

Traffic Engineer Referral Response

Application Number:	DA2023/1708
Proposed Development:	Demolition works and construction of a Recreation Facility (indoor) with signage
Date:	12/02/2024
Responsible Officer	
Land to be developed (Address):	Lot 2743 DP 752038 , 431 Pittwater Road NORTH MANLY NSW 2100

Officer comments

Proposal description: Demolition works and construction of a Recreation Facility (indoor) with signage

The traffic team has reviewed the following documents:

- Traffic Impact Assessment (TIA), Reference 12217/3, prepared by Colston Budd Rogers & Kafes Pty Ltd dated December 2023,
- The Statement of Environmental Effects prepared by Boston Blyth Fleming Pty Ltd, dated November 2023,
- Plans (Master Set) – Revision 1, designed by Carr, dated 23/10/2023,
- TfNSW referral letters (ref: SYD23/01391 dated 12 January 2024, and
- Pre-Lodgement Advice (PLM2023/0053) dated 13 June 2023.

There were a number of traffic concerns raised in the Pre-Lodgement meeting (PLM) traffic referral comments dated 13 June 2023, which have been addressed in the Traffic Impact Assessment (TIA) Report. The comments were mainly related to the proposed off-street car parking requirement/design, proposed bicycle parking spaces, bus bay, access driveways, Shared Path and traffic modelling.

Parking requirements and design

- The site is zoned RE1 Public Recreation under the Warringah Local Environmental Plan 2013.
- Warringah DCP applies to the subject site. The DCP parking rate for a gymnasium use is 4.5 spaces /100m² GFA and for a Café is 15 spaces/100m² GFA. For this site, with a GFA of 4750m² for the gymnasium club and about 100m² for the café component, this would equate to 228.7 spaces (rounded up to 229 spaces). The development proposes 105 car spaces including 11 existing parking spaces alongside the Bitumen Access Road. The parking provision is well under the DCP requirement. This parking shortfall is however considered acceptable given that:
 - The café on the site is considered ancillary to the development. Although the café is open to the general public, due to its small size and its location (on the Pittwater Road frontage of the site which is not convenient for on-site parking), any external customers would be walk-in trade from the adjacent residential area or playing fields. The café therefore is not expected to generate any traffic or parking.

- According to the Traffic report, the proposed gymnasium does not provide the facilities found in a typical fitness centre/gymnasium; it provides training for athletes in gymnastics. Analysis of such developments therefore should be based on surveys of similar developments. If this is not possible, a first-principles analysis is required.
 - Surveys of parking demand were undertaken by the consultant at the existing Manly Warringah Gymnastics Centre (MWGC) which operates a gymnastic training facility at Cromer.
 - Car parking surveys were undertaken on a typical weekday and on weekend (Saturday operations) on-site, and in the adjacent street. The surveys included counts every 30 minutes on the times of day that the proposed gymnasium centre would be expected to generate its peak car parking demand. The surveys were undertaken to gain an understanding of the existing parking demands within the vicinity of the site.
 - The surveyed parking demand at Cromer was increased by 20% to take into account the practical capacity of the classes (the classes at the time of the surveys were at their 80% capacity). Additionally, the peak parking demand at Cromer was increased by 40% given that the proposed MWGC at North Manly will have 40% additional capacity compared to the existing centre at Cromer.
 - Under this approach, the development was assessed to generate a demand for 96 car parking spaces during 'typical operations' and 102 car parking spaces during the weekend. The proposal has provided 105 on-site car parking spaces which can accommodate the proposed gymnasium centre parking demand.
 - Based on the surveys undertaken, it was concluded that in the vicinity of the site, there was also an abundance of spare car parking spaces on both a typical weekday and Saturday; users of the proposed gymnasium therefore would likely be able to park their car in those locations.
 - A Green Travel Plan (GTP) has been included in the Traffic report as part of this DA to be circulated among the staff/gymnasium centre users to reduce and shift the use and dependency away from single occupancy private vehicle use. The use of a Green Travel Plan will be of use in reducing private motor vehicle trips and its use is supported.
- The proposed parking space dimensions (a minimum space width of 2.6 metres and length of 5.4 metres, with a minimum aisle width of 6.6 metres and some seven (7) parking spaces with a minimum space width of 2.7 metres and length of 5.4 metres, with a minimum aisle width of 6.2 metres) are compliant with Australian Standard requirements.
 - It is noted that the architectural plans show the location of 12 existing 90-degree angle parking spaces alongside the Bitumen Access Road.
 - Three (3) accessible parking spaces are proposed. The design of the accessible parking space should be in accordance with the Australian Standard AS2890.6:2009 Parking Facilities-Off Street Parking for People with Disability. Space should be provided with a clear width of 2.4m and located adjacent to a minimum shared area of 2.4m. The width of the accessible parking spaces is 2.6m, which is in excess of the required 2.4m by 200mm. This is, however, considered acceptable.
 - Bollards are conditioned to be provided for the disabled shared area as shown in Figure 2.2 of the Australian Standard AS2890.6:2009 Parking Facilities-Off Street Parking for People with Disability.
 - Dimensioned plans are submitted for the parking area and confirm that all parking bays and aisles are appropriately sized.
 - It is noted that a raised traffic island has been proposed separating persons alighting from vehicles from circulating/reversing traffic.
 - A single loading bay has been proposed on the southern side of the building, which accommodates service vehicles up to and including a 10.7-metre-Long Rigid Vehicle (SLRV).

