom island. A mechanical car lift will allow for vehicles to access additional parking spaces provided on the Ground Floor and Level 1.

The proposed mechanical vehicle lift system will provide a door opening width of 3.0m; internal clearance height of 2.2m and internal dimensions of 3.2m x 5.9m, being compliant with AS2890.1:2004 for a single vehicle garage. Vehicular access to/from the lift is proposed to be governed by an internal traffic signal system, which includes one push button positioned near the lifts within the ground and level 1; and signage positioned within the ground and level 1 parking areas specifying that vehicles are to remain within their parking spaces until a green lantern is displayed.

The PTIA states that in the event that the lift is not located at basement level, an entering vehicle will occupy the designated waiting bay situated to the north of the lift. The waiting bay is not shown on the Basement Level plan and needs to be marked accordingly. The setting back of the vehicle lift within the site (approximately 22m) allows for up to three passenger vehicles to queue on approach to the lift. The queueing analysis shows that the likelihood of the scenario where 5 or more vehicles are

within the system, resulting in queues extending to the public road are well in excess of the 98th percentile queue, thereby complying with the requirements of Clause 3.5 of AS2890.1:2004. Details of the lift system are to be provided prior to issue of the Construction Certificate. Details of the of the parking operations including lift procedures for users are required as part of the Operational Management Plan.

Drawing Number DA200 shows that the required sight triangle can not be provided at the property in accordance with AS2890.1:2004. due to the existing wall and stairway which provides pedestrian access to the adjacent property at No.65 The Pacific. The footpath along the frontage of the development site should therefore be widened accordingly with transitions to the footpath continuing further north, to provide the necessary sightlines to pedestrians. This can be conditioned with plans to be submitted to Council as part of the s138 approval prior to the issue of the Construction Certificate.

Parking

The proposal will provide for a total of 15 car parking spaces across 3 levels of parking, comprising 13 resident spaces (including 1 accessible space) and 2 visitor spaces, in accordance with the WDCP. A total of 10 bicycle spaces, comprising 9 resident and 1 visitor spaces are provided in accordance with the WDCP. A total of 4 Electrical Vehicle charging points are proposed which exceeds the WDCP requirements. Provisions have been included in both visitor parking spaces on the basement level, and 1 space on each of the Ground Floor and Level 1.

The site constraints provides challenges in producing a functional car park layout. However, the Applicant has incorporated a number of measures to provide the required parking spaces under the WDCP, with swept paths demonstrating access to the parking spaces. The PTIA acknowledges that additional manoeuvring is required in order to access the eastern-most parking spaces within the ground and level parking areas due to the site constraints.

The PTIA recommends that the basement visitor car parking spaces be supplemented with a occupation sensor system, to prevent undesirable internal turnaround movements. The system will trigger an electronic “car park full” sign situated adjacent to the access driveway when the visitor spaces are fully occupied. Visitor parking spaces on Basement Level should be signposted ‘Rear to Kerb’, to support the recommended movements to access the parking spaces shown by the swept paths. The car park management measures could be incorporated in the Operational Management Plan, as part of the Condition of Consent. The location and width of the new driveway would result in the loss of 2 unrestricted on-street parking spaces located along the frontage of the site. The provision of 2 visitor parking spaces on the Basement Level is therefore considered necessary and is supported due to the parking impacts of the proposal.

The development is required to provide 1 adaptable dwellings under the WDCP (at least five dwellings, 10% rounded up to next whole number). The development should also provide 2 dwellings incorporating Silver Level Living design features based on the Apartment Design Guide (benchmark of 20% of the total apartments).

