

Attachment 2: Recommended TRA Chapter

Transport (TRA)

Overview Issues

The transport network in Whangarei is essential in facilitating the accessibility and efficient functioning of the District and the Region. The transport network includes public and private roads, access ways, service lanes, active and public transport lanes and ~~on and off site~~ parking and loading areas. The network provides for the movement of people and goods throughout the District, creates a service corridor for network utility operators, and is a public space that people can identify with and use to interact. The transport vision for Whangarei is a safe and efficient transport network that promotes a range of transport choices and supports the vitality, ~~and liveability~~ and connectivity of the District and its communities.

Historic scattered patterns of development have led to a high dependency on private motor vehicles for transportation needs and have caused inefficiencies in providing transport network improvements. Similarly, ad hoc development has often led to fragmented and inefficient transport infrastructure. The interrelationship between transport and land use planning is therefore fundamental to achieving Whangarei's transport vision.

Whangarei's future growth expectation is for consolidated urban development. Planning for growth in a consolidated manner allows transport priorities to be established and transport infrastructure to be more efficiently provided. Consolidated development and responsible land use planning can also promote a variety of transport methods, including walking, cycling and public transport, and can help reduce the reliance on private motor vehicles within the District.

While the District Plan promotes alternative modes of transportation and reduced dependency on private motor vehicles, ~~there are positive effects in providing~~ mobility through private motor vehicle usage will continue to be provided for. Therefore, it is important to establish clear standards and expectations for the transport network, and promote its safe, efficient, accessible and convenient use. Where potential future transport infrastructure needs are identified, indicative roads and strategic road protection areas are mapped to provide for and safeguard future transport needs.

The establishment, maintenance and use of transport network assets such as parking areas, footpaths, cycleways and roads can cause adverse effects on the surrounding environment such as reducing amenity values, increasing impervious surfaces and increasing noise levels. The transport network and transport infrastructure can contribute positively or negatively to an area. Therefore, urban design should be considered when constructing transport network assets while also balancing Whangarei's practical transportation needs.

The management of Pparking and loading management is important ~~crucial~~ to the safe and efficient functioning of the transport network. It is important that parking and loading are ~~is~~ provided and managed in a manner that supports the efficient use of land, ~~and~~ is compatible with surrounding amenity, and is flexible for diverse living choices. Car parking can also be managed to have an influence on reducing private motor vehicle use.

The safe and efficient operation of the transport network can be adversely affected by adjacent land use activities, development and subdivision. Activities or subdivisions which may result in too many accesses or may generate higher amounts of traffic than anticipated must be well integrated with the transport network to manage adverse effects.

Transport (TRA)

Objectives	
TRA-O1 – Transport Network	Provide and maintain a safe, efficient, accessible and sustainable transport network while avoiding, remedying or mitigating adverse effects on the environment, adjoining land uses and the surrounding amenity and character.
TRA-O2 – Integrate Transport and Land Use Planning	Integrate land use and transport planning to ensure that land use activities, development and subdivision maintain the safety and efficiency of the transport network.
TRA-O3 – Active and Public Transport	Encourage and facilitate active transport and public transportation.
TRA-O4 – Safety and Efficiency	Provide suitable and sufficient vehicle crossings, access, parking, loading and manoeuvring areas that <u>do not adversely affect</u> contribute to the safe, <u>effective</u> efficient functioning of the transport network.
TRA-O5 – Urban Design	Design and locate transport infrastructure in a manner <u>that is consistent with the</u> which contributes to amenity and quality urban design outcomes <u>anticipated for the zone</u> .
TRA-O6 – Future Growth	Ensure that future growth can be supported by appropriate transport infrastructure.

Policies	
TRA-P1 – Design, Construction and Maintenance	<p>To design, construct and maintain roads, cycleways, walkways, <u>public transport infrastructure</u>, car parks and pedestrian access in a manner that:</p> <ol style="list-style-type: none"> 1. Provides a safe and efficient transport network. 2. Enables and balances the <u>efficient</u> provision of network utility infrastructure <u>while providing for suitable</u> and streetscape amenity including lighting and landscaping. 3. Has regard to the future capacity and growth of the transport network. 4. Is multi-modal and <u>provides for the needs of all users, as appropriate for the surrounding environment and the function of the road within the transport network hierarchy</u> accommodates a range of users where appropriate. 5. Avoids no exit roads where through roads and connected networks can be designed, particularly in commercial and industrial areas. 6. Provides pedestrian <u>and cyclist</u> access to connect roads and public spaces where they would offer a <u>significantly</u> shorter walking route. 7. Ensures access to multiple allotments is constructed to an acceptable standard and vested as a public road where appropriate.

