| APPENDIX I                           |
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| INTEGRATED TRANSPORTATION ASSESSMENT |
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Planning | Surveying | Engineering | Environmental

# INTEGRATED TRANSPORTATION ASSESSMENT

Te Kowhai Estate Ltd

561 Horotiu Road, Te Kowhai

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# 1.0 INTRODUCTION

1.0.1 This Integrated Transportation Assessment (ITA) has been prepared to assess the effects of a proposed commercial development located at 561 Horotiu Road, Te Kowhai. Overall, the activity is a discretionary activity under the Waikato Operative District Plan (ODP) and is expected to generate between 984 to 1,388 vehicles per day (vpd). Therefore, this ITA has been prepared to assess the transportation effects of the proposal.

1.0.2 Overall, it has been concluded that the potential effects of the proposed development are less than minor, particularly for the future 50km/h speed environment. As such, it is considered that there are no transportation reasons why resource consent cannot be granted, based on the proposed design and layout.

# 2.0 SITE LOCATION

2.0.1 The subject site is located at 561 Horotiu Road (Figure 1), with an area of 5,029m². It is zoned Country Living under the ODP. It is generally flat, rising in elevation from northeast to southeast and generally trapezoidal in shape. Figure 2 illustrates the topography of the site. The subject site is zoned Business in the Proposed District Plan (PDP), which was notified on 18<sup>th</sup> July 2018. As such, a weighting is required to be applied to the assessment that is reflective of the current status of the PDP.

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Figure 1: Site Location (Copyright 2018 Google Earth)



Figure 2: Subject site, looking east

2.0.2 To the south of the subject site is Te Kowhai Village, including residential property, some retail activity, Te Kowhai School and a lifestyle village. A consent has been approved for a large café and gift shop directly adjacent to the southern boundary, which is anticipated to cater for up to 150 customers per day. Property to the north, east and west is largely zoned Rural and is under rural residential use.

## 3.0 EXISTING ROADING NETWORK

# 3.1 Physical Environment

3.1.1 Horotiu Road is identified as a District Arterial Road in under Appendix A of the ODP and has the function of movement of goods and people. It is also identified as a milk haul route between rural areas and the Te Rapa milk processing factory. It currently operates under a 50km/h speed limit through Te Kowhai Village, with a speed derestriction sign (allowing travel up to 100km/h) approximately 20m north of the intersection between Horotiu Road and Westvale Lane. The subject site is located to the north of the speed derestriction sign. The general cross section of Horotiu Road in proximity to the subject site is shown in Figure 3.

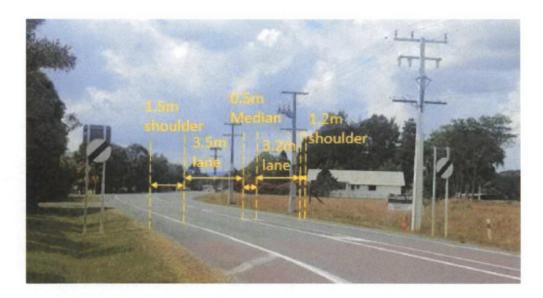


Figure 3: Cross section of Horotiu Road, looking north.

3.1.2 Westvale Lane is located approximately 50m south of the subject site boundary and serves around 12 residential allotments. Westvale Lane intersects with Horotiu

Road at a priority controlled T-intersection, within the 50km/h speed limit area. It is a local no-exit road.

3.1.3 The intersection between Ngaruawahia Road and Horotiu Road is located approximately 73m from the northern boundary of the subject site and is a priority T-intersection. Ngaruawahia Road is identified as a District Arterial Road in the ODP, with the predominant function of inter-regional traffic and rural link. It operates under a 100km/h speed limit.

3.1.4 There is an unformed crossing for the subject site located adjacent to the northern boundary, providing access to Horotiu Road.

#### 3.2 Traffic Volumes

3.2.1 Access to the subject site will be from Horotiu Road. Data from the Mobile Roads website (mobilieroad.org), which is gathered from Council RAMM data shows a traffic volume on Horotiu Road of some 4,260vpd. Based on the peak hour typically representing 8%-12% of daily traffic demands, the assessed peak hour demand is some 340 vehicles per hour (vph) to 511vph.

