

LUC80045488

360 Albany Highway, Albany

Resource Consent Review - Transportation

Prepared for:	Jarrod Dixon, Auckland Council
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1. Introduction

Abley was engaged by Auckland Council (Council) to provide independent transport planning advice in respect of a resource consent application to enable school buses and other vehicles to use the Bass Road entrance as an alternative to the two main school entrances for Kristin School, which is located at 360 Albany Highway.

A site overview is illustrated in Figure 1.1.

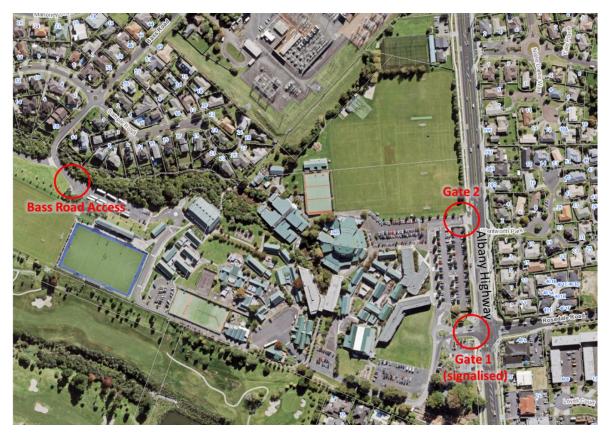


Figure 1.1: Site Overview.

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The resource consent application proposes to delete condition 17 of the current resource consent (LR/2120110) under section 127 of the Resource Management Act (RMA). The key features of the proposal concerning the potential transport-related effects are as follows:

- The activity type is a school surrounded by Residential Mixed Housing Suburban Zones
- Due to concerns over congestion, it is proposed that condition 17 which restricts the use of the Bass Road accessway is to be removed.
- Twenty-one school buses are proposed to use the Bass Road access and general traffic exceeding the consented 130 vehicles per day.
- Gate 1 and Gate 2 will remain the primary accesses to the school with the Bass Road access.

The AUPOP rules will not be assessed as the activity is Discretionary and the applicant has provided a certificate of compliance showing compliance with the AUPOP. This assessment will evaluate the traffic and transportation effects of the resource consent application using the information provided in the following documents.

In preparing our review, we have taken into consideration:

- The Integrated Transport Assessment prepared by Stantec, dated 30 August 2018.
- The Assessment of Environmental Effects (AEE) prepared by Haines Planning, dated 23 March 2020.
- The Certificate of Compliance application LUC80045488-A, prepared by Haines Planning and Stantec, dated 23 March 2020.
- The s92 response prepared by Haines Planning, dated 18 May 2020.
- Comments received from Mitra Prasad at Auckland Transport, dated 26 May 2020.

The proposal triggers traffic generation thresholds and asset modification matters for Auckland Transport input.

2. Matters for Assessment

The resource consent application is a Discretionary Activity, meaning that full discretion can be exercised in relation to the objectives and policies of the AUPOP. By removing a condition that prohibits the use of the Bass Road accessway, there will be traffic-related implications. Traffic-related effects that are considered include; modelling, vehicle queuing, vehicle tracking, increased traffic, internal traffic and parking removal.

The certificate of compliance for unrestricted access for the Bass Road entrance (issued by Auckland Council on 2 December 2019) demonstrates that the activity is permitted. However, the activity, when considered in its entirety exceeds the trip generation thresholds found in E27.6.1.1. Therefore, it is appropriate to assess the traffic effects of the application with full discretion.

2.1 Modelling

Results from the applicant's ITA are observational. The data provided for both vehicle movements from Gates 1 and 2, and queuing on Bass Road is outdated, being recorded in 2016 and 2018 respectively. However, the school roll has increased by 117 students (current roll is 1752) since the information was collated for the ITA. Although results from the observational analysis may be higher, this is deemed to not be significant enough to question the validity of the data used.

