

29 October 2021

P1694 Additional information addressing Traffic Consultant requests

Additional information in response to the Section 34 Conference held on the 19th October 2021

Updated overall site plan

The revised site plan has been updated firstly to reflect the agreement between the parties on the day including;

- Removal of lot 1 and turning area into a pocket park
- Removal of 3 parking spaces adjacent lots 106 and 107 and the relocation of this green space to the south of lots 101/112
- Sliding lots 50 – 55 to the East to relocate open space area from adjacent Lot 55 to adjacent Lot 50.
- Adjustment of the location of the steps in the front acoustic fence remove conflicts with traffic movements.

In addition to these changes some minor modifications have also been made to kerb alignments (and corresponding lease boundaries) to provide additional turning space at pinch points (generally corners) to allow for better vehicular circulation.

Updated plan C01.02 – 12.5m Heavy Rigid Vehicle

This revised plan (based on the above mentioned amended site plan) demonstrates the capacity of the road design to accommodate the movement of the design vehicle – the largest garbage truck that would be used to access the site - throughout all areas of the subject site. This same vehicle may also be utilized to deliver smaller housing modules to the site where relevant (see more on this below).

A standard Council garbage truck is in the order of 10.4 to 10.8 metres long and therefore shorter than this design vehicle of 12.5 and the movement through the site would therefore be easier than that shown in the attached swept path plans.

The design reflects the ability of this vehicle to access the site for ongoing regular usage (such as regular garbage removal). It should be noted that the applicant has stated that garbage will be removed by private contractor, and as such, the site may ultimately be serviced by smaller vehicles.

Advice provided by the NSW Fire and Rescue guide (dated 17 November 2020) indicates that the subject site would only require access by a general fire appliance with an overall length of 10.0 metres. Clause 7.1.7 of this document also states that the design vehicle for this appliance for swept path analysis is a “medium rigid vehicle” as per AS2890.2.2018.

The 12.5 m long heavy rigid vehicle allows for the swept path for a specialist fire appliance which is noted as being a “heavy rigid vehicle” within the NSW Fire and Rescue guide (Clause 7.1.7). While

this appliance would not be used at this site, the swept path assessment demonstrates that if required this vehicle can in fact circulate around the site.

Updated plan C01.03 – 10.0m Heavy Rigid Vehicle

This revised plan (based on the above mentioned amended site plan) demonstrates the capacity of the road design to accommodate the movement of the design vehicle – ‘General fire appliance’ - throughout all areas of the subject site.

The design reflects the ability of this vehicle to access the site unrestricted for emergency or other usage.

As above this is consistent with the NSW Fire and Rescue guide.

Updated plan C01.01 – 15.3m semi-trailer Vehicle

This revised plan based on the amended site plan demonstrates the capacity of the road network to accommodate the movement of the 15.3 m design vehicle throughout all areas of the subject site.

The design reflects the ability of this vehicle to access the site on an intermittent and occasional basis both during construction and after completion (for the potential future removal of a home). As such it is possible that on some of the tighter corners through the site, the swept wheel path of this vehicle will overrun the edge of the pavement in occasional isolated areas. This often occurs at these types of development sites and installers can lay protection devices on the inside of the corners if need be or remedial work is completed at the end of the work.

During the course of construction with the delivery of housing modules, there is far more freedom in vehicular movement patterns due to the combined staging of house construction and civil works construction.

It should be noted, that this is not a day to day traffic movement and while swept paths are shown for this vehicle in a single movement in a forward direction, the use of this vehicle would be under a traffic controlled environment and would permit additional reversing / shuffling movements of the vehicle to not only make its way around the site, but to position it for drop-off / pickup of modules.

The swept path also shows a 500mm overhang to each side of the vehicle (allowing for a 3.5m wide module placed on the tray). This width is consistent with the lot size parameters proposed for the site for both lateral and longitudinal placement of modules (both current practices for such development types). To assist in demonstrating these parameters, an explanation sheet titled ‘MHE Typical Lot and Street Development’ is provided. It should be noted from this information;

- Typical module size for the given lot size is in the order of 10.0m x 3.5m (both for lateral or longitudinal modules)
- For a given one way 4.0m wide road, the actual clearance between vertical obstructions (houses / fences) from one side of the road to another is 11.0m approximately – allowing for the 1.5m wide verge to both sides of the 4 m wide pavement and front setback of 2.0m each side.
- For a given two way 6.0m wide road, the actual clearance between vertical obstructions (houses / fences) from one side of the road to another is 13.0m approximately - allowing for

the 1.5m wide verge to both sides of the 6 m wide pavement and front setback of 2.0m each side.

- The surface between vertical obstructions is made up of pavements (roads and driveways) and low growing landscaping – thus allowing some latitude for occasional overruns in the occasional future instance of module removal.

The site operations and sale of the units in the future reduces the likelihood of actual complete module removal of a home. Typically, the house is sold insitu and the new owner enters into a lease agreement with the park owner.

It should also be noted that all proposed roads are in compliance with the regulations for MHE development (and actually exceed these requirements with the 1.5m road reserves). Further, recent easing of potential pinch points within the site have facilitated far better than 'industry standard' access provisions.

Access from external road network

Access from Cessnock Road to the site for the delivery of building materials and modules will be via Redwood Drive / Saddlers Drive / Aspen Drive into Tangerine Street.

Redwood Drive provides a pavement width of 10.0 metres allowing for 2-way traffic movements and kerb side parking to both sides. It also forms part of the bus route number 166 through Gillieston Heights. It connects with Cessnock Road via a 4-way signal-controlled intersection.

Redwood Drive connects with Saddlers Drive via a 4-way roundabout. This roundabout has an external radius of 13.5 metres and an internal radius of 7.3 metres, with a run over width for large vehicle reducing the central island radius further to 4.5 metres. This gives an effective pavement width of 9 metres for large vehicles which would cater for the turn requirement of the 15.3 m long semi-trailer required for the housing modules to be delivered to the site.

Saddlers Drive forms part of the future bus route and provides a width of 11.0 metres allowing for 2-way traffic movements and parking to both sides. It connects with Aspen Drive via a 4-way roundabout. This roundabout has an external radius of 18.0 metres and an internal radius of 9.5 metres, with a run over width for large vehicle reducing the central island radius further to 5.5 metres. This gives an effective pavement width of 12.5 metres for large vehicles which would cater for the turn requirement of the 15.3 m long semi-trailer required for the housing modules to be delivered to the site.

Given the above road and intersection design provisions it can be seen that the 15.3 m long semi-trailer can access the site. It is further noted that these roads have been used and continue to be used for construction vehicle access which can include upto a standard 19 m semi-trailer associated with house frame deliveries across this growing residential area.

In response to other requests please note the following;

- Fire Hydrants will be located within the site to suit regulatory requirements and will be placed clear of swept paths for all vehicle types – this information will be provided with Construction Certificate documentation for the site.
- DWG files for the revised site plan and Autorun Electronic files are provided herein
- Given the clear width within the access corridors identified above, exact sizes of house modules are irrelevant. Further the proposed MHE does not propose specific houses as part of the application.
- Required cranes to load and unload modules will be no larger than design vehicles identified within the attached documentation – swept paths are therefore consistent within parameters already provided.
- A staging plan has already been provided as part of the Development application documents.

The swept path work has been completed by Jason Kidd from Northrop Consulting Engineers:

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Please feel free to contact me on (02) 40327979 should you have any further queries.

Yours sincerely,



Sean Morgan

Director