Transport (TRA)

	8. Appropriately manages stormwater to ensure the risk of flooding is not increased and water quality is maintained.
TRA-P2 – Roads	<p>Only allow new public roads or major roading upgrades to public roads where the location and design of the road:</p> <ol style="list-style-type: none"> 1. Provides for the needs of all users, as appropriate for the surrounding environment and the function of the road within the transport network hierarchy. 2. Minimises adverse effects on surrounding sensitive activities, including severance effects and streetscape amenity. 3. Maintains or enhances the safety and efficiency of the transport network. 4. Does not compromise, and where possible provides, connections to surrounding areas, particularly for buses, pedestrians, and cyclists. 5. Provides sufficient area for landscaping and tree planting in appropriate areas while balancing the need to maintain safety and provide underground services and footpaths. 6. Contributes to positive urban design outcomes within the Urban Area.
TRA-P3 – Transport Network Capacity	<p>To manage the scale and design of subdivision and development by:</p> <ol style="list-style-type: none"> 1. Ensuring that there is sufficient capacity within the transport network to cater for the proposal. 2. <u>Requiring subdividers and developers to meet the costs of any</u> Requiring upgrades and/or extensions to the transport network which are <u>directly</u> attributed to <u>measurable</u> the impacts of the subdivision or development at the cost of the subdivider or developer.
TRA-P4 – Integrated Transport Assessments	To avoid remedy or mitigate adverse effects on the adjacent and wider transport network by requiring Integrated Transport Assessments for large scale developments and subdivisions.
TRA-P5 – Active Transport	To promote active transport by facilitating cycle and pedestrian connectivity within new subdivisions and developments and, where appropriate, to existing developments, reserves and other public spaces.
TRA-P6 – Dust Nuisances	To avoid dust nuisances in the Urban Area and improve amenity and accessibility by implementing formation standards for access and parking whilst managing stormwater.
TRA-P7 – Access and Intersections	<p>To ensure that access and intersections are designed and located so that:</p> <ol style="list-style-type: none"> 1. Good visibility is provided. 2. Vehicle manoeuvres <u>and public and active transport modes</u> are <u>appropriately</u> accommodated.

Transport (TRA)

	<p>3. They are sufficiently separated so as not to adversely affect the free flow of traffic.</p>
TRA-P8 – Vehicle Crossings and Access	<p>To require vehicle crossings and associated access to be designed and located to protect amenity and ensure safe and efficient movement to and from sites for vehicles, pedestrians and cyclists by managing:</p> <ol style="list-style-type: none"> 1. Separation distances between vehicle crossings. 2. Separation distances from intersections, railway crossings and pedestrian crossing facilities. 3. Vehicle crossing sight distances. 4. The number of vehicle crossings per site. 5. The design, formation and construction standards of crossings and access.
TRA-P9 – Car Parking	<p>To <u>specify minimum on-site car parking space requirements while allowing</u> allow for reduced on-site parking spaces where appropriate based on:</p> <ol style="list-style-type: none"> 1. Surrounding transport infrastructure. 2. Proximity to the City Centre, <u>Local Commercial Centre</u> or <u>Neighbourhood Commercial Centre</u> Zones. 3. The provision of additional amenities on-site. 4. The ability to mitigate car parking spillover effects.
TRA-P10 – Parking and Loading	<p>To require parking and loading areas and access to be designed and located to ensure safe movement on-site and safe ingress and egress of vehicles, pedestrians and cyclists by managing:</p> <ol style="list-style-type: none"> 1. Parking and loading space dimensions and gradient. 2. The location and identification of car parking and loading spaces. 3. Manoeuvring space within the site. 4. The formation and construction standards of parking areas. 5. The design and layout of parking areas.
TRA-P11 – Bicycle Parking	<p>To require <u>safe and secure</u> bicycle parking spaces and end-of-trip facilities for activities with high numbers of employees, students or residents, <u>except where not appropriate</u>.</p>
TRA-P12 – Charging Stations	<p>To reduce emissions and enhance the sustainability of Whangarei’s transport network by <u>requiring providing</u>:</p> <ol style="list-style-type: none"> 1. Electric vehicle charging stations where high numbers of on-site car parking spaces are provided. 2. Underground electrical conduit for new large car parking areas.
TRA-P13 – Landscaping	<p>To require landscape planting where <u>uncovered</u> on-site car parking is provided to improve visual amenity, <u>accessibility navigability</u> and stormwater management.</p>
TRA-P14 – Indicative Roads and Strategic	<p>To identify indicative roads and strategic road protection areas based on long term growth projections, and to require development and</p>