As outlined in the Traffic report, the development would generate a minimal demand for service vehicle parking with only 1-2 deliveries expected per day.

- Swept path plots for a B99 and a 10.7-metre SLRV demonstrating satisfactory access to and from the site/loading bay are included in the traffic report.
- The turning paths of a 12.5 metre Bus show that the exit movement would require the driver to stop and turn on spot; it also requires the driver to undertake 4 and 5-point turns to exit in a forward direction. During the time of bus operation, some parking spaces need to be made vacant as the exit turning movement for buses encroaches them. The Traffic report mentions that no other classes will be operating during the weekday early afternoon period (12.00pm to 3.00pm) when the facility will be used by schools and other groups arriving and departing by bus. Although the turning plots show that access for 12.5m buses is constrained and may cause inconvenience for bus drivers, this is acceptable and the facility will still be operational during those specified time (12.00pm to 3.00pm).
- In Attachment B of the Traffic report, the entry and exit driveway widths are proposed to be 4.5 metres and 9.3 metres respectively to accommodate the turning paths, it however is measured to be approximately 6.4 metres wide on the Architectural plans. It will be conditioned that dimensioned plans be submitted for the driveway width to confirm that the driveways are appropriately sized.
- The WDCP 2011, clause C3(A) requires the provision of one (1) secure bicycle parking space per 4 employees plus 1/1500 spectator seats for a recreational facility. Further, one (1) casual bicycle parking space per 200m² plus 1 per 250 spectator seats should be provided. This would result in a requirement of 9 secure spaces and 25 casual spaces. The plan shows bicycle parking for 22 bike racks at two (2) locations. As outlined in the PLM referral comments, bicycle parking compliant with the DCP should be provided with bicycle parking ideally located where bikes will be protected from the weather, particularly spaces for high-medium security use. This will be conditioned.
- The WDCP 2011 does not stipulate motorcycle parking rates for recreational facility (gymnastic centre), however, the subject DA has proposed eight (8) motorcycle parking spaces to offset the shortfall in parking and facilitate alternate travel modes.
- An extension of the existing Shared Path is noted to/through the site to facilitate safe access to the bicycle parking.
- It will be conditioned that the footpath links from the nearest bus stops (on the north and south side of Pittwater Road) to/from the foyer area separated as much as possible from cars undertaking parking manoeuvres be provided and submitted to Council.

Traffic Impact

- The proposal will generate traffic up to 170 vehicle movements (two-way) in the peak weekday afternoon.
- The operation of the key intersections within the study area was assessed using SIDRA INTERSECTION software. Based on the sidra modelling outputs included in Attachment A of the report, the surrounding intersections would continue to operate satisfactorily with generally less than 50 seconds per vehicle average delay and some moderate increase to 95th percentile queue lengths. The LOS of each intersection would operate well with spare capacity. The LOS for the signalised intersection of Condamine Street and Kentwell Road would operate satisfactory (LOS D), nearing capacity.
- It is noted that no discount for the traffic generated by the existing bowling club was applied to the assessment, therefore the Sidra analysis is considered conservative. Surveys of a bowling club (with three bowling greens) in Cromer found a traffic generation of some 54 vehicles per hour (two way) in the weekday afternoon peak hour.

- The modelling has been completed for the intersections at Condamine Street / Kentwell Road, Kentwell Road/ Pittwater Road and Access Road/ Pittwater Road. The intersections are closely spaced intersections; therefore a network-wide process (Sirda Network Model) was assessed by the consultant. This determines the backward spread of congestion as queues on downstream lanes block upstream lanes (queue spillback), and applies capacity constraint to oversaturated upstream lanes, thus limiting the flows entering downstream lanes.
- The modelling found that while queues on Kentwell Road can, on occasions, extend back past the Access Road, the queues are clearing each cycle which allows traffic to turn right out of the Access Road onto Kentwell Road.
- It is also noted that TfNSW has reviewed the submitted application and raises no objection as the proposed development is unlikely to have a significant impact on the classified road network.

Conclusion

Subject to conditions, the application can be supported on traffic grounds.

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

Road Occupancy Licence (ROL) from Roads and Maritime Services

The developer shall apply for a Road Occupancy Licence (ROL) from the TfNSW Transport Management Centre (TMC) prior to commencing work within the classified road reserve or within 100m of traffic signals. The application will require a Traffic Management Plan (TMP) to be prepared by a person who is certified with 'Prepare a Work Zone Traffic Management' accreditation or equivalent. Should the TMP require a reduction of the speed limit, a Direction to Restrict will also be required from the TMC.

Reason: To inform the relevant Roads Authority of proposed disruption to traffic flows.

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

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.

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 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;

- dimensioned plans be submitted for the driveway width to confirm that the driveways are appropriately sized.
- bicycle parking compliant with the DCP should be provided with bicycle parking ideally located where bikes will be protected from the weather, particularly spaces for high-medium security use.
- the footpath links from the nearest bus stops (on the north and south side of Pittwater Road) to/from the foyer area separated as much as possible from cars undertaking parking manoeuvres be provided.

Plans prepared by a suitably qualified Engineer shall 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.

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.

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.
- Specify that, due to the proximity of the site adjacent to ##### School, no heavy vehicle movements or construction activities effecting vehicle and pedestrian traffic are permitted in school zone hours (8:00am-9:30am and 2:30pm-4:00pm weekdays).
- Include a Traffic Control Plan prepared by an TfNSW 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 TfNSW 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 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

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.