

DISTRICT-WIDE MATTERS

TR – Transport

The transport network is vital infrastructure in the District, which physically connects the Manawatū District communities and the wider Manawatū Region enabling economic growth. The transport network in this chapter refers to both the *road* and rail networks throughout the Manawatū District.

Traffic generated by new land uses has the potential to increase the risk of accidents. Careful planning of access ways, land use development near key roads and controlling the type and location of vehicle intensive activities establishing near highways or key roads within the District can ensure efficient through movement.

Primary *industry* relies heavily on key transportation routes in the District. The Roding Hierarchy identifies these routes and the District Plan seeks to manage activities to avoid unnecessary conflict. A number of State Highways traverse the District and recognition of the role of NZ Transport Agency in managing these routes is noted throughout the chapter. There are some instances where approval from NZ Transport Agency as the *road* controlling authority for the State Highway network is required.

Most of the State Highways running through the District are “Limited Access Roads”. This means that the NZ Transport Agency (or the *Council* for State Highways within *urban areas*) has control over the number and location of new vehicles crossings and over new subdivision adjoining these roads. If a proposal meets this Plan’s standards, however, approval from the NZ Transport Agency will be a formality.

Increasing national priority is being given to recognising and providing for alternative transportation methods, such as cycling, walking and passenger transport.

Issues

The following resource management issues have been identified in relation to transportation.

TR-I1	Potential <i>effects</i> from development on the safety and efficiency of the transport network.
TR-I2	The need to plan for and design roads to ensure they function in accordance with their status in the Roding Hierarchy.

TR-I3	Providing for alternative transport modes such as walking, cycling and passenger transport in <i>urban areas</i> to reduce car dependency where possible
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Objectives

TR-O1	To maintain and enhance the safe, efficient and integrated operation of the transport network within the District.
TR-O2	To protect the roading network, as identified in TR-APP1, from the potential adverse <i>effects</i> of all land use activities.
TR-O3	To mitigate the adverse <i>effects</i> of roads and vehicles on <i>amenity values</i> of the District.

Policies

TR-P1	To ensure that the adverse <i>effects</i> of vehicle movements to and from roads are managed by:	
	TR-P1.1	Requiring appropriate sight lines for vehicles at railway crossings, at intersections and at property entrances and exits.
	TR-P1.2	Ensuring that vehicle crossings are formed to a safety standard appropriate to the function, as defined in the Roding Hierarchy in TR-APP1, of the <i>road</i> concerned.
	TR-P1.3	Preventing vegetation, <i>signs</i> and structures from obscuring <i>official signs</i> or posing a risk to <i>road</i> users.
	TR-P1.4	Providing appropriate facilities for pedestrians and cyclists, particularly in <i>urban areas</i> .
	TR-P1.5	Ensuring that new vegetation plantings are managed to maintain adequate visibility at <i>road</i> intersections and property accesses, and to minimise icing of roads.

TR-P2	To ensure that the adverse <i>effects</i> of vehicle movements associated with access ways are managed by:	
	TR-P2.1	Limiting the number of new vehicle crossings onto all roads.
	TR-P2.2	Requiring all accesses onto roads to be built to a standard that is appropriate for their intended use.
	TR-P2.3	Ensuring that property accesses are spaced, constructed and used in a manner which does not disrupt traffic flows.
	TR-P2.4	Ensuring that traffic generation to and from <i>sites</i> is managed through car equivalent movements to ensure traffic, including heavy vehicles, are compatible with the roading network.
TR-P3	To ensure development setbacks near railway level crossings are achieved to maintain sight distances as specified in TR-APP5.	
TR-P4	To establish and maintain a roading hierarchy for roads in the District.	
TR-P5	To recognise the importance of maintaining the safety and efficiency of the District's roading network.	
TR-P6	To restrict the through movement of traffic where this can have adverse <i>effects</i> on visual, noise and safety on adjacent residential uses.	
TR-P7	To promote corridor management for key <i>road</i> routes within the District, to ensure that they are constructed and managed in a way that is safe and efficient and which may include restricting or encouraging the flow of traffic through movement of vehicles.	
TR-P8	To enable the development of network utilities in the <i>road</i> reserve only where the roading network has the capacity to accommodate them.	
TR-P9	To ensure all roads are designed to achieve form and function consistent with the Roding Hierarchy and <i>road</i> cross sections in TR-APP1 and TR-APP2 respectively.	
TR-P10	To mitigate the <i>effects</i> of roads and parking areas on visual <i>amenity values</i> through the provision of landscaping.	

TR-P11	To support and encourage walking and cycling as alternative modes of transport.
TR-P12	To require that <i>building</i> materials and exterior lighting do not cause reflection or light spill that distracts <i>road</i> users.
TR-P13	To ensure roads are designed recognising alternative modes and the need to provide <i>local road</i> amenity.
TR-P14	To ensure development of new roads is integrated into the existing roading network in a coordinated manner.

Rules

Rules in this chapter apply District-wide and the chapter needs to be read in conjunction with the District Plan maps, relevant appendices and provisions of the applicable *zone*. This section includes some rules and some performance standards that relate to *permitted activities* within each *zone* in the District.

Permitted Activities (PER)

TR-R1	<p>All roads</p> <p>Guidance Note: Roads other than State Highways are not designated under this Plan and are zoned instead. The zoning of roads must be the same as that of the adjoining land. If the zoning on <i>opposite</i> sides of the <i>road</i> is different, then the <i>road</i> centreline is the <i>zone</i> boundary.</p>
TR-R2	<p>Access</p> <p>The formation of vehicle crossings onto roads is a Permitted Activity in all zones provided that they comply with TR-ST1 below.</p> <p>Guidance Note: All vehicle crossings must be constructed according to <i>Council</i> policy and that <i>Council's</i> vehicle crossing application form is completed and submitted for approval.</p>