Transport (TRA)

Road Protection Areas	subdivision to have regard to effects on any indicative road or strategic road protection area.
TRA-P15 – Transport Network Hierarchy	To identify and apply a transport network hierarchy to ensure that the functions of transport network assets are recognised and protected in the management of land use and subdivision.
<u>TRA-PNew1– Rail Level Crossings</u>	<u>To support the safe, effective and efficient operation of the transport network by discouraging new vehicle and new pedestrian rail level crossings.</u>

Rules

TRA-R1	Any Activity Not Otherwise Listed in This Chapter	
All Zones	Activity Status: <u>Permitted</u>	
	Where:	
	1. Resource consent is not required under any rule of the District Plan.	
	2. The activity is not prohibited under any rule of the District Plan.	

Parking

TRA-R2	Required Spaces and Dimensions	
All Zones	Activity Status: <u>Permitted</u>	Activity Status when compliance not achieved: <u>Restricted Discretionary</u>
	Where:	<u>Matters of discretion:</u>
	1. All off-street car parking spaces, loading spaces, bicycle parking spaces, end-of-trip facilities and associated manoeuvring areas are provided and constructed in accordance with <u>TRA Appendix 1</u> .	1. <u>Location, size and design of parking and loading areas.</u>
	<u>Note:</u>	2. <u>The number of parking and loading spaces.</u>
	1. <u>Lighting requirements for parking and loading spaces are contained within the LI Chapter.</u>	3. <u>Scale, management and operation of the activity as it relates to its demand for parking.</u>
		4. <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u>
TRA-R3	Location and Identification	
All Zones	Activity Status: <u>Permitted</u>	Activity Status when compliance not achieved: <u>Restricted Discretionary</u>
	Where:	<u>Matters of discretion:</u>
	1. All car parking spaces and loading spaces are:	1. <u>Location, size and design of parking and loading areas.</u>

Transport (TRA)

<ul style="list-style-type: none"> a. Not located on any footpath, access, manoeuvring or outdoor living court area. b. Not located within any Strategic Road Protection Area. c. Permanently marked or delineated, except <u>where they are: in the case of any</u> <ul style="list-style-type: none"> i. <u>Associated with a residential unit which is not part of a multi unit development.</u> ii. <u>Associated with the loading area for the fuel delivery vehicle or car parking spaces at a pump of a service station.</u> iii. <u>Located in the Rural Production Zone, Natural Open Space Zone or Open Space Zone.</u> 	<ul style="list-style-type: none"> 2. <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u> 	
<p>TRA-R4</p>	<p>Gradient</p>	
<p>All Zones</p>	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ul style="list-style-type: none"> 1. All car parking spaces, loading spaces and associated manoeuvring areas do not have a gradient steeper than: <ul style="list-style-type: none"> a. 1 in 16 for surfaces at 90⁰ to the angle of the parking. b. 1 in 20 for surfaces parallel to the angle of the parking. 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ul style="list-style-type: none"> 1. <u>Location and design of parking, loading and manoeuvring areas.</u> 2. <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u>

Vehicle Crossings and Access

<p>TRA-R5</p>	<p>Design and Location</p>	
<p>All Zones</p>	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ul style="list-style-type: none"> 1. <u>Any The vehicle crossing and access is are provided and constructed in accordance with TRA Appendix 2.</u> 	<p>Activity Status when compliance not achieved <u>with TRA-R5.1 – 3: Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p>

