TR – Transport

An efficient and effective transport network is critical to the functioning and economic support of the Wairarapa, to convey people, goods, and services in a safe and effective manner by any mode of transport. The Wairarapa's land transport network comprises state highways, roads, pedestrian and cycle networks, public transport facilities, and the rail network.

The District Plan seeks to ensure that activities generate a type or level of traffic that is compatible with the roads they are located on. It also seeks to ensure that on-site transport facilities such as vehicle crossings, parking, manoeuvring, loading, and cycle facilities are appropriately located, designed, and linked to the transport network to ensure the safety and efficiency of the transport network and people's health and wellbeing.

Activities that generate high volumes of traffic may have significant adverse effects on the transport network and adversely affect the amenity of adjacent land use activities. As such, high traffic generating activities warrant case-by-case management and assessment. The cumulative effects of less intensive activities also need to be carefully managed.

The rail corridor is also a key part of the Wairarapa's transport network and is anticipated to increase in importance over the life of the plan, and therefore its efficient, effective, and safe operation must be protected from potential adverse effects of activities, such as road crossings.

Hood Aerodrome is a strategic component of the Wairarapa aviation industry, and the Transport chapter includes controls to manage the height of structures and trees within the *Obstacle Limitation Surface* for safety within flight paths.

The Transport Chapter contains provisions that deal with on-site transport facilities and access, the operation, maintenance and repair of the transport network, and the effects of high traffic generating activities. Provisions addressing noise related reverse sensitivity effects on the State Highway and Hood Aerodrome are in the Noise Chapter.

The zoning applying to roads and railway corridor is the same zone as the land nearest to each point in the road and railway corridor. Where the zone is different either side of the road or railway corridor, then the boundary between the zones is the centreline of the road or railway corridor.

Unless otherwise specified in the District Plan, the Transport rules apply to all activities. Activities are subject to compliance with all relevant Transport rules. Where activities meet the specific standards and thresholds set out in this chapter, the transportation component of the activity will be permitted. Activities that do not meet the standards or which generate higher amounts of traffic than permitted by the provisions in this chapter will require resource consent.

There may be a number of objectives, policies and rules that apply to an activity, building, structure, or site. Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach section in the How the Plan Works chapter.

Objectives

TR-O1	Well-connected, integrated, safe, and accessible transport network
The transport network is a well-connected, integrated, safe, and accessible system that: a. meets and is responsive to current and future needs; b. is efficient and effective in transporting people, goods, and services by all transport modes; c. supports healthy and liveable communities with a variety of transport options that are accessible; d. integrates with subdivision, land use, and development; e. supports transport mode options to increase the use and accessibility of public transport, walking, and cycling and reduces dependency on private motor vehicles where that is, or can be made, practicable and safe; and f. enables emergency service vehicles to respond to emergency call outs effectively and efficiently.	
TR-O2	**Adverse effects of the transport network**
Adverse effects on the environment from the construction, operation, maintenance, and development of the transport network are avoided, remedied, or mitigated.	
TR-O3	**Effects of activities on the transport network**
The safe, effective, and efficient operation of the transport network is not compromised or constrained by incompatible land use, subdivision, and development, including High Traffic Generating Activities.	

Policies

General	
TR-P1	**Multi-modal transport system**
Support a multi-modal transport system that promotes alternative means of safe, efficient and effective transport, including cycling and walking and public transport facilities to enable people of all ages to move within the district and reduce the effects of vehicle-based transport systems and greenhouse gas emissions by:	

a. maximising safe and accessible opportunities for walking, cycling, and public transport use;

b. Promoting multi-modal options to meet with any best practice guidance current at the time of consenting; and

requiring cycle parking as appropriate for the proposed use and end of trip cycle facilities where cycle parking is required to be provided.

TR-P2	Good design outcomes

The transport network is maintained or improved in a way that:

a. promotes integrated planning and supports strategic directions;

b. roads and vehicle crossings meet minimum design standards to allow for safe, effective, and efficient traffic movement and can safely accommodate the intended number of users and the intended functioning of the road or crossing;

c. is consistent with the relevant Design Guide in Appendices APP3, APP4, or APP5 and Council's Engineering Development Standard 2023 and promotes good urban design, including connectivity, decreasing travel distances, and linking to existing transport networks;

d. considers and responds to safety and accessibility, including Crime Prevention Through Environmental Design (CPTED) principles.

e. Promotes the use of public transport, walking and cycling through the provision of a safe, accessible and connected multimodal network.

TR-P3	Role of transport corridors

Identify and manage a classification of roads and other transport corridors within the Wairarapa based on the One Network Framework to ensure that the function of each corridor is recognised and protected when managing subdivision and land use.

TR-P4	On-site facilities

Require on-site facilities including loading, parking, manoeuvring and vehicle, pedestrian, and cycle access to meet minimum standards and facilitate multi-modal transport use, or where these are not met, ensure they are appropriate for the demands of the activities and development carried out on the site and avoids, remedies, or mitigates any adverse effects on the safe, effective, and efficient functioning of the transport network.

TR-P5	Transport network connections

Require development (new or changes to existing lawfully established activities) to meet minimum standards when connecting to road, cycling, pedestrian, and public transport corridors, or where these are not met, ensure development avoids, remedies, or mitigates

any adverse effects on the safe, effective, and efficient functioning of the transport network and provides a safe, suitable, legal, and practicable access to and from a transport corridor.	
TR-P6	**Managing effects of the transport network**
Provide for the development and safe operation of the transport network, including the state highway network and rail network, while avoiding, remedying, or mitigating the adverse effects of the development and use of roads, including state highways, on adjacent activities.	
TR-P7	**High Traffic Generating Activities**
Require new, and changes to existing high traffic generating activities which propose to access and utilise the districts' roads to be assessed in an Integrated Transport Assessment prepared by a suitably qualified traffic specialist that demonstrates how any adverse effects on the road transport network will be avoided, remedied or mitigated, and assesses: a. the road's capacity and the likely effect of the proposed use on the road and its users; b. the effect on ongoing maintenance of the road and the need for road maintenance agreements; c. whether opportunities for alternative access and/or routes exist; d. appropriate traffic management and travel demand management mechanisms; e. whether it is appropriate to stage the activity and/or undertake improvements to the transport network; and cumulative effects.	
Rail	
TR-P8	**Rail corridor safety**
Ensure the safe and efficient operation of the rail network by providing for safe visibility and appropriate infrastructure at road/rail level crossings. This includes protecting sight lines and managing vehicle access adjacent to level crossings.	
Hood Aerodrome	
TR-P9	**Protection of Hood Aerodrome**
Protect the operation of Hood Aerodrome and other key air transport facilities from the potential adverse effects created by the proximity of nearby sensitive land use activities.	
TR-P10	**Effects of Hood Aerodrome**
Provide for the continued functioning and future development of Hood Aerodrome and other key air transport facilities while managing the adverse effects caused by the operation of Hood Aerodrome and other key air transport facilities on adjacent activities.	

Wairarapa Five Towns Trail Network	
TR-P11	**Wairarapa Five Towns Trail Network**
Enable and encourage the establishment and operation of the Wairarapa Five Towns Trail Network.	

Rules

TR-R1		**All land use activities**
	All zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with TR-S1 - TR-S28;
	All zones	2. Activity status: **Restricted discretionary** Where: a. Compliance is not achieved with TR-S1 - TR-S28; Matters of discretion: 1. The effect of non-compliance with the relevant standard and the matters of discretion of any standard that is not met. 2. The construction, use, location, design, and number of vehicle crossings or intersections. 3. Sightlines. 4. The safety and suitability of the access for the activity. 5. The ability to obtain alternative access. 6. The safe, efficient, and effective operation of the transport network, including State Highways.

TR-R2		**Construction, alteration, maintenance, and repair of *accessways*, *vehicle crossings*, parking, and loading areas**
	All zones	1. Activity status: **Permitted** Where: b. Compliance is achieved with TR-S1 - TR-S28; i. There is no new *vehicle crossing* onto a State Highway; and ii. All *sites* and activities have legal and physical access to and from a *road*.
	All zones	2. Activity status: **Restricted discretionary**

		Where: c. Compliance is not achieved with TR-R2(1). Matters of discretion: 1. The effect of non-compliance with the relevant standard and the matters of discretion of any standard that is not met. 2. The construction, use, location, design, and number of vehicle crossings or intersections. 3. Sightlines. 4. The safety and suitability of the access for the activity. 5. The ability to obtain alternative access. 6. The safe, efficient, and effective operation of the transport network, including State Highways. Note 1: Any access proposed onto a section of a State Highway which has been declared a Limited Access Road will also require a Licenced Crossing Place approval from Waka Kotahi NZ Transport Agency under the Government Roading Powers Act 1989. Note 2: If a resource consent application is made under this rule for a new vehicle crossing onto a State Highway, Waka Kotahi NZ Transport Agency will be considered an affected person in accordance with Section 95E of the RMA and notified of the application, where written approval is not provided.