Standards for Permitted Activities

TR-ST1	Vehicle Crossings: For all <i>zones</i> vehicle crossings onto all roads must comply with the following standards:	
	TR-ST1.1	All vehicle crossings must be sited in accordance with the minimum sight distances and intersection spacings as defined in TR-APP3.
	TR-ST1.2	No new vehicle crossings will be located within 30m of any railway level crossing
	TR-ST1.3	Existing vehicle crossings that are within 30m of a railway level crossing must be maintained to ensure the sightline standards detailed in TR-APP5 are met
	TR-ST1.4	No <i>dwelling</i> or <i>accessory building</i> will have access via an unformed legal <i>road</i> (<i>paper road</i>).
	TR-ST1.5	Onsite manoeuvring must be provided for vehicles to enter and exit in a forward direction.
	TR-ST1.6	Vehicle crossing movements must not exceed 100 car equivalent movements per day and the car equivalent movements must be calculated in accordance with TR-APP4.
	TR-ST1.7	Vehicle Crossings must comply with Diagram D-Special Use Access in TR-APP3 if there is more than one slow, heavy or long vehicle movements per week using the accessway and vehicle crossing.
	TR-ST1.8	All vehicle crossings must be constructed or upgraded according to <i>Council's</i> Engineering Standards.
	TR-ST1.9	In addition to standards TR-ST1 – TR-ST1.8 above, for <i>Major Arterial</i> or <i>Minor Arterial roads</i> the following also apply:
	TR-ST1.9.a	Vehicle crossings may only be constructed on <i>Major Arterial Road</i> or <i>Minor Arterial Road</i>

			identified in TR-APP1 if there is no alternative legal access from the <i>site</i> to another <i>road</i> .
		TR-ST1.9.b	In the Mixed Use <i>Zone</i> , vehicle access to <i>sites</i> from SH54/Aorangi Street, between Gladstone St and Eyre Street, must be left turn in and left turn out only.
	Guidance Note: All vehicle crossings must be constructed according to <i>Council</i> policy and that <i>Council's</i> vehicle crossing application form is completed and submitted for approval.		
TR-ST2	Glare - Any <i>Permitted Activity</i> within any <i>zone</i> in the District Plan must also comply with the following glare standards:		
	TR-ST2.1	Exterior lighting must be directed away from public places and adjoining premises and must avoid any spill of light that may distract <i>road</i> users.	
	TR-ST2.2	There must be no sun-strike <i>effect</i> on <i>road</i> users resulting from mirrored glazing or unpainted corrugated iron fences.	
TR-ST3	Car Parking – Any activity in the District must also comply with the following car parking standards:		
	TR-ST3.1	Car Parking and Manoeuvring Spaces, and Access Manoeuvring space and car parking spaces must comply with the minimum dimensions set out in NZS 2890.1:2004 Parking Facilities – Off-Street Car Parking and NZS 4121 (2001): Design for Access and Mobility – <i>Buildings</i> and Associated Facilities.	
	TR-ST3.2	Formation and Screening of Car Parking Areas	
	TR-ST3.2.a	For all activities except <i>dwellings</i> , car parking and manoeuvring spaces in the Mixed Use, General Residential, and Settlement <i>zones</i> must be formed, surfaced in seal or concrete and marked out to the <i>Council's</i> standard. [NPS-UD 2020]	
	TR-ST3.2.b	For all activities in the General Rural and General Industrial <i>zones</i> , except <i>dwellings</i> , car parking and manoeuvring spaces must be	

			formed, surfaced in seal, concrete or permeable surfacing and marked out to the <i>Council's</i> standard. [NPS-UD 2020]
		TR-ST3.2.c	Car parking areas adjoining <i>sites</i> zoned General Residential must be screened from the General Residential <i>Zone</i> by a solid screen wall or fence at least 2m high.
		TR-ST3.2.d	Car parking in the Open Space <i>Zone</i> must not be located within 3m of the front boundary of the <i>site</i> , or within 4.5m of any property zoned General Residential or Settlement.

Restricted Discretionary Activities (RDIS)

The following activities are *Restricted Discretionary Activities* in respect to transportation:

TR-R3

Any *Permitted Activity* that does not comply with any of the relevant standards in TR-ST1 – TR-ST3.

Matters of Discretion:

For these activities, the *Council* has restricted its discretion to considering the following matters, only to the extent that they are relevant to the standard that is not met:

TR-MD1	the safe, efficient and integrated operation of the transport network
TR-MD2	design and appearance of parking areas
TR-MD3	glare
TR-MD4	access
TR-MD5	visual amenity <i>effects</i> on adjoining General Residential zoned properties and surrounding <i>streetscape</i> .
TR-MD6	traffic generation, <i>site</i> access and parking
TR-MD7	<i>Effects</i> on walking and cycling and other alternative modes such as passenger transport.

Assessment Criteria:

In determining whether to grant a resource consent and what conditions to impose, the *Council* will, in addition to the objectives and policies of the Transport section and the relevant *zone*, assess any application in terms of the following assessment criteria:

TR-AC1	the degree of non-compliance with the particular performance standards that the proposal fails to meet.
TR-AC2	whether the application remains consistent with the intention of the standard(s) it infringes.
TR-AC3	whether the application will result in any adverse <i>effects</i> on <i>amenity values</i> of neighbouring properties or the character of the <i>zone</i> in which the activity is proposed.
TR-AC4	whether the application will result in any adverse <i>effects</i> on <i>streetscape</i> character as anticipated under TR-APP2.
TR-AC5	the degree to which the non-compliance can be mitigated to ensure any <i>effects</i> are internalised to the <i>site</i> .
TR-AC6	whether there is a reasonably practicable alternative for legal access to a <i>road</i> other than a <i>Major Arterial Road</i> or <i>Minor Arterial Road</i> .
TR-AC7	whether alternative transport modes such as walking, cycling and passenger transport have been provided for.

Discretionary Activities (DIS)

TR-R4	Any activity not otherwise specified as <i>permitted</i> or <i>restricted discretionary</i> , or is not specifically provided for in this Plan, shall be a <i>discretionary activity</i> .
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TR - APP1 – Roading Hierarchy