The applicant has stated that a SIDRA analysis was not conducted on the premise that during peak hours, the result would be LOS F. Abley agrees with the applicant's reasoning and comments within the ITA. The applicant has stated that it would only confirm what is already known (significant queuing and delays) and not be of additional value.

2.2 Vehicle Queuing

By allowing the Bass Road access to be used by parents and buses, traffic effects on Bass Road could potentially be increased. Based on the applicant's observations, the most severe impacts on the transport network resulting from the operation of the school occur between 3:00 pm and 3:30 pm. Allowing parents to use the Bass Road access would increase the current impacts of vehicle queuing on the operation of Bass Road and the surrounding transport network. This is due to more vehicles using the Bass Road access resulting in longer queues. The current "worst case" extent of vehicle queuing

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based on the ITA observations can be found in **Figure 2.1**. Opening up the access for parents to use will reduce the number of vehicles currently using Gate 1 and Gate 2. It may reduce the amount of illegal parking that had been observed by the applicant as parents will be able to access the site from Bass Road. Therefore it could reduce the amount of queuing observed.

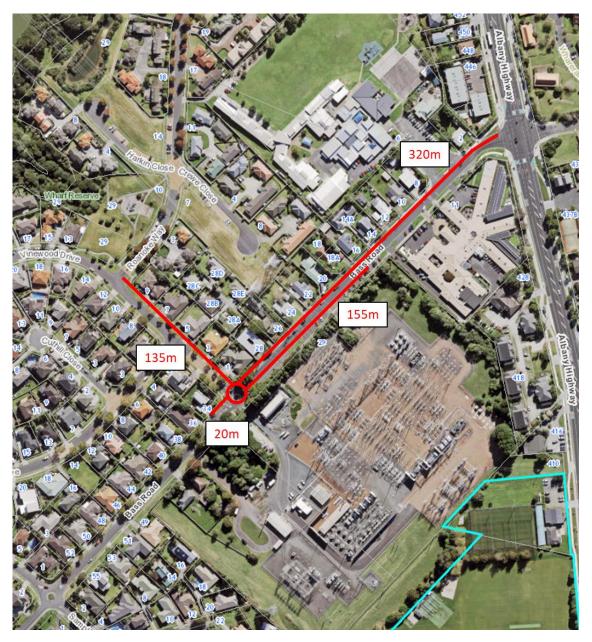


Figure 2.1: "Worst case" queuing based on the applicant's observations.

The Bass Road access trips have been derived by the applicant using traffic counted with a north origin-destination (164), likely preference based on distance (50%), and the number of facilities associated with the rear of the school site (30%). The numbers used are acceptable totalling 49 trips for AM and PM peak combined.

Allowing parents to access the school site through Bass Road has the potential to increase the amount of queuing that will occur on Bass Road. Although the ITA estimates that a total of 25 vehicles will use Bass Road during the PM peak time when queues are at their worst, driver preference is likely to come into play. Vehicles will be encouraged to use the school access that is the most efficient. This will potentially worsen the vehicle queuing on Bass Road. However, if buses are allowed to use the Bass Road access, there will be less conflict between parent vehicles and the buses at Gates 1 and 2 further encouraging the use of these accesses.

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2.3 Vehicle Tracking

Bass Road is a local road surrounded by Residential – Mixed Housing Suburban Zone housing. The majority of the road is 7.5 metres wide; however, 130 metres from the Bass Road access the road narrows to 5.2 metres. The vehicle tracking curves provided by the applicant in the section 92 response demonstrate that the buses within the school fleet can be accommodated without disrupting traffic flow. However, to be able to do this the roundabout where Bass Road intersects with Kinleith Way and Sample Road will need to be redesigned. The applicant has stated that the removal of the keep left signs will allow buses to slightly encroach the roundabout. As demonstrated in Figure 2.2, a redesign of the roundabout is required to avoid buses encroaching on the roundabout island as well as on the keep left signs.



Figure 2.2: Vehicle tracking curves for Bass Road / Kinleith Way / Sample Road roundabout.

