Traffic Engineer Referral Response

Application Number:	DA2024/0499
Proposed Development:	Demolition works and construction of three residential flat buildings
Date:	15/07/2024
Responsible Officer	
Land to be developed (Address):	Lot 1 DP 213608 , 120 Frenchs Forest Road West FRENCHS FOREST NSW 2086 Lot 2 DP 213608 , 118 Frenchs Forest Road West FRENCHS FOREST NSW 2086 Lot 14 DP 25713 , 11 Gladys Avenue FRENCHS FOREST NSW 2086 Lot 24 DP 25713 , 116 Frenchs Forest Road West FRENCHS FOREST NSW 2086

Officer comments

This development application involves the demolition of the existing structures to facilitate the construction of three residential flat buildings, comprising a total of 127 units (9 x 1-bedroom units, 85 x 2-bedroom units and 33 x 3-bedroom units).

Parking

The proposed development property is located within Part 8 Frenchs Forest Precinct of the Warringah Local Environmental Plan 2011 (WLEP) and Part G9 Frenchs Forest Town Centre of the Warringah Development Control Plan 2011 (WDCP). Under WDCP, the proposed development property is within Precinct 05 Frenchs Forest Road West Neighbourhood Centre. The WDCP has special area controls to provide adequate on-site parking for a mix of development and vehicle types, and to support the reduction of car trips and encourage the use of sustainable transport. The WDCP specifies maximum parking rates for residents and visitor parking; and minimum parking rates for dedicated Car Share spaces, Electrical Vehicle Charging spaces as well as motorcycle and bicycle parking.

The Traffic and Impact Assessment (TIA) undertaken by Genesis Traffic, states that parking is provided on three levels of basement parking. A total of 169 vehicle spaces is proposed comprising 139 residential spaces, 13 visitor spaces (including 3 car wash bay and 3 Electrical Vehicle Charging Spaces) and 17 Car Share spaces. It is noted that 7 residential spaces and 7 visitor spaces are identified as Small car spaces (2.3m wide x 5m long) compared to a standard parking space (2.4m wide x 5.4m long). The parking spaces provided do not exceed the maximum number of resident and visitor parking permitted, and would satisfy the minimum required car share, wash bay and parking spaces for people with disabilities.

The development also requires a minimum of 64 motorcycle parking spaces (0.5 spaces per dwelling), 254 resident bicycle spaces (2 spaces per dwelling) and 32 visitor bicycle parking spaces (0.5 spaces per dwelling). The TIA indicates that the resident bicycle spaces will be provided within the individual enclosed storage spaces. The 32 visitor bicycle parking spaces are provided with double tier bike

racks/lockers on Basement 1 level. It is not clear on the Architectural Plans the location and total number of motorcycle spaces provided. The notes on the relevant plans would suggest that there is a total of 52 spaces, however only 44 spaces appear to be shown on the plans. Neither total amounts to the required 64 motorcycle parking spaces. Clarification is required on the actual number of spaces provided and all spaces need to be clearly marked.

Access and Circulation

Vehicular access to the development site is provided via a new two-way driveway located off the Gladys Avenue cul-de-sac. The access driveway width is 8.2m at the site frontage and 5.5m at the property boundary. The circulation roadway and ramp widths between the basement levels is generally between 6.1-6.5m wide, however the ramp from the Mezzanine level to the Lower Ground level is only 4.1m. The Architectural Plan proposes 20 residential and 20 motorcycle parking spaces on the Lower Ground level. The reduced ramp widths and parking aisle widths on the Lower Ground level relies on the provision of 3 Waiting Bays and installation of convex mirrors for residents to access parking spaces. The swept path assessment provided for the Lower Ground level shows vehicles encroaching over the marked Waiting Bay areas in order to access parking spaces. Residents with parking spaces on this level already need to circulate over 2 levels and would be further inconvenienced by the poor car park layout. The awkward access to the Lower Ground parking level can be avoided by providing a minimum ramp width of 6.1m similar to what has been proposed between the other car park levels.

AS2890.1:2004 requires the aisle be extended a minimum of 1m beyond the last parking space for blind aisles. The TIA states that a non-compliant 0.7m blind aisle has been provided with a 6.2m wide aisle to facilitate easier turning manoeuvres. These adjustments have not been made as the non-compliances apply to the blind aisles located at the southern end of the basement levels which are 5.8 and 5.825m wide. Regardless, the parking modules should be designed in accordance with AS2890.1:2004 by providing the required widths rather than modifications to accommodate any deficiencies.