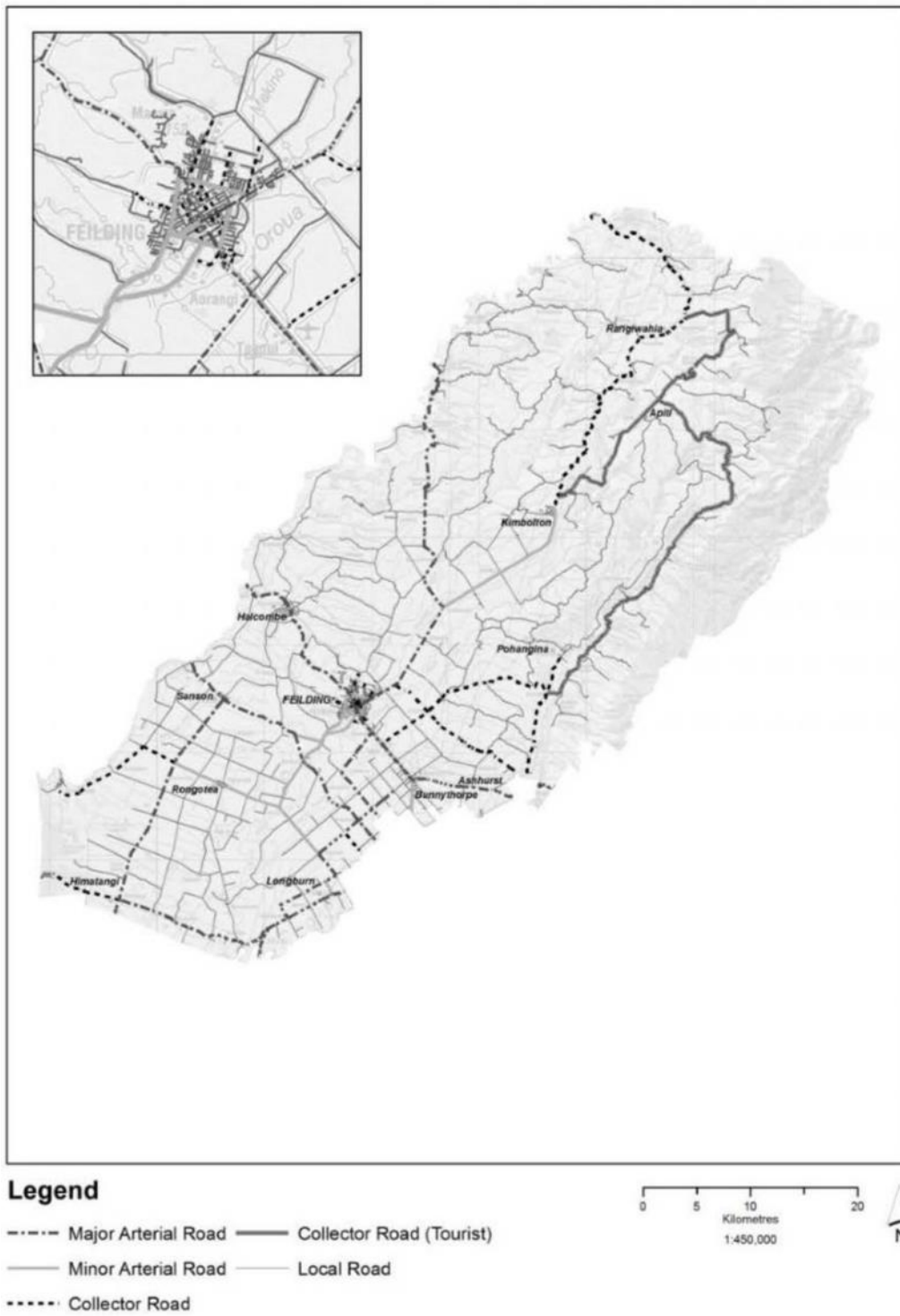
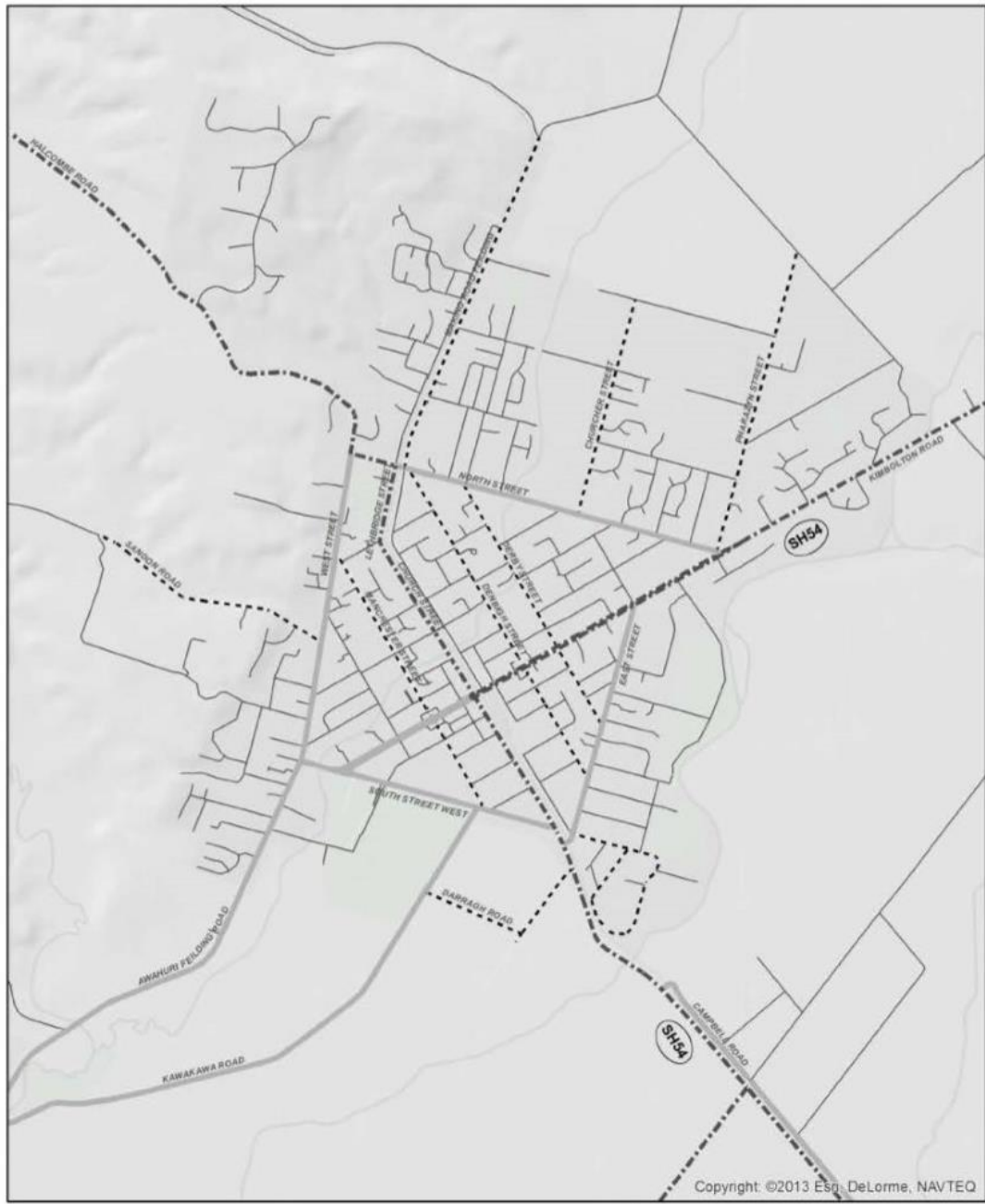


Figure 5 – Manawātū District Roading Hierarchy



Legend

- Major Arterial Road
- Collector Road (Tourist)
- Minor Arterial Road
- Local Road
- Collector Road

