

## Asset Owner / Specialist Response

**From:** Tessa Craig, Major Developments Interface Lead, Auckland Transport

**Date:** 9<sup>th</sup> June 2021

### Overall Summary:

1. Auckland Transport (AT) have reviewed the application documents submitted with the Project. Schedule 12 of the COVID-19 Recovery (Fast-Track Consenting) Referred Projects Order 2020 requires that an integrated transport assessment be submitted with the application (6(a)). An Integrated Transport Assessment provides a more comprehensive assessment than a Traffic Impact Assessment (TIA). The applicant has submitted a Traffic Impact Assessment prepared by TPC and dated February 2021, 'Reference 20278, Issue B – Final'. AT has previously reviewed this TIA as part of pre-application discussions with the applicant, and the TIA has not been updated to reflect comments raised during those discussions (the same version is submitted with the fast track application). A copy of the recent pre-application memo by AT is provided with this response (dated 5<sup>th</sup> May 2020).
2. The applicant has submitted a Traffic Impact Assessment prepared by TPC and dated February 2021, 'Reference 20278, Issue B – Final'. AT has previously reviewed this TIA as part of pre-application discussions with the applicant, and the TIA has not been updated to reflect comments raised during those discussions (the same version is submitted with the fast track application). A copy of the recent pre-application memo by AT is provided with this response (dated 5<sup>th</sup> May 2020).
3. AT have reviewed the additional information supplied by the applicant, including the revised engineering drawings and the TPC letter, dated 2 June 2021, in response to the request for further information made by the Environmental Protection Agency.
4. Matters raised at pre-application stage have not yet been appropriately addressed within the fast track application material and therefore the effects of the Project have not been adequately considered or addressed. In particular, the applicant should provide tracking details to confirm all intersections will work, review and provide for safe crossing points at the roundabout and provide the Overland Flow Path risk assessment flooding calculations currently exceed limits for stormwater depths and velocity within the road reserve.
5. Any updates to the road reserve (i.e. stormwater devices, footpaths, street furniture, affected kerblines, etc) should be shown on a set of plans at resource consent stage to ensure that they can be easily facilitated. The following issues are outstanding, and resolution of these matters is considered necessary in order to avoid any adverse transport effects:

### *Access to Public Transportation*

6. The Traffic Impact Assessment prepared by TPC (Appendix 12) claims that there are plans for an additional rapid transit line, but there are no such plans in place in this area (refer map from the Auckland Plan which looks out to 2050). The application documents should be updated accordingly.  
<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/transport-access/Documents/ta-3-aucklands-future-strategic-transport-network.pdf>
7. The applicant should consider provision for a car-share scheme, e-bikes with each dwelling, and other ways to encourage and facilitate residents taking public transport or active modes from the day they move in (for example a free Hop card and bus timetable). Cycle store facilities should be provided for each unit.

### *Solid Median*

8. The Traffic Impact Assessment prepared by TPC includes a plan which appears to show a solid median on West Coast Road ('Dimension Plan' in Appendix 1). If this solid median were to be installed, it would prevent rights turns into and out of the site. More detail is required to ensure this

solid median would be acceptable (size and extent of solid median, kerb height) and therefore a condition of consent is suggested for this detail to be submitted for approval and for the median to be in place prior to the dwellings being occupied. No condition is currently proposed by the applicant to ensure the solid median is installed to prevent right turns from the West Coast Road access.

### *Bus Stops*

9. The applicant should therefore contribute to providing public transport facilities i.e. the bus stops and connections to the bus stops (including safe crossing facilities and pedestrian linkages through the site) to align with AUP(OP) strategies of growth near areas served by public transport. People will catch buses in both directions and will often need to wait for a bus to arrive.
10. The bus stops nearest the site (5466 and 5468 at 448 and 478 West Coast Road) are recommended to be upgraded (including a shelter in accordance with the Transport Design Manual – Public Transport – Bus Infrastructure) to support a greater number of people using public transport from the proposed development, particularly given the distance to the nearest train station. Details of any upgrades should be provided for approval, designed in accordance with the Transport Design Manual and installed prior to dwelling occupation.