An accessible parking space has been provided on the Basement Level which meet the car parking space requirements for adaptable housing, Unit G01. However, an additional space must be provided with a minimum 3.2m width x 5.4m length to meet Silver Level Living requirements. It is suggested that one of the parking spaces on the Ground Floor or Level 1 would need to be removed in order to provide a suitable parking space with a minimum 3.2m width x 5.4m length to meet Silver Level Living requirements. It is therefore recommended that the resident parking spaces on the eastern side of Level 1 near the stairway and lift be removed to provide 2 motorcycle parking spaces (1m width x 2m length) and the adjacent parking space be widened to 3.2m for Silver Level Living requirements.

There are some concerns regarding the parking layout and sight lines to pedestrians at the property boundary, however measures to address these issues can be conditioned as part of the Consent. The proposal can therefore be supported subject to the recommended 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 Traffic Engineer Conditions:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Traffic Management
Traffic management procedures and systems must be in place and practised during the course of the project to ensure safety and minimise the effect on adjoining pedestrian and vehicular traffic systems. These procedures and systems must be in accordance with AS 1742.3 2009 Manual of Uniform Traffic Control Devices and Council's Development Control Plans.
Note: A plan of traffic management is to be submitted to and approved by the Principal Certifier.

Reason: To ensure pedestrian safety and continued efficient network operation.

Staff and Contractor Parking
The applicant is to make provision for parking for all construction staff and contractors for the duration of the project. All Staff and Contractors are to use the basement parking once available. All necessary facilities are to be provided to accommodate this requirement including lighting in the basement, security cameras, etc.

Reason: To ensure minimum impact of construction activity on local parking amenity.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Car Parking Standards
The driveway/access ramp grades, access and car parking facilities must comply with the Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking. The dimensions of car parking bays and aisle widths in the car park are to comply with Australian/New Zealand Standard for Off-Street Parking AS/NZS 2890.1-2004.
Details demonstrating compliance with this condition are to be submitted to the Principal Certifier prior to the issue of a construction certificate.

Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicles.

Vehicular Swept Paths

Vehicular manoeuvring paths must be provided to demonstrate all vehicles can enter or depart the site in a forward direction without encroaching on required car parking spaces. The drawings must be compliant with Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking.
Details demonstrating compliance with this condition must be submitted to the Principal Certifier prior to the issue of the construction Certificate.

Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicles.

Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) and report shall be prepared by a Transport for NSW accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to issue of any Construction Certificate.
Due to heavy traffic congestion throughout the area, truck movements will be restricted during the major commuter peak times being 8.00-9.30am and 4.30-6.00pm.
The CTMP must address following:

- The proposed phases of construction works on the site, and the expected duration of each construction phase.
- The proposed order in which works on the site will be undertaken, and the method statements on how various stages of construction will be undertaken.
- Make provision for all construction materials to be stored on site, at all times.
- The proposed areas within the site to be used for the storage of excavated materials, construction materials and waste containers during the construction period.
- The proposed method of access to and egress from the site for construction vehicles, including access routes and truck routes through the Council area and the location and type of temporary vehicular crossing for the purpose of minimising traffic congestion and noise in the area, with no access across public parks or reserves being allowed.
- Where access is required across private property not in the direct ownership of the proponent, such as a private road/driveway, community title road or right of way, the CTMP is to include:
    - Evidence of the legal right and terms to use the access route or provide owners consent from the owners/strata/community association.
    - Demonstrate that direct access from a public space/road is not viable for each stage of works.
    - An assessment to be carried out of the physical constraints of the Right of Carriageway to determine the maximum size of vehicle that may access the site via the Right of Carriageway during construction.
    - Unless owner/strata/community associations consent is obtained, vehicles are not to exceed 24 tonnes or 7.5 metres in length (an assessment must be undertaken that the surface is capable of supporting up to 24 tonnes, otherwise the weight limit should be reduced in the CTMP). If consent is obtained, a copy must be included in the CTMP.
    - No construction vehicles, materials or plant are to be located or parked in the private road/driveway, community title road or right of way.
    - How any disruption to other users of the private road/driveway, community title road or right of way will be minimised and all users kept informed of likely disruption where the access will be closed or blocked for any given time.
    - If trees are located within or overhang the access route, a tree protection plan prepared by an Arborist with minimum AQF Level 5 in arboriculture demonstrating how any trees within the Right of Carriageway will be protected from damage by construction vehicles. Should any tree protection measures be required on private land in accordance with

AS4970-2009 Protection of trees on development sites, owner's consent must be obtained.