## 3.3 Road Safety

- 3.3.1 The Crash Analysis System (CAS) database has been reviewed to identify the existing 5-year crash record (2014-2018) on Horotiu Road in proximity to the subject site.
- 3.3.2 There was one no-injury crash involving one vehicle veering off the roadway to the left in 2014 in proximity to the subject site.
- 3.3.3 Overall, it is considered there are no significant road safety issues along Horotiu Road in proximity to the subject site.

#### 4.0 SUSTAINABLE TRAVEL MODES

## 4.1 Walking and Cycling

4.1.1 A footpath ends approximately 80m south of the subject site boundary on the eastern side of Horotiu Road. There is no footpath on the western side. However, it is understood the existing footpath on the eastern side will be extended to the north as part of the consent for the adjacent site (Lot 27 DP 522977). There is no provision for dedicated cycle facilities, although there is a reasonable sized shoulder on the sides of the carriageway.

# 4.2 Public Transport

4.2.1 There are no public transport links within Te Kowhai. Te Kowhai is also not located on any of the regional service lines for the Waikato.

# 5.0 COMMITTED ENVIRONMENTAL CHANGES

- 5.0.1 A review of the Waikato District Council Speed Limits bylaw identifies Horotiu Road north of Te Kowhai Village as a location where changes to the speed limited from 100km/h (unrestricted speed limit sign) to 50km/h will be made. This would extend the 50km/h speed limit north along Horotiu Road from Te Kowhai Village through to the intersection of Ngaruawahia Road and some 300m along each approach to the intersection. At this point, an 80km/hr speed limit is proposed before the open road speed limit (100km/hr) is permitted. A hearing was scheduled for 12 December 2018 to make decisions based on public submissions; it is anticipated a formal decision on the speed limit bylaw change will be announced in early 2019.
- 5.0.2 A café is proposed directly to the south of the subject site and is expected to generate a maximum of 185vpd, with a peak hour of around 50vph.
- 5.0.3 The subject site is proposed to be rezoned to Business Zone under the Proposed District Plan, which was notified on 18<sup>th</sup> July 2018.

# 6.0 DEVELOPMENT PROPOSALS

# 6.1 Development Proposals

6.1.1 The proposal is to develop the subject site into a commercial and retail hub, comprising seven retail tenancies as shown in Figure 4 and Appendix 1.

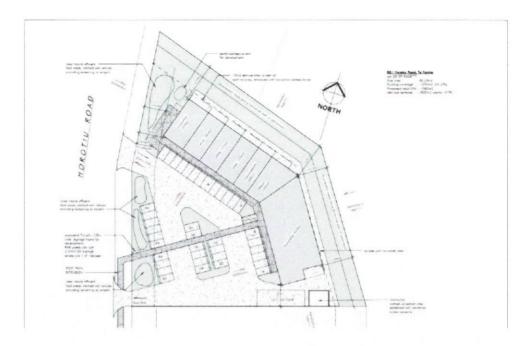


Figure 4: Site Layout Plan

6.1.2 The tenancies are expected to include a takeaway pizza shop, hairdressers, and a mini supermarket. The remaining four tenancies are yet to be determined but will consist of retail or food outlets.

# 6.2 Access

- 6.2.1 Access to the site is via a 12.5m vehicle crossing and internal access from Horotiu Road. It is proposed to extend the footpath along the eastern side of Horotiu Road for approximately 80m from its current termination point to the site to allow for pedestrian access separate from vehicles. This footpath will be demarcated as it traverses the internal vehicle area to provide direct access to each shop frontage.
- 6.2.2 A second, exit only service vehicle exit is also proposed to minimise the need for service vehicle manoeuvring within the site.
- 6.2.3 In addition, it is proposed to include a pedestrian link to the cafe site to the south.

## 6.3 Parking and loading

6.3.1 A car parking area is proposed to be serviced by the dual access vehicle crossing to Horotiu Road and will form a loop to provide greater accessibility for vehicles. 39 car spaces are proposed, which includes 19 spaces adjacent to the shop frontages. Two accessible car spaces are proposed adjacent to the shop frontages, and a loading bay will be located on the southern side of the supermarket for ease of use.