### *Traffic Engineering/ Road Safety*

11. The Parrs Cross Road roundabout is not currently a suitable and safe roundabout to deal with additional pedestrian and cyclists from the proposed development. The application needs to consider where pedestrians / cyclists are coming from / travelling to, in relation to the development site (i.e. Parrs Parks, Sunnyvale Station, Glen Eden Station, etc). AT would like to see active mode routes to / from destinations of interest investigated further to ensure that the safe and efficient movement of pedestrians and cyclists are sufficiently provided for within the transport network. Additional pedestrian and cyclist movements generated by the higher density proposed by the project and not anticipated by the AUP(OP) zoning for the site could be addressed by the following improvements:
  - Installing a raised zebra crossing at the corner of Glengarry Road and West Coast Road (crossing West Coast Road), whilst converting the existing raised table at the northern end of Glengarry Road into a raised zebra crossing;
  - Page 27 of the Traffic Impact Assessment (TIA) states that “a pedestrian crossing facility with a central refuge will also be provided at the roundabout intersection of West Coast Road and Parrs Cross Road”, no further detail has been provided on what this will encompass. AT would like the applicant to provide more detail to better understand the proposal.
  - The Glengarry Road footpath outside the development should be widened to 3.0m to connect with the shared path on West Coast Road.
  - Pedestrian crossing points should be installed on each arm of all proposed internal intersections within the development. This should also include a pedestrian crossing to the proposed reserve within the site. Crossing points should line up with pedestrian accessways.
  - The site frontages along Glengarry Road and West Coast Road should be upgraded to include 3m wide shared paths to tie in with the existing facility that is currently limited to the site frontage on the west part of West Coast Road to encourage active modes.
12. Page 27 of the TIA states that the existing zebra crossing on West Coast Road will be upgraded to a raised table crossing. The zebra crossing on West Coast Road is already a raised zebra crossing. AT would like the applicant to update their TIA confirming what is proposed. It appears a zebra crossing point is proposed at the eastern end of the proposed raised median on West Coast Road. More details are required to confirm this would act as a safe crossing point. As with the details of the raised median, the design should be submitted for approval and installed prior to dwelling occupation.
13. Some of the road alignments include sharp corners in the property boundary which may not achieve appropriate road corridor widths. A 90-degree corner requires road widening, as well as appropriate visibility to ensure the safe and efficient operation of the transport network. Accordingly, AT would like the application to demonstrate that the proposed roads and intersections can fit appropriately within the property boundaries.

14. Road C Loading Zone is located close to the West Coast Road intersection and may not facilitate safe truck manoeuvring and may cause disruption to the adjacent transport network. Also, for trucks entering the site from West Coast Road to service the commercial units, there is no internal turning point thereby requiring them to either drive through the site or perform a dangerous manoeuvre to access the loading zone on Road C. The application should consider including measures such as a roundabout sized for trucks to U-turn at Road A/C intersection to support service and delivery for the commercial units.
15. The applicant has not shown a back berm in any of the plans. Back berms are required to accommodate utilities and to support safe existing/visibility to footpath when exiting a site. Auckland Transport does not support locating utilities within the footpath as any works require expensive digging up of footpaths. The applicant should include a back berm of 0.5m to accommodate services. Plans will need to be updated to reflect this requirement.
16. Section 3.6 of the TIA states that traffic calming within the site comprises side islands and threshold treatments, but the drawings show speed tables. The TIA should be updated to reflect what is shown on the drawings.