TR-R3		**Construction, alteration, maintenance, and repair of the transport network**
	All zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with TR-S1 - TR-S28; and b. There is no new *road* intersection with a State Highway.
	All zones	2. Activity status: **Restricted discretionary** Where: a. Compliance is not achieved with TR-R3(1). Matters of discretion: 1. The effect of non-compliance with the relevant standard and the matters of discretion of any standard that is not met. 2. The construction, use, location, design, and number of intersections. 3. Sightlines.

		4. The safe, efficient, and effective operation of the transport network, including State Highways. Note: If a resource consent application is made under this rule for a new intersection onto a State Highway, Waka Kotahi NZ Transport Agency will be considered an affected person in accordance with Section 95E of the RMA and notified of the application, where written approval is not provided.

TR-R4	**Construction of roads, vehicle crossings, and accessways in close proximity to a railway**
All zones	1. Activity status: **Restricted discretionary** Where: a. It is proposed to create a *road*, *vehicle crossing*, or an accessway over or under the railway; or b. It is proposed to create a vehicle crossing or an accessway or intersection within 30m of a road/rail level crossing. Matters of discretion: 1. The use, location, design, and number of *vehicle crossings* or *accessways*. 2. The ability to obtain alternative access. 3. The safe, efficient, and effective operation of the *road* and railway. Note: If a resource consent application is made under this rule, KiwiRail will be considered an affected person in accordance with Section 95E of the RMA and notified of the application, where written approval is not provided.

TR-R5	**Sight lines at railway level crossings**
All zones	1. Activity status: **Permitted** Where: Compliance is achieved with TR-S30
All zones	1. Activity status: Restricted discretionary Where: a. Compliance is not achieved with TR-R5(1). Matters of discretion:

		1. the potential for adverse effects on the safely and efficiency of the rail network. 2. applications under this rule must provide, in addition to the standard information requirements, evidence of engagement with KiwiRail.

TR-R6		**High Traffic Generating Activities**
	All zones	1. Activity status: **Restricted discretionary** Where: a. Any new activity, or change to an existing activity (excluding existing service stations), that generates an average daily traffic volume or peak hour traffic volume that exceeds the thresholds in Standard TR-S29 Table TR-16. b. Any change to an existing service station involves one or more additional refuelling spaces. For all activities where TR-R5(1)(a) apply: a. An Integrated Transport Assessment shall be prepared by an independent, suitably qualified, and experienced transport engineer; and b. The type of Integrated Transport Assessment (either Full or Basic) shall be as determined by the status of the application under all other applicable rules as per Standard TR-S29 Table TR-18. Matters of discretion: 1. The safe, efficient, and effective operation of the transport network. 2. Site access. 3. Accessibility for pedestrians, cycle facilities, and public transport. 4. Strategic frameworks. 5. Mitigation of effects through Travel Demand Management. Note: 2. Guidance for the content of a Full or Basic Integrated Transport Assessment is provided in Appendix TR-1. Consultation with Council is recommended to confirm the scope of the Integrated Transport Assessment. Activities that do not exceed the thresholds in Standard TR-S29 Table TR-16 to be classed as a High Traffic Generating Activity require an

		assessment of traffic effects if they require resource consents under other rules in the District Plan.

TR-R7		***Buildings, structures*, masts, or trees in *Aerodrome Obstacle Limitation Surface***
	All zones	1. Activity status: **Permitted** Where: a. Any *building*, *structure*, mast, or tree does not penetrate the Aerodrome Obstacle Limitation Surfaces 1:50 approach slopes, the transitional slopes, or the horizontal surface.
	All zones	2. Activity status: **Discretionary** Where: a. Compliance is not achieved with TR-R7(1).

TR-R8		**Any activity not otherwise listed in this chapter**
	All zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with TR-S1 - TR-S28.
	All Zones	2. Activity status: **Restricted discretionary** Where: a. Compliance is not achieved with TR-R8(1). Matters of discretion: 1. The effect of non-compliance with the relevant standard and the matters of discretion of any standard that is not met.

Standards

<table>
<tr><td colspan="4">Road design</td></tr>
<tr><td>TR-S1</td><td colspan="3">Road design</td></tr>
<tr><td>All zones</td><td colspan="2">1. Any accessway to a site or sites with potential to accommodate more than 15 residential units shall be formed as a road in accordance with the Council’s Engineering Development Standard 2023 and vested with Council.
2. Any shared accessway shall have legally enforceable arrangements for maintenance of the access at the time it is created.
3. All roads shall be formed in accordance with the Council’s Engineering Development Standard 2023.</td><td>Matters of discretion:
1. Effects on the safe, efficient, and effective operation of the transport network.
2. Design of the access or road.
3. On-going maintenance of the access.
4. Council’s Engineering Development Standard 2023.
5. Firefighting access.</td></tr>
<tr><td>TR-S2</td><td colspan="3">Minimum road intersection separation distances</td></tr>
<tr><td>All Zones</td><td colspan="2">1. The minimum separation between road intersections shall comply with Table TR-2.</td><td>Matters of discretion:
1. Effects on the safe, efficient, and effective operation of the transport network.</td></tr>
<tr><td></td><td colspan="3">Table TR-2 Minimum intersection separation distances
<table><tr><th>Posted Speed Limit (km/h)</th><th>Minimum intersection separation (m)</th></tr><tr><td>100</td><td>450</td></tr><tr><td>80</td><td>320</td></tr><tr><td>60</td><td>220</td></tr><tr><td>50</td><td>100</td></tr><tr><td>40</td><td>75</td></tr><tr><td>30 or less</td><td>60</td></tr></table></td></tr>
</table>

Lighting		
TR-S3	**Lighting for parking and loading areas**	
All zones	1. Lighting shall be provided during the hours of darkness for all: a. non-residential *parking areas* used in the hours of darkness; b. residential *parking areas* with more than 6 spaces; and c. *loading areas* used in the hours of darkness. Note. Refer to Light Chapter for standards relating to lighting.	Matters of discretion: 1. Effects on the safe operation of the transport network. 2. Lighting level. 3. Uniformity of lighting. 4. Light spill. 5. Hours of operation.
TR-S4	**Street lighting provision**	
All Zones except Rural Zones, Māori Purpose Zone, and Future Urban Zone	1. All public *roads* serving 3 or more residential *allotments* shall be provided with night lighting. Note. Refer to Light Chapter for standards relating to lighting.	Matters of discretion: 1. Effects on the safe operation of the transport network. 2. Uniformity of lighting.
Access		
TR-S5	**Site access**	
All zones	1. Accessways shall be formed in accordance with the *Council's Engineering Development Standard* 2023.	Matters of discretion: 1. Effects, including cumulative effects, on the safety, efficiency, and effectiveness of the transport network resulting from the nature, use, location, design, and

<table>
<tr><td></td><td></td><td>construction of the accessway.
2. Council's Engineering Development Standard 2023.</td></tr>
<tr><td>All zones</td><td>2. Accessways shall comply with Table TR-3: Minimum and maximum widths of accessways</td><td>Matters of discretion:
1. Effects, including cumulative effects, on the safety, efficiency, and effectiveness of the transport network resulting from the nature, use, location, design, and construction of the accessway.</td></tr>
<tr><td></td><td colspan="2">Table TR-3 Minimum and maximum widths of accessways
<table>
<tr><th>Activity</th><th>Number of residential units</th><th>Number of parking spaces provided</th><th>Minimum legal width (m)</th><th>Minimum formed width (m)</th><th>Maximum formed width (m)</th></tr>
<tr><td rowspan="3">Residential</td><td>1-3</td><td></td><td>4.6</td><td>3.5</td><td>6.0</td></tr>
<tr><td>4-8</td><td></td><td>5.0</td><td>3.5*</td><td>6.0</td></tr>
<tr><td>9-15</td><td></td><td>6.5</td><td>5.5</td><td>6.0</td></tr>
<tr><td rowspan="2">Commercial and Industrial</td><td></td><td>1-15</td><td>8.0</td><td>5.5</td><td>9.0</td></tr>
<tr><td></td><td>> 15</td><td>8.0</td><td>6.0</td><td>10.0</td></tr>
<tr><td>Rural</td><td>1-15</td><td></td><td>10.0</td><td>4.0</td><td>8.0</td></tr>
</table>
Notes:
* Passing bays are required when the length of the accessway exceeds 25m.</td></tr>
<tr><td>TR-S6</td><td colspan="2">Vehicle crossing design</td></tr>
<tr><td>All Zones</td><td>Vehicle crossings shall comply with the following:</td><td>Matters of discretion:
1. Effects, including cumulative effects, on the</td></tr>
</table>

	1. Table TR-4: Maximum number of vehicle crossings per site road frontage; 2. Table TR-5: Minimum sight distance requirements; 3. Table TR-6: Minimum separation between vehicle crossings and from intersections; and 4. Figure TR-5: Minimum separation distance for a new vehicle crossing from a pedestrian or cycle crossing facility.	safety, efficiency, and effectiveness of the transport network resulting from the nature, use, location, design, and construction of the vehicle crossing.

