Residential development with in-fill affordable housing – 11-23 Rangers Avenue Mosman – Part 3 Traffic

EIS - Traffic, Transport and Accessibility

The Developer claims the Rangers Ave frontage currently operates at a very strong level of service in both the morning and afternoon peak hours with spare levels of capacity. Any resident of the broader Mosman LGA knows this to be false.

The map above shows how Rangers Ave connects Raglan St, Avenue Rd and Cowles Rd in the east, to Spofforth St, Murdoch St and Rangers Rd in the west. The yellow arrows show the various flows that all funnel into Rangers Ave from the East and the West. The result is that there are 6 choke points that regularly create delays and gridlock is common.

This stretch is known locally as the “rat run” as drivers try to avoid the congestion of Military Rd when commuting. This traffic combines with local traffic associated with schools (Redlands and Redlands Prep, Mosman Prep, Queenwood Junior, Mosman Public and Mosman High) to create regular delays. School drop-off and pick-up times are particularly troublesome as cars back-up waiting for children to alight.

Even weekend traffic creates bottlenecks. The traffic is also affected by motorists turning right from Avenue Rd into the BP service station or Cowles Rd and cars parking at the Avenue Rd shops.

Increasing traffic on Rangers Ave associated with this development and the 3 other planned amalgamations on Rangers Ave will significantly increase the delays at these choke points making the area a parking lot. When Rangers Ave does block, traffic in Holt Ave and Spencer St gets included in the traffic congestion as drivers try and find a way around the delays.

Traffic on Cowles Rd trying to enter Avenue Rd

In addition to the traffic delays, these choke points are also dangerous for pedestrians that cross Rangers Ave, Spofforth St, Avenue Rd and Canrobert St. In this area, there are only 3 pedestrian crossings –

- Spofforth St between Rangers Ave and Brierley St,
- Avenue Rd between Canrobert St and Noble St, and
- Canrobert St between Avenue Rd and Shadforth St.

The picture below shows the pedestrian islands on Canrobert St and Avenue Rd roundabout. The pedestrian crossing on Avenue Rd is shown in the background on the right.

The combination of the roundabout traffic with cars parking on both sides of Avenue Rd to the south of Canrobert St and pedestrians trying to cross Avenue Rd and Canrobert St (particularly

school children) is a constant source of danger. Cars turning left from Canrobert St into Avenue Rd must look right for cars on the roundabout and progressing south on Avenue Rd. Then immediately face the prospect of a pedestrian crossing or parked cars exiting in Avenue Rd.

The proposal also suggests two-way access to the development's parking through left turns for eastbound and right turns for westbound traffic. Rangers Ave does not have room for a dedicated right turn lane and therefore any resident or guest of the development will block Rangers Ave westbound when entering. During high periods of eastbound traffic, another choke point will be created.

The photo below shows Rangers Ave site from the Park Ave roundabout. The proposed entrance to the development is just behind the first parked cars in the background on the right. If the parking lane is retained, there is no room for a right turn from Rangers Ave into the proposed development.

Servicing Arrangements

As mentioned previously, Rangers Ave is not a wide street. Any waste collection activity will block traffic travelling in the same direction as the collection vehicles. A development of 44 apartments will have many bins to be collected. The proposal assumes these bins are wheeled out and back in at the time of pickup. This will increase the time a collection vehicle is parked blocking Rangers Ave. It also ignores the neighbouring amalgamations and cumulative impact.

In addition, there are multiple collection activities. Household waste, recyclable plastic and glass, paper and cardboard waste, green waste are all collected on a regular basis. Mosman council also offers larger waste pickup service twice per year. The combined effect of this effort will be material on the traffic congestion along Rangers Ave.

The proposal admits there is no on-site capacity for move-ins or move-outs. This adds another congestion factor. The same is true for grocery deliveries that are increasingly common.

Traffic Impacts

The Developer suggests (page 74) that the additional peak hour traffic generation could be expected to be 4 trips in the AM peak hour and 3 trips in the PM peak hour. Assuming that any trip away from the development would be matched by a return trip, this assumption implies that 3.5 residents per day would use their car during peak hours. This would appear to be a ludicrously low assumption. It also appears inconsistent with the need to cater for 91 car spots for residents and visitors that is proposed.