#### 6.4 Traffic Generation

6.4.1 NZTA Research Report 'Trips and Parking Related to Land Use' (RR453) is an industry standard data source and is widely used to assess traffic generation. It contains information on a range of retail types, including small shopping centres. The daily trip generation for small shopping centres is between 92 and 141 trips per 100m<sup>2</sup> Gross Floor Area (GFA), with a peak hour generation of 14.6 to 18.9 trips per 100m<sup>2</sup> GFA. As such, it is considered the proposal is likely to generate between 156vph and 186vph during the peak hour, and 984vpd to 1,388vpd daily.

# 7.0 ASSESSMENT OF EFFECTS

### 7.1 Access Effects

7.1.1 Access to the development will be provided via a 12.5m wide vehicle crossing located approximately 130m from the Ngaruawahia Road / Horotiu Road intersection. A secondary exit-only crossing is proposed some 40m to the south, and approximately 57m north of the Westvale Lane / Horotiu Road intersection. As the Speed Limit Bylaw Review is currently underway, and the likely timeframe for construction of the development being subsequent to completion of the Speed Limit Bylaw Review, it is reasonable to assess the effects of providing access to the development within 50km/hr operating conditions. For completeness, the existing speed environment of 100km/hr has also been considered. Vehicle separation distance requirements are outlined in Table 1 and Table 2 for each of the proposed vehicle crossing, with performance standard non-compliances given in red.

Table 1: Separation distances for the northern vehicle crossing

| Northern Vehicle Crossing distance to:                                  | Distance to vehicle crossing / intersection | 50km/hr<br>speed<br>environment | 100km/hr<br>speed<br>environment |
|---|---|---------------------------------|----------------------------------|
| Horotiu Road and Ngaruawahia<br>Road intersection                       | 130m  | 30m                             | 200m                             |
| Horotiu Road and Westvale<br>Lane                                       | 105m  | 30m                             | 100m                             |
| 561 Horotiu Road (residential vehicle crossing)                         | 50m   | 15m                             | 200m                             |
| 560 Horotiu Road (residential vehicle crossing)                         | 0m  | 15m                             | 200m                             |
| 564 Horotiu Road (residential vehicle crossing)                         | 42m   | 15m                             | 200m                             |
| Proposed entrance to the<br>consented café located<br>immediately south | 100m  | 15m                             | 200m                             |

Table 2: Separation distances for the southern vehicle crossing

| Southern Vehicle Crossing distance to:                          | Distance to vehicle crossing / intersection | 50km/hr<br>speed<br>environment | 100km/hr<br>speed<br>environment |
|---|---|---------------------------------|----------------------------------|
| Horotiu Road and Ngaruawahia<br>Road intersection               | 170m  | 30m                             | 200m                             |
| Horotiu Road and Westvale<br>Lane                               | 57m   | 30m                             | 100m                             |
| 561 Horotiu Road (residential vehicle crossing)                 | 105m  | 15m                             | 200m                             |
| 560 Horotiu Road (residential vehicle crossing)                 | 52m   | 15m                             | 200m                             |
| 564 Horotiu Road (residential vehicle crossing)                 | 8m  | 15m                             | 200m                             |
| Proposed entrance to the consent café located immediately south | 60m   | 15m                             | 200m                             |

7.1.2 As can be seen from the above tables, under the expected future 50km/h speed limit, there are two non-compliances in relation to separation distances to adjacent residential crossings. In relation to the non-compliance for the southern crossing, this is exit only and is expected to be used by service vehicles rather than general public. As such, the effects of the non-compliance are assessed as being negligible given the extremely low volume of traffic that can be expected to use this crossing.