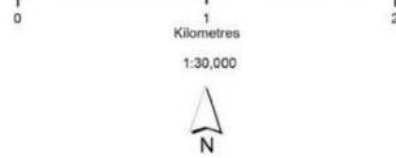


Figure 6 – Feilding roading hierarchy

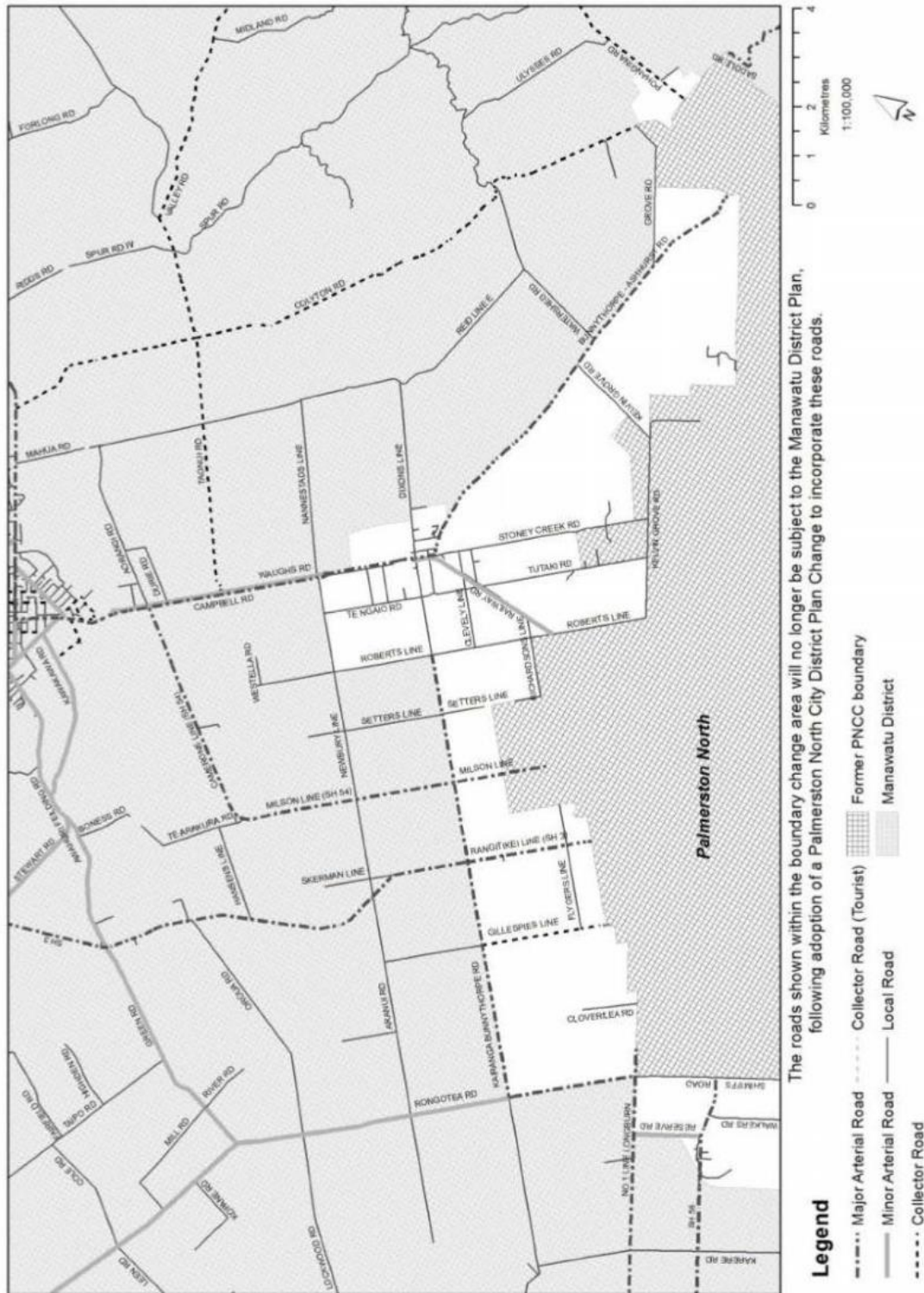


Figure 7 – Manawātū district roading hierarchy – Boundary change area

TR - APP2 – Road cross sections

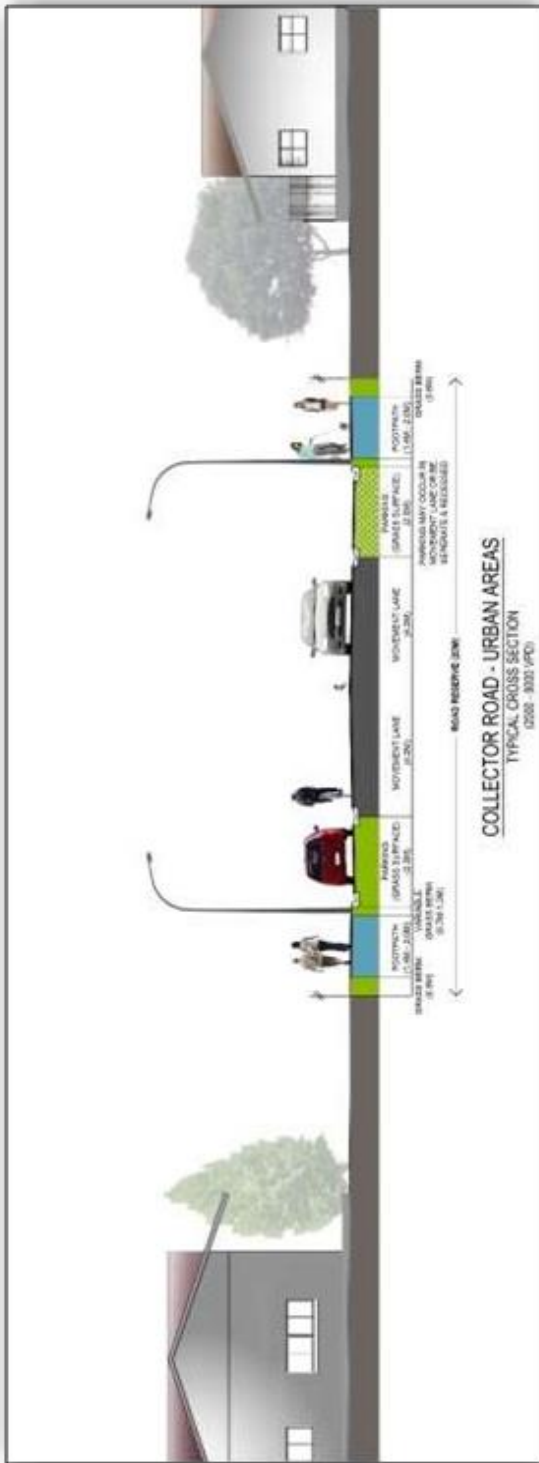


Figure 8 – Typical cross section: collector road – urban areas

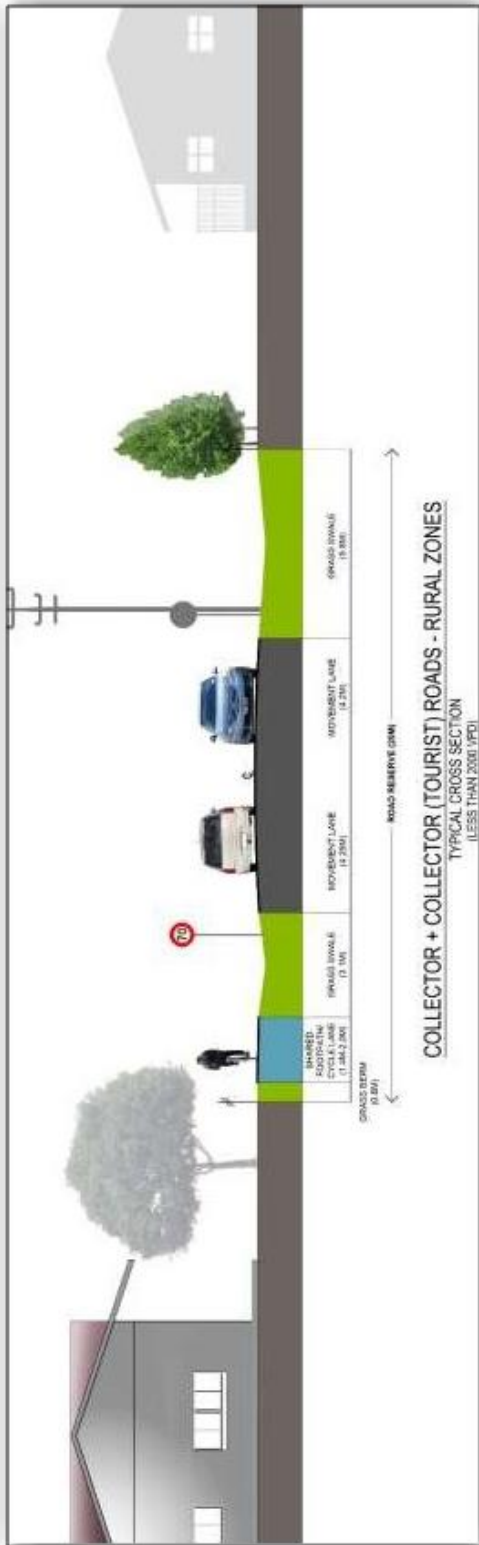


Figure 9 – Typical cross section: collector and collector (tourist) roads – rural zones



Figure 10 – Typical cross section: local road - all zones



Figure 11 – Typical cross section: collector road urban Maewa (Growth Precinct 4)