Transport (TRA)

	<ol style="list-style-type: none"> The vehicle crossing is not fronting a <u>state highway-National or Regional road</u>. Any unused vehicle crossings are reinstated to match the existing footpath and kerbing. <u>The vehicle or pedestrian crossing is not over a railway corridor.</u> <p>Note:</p> <ol style="list-style-type: none"> A vehicle crossing permit may be required. 	<ol style="list-style-type: none"> <u>Location, size and design of vehicle crossings and access.</u> <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u> <u>The extent to which the safety and efficiency of railway and road operations will be adversely affected.</u> <p><u>Activity Status when compliance not achieved with TRA-R5.4: Non-Complying</u></p>
TRA-R6 Setbacks		
All Zones	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ol style="list-style-type: none"> Any <u>The</u> new vehicle crossing is located at least: <ol style="list-style-type: none"> 30m from a railway level crossing. 8m from a dedicated pedestrian crossing facility (e.g. <u>including</u> pedestrian crossing, mid-block pedestrian signals, refuge islands and traffic signalled intersections). 2m from a separate vehicle crossing. 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ol style="list-style-type: none"> <u>Location, size and design of vehicle crossings and access.</u> <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u>
Manoeuvring Space		
TRA-R7 Requirements for On-Site Manoeuvring Space		
All Zones	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ol style="list-style-type: none"> All car parking, loading spaces and associated manoeuvring areas provide sufficient on-site manoeuvring space: <ol style="list-style-type: none"> To ensure that no vehicle is required to reverse either onto, or off, the site, except for front sites where: 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ol style="list-style-type: none"> <u>Location, size and design of vehicle crossings, manoeuvring and access.</u> <u>Location, size and design of parking and loading spaces.</u> <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u>

Transport (TRA)

- i. Access is gained from an Access or Low Volume Road; and
 - ii. Less than 3 car parking spaces are required under TRA Appendix 1 on-site.
- b. That enables vehicles occupying a car parking space or loading space to have ready access to the road at all times, without needing to move any other vehicles occupying other car parking spaces or loading spaces, except for:
- i. Parking associated with an individual residential unit.
 - ii. Staff parking areas associated with an individual activity; or
 - iii. Parking for vehicles being serviced at a Repair and Maintenance Service or Rural Centre Service Activity.
- c. To ensure that ~~that~~ vehicles using or waiting to use fuel dispensers, ticket vending machines, remote ordering facilities and devices, entrance control mechanisms, or other drive-through facilities do not queue into the adjoining road or obstruct entry to or exit from the site.
- d. For every car parking space, to accommodate the 90th percentile car tracking curves in Figure TRA 1 so that only one reverse manoeuvre is required to manoeuvre in or out of any car parking space.
- e. For every loading space, to comply with the tracking curves set out in the NZTA guidelines: RTS 18: NZ on-road tracking curves for heavy vehicles

