

Wellington City Proposed District Plan

Hearing Stream 9 – Transport

Appendix A Recommended Amendments to Provisions

Ngā Tautuhinga

Definitions

<u>ACTIVE TRANSPORT</u>	means forms of transport that involve <u>physical effort</u> .
<u>ANCILLARY TRANSPORT NETWORK INFRASTRUCTURE</u>	means infrastructure located within the road reserve or railway corridor that supports the transport network and includes: <ol style="list-style-type: none"> 1. traffic control signals, signs and devices; 2. light poles; 3. post boxes; 4. landscaped gardens, artwork and sculptures; 5. public transport stops and shelters; 6. train stations; 7. public toilets; and 8. road or rail furniture.
CYCLE	means a transportation device that has at least two wheels and that is designed primarily to be propelled by the muscular energy <u>physical effort</u> of the rider <u>to rotate pedals</u> . It includes electric cycles.
TRANSPORT NETWORK	means all public rail, public roads, <u>sea freight and passenger ferries</u> , public pedestrian, cycle and micromobility facilities, public transport and associated infrastructure. It includes: <ol style="list-style-type: none"> a. Train stations; b. Bus stops <u>and shelters</u>; c. Bus shelters; and c. Park and Ride areas; <u>d. Rapid transit stops and shelters; and</u> <u>e. Ferry terminals.</u>

Tūāhanga

Infrastructure

INF-R7	<p>Structures associated with infrastructure including:</p> <ol style="list-style-type: none"> 1. Substations (including switching stations); 2. Transformers; 3. Gas transmission and distribution structures; 4. Energy storage batteries not enclosed by a building; and 5. Communications kiosks; <u>and</u> 6. <u>Electrical vehicle charging stations.</u>
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Tūnuku

Transport

TR	Transport
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Introduction

The purpose of the Transport Chapter is to manage on-site transport facilities and the effects of high vehicle trip-generating use and development. Matters concerning the operation, maintenance, repair and renewal, upgrading and development of the transport network and connections to the transport network are provided in the Infrastructure Chapter. This is a result of the RMA definition of infrastructure, which includes “structures for transport on land by cycleways, rail, roads, walkways, or any other means”.

Wellington City Council has adopted a 'Sustainable Transport Hierarchy' which has been published as part of the Council's Parking Policy (2020) and Paneke Pōneke Bike Network Plan 2022, which places walking, cycling and public transport at the top of the hierarchy. Private vehicles are towards the bottom of the hierarchy. This reflects the City's goal of being carbon neutral by 2050, and creating a more sustainable transport system to get there. The provisions in this Transport chapter support this goal by requiring the provision of cycling and micromobility parking with new development. This chapter therefore complements the intensification provisions within the zone chapters which seek to provide a more compact urban form close to public transport and the City's walking and cycling network.

This chapter recognises that some activities generate high volumes of traffic which may have significant adverse effects on the transport network and adversely affect the amenity of adjacent land use activities. These activities require assessment to ensure these effects are managed effectively. However, where an activity is not a high vehicle trip-generating use and can be reasonably expected to occur within a zone, then any effects associated with an absence of on-site carparking and associated loss of on street carparking from that activity should not be considered as an adverse residential amenity effect.

On-site transport facilities such as site access, carparking, and parking for bicycles and other micromobility devices also need to be designed effectively to ensure people's safety and wellbeing is maintained. This chapter provides specific design requirements for these facilities.

Overall, the Chapter seeks to:

- Enable a range of transport modes, where the effects of those activities are appropriately managed;
- Encourage the uptake of alternative transport modes other than the private vehicle;
- Manage any adverse effects arising from high trip generating activities; and
- Maintain the health, safety and wellbeing of on-site transport facilities.

Other relevant District Plan provisions

It is important to note that in addition to the provisions in this chapter, the following Part 2: District-Wide chapters may also be of relevance, including:

- **Historic Heritage and Sites and Areas of Significance to Māori** - Specific provisions for the protection of these sites are located in the Sites and Areas of Significance to Māori Chapter and Historic Heritage Chapter.
- **Earthworks** - The Earthworks Chapter manages the adverse effects of earthworks on the environment, including visual amenity values and stability of land plus adverse health and safety effects, damage to property and the creation or increase in the risk of natural hazards.

<ul style="list-style-type: none"> • Light - The Light Chapter contains specific provisions relating to light spill and the management of effects on residential areas. • Noise - The Noise Chapter contains specific controls in relation to noise, including effects standards NOISE-S1 (maximum noise levels). • Signs – The Signs Chapter contains specific controls in relation to signage, including official signs, the effects of signs on road safety, and third party signage. • Contaminated land - The Contaminated Land Chapter manages the use and development of Contaminated Land or potentially Contaminated Land. • Hazardous substances - The Hazardous Substances Chapter contains provisions to manage Hazardous Substances. • Trees – The Notable Tree chapter contains specific provisions relating to the management of Notable Trees. Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule or in this chapter, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach chapter. 	
Objective	
TR-O1	<p>Purpose</p> <p>Land use and development is managed to ensure that:</p> <ol style="list-style-type: none"> 1. High trip generating activities do not compromise the safety and effectiveness of the transport network; 2. A range of transport modes are provided for; 3. Reliance on private vehicles is reduced; 4. New development provides appropriate on-site facilities for cycling and micromobility users; and 5. Safe and <u>effective-functional</u> on-site parking, loading, access and manoeuvring is provided.
Policies	
TR-P1	<p>High <u>vehicle</u> trip generation <u>ong use and development</u></p> <p>Provide for high vehicle trip generating activities where they:</p> <ol style="list-style-type: none"> 1. Safely and effectively integrate with the transport network, including planned network upgrades and service improvements; and 2. Provide for pedestrian, cycling, micromobility and public transport modes <u>at an appropriate scale to the nature of the high vehicle trip generating activity;</u> Or 3. <u>Are in the Airport Zone's Terminal Precinct or East Side Precinct.</u>
TR-P2	<p>Enabled activities</p> <p>Enable on-site transport facilities and driveways that:</p> <ol style="list-style-type: none"> 1. Provide for the safe and <u>effective functional</u> use of the site and functioning of the transport network; 2. Meet the reasonable demands of site users; and 3. Promote the uptake and use of pedestrian, cycling, micromobility and public transport modes; <u>and</u> 4. <u>Provide parking for cycles and micromobility devices that is sheltered, convenient and secure, and end-of-journey showers and lockers for staff in new substantial buildings for commercial, tertiary education and healthcare activities.</u>
TR-P3	<p>Managed activities</p> <p>Only allow on-site transport facilities and driveways that do not meet standards where:</p>