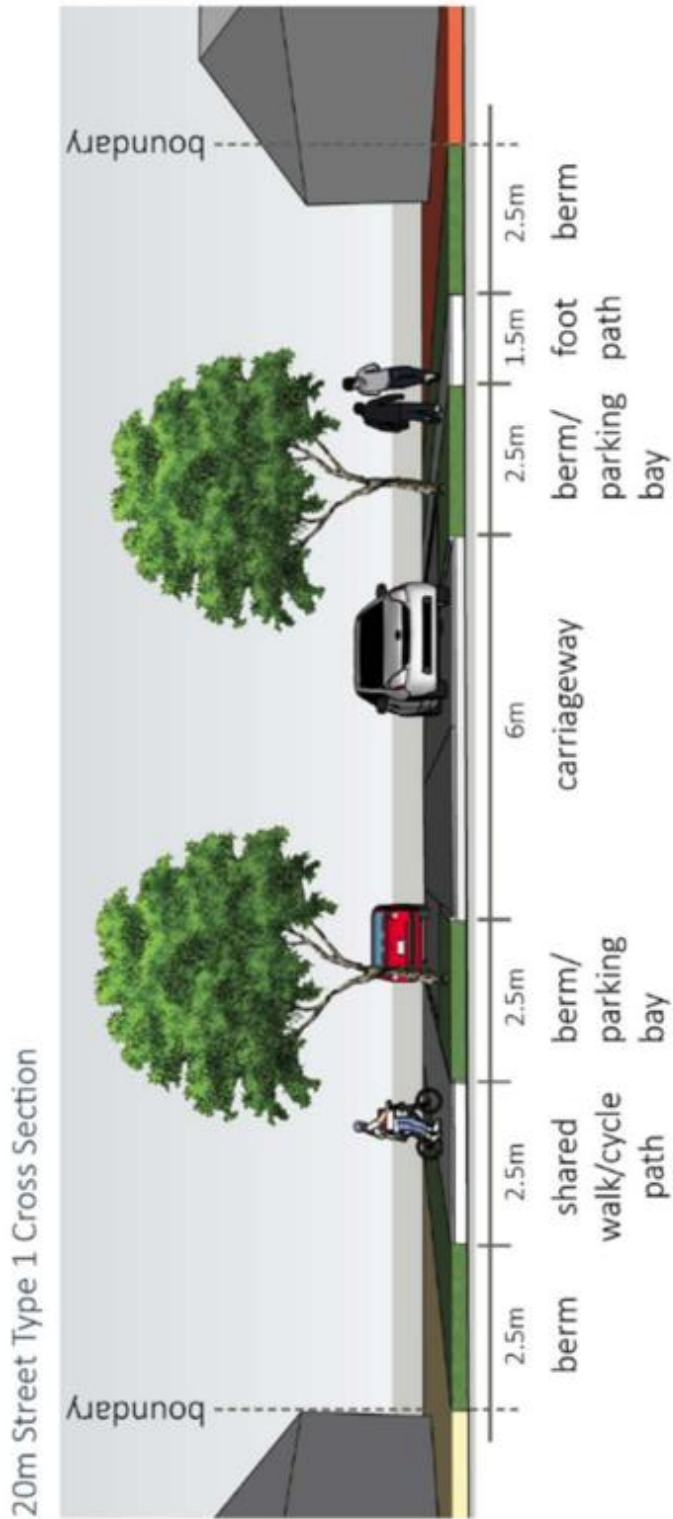


Figure 12 – Rongotea South Development Area – 20m Street Type 1 Cross Section

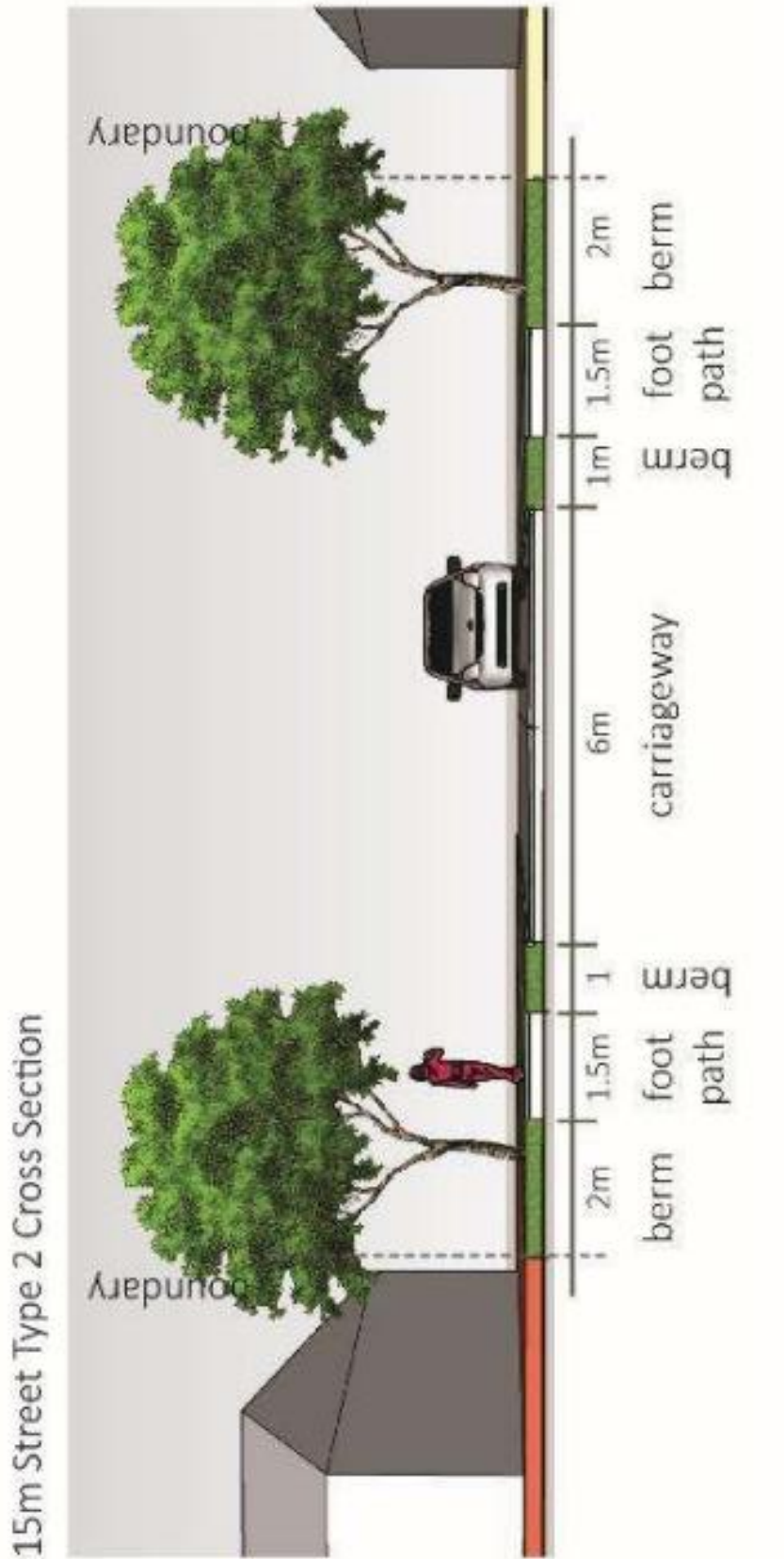


Figure 13 – Rongotea South Development Area – 15m Street Type 2 Cross Section

TR - APP3 – Measurement of Sight Distances and Minimum Spacing

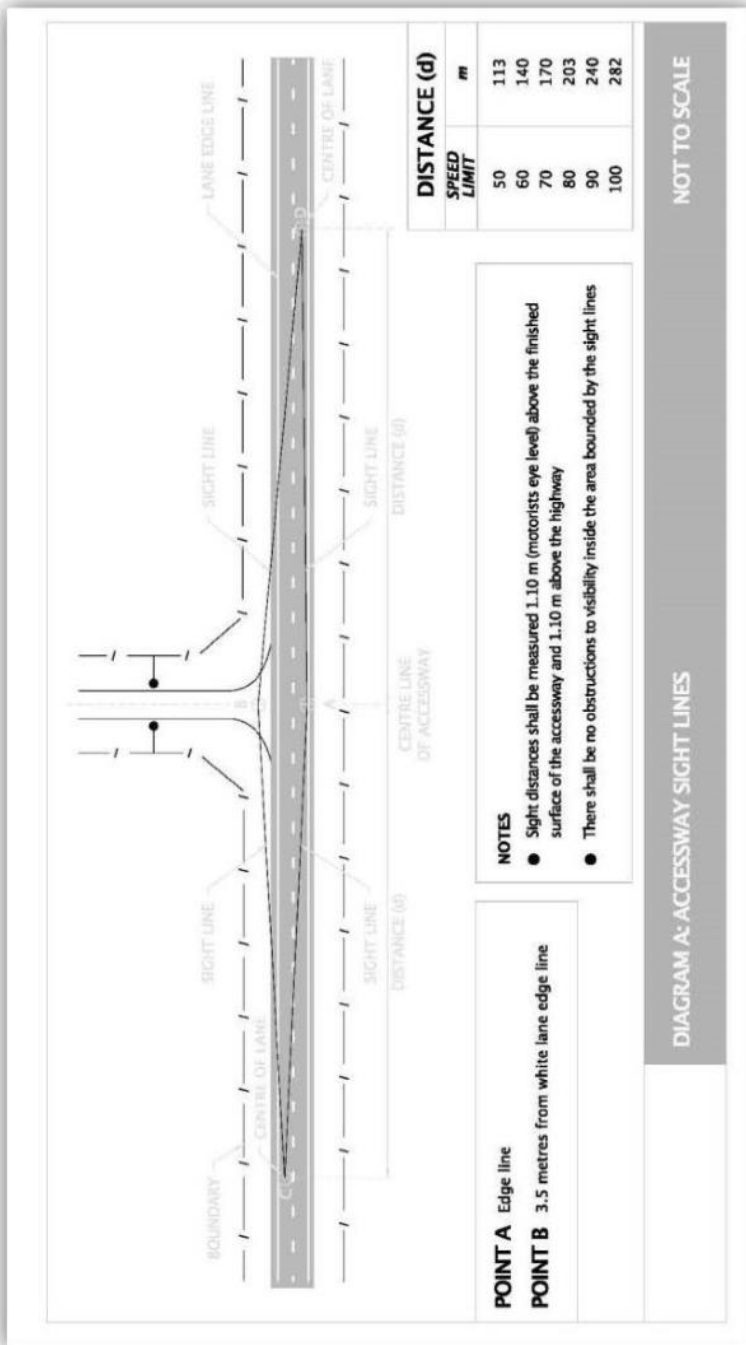


Diagram A – Accessway Sight Lines

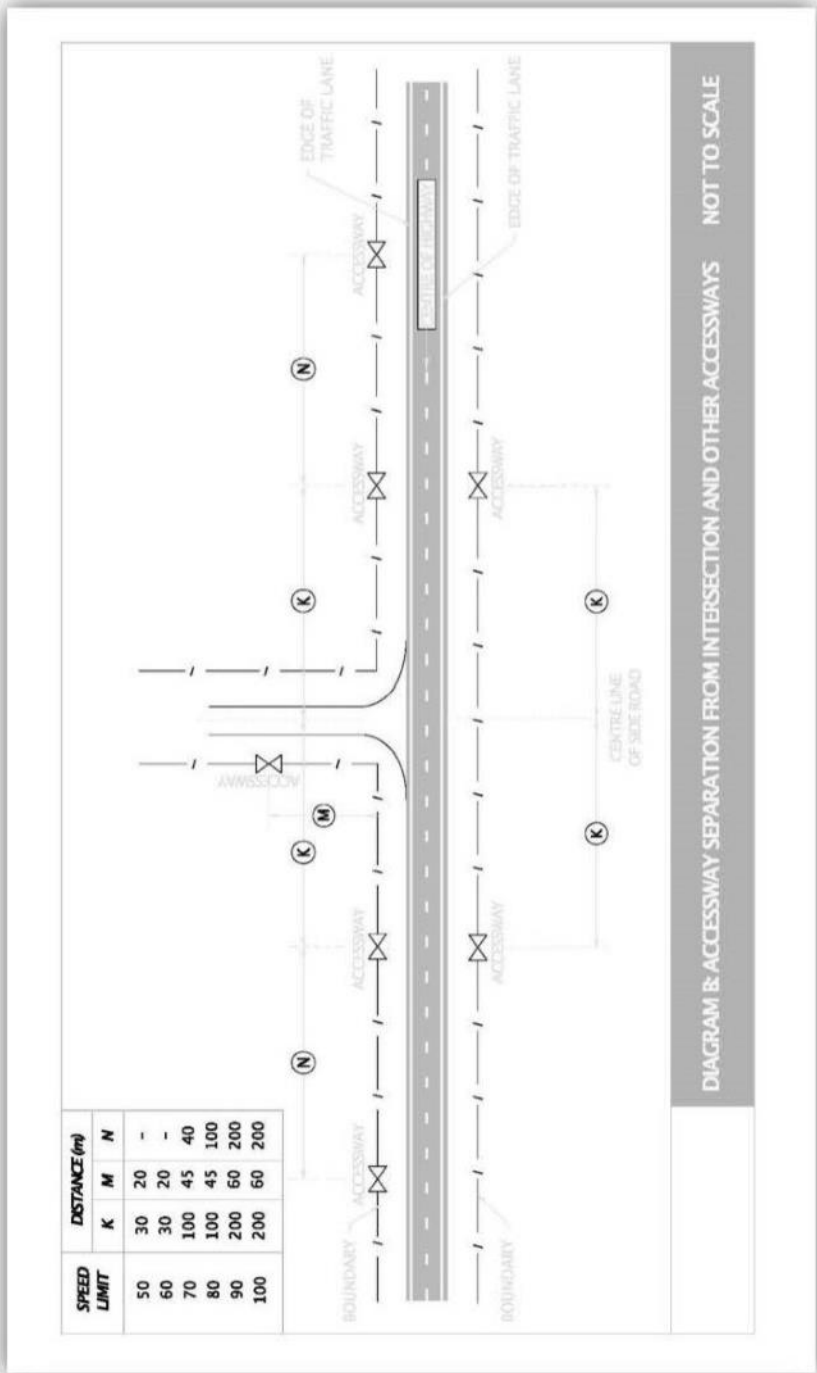


Diagram B – Accessway Separation From Intersection and Other Accessways

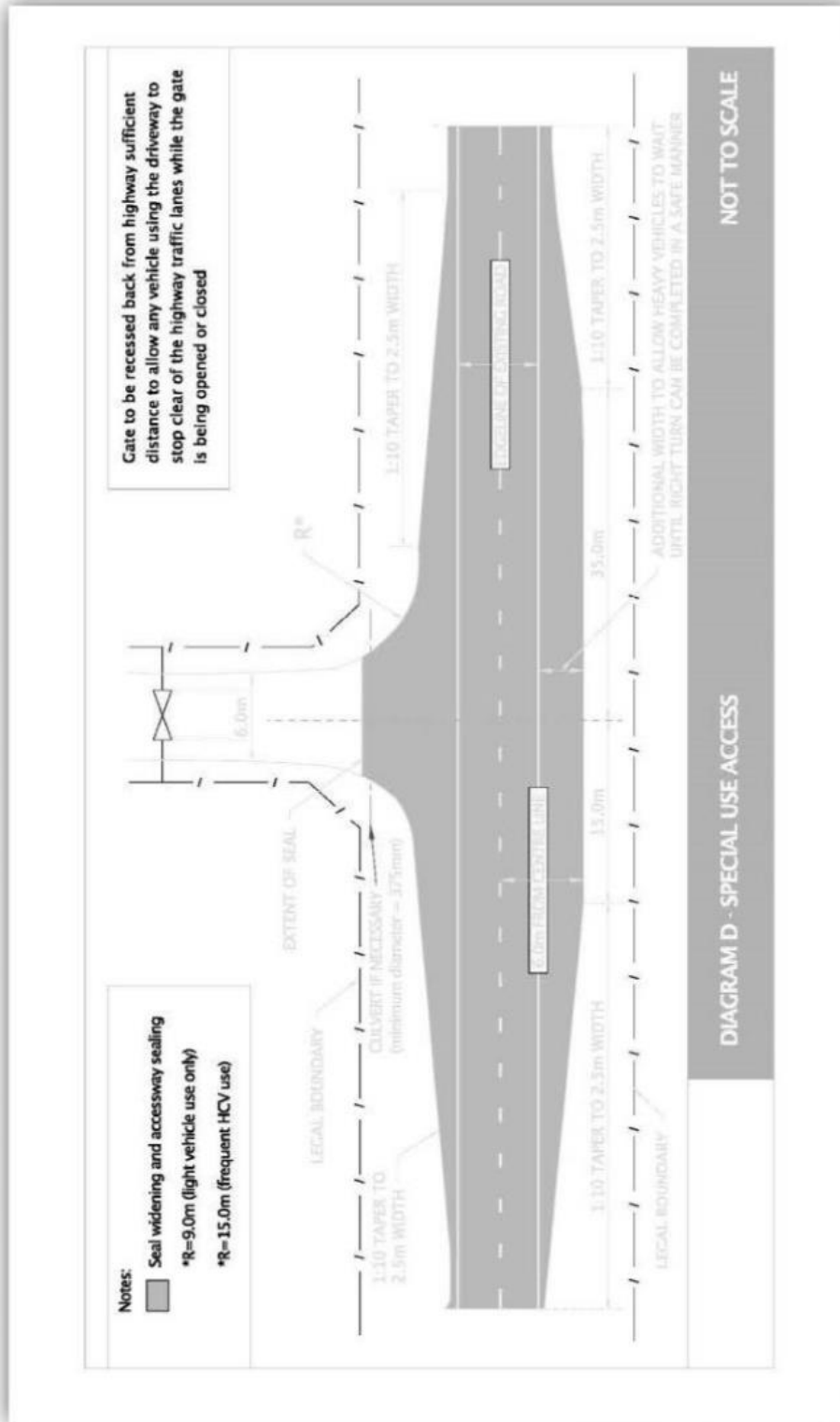


Diagram D – Special Use Access

TR - APP4 – Calculation of Car Equivalent Vehicle Movements

1. Car equivalent movements are defined as being the following within any given day:

Table 1 – Car equivalent movements

One car to and from the <i>site</i>	2 car equivalent movements
One truck to and from the <i>site</i>	6 car equivalent movements