Table TR-4 Maximum number of vehicle crossings per site road frontage

Frontage length (m)	Road frontage type	
	State Highway, Transit Corridor	All other roads
0 - 16	1	1
> 16 - 60	1	2
> 60 - 200	1	2
> 200	2	3

Table TR-5 Minimum sight distance requirements

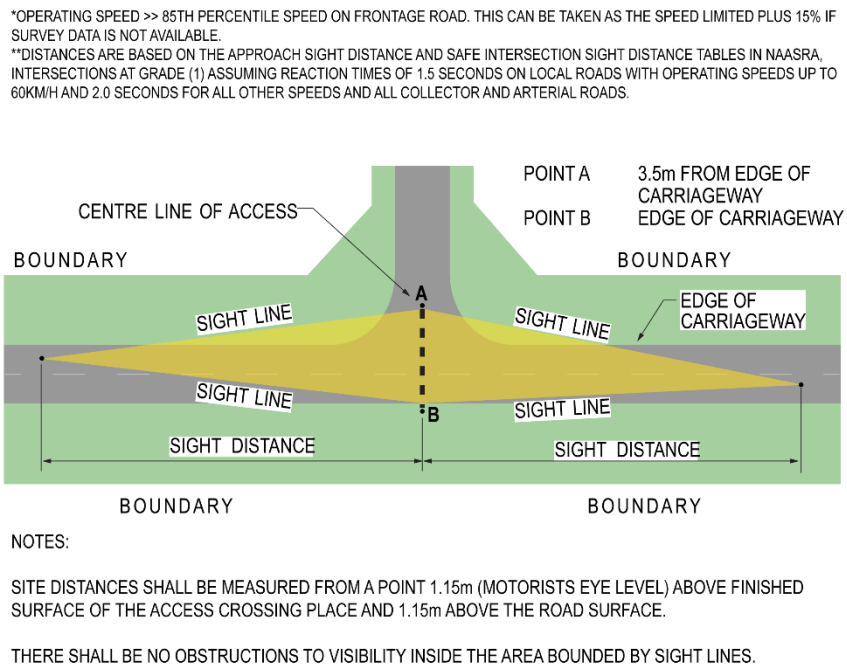
Posted speed limit (km/h)	Urban roads	Rural roads
30 or less	50m	
40	70m	
50	100m	
60	125m	
60		160m
70		190m
80		225m

	100		300m

Notes:

Sight distance measured in accordance with Figure TR-3.

Figure TR-3 Sight distance measurement



Notes:

1. Sight lines shall be from driver's eye height to driver's eye height (1.15m) above ground level within the sight triangle.
2. Sight distances AC and AD shall be measured along the centre line of the carriageway.
3. Point A: Intersection of lane centreline and driveway centreline.
4. Point B: Position of centreline of driveway where sight distance is measured (note - this is measured from the edge lane line and where there is no edge lane line, from the edge of seal) and is 3.5m for residential houses and 5m for all other activities.
5. Point C and D: Position on centreline of lane where sight distance is measured.

Table TR-6 Minimum separation between vehicle crossings and from intersections

Posted speed limit (km/h)	Minimum separation from intersection	Minimum separation from vehicle crossing on the same or opposite side of the road
50 or less	20m	9m
60	30m	20m
70	60m	40m
80	90m	100m
100	200m	200m

Notes:

Minimum separation distance shall be measured in accordance with Figure TR-4.

Figure TR-4 Minimum separation of vehicle crossing from intersection

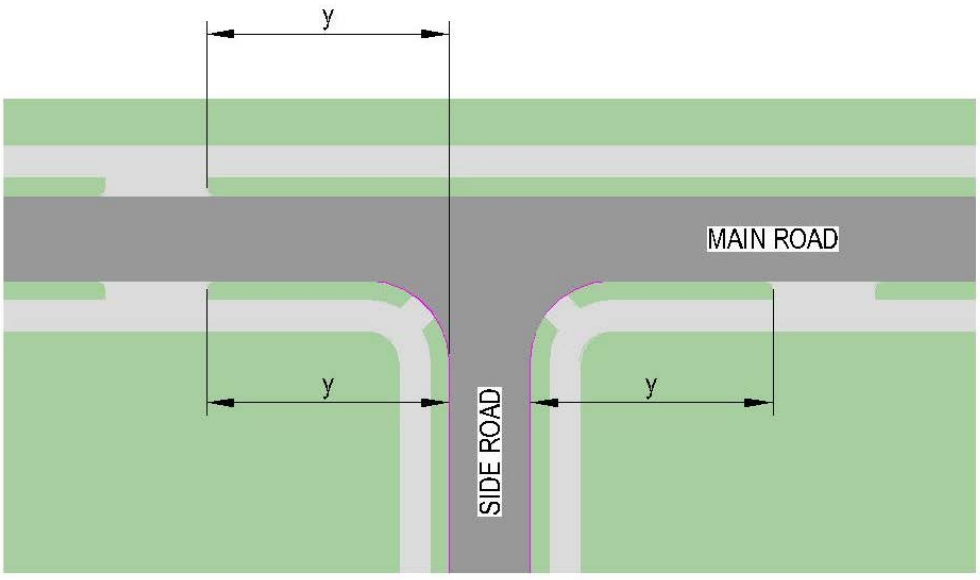
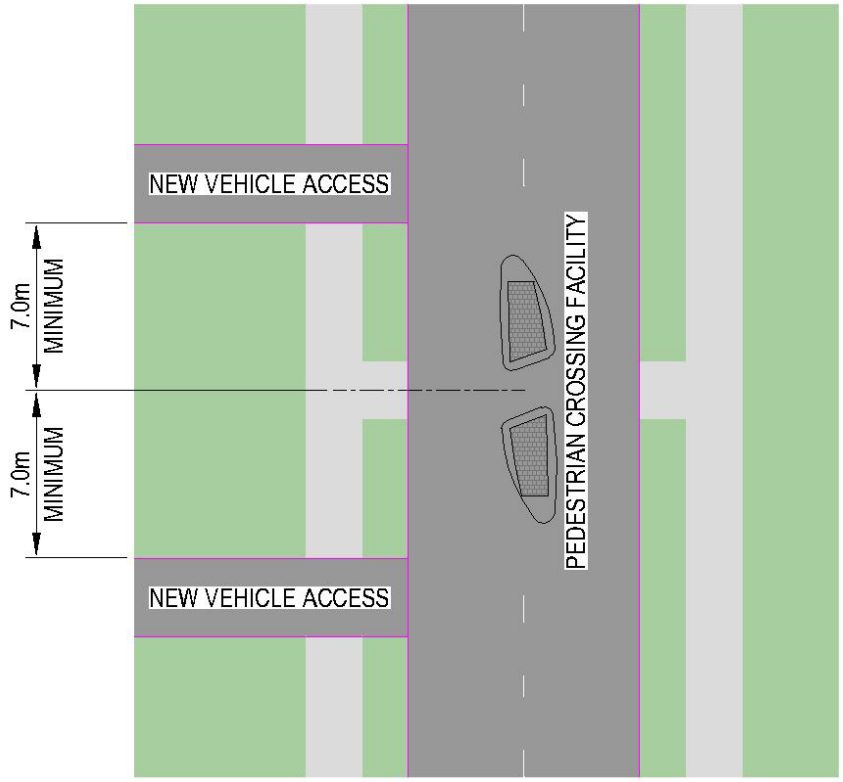


Figure TR-5 Minimum separation distance for a new vehicle crossing from a pedestrian or cycle crossing facility



TR-S7 | **Visibility splays**

All Zones

1. *Vehicle accessways* shall provide a visibility splay that complies with Table TR-7.

Matters of discretion:

1. Effects on the safe operation of the transport network, including pedestrians and cyclists.
2. Compatibility with existing patterns within Historic Heritage Precincts.

Table TR-7 Visibility splay design parameters

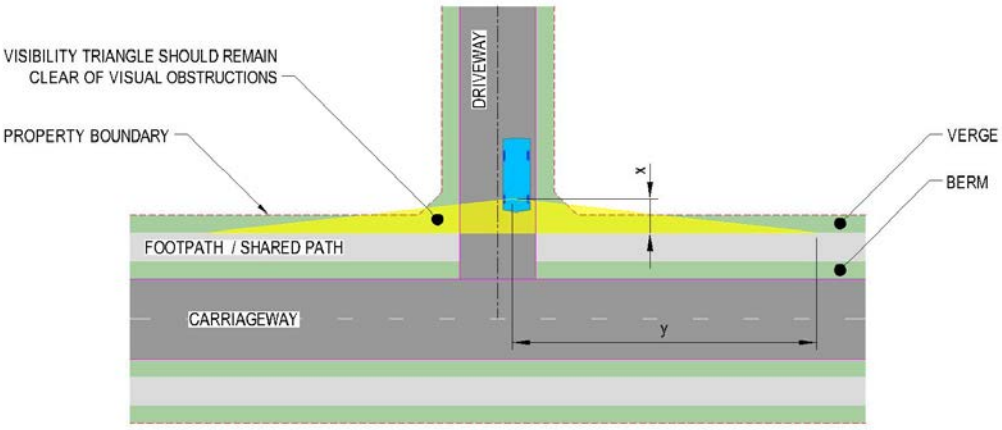
Path Type	Path User Speed (km/h)	X (m)	Y (m)
Footpaths	5	5*	3
	10	5*	7
Shared Paths	15	5	12

	20	5	18
Cycle Path	25	5	26

Notes:

*This value can be reduced to 2.5m at domestic driveways.