	<ol style="list-style-type: none"> 1. The transport facilities and driveways are effective safe and functional in meeting the operational needs and functional needs of the activity on the site; 2. The safety and effectiveness of the transport network is not compromised; 3. Public health and safety, including the safety of pedestrians, cyclists and micromobility users travelling through any parking areas, is not compromised; 4. The projected demand for loading spaces or cycling and micromobility parking will be lower than that required in the standards or can be accommodated by public, shared or reciprocal arrangements; 5. Safe and effective access for firefighting purposes is provided <u>with reference to NZS 4404:2010 and the New Zealand Fire Service Firefighting Water Supplies Code of Practice SNA PAS 4509:2008</u>; and 6. There are site and topographical constraints that make compliance unreasonable.
<p>INF-P11-TR-P4</p>	<p><u>Connections to roads</u></p> <p><u>Enable safe and effective connections between sites and the transport network by requiring connections to roads to address:</u></p> <p>-</p> <ol style="list-style-type: none"> <u>1. The One Network Framework classification, characteristics and operating speed of the road and the number and types of vehicles accessing the site;</u> <u>2. Opportunities to share and minimise the number of connections;</u> <u>3. Public health and safety including the safe functioning of the transport network and the safety of pedestrians, cyclists and micromobility device users; and</u> <u>4. Site or topography constraints including reduced visibility.</u>
<p>Rules: Land use activities</p>	
<p>TR-R1</p>	<p>All activities except for trip generation, site access, on-site cycling and micromobility paths, and on-site vehicle parking and manoeuvring</p>
<p>All Zones</p>	<ol style="list-style-type: none"> 1. Activity status: Permitted <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with the following standards is achieved: <ol style="list-style-type: none"> i. TR-S2; ii. TR-S3; iii. TR-S8; and iv. TR-S9.
<p>All Zones</p>	<ol style="list-style-type: none"> 2. Activity status: Restricted Discretionary <p>Where:</p> <ol style="list-style-type: none"> a. Compliance with any of the requirements of TR-R1 cannot be achieved. Matters of discretion are: <ol style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant Standard as specified in the associated assessment criteria for the infringed standards; and 2. The matters in TR-P3. <p><u>Notification status: An application under Rule TR-R1 is precluded from being publicly notified.</u></p>
<p>TR-R2</p>	<p><u>Vehicle Trip generation</u></p>
<p><u>Airport Zone's Terminal Precinct or East Side Precinct</u></p>	<ol style="list-style-type: none"> <u>1. Activity status: Permitted</u>

<p><u>All Zones except Terminal Precinct, East Side Precinct</u></p>	<p><u>2.</u> Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance with TR-S1 is achieved; and e. The activity is not:</p> <ul style="list-style-type: none"> i. a service station; or ii. a drive-through activity.
<p><u>All Zones except Terminal Precinct, East Side Precinct</u></p>	<p><u>3.</u> Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with any of the requirements of TR-R2. 42 cannot be achieved.</p> <p>Matters of discretion are:</p> <p>1. The matters in TR-P1.</p> <p><u>Notification status: An application under Rule TR-R2 is precluded from being publicly notified.</u></p> <p>Section 88 information requirements for applications:</p> <p>Applications under Rule TR-R1.2.a-2.3 must provide an Integrated Transport Assessment by a suitably qualified transport engineer or transport planner. The Waka Kotahi NZ Transport Agency guidelines "Research Report 422: Integrated Transport Assessment Guidelines, November 2010" should be used to inform any Integrated Transport Assessment.</p>
<p>TR-R3 <u>Site access Driveways</u></p>	
<p>All Zones</p>	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance with TR-S5 and TR-S6 is achieved; and</p> <p>b. The access is not to a State Highway.</p>
<p>All Zones</p>	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of TR-R3.1 cannot be achieved.</p> <p>Matters of discretion are:</p> <p>1. The matters in TR-P3</p> <p>Notification status: An application under Rule TR-R3 is precluded from being publicly notified.</p>
<p>TR-R4 <u>On-site pedestrian, cycling and micromobility paths</u></p>	
<p>All Zones</p>	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance with TR-S4 is achieved.</p>
<p>All Zones</p>	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the any of the requirements of TR-R4.1.a cannot be achieved.</p> <p>Matters of discretion are:</p>

	<p>1. The matters in TR-P3. Notification status: An application under Rule TR-R4 is precluded from being publicly <u>or limited</u> notified.</p>
TR-R5	On-site vehicle parking and manoeuvring
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance with TR-S7 is achieved; <u>and</u> b. <u>It does not include ramps, turntables, lifts or stackers.</u></p>
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of TR-R5.1 cannot be achieved. Matters of discretion are:</p> <p>1. The matters in TR-P3. Notification status: An application under Rule TR-R4<u>5</u> is precluded from being publicly notified.</p>
TR-R5<u>6</u>	Car sharing activities
All Zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. Compliance with the requirements of TR-S7 is achieved.</p>
All Zones	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of TR-R5.1 cannot be achieved. Matters of discretion are:</p> <p>1. The matters in TR-P3. Notification status: An application under Rule TR-R5<u>6</u> is precluded from being publicly notified.</p>
INF-R24 TR-R7	Connections to roads
All Zones	<p><u>1. Activity status: Permitted</u></p> <p><u>Where:</u></p> <p><u>a. The connection provides site access for sites with no driveway, on-site parking or loading; and</u> <u>b. Compliance is achieved with INF-S16-TR-S10;</u></p> <p><u>or</u></p> <p><u>c. The connection provides site access to an Urban Road (except a Transit Corridor) or a Rural Road (except National Highway) as identified in and mapped in the road classification overlay; and</u> <u>d. The access is not to a State Highway; and</u> <u>e. Compliance is achieved with INF-S17-TR-S11.</u></p>
All Zones	<p><u>2. Activity status: Restricted Discretionary</u></p>

	<p><u>Where:</u></p> <p>a. <u>Compliance with the requirements of INF-R24.1-TR-R7.1 cannot be achieved.</u></p> <p><u>Matters of discretion are:</u></p> <p>1. <u>The matters in INF-P13-TR-P4.</u></p> <p><u>Notification status: An application under Rule TR-R7 is precluded from being publicly notified.</u></p>
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Standards

TR-S1	Vehicle trip generation
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1. Activities must not exceed the following maximum vehicle movement thresholds:	
Type of vehicle	Maximum number of vehicle movements
Light	200 per day <u>to/from a local road</u>
<u>Light</u>	<u>100 per day to/from the state highway</u>
Heavy	8 per week
<p>2. For the purpose of the above assessments:</p> <p>a. An on-site carpark associated with a residential activity is considered to generate 10 light vehicle movements per day;</p> <p>b. Vehicle movements per day must be assessed as average vehicle movements per day, averaged over a full seven-day week; and</p> <p>c. Vehicle movements per week must be assessed as average vehicle movements per week, averaged over a full 52-week year.</p>	

