

Traffic Engineer Referral Response

Application Number:	DA2022/0145
Proposed Development:	Demolition works and construction of a mixed-use development comprising a residential flat building and shop top housing, basement parking, lot consolidation and torrens title subdivision
Date:	10/01/2023
Responsible Officer	
Land to be developed (Address):	Lot CP SP 32072 , 812 Pittwater Road DEE WHY NSW 2099 Lot CP SP 32071 , 4 Delmar Parade DEE WHY NSW 2099

Officer comments

comments on amended plans - 10/1/23

The revised plans have reduced the number of apartments from 230 to 219 and has increased the commercial/retail floor area from 439m2 to 817m2. This will now be served by 334 parking spaces including 259 residential spaces, 47 visitor spaces and 28 commercial/retail spaces. A Loading Bay for a small rigid vehicle has been added to the basement 1 parking area meaning that the development will now be served by 2 loading bays.

Parking

In terms of DCP requirements the amended development is required to provided 191 residential spaces, 44 visitor spaces, and 34 retail spaces (if the higher retail rate is adopted rather than the commercial rate). A total of 269 parking spaces is required. The developer is also required to provide 1 car share spaces at a rate of 1 car share space for each 25 car spaces.

The developer is now proposing to provide 334 parking spaces, well in excess of DCP requirements. The residential parking component is some 68 parking spaces in excess of requirements while the retail parking component is 6 spaces under the DCP requirement. The developer is still not providing any car share spaces.

As noted in the original traffic referral comments a DCP objective for the Dee Why Town Centre is that developments should "encourage walking, cycling, public transport and car sharing"

By providing residential parking well in excess of DCP requirements the developer is encouraging higher levels of car ownership and is not encouraging travel by public transport. The absence of car share spaces also does not support reduced levels of private car ownership.

Parking space provision should be reduced to levels nearer to the DCP requirement with the required car share spaces provided and sited in locations consistent with the requirements outlined in Part G1 clause 8 of the Warringah DCP



Traffic Generation

As noted in the original traffic referral comments, the applicant's traffic consultant has estimated traffic based on an optimistic assumption that the development will generate traffic at a rate consistent with similar developments located near a rail line. This is not accepted and a more realistic traffic generation rate of 0.29 trips/ residential car space in the AM peak and 0.28trips/residential car space in the pm should be used given the absence of a rail line and the 500m walking distance to the nearest B-Line bus stop. For the revised development it is considered that more realistic trip rates from the residential component would be 0.29x235 (68) residential trips in AM peak and 0/28x235 (66) residential trips in the PM peak.

In addition there will be 19 AM peak retail/commercial trips and 38 PM peak retail commercial trips

i.e a total AM peak traffic generation of 87 trips/hr and a PM peak traffic generation of 104 trips/hr.

The developer's traffic consultant has estimated the existing commercial development on the site to have generated 64 trips/hr in the AM peak and 48 trips/hr in the PM peak.

Baes upon the above, the PM peak traffic is estimated to increase by 56 vehicles per hour post development. In addition, as noted in the original traffic referral comments the commercial traffic from the existing site would be primarily inbound in the morning and outbound in the evening. The proposed development by contrast would be primarily outbound in the morning and inbound in the evening. The PM peak traffic generated by the high number of residential apartments will generate a high PM peak right turn movement into Delmar Pde which may result in road safety or queuing issues associated with that movement at that time. The developer's traffic consultants do not appear to have undertaken any traffic modelling at this stage which is unacceptable for a development of this size. It is also noted that TfNSW have also requested intersection modelling of the Pittwater Road/Delmar Parade intersection.

The required traffic modelling should be provided for review to both Council and TfNSW

Property access and traffic circulation

As noted in the original traffic referral comments a development providing access to 334 parking spaces is required to provide a category 3 driveway (Table 3.1 of AS/NZS 2890.1) with a 6m wide entry driveway and a 4m to 6m wide exit driveway. The driveways should be separated by 1 to 3 metres. The plans are not compliant as they only make provision for a single driveway of approximately 8.5m in width. The access driveway should be redesigned as a category 3 driveway to provide for suitable separation of entry and exit movements, and more adequate provision for pedestrian safety.

Separate driveways for cars and service vehicles are also required as outlined in Clause 6.4.2 of the RMS Guide to Traffic Generating Development. This would eliminate any conflict between vehicles making deliveries/collecting waste and traffic using the carpark. The queueing analysis undertaken by the developer's traffic consultant has been prepared on the basis of a lower rate of traffic generation than is considered reasonable for this site. It is considered that inbound traffic movements into the development in the pm peak are likely to be almost double that estimated by the developers traffic consultant (see comments above). It is also likely that there will be a high level of platooning as vehicles turn together from Pittwater Road into Delmar Parade into gaps in the southbound traffic flow. Noting that there is only space for two vehicles to queue north of the loading dock, queuing across the footpath is therefore anticipated to be a likely regular occurrence. Furthermore, any queuing of vehicles waiting for a truck to manoeuvre into or out of the loading dock is considered inconvenient and undesirable. Given the number of parking spaces accessed from the driveway and the number of vehicles using it,



queuing space for at least 3 vehicles is required however a separate driveway for access to and from the main loading dock is considered a far superior outcome.