The WDCP requires that servicing and loading be accommodated internally within the building. The Applicant proposes a loading bay (3.5m wide x 8.82m long) accessed off Gladys Avenue to enable on-site waste collection. The loading bay is located adjacent to a bin hold area and bin hoist/service lift, connecting to Basement 1 level where the Garbage Rooms are located for each building. There does not appear to be any loading facility within the basement car park. The Plans show a minimum headroom clearance of 2.2m for access to the basement car park. This minimum provides general access for both cars and light vans, but not for a Small Rigid Vehicle (SRV) where a 3.5m clearance height is required. The proposed loading bay may be reasonable for waste collection, however is not considered acceptable for other services such as removalists or deliveries of bulky goods. The current proposal would require a removalist/delivery driver to unload from the at-grade loading bay, use the service lift to access the basement level, enter the boom gate and move the goods along the parking aisle just to reach the lift for the required building. A delivery to Building A would traverse a distance of over 150m with the existing traffic circulating around the car park. The basement car park should therefore be designed to incorporate a centrally located service bay.

Traffic Generation

The future traffic generation has been assessed in accordance with Roads and Maritime Services (RMS) ‘Guide to Traffic Generating Developments 2002’ and the updated traffic generation rates in the Technical Direction (TDT 2013/04a) document. The TIA reports that the 127-unit development will

generate approximately 24 vehicle trips (0.19 vtph per unit) during the AM peak hour, and 19 vehicle trips (0.15 vtph per unit) during the PM peak hour. The traffic generation from the existing 4 dwellings is approximately 4 vehicle trips (0.95 vtph per dwelling) during the AM peak hour, and 4 vehicle trips (0.99 vtph per dwelling) during the PM peak hour. The nett increase for the site is estimated to be 20 vehicle trips during the AM peak hour, and 15 vehicle trips during the PM peak hour.

The projected development traffic movements were added onto the surveyed background traffic and reanalysed using SIDRA. The assessment shows that the existing road network overall operates at a Level of Service (LOS) A and is maintained at LOS A following the addition of the subject development. The existing intersection of Gladys Avenue and Frenchs Forest Road West however operates at LOS C and remains at LOS C post-development which is still considered satisfactory. The SIDRA analysis shows that the 95% Queue Length (Q95) in Gladys Avenue has increased from 9.5m to 14.3m post-development. The additional traffic may result in increased queuing of vehicles exiting Gladys Avenue which may then block access into Gladys Avenue from Frenchs Forest Road West. It is therefore likely that the existing 'No Stopping' restriction on the western side of Gladys Avenue will need to be extended to provide safe access into Gladys Avenue.

The WDCP controls for resident and visitor parking applies a maximum permitted number, while a minimum number is required for car share, to reduce car ownership and provide additional and more sustainable transport options. If the Applicant proposes to apply the maximum numbers for resident and visitor spaces, this should not be at the expense of a sub-standard parking layout which does not provide for the needs of future residents of the 127 unit development.

There are a number of issues which can not be supported due to the proposed parking facilities and location, parking layout, access and circulation. Changes should be made to the design to improve safety, functionality and comply with AS2890.1:2004. Amended plans to address the above issues should be accompanied by a swept path analysis to demonstrate access to circulation roadways, and manoeuvring into parking spaces.

- Increase ramp width from 4.1m to minimum 6.1m wide, between the Mezzanine level to the Lower Ground level, to reduce the number of Waiting Bays and convex mirrors required for access and safety.
- Waiting Bay areas to be located outside the swept paths for access to parking spaces.
- Provide a minimum of 1m beyond the last parking space for blind aisles. The basement footprint could be increased by 0.3m (further south).
- The use of Small Car spaces to provide 7 residential spaces and 7 visitor spaces is unacceptable. The reduced parking space size are not in isolated areas of the building but apply to entire parking aisles. The basement footprint could be increased by 0.4m (further west) to provide the standard 5.4m length. The required 2.4m width can be provided by removing a car/motorcycle space and/or rearranging the parking layout.
- Provision of minimum 64 motorcycle parking spaces. Clarification on actual number of spaces provided and all spaces to be clearly marked on the Plans.
- Provision of a centrally located Service Bay within Basement 1 level for a minimum Small Rigid Vehicle (SRV). Minimum 3.5m clearance height is required for SRV.
- Visitor and Car Share spaces are to be publicly accessible, i.e cannot be located behind a roller shutter where they are not accessible by visitors. The 'Residential Only Shutter' is marked on the Basement 1 Level plan near the lift access for Building B. There is 1 Visitor EV Charging space (Basement Level 1) and 7 Visitor Small Car spaces (Mezzanine) located behind the shutter. The location of the roller shutter and Visitor Spaces need to be relocated to ensure public access.

The development site consolidates 4 existing allotments which should provide the opportunity for a compliant and uncomplicated parking layout. The proposed access and parking arrangement is a sub-standard design and does not facilitate safe or efficient access from the public road to the basement car park, and movement between car park levels. There are also requirements for drivers to give way or wait in marked Waiting Bays (some within the swept paths areas which is not permitted) located in parking aisles or at the top/bottom of the ramp if they detect a vehicle entering from the convex mirror. The maximum allowable number of parking spaces should be reduced accordingly to produce a safe, efficient and compliant parking layout. The proposal is not acceptable in its current form and it is requested that the above recommendations be considered and addressed in the amended plans for review.

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.