Figure TR-6 Visibility splays



Notes

X = safe stopping distance for a vehicle prior to encroaching the path (measured from the path user location towards the property;

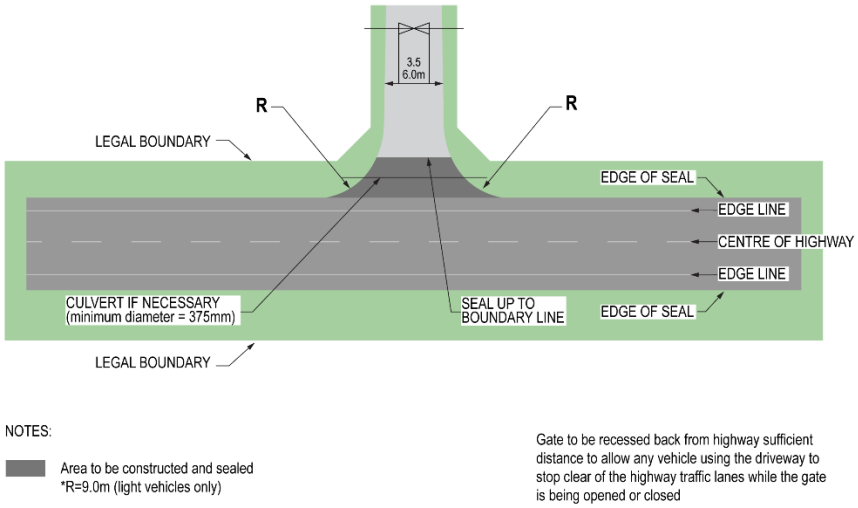
allows drivers to see path users in time to stop before reaching the path.

Y= safe stopping distance for path users travelling at a comfortable speed to stop in time to avoid collision (if a driver does not give way to them.

TR-S8	***Vehicle crossing* formation**	
All zones except Rural Zones, Māori Purpose Zone, and Future Urban Zone	1. All *vehicle crossing* points shall be formed, sealed, and drained in accordance with the requirements for vehicle crossings and surfacing in Council's Engineering Development Standard 2023.	Matters of discretion: 1. Effects on the safe, efficient, and effective operation of the transport network. 2. Access design, including width of access formation. 3. Drainage design and effects on drainage. 4. Council's Engineering Development Standard 2023. 5. Compatibility with heritage character in Historic Heritage Precincts.
Rural Zones, Māori Purpose Zone, and Future Urban Zone	2. Any *vehicle crossing* to a sealed *road* shall be formed, surfaced with concrete, chip seal or asphaltic concrete, and drained: a. for a minimum distance of 30m from the edge of the *road* carriageway for shared accessways. b. from the edge of the road carriageway to the property boundary for a single accessway.	
All zones	3. All *vehicle crossings* shall be designed and constructed so that roading drainage is continuous across the length of the crossing in accordance with the requirements for vehicle crossings in Council's Engineering Development Standard 2023.	
All zones	4. All crossings to a state highway shall be sealed from the edge of the carriageway for a minimum distance of 30m.	
TR-S9	**Vehicle crossing alignment**	
All zones	1. All *vehicle crossing* points shall be designed so that: a. The crossing centreline intersects with the property boundary at an angle of between 45º and 90º; and	Matters of discretion: 1. Effects of access alignment on road safety or sight distances.

<table>
<tr><td></td><td>The crossing centreline intersects with the carriageway at an angle of 90º plus or minus 15º.</td><td></td></tr>
<tr><td>TR-S10</td><td colspan="2">Rural accessway design</td></tr>
<tr><td>Rural Zones, Māori Purpose Zone, and Future Urban Zone</td><td>1. Any vehicle crossing with an average daily volume of vehicle movements of less than 100 shall be formed in accordance with the requirements of Table TR-8.
2. Any vehicle crossing with an average daily volume of vehicle movements of 100 or more shall be formed as a road intersection.</td><td>Matters of discretion:
1. Effects on the safety of the vehicle crossing and the adjacent transport network.
2. Ability to accommodate the largest size of vehicle anticipated to use the access.
3. Effects on the ability to provide adequate emergency vehicle access to the property/properties.</td></tr>
<tr><td></td><td colspan="2">Table TR-8 Rural vehicle crossing design
<table>
<tr><th>Average volume of vehicle movements using access per day</th><th>One Network Framework (ONF) Classification or Average Volume of traffic using the adjoining road (vpd)</th><th>Access design standard</th></tr>
<tr><td rowspan="2"><= 30</td><td>Rural road (low volume) or < 2000</td><td>Diagram C (Figure TR-7)</td></tr>
<tr><td>Rural Connector >= 2000</td><td>Diagram D (Figure TR-8)</td></tr>
<tr><td rowspan="2">31 – 100</td><td>Rural road (low volume) < 2000</td><td>Diagram D (Figure TR-8)</td></tr>
<tr><td>Rural Connector or >= 2000</td><td>Diagram E (Figure TR-9)</td></tr>
<tr><td>> 100 or serves more than 10 properties</td><td>>= 2000</td><td>Design as intersection</td></tr>
</table></td></tr>
</table>

Figure TR-7 Diagram C



NOTES:

Area to be constructed and sealed
*R=9.0m (light vehicles only)

Gate to be recessed back from highway sufficient distance to allow any vehicle using the driveway to stop clear of the highway traffic lanes while the gate is being opened or closed

Figure TR-8 Diagram D

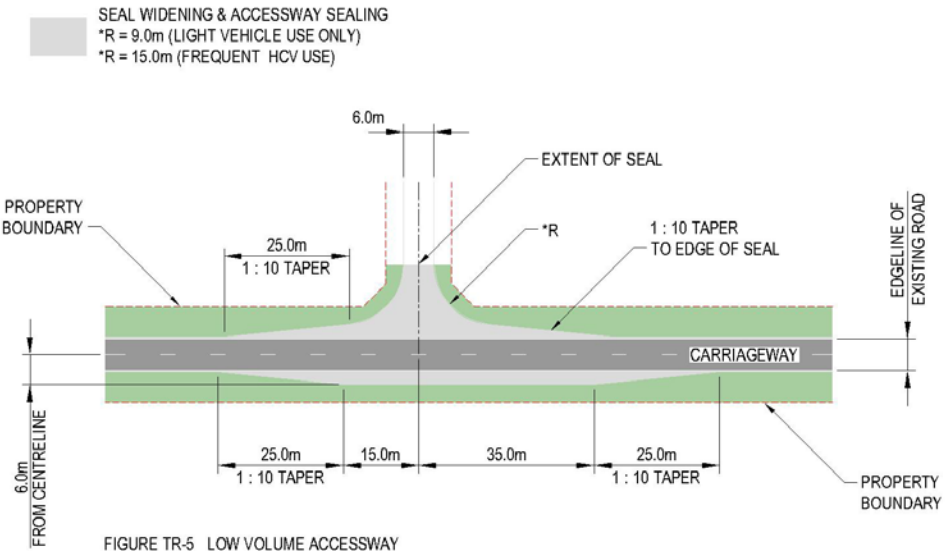
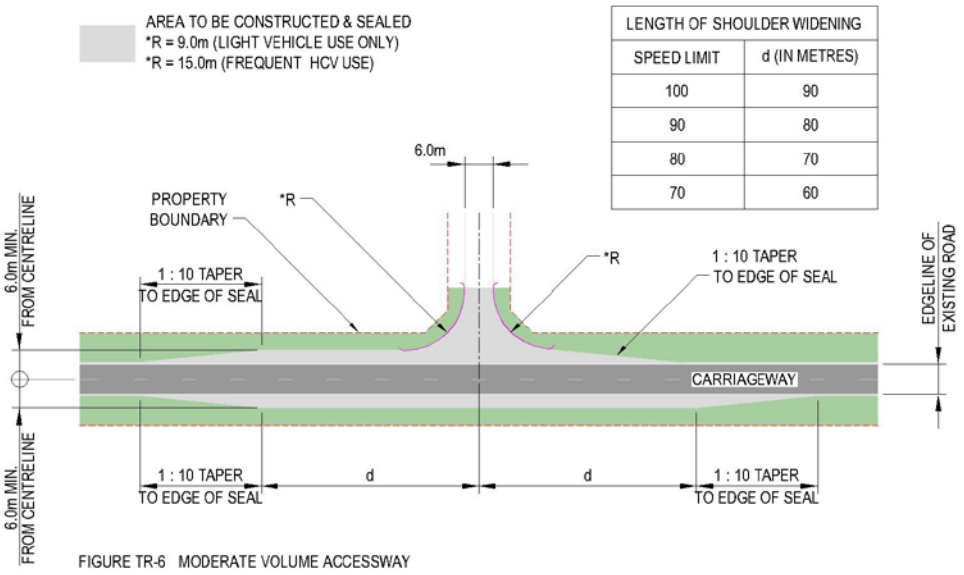


FIGURE TR-5 LOW VOLUME ACCESSWAY

Figure TR-9 Diagram E



TR-S11	**Accessway gradient**	
All Zones	1. The maximum gradient for any *accessway* used for vehicle access shall be 1 in 6. 2. In residential zones where an *accessway* serves no more than 2 residential units, the maximum gradient may be increased to 1 in 5 provided: a. the average gradient over the full length of the *accessway* does not exceed 1 in 6; b. the maximum gradient is no more than 1 in 6 within 6m of the *road* boundary; and c. the *accessway* is sealed with a non-slip surfacing. For the purpose of this rule gradient (maximum and average) shall be measured on the centreline of the *accessway*.	Matters of discretion: 1. Effects on the efficiency of land-use, safety, and maintenance of the accessway and of the adjacent transport network. 2. Effects on congestion resulting from any inability of cars or certain types of cars to readily use the accessway. 3. Effects on the ability to provide adequate emergency vehicle access to the property/properties.