TR-S2	<u>Cycling and Micromobility device parking, and staff showers and lockers</u>
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<p>1. Cycling and micromobility <u>device</u> parking must be provided in accordance with Table TR-7.</p> <p>2. <u>Showers and lockers for staff cycling and micromobility trips to new buildings for commercial activities, tertiary education and healthcare activities must be provided in accordance with Table TR-7A.</u></p>	<p>Assessment criteria where the standard is infringed:</p> <ol style="list-style-type: none"> 1. The availability of alternative, safe and secure cycling and micromobility parking, <u>and showers and lockers if relevant</u>, that meets the needs of the intended users, in a nearby accessible location; 2. Whether parking can be provided and maintained in a jointly-used cycling and micromobility parking area; and 3. Site limitations, configuration of buildings and activities, demonstrated user requirements and operational requirements.
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Table 7 – TR: Minimum number of on-site cycling and micromobility device parking spaces

Activity	Minimum number of on-site cycling and micromobility device parking spaces	
	Both short stay and long stay must be provided	
	Short stay (visitors)	Long stay (staff*, residents, students)
<p>Any activity in the following zones:</p> <ul style="list-style-type: none"> • City Centre 	<p>Nil</p> <p><u>In accordance with the rest of this table if one or more short stay car</u></p>	<p>In accordance with the rest of this table</p>

<ul style="list-style-type: none"> Metropolitan Local Centre Neighbourhood <u>Centre</u> Mixed Use 	<p><u>parks are provided on-site, otherwise Nil.</u></p>	
Commercial activity	Minimum 2, 0.05 per 100 m ² GFA or as per specific activity below	Minimum 1, 0.1 per 100m ² GFA or as per specific activity below
<ul style="list-style-type: none"> Entertainment and Hospitality Activity 	0.1 per person that the site is designed to accommodate; or as per specific activity below	Minimum 1, 0.1 per staff member* or as per specific activity below
Community facility	0.1 per person that the site is designed to accommodate	Minimum 1, 0.1 per staff member*
Educational facility	As per specific activities below	
1. Childcare services	Minimum 2	Minimum 1, 0.1 per staff member*
2. Tertiary education facility	Minimum 2	Minimum 1, 0.1 per student and 0.1 per staff member*
Emergency service facilities	Minimum 2	Minimum 1, 0.1 per staff member*
Healthcare activity	Minimum 2, 1 per 100m ² GFA	Minimum 1, 0.1 per staff member*
Industrial activity	Minimum 2	Minimum 1, 0.1 per 100m ² GFA
Residential	1 per 10 residential units	Minimum 1 per residential unit**
<ul style="list-style-type: none"> Hostels 	1 per 10 beds	Minimum 1, 1 per 3 beds
<ul style="list-style-type: none"> <u>Retirement villages</u> 	<u>Minimum 1, plus 0.1 per residential unit</u>	<u>Minimum 1, plus Minimum 0.1 per residential unit** and 0.1 per staff member*</u>

Where the calculation of required parking spaces results in a fractional space, the fraction must be rounded up or down to the nearest full space.

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

** The cycle and micromobility device parking space cannot be located within the residential unit itself. A lockable, residential unit-specific storage facility such as a garage or storage locker is an acceptable solution, provided it can fit the cycle space dimensions in Figure 1 – TR: Cycle and micromobility parking. This may be a communal facility.

Table 7A – TR: On-site showers and lockers

<u>Number of additional long stay cycle/micro-mobility device parks required under Table 7 as a result of construction of a new building for commercial, tertiary education or healthcare activities</u>		<u>Minimum number of showers and lockers required on-site for staff cycling and micromobility trips</u>
1.	<u>1 – 10</u>	None
2.	<u>11 – 100</u>	a. <u>1 shower per every 10 staff cycle/micromobility parks required</u> b. <u>1 locker per every staff cycle/micromobility park required</u>
3.	<u>> 100</u>	a. <u>1 shower per every 10 staff cycle/micromobility parks required</u> b. <u>1 locker per every staff cycle/micromobility park required</u>
4.	<u>The minimum internal dimensions of each locker required is: height 85 cm, depth 45 cm, width 20 cm.</u>	

TR-S3 Cycling and Mmicromobility parking design

<p>1. Where short stay cycling and micromobility parking spaces are required to be provided by TR-S2, <u>and that are not in a lockable, residential unit-specific storage facility such as a garage or storage locker dedicated to that residential unit, they must include stands, aisles and spaces that meet the following minimum specifications in Figure 1 – TR: Cycle and micromobility parking and Table 7 – TR: Minimum distance from centre of stand to a wall or kerb.:</u></p> <p>a. Stands must be sized and spaced to accommodate cycle dimensions of 1200mm high, 1800mm long and 600mm wide;</p> <p>a. <u>Note that all dimensions in Figure 1 – TR and Table 7B – TR are based on cycle envelopes and a 1.0 m long cycle stand. Adjust if using different stands or if providing for different types of cycles.</u></p> <p>b. <u>Where a range is given, the upper value is preferred for ease of use, but the lower value is the minimum standard.</u></p> <p>c. <u>The minimum aisle width for manoeuvring cycles to/from parking, per Australian Standard 2890.3 is 1.5 m, or 2.0 m for multi-tier parking or cycle lockers. Aisle widths are measured between the parking space envelopes, not between stands.</u></p> <p>2. <u>Hanging racks or vertical stands that require lifting of the bicycle must not exceed 50% of number of spaces.</u></p> <p>3. <u>At least one in every four cycle/micromobility parks on a site must meet the standards for “large cycles” in Figure 1 – TR.</u></p> <p>4. Except for a <u>lockable, residential unit-specific storage facility, each stand must provide a locking point that is securely anchored to an immovable object and must allow the frame and at least one wheel to be secured, with the</u></p>	<p>Assessment criteria where the standard is infringed:</p> <ol style="list-style-type: none"> 1. The safety and effectiveness of the cycling and micromobility parking spaces; 2. Site limitations, configuration of buildings and activities, user requirements and operational requirements; and 3. The safety of pedestrians, cyclists and micromobility users using the road, accessways and walkways.
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<p><u>frame able to be secured by a U-lock (also known as a “D-lock”)</u></p> <ul style="list-style-type: none"> a. Stands must be securely anchored to an immovable object. b. Stands must allow the cycling or micromobility device frame and, in the case of cycles, at least one wheel, to be secured. <p>2. <u>Short stay C</u>cycling and <u>M</u>micromobility parking facilities <u>required to be provided by TR-S2</u> must be located:</p> <ul style="list-style-type: none"> i. So they are easily accessible for users, within 20m of the primary entrance; ii. So they do not impede <u>are clear of</u> pedestrian thoroughfares including areas used by people whose mobility or vision is restricted to provide safety for all pedestrians, including at-risk groups such as pedestrians with mobility and vision impairments, and children; iii. To be clear of vehicle parking or manoeuvring areas; and iv. Short stay cycling and micromobility parking facilities must To <u>be available during the activity's hours of operation and must not be impeded by any structure, storage of goods, landscape planting or other use; and</u> <p>3. Where Long stay cycling and micromobility parking spaces are <u>required to be provided by TR-S2;</u></p> <ul style="list-style-type: none"> a. they must be located: in a covered area where access by the general public is excluded, and at least one wheel is able to be secured; and b. <u>must be electric charging-ready by being serviced with an electrical cable conduit from the electricity supply to the parking space or the collective parking facility.</u> <p>Note: Refer to 'Cycle Parking Planning and Design, Waka Kotahi 2019'.</p>	
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Figure 1 – TR: Cycle and micromobility parking