Swept path plots provided in the traffic report reveal that there are a number of locations within both the basement 1 and basement 2 parking levels where the circulation area has not been designed to allow for passing of B85 & B99 vehicle as required by AS2890.1 clause 2.5.2(c). Given that there is a significant over supply of parking in terms of DCP requirements and given the number of vehicles likely to be circulating to and from parking spaces, deletion of some parking spaces and/or widening of circulation aisles to facilitate adequate passing opportunities is required.

Pedestrian sight lines

The amended plans now appear to accommodate a pedestrian sight line triangle at the property boundary that is consistent with AS2890.1 Clause 3.2.4(b)

Loading Bays and servicing

It is noted that the amended plans have made allowance for an additional loading bay in basement level 1 capable of accommodating a Small Rigid Vehicle. It is also noted that the applicants traffic consultant has confirmed that the required clearance of 3.5m is available to and from the basement 1 loading bay and that 4.5m headroom clearance is available over the ground floor loading dock as required for access by a Medium Rigid Vehicle.

It is noted that the size of the ground floor loading dock has been increased however there is concern that the dual use of this area as a good receiving area and a waste pick up area may lead to the area becoming overcongested with bins on waste collection days. The adequacy of this area to meet waste collection needs should be addressed by Council's waste Services team.

Summary

There are a number of matters outlined above which were raised in the initial traffic referral comments but remain unaddressed or unsatisfactorily addressed by the applicant. Further information and/or amendments to the plans are required prior to further review of the Development Application.

Original comments - 25/5/22

The development is for demolition of the existing office/commercial buildings on the site and construction of a mixed use development comprising:

230 residential apartments and 439m2 of GFA for 3 commercial units

The development will provide parking for 340 vehicles including 275 residential spaces, 46 visitor spaces and 19 commercial/retail spaces

The development site lies at the southern end of the B4 Mixed Use zone of the Dee Why Town Centre



Parking

Required:

In terms of the DCP, as the development lies within the Dee Why Town Centre, the following parking rates apply:

Residential component

- 0.6 parking spaces for each 1 bedroom apartment
- 0.9 parking spaces for each 2 bedroom apartment
- 1.4 parking spaces for each 3 bedroom apartment
- 1 visitor parking space for each 5 units

Commercial/retail component

1 space per 40 sqm (commercial) or 4.2 spaces per 100 m2 (retail)

Bicycle Parking

- 1 space per dwelling
- 1 space per 12 dwellings (for vistors)
- 1 space per 200m2 for Commercial/Retail

Car Share

In the Dee Why Town centre developments with more than 25 dwellings are required to provide 1 car share space for each 25 dwellings with that car share space to replace one regular car space.



The above rates result in a residential parking requirement of 194 residential spaces (including 7 car share spaces), 46 visitor spaces and 18 retail parking spaces (if the higher retail parking rate is used rather than the lower commercial rate). A total of 258 spaces in total together with 232 resident/employee bicycle parking spaces and 19 visitor bicycle parking spaces

Proposed:

The developer proposes to provide 340 parking spaces comprised of 275 residential spaces, 46 visitor spaces and 19 commercial spaces. None of the spaces are proposed to be for car share use. Bicycle parking for residents is proposed to be accommodated within residential storage cages while 22 visitor bicycle parking spaces are proposed. The quantum of parking is 82 spaces in excess of DCP requirements with most of that excess associated with residential parking.

The DCP notes as an objective for the Dee Why Town Centre that developments should "encourage walking, cycling, public transport and car sharing"

By providing residential parking well in excess of DCP requirements the developer is encouraging higher levels of car ownership and is not encouraging travel by public transport. The absence of car share spaces also does not support reduced levels of private car ownership.

Parking space provision should be reduced to levels nearer to the DCP requirement with the required car share spaces provided and sited in locations consistent with the requirements outlined in Part G1 clause 8 of the Warringah DCP.