The applicant has not provided any potential designs for the roundabout. The design will need to be conditioned and approved by Auckland Transport.

There are two roundabouts located on Bass Road. The roundabout where Vinewood Drive intersects Bass Road has been demonstrated to be able to accommodate the bus fleet. Buses can navigate around the roundabout without encroaching other lanes, however, there is an encroachment on the roundabout as demonstrated below. However, unlike the Bass Road / Kinleith Way / Sample Road roundabout the Bass Road/ Vinewood Drive Roundabout is designed so larger vehicles can encroach the roundabout if required. There are no signs preventing vehicle tracking for this roundabout.

2.4 Bus Impact on Network

During off-peak hours some buses have been stated by the applicant to be day charter, returning to the school later. The applicant has clarified that no buses that day charter use the Bass Road entrance, arriving and leaving through Gate 1 and this will not to be changed.

Buses using Bass Road as a vehicle access during peak hours presents challenges for the current operation of the network. It has been highlighted in the ITA Bass Road is subject to congestion between 2:45 pm and 3:30 pm. This causes extensive queuing as parents use the road to wait for their children and leave promptly after. If the 21 vehicle bus fleet exit from the Bass Road access point during times when there is queuing on Bass Road, the adverse effects on the transport network will be exacerbated. Buses will add to the queue delaying parents from exiting Bass Road, causing frustration among drivers and potentially blocking Bass Road, so it is unusable by other road users. To prevent this from occurring buses must be instructed to leave Bass Road once queuing is dispersed. According to the ITA most queuing has dissipated by 3:30 pm.

2.5 Internal Traffic Effects

Currently, the Bass Road gate is electronically locked between 2:30 pm and 4:00 pm and is minimally used overall, as stated by the applicant. By allowing parents to use the Bass Road access, the internal accessway will be used by parents to access the parking areas. This would most likely result in traffic issues within the site, with the potential for queuing to extend back onto Bass Road

There is a high likelihood that parents will prefer to use the access that is quickest. If Bass Road becomes the preferred access, this will exacerbate the traffic on Bass Road leading to overspill from internal queuing and additional queuing on

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Bass Road., To keep the current negative effects on Bass Road from being exacerbated by additional school traffic and internal queueing, the access should remain restricted for parent vehicles during the PM peak. The applicant has not provided any evidence or comments on the management of internal traffic from both Bass Road and Albany Road entrances.

2.6 Parking

The consent requires the removal of parking spaces for bus parking within the Bass Road car park to allow buses to leave via Bass Road. Additionally, some buses proceed to park in the parent drop off/pick up area once arriving at the school (between 8:00 am and 8:30 am). The applicant has stated that buses arrive at the pickup/drop off area between 8:00 am and 8:30 am with 21 buses parking there during the day and leave the school between 3:10 pm and 3:30 pm.

Despite bus parking removing 68 parking spaces based on the plans in Figure 2.3, the certificate of compliance demonstrates that this is still compliant with the AUPOP. A total of 387 parking spaces are found across the entire school site, with 218 required by the AUPOP.



Figure 2.3.: Layout of Bass Rd car park.

3. Auckland Transport Comments

Auckland Transport have made the following comments (in italics) concerning the proposed development. Our comments are presented below the Auckland Transport comments.

- The effects are no different to what had been previously assessed, and so our position remains the same. We could not support unrestricted access, as the effects would be too great and it seems that no further work has been done to address this. This has been confirmed with our traffic engineering team.
- 2) Although Stantec has stated that tracking will be able to work with some redesign of the Bass Road / Kinleith Way roundabout, we have not been provided designs of how this would work and hence it is yet to be demonstrated. It is acceptable to have this conditioned, though with an advice note that it would be subject to AT review at Engineering Approval stage.
- 3) Limited notification to Albany Primary and MoE is recommended, as it would affect them by limiting their ability to change finishing times to after 3:30pm in future without potentially having the cumulative impact of the traffic have a substantial effect on the operation of Bass Road. alternatively, they could seek to get agreement from Albany Primary around coordination of finishing times.