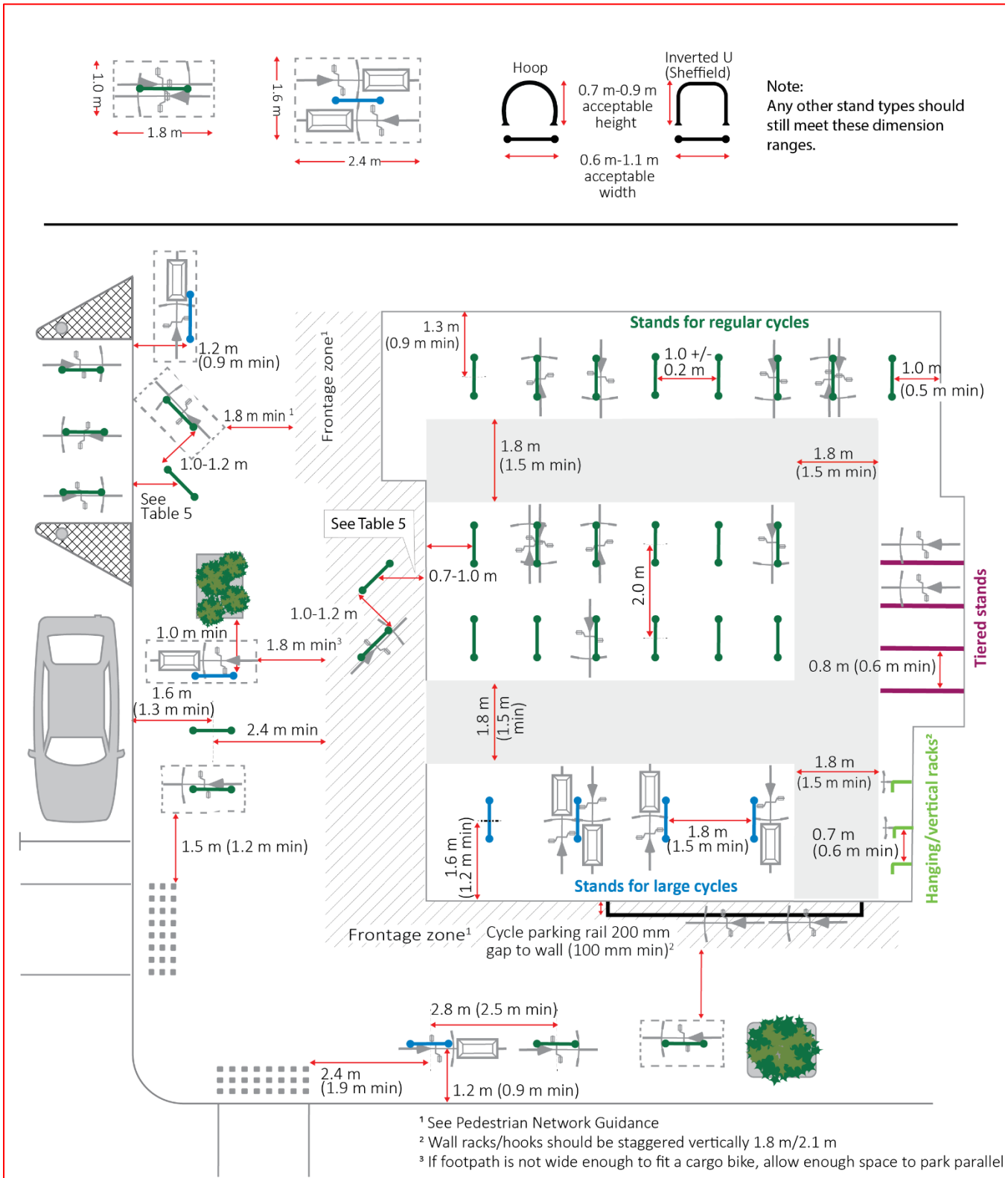


Table 7B – TR: Minimum distance from centre of stand to a wall or kerb

Use this Table when Figure 5A refers to "See Table 5".

	Orientation				
	Parallel				Perpendicular
	0°	22.5°	45°	67.5°	90°
With clearance	0.9 m	1.0 m	1.1 m	1.2 m	1.3 m

<u>Without clearance</u>	<u>0.5 m</u>	<u>0.6 m</u>	<u>0.7 m</u>	<u>0.8 m</u>	<u>0.9 m</u>
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Note: source of Figure 1-TR and Table 7B-TR is the Cycling parking planning and design: Cycling Network Guidance Technical Note (Version 3, 9 December 2022) Figure 16: cycle parking envelopes, typical stand dimensions and layouts, and Table 5: minimum distance (in metres) from centre of stand to a wall or kerb.

TR-S4	On-site pedestrian, cycling and micromobility paths	
1. On-site pedestrian, cycling and micromobility paths must achieve the following: <ul style="list-style-type: none"> a. Provide pedestrian access from the road to each residential unit on the site; b. Provide cycling and micromobility access from the road to each building on the site that provides cycle and micromobility device storage; c. Connect to minimum width of 1.8m at the road boundary; d. Have a minimum formed width of 1.2_m or, for paths accessing more than 1 residential unit, 1.5_m; and e. If stairs are necessary between cycling and micromobility storage and the legal road, a <u>wheeling</u> ramp at least 300_mm wide on one side of the stairs must be provided. 		
TR-S5	Classification of driveways	
1. Driveways must be classified according to Table 8 – TR: Classification of Driveways.		