Traffic Generation

Traffic generation rates quoted in the applicants traffic report are from the TfNSW document Guide to Traffic Generation updated surveys 2013. The rates quoted are sourced from data for high density residential adjacent to public transport – each site surveyed in that data is in a location adjacent to a rail line. As there is no rail line through Dee Why residents will rely upon bus transport. Although the B-Line bus service is a high frequency bus service, the nearest B-Line bus stop is sited over 500m from the development site and does not provide the same level of service as a rail line adjacent to a development would do. Buses still need to negotiate traffic signals, are subject to traffic congestion and the B-Line does not benefit from full time bus lanes on all of its route to/from the Sydney CBD. Bus routes serving other destinations also exist but offer a lower standard of service than the B-Line. Residents of this development will therefore tend to have a higher reliance on private motor vehicle



travel than residents of high density developments adjacent to a rail line and a higher level of traffic generation than the 0.19 trips/unit used in the traffic impact assessment is considered appropriate, particularly if parking rates which are well above DCP requirements are proposed.

The revised surveys provide a range of values for the Sydney Region, if we consider the rates per car space, a range of values for the am peak of 0.09 to 0.29 trips per car space is quoted with a range of 0.05 to 0.28 trips per car space in the pm peak. Using the upper level of that range (given the use of bus rather than train as public transport option, noting the travel time distance to the Sydney CBD and the high level of proposed parking provision), the residential component of the development might generate 0.29 x 321 = 93 AM peak hour trips and $0.28 \times 321 = 90$ PM peak hour trips. Total traffic generation (adding the commercial traffic quoted in the traffic report) might therefore be as high as 103 trips per hour in the AM peak and 110 trips per hour in the PM peak.

It is noted that TfNSW has requested intersection modelling of the Pittwater Road/Delmar Pde intersection. That modelling should be undertaken on the basis of the generated traffic quoted above. In addition, the modelling should take account of the fact that traffic movements associated with the residential use will be largely outbound in the AM peak and inbound in the PM peak which will differ to the demands associated with the previous office uses which would primarily have been inbound in the AM peak and outbound in the PM peak. It is also noted that the PM peak traffic generated by the high number of residential apartments will generate a high PM peak right turn movement into Delmar Pde which may result in road safety issues associated with that movement at that time. The developer's traffic consultants do not appear to have undertaken any traffic modelling at this stage which is unacceptable for a development of this size.

Property access and traffic circulation

For a development providing access to 340 parking spaces Table 3.1 of AS2890.1 advises that the carpark driveway should be category 3 with a 6m wide entry driveway and a 4m to 6m wide exit driveway. The driveways should be separated by 1 to 3 metres. The plans are uncompliant as they only make provision for a single driveway of approximately 8.5m in width. The access driveway should be redesigned as a category 3 driveway to provide for suitable separation of entry and exit movements, and more adequate provision for pedestrian safety.

Separate driveways for cars and service vehicles are also required as outlined in Clause 6.4.2 of the RMS Guide to Traffic Generating Development.

Swept path plots provided in the traffic report reveal that there are a number of locations within both the basement 1 and basement 2 parking levels where the circulation area has not been designed to allow for passing of B85 & B99 vehicle as required by AS2890.1 clause 2.5.2(c). Given that there is a significant over supply of parking in terms of DCP requirements deletion of some parking spaces and/or



widening of circulation aisles to facilitate adequate passing opportunities are required.

Pedestrian Sight Lines

The traffic report has plotted the pedestrian sight line triangle and it appears that a pedestrian sight line triangle that complies with the ASAS2890.1 Clause 3.2.4(b) is not available at the point where the carpark driveway meets the Delmar Pde property boundary. This shall be amended.

Loading Bays and Servicing

There is only one loading dock to service the whole development and only one point for waste collection to occur.

The single bin room to service the entire development is questioned particularly when it is insufficiently sized and reliant upon bins being placed along the side of the bin room where they would be inaccessible for rear loading. A truck manoeuvring into the bin room will also block entry and exit to/from carpark ramps resulting in potential queuing/reversing issues back onto the road or across the footpath

The commercial units facing Pittwater Rd have no access to a Loading Dock and no ability for deliveries to be achieved on-street given the presence of on street No Parking restrictions and an AM peak Bus Lane. It is therefore unclear how deliveries to these units will be achieved noting that the adjacent Council carpark is not designed for and inappropriate for truck parking.

Clause 6.4.2 of RMS Guide to Traffic Generating Development suggests that there should be separate truck and carpark driveways the plans should be amended to comply.

Points of clarification

It is unclear if the commercial carparking is accessible without having to activate a security gate. It is noted that there is an intercom at the top of carpark ramp which may result in these spaces being difficult to access for commercial customers. All commercial spaces and visitor parking spaces should be located where they can be accessed without needing to activate a security gate



It is unclear if the Pittwater Rd & Delmar Pde commercial units are accessible from the basement commercial parking spaces. It is noted that there is a lift and stairs which could provide access and it should be confirmed that access for non-residents from the carpark via both the lift and stairs to the street will be available.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Traffic Engineer Conditions:

Nil.