Based on these comments, Auckland Transport has recommended the following conditions/recommendations based on the application to remove condition 17.

- 1) Allow buses to leave the school via Bass Road from 15:30, which would provide the school with better connectivity to the existing transport network outside of the Bass Road afternoon peak hour;
- 2) keep the Bass Road access from Kristin School closed for all users, except for school staff between 14:30 and 15:45, which would ensure that Kristin School traffic has no impact on the congestion on Bass Road; and
- 3) have an unrestricted vehicle use of the Bass Road access outside of the afternoon peak hour, which would provide a better transport network utilisation during Bass Road off-peak periods.

Abley agrees with the conditions Auckland Transport have proposed. The only alteration would be to change unrestricted access to all users to 3:30 pm as the applicant has demonstrated that queues have dissipated by then. A condition will be included regarding the redesign of the roundabout with the approval of Auckland Transport.

Concerns over the potential changes in school finishing times creating an increased peak is justified. If Albany Primary school were to change their finishing hours, queueing on Bass Road would likely be prolonged. Therefore, Kristin School buses would add to the Bass Road congestion when exiting. limited notification is a way to ensure the Albany Primary School operating hours remain the same as it is currently out of the applicant's control. Abley believes limited notification is excessive for the activity given how unlikely Albany Primary School is to change its hours. However, to avoid the adverse effects on the transport network of Albany Primary school changing its hours of operation in future, a condition to produce a Memorandum of Understanding between Kristin School and Albany Primary School to keep hours of operation the same is recommended.

4. Conclusion

This report describes a review of the transport effects of a proposal to delete condition 17 of the existing resource consent preventing the use of the Bass Road access for Kristin School located at 360 Albany Highway in Auckland.

The traffic effects of this proposal have been assessed with full discretion. All the assessed transport effects are listed below, along with the associated assessment conclusion of each matter:

- Modelling -the decision to not use modelling and base the assessment of observations is acceptable.
- Vehicle Queuing -current vehicle queuing could be increased by school traffic, however there is the potential for less illegal parking and les driver frustration at the main accesses
- Vehicle Tracking- The Bass Road / Kinleith Way / Sample Road roundabout will need to be redesigned to accommodate the bus tracking curves.
- Bus Impact on Network -Buses should only be able to leave via Bass Road when queuing has dispersed after 3:30 pm to minimise the impact on the transport network.
- Internal Traffic Effects The internal accessway should not be used by vehicles other than staff, buses and emergency vehicles as there is the potential for overspill on Bass Road due to internal queueing
- Parking There are enough parking spaces within site to be compliant with the AUPOP rules.

Therefore, from a transport perspective the removal of condition 17 is acceptable, provided it is replaced by the following recommended conditions:

- Buses are not permitted to depart from the Bass Road entry and exit point until after 3:30 pm when vehicle queuing on Bass Road is minimal.
- The internal access from Bass Road is to remain closed off via the electronic gate to all users except for emergency services and staff between 2:30 pm and 3:30 pm on weekdays.
- Unrestricted vehicle use of the Bass Road access is permitted outside of the hours between 2:30 pm and 3:30 pm.
- Prior to the removal of condition 17 the consent holder shall provide designs for the Bass Road / Kinleith Way roundabout to accommodate the vehicle tracking curves of all buses within the fleet. This must be subject to AT review at Engineering Approval stage. When designs have been approved by AT the consent holder shall construct the roundabout at the Bass Road / Kinleith Way intersection to the satisfaction of Team Leader Engineering Monitoring.
- A Memorandum of Understanding between Kristin School and Albany Primary School to keep both schools finishing times at 3:10 pm and 3:20 pm for Kristin School, and 3:15 pm for Albany Primary School is required before the restricted use of the Bass Road access can occur.

If these conditions are not put in place and condition 17 is removed (allowing unrestricted use of the Bass Road access), then from a transport perspective the application cannot be supported.

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