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28 April, 2022

Clarendon Homes
21 Solent Circuit
BAULKHAM HILLS NSW 2153

Our Reference: 2021649RP1.DOCX

Attention: Ms C Coomer

Dear Chelsea,

RE: PROPOSED DISPLAY HOME AT 776-778 HUME HIGHWAY, YAGOONA

This Traffic and Parking Report supports a Development Application (DA) for the construction of a display home at Lot 11 & 12, 776-778 Hume Highway, Yagoona. A single two-storey display home is proposed on Lot 12 (no. 776) with car parking area proposed on Lot 11 (no. 778). This letter report outlines the current and future requirements at the proposed location. The site and its surrounds are shown in **Figure 1**.

Figure 1 Site Locality

Existing traffic situation

The proposed development site is located on Hume Highway which is classified as a State Road. Hume Highway at Yagoona is a six (6) lane divided road with an existing speed limit of 70km/h. The AADT is approximately 55,000 vehicles.

Lots 11 and 12 are currently a single block, residential dwelling with one access driveway.

The nearest crossroads are Hood Street, 50m to the west, and Smith Road, 30m to the east. Hood Street is signalised and provides access to the laneway that services the car dealership, carwash and pizza shop. No parking is available in Hood Street. Smith Road is a wide local street with unrestricted kerbside parking as well as additional 90-degree parking along the sports oval. Parking on Smith Street is within walking distance to the site.

A bus stop is located outside the adjacent property (no. 774). The bus stop is serviced by bus route 907 which travels between Parramatta Train Station and Bankstown Train Station via Bass Hill up to every 30mins.

Proposed development

The proposed development is for a single two-storey display home. One car parking area with four (4) visitor spaces and one (1) staff space will be provided. Access to the proposed development will be provided via Hume Highway at the same location as the existing dwelling.

The proposed display home will be open from 10am to 5pm from Monday to Sunday.

Traffic generation

Most of the visitors to the display homes are expected to arrive as groups, such as families and couples, predominantly on weekends.

Two previous traffic surveys were conducted to determine likely traffic generation patterns. The surveys were undertaken at a Clarendon Homes display homes at 653 Warringah Road, Forestville in October 2016 and 809 Pittwater Road, Dee Why in June 2014 from 10am to 3pm. The results of the traffic surveys are provided below:

Saturday 29 October 2016 at 653 Warringah Road, Forestville:

- Number of groups to visit during the study period - **4**
- Maximum number of groups within a single hour - **2**
- Average duration of stay per vehicle on-site - **30 minutes**

Sunday 30 October 2016 at 653 Warringah Road, Forestville:

- Number of groups to visit during the study period - **6**
- Maximum number of groups within a single hour - **2**
- Average duration of stay per vehicle on-site - **30 minutes**

Sunday 15 June 2014 at 809 Pittwater Road, Dee Why:

- Number of groups to visit during the study period - **9**
- Maximum number of groups within a single hour - **4**
- Average duration of stay - **30 minutes**

To calculate adequate on-site parking for the worst-case scenario, the 'maximum number of groups within a single hour' has been averaged over all surveys. The proposed development provides three (3) on-site parking spaces. As the average length of stay per group is 30 minutes, three (3) on-site parking spaces should be satisfactory for visitor parking demands. The proposed parking arrangement will provide four (4) visitor parking spaces plus one (1) staff parking space and should be sufficient in satisfying the worst-case scenario. The worst-case scenario is defined as all groups arriving by vehicle, on-site, within the same 30-minute period.

For comparison, a Clarendon Homes site on Ryde Road at West Pymble is currently operating satisfactorily with three (3) visitor spaces and one (1) staff space.

Additionally, it is likely that some visitors to the site will travel by bus due to the conveniently located bus stop and the frequency of the service. The bus service links Parramatta CBD to Bankstown CBD.

Traffic and parking impacts

The following comments are provided in relation to traffic and parking impacts:

- Since the display home is expected to generate less than four (4) vehicle movements per hour, the impact on the road network is expected to be minimal.
- Maximum parking demand is three (3) spaces which can be easily accommodated on-site by the provided four (4) parking spaces.
- Visitors choosing to park in neighbouring streets will be able to access the site via the paved footpaths currently in place along Hume Highway and its side streets.
- All vehicles are able to enter and leave the property in a forward direction, as shown in the diagrams attached to this letter. The B99 vehicle has been used for all swept paths.
- The proposed development is located on a public transport route via Hume Highway. Some of the visitors to the display home are expected use public transport to access the site.

Carpark design compliance

The car park design has been checked against Bankstown Council's DCP's, Australian Standards AS2890.1-2004, AS2890.6-2004, AUSTROADS Guide to Road Design Part 3 and Part 4A and a swept path analysis has been undertaken with AutoTURN Pro software v11.

TAR Technologies can confirm that all internal car park provisions including, but not limited to, bay dimensions, aisle widths, driveway widths and pedestrian visibility are compliant with current Australian Standards outlined in AS2890.1 and Bankstown DCP.

Sight distances are adequate and comply with the recommended requirements for SSD, MGSD and ASD as outlined in AUSTROADS Guide to Road Design. The maximum required sight distance in AUSTROADS is the SSD at 2.5s reaction time which equals 102m. As seen in **Figure 2** below this sight requirement is easily satisfied.

Figure 2 Sight Distance To/From Driveway

Staff parking

It is worth noting that staff will most likely always be the first to arrive and last to leave the site. The swept paths attached show the egress movements from both staff spaces under the worst case scenario (i.e a reverse movement undertaken while a car is parked adjacent to the turning bay). Understandably, forward exit movements will be easier if staff reverse park.

Conclusion

The proposed display home is expected to have minimal impacts on traffic movements along Hume Highway and the local road network. The car park design agrees with current Australian Standards and AUSTROADS guidelines.

Yours sincerely,
for TAR Technologies Pty Ltd

Nathan Bruton
Traffic Engineer