TR-S12	**Turning and passing**	
All Zones	1. A turning area shall include a turning head as per Clause 3.C.14.3 of the Council Development Engineering Standard 2023 and shall be provided on any *accessway* that: a. provides access to 3 or more lots; or b. is longer than 50m. 2. Passing opportunities or bays with a minimum width of 5.5m and length of 15m shall be provided at intervals of not more than 50m in urban areas and 100m in rural areas where visibility is available from bay to bay.	Matters of discretion: 1. Effects on the safety of the *accessway* and adjacent road network associated with reversing vehicles. 2. Effects on congestion resulting from any inability of cars or certain types of cars to readily use the *accessway*. 3. Effects on the ability to provide adequate emergency vehicle access to the property/properties. 4. Distances between passing opportunities. 5. Location of passing opportunities.
TR-S13	**Stormwater management**	
All Zones except Rural Zones, Māori Purpose Zone, and Future Urban Zone	1. *Accessways* shall include stormwater control in accordance with Council's Engineering Development Standard 2023.	Matters of discretion: 1. Effects on stormwater flows and management. 2. Council's Engineering Development Standard 2023.

Rural Zones, Māori Purpose Zone, and Future Urban Zone	2. Where an *accessway* is less than or equal to 40m from a residential unit, it shall be formed and sealed with stormwater control. 3. Where an *accessway* is greater than 40m from a residential unit it shall be: a. formed to an all weather standard with stormwater control when the gradient is less than 1:10; or b. formed and sealed with stormwater control where the gradient is greater than 1:10.	

TR-S14	**Firefighting access**	
All Zones	1. Any *accessway* to a site located in an area where no fully reticulated water supply system is available, or having a length greater than 50m when connected to a road that has a fully reticulated water supply system including hydrants, shall: a. be designed to achieve the vehicle crossing design and formation standards in TR-S6 and the access design in TR-S5; b. have a minimum formed width of 4m; c. have a minimum height clearance of 4m; d. have a turning area suitable for a fire truck; and e. be designed to be free of obstacles that could hinder access for emergency service vehicles.	Matters of discretion: 1. The safe, effective, and efficient functioning of the vehicle access for firefighting access. 2. Need for onsite access for appliances. 3. Design of turning areas. 4. Site and topographical constraints.

Accessibility		
TR-S15	**Accessible routes**	
All Zones	1. For all non-residential activities providing parking an accessible route shall be provided between the main building entrance and any allocated parking for people with disabilities. 2. Accessible parking bays shall be located as close as practical to the accessible entrance or to an accessible lift to the building or activity.	Matters of discretion: 1. The ability for people with disabilities to safely and effectively park and enter and exit a vehicle and gain access to the building. 2. Proximity to the accessible entrance. 3. Any building or site constraints. 4. Access gradients. 5. Access widths. 6. Access surfacing. NOTE: Desirable minimum design standards are set out in NZS4121:2001 Design for Access and Mobility.

Car parking		
TR-S16	**Minimum number of parking bays**	
All Zones in Masterton District	1. No minimum requirement.	
All zones in Carterton and South Wairarapa Districts	2. Every activity shall provide sufficient off-street parking for vehicles associated with the activity and vehicles expected to visit or be stored on the site in connection with the activity, in accordance with Table TR-9 below.	Matters of discretion: 1. The safe, resilient, efficient, and effective functioning of the transport network. 2. The parking needs of the activity. 3. The safety and movement of pedestrians, cyclists, public transport, and general traffic.

<table>
<tr>
<td></td>
<td>3. Where any activity is changed or any building erected or altered, sufficient vehicle parking shall be provided to meet the demands generated by the altered activity or building, in accordance with Table TR-9 below.

4. Vehicle parking bays shall be provided for activities in accordance with Table TR-9. If an activity is not listed, then the standard for the activity listed that is closest in nature to that proposed activity shall be applied. Parking requirements do not apply to temporary activities.

5. On sites where there are multiple activities, and each activity requires vehicle parking in terms of this Plan, the total parking required shall be the combined total requirement for all activities.

Notes:

6. Where the calculation of required vehicle parking bays results in a fraction of a whole space, any fraction less than or equal to one half shall be disregarded, and any fraction over one half shall count as one space.

7. The area of required spaces, access drives, or aisles provided within a building shall be excluded from the gross floor area (GFA) of the building.</td>
<td>4. Accessibility of the site by active transport and public transport.
5. Public health and safety.
6. The safety and usability of the parking bays.
7. Site limitations, configuration of buildings, and activities.
8. The complementary nature of parking demands on sites serving multiple activities.</td>
</tr>
<tr>
<td></td>
<td colspan="2">Table TR-9 Minimum number of parking bays
<table>
<tr><th>Activity</th><th>Parking bays required</th></tr>
<tr><td>Visitor accommodation (excluding residential visitor accommodation)</td><td>1 per accommodation unit, room or campsite, plus 1 per 2 employees</td></tr>
<tr><td>Childcare centre</td><td>1 per employee, plus 1 per 10 persons to be accommodated in the centre</td></tr>
</table></td>
</tr>
</table>

	Commercial activities (including, but not limited to retail, supermarkets, and business services)	1 per 45m^2 GFA, plus 1 per 100m^2 outdoor display area
	Educational facilities (primary and secondary)	1 per employee
	Educational facilities (tertiary)	1 per employee plus 1 per 10 students
	Emergency service facilities	1 per 100m^2 GFA, plus 1 per on duty staff member (excluding volunteers)
	Entertainment facility	1 per 3 persons the facility is designed to accommodate
	Healthcare activities	4 per practitioner
	Hospital	1 per bed the facility is designed to accommodate, plus 1 per 2 staff members on site
	Industrial activities	1 per 50m^2 GFA
	Place of assembly	1 per 4 persons the place is designed to accommodate
	Residential activities	1 per residential unit
	F*ood and beverage activities* (excluding bars and taverns)	1 per 4 persons the facility is designed to accommodate
	Bars and taverns	1 per 10m^2 GFA
	Supported residential care facilities	1 per 4 beds the facility is designed to accommodate, plus 1 per employee on site
	Sports fields and playing fields	1 for every 3 participants (design capacity)
	Quarrying activities	No minimum
	Note 1: GFA means Gross Floor Area and includes office space associated with the primary industrial activity not commercial offices or retail space.	

	Note 2: Where an existing building within the Commercial and Mixed Use Zones is being used by a permitted activity the requirements outlined above do not need to be met. For the purposes of the above parking requirements the following definitions apply: ***Outdoor display area*** – (parking requirement) an outdoor space provided for the display of retail goods or services for purchase and excludes parking, landscaping, or other similar required areas. ***Place of assembly*** – any facility and associated land and buildings for the general assembly of people engaged in deliberation, education, worship, or entertainment and includes, but is not exclusive to indoor recreation facilities, theatre, marae, cinemas, halls, conference facilities, churches, and education facilities.	
TR-S17	**Accessible parking**	
All Zones	1. Where on-site parking is provided, the minimum number of accessible *parking bays* shall be provided in accordance with Table TR-10. 2. Where parking is not otherwise provided, all non-residential activities with a combined GFA greater than 2,000m^2 shall provide accessible *parking bays*, even if no other *parking bays* are provided. If no other car *parking bays* are provided, the amount of accessible *parking bays* required shall be calculated by determining how many accessible parking bays would be required if one standard *parking bay* per 100m^2 GFA were provided. 3. Where parking is not otherwise provided, all residential activities shall provide accessible parking at a rate of two spaces per 25 residential units on a pro-rata basis. Note: Where the calculation of required vehicle parking bays results in a fraction of a whole space, any fraction less than or	Matters of discretion: 1. The parking demands of the activity. 2. The complementary nature of parking demands on sites serving multiple activities. 3. The safety and movement of pedestrians, cyclists, public transport, and general traffic. 4. Accessibility of the site by active transport and public transport. 5. The safety and usability of the *parking bays*. 6. Site limitations, configuration of buildings, and activities.