- 7.1.3 In terms of the northern vehicle crossing, it will essentially form a cross-road intersection with the opposite residential crossing serving three houses. The likely traffic generation from the residential sites would be around 30vpd and 3vph. There is therefore a very low likelihood that vehicles will be using the site and residential crossings at the same time and as such, it is assessed that the effect of this non-compliance is less than minor.
- 7.1.4 For completeness, the existing situation has also been considered. However, it should be noted that it is unlikely that the existing 100km/h speed limit will be retained. The proposed northern vehicle crossing is less than the required 200m from the Ngaruawahia Road and Horotiu Road intersection. However, there is ample visibility between the two to allow drivers to identify the presence of a vehicle pulling out or turning in and to act accordingly. The same applies to the non-compliance in relation to the southern exit crossing.
- 7.1.5 There is also a non-compliance in relation to the southern crossing and separation distance to Westvale Lane. However, this is considered to be technical only as the presence of the speed limit change means that vehicles are likely to be travelling considerably below the 100km/h speed limit over the stretch of road between Westvale Lane and the southern vehicle crossing. Overall, the effects of these non-compliances are considered to be less than minor, particularly given the high likelihood of a speed limit change.
- 7.1.6 Minimum sight distances from a vehicle entrance generating more than 40 vehicle movements per day is 80m for a speed environment of 50km/hr in an urban environment. There is greater than 250m sight distance in each direction from the proposed northern vehicle crossing, which will be the predominant vehicle crossing for the subject site. When the existing rural environment and 100km/hr speed environment is taken into account, 250m of sight distance is required and achieved. Therefore, the effects of the proposal with regard to sight visibility for the predominant vehicle crossing will be no more than minor.
- 7.1.7 Minimum sight distances from a vehicle entrance generating less than 40 vehicle movements per day requires a sight distance of 60m in either direction. The proposed southern vehicle crossing will only be available for service vehicles and is

therefore expected to generate less than 40 vehicle movements per day. Greater than 200m of sight distance to the south will be achieved, and approximately 73m of sight distance to the north from the proposed vehicle crossing. As such, the potential effects of the proposal with regard to sight visibility to for the southern crossing will be no more than minor. When the existing rural environment and 100km/hr speed environment is taken into account, 200m of sight distance is required and achieved to the north, but a non-compliance to the south arises. Given the likely timeframes to construction and the proposed changes to the bylaw, it is anticipated the proposal will result in less than minor effects on the safety and efficiency of the transportation network. As such, it is considered the effects of the vehicle crossing sight distance would be less than minor should the speed environment change to a 50km/h through an amendment to the bylaw, or temporary traffic management is used to moderate speeds in the interim prior to a permanent change to the speed limit.

7.1.8 Therefore, access for the proposal has been assessed as having less than minor effects on Horotiu Road and the surrounding transportation environment.

#### 7.2 Internal Layout

- 7.2.1 A 39 space car park, including two accessible spaces will be provided. Only 33 car spaces are required to service the development based on the performance standards of the ODP requiring 1 car space per 25m² GFA for a supermarket activity, and 1 car space per 45m² GFA for retail activities. The internal access forms a loop, allowing vehicles to enter and exit the development in a forward direction and circulate easily around the site. Whilst 8.7m of manoeuvring space is required pursuant to Rule A11.1(a) for 2.4m wide car spaces, 7.5m to 7.8m of manoeuvring width is provided. Whilst this is non-compliant with the ODP performance standards, the overall layout of the parking spaces and aisles meets the standards set out in AS/NZS 28901.1:2004 Parking facilities Part 1: Off-street car parking. As such, the effects of the non-compliance are considered to be less than minor.
- 7.2.2 Four bike parks required under the ODP and there is sufficient space on the subject site for these to be provided.

7.2.3 Under the ODP, two loading zones are required for a supermarket activity regardless of size. Takeaway food stores also require a loading zone under the ODP. One loading zone is proposed to serve the entire development, which is considered to adequately serve the small supermarket activity and any retail activity or food outlet that may require the use of heavy goods vehicles. As such, the effects of this non-compliance is considered to be less than minor.