Table 8 – TR: Classification of driveways

Driveway use	Resulting driveway classification
<ol style="list-style-type: none"> <u>1.</u> 1-30 light vehicle movements per day*; or <u>2.</u> No more than 2 heavy vehicle movement per week** 	Driveway Level 1
<ol style="list-style-type: none"> <u>3.</u> 31-60 light vehicle movements per day*; or <u>4.</u> 3-4 heavy vehicle movements per week** 	Driveway Level 2
<ol style="list-style-type: none"> <u>5.</u> 61-200 light vehicle movements per day*; or <u>6.</u> 5-8 heavy vehicle movements per week** 	Driveway Level 3
<ol style="list-style-type: none"> <u>7.</u> 201 or more light vehicle movements per day*; or <u>8.</u> 9 or more heavy vehicle movements per week** 	Specific design as part of High Trip Generating activity consideration

* Vehicle movements per day must be assessed as average vehicle movements per day, averaged over a full seven day week;

** Vehicle movements per week must be assessed as average vehicle movements per week, averaged over a full 52 week year.

TR-S6	Design of driveways
<p>1. The minimum design vehicle used for a driveway must be a 4.91_m x 1.87_m vehicle (85th percentile vehicle); and</p> <p>2. Driveways must be designed to achieve the design speeds, minimum widths, maximum gradients and seal requirements in Table 9 – TR: Design of Driveways; <u>and</u></p> <p>3. <u>Where driveways will result in any building served from the driveway to be more than 70 m away from a legal road, the full length of the driveway must provide unhindered access for fire appliances in accordance with the vehicle access standards in the NZ Fire Service Firefighting Water Supplies Code of Practice SNA PAS 4509:2008.</u></p>	

Table 9 – TR: Design of driveways

Classification	Design speed (km/h)	Maximum gradient	Minimum Width (m)				
			Footpath	Cycling and micromobility	Vehicles (must provide unhindered vehicle access)	Infrastructure berm	Overall legal width
Driveway Level 1	<ul style="list-style-type: none"> • 10 	<ul style="list-style-type: none"> • 25% (1 : 4) • 2_m transition length for changes in grade >12.5% (1 : 8) • For sites where the driveway rises to meet the road, 5% (1 : 20) maximum gradient within 6_m of road boundary 	<ul style="list-style-type: none"> • Shared in vehicle lane 	<ul style="list-style-type: none"> • Shared in vehicle lane 	<ul style="list-style-type: none"> • 1 x 3.0 • Passing bays at 50_m maximum spacing; • Clear line of sight between passing bays 	<ul style="list-style-type: none"> • Shared in vehicle lane 	<ul style="list-style-type: none"> • 3.0 + any passing bays
Driveway Level 2	<ul style="list-style-type: none"> • 10 	<ul style="list-style-type: none"> • 20% (1 : 5) • 2_m transition length for changes in grade >12.5% (1 : 8) • For sites where the driveway rises to meet the road, 5% 	<ul style="list-style-type: none"> • 1 x 1.0 	<ul style="list-style-type: none"> • Shared in vehicle lane 	<ul style="list-style-type: none"> • 2 x 3.0 for the first 6.0 m from the road boundary; • 1 x 3.0 for the rest of the driveway; • Passing bays at 50_m maximum spacing; • Clear line of sight between passing bays 	<ul style="list-style-type: none"> • Shared in vehicle lane 	<ul style="list-style-type: none"> • 4.0 + any passing bays

		(1 : 20) maximum gradient within 6_m of road boundary					
Driveway Level 3	• 20	<ul style="list-style-type: none"> • 16% (1 : 6.25) • 2m transition length for changes in grade >12.5% • (1 : 8) • For sites where the driveway rises to meet the road, 5% • (1 : 20) maximum gradient within 6_m of road boundary 	• 1 x 1.5	• Shared in vehicle lane	• 2 x 3.0	• 1 x 1.0	• 8.5

TR-S7 Design requirements for on-site vehicle parking, circulation and manoeuvring

1. Where provided on a site, car parking spaces and associated circulation and manoeuvring areas must be designed to accommodate a 4.91_m x 1.87_m vehicle (85th percentile vehicle) as the minimum design vehicle, with 300mm clearance per side to obstructions and a minimum outside turning radius of 5.8_m;

2. If the site is located in an area where no fully reticulated water supply system is available, or the development will result in any building served from the driveway to be more than 70 m away from a legal road with a fully reticulated water supply system including hydrants, then circulation and manoeuvring areas must:

- a. Have a minimum unobstructed width of 4 m;
- b. Have a minimum formed width of 3.5 m;
- c. Have a minimum height clearance of 4 m;
and
- d. Be designed to be free of obstacles that could hinder access for emergency vehicles;

These TR-S7.2 standards override other vehicle access, circulation and manoeuvring standards to the extent of any conflict.

3. Car parking spaces must:

- a. Comply with the minimum dimensions of Figure 5 – TR: Parking and Table 10 – TR: Parking Space Dimensions;