One truck and trailer to and from the <i>site</i>	10 car equivalent movements
A <i>dwelling</i>	Deemed to generate 8 car equivalent movements

2. The number of car equivalent movements will be deemed to be less than 30 if they exceed 30 on no more than two days per week, provided that they do not exceed 60 on any given day.
3. The number of car equivalent movements will be deemed to be less than 100 if they exceed 100 on no more than two days per week.

TR - APP5 – Traffic Sight Lines at Road/Rail Level Crossings

Level Crossings

Approach sight triangles at level crossings with Stop or Give Way signs

On *sites* adjacent to rail level crossings controlled by Stop or Give Way *signs*, no *building*, structure or planting must be located within the shaded areas shown in Figure 14. These are defined by a sight triangle taken 30 metres from the outside rail and 320 metres along the railway truck.

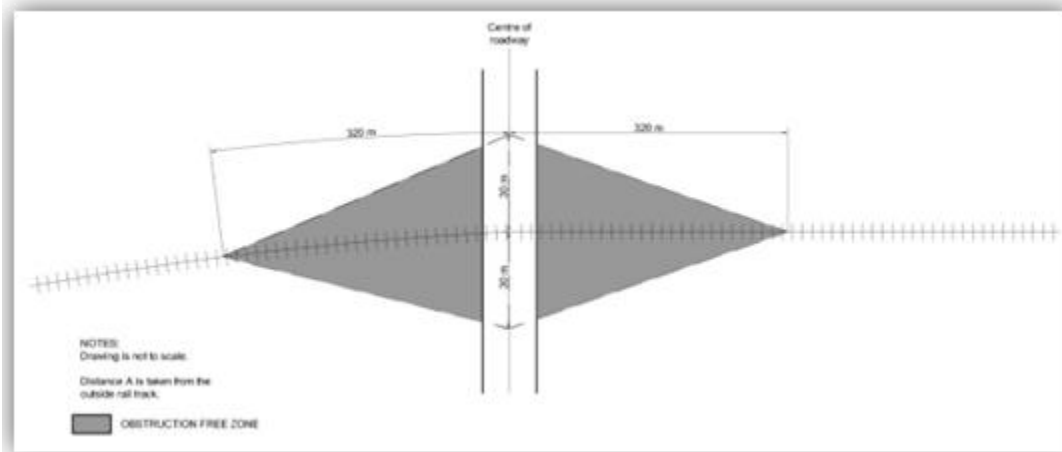