#### *Tracking and Internal Intersections*

17. A delivery van is shown tracking onto the berm in Drawing 20278 – VTF – (12) (in the TIA). The plan should be corrected/updated to show all tracking within the carriageway. Tracking plans have not been supplied as part of the additional information, so it is not possible to confirm whether tracking will work (or not).
18. The mid-block vehicle tracking for the internal road network only shows a 6.3m van against opposing movements from a van on the curves. The applicant needs to check for the 10.3m rubbish truck against an opposing van to ensure that the transport network can operate safely and efficiently.
19. AT considers that the formation of the Road B/Road C intersection is unsatisfactory (see drawing 20278 – VTF (3) from the TIA). Alternative intersection options should be investigated by the applicant, and this could include a mini-roundabout with traffic calming with raised tables on all legs for pedestrians to cross. An alternative design should be submitted with full tracking and visibility checks to demonstrate its acceptability. It is recommended that updated plans (including tracking details) to address these matters be submitted for review as the amendments may have implications for lot boundaries.
20. AT agrees with Section 3.3 of the TIA that no stopping at all times (NSAAT) markings will be needed around the intersections, especially on Glengarry Road to ensure that approaching vehicles are visible. AT also notes that NSAAT will need to be installed around the horizontal curve in Glengarry Road. This detail can be supplied at Engineering Plan Approval stage.

#### *Traffic Modelling and Trip Generation*

21. AT notes that the TIA could be more thorough in some areas and makes the following recommendations to ensure that effects on the safe and efficient operation of the adjacent transport network are sufficiently anticipated and addressed:
  - Existing traffic volumes are based on surveys taken in August and September 2020 (refer TIA Section 2.2.3). There was a 2 week period of level 3 lockdown in August which would impact traffic volumes. The TIA acknowledge this and take steps to account for it, but there is no standard method to adjust for this type of event. A new survey could be taken now to confirm the earlier survey.
  - Its normal to record observed lengths during traffic surveys. When a traffic model for the existing situation is prepared the queue lengths the model estimates are compared against the survey observations to calibrate the model. AT would like to see information on the

observed queue lengths included in the TIA. This should include a table comparing them against what the SIDRA model is predicting.

- TIA Section 3.11 uses the NSW RTA guide for trip generation rates with a value of 0.65 vph for medium density residential. This is a commonly used guide but there are other sources which are also used and there is range of values which could be considered reasonable for this development type. 0.65 vph is within the typical range and seems reasonable but some sensitivity testing using a higher trip generation rate would be prudent. This will help to confirm that if it is higher than expected, it will not cause a significant capacity issue on the network. Trip generation rates may be higher than expected due to the relatively infrequent bus routes in the area.

22. The TIA makes assumptions regarding which directions vehicles coming to and from the development have come from/to. A sensitivity check could also be undertaken in this regard to confirm that any effects to the safe and efficient operation of the adjacent transport network have been sufficiently anticipated and are acceptable.

#### CTMP

23. The applicant has proposed a condition of consent to provide a CTMP. AT agrees with imposing this condition in order to manage construction traffic appropriately.

#### Stormwater

24. The applicant appears to have taken onboard comments made during pre-application discussions about consolidating roadside raingardens into fewer, larger, specifically designed devices as reflected in the updated Civil Engineering Drawings, provided as additional information received on the 4<sup>th</sup> June 2021 (Appendix 6). However, the selection of stormwater management devices should still be supported by a comprehensive Whole of Life Cost Assessment to ensure this is the most cost-effective solution (noting that developer yield is not a suitable justification for a solution that puts an undue cost burden on the ratepayer in the long term). This should include comparisons against alternatives such as a downstream communal bioretention device or similar 'bottom of catchment devices' within drainage reserves.
25. The application has discussed alternatives which as stated in Section 6.3.4 of the Infrastructure report would result in "*a significantly cheaper upfront construction & long-term maintenance cost for the development.*" These alternatives have been dismissed by the applicant as they would result less houses being able to be constructed within the development. A requirement in the Code of Practice Chapter 1 Section 1.5.5.2, is for the selection of assets to be based on a Whole of Life Cost Assessment, where the full life-cycle costs of assets are assessed against alternatives to ensure a cost-effective solution is selected for the asset owner and ultimately the ratepayer. This section of the code of practice specifically states that "*Council will not accept designs or works that minimise construction costs to the extent that disproportionately high operation and maintenance costs will be incurred*".
26. If the devices are not able to be effectively maintained, they will not operate correctly and effects on stormwater will not be mitigated as currently proposed. The life cycle cost should be updated to reflect these considerations and the devices/proposal should be amended as necessary to achieve an acceptable level of operational and maintenance cost. AT seeks larger, communal devices over small pre-cast raingardens due to the maintenance burden and likelihood of planting failure. Stormwater runoff from roads could be dealt with in the reserve space. Stormwater management needs to be resolved prior to consent being granted to ensure effects are avoided, remedied or mitigated. Any amendments to the design may have implications for lot boundaries and other aspects of the layout.
27. Flooding calculations on Drawings 1360 and 1361 shows Overland Flow Paths not complying with Code of Practice limits for stormwater depths and velocity within the road reserve. No risk assessment of these overland flow paths has been provided. Section 6.3.1 of the Infrastructure Report proposes trees in raingardens, however these are not acceptable due to maintenance issues. The OLFP risk assessment should be provided for review and trees removed from