### 7.3 Traffic Effects

7.3.1 It is estimated Horotiu Road in proximity to the subject site carries around 4,200vpd, with the proposal likely to increase traffic demands by some 984vpd to 1,388vpd. Whilst the estimated generation of vehicles from the proposal is proportionately high compared to the existing anticipated volumes, Horotiu Road was previously State Highway 39 and therefore designed to carry a larger capacity that the existing 4,200vpd. Typical traffic lane capacity is between 800vph and 1,200vph therefore assuming a worst case of 800vph capacity and assessing the likely future demand as being some 690vph (i.e. 504vph existing + 186vph development traffic) it is clear that the overall traffic demand is less than the capacity of a single traffic lane. As such, the effects of the proposed development are considered to be less than minor.

## 7.4 Road Safety Effects

- 7.4.1 Horotiu Road is reflective of a declassified State Highway and has wide shoulders and a slight curve in proximity to the subject site. There is good visibility in both directions from both proposed vehicle crossings to Horotiu Road, subject to a change in the posted speed limit to 50km/h. Given the crash history along Horotiu Road, it is considered unlikely the proposed development will have a detrimental effect on Horotiu Road safety.
- 7.4.2 As such, it is assessed the proposal will have a less than minor effect on the safety and function Horotiu Road.

# 8.0 DISTRICT PLAN CONSIDERATIONS

8.0.1 Table 3 outlines an assessment of the proposal against the requirements of the Waikato District Council ODP. Compliance is generally anticipated with Appendix A (Transportation).

Table 3: ODP compliance table

| Rule    |   | Assessment  |
|---------|---|---|
| Appendi | x A   |   |
| A11     | Parking, loading bays, service lanes, and manoeuvr  | ing areas   |
| A11.1   | Any activity is a permitted activity if:  a) parking and loading bays are provided that complies with Table 1 and Figures 1, 2 and 3, and Appendix B (Engineering Standards), and b) bicycle spaces are provided that comply with Table 2, and c) parking, loading bays and manoeuvring spaces are sealed, drained and permanently marked if 5 or more parking spaces are required, excluding parking spaces required for a dwelling, and d) parking spaces and loading bays are not located on a shared access or living court, and are not obstructed when not in use, and e) parking, loading bays and manoeuvring spaces are located on the same site as the activity for which they are required, and f) in Business Zones a service lane is provided that complies with Table 4 and Appendix B (Engineering Standards), and so that a vehicle is not required to reverse to or from a road, shared access or across a footpath. | a) Non-compliance: 33 car spaces are required and 39 car spaces are provided. Car spaces are 5.0m x 2.4m and to a kerb. However aisle widths are not compliant and only 1 loading zone instead of 3 is provided. b) Complies: 4 bicycle spaces are required and can be provided. c) Complies: The car park will be permanently marked or a drained and sealed surface d) Complies: the loading bay is not located within a shared access or living court e) Complies: all car spaces for the proposed activities are located on the subject site f) N/A: the subject site is not located in the Business Zone |
| A12     | Manoeuvring Space   |   |
| A12.1   | Any activity is a permitted activity if on-site manoeuvring space is provided so that:  a) no vehicle is required to reverse to or from a road, or a shared access, and  b) a 90 percentile car, as defined in Figure 2, can enter and exit all parking spaces without making more than one reverse movement,   | a) Complies: Vehicles will be able to enter and exit the site in a forward's direction in addition to entering and exiting all car parking spaces with one reverse movement   |