<ul style="list-style-type: none"> b. Have a maximum gradient of 5% (1 : 20) in any direction; and c. Have a minimum height clearance of <u>its vehicle access and any associated garage door of:</u> <ul style="list-style-type: none"> i. 2.3 m <u>for spaces where the general public have access; and</u> ii. <u>2.1 m for all other spaces;</u> and d. Have a minimum height clearance of its vehicle access and any associated Commercial/Industrial 2.3 e. For residential on-site car parking spaces, be electric vehicle-charging-ready by being serviced with an electrical cable conduit from the electricity supply to the edge of the <u>carpark car parking area;</u> <p>4. <u>Blind Car parking</u> aisles <u>closed at one end</u> must extend at least 1_m <u>at the closed end</u> beyond the last parking space they provide access to;</p> <p>5. On-site circulation and manoeuvring areas must have a maximum gradient of 12.5% (1 : 8);</p> <p>6. On-site circulation and manoeuvring areas must be provided so that vehicles can enter and exit the site in a forward direction, except where:</p> <ul style="list-style-type: none"> a. The site has no more than three parking spaces; b. Any reversing would be for a distance no more than 30_m; and c. The road is a Local Street; <p>7. On-site circulation and manoeuvring areas must not be located on:</p> <ul style="list-style-type: none"> a. The public road reserve; or b. Areas provided for parking, loading or storage; and <p>8. On-site parking, circulation and manoeuvring must not include ramps, turntables, lifts or stackers.</p> <p>Note: Where parking is provided, the New Zealand Building Code D1/AS1 New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001) sets out requirements for the number and design of parking spaces for people with disabilities and for accessible routes from the parking spaces to the associated activity or road.</p>	
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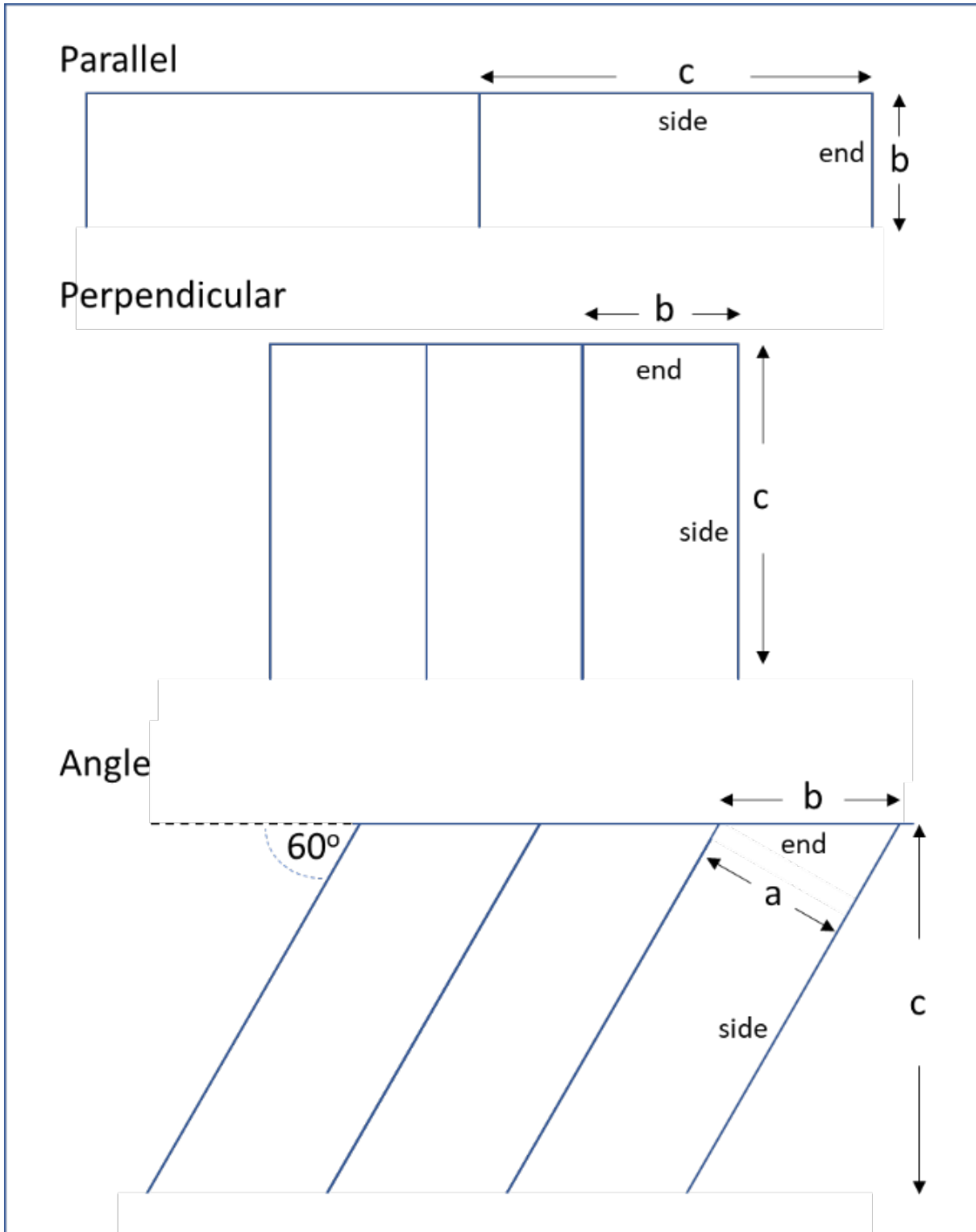
Table 10 – TR: Parking space dimensions

Parking space type	Dimension a* (m)	Dimension b* (m)	Dimension c* (m)	Minimum aisle width (m)
Parallel (permanently unobstructed sides and ends)	-	2.1	6.0	3.6

Additional clearance requirement for each obstructed side or end (e.g. fence, wall, column)	-	+0.3	+0.3	
Perpendicular (permanently unobstructed sides and ends)	-	2.5	5.0	6.2
Additional clearance requirement for each obstructed side or end (e.g. fence, wall, column or inside garage)	-	+0.3	+0.3	
Additional clearance requirement both ends obstructed (e.g. inside garage)	-	-	+0.4	
Additional aisle width for accessing garage door that is less than 2.7m wide				+0.8
Angle - 60 degrees (permanently unobstructed sides)	2.5	2.9	5.1	4.6
Additional clearance requirement for each obstructed side (e.g. fence, wall, column)	+0.3	+0.33	-	
Additional clearance requirement if one end obstructed (e.g. fence, wall, column)			+0.6	

*Dimensions a, b and c are shown in Figure 5 - TR: Parking

Figure 5 – TR: Parking



TR-S8	Provision of on-site loading areas
<p>1. 2. No on-site loading areas are required for buildings with a building footprint [OR gross floor area] of less than 450_m²; and</p> <p>2. 4. At least one on-site loading area must be provided for on a site with one or more buildings</p>	

with that have a building footprint [OR gross floor area] of 450_m ² or more; and	
TR-S9	Design requirements for on-site loading, circulation and manoeuvring
<p>7. On-site loading and associated circulation and manoeuvring areas must be designed to accommodate an 8.0_m x 2.5_m medium rigid truck as the minimum design vehicle, with 300 mm clearance per side to obstructions and a minimum outside turning radius of 10.0_m;</p> <p>8. Loading areas must have a minimum height clearance of 4.5_m; and</p> <p>9. Loading, circulation and manoeuvring areas must not be located on the public road reserve.</p>	