raingardens. The OLFP and flooding may become constraining in terms of location and implementation of raised tables and needs to be carefully considered to agree an acceptable design. Chicanes will narrow the flow path and could result in even higher depth-velocities within the road.

#### *Pedestrian Link*

28. There appears to be a pedestrian accessway between Blocks E and D linking Road 2 to West Coast Road. AT is supportive of this accessway for connectivity, but more detail to ensure compliance with the Transport Design Manual and CPTED consideration is needed. Raised tables should be lined up with the pedestrian connections to provide a level surface for crossing opportunities particularly on key routes. It is recommended that details be supplied for approval.

#### Conditions of Consent

29. The applicant has supplied suggested conditions of consent in Appendix 21 of the application material. In addition to those which are supplied in Appendix 21, should the EPA be of the mind to grant resource consent, it is recommended the following conditions also be included to appropriately avoid, remedy and mitigate the transport effects of the development. Should the additional recommended conditions of consent be imposed or adopted, adverse effects on the road network will be able to be suitably avoided or mitigated.

#### *Bus Stop Upgrades*

30. *The applicant shall upgrade bus stops 5466 and 5468 at 448 and 478 West Coast Road, to include shelters in accordance with the Transport Design Manual – Public Transport Bus Infrastructure. The details of the upgrades shall be submitted to the Council and be designed in accordance with the Transport Design Manual. The bus stops shall be upgraded prior to the occupation of any dwelling.*

#### *Left In Left Out*

31. *The site access on West Coast Road shall be designed as a left-in / left-out only access. The crossing shall be angled such that right turns into and out of the site are prevented. A solid median shall be provided on West Coast Road to assist in channelling traffic and supporting RG-7 No Right Turn signage. A raised zebra crossing shall be included at the eastern end of the raised median. Details of the access layout shall be submitted at Engineering Plan Approval stage.*

#### *Frontage Upgrades*

32. *The applicant shall install a 3m wide shared path along all site frontages (West Coast Road and Glengarry Road) to match the existing facility. The works shall be carried out to the satisfaction of the Council and prior to the occupation of any dwellings.*

#### *Engineering Plan Approval*

33. *The consent holder must design and construct new public roads in accordance with the requirements of Auckland Transport. Certification from a suitably qualified and experienced engineer that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c) of the RMA.*

#### *Advice Notes:*

*An Engineering Plan Approval for construction for this work is required to be submitted to Council and approved prior to the works commencing. Detailed design of the roads, such as street intersection geometry, street furniture, street lighting and safety features, can be further refined and finalised through the Engineering Plan Approval process. Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval. The following details should be included for review:*

- *Transport Design Manual compound corners;*
- *Detailed design of all street lighting. These shall be designed in accordance with the Auckland Transport Design Manual;*
- *NSAATs/ Road Markings and Signs;*
- *Upgrades to bus stops 152 on Glengarry Road and 151 and 154 on West Coast Road;*
- *Stormwater device details;*

- Raised tables and pedestrian crossing points;
- Pedestrian accessway though site between Blocks E and D;
- Left -in-left out access on West Coast Road;
- Raised median detailed design on West Coast Road.