- A Dilapidation report, including photographic surveys, of the private road/driveway/right of way must be included prior to any works commencing on the site. The report must detail the physical condition of the private road/driveway/right of way, and any other adjacent private property assets (including trees) or adjacent public property that may be adversely affected by vehicles servicing the development site to undertake works or activity during site works.
- A requirement for Post-Construction Dilapidation Reports, including photos of any damage evident at the time of inspection, to be submitted after the completion of works and prior to the Occupation certificate. The report must:
  - Compare the post-construction report with the pre-construction report,
  - Clearly identify any recent damage or change to the private road/driveway/right of way and whether or not it is likely to be the result of the development works,
  - Should any damage have occurred, identify remediation actions taken.
  - Be submitted to Council with the Occupation Certificate.

- The proposed method of loading and unloading excavation and construction machinery, excavation and building materials, formwork and the erection of any part of the structure within the site. Wherever possible mobile cranes should be located wholly within the site.
- Make provision for parking onsite. All Staff and Contractors are to use any basement parking once available.
- Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site are not permitted unless approved by Council prior.
- Include a Traffic Control Plan prepared by a person with suitable RMS accreditation for any activities involving the management of vehicle and pedestrian safety.
- The proposed manner in which adjoining property owners will be kept advised of the timeframes for completion of each phase of development/construction process. It must also specify that a minimum Fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measure.
- Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes and concrete pumps, structures proposed on the footpath areas (hoardings, scaffolding or shoring) and any tree protection zones around Council street trees.
- Take into consideration the combined construction activities of other development in the surrounding area. To this end, the consultant preparing the CTMP must engage and consult with developers undertaking major development works within a 250m radius of the subject site to ensure that appropriate measures are in place to prevent the combined impact of construction activities, such as (but not limited to) concrete pours, crane lifts and dump truck routes. These communications must be documented and submitted to Council prior to work commencing on site.
- The proposed method/device to remove loose material from all vehicles and/or machinery before entering the road reserve, any run-off from the washing down of vehicles shall be directed to the sediment control system within the site.
- Specify that the public roadway (including footpath) must be kept in a serviceable condition for the duration of construction. At the direction of Council, undertake remedial treatments such as patching at no cost to Council.
- The proposed method of support to any excavation adjacent to adjoining properties, or the road reserve. The proposed method of support is to be designed and certified by an appropriately qualified and practising Structural Engineer, or equivalent.
- Proposed protection for Council and adjoining properties.
- The location and operation of any on site crane.

The CTMP shall be prepared in accordance with relevant sections of Australian Standard 1742 – "Manual of Uniform Traffic Control Devices", RMS' Manual – "Traffic Control at Work Sites".
All fees and charges associated with the review of this plan is to be in accordance with Council's Schedule of Fees and Charges and are to be paid at the time that the Construction Traffic Management Plan is submitted.
A copy of the approved CTMP must be kept on-site at all times while work is being carried out.
The development is to be undertaken in accordance with the Construction Traffic Management Plan approved by Northern Beaches Council Traffic Team.

Reason: To ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems.

Vehicle Access & Parking
All internal driveways, vehicle turning areas, garages and vehicle parking space/ loading bay dimensions must be designed and constructed to comply with the relevant section of AS 2890 (Off-street Parking standards).
With respect to this, the following revision(s) must be undertaken to the car park layout and parking allocation:

- Convert the resident parking space situated on the eastern side of Level 1 (near the lift) to provide a parking space to meet Silver Level Living requirements (3.2m width x 5.4m length).
- Convert the resident parking space situated on the eastern side of Level 1 (near the stairway) to provide 2 motorcycle parking spaces (1m width x 2m length).