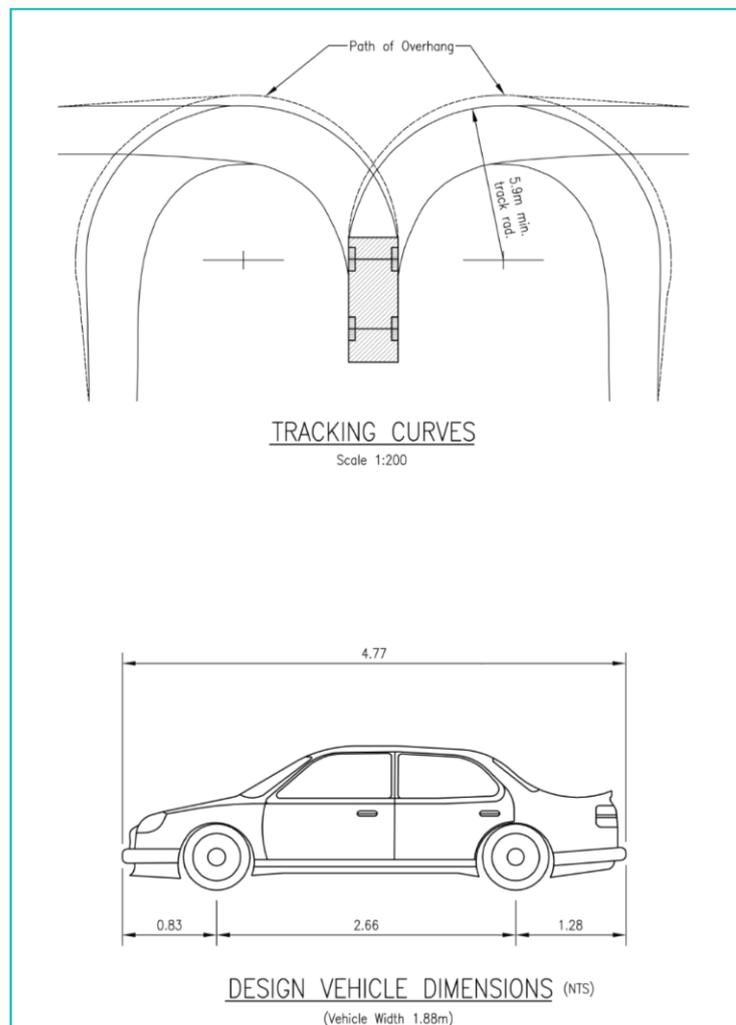
Transport (TRA)

(2007) so that only one reverse manoeuvre is required to manoeuvre in or out of any loading space.

Note:

1. *Acceptable means of compliance with access, parking and manoeuvring design can be found in the Whangarei District Council Engineering Standards.*

Figure TRA 1: Standard Car Tracking Curve



Note: The turning radius shown is the minimum and is not appropriate for speeds greater than 10km/hr.

Transport (TRA)

Sealing and Formation Standards		
TRA-R8	Crossings, Access and Parking Areas	
All Zones	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ol style="list-style-type: none"> 1. Any Vehicle crossings accessing a sealed road <u>is</u> are sealed for <u>the first a minimum distance of 10m</u> from the road boundary to a standard not less than that of the adjoining road surface. 2. On-site access and parking areas (including loading and manoeuvring areas) are formed, drained and sealed with a permanent all-weather surface in the following instances: <ol style="list-style-type: none"> a. Urban Zone sites. b. Rural (Urban Expansion) Zone sites with an area less than 2,000m². c. Rural Village Zone sites. d. Strategic Rural Industries Zone sites. e. Any accessway serving more than 5 principal residential units. f. Where the gradient exceeds 12.5%. 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ol style="list-style-type: none"> 1. <u>Location, size and design of vehicle crossings, manoeuvring and access.</u> 2. <u>Location, size and design of parking and loading spaces.</u> 3. <u>The safety and efficiency of the transport network for vehicles, pedestrians and cyclists.</u> 4. <u>Dust nuisance.</u> 5. <u>Adverse effects on amenity.</u> 6. <u>Stormwater management.</u>
Strategic Road Protection Areas and Indicative Roads		
TRA-R9	Setbacks	
All Zones	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ol style="list-style-type: none"> 1. All buildings <u>and major structures (excluding minor buildings)</u> are set back at least 0.5m from a strategic road protection area as detailed in <u>TRA Appendix 4.</u> 2. Sensitive activities at ground floor are set back at least 2m from a strategic road protection area as detailed in <u>TRA Appendix 4.</u> 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ol style="list-style-type: none"> 1. <u>Location, size and design of buildings and activities.</u> 2. <u>The safety and efficiency of the transport network.</u> 3. <u>Effects on the future growth or expansion of the transport network.</u> 4. <u>Alternative routes to achieve the indicative road outcome.</u>

Transport (TRA)

3. No buildings or major structures (excluding minor buildings) are located within 10m of an indicative road as shown on the Planning ~~m~~Maps.