#### Avoid damaging assets

34. Unless specifically provided for by this consent approval, there shall be no damage to public roads, footpaths, berms, kerbs, drains, reserves or other public asset as a result of the earthworks and construction activity. In the event that such damage does occur, the Council will be notified within 24 hours of its discovery. The costs of rectifying such damage and restoring the asset to its original condition shall be met by the consent holder.

#### Crossings and footpaths

35. All new vehicle crossings shall be designed and formed to Auckland Transport Design Manual. This shall be undertaken at the consent holders' expense and to the satisfaction of the Council.
36. Prior to the occupation of the new building, all redundant vehicle crossings shall be removed and reinstated as kerbing and footpath to Auckland Transport Design Manual requirements, including a regrade of the footpath across the vehicle crossing to 2% cross-fall. This shall be undertaken at the consent holders' expense and to the satisfaction of the Council.

#### Advice Notes

##### Pavement Design

37. All new roads or modifications of existing roads intending to be vested to Auckland Transport must be designed in accordance to the attached technical note for pavement design. Appropriate pavement design will be reviewed at the Engineering Plan Approval stage.

##### Resolutions

38. The consent holder shall submit a Resolution report for approval by Auckland Transport Traffic Control Committee to legalise the proposed traffic control devices. A copy of the Resolution from Traffic Control Committee shall be submitted to the Council prior to the commencement the activity provided for by this consent approval.
39. Further information on the resolution process can be found in the following the link: <https://at.govt.nz/about-us/working-with-at/traffic-and-parking-controls>.

##### Corridor Access Requests

40. It will be the responsibility of the applicant to determine the presence of any underground services that may be affected by the applicants work in the road reserve. Should any services exist, the applicant shall contact the owners of those and agree on the service owners' future access for maintenance and upgrades. Services information may be obtained from <https://www.beforeudig.co.nz/nz/home>
41. All work in the road reserve shall be carried out in accordance with the general requirements of The National Code of Practice for Utility Operators' Access to Transport Corridors <http://nzuag.org.nz/national-code/ApprovedNationalCodeFeb13.pdf> and Auckland Transport Design Manual <https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/>
42. Prior to carrying out any work in the road corridor, the applicant shall submit to Auckland Transport a Corridor Access Request (CAR) and temporary traffic management plan (TMP), the latter prepared by an NZ Transport Agency qualified person and work shall not commence until such time as the applicant has approval in the form of a Works Access Permit (WAP). The application may be made through [MyWorksites.co.nz](http://MyWorksites.co.nz) and 15 working days should be allowed for approval

##### CTMP

43. All applications for temporary use of the road reserve during construction must be submitted to Auckland Transport as a Corridor Access Request (CAR). Applications are to be submitted electronically via [MyWorksites.co.nz](http://MyWorksites.co.nz)
44. Unless the applicant can reasonably demonstrate the impracticalities to the satisfaction of Auckland Transport, the use of any part of the road reserve (the public space between the property boundaries on opposite sides of the road) should not be considered in any applications for temporary use of the road reserve including in construction traffic management plans for:
- Carrying out any construction activities;

- *Storing and/or stockpiling materials or equipment;*
- *The parking of vehicles associated with the construction in any way except for the loading or unloading of materials and equipment while the vehicle is parked in an approved loading zone;*
- *Temporary hoardings except as required for the safety of other road users;*
- *Gates and/or doors from the site or other structure opening outwards across any part of the road reserve;*

*Heavy vehicles are to be managed to avoid:*

- *Movements to or from the site during peak traffic periods, generally 7.00am to 9.00am and 4.00pm to 6.00pm;*
- *Parking or waiting in the surrounding streets or at the site entry points;*
- *Reversing into or out of the site.*

*45. Any activity on the road reserve associated directly with the site, and whether or not the activity is occurring directly adjacent to the site, is subject to auditing at all times by officers of Auckland Transport. Breaches of any of conditions of the approvals issued by Auckland Transport may result in penalties being imposed on the consent holder.*