

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:	22/03/2023
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

further comments on amended plans 21/3/23

SUPPORTED SUBJECT TO CONDITIONS

The applicant has lodged amended plans and a response to traffic issues raised in earlier referral comments. The amended plans have incorporated a revised loading dock arrangement which satisfactorily addresses concerns raised regarding conflict with vehicles entering and exiting the basement carpark level. The additional information provided by the applicant's traffic consultant has responded to the traffic and parking concerns previously raised and after review of that information:

- the over supply of parking is noted and while it would be preferred if the parking levels matched DCP parking rates the oversupply of parking is no longer pressed as an issue preventing approval of the DA
- given that parking rates are in excess of DCP requirements there is no reason to require car share parking on the site
- the traffic generation analysis is noted and traffic modelling results indicate increased numbers turning right into Delmar Parade in the PM peak period and worsening queuing issues associated with right turns in and out of Delmar Parade. It is also noted that very low numbers turn right out of Delmar Pde in both the AM and PM peak periods. In view of the increased numbers turning right into Delmar Parade and the likelihood that it will both result in worsening queuing and an increased right turn related crash history it is considered that either 1) the existing AM peak right turn ban should be extended to cover the PM peak OR b) right turns in and out of Delmar Parade should be prevented by closure of the median island on Pittwater Road. Either option would require consent from Transport for NSW and a condition of consent will be drafted requiring the applicant to undertake whatever works are supported by Transport for NSW at their cost.
- the request for separate driveways for cars and service vehicles is no longer pressed given that the amended loading dock arrangement has addressed concerns relating to conflict between the two access functions.
- the carpark design has been reviewed and has satisfactorily provided for passing opportunities at locations where sight lines are restricted.

The amended plans are now considered acceptable and can be supported for approval subject to conditions of consent

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 provide 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.

Based 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 goods receiving area and a waste pick up area may lead to the area becoming over-congested 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 visitors)

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 $0.29 \times 321 = 93$ 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 1 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 supported.

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

Recommended Traffic Engineer Conditions:

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

Construction Traffic Management Plan

As a result of the site constraints, limited vehicle access and parking, a Construction Traffic Management Plan (CTMP) and report shall be prepared by an RMS 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 town centre, truck movements will be restricted during the major commuter peak times being 8.00-9.30am and 4.30-6.00pm. Truck movements must be agreed with Council's Traffic Engineer prior to submission of the CTMP.

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
- 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 the 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 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.

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

Basement 1 Loading Bay Access

The basement 1 loading bay shall provide minimum dimensions for service in compliance with AS2890.2:2002 with regards to length, width and vertical clearance for access by a small rigid vehicle. Such vehicles are to be able to ingress and egress the loading bay with only one reverse manoeuvre. Plans showing compliance with the distances and the swept path diagrams are to be submitted to the Certifying Authority prior to the issue of a construction certificate.

Reason: To ensure compliance with Australian Standards.

Waste and Service Vehicle Access (11m Waste Vehicle)

Access to the on-site ground floor loading bay area including ramp grades, transitions and height clearance shall be designed for safe forward in and forward out access of 11m Council’s waste vehicle, as a minimum requirement. The height clearance required is 4.5m, measured from the floor level to any overhead structures such as pipes. Swept path diagrams must include details of the road including, kerb line, line marking, signs, traffic devices, power poles, other structures and neighbouring driveways. Plans showing the ramp grades, transitions and height clearance and swept path diagrams of 11m Council’s waste vehicle shall be submitted to and approved by an Certifying Authority prior to the issue of the Construction Certificate.

Reason: to ensure adequate service vehicle access.

Removal of Redundant Driveways

All redundant driveways shall be removed and reinstated to Council standard kerb and gutter. Suitably prepared plans shall be submitted to for an approval under and approved by Council prior to the issue of the Construction Certificate. All costs associated with the works shall be borne by the applicant.

A plan checking fee (amount to be advised) and lodgement of a performance bond may be required from the applicant prior to the release of the approval.

Reason: To maximise on street car parking by removing driveways that are no longer needed in accordance with Council policy.

Right Turn prevention Delmar Parade

The applicant shall lodge plans to Council for Traffic Committee and Transport for NSW consideration for both:

- a) the adjustment of the existing AM peak (6am -10am Monday-Friday) right turn ban from Pittwater

Road into Delmar Parade to be expanded to also incorporate a PM peak right turn ban (3pm -7pm Monday-Friday) and
b) the closure of the median on Pittwater Road at Delmar Parade to prevent right turns

with the applicant to be responsible for the cost of installation of whatever option is approved to prevent right turns at the Delmar Parade/Pittwater Road intersection.

Reason: <to reduce delays associated with the right turns and ensure ongoing safety at the intersection> (DACTRCPC1)

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 Management Plan for standing of construction vehicles in a trafficable lane and a Roads and Maritime Services Work Zone Permit shall be obtained for State Roads.

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

Road Occupancy Licence

Prior to commencement of the associated works, the applicant shall obtain a Road Occupancy License from Transport Management Centre for any works that may impact on traffic flows.