Landscaping

TRA-R10 Road Boundary Landscaping

All Zones except for the Heavy Industrial and Strategic Rural Industries Zones

Activity Status: ~~P~~

Where:

- ~~1. Any ground level car parking areas, except those associated with a residential activity, between a building and the road boundary provide a minimum 2m wide landscaping strip with a minimum plant height of 0.9m and a maximum plant height of 1.15m (excluding any tree planting) between the parking area and the road boundary (excluding any area for vehicle crossings).~~

Activity Status when compliance not achieved: ~~D~~

TRA-R11

Landscaping Within Parking Areas

All Zones except for the Heavy Industrial, Rural Production and Strategic Rural Industries Zones

Activity Status: Permitted

Where:

1. ~~Any~~ All uncovered ground level car parking areas:
 - a. Of 20 – 200 adjacent car parking spaces provides landscaping within or adjacent to the parking area to a minimum of ~~5~~40% of the total parking area.
 - b. Of more than 200 adjacent car parking spaces provides landscaping within or adjacent to the parking area to a minimum of ~~4~~7.5% of the total parking area.

Activity Status when compliance not achieved: Restricted Discretionary

Matters of discretion:

1. Location, size and design of parking and loading areas.
2. Safety and efficiency for vehicles, pedestrians and cyclists.
3. Amenity and character.
4. Stormwater management.
5. Navigability for pedestrians.
6. The number of parking spaces.

Transport (TRA)

TRA-R12	Tree Planting Within Parking Areas	
<p>All Zones except for the Heavy Industrial, Rural Production and Strategic Rural Industries Zones</p>	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ol style="list-style-type: none"> 1. <u>Any All uncovered ground level parking areas</u> where at least 20 car parking spaces are required by TRA Appendix 1 provides at least 1 tree <u>for every 20 car parking spaces and each tree:</u> <ol style="list-style-type: none"> a. <u>Is planted within or adjacent to the parking area.</u> b. <u>Has a minimum height of 4m above ground level at maturity.</u> c. <u>Has a minimum canopy shade coverage of 30m² at maturity within or adjacent to the parking area for every 20-car parking spaces with:</u> <ol style="list-style-type: none"> a. <u>A tree species with a minimum height of 4m and minimum canopy shade coverage of 30m² at 20 years.</u> b. <u>A root area with a minimum area of 9m² and a minimum dimension of 3m and minimum depth of 1m.</u> <p><i>Compliance Standards for Rules TRA-R110 – R12:</i></p> <ol style="list-style-type: none"> 1. <i>For the purpose of calculating total parking area, only the areas used for parking spaces and access aisles along parking spaces shall be included. Not included in the parking area calculation are service roads, pedestrian footpaths, loading/unloading areas, and perimeter landscape areas.</i> 2. <i>TRA-R10-R12 do not apply to multi-storey standalone car parking facilities.</i> <p><i>Note for Rules TRA- R110 – R12:</i></p> <ol style="list-style-type: none"> 1. <i>Further guidance on best practice landscaping in car parks is contained in Whangarei’s Urban Design Guidelines.</i> 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ol style="list-style-type: none"> 1. <u>Location, size and design of parking and loading areas.</u> 2. <u>Safety and efficiency for vehicles, pedestrians and cyclists.</u> 3. <u>Amenity and character.</u> 4. <u>Stormwater management.</u> 5. <u>Navigability for pedestrians.</u> 6. <u>The number of parking spaces.</u>

Transport (TRA)

Electric Vehicle Charging Stations		
TRA-R13	Number Requirements	
All Zones	<p>Activity Status: <u>Permitted</u></p> <p>Where:</p> <ol style="list-style-type: none"> Any <u>All</u> parking areas, except those associated with a residential activity, where 50 or more car parking spaces are required by <u>TRA</u> Appendix 1 provides at least 1 electric vehicle charging station per every 50 required car parking spaces. <p><i>Compliance Standard:</i></p> <ol style="list-style-type: none"> Any electric vehicle parking space associated with the charging stations counts towards the total number of required parking spaces in <u>TRA</u> Appendix 1. 	<p>Activity Status when compliance not achieved: <u>Restricted Discretionary</u></p> <p><u>Matters of discretion:</u></p> <ol style="list-style-type: none"> <u>Location, size and design of parking and loading areas.</u> <u>The number of parking spaces.</u> <u>The provision of electric vehicle charging stations and supporting infrastructure.</u>
Subdivision		
TRA-R14	Subdivision	
All Zones	<p>Activity Status: <u>Controlled</u></p> <p>Where:</p> <ol style="list-style-type: none"> The site does not contain an indicative road or a strategic road protection area. 	<p>Activity Status when compliance not achieved: <u>Discretionary</u></p>
All Zones	<ol style="list-style-type: none"> Subdivision results in all sites having access and crossings which comply with TRA-R5 – R6. 	
Rural (Urban Expansion) Zone	<ol style="list-style-type: none"> Subdivision results in: <ol style="list-style-type: none"> A shared access which serves no more than 3 allotments or 3 principal residential units. No more than 1 right of way being created. 	
All Zones except for the Rural (Urban Expansion) Zone	<ol style="list-style-type: none"> Subdivision results in a shared access which serves no more than 8 allotments or 8 principal residential units. 	