<table>
<tr><td></td><td>equal to one half shall be disregarded, and any fraction over one half shall count as one space.</td><td></td></tr>
<tr><td></td><td colspan="2">Table TR-10 Minimum number of accessible parking bays
<table>
<tr><th>Total number of parking bays</th><th>Number of accessible bays</th></tr>
<tr><td><20</td><td>1</td></tr>
<tr><td>20-50</td><td>2</td></tr>
<tr><td>For every additional 50 car parks or part thereof</td><td>1</td></tr>
</table></td></tr>
<tr><td>TR-S18</td><td colspan="2">Vehicle parking bay dimensions</td></tr>
<tr><td>All Zones</td><td>All parking bays shall have dimensions that meet the minimum requirements of Table TR-11, except for parking bays associated with quarrying activities, which are not subject to any minimum requirements.</td><td>Matters of discretion:
1. Effects on the safety and efficiency of the site and the transport network.
2. Adequacy of manoeuvring space for all vehicles anticipated to use the site.
3. Number of reverse manoeuvres required to enter or depart from a parking bay.</td></tr>
<tr><td></td><td colspan="2">Table TR-11 Minimum parking bay dimensions
<table>
<tr><th>User Type</th><th>Parking angle (degrees)</th><th>Stall width (m)[4]</th><th>Stall depth (m)[5]</th><th>Aisle width (m)</th></tr>
<tr><td>All users</td><td>Parallel</td><td>2.2</td><td>5.6 unobstructed
6.5 obstructed</td><td>3.0 one-way
6.0 two way</td></tr>
<tr><td rowspan="4">Long term parking[1]</td><td>30</td><td>2.5</td><td>4.5</td><td>2.9</td></tr>
<tr><td>45</td><td>2.5</td><td>5.3</td><td>3.7</td></tr>
<tr><td>60</td><td>2.5</td><td>5.8</td><td>4.6</td></tr>
<tr><td>90</td><td>2.5</td><td>5.6</td><td>5.8</td></tr>
</table></td></tr>
</table>

Medium term parking[2]	30	2.6	4.5	2.9
	45	2.6	5.3	3.5
	60	2.6	5.8	4.3
	90	2.6	5.6	5.8
Short term parking[3]	30	2.7	4.5	3.0
	45	2.7	5.3	4.2
	60	2.7	5.8	5.1
	90	2.7	5.6	6.2
Accessible parking	30	3.6	4.5	3.0
	45	3.6	5.3	4.2
	60	3.6	5.8	4.3
	90	3.6	5.6	6.2

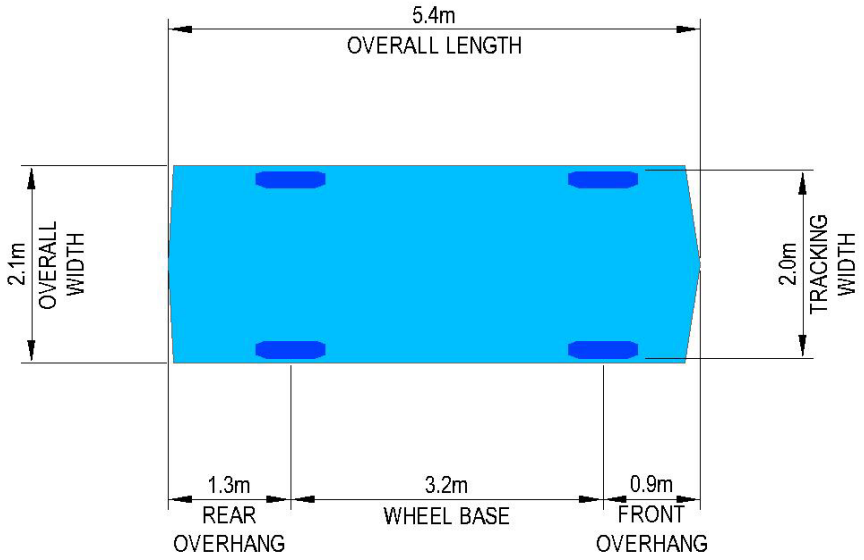
Notes:

1. Tenant, employee, and commuter parking (generally all-day parking).
2. Medium-term town centre parking, sports facilities, entertainment centres, hotels, motels.
3. Short term town centre parking, shopping centres, supermarkets, hospitals, and medical centres, activities involving drop off or collection of children or goods.
4. Stall width shall be increased by 300mm where a *parking bay* abuts a permanent obstruction such as a wall, column or other permanent obstruction. Where there is such an obstruction on both sides of a *parking bay*, the minimum stall width shall be increased by 600mm.
5. Stall depth may be reduced by the corresponding vehicle overhang length if a low kerb allows overhang, up to 600mm, but this overhang shall not encroach another *parking bay*, path, or landscaping.
6. *Parking bays* (other than parallel) immediately adjacent to paths or landscaping shall include wheel stop barriers located at least 600mm from the path or landscaping to avoid or mitigate obstruction of paths or damage to landscaping by parked vehicles.

TR-S19	**Blind aisles**	
All Zones	1. Blind aisles shall be extended by a minimum of 1m beyond the last *parking bay* and the last *parking bay* widened by 300mm if it is bounded by a wall or space. Where practical, the end space should be widened by the same amount as the aisle is lengthened. 2. TR-S19.1 shall not apply to any blind aisles in parking areas associated with quarrying activities.	Matters of discretion: 1. Effects on the safety and efficiency of the site and the transport network. 2. Building constraints such as walls or columns.
TR-S20	***Parking bay* gradients**	
All Zones	1. The maximum gradient within a standard *parking bay*, including motorcycle parking shall be as follows: a. 1 in 20 measured parallel to the angle of parking; and b. 1 in 16 measured in any other direction. 2. The maximum gradient within any accessible *parking bay* shall be 1 in 40 in any direction. 3. TR-S20.1 and TR-S20.2 shall not apply to any parking bays associated with quarrying activities.	Matters of discretion: 1. Effects on the safety and efficiency of the site and the transport network. 2. Topographic constraints.
TR-S21	***Parking bay* construction and formation**	
All Zones	1. For sites with fewer than four *parking bays*, the surface shall be formed to an all-weather standard and drained. 2. For sites with more four or more *parking bays*, the surface shall be formed, sealed, and drained. 3. *Parking bays* shall be marked on all sealed *parking areas*. 4. TR-S21.1 – TR-S21.3 shall not apply to any parking bays associated with quarrying activities.	Matters of discretion: 1. Effects on the safety and efficiency of the site and the transport network. 2. Surface formation. 3. Drainage. 4. Markings. 5. Compatibility with heritage character in Historic Heritage Precincts.

TR-S22	Reverse manoeuvres	
All Zones	1. Sufficient manoeuvring space shall be provided on site to ensure that no vehicle is required to reverse: a. onto or off any State Highway; b. onto of off any transit corridor; c. onto or off any road with a marked cycle lane; d. across any shared use path; or e. across any cycle path. 2. Sufficient manoeuvring space shall be provided on site to ensure that a 99 percentile design vehicle is not required to reverse onto or off any Urban Connector road. 3. Sufficient manoeuvring space shall be provided on site to ensure that a 99 percentile design vehicle is not required to reverse onto or off any urban road where: a. four or more *parking bays* are serviced via a single accessway; or b. the activity is on a rear site. c. TR-S22.1 – TR-S22.3 shall not apply to any quarrying activities.	Matters of discretion: 1. Effects on the safe, efficient, and effective operation of the transport network, including pedestrian and cycle safety. 2. Compatibility with heritage character in Historic Heritage Precincts.

Figure TR-9 99 Percentile design vehicle



Cycle parking		
TR-S23	**Minimum number of cycle parking spaces**	
All Zones	1. The minimum number of cycle parking spaces shall be provided in accordance with Table TR-12.	Matters of discretion: 1. Effects on the safety, effectiveness and efficiency of the transport network, including the cycling network. 2. The availability of cycle parking in the vicinity of the activity. 3. Site limitations.

Table TR-12 Minimum number of cycle parking spaces

Activity	Short stay / visitor	Long stay / staff
Recreation activities, community facilities	0.1 per person that the site is designed to accommodate	Minimum 1, 0.1 per staff member*
Quarrying activities	0	0
Retail activity	Minimum 1, 0.1 per 100m^2 GFA	Minimum 1, 0.1 per 100m^2 GFA

	Healthcare facility	Minimum 1, 1 per 100m^2 GFA	Minimum 1, 0.1 per staff member*
	Educational facility	Minimum 1	Minimum 1, 0.1 per staff member*
	Industrial activity	0	Minimum 1, 0.1 per staff member*
	Other commercial activities (including, but not limited to, offices)	Minimum 1, 0.05 per 100m^2 GFA	Minimum 1, 0.1 per 100m^2 GFA

* The number of staff members is the maximum number of full-time or part-time staff members on the site at any one time.

Note 1: Short stay / visitor cycle parking requirements do not apply in the Town Centre Zone.

Note 2: Where an existing building within the Town Centre or Neighbourhood Centre Zones is being used by a permitted activity the requirements outlined above do not need to be met.