|       | excluding spaces required for a dwelling, and c) a 90 percentile car, as defined in Figure 2, can enter and exit one parking space per dwelling, without making more than one reverse movement, and d) a 90 percentile truck, as defined in Figure 3, can enter and exit all loading spaces required under Table 1 without making more than one reverse movement.  Note: (a) does not apply to Local Roads 'A' and 'B' in any of the Living Zones in the Te Kauwhata Structure Plan area, or to residential dwellings in the Rangitahi Living Zone. | b) Complies: a 90 percent vehicle will be able to enter and exit each car space with one reverse movement c) N/A: a dwelling is not proposed. d) Complies: The proposed loading space is accessible by a 90 percentile truck        |
|-------|---|---|
| A13   | Queuing Space   |   |
| A13.1 | Any activity that provides on-site parking spaces, or is serviced by a drive-through facility, is a permitted activity if:  a) on-site queuing space is provided in accordance with Table 3 for vehicles entering or exiting the parking, loading, manoeuvring or service area.   | Complies: There is greater than 10.5m of queuing space for each exit.   |
| A14   | Access and vehicle entrances  |   |
| A14.1 | Any activity is a permitted activity if:  a) the site has vehicle access to a formed road that is maintained by Council, and b) no more than 3 activities share a private access, and c) no access, access leg or right-of-way runs parallel to any road within 30m of the road, except within the Rangitahi Peninsula Structure Plan Area and the primary access route thereto (Opotoru Road) and, d) every access and road entrance is laid out and constructed to comply with the  | a) Complies: the site has access to a formed road maintained by Council     b) Complies: a private accessway is not proposed.  c) Complies: a private accessway is not proposed  d) Does not comply: The proposed entranceways will |
|       | standards in:  i. Tables 4, 5 and 6, and  ii. Figures 4 to 10, and  iii. Appendix B (Engineering Standards),  except that in the Rangitahi Peninsula Structure  Plan Area, and the primary access route thereto  (Opotoru Road), alternative standards may be applied in relation to access gradients and seal  width.  | not comply with sight distance and separation requirements from intersections and other vehicle accesses.   |

|         | e) no new entrance is created from a limited access road, and f) on a site with legal access to 2 roads, the activity only accesses the road with the lower classification in the road hierarchy in Table 8 (where the roads have the same classification, access is only to the road with the lower average daily traffic movements, unless it is considered unsafe), and                | e) Complies with access allotment requirements within the Country Living Zone. Vehicle crossing is reflective of a commercial entrance f) N/A: single road frontage only. |
|---------|---|---|
|         | (fb) no access or entrance within 10 metres of a road has a gradient steeper than 12 degrees.   |   |
|         | OR  |   |
|         | if it is on land accessed solely via the Te Rapa<br>Interchange, adjacent to the Te Rapa Dairy<br>Factory.  |   |
| A14.A   | Road Network – Safety and Functions   |   |
| A14.A.1 | Any activity is a permitted activity if:  |   |
|         | a) no new entrance is created from a State highway; and b) in relation to direct vehicle entrances onto a State highway no increase in Equivalent Car Movements/Day from or to an existing vehicle entrance resulting from any new activity, or expansion of existing activities requiring a resource consent under this  | a) Complies: Horotiu Roac<br>is not a State Highway<br>b) Complies: Horotiu Roac<br>is not a State Highway  |
|         | Plan, is created; and c) in relation to all other roads (except in the Industrial Zone) it is a new activity or expansion of an existing activity which: i. does not generate any additional traffic movements; or ii. does not require a resource consent under this plan (except for a Controlled Activity): or   | c) Does not comply: the proposal will generate additional traffic movements and is therefore not a permitted activity   |
|         | d) it is a new activity or expansion of an existing activity in the Industrial Zone complying with A14.A.1(a) and (b) above, and:  i. it does not involve more than 200 vehicle movements per day; or  ii. it is from the Huntly Power Station site shown as the Heavy Industrial Zone on Planning Map 20.1, and all traffic movements generated from all activities on the site combined | d) N/A. The proposal is no<br>within the Industrial<br>Zone.  |

| A15     | Road Construction and Maintenance  |  |
|---------|--|--|
|         | A14.1 and A14.A.1(d)a.   |  |
| A14.B.1 | Notwithstanding Rule A14.A.1, any activity is a permitted activity if it is from land accessed via the Te Rapa Interchange adjacent to the Te Rapa Dairy Factory and the peak hour traffic flows do not exceed the following limits:  a) AM Peak (7.30 - 9.30am)  i. All Ramps - 300 vehicles per hour (vph) b) PM Peak (4.00 - 6.00pm) i. North Bound On-Ramp - 150 vph ii. All other Ramps - 300 vph  If the site is also accessed via another route, traffic movements via that/those other route(s) shall remain subject to the vehicle movement limits contained in Rules 24.15.1(a) and Appendix A Rule  | N/A: the subject site is not located near the Te Rapa Dairy Factory. |
| A14B    | Road Network – Safety and Functions – Te Rapa Int  | erchange   |
|         | (including those movements which were lawfully established prior to 5 December 2012 do not involve more than 750 vehicle movements per day, and no more than 300 of these vehicle movements are Heavy Vehicle movements; or iii. it is from the Greenhill Huntly Quarry site as identified in Figure 24C(A), and all traffic movements generated from all activities on the site combined (excluding those movements which were lawfully established prior to 5 December 2012 do not involve more than 350 vehicle movements per day, and no more than 150 of these vehicle movements are Heavy Vehicle movements, increasing to 200 once the Huntly Bypass section of the Waikato Expressway is open for public use.  Note: For A14.A.1(c) please refer to Explanation and Reason 29.35A. |  |