Transport (TRA)

Matters of Control:

1. Effects on the road network ~~The need for forming, upgrading or extending roads in the vicinity due to increased traffic from the subdivision.~~
- ~~2. The need for traffic control measures on roads due to increased traffic from the subdivision.~~
- ~~3~~2. The need for footpaths, kerb and channel on roads in the vicinity, including for stormwater management.
- ~~4~~3. The adequacy of the access for the anticipated use.
- ~~5~~4. The ability of the access to contain required services.
- ~~6~~5. Traffic safety and visibility.
- ~~7. The need for acceleration and deceleration lanes.~~
- ~~8~~6. Type, frequency and timing of traffic.
- ~~9~~7. Access design, and number and location of vehicle crossings.
- ~~10~~8. Design and construction of any bridges or culverts.
- ~~11~~9. The construction and maintenance of new vehicle crossings or alterations to existing vehicle crossings where proposed as part of the subdivision.
- ~~12~~10. Where relevant, tThe provision, location, design, capacity, connection, upgrading, staging and integration of transport infrastructure.
- ~~13~~11. Pedestrian and cycle connections to public roads from existing reserves and/or pedestrian accessways, especially where the connection will provide a significantly shorter ~~walking~~ distance.
- ~~14~~12. Design of pedestrian and cycle connections to ensure ease of use, accessibility and safety.
- ~~15~~13. In the Rural (Urban Expansion) Zone, the protection of land within the proposed allotments to allow access and linkages to adjacent allotments for future transport infrastructure.

Notes:

1. Refer to Rules TRA-R15 – R16 for any Integrated Transport Assessment Requirements as part of a subdivision.
2. Acceptable means of compliance can be found in the Whangarei District Council Engineering Standards.

Transport (TRA)

Integrated Transport Assessments	
TRA-R15	Restricted Discretionary Integrated Transport Assessments
All Zones	<p>Activity Status: <u>Restricted Discretionary</u></p> <p><u>An integrated transport assessment is required w</u>Where:</p> <ol style="list-style-type: none"> 1. Any <u>The</u> activity (or activities) that requires an increase of more than 50 car parking spaces in accordance with <u>TRA Appendix 1</u> within a parent allotment or allotments that existed at [Operative Date]. 2. Any <u>The</u> subdivision <u>is</u> of an allotment that existed at [Operative Date] <u>and</u> where the area of the parent allotment is equal to or larger than: <ol style="list-style-type: none"> a. 1,000m² within the Rural (Urban Expansion) Zone where any allotment will be connected to Council reticulated water, wastewater and stormwater services. b. 5,000m² within the High-density <u>Medium Density</u> Residential Zone. c. 1ha within the Medium-density <u>General</u> Residential Zone or Rural Village Residential Zone. d. 4ha within the <u>Low Density</u> Residential Zone. e. 6ha within the Low-density <u>Large Lot</u> Residential Zone. <p>Matters of discretion:</p> <ol style="list-style-type: none"> 1. Effects on the sustainability, safety, efficiency, effectiveness and <u>accessibility convenience</u> of the <u>immediately</u> adjacent transport network. 2. Required improvements, alterations or extensions to the <u>immediately</u> adjacent transport network to mitigate adverse effects (<u>including at level crossings</u>). 3. The need for pedestrian and cyclist connections to adjacent destinations. 4. Adverse effects on streetscape and amenity. 5. Recommendations and proposed mitigation measures of the Integrated Transport Assessment <u>and any further information provided through the consent process.</u> <p><i>Compliance Standard:</i></p> <ol style="list-style-type: none"> 1. <i>TRA-R15<u>2</u> does not apply for any allotment where consent has previously been granted for the allotment under Rule TRA-R15<u>2</u>.</i> <p><i>Note: Any a <u>Applications</u> shall comply with information requirement TRA-REQ1.</i></p>
TRA-R16	Discretionary Integrated Transport Assessments
All Zones	<p>Activity Status: <u>Discretionary</u></p> <p><u>An integrated transport assessment is required w</u>Where:</p> <ol style="list-style-type: none"> 1. Any <u>The</u> activity (or activities) that requires an increase of more than 100 car parking spaces in accordance with <u>TRA Appendix 1</u> within a parent allotment or allotments that existed at [Operative Date].