These amendment(s) must be clearly marked on the Architectural Plans and submitted to the Principal Certifier prior to the issue of a Construction Certificate.

Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicle.

Submission of Engineering Plans (standard from development engineers).

The Applicant is to submit an application for approval for infrastructure works on Council's roadway for approval under Sections 138 and 139 of the Roads Act 1993.

The application is to include four (4) copies of Civil Engineering plans for the design of footpath and kerb and gutter along the full development frontage 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:

a) Widening of footpath to the kerb along Pacific Parade for the full frontage of the site, to 3m west of the property boundary of No.65 and 67, before transitioning back to the existing footpath.

Details demonstrating compliance are to be submitted to the Council prior to the issue of the Construction Certificate. The fee associated with the assessment and approval of the application is to be in accordance with Council's Fee and Charges.

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

Pedestrian sight distance at property boundary
A pedestrian sight triangle of 2.0 metres by 2.5m metres, in accordance with AS2890.1:2004 is to be provided at the vehicular access to the property and where internal circulation roadways intersect with footpaths or other pedestrian access areas.
Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Construction Certificate.

Reason: To maintain pedestrian safety.

Compliance with Standards
The development is required to be carried out in accordance with all relevant Australian Standards.

At the time of determination the following (but not limited to) Australian Standards applied:

(a) AS2601.2001 - Demolition of Structures**
(b) AS4361.2 - Guide to lead paint management - Residential and commercial buildings**
(c) AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting**
(d) AS 4373 - 2007 'Pruning of amenity trees' (Note: if approval is granted) **
(e) AS 4970 - 2009 'Protection of trees on development sites'**
(f) AS/NZS 2890.1:2004 Parking facilities - Off-street car parking**
(g) AS 2890.2 - 2002 Parking facilities - Off-street commercial vehicle facilities**
(h) AS 2890.3 - 1993 Parking facilities - Bicycle parking facilities**
(i) AS 2890.5 - 1993 Parking facilities - On-street parking**
(j) AS/NZS 2890.6 - 2009 Parking facilities - Off-street parking for people with disabilities**
(k) AS 1742 Set - 2010 Manual of uniform traffic control devices Set**
(l) AS 1428.1 – 2009* Design for access and mobility - General requirements for access – New building work**
(m) AS 1428.2 – 1992*, Design for access and mobility - Enhanced and additional requirements - Buildings and facilities**

**Note: the listed Australian Standards is not exhaustive and it is the responsibility of the applicant and the Principal Certifier to ensure compliance with this condition and that the relevant Australian Standards are adhered to.

The Australian Human Rights Commission provides useful information and a guide relating to building accessibility entitled "the good the bad and the ugly: Design and construction for access". This information is available on the Australian Human Rights Commission website.

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

Reason: To ensure the development is constructed in accordance with appropriate standards.

Mechanical Vehicle Lift

The applicant is to provide information on the proposed vehicle lift, operation details, and instructions on using the device, maintenance plan, and contingency plan during a malfunction.

Details are to be provided to Council for approval and this requirement is to be reflected on the Construction Certificate plans. Details demonstrating compliance are to be reflected on the Construction Certificate plans and any supporting documentation for the endorsement of the Principal Certifier prior to the release of the Construction Certificate.

Reason: To ensure no vehicle conflicts within the site.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Work Zones and Permits
Prior to commencement of the associated works, the applicant shall obtain a Work Zone Permit where it is proposed to reserve an area of road pavement for the parking of vehicles associated with a construction site.
A separate application is required with a Traffic Guidance Scheme for standing of construction vehicles in a trafficable lane.