- a) complies with Appendix B (Engineering Standards), and
- does not create a new intersection with a limited access road, and
- c) either
  - is undertaken by the council or other public road authority on a road that it owns or controls, or
  - ii. is required or authorised by a resource consent.

## 8.1 Assessment of ODP Non-compliances

#### 8.1.1 Aisle width for car parking spaces.

Rule A11.1(a) of the ODP requires a minimum aisle width of 8.7m for car spaces 2.4m wide. 7.5m. This non-compliance is considered to be assessed as having less than minor effects, as outlined in Section 7.2 of this report.

## 8.1.2 Sight Distance and vehicle access separation distance

Rule A14.1(d) requires compliance with minimum sight and separation distances from other vehicle crossings and intersections. The location of the proposed vehicle entranceways, particularly due to the varying speed environment in proximity to the subject site means there each vehicle access will have a number of non-compliances with this rule. These non-compliances are considered as having less than minor effects, as outlined in Section 7.1 of this report.

### 8.1.3 Loading bays

Rule A11.1(a) requires three loading bays for heavy goods vehicles to be provided, being one for the takeaway store and two for the supermarket. However, only one loading bay is proposed, resulting in a non-compliance of two loading bays. Three loading bays in total for a development of this size is considered superfluous, particularly given the size of the supermarket being around 10-15% of a standard supermarket size. As such, one loading bay is assessed as adequate to service the retail activities, takeaway store and the supermarket and therefore the effects of the non-compliance will be no more than minor.

## 8.1.4 Additional traffic movements

Rule A14.A1(c) the ODP states an activity is not a permitted activity if it generates additional traffic movements. The proposal will generate between 984vpd and 1,388vpd. This non-compliance is pertinent only to the activity status rather than as a performance standard, and the effects of such have been assessed through this ITA.

# 8.2 Assessment against the PDP

8.2.1 The PDP was notified on 18<sup>th</sup> July 2018. As such, relevant objectives and policies are required to be taken into account, and consideration to relevant rules for transportation. The proposal is not considered contrary to the Transportation objectives and policies of the PDP and will allow the road hierarchy, safety and function of the transportation network will not be compromised by the proposed development. The transportation rules within the PDP have also been considered; there are no fundamental changes to the content of the rules and therefore the proposal is not considered contrary to the transportation section of the PDP.

## 9.0 SUMMARY AND CONCLUSIONS

- 9.0.1 This ITA has been prepared to assess the effects of a proposed commercial development located at 561 Horotiu Road. It is anticipated the proposal will include seven retail tenancies, including a pizza shop, hairdressers, and a small supermarket. The proposed development will gain access to the transportation network via a two-way access vehicle entranceway to Horotiu Road. An additional exit-only vehicle entrance way for the exclusive use of service vehicles is also proposed onto Horotiu Road. The following conclusions have been reached:
  - The safety and efficiency of Horotiu Road have been assessed in light of the
    proposal and it is considered the development will have a less than minor
    effect on the wider transportation network. Horotiu Road has sufficient
    capacity to accommodate the additional traffic volumes and there are no
    existing safety issues that will be exacerbated by the proposal;
  - The internal layout of the proposal is considered sufficient to serve the forecasted traffic volumes for the development with adequate on-site