TR-S24	**Cycle parking design**	
All Zones	1. All cycle stands shall: a. be securely anchored to an immovable object; b. support the bicycle frame and front wheel; and c. allow the bicycle frame to be secured. 2. Cycle parking facilities shall be available during the hours of operation and shall not be diminished by the subsequent erection of any structure, storage of goods, landscape planting, or any other use. 3. Cycle parking facilities shall: a. be easily accessible for users;	Matters of discretion: 1. Effects on the safety, effectiveness, and efficiency of the transport network, including the cycling network. 2. Site limitations including building configurations. 3. User requirements in relation to security or duration of parking. 4. Compatibility with heritage character in Historic Heritage Precincts.

<table>
<tr><td></td><td>b. not impede pedestrian thoroughfares including areas used by people whose mobility or vision is restricted; and
c. be clear of vehicle parking or manoeuvring areas.
d. TR-S24.1 – TR-S24.3 shall not apply to any cycle parking provided in association with any quarrying activities.</td><td></td></tr>
<tr><td>TR-S25</td><td colspan="2">Trip-end facilities</td></tr>
<tr><td rowspan="2">All Zones</td><td>1. All activities shall provide trip end facilities for active modes in accordance with Table TR-13, except for quarrying activities where no minimum trip end facilities shall be required.</td><td>Matters of discretion:
1. Effects on the safety, effectiveness, and efficiency of the transport network, including the cycling network.
2. Site limitations including building configurations.
3. User requirements in relation to security or duration of parking.</td></tr>
<tr><td colspan="2">TR-13 Minimum end trip facilities
<table>
<tr><th>Number of staff</th><th>Trip end facilities</th></tr>
<tr><td><25</td><td>None</td></tr>
<tr><td>25-50</td><td>1 shower
1 locker per 10 staff</td></tr>
<tr><td>>50</td><td>1 shower per 50 staff or part thereof
1 locker per 10 staff</td></tr>
</table></td></tr>
</table>

<table>
<tr><th colspan="3">Loading</th></tr>
<tr><th>TR-S26</th><th colspan="2">Loading and standing space dimensions</th></tr>
<tr><td>All non-residential activity</td><td>1. One loading space per site shall be provided with dimensions suitable for the largest vehicle anticipated on the site and in accordance with Table TR-14.
2. Where more than one large vehicle is anticipated on a site, then standing space or additional loading spaces for each additional vehicle shall be provided.
3. TR-S26.1 and TR-S26.2 shall not apply to any quarrying activities.</td><td rowspan="2">Matters of discretion:
1. Effects on the safety and efficiency of the site and the transport network.
2. Site limitations including building configurations.
3. Loading and servicing demands.</td></tr>
<tr><td>Residential Activity</td><td>4. One loading space for a Small Rigid Vehicle shall be provided for any residential site with more than 10 residential units.</td></tr>
<tr><td></td><td colspan="2">TR-14 Loading space dimensions
<table>
<tr><th>Vehicle Type</th><th>Width (m)</th><th>Length (m)</th><th>Height clearance (m)</th></tr>
<tr><td>B99</td><td>3.0</td><td>6.0</td><td>3.5</td></tr>
<tr><td>SRV</td><td>3.5</td><td>6.4</td><td>3.5</td></tr>
<tr><td>MRV</td><td>3.5</td><td>8.8</td><td>4.5</td></tr>
<tr><td>HRV</td><td>3.5</td><td>12.5</td><td>4.5</td></tr>
<tr><td>AV</td><td>3.5</td><td>20.0</td><td>4.5</td></tr>
</table>
Notes:
1. B99 design vehicle dimensions are based on NZS2890.1:2009.
2. SRV, MRV, HRV, and AV dimensions are based on NZS2890.2: 2018.</td></tr>
<tr><th>TR-S27</th><th colspan="2">Loading and standing space access</th></tr>
<tr><td>All Zones</td><td>1. Circulation accessways to loading spaces shall be designed to accommodate the swept path of the</td><td>Matters of discretion:
1. Effects on the safety and efficiency of the site and the transport network.</td></tr>
</table>

<table>
<tr><td></td><td>largest vehicle anticipated on site and provide clearances of:
a. 0.5m between the vehicle body and vertical obstructions; and
b. 1m separation between vehicle bodies on two-way accessways.
2. Any required standing space shall not obstruct any space used for on-site queuing, loading, parking, or manoeuvring space.
3. Accessway gradients shall be in accordance with Table TR-15.
4. TR-S27.1 - TR-S27.3 shall not apply to any quarrying activities.</td><td>2. Site limitations including building configurations.</td></tr>
<tr><td></td><td colspan="2">Table TR-15 Loading space accessway gradients
<table>
<tr><th>Vehicle Type</th><th>Maximum Gradient</th><th>Maximum rate of change of gradient</th></tr>
<tr><td>B99</td><td>1:6.5 (15.4%)</td><td>1:12 (8.3%) in 4m of travel</td></tr>
<tr><td>SRV</td><td>1:6.5 (15.4%)</td><td>1:16 (6.25%) in 7m of travel</td></tr>
<tr><td>MRV</td><td>1:6.5 (15.4%)</td><td>1:16 (8.3%) in 7m of travel</td></tr>
<tr><td>HRV</td><td>1:6.5 (15.4%)</td><td>1:16 (8.3%) in 10m of travel</td></tr>
<tr><td>AV</td><td>1:6.5 (15.4%)</td><td>1:16 (8.3%) in 10m of travel</td></tr>
</table>
Notes:
SRV, MRV, HRV, and AV dimensions are based on NZS2890.2: 2018.</td></tr>
<tr><td>TR-S28</td><td colspan="2">Loading and standing spaces - construction and formation</td></tr>
<tr><td>Rural zones, Māori Purpose Zone, and Future Urban Zone</td><td>1. For sites with four or fewer loading and standing areas, the loading and standing areas shall be formed to an all-weather standard, drained, and have a maximum gradient of 1:20 (5%).
2. For sites with more than four loading and standing areas, the loading and standing areas shall be sealed,</td><td>Matters of discretion:
1. Effects on the safety and efficiency of the site and the transport network.
2. Surfacing.
3. Drainage.
4. Gradient.
5. Signs and markings.</td></tr>
</table>

	drained, and have a maximum gradient of 1:20 (5%). 3. TR-S28.1 and TR-S28.2 shall not apply to any quarrying activities. Notes: Loose, large grade metal does not constitute an all weather standard.	
All other zones	4. Loading and standing areas shall be sealed, drained and have a maximum gradient of 1:20 (5%). 5. Loading areas shall be signed and marked.	Matters of discretion: 1. Effects on the safety and efficiency of the site and the transport network. 2. Surfacing. 3. Drainage. 4. Gradient. 5. Signs and markings.

High traffic generating thresholds

TR-S29 | **High traffic generating thresholds**

All Zones

Table TR-16 HTGP Thresholds

Type of Zone	Average Daily Traffic Generation Threshold	Peak Hourly Traffic Generation Threshold	Heavy Vehicle Movement Threshold
General Residential Zone, Settlement Zone, Open Space and Recreation Zones	200 vpd	25 vph	10 hvpd
All other zones	400 vpd	50 vph	50 hvpd

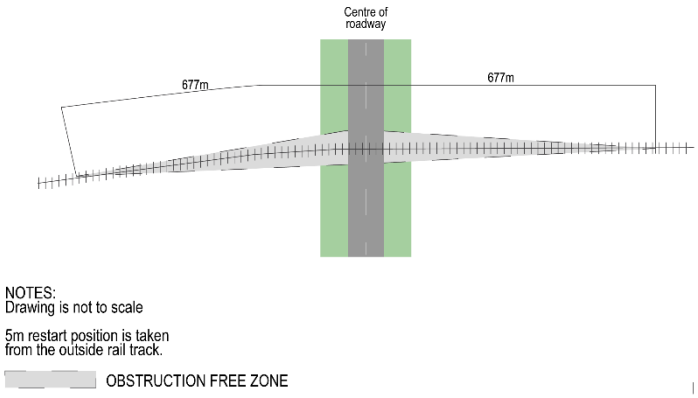
The following table provides guidance on expected traffic generation for different activities to help determine whether an Integrated Transport Assessment (ITA) is likely to be required.