Reason: To ensure Work zones are monitored and installed correctly.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Implementation of Construction Traffic Management Plan
All works and construction activities are to be undertaken in accordance with the approved Construction Traffic Management Plan (CTMP). All controls in the CTMP must be maintained at all times and all traffic management control must be undertaken by personnel having appropriate TfNSW accreditation. Should the implementation or effectiveness of the CTMP be impacted by surrounding major development not encompassed in the approved CTMP, the CTMP measures and controls are to be revised accordingly and submitted to Council for approval. A copy of the approved CTMP is to be kept onsite at all times and made available to Council on request.

Reason: To ensure compliance of the developer/builder in adhering to the Construction Traffic Management procedures agreed and are held liable to the conditions of consent.

Ongoing Management
The applicant shall be responsible in ensuring that the road reserve remains in a serviceable state during the course of the demolition and building works.

Reason: To ensure public safety.

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

Basement Garage Traffic Signal System
To prevent conflicting vehicle flows on the internal basement garage ramp and avoid vehicles having to reverse up/ down the ramp, a traffic signal system must be installed at each ramp entry, designed to warn drivers about to enter the road of any conflicting vehicle approaching.
The signal system must;

- be clearly visible from ramp entrances,
- is to clearly indicate to an approaching driver, by way of red light or wording, that an opposing vehicle has entered the ramp,
- Incorporate linemarking to delineate traffic flow and nominate waiting bay location to allow vehicles to queuing and overtake another.
- Include provisions for a visitor parking space occupation sensor system, to indicate if the availability of visitor spaces.

Details of the system, including the system operation, components and placement within the development, must be specified by a practising Traffic Engineer. This engineer is to submit a compliance certificate to the Principal Certifier that the system has been installed and operating as designed, in accordance with the requirements of this condition, prior to the issue of an Occupation Certificate issued for the development.

Reason: To ensure no vehicle conflicts within the basement carpark.

Disabled Parking Spaces
Where disabled parking spaces are provided they must be in accordance with AS2890.6:2009. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of any Occupation Certificate.

Reason: To ensure compliance with Australian Standards.

Shared Zone Bollard
A bollard is to be provided at the shared zone between disabled spaces in accordance to Australian Standards AS2890.6:2009.

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

Reason: To ensure compliance with Australian Standards.

Operational Management Plan
An Operational Management Plan (OMP) is required to be prepared and submitted to Council detailing the operation of the development. The OMP shall include, but not be limited to the following:

- Vehicle access and egress.
- Through-site circulation of vehicle movements.
- Management of car parking areas.
- The location and content of directional signage.
- Maintenance, servicing and emergency procedures with respect to the vehicle lift and traffic signal system
- Communication of parking and operational procedures to all residents

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

Reason: To ensure that the development operates with minimum disruption to the surrounding area.

Mechanical Servicing
The applicant is to include a Section 88E instrument on the title permitting Council to provide direction as to the repair/maintenance of any mechanical devices. In the instance where the building manager does not comply with the direction of Council, or fails to address repair/maintenance requirements in a timely manner, Council reserves the right to undertake the repairs and all fees associated will be borne by the building manager.
Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of any Occupation Certificate.

Reason: To ensure the mechanical services are maintained in a serviceable state at all times.

Visitor Parking

A total of 2 visitor parking spaces are to be provided on the Basement Level which are accessible at all times, with signage erected at the vehicular entry point(s) of the development indicating the location of the parking. The visitor parking spaces should be signposted 'Rear to Kerb Only', to support the recommended movements to access the parking spaces shown by the swept paths.

Reason: To advise visitors of the access requirements and availability of visitor parking provided within the development.

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

Landscaping adjoining vehicular access
The applicant must ensure that the planting chosen for any land immediately adjacent to the driveway and adjacent to any driveway intersections must not exceed a height of 1,140mm

Reason: To maintain unobstructed sight distance for motorists.

Sight lines within carparks
The required sight lines to pedestrians and other vehicles in and around the carpark and entrance(s) are not to be obstructed by landscaping or signage.

Reason: To maintain unobstructed sight distance for motorists.