

Traffic Engineer Referral Response

Application Number:	Mod2015/0152
Responsible Officer	
Land to be developed (Address):	Lot 12 DP 1197725 , 80 Evans Street FRESHWATER NSW 2096

Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m² or
- Alterations to existing or new driveways or
- Where proposals affect or are adjacent to Council drainage infrastructure incl. watercourses and drainage channels or
- Torrens, Stratum and Community Title Subdivisions or
- All new Commercial and Industrial and RFB Development with the exception of signage or
- Works/uses in flood affected areas

And as such, Councils development engineers are required to consider the likely impacts on drainage regimes.

Officer comments

Traffic Comments on Exit Driveway and Parking Provision

These comments are provided on the amended exit driveway plan provided by the applicant in response to Council's comments on the Mod2015/0152 and the applicant's letter.

Exit Driveway

The Harbord Diggers club development comprises seniors living independent accommodation, childcare centre, club, aquatic centre, gymnasium, and ancillary club facilities and provides a separate entry and exit driveway shared for all uses. Whilst it was desired that a separate driveway be provided for the senior living accommodation, no objection was raised on the proposed shared exit driveway given the history of previous unsatisfactory access proposal, site considerations on the fact that a two-lane wide driveway was proposed. In the approval of the DA, a condition was imposed that the two lane be assigned as separate right and left turn to avoid potential conflict between the left and right movements at the driveway.

We do not support the proposed modification to reduce the exit driveway from two lanes to one lane. We also do not support the widening of the driveway to two lanes at Evans Street while retaining a one lane internally. The design is not satisfactory for servicing a development with about 700 parking spaces and the peak exiting traffic of 350 veh/hr. In this regard it is noted that the driveway does not comply with the following driveway design criteria

- Warringham DCP requires a convenient access to the car park with no queuing and congestion at the driveway and on the street.

- The RMS's Guide to Traffic Generating Developments requirements for driveway category 4 which is related to the driveways on a Road frontage on a minor road and number of driveway served by the driveway) is a width of 6.0 to 8.0m exit driveway.
 - Australian Standards AS2890.212004: requires separated 6.0 to 8.0 exit driveway for the developments having frontage to local road and compromising more than 600 parking spaces. It is indicated that where traffic flow data on an access driveway is either known or can be determined by separate means more accurately than by use of the categories of the Australian Standards, such data may be used to determine driveway widths by accepted design procedure.
- The applicant has used traffic modelling of the intersection of the exit driveway and Evans Street to justify a one lane driveway. However we do not agree with the assumptions applied in the modelling for the reasons highlighted below:
- o The traffic volume of Evans Street was reduced by 50% of the existing traffic volume (106 and 103 veh/hr eastbound and westbound respectively) with no valid justification.
 - o The applied traffic flow capacity for the driveway does not appear to take into account the constraints, design speed, length, width, curves and sight distance properties at the driveway as well as crest in Evans Street. These combined characteristic will reduce the traffic flow capacity of the driveway well below the capacity used in the model.
 - o A lane length of 500m has been used for the driveway which does not reflect the proposed design.
 - o The existing traffic flow at the two intersections of Evans St / Carrington Pde and Lumsdaine Dr / Carrington Pde does not correlate with the assumed traffic distribution at the driveway (85% right turn and 15% left turn).

In conclusion a two lane driveway is required from the Port Corche to Evans Street to avoid the potential conflict between the left and right turn movements at the driveway. The approved conditions require that the two lanes be assigned as separate right and left turn. The driveway needs to be designed to allow drivers merging and lane changing prior to reaching the car park exit.

In view of the foregoing we do not agree with the proposed modification.

Parking Allocation

The parking requirement for Harbord Diggers development was originally calculated applying relevant rates for each use. The parking rate used for the club was based on a patronage based survey on the existing parking provision for the club use. On this basis the total development required 755 parking spaces, however the provision of 705 spaces was justified by the applicant by using the child care centre parking spaces after the child care centre operation hours as well as the seniors living visitor spaces.

The modification stated that there would be a reduction of 4340sqm GFA. However the Urbis letter indicates the reduction of the total GFA is 2111sqm. It should be noted that the reduction of 32 spaces for the club was based on an overall reduction of 16% GFA (the reduction of 4340sqm GFA) for the whole development.

The changes in the GFAs indicates a total reduction of 1684sqm in Ancillary Club Facilities, member Services, Youth Centre whilst these uses never included as calculable floor space for parking requirements. These uses were considered as ancillary uses to the club using the parking spaces provided for the club.

Therefore, the total reduction on the club's GFA would be 258sqm and we do not consider that this would result in a reduction of parking requirements given that the club is highly unlikely to reduce its patronage. Also it could be reasonable to expect that the new club could attract more patrons notwithstanding minor changes in the GFA. Therefore any reduction in the allocated parking spaces to the club is not acceptable.

In view of the foregoing comment we do not support the proposed modification of Development consent to reduce club parking.