Figure 14 - Approach sight triangles at level crossings with “stop” or “give way” signs

Guidance Note:

The approach sight triangles ensure that clear visibility is achieved around rail level crossings with Stop or 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 provisions 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.

Restart sight triangles at level crossings

On *sites* adjacent to all rail level crossings, no *building*, structure or planting must be located within the shaded areas shown in Figure 15. 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 in Table 2 below.

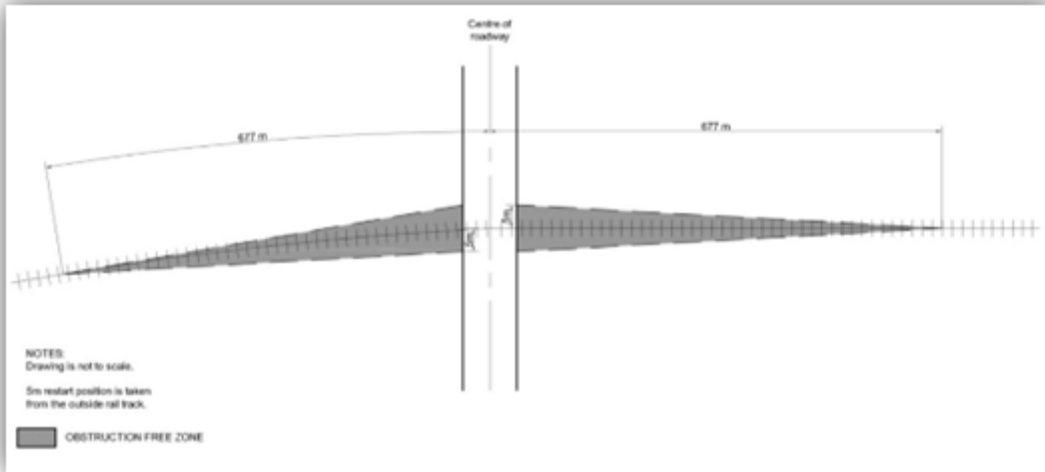


Figure 15 - Restart sight triangles for all level crossings

Table 2 – Required restart sight distances for Figure 15

Signs only	Alarms only	Alarms and barriers
677m	677m	60m

Guidance Notes:

1. 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.
2. Of particular concern are developments that include shelter belts, tree planting, or series of *building* extensions. These conditions apply irrespective of whether any visual obstructions already exist.
3. Figures 14 and 15 show a single set of rail tracks only. For each additional set of tracks add 25 m to the along track distance in Figure 14, and 50m to the along track distances in Figure 15.

4. All figures are based on the sight distance formula used in New Zealand Transport Agency Traffic Control Devices Manual 2008, Part 9 Level Crossings. The formulae in this document are performance based however the rule contains fixed parameters to enable easy application of the standard. Approach and restart distances are derived from a:

- Train speed of 110km/h
- Vehicle approach speed of 20km/h
- Fall of 8% on the approach to the level crossing and a rise of 8% at that level crossing
- 25m design truck length
- 90° angle between *road* and rail.