<u>INF-S15-TR-S10</u>	<u>Connection to roads – sites with pedestrian, cycling and micromobility site access only</u>
<p>1. <u>For sites with frontage to a road:</u></p> <p style="padding-left: 20px;">a. <u>The direct legal road frontage must have a width of at least 1.8m.</u></p> <p>2. <u>For sites with no frontage to a road:</u></p> <p style="padding-left: 20px;">a. <u>Access must be provided to a road via an access easement with a width of at least 1.8m.</u></p>	
<u>INF-S16-TR-S11</u>	<u>Connection to roads - driveways</u>
<p>1. <u>The number of vehicle crossings per site must not exceed one;</u></p> <p>2. <u>The minimum design vehicle for a vehicle crossing is a 5.20 m x 1.94 m vehicle (99th percentile vehicle);</u></p> <p>3. <u>For Urban Roads, the length of a vehicle crossing parallel to the road must be no more than:</u></p> <p style="padding-left: 20px;">a. <u>3 m for Driveways Level 1; or</u></p> <p style="padding-left: 20px;">b. <u>6 m for Driveways Level 2 and 3.</u></p> <p>4. <u>For Rural Roads:</u></p> <p style="padding-left: 20px;">a. <u>The vehicle crossing must be sealed between the road carriageway and the property boundary; and</u></p> <p style="padding-left: 20px;">b. <u>The entry and exit turn radius of the vehicle crossing must each be at least 9.0 m;</u></p> <p>5. <u>Where the vehicle crossing incorporates a pedestrian, cycling or micromobility path, the crossfall of the path must meet not exceed 2.5% (1 : 40);</u></p> <p>6. <u>The vehicle crossing for a site with frontage to two or more roads must connect to the road with the lower number of vehicle movements per day;</u></p> <p>7. <u>Vehicle crossings must not be located within 10m of an intersection tangent point as shown as the heavy line between Points A and B in Figure 2 – INF: Vehicle Crossings in Relation to Intersections. In addition, vehicle crossings for Driveways Level 2 and 3 must not be located at the top of a T-intersection as shown as the heavy line between Points C and D in Figure 2 – INF: Vehicle Crossings in Relation to Intersections;</u></p> <p>8. <u>The distance from vehicle crossings to railway crossings must be at least 30 m, measured from the nearest edge of the vehicle crossing to the nearest railway track;</u></p>	

<p>9. <u>Connections to the road reserve must provide clear visibility splays for pedestrian safety from 1.0 m above ground level as shown in Figure 3 – INF: Driveway Visibility Splays and Sight Distances. Driveways Levels 2 and 3 must provide the visibility splay on the left hand exit side only. For Driveways Level 1 where the driveway is within 2.0 m of the adjoining property boundary, the visibility splay is not required if a 75 mm high speed hump is installed 1.0 m from the road boundary;</u></p> <p>10. <u>Sight distances from vehicle crossings as shown in Figure 3 – INF: Driveway Visibility Splays and Sight Distances; and</u></p> <p>11. <u>Must comply with Table 5 – INF: Minimum Sight Distances at Vehicle Crossings.</u></p> <p><u>Note: Limited Access Roads may have additional or different requirements under the Government Roding Powers Act 1989.</u></p>	
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Figure 2 – INFTR: Vehicle Crossings in Relation to Intersections