The Developer references the NSW Guide to Transport Impact Assessment recommendation for vehicular trip rates for **high density residential developments**. This proposal falls under the Low and Medium rise development policy. Provided below are the extracts from the NSW Government Guide on Traffic Impact Assessment Section 5.6.2 for Residential.

Table 5.6. **Medium density residential sample summary**

Weekday rates	Sydney
Person trips (person trips/dwelling)	
AM peak hour	1.05
PM peak hour	0.98
Daily	6.76
Vehicle trips (vehicle trips/dwelling)	
AM peak hour	0.39
PM peak hour	0.37
Daily	2.72

Table 5.8. **Car based high density residential sample summary (weekday)**

Weekday rates	Person trips	Vehicle trips
Metropolitan		
AM Peak	0.2P + 4.67 (where P>92)	0.134P + 4.9 (where P>147)
PM Peak	0.26P	0.20P
Daily	Not available	1.37P

Variables

- (P): number of off-street parking spaces

The Developer's Traffic Impact Assessment (cl 3.9) uses the High-Density residential development recommendation of AM Peak hour (0.19 per apartment) and PM peak hour 0.15 trips per apartment. This is inconsistent with the NSW Traffic Impact Assessment guide of 0.134 trips per parking space for AM Peak Hour and 0.2 trips per parking space for PM Peak Hour. Using 91 off-street parking spaces, this results in 12 AM Peak Hour trips and 18 PM peak hour trips. Four times more than the Developer's assessment assumption.

This underestimation grows if a Medium Density development assumption is used. With 17 AM peak hour trips and 16 PM peak hour trips.

The NSW guide is detailed in the guidance provided. In particular the importance of sensitivity testing (Clause 3.4.3) and Key Principles (cl 5.2.1) including site-based factors. This assessment does not contain any sensitivity testing or justification for the applicability of the general assumption for this development.

The errors made and lack of due consideration to the guidance results in this assessment to be invalid and not fit for purpose.

Construction Traffic Impacts

The proposal suggests that construction vehicles will access the site via Rangers Ave. Rangers Ave has a 3-tonne weight limit. It is not suitable for heavy construction vehicles. In addition, as mentioned above, the Spofforth Rd & Rangers Ave roundabout is one of the key choke points of this area. Having construction vehicles entering and leaving Rangers Ave on a daily basis will have a material impact.

Construction vehicles accessing the site via Rangers Rd are planned to turn left from Spofforth St. There is a dangerous pedestrian crossing on Rangers Ave (at Spofforth St) that is used consistently by school children and adults walking to and from the Spofforth Rd shops or up to the Cremorne town centre. The pictures below show this crossing.

There is no marked crossing but there is a pedestrian island to allow pedestrians to safely stop in the middle. There is also traffic protections on either side to protect pedestrians as they step off the kerb. Pedestrians must navigate cars circling the roundabout and entering Rangers Rd. There is also a further risk for cars turning left off Spofforth St into Rangers Ave. Cars turning left are focussed on the roundabout traffic and do not see the pedestrians crossing immediately on entering Rangers Ave.

It is also noteworthy that the pedestrian island contains bollards and road signs. Large construction vehicles will not be able to extend their turning circle onto the opposite side of the road to make the left turn. Using this route for large construction vehicles is not possible and will add materially to the risk of pedestrians.

The construction traffic plan also suggests that large vehicles will turn left on exiting the site and turn around at the Park Ave intersection roundabout. The photo on page 3 shows this intersection and there in insufficient room for a large vehicle to make the 360-degree turn. Equally when the vehicles departing reach Spofforth St, they will need to navigate the right hand turn into Spofforth St with pedestrian safety at risk again.

The construction traffic plan also fails to appreciate the lack of parking on Rangers Ave or surrounding streets. Whilst the Developer claims construction workers will use public transport (noting that there are no Metro Stations or Train lines in the area), the evidence from other sites clearly indicate construction workers will park in surrounding streets. Holt Ave is notorious for

the lack of parking and is already congested on most days with residents cars, trade vehicles working in houses on Holt Ave and grocery and other delivery services.

There also needs to be an explicit prohibition from using Bloxsome Lane during demolition and construction or for construction workers entering the site. Bloxsome Lane is totally unsuitable for this type of activity and sufficient penalties, and personal liability is needed to prevent breaches. If construction workers enter the site from Bloxsome Lane, it will encourage parking in Holt Ave and Spencer St that does not have the capacity to handle this increase.