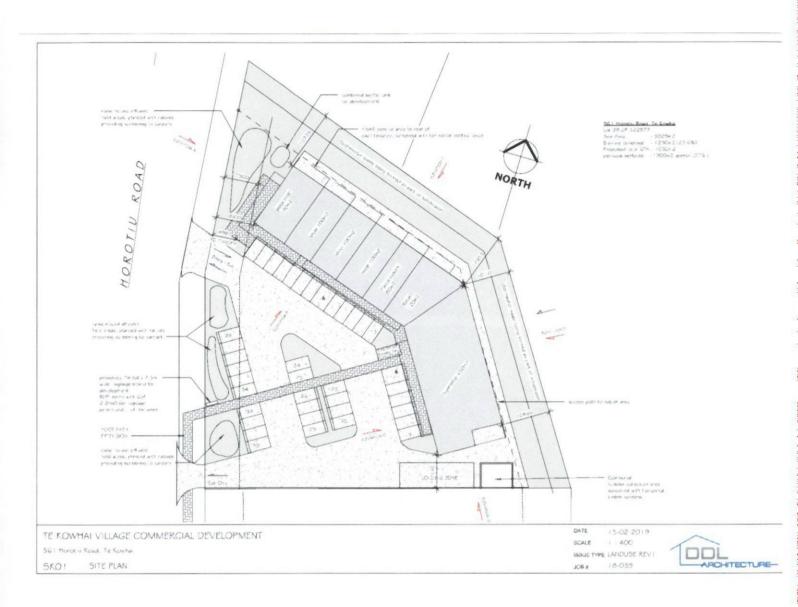
manoeuvring to ensure all vehicles can leave the subject site in a forward direction;

- The location of each access is considered acceptable for a speed environment
  of 50km/h. The northern access is considered acceptable within a 100km/h
  speed environment, although the southern exit-only vehicle access is not
  considered acceptable for a 100km/h speed environment;
- While there are four of non-compliances with the ODP, including aisle width, the number of loading bays, vehicle access sight distances and additional traffic generation, it is considered the design and site layout is acceptable to cater for the proposal.
- 9.0.2 As such, it is concluded there are no traffic or transportation reasons why resource consent cannot be granted.

CKL | Hamilton | B18163

# **APPENDIX 1**

Site Layout



# **APPENDIX 2**

# ODP - Required Parking Spaces and Loading Bays

| Activity                                     | Required Parking Space  | Required Loading<br>Bays   | Number of car spaces required                                      |
|--|---|--|--|
| All activities, accessible parks             | At least one accessible park shall be located on a level surface and close to access to every activity. If more than 50 car parks are required for the activity by this Table, accessible parks shall be included at a ratio of 1 for every 50 car parks required. Accessible car parking spaces to comply with the provisions of the NZ Building Code, Clause D1 Access Routes, reference D1/AS1.10. | Nil  | Two accessible car spaces are proposed.                            |
| Dairies, take<br>away food,<br>bottle stores | 1 car space per 30m <sup>2</sup> GFA, except<br>that in the Rangitahi Living Zone<br>1 car space per 50m <sup>2</sup> GFA is<br>required.   | 1 HGV, except that<br>in the Rangitahi<br>Living Zone 1 HGV<br>per 1000m <sup>2</sup> GFA of<br>Rangitahi<br>commercial activity<br>is required. | 4 car spaces required<br>1 HGV loading space<br>is required.       |
| Retail<br>Activity                           | 1 car space per 45 m <sup>2</sup> GFA including indoor and outdoor retail area  | Nil  | 11 car spaces required   |
| Supermarket<br>Activity                      | 1 car space per 25m² GFA  | 2 HGV  | 18 car spaces<br>required<br>2 HGV loading spaces<br>are required. |



| Label | Address             |  |
|-------|---------------------|--|
| 1     | 714 Te Kowhai Road* |  |
| 2     | 571 Horotiu Road*   |  |
| 3     | 8 Westvale Lane     |  |
| 4     | 564A Horotiu Road   |  |
| 5     | 560A Horotiu Road   |  |
| 6     | 560B Horotiu Road   |  |
| 7     | 560C Horotiu Road   |  |
| 8     | 557 Horotiu Road    |  |

 $<sup>{}^{*}\</sup>mathsf{The}$  owner of these properties has provided their written approval.