Reason: Requirement of TMC for any works that impact on traffic flow.

Demolition Traffic Management Plan

As a result of the site constraints, limited vehicle access and parking, a Demolition Traffic Management Plan (DTMP) shall be prepared by an suitably accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to commencing any demolition work.

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 DTMP must:-

- Make provision for all construction materials to be stored on site, at all times.
- The DTMP is to be adhered to at all times during the project.
- Specify construction truck routes and truck rates. Nominated truck routes are to be distributed over the surrounding road network where possible.
- Provide for the movement of trucks to and from the site, and deliveries to the site. Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site is not permitted unless prior approval is granted by Council's Traffic Engineers.
- Include a Traffic Control Plan prepared by an RMS accredited traffic controller for any activities involving the management of vehicle and pedestrian traffic.
- Specify that a minimum fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measures.
- Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes, structures proposed on the footpath areas (hoardings, scaffolding or temporary shoring) and extent of 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 DTMP 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. These communications must be documented and submitted to Council prior to work commencing on site.
- Specify spoil management process and facilities to be used on site.
- Specify that the roadway (including footpath) must be kept in a serviceable condition for the duration of demolition. At the direction of Council, the applicant is to undertake remedial treatments such as patching at no cost to Council.

The DTMP 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 Demolition Traffic Management Plan is submitted.

Reason: This condition is to ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems. The DTMP is intended to minimise impact of construction activities on the surrounding community, in terms of vehicle traffic (including traffic flow and parking) and pedestrian amenity adjacent to the site.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Implementation of Demolition Traffic Management Plan

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

Reason: To ensure compliance and Council’s ability to modify the approved Construction Traffic Management Plan where it is deemed unsuitable during the course of the project.

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 RMS 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

Loading Dock Traffic Signal and access control system

To prevent conflicting vehicle flows on the internal carpark and loading dock access ramps and avoid vehicles having to reverse up/ down the ramp, a traffic signal system must be installed to provide warning to vehicles entering and exiting the carpark when the loading dock is in use and designed to warn drivers of any conflicting service/delivery vehicle approaching.

The signal system must;

- be clearly visible from carpark ramp entrances,
- is to clearly indicate to an approaching car driver, by way of red light or wording, that a truck is exiting the loading dock,
- Incorporate an automated boomgate (or other means of access prevention) to manage movements to and from the loading dock and prevent parking in it other than by delivery/waste collection vehicles

Details, 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 Certifying Authority that the system has been installed and operating as designed, in accordance with the requirements of this condition, prior to the issue of any Occupation Certificate issued for the development.

Reason: To ensure no vehicle conflicts at the carpark ramp/loading bay junction.

Loading Dock Management Plan

A Loading Dock Management Plan shall be prepared by the applicant and submitted to and approved by the Principal Certifying Authority prior to the issue of any Occupation Certificate.

The Plan will need to demonstrate how the loading docks will be managed to ensure that there will be only one vehicle entering and exiting each loading docks in any period and how safe servicing arrangements including waste collection will be undertaken without interrupting general traffic. The Loading Dock management plan will also include information relating to measures to prevent unauthorised access to the main loading dock and outline the operation of an automated warning system for motorists entering/exiting the basement carpark that a vehicle is exiting the loading dock. The loading dock management plan will ensure and reinforce that vehicle queuing on public road(s) is not permitted.

Reason: to ensure the loading dock is managed appropriately and that tenants are aware of the conditions of use.

Disabled Parking Spaces

Where disabled parking spaces are provided they must be in accordance with AS2890.6:2009 including provision of shared zone bollards.

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

Reason: To ensure compliance with Australian Standards.

Footpath Construction

The footpath, in accordance with Council's standard specifications, shall be reconstructed along the full property frontage to Council's satisfaction. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: To ensure that an acceptable level of pedestrian access to and from the property is available.

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

Vehicle Parking

The car parking area shown on the approved drawings must be used for vehicle parking only. Loading and unloading of vehicles and delivery of goods to the land must be carried out within the site. Any loading or unloading of materials of potential environmental damage must be appropriately bunded with adequate spill response equipment in place to ensure nil runoff from the site.

Reason: To ensure the safety and amenity of the general public using public streets, and to ensure the protection of the environment from spillage of materials.

Delivery/service vehicles not to use Stony Range carpark

Delivery and service vehicles associated with the completed development are not permitted to drive, stand or park in the Stony Range Botanic Gardens carpark. Deliveries to commercial/retail or residential premises shall be undertaken within the Loading Docks provided on site

Reason: to ensure deliveries are undertaken within Loading Docks provided on site for that purpose and prevent use of public carparking which is not designed for use by trucks.

Implementation of Loading Dock Management Plan

All vehicle ingress and/or egress activities are to be undertaken in accordance with the approved Loading Dock Management Plan. Vehicle queuing on public road(s) is not permitted.

Reason: To allow for vehicular access.

Landscaping and signage adjoining vehicular access

The applicant must ensure that the planting or signage chosen for any land immediately adjacent to the driveway and adjacent to any driveway intersections must not exceed a height of 1m

Reason: To maintain unobstructed sight distance for motorists.