We note that as of 21 October 2015 the applicant has withdrawn the modification for the reduction of 32 club parking spaces and is now seeking to reduce two spaces for the senior development. We do not object to this provided that the senior development parking rate is satisfied.

Previous Comment on Applicant's Letter

This comment is prepared in response to the letter provided by Urbis following the meeting held in relation to the modification application for the Harbord Diggers Club.

Refuge Island and Drop-off Area

It was agreed in the meeting that the applicant to withdraw the refuge island in the Modification and remove the drop-off zone in Evans Street.

Narrowed Exit Driveway

We do not agree with the assumptions used in modelling the Driveway at Evans Street.

- The traffic volume of Evans Street was reduced by 50% of the existing traffic volume (106 and 103 veh/hr eastbound and westbound respectively) with no valid justification.

- The applied traffic flow capacity for the driveway does not appear to take into account the constraints, design speed, length, width, curves and sight distance properties at the driveway as well as crest in Evans Street. These combined characteristic will reduce the traffic flow capacity of the driveway.

A lane length of 500m has been used for the driveway which does not reflect the proposed design.

- The existing traffic flow at the two intersections of Evans St / Carrington Pde and Lumsdaine Dr / Carrington Pde does not correlate with the assumed traffic distribution at the driveway (85% right turn and 15% left turn).

A two lane driveway is required from the Port Corche to Evans Street. To avoid the potential conflict between the left and right turn movements at the driveway, the approved conditions requires that the two lanes be assigned as separate right and left turn. The driveway needs to be designed to allow merging of vehicles prior reaching the car park exit.

In view of the foregoing we do not agree with the proposed modification of the exit driveway to a single lane.

Parking Allocation

In accordance with the discussions at the meeting, the Urbis agreed to provide a break down on the

proposed GFA together with the parking allocation correlated to the reduction proposed for each use. The information provided does not include the correlated parking data to justify the proposed allocation.

The modification stated that there would be a reduction of 4340sqm GFA. However the letter indicates the reduction of the total GFA of 2111sqm. The reduction of 32 spaces for the club was based on an overall reduction of 16% GFA for the whole development.

The changes in the GFAs indicates a total reduction of 1684sqm in Ancillary Club Facilities, member Services, Youth Centre whilst no parking provision was considered for these uses at the original DA. These uses were considered as ancillary uses to the club using the parking spaces provided for the club. Therefore, the total reduction on the club's GFA would be 258sqm and we do not consider that this would result in a reduction of parking requirements given that the club is highly unlikely to reduce its patronage.

The new club is expected to attract more patrons. This is irrespective to the minor changes in the GFA, and therefore any reduction in the allocated parking spaces to the club is not acceptable.

In view of the foregoing comment we do not support the proposed modification of Development consent DA2014/0875.

Previous Comment on Modification

We do not concur with the findings of the traffic report prepared by Arup on behalf of the applicant in support of the Mod2015/0152. The proposed modification to narrow the exit driveway, the relocation of the refuge island, reducing parking provision for the club as well as the drop off area in Evans Street will have detrimental impact on traffic and road safety and could not be supported.

Narrowed Exit Driveway

In accordance with AS2890.1:2004 and the comments provided at the Pre-lodgment Meeting the proposed car parking requires the provision of minimum 6 to 8m wide exit driveway. The proposed narrowing down the driveway to one lane to service about 700 car spaces is not appropriate or acceptable.

Reason: Congestion and queuing at the exit driveway and noncompliance with the Australian Standards

Relocation of Refuge Island

The location of the refuge island on Evans Street outside the at-grade car park is not supported due to its position alongside with the existing bus zone. Refer back to the traffic report provided by Arup on 5 November 2014 indicating the implementation of the refuge island further west along the existing pathway is feasible and the RMS Guideline requirements, the proposed location of refuge island as proposed on the modification is not acceptable.

Reason: Pedestrian safety and non-compliance with RMS Technical Direction for Pedestrian Refuges

Parking Provision

Whilst the proposal is to reduce the overall number of parking space by two, the reduction of 32 parking spaces for the club is significant, has not been substantiated and therefore is not supported on traffic ground. The information provided by the applicant does not indicate which areas of the development are to

be reduced and will be affected by the reduction of parking provision.

The assessment of parking provision in the previous DA was based on the peak parking accumulation for the different uses. On this basis a proposed reduction of 50 parking spaces was accepted, and it was concurred that the provision of 705 parking spaces would meet the expected parking demand for the development.

Reason: Significant club parking reduction and impact of the reduced parking provision on the club and ancillary uses

Drop-off area in Evans Street

The layby area proposed in Evans Street adjacent to the entry driveway is not supported due to its conflict with the vehicles exiting the driveway. It is noted that if a layby area was installed the width of the nature strip and the footpath area would be very narrow and not meet requirements.

Reason: Vehicular and pedestrian conflict and safety issue

Referral Body Recommendation

Refusal comments

Recommended Traffic Engineer Conditions:

Nil.