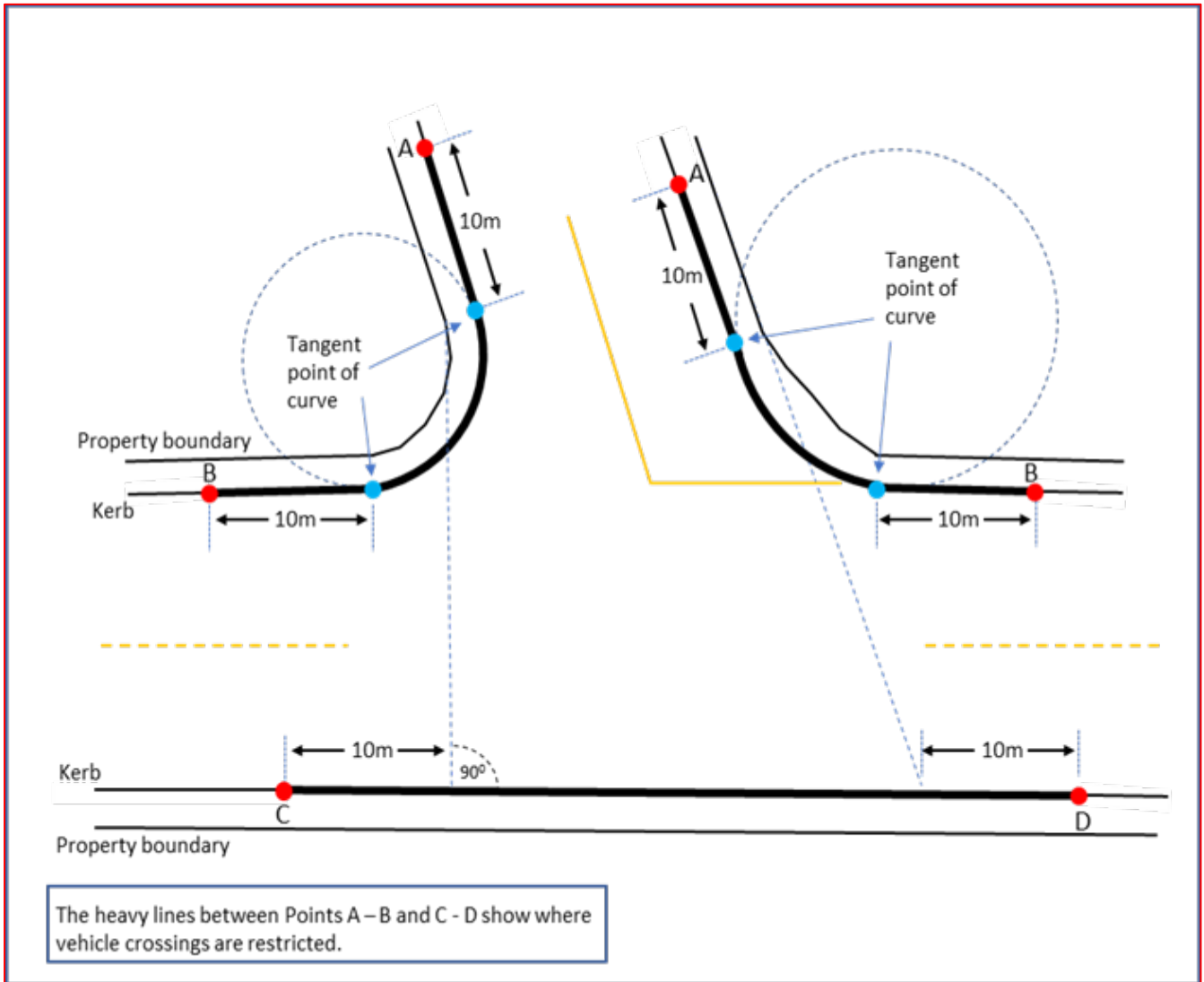


Figure 3 – INFTR: Driveway Visibility Splays and Sight Distances

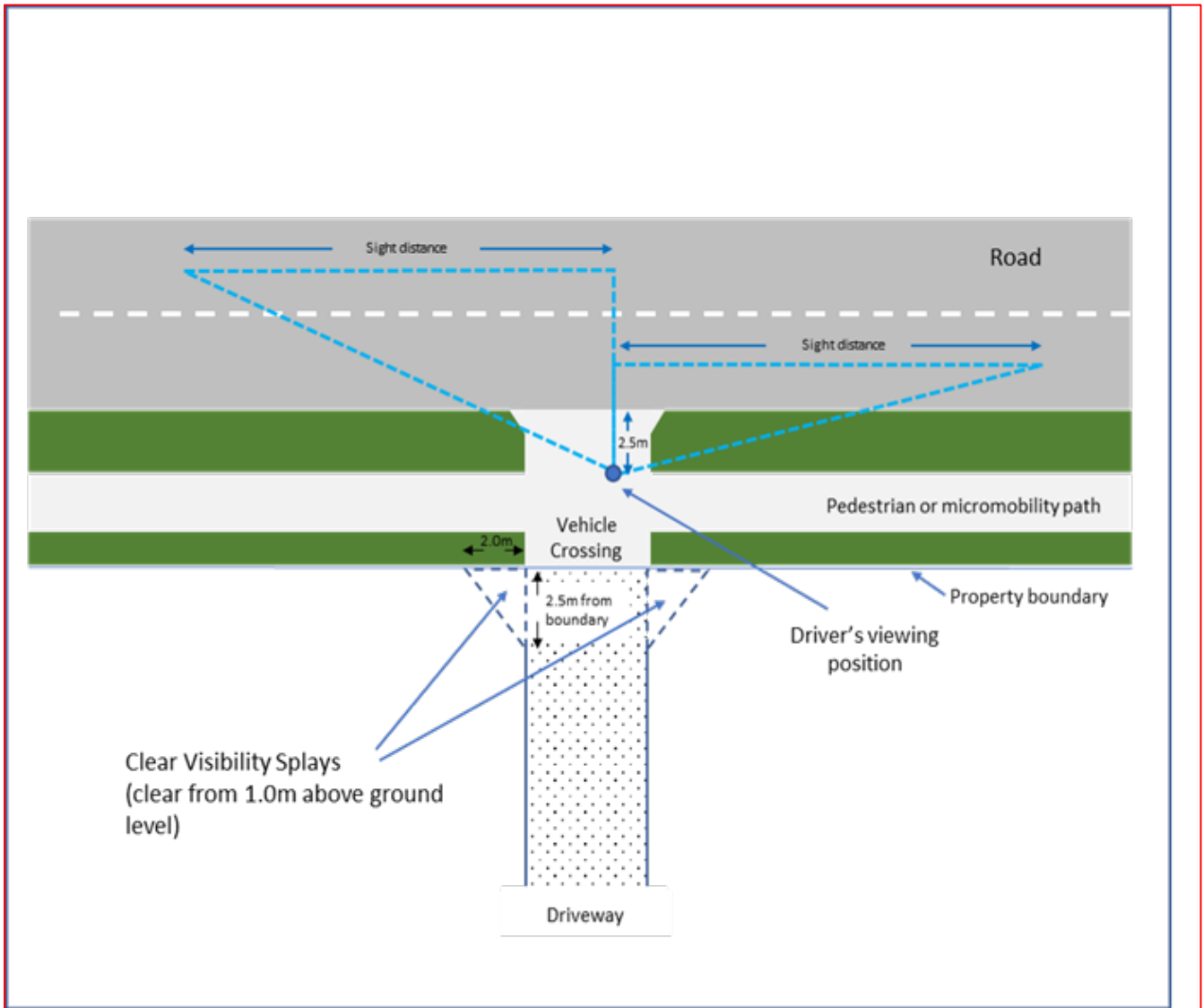


Table 5 – INFTR: Minimum Sight Distances at Vehicle Crossings

<u>Frontage speed limit</u> <u>(km/h)</u>	<u>Driveway level 1</u> <u>Minimum sight distance (m)</u> <u>(see Figure 3 – INF: Driveway</u> <u>Visibility Splays and Sight</u> <u>Distances)</u>	<u>Driveways levels 2 & 3</u> <u>Minimum sight distance (m)</u> <u>(see Figure 3 – INF: Driveway</u> <u>Visibility Splays and Sight</u> <u>Distances)</u>
<u>30</u>	<u>25</u>	<u>25</u>
<u>40</u>	<u>30</u>	<u>35</u>
<u>50</u>	<u>40</u>	<u>45</u>
<u>60</u>	<u>55</u>	<u>65</u>
<u>70</u>	<u>70</u>	<u>85</u>
<u>80</u>	<u>96</u>	<u>105</u>

He Rohe Kāinga Mātoru-Waenga

Medium Density Residential Zone

MRZ-S3	Height in relation to boundary
<p>3. Where the boundary forms part of a legal right of way, entrance-access strip, access site-allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, entrance-access strip, access site-allotment, or pedestrian access way.</p>	

He Rohe Wharenoho Mātoru-Nui

High Density Residential Zone

HRZ-S3	Height in relation to boundary
<p>5. 4. In relation to 1, 2 and 3 above, where the boundary forms part of a legal right of way, entrance-access strip, access site-allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, entrance-access strip, access site-allotment, or pedestrian access way.</p>	

He Rohe Tuawhenua Whānui

General Rural Zone

GRUZ-S6	Height in relation to boundary within the Makara Beach and Makara Village Precinct
<p>3. Where the site abuts a boundary shared with an access strip, access lot, public accessway or right of way, the measurement must be taken from the furthest boundary.</p> <p><u>Where the boundary forms part of a legal right of way, access strip, access allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, access strip, access allotment, or pedestrian access way.</u></p> <p>This standard does not apply to:</p> <ul style="list-style-type: none"> a. A boundary with a road; b. Solar panel and heating components attached to a building provided these do not exceed the height in relation to boundary by more than 500mm; and 	

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| <p>c. Satellite dishes, antennas, aerials, chimneys, flues, architectural or decorative features (e.g., finials, spires) provided that none of these exceed 1m in diameter and do not exceed the height in relation to boundary by more than 3m measured vertically.</p> |
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He Rohe Hōhipera

Hospital Zone

HOSZ-S2	Height in relation to boundary
<p>2. In relation to the above, where the boundary forms part of a legal right of way, entrance-access strip, access site-allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, entrance-access strip, access site-allotment, or pedestrian access way.</p>	

He Rohe Mātātoru

Tertiary Education Zone

TEDZ-S3	Height in relation to boundary
<p>2. In relation to the above, where the boundary forms part of a legal right of way, entrance-access strip, access site-allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, entrance-access strip, access site-allotment, or pedestrian access way.</p>	