Table TR-17 Average Daily Traffic Generation Screening Table

Activity	200 vpd	400 vpd
Residential Development	25 residential units	50 residential units
Retirement Living	80 units	160 units
Preschool	50 children	100 children
Schools (excluding preschools)	Full ITA	
Healthcare (excluding hospitals)	Basic ITA	
Hospitals	Full ITA	
Office	750m^2 GFA	1,500m^2 GFA
Industrial (excluding transport depot)	2,500m^2 GFA	5,000m^2 GFA
Transport Depot	Full ITA	
Trade Supplier	750m^2 GFA	750m^2 GFA
General Retail	200m^2 GFA	400m^2 GFA
Large Format Retail	500m^2 GFA	1,000m^2 GFA
Supermarket	Basic ITA	
Café/Bar	50m^2 GFA	100m^2 GFA
Service Station	Basic ITA	

Table TR-18: ITA Type Requirement

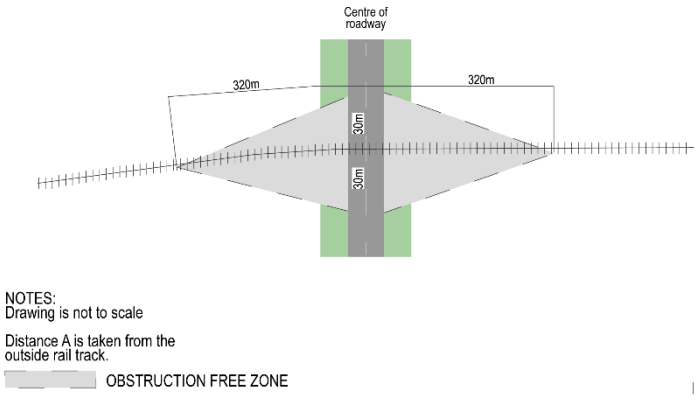
Highest activity status of application	Type of ITA Required
Permitted	Basic
Controlled	Basic
Restricted discretionary	Full
Discretionary	Full
Non-complying	Full

TR-S30	Sight lines at railway level crossings	
All Zones	Restart sight triangles at level crossings On sites adjacent to all rail level crossings, no building, structure, planting or visual obstruction shall be located within the shaded areas shown in Figure 1. These are defined by a sight triangle taken 5 metres from the outside rail and distance A along the railway track. Distance A depends on the type of control (Table 1). Figure 1: Restart sight triangles for all level crossings  Table 1: Required restart sight distances for Figure 1 Required approach visibility along tracks A (m) Signs only / Alarms only / Alarms and barriers 677m / 677m / 60m Advice Note: The restart sight line triangles ensure that a road vehicle driver stopped at a level crossing can see far enough along the railway to be able to start off, cross and clear the level crossing safely before the arrival of any previously unseen train. Of particular concern are developments that include shelter belts, tree planting, or a series of building extensions. These	

conditions apply irrespective of whether any visual obstructions already exist.

Approach sight triangles at level crossings with Give Way signs: On sites adjacent to rail level crossings controlled by Give Way Signs, no building, structure, planting or other visual obstruction shall be located within the shaded areas shown in Figure 2.

Figure 2: Approach sight triangles for level crossings with "Give Way" signs



Advice Note: The approach sight triangles ensure that clear visibility is achieved around rail level crossings with Give Way signs so that a driver approaching a rail level can either:

- See a train and stop before the crossing; or
- Continue at the approach speed and cross the level crossing safely.

Of particular concern are developments that include shelter belts, tree planting, or a series of building extensions. These conditions apply irrespective of whether any visual obstructions already exist.

No approach sight triangles apply for level crossings fitted with alarms and/or barrier arms. However, care should be taken to avoid developments that have the potential to obscure visibility of these alarm masts.

This is particularly important where there is a curve in the road on the approach to the level crossing, or where the property boundary is close to the edge of the road surface and there is the potential for vegetation growth.

TR-APP1 Integrated Transport Assessment Requirements				
	Description	Details Required	Basic ITA	Full ITA
1	Background	Description of proposal, purpose of ITA	√	√
2	Existing environment	Description of: site location site context surrounding land use	√	√
3	Existing transport infrastructure	Description of: site access and service arrangements surrounding road network/road hierarchy public transport network and facilities cycle network and facilities pedestrian network and facilities	√	√
4	Existing travel patterns	Description of: traffic volumes (annual, seasonal, daily, hourly as appropriate) intersection performance (turning volumes, queue lengths, delays, level of service) crash analysis (Minimum of five years)	√	√
5	Committed environment changes	Approved developments in the surrounding area Transport infrastructure improvement	√	√

TR-APP1 Integrated Transport Assessment Requirements				
	Description	Details Required	Basic ITA	Full ITA
6	Proposal Details	Description of: proposed activity site layout (access, circulation and parking) any proposed transport infrastructure staging (if applicable) servicing/loading arrangements end of trip facilities for active modes	√	√
7	Travel Demand Management	Travel Demand Management measures for any interventions and actions to influence travel behaviour, with the aim of minimising travel demand or redistributing demand from traditional car usage to more sustainable transport modes	√	√
8	Travel choice assessment	a. demonstrates how the use of public transport and active modes will be maximised; and b. demonstrates how the use of private vehicles will be minimised;	√	√
9	Expected Travel Demands	Assessment of: traffic generation (daily, peak hours) heavy vehicle movements traffic distribution on the transport network Mode split	√	√
10	Transportation Effects	Assessment of effects on: safety for all travel modes traffic volumes effects on frontage road wider transport network (Full ITA1)	√	√

TR-APP1 Integrated Transport Assessment Requirements				
	Description	Details Required	Basic ITA	Full ITA
11	Mitigation Measures	Description of any proposed mitigation measures	√	√
12	District Plan	Assessment of compliance with District Plan Transport Rules	√	√
13	Strategic Framework	Assessment against relevant local, regional and national transport plans and strategies		√
14	Conclusions and recommendations	Summary of assessment with conclusions Recommended conditions of consent, if any	√	√

Notes:

It is recommended that the extent of any wide area assessment and the assessment methodology is agreed with Council in advance of lodging a resource consent application.

The level of detail in the basic or full ITA should be commensurate with the scale and significance of the proposal.

TR-APP2 Aerodrome Obstacle Limitation Surface Specifications

An Obstacle Limitation Surface (OLS) is an internationally accepted area to protect aircraft operations in and around an aerodrome. The obstacle limitation surfaces of an aerodrome are defined surfaces in the airspace above and adjacent to the aerodrome. The surfaces are primarily intended to protect the critical areas for the arrival and departure of aircraft using a runway.

The Civil Aviation Authority of New Zealand (CAANZ) Part 139 Advisory Circulars provide guidance on what OLS areas should include.

The areas originate from the ends and edges of the runway strip area which is a protection area around the runway.

CAANZ Advisory Circulars (ACs) provide acceptable means of compliance and guidance material for aerodrome operators on OLS in two documents:

- Advisory Circular AC139-6 Aerodrome Design Requirements: All Aeroplanes Conducting Air Transport Operations and All Aeroplanes above 5700 kg MCTOW
- Advisory Circular AC139-7 - Aerodrome Standards and Requirements: Aeroplanes at or below 5700 kg MCTOW–Non Air Transport Operations

Hood aerodrome has three runways with the main paved runway 60/24 designed to AC139-6 and grass runways 06/24 and 10/28 designed to AC139-7.

The following tables provide the OLS specifications for Hood Aerodrome. Reference should also be made to the Planning Maps.

Runway 06/24 – Paved

Runway 06/24	**Paved Runway Configuration (1250 x 30m)**	
Design Guidelines	CAA Advisory Circular AC139-6 Aerodrome Design Requirements: All Aeroplanes Conducting Air Transport Operations and All Aeroplanes above 5700 kg MCTOW	
Design Basis	1. Dimensions and slopes based on Tables 4-1 (Approach Runway) and Table 4-2 (Takeoff Runway) for a Code 3 Non-precision approach runway. 2. The runway strip is 75 metres each side of the centre line. 3. Only one surface is shown on the plan which combines the most demanding geometrical constraints of the approach and take-off fans.	
Geometry Take-off & Landing Fans	Length of inner edge:	150m (approach/ take-off)

	Distance from runway end/threshold:	60 m (approach/ take-off)
	Divergence:	1:6.6 (approach)
	Final Width:	4,695 m (approach)
	Length:	15,000 m (approach/ take-off)
	Slope:	1:50 (take-off)
	1. The origin of the take-off and landing fans are coincident as specified in the advisory circular, at the end of the runway strip.	

Runway 10/28 – Grass

Runway 10/28	**Grass Runway Configuration (1042 x 30m)** **Published in the Aeronautical Information Publication (AIP) for Masterton (NZMS)**	
Design Guidelines	CAA Advisory Circular AC139-7 - Aerodrome Standards and Requirements: Aeroplanes at or below 5700 kg MCTOW–Non Air Transport Operations	
Design Basis	1. Day VFR Runway 2. The runway strip is 55 metres overall. 3. Only one surface is shown on the plan, which combines the most demanding geometrical constraints of the two areas.	
Dimensions and slopes	Length of inner edge:	30m
	Distance from runway end/threshold:	30m
	Divergence:	1:20
	Final Width:	175m
	Length:	1,200m
	Slope:	1:20

Runway 6/24 - Grass

Runway 06/24	**Grass Runway Configuration (1060 x 30m)** **Published in the Aeronautical Information Publication (AIP) for Masterton (NZMS)**	
Design Guidelines	CAA Advisory Circular AC139-7 - Aerodrome Standards and Requirements: Aeroplanes at or below 5700 kg MCTOW–Non Air Transport Operations	
Design Basis	1. Day VFR Runway 2. The runway strip is 55 meters overall. 3. Only one surface is shown on the plan, which combines the most demanding geometrical constraints of the two areas.	
Geometry	Length of inner edge:	30m
	Distance from runway end/threshold:	30m
	Divergence:	1:20
	Final Width:	175m
	Length:	1200m
	Slope:	1:20