Transport (TRA)

2. ~~Any~~ The subdivision is of an allotment that existed at [Operative Date] and ~~where~~ the area of the parent allotment is equal to or larger than:
 - a. 1ha within the ~~High-density~~ Medium Density Residential Zone.
 - b. 2.5ha within the ~~Medium-density~~ General Residential Zone or Rural Village Residential Zone.
 - c. 8ha within the Low Density Residential Zone.

Compliance Standard:

1. TRA-R16.2 does not apply for any allotment where consent has previously been granted for the allotment under Rule TRA-R16.2.

Note: ~~Any~~ Applications shall comply with information requirement TRA-REQ2.

TRA-R17	Construction of Any New Public Road or Service Lane
TRA-R18	Any Major Roding Alteration to an Existing Public Road
All Zones	Activity Status: <u>Discretionary</u>
<i>Note: Any application shall comply with information requirement <u>TRA-REQ3</u>.</i>	

Rule Requirements

TRA-REQ1	Information Requirement – <u>Integrated Transport Assessments</u>
<ol style="list-style-type: none"> 1. Any application pursuant to TRA-R15 shall include an Integrated Transport Assessment prepared by a suitably qualified professional, and <u>which</u> shall include the following: <ol style="list-style-type: none"> a. A description of the site characteristics, existing development, existing traffic conditions and trip generation, <u>immediately</u> adjacent land uses, proposed activity and its intensity. b. An assessment of the features of the existing transport network, including the following (where relevant to the proposal): <ol style="list-style-type: none"> i. Existing access arrangements, on-site car parking and crossing locations. ii. Existing internal vehicle and pedestrian circulation. iii. Existing walking and cycling networks. iv. Existing public transport service routes and frequencies including bus stops and lanes. v. Hours of operation for non-residential activities. vi. The adjacent transport network road hierarchy and the safety of the transport network in the immediate vicinity including crash history if relevant. vii. <u>The location and type of any existing level crossings in the locality.</u> c. A description of the estimated number of trips which will be generated by each transport modes (public transport, walking, cycling and private vehicles, including heavy vehicles). d. An assessment of the suitability of the proposal for all users within the development and connecting to the adjacent transport network. This shall include assessments of: 	

Transport (TRA)

- ~~i. The accessibility of the development for public transport and how the design of the development will encourage public transport use by considering the attractiveness, safety, distance and suitability of the walking routes to the nearest bus stop.~~
- ~~ii. The accessibility of the development for pedestrians and cyclists and how the design of the development will encourage walking and cycling to nearby destinations such as reserves, other public spaces and commercial or community facilities.~~
- ~~iii. Any safety implications that may detract from walking or cycling to/from the development.~~
- ~~iv. The accessibility of the development by private motor vehicles and the suitability of the proposed access and use of the site with respect to the efficient and effective functioning of the transport network.~~
- e. An evaluation of the effects of the development on the immediately adjacent transport network, including:
 - ~~i. Impacts on the operation of public transport infrastructure, and any vehicle and pedestrian/cyclist conflicts likely to arise from vehicle movements to and from the development.~~
 - ii. The impacts that any additional vehicle movements are likely to have on the capacity and operation of the adjacent road network, including any intersections and level crossings.
 - iii. For heavy vehicle trips per day, whether there are any effects from these trips on roading infrastructure.
 - ~~iv. Where the development will directly impact the state highway, a summary of consultation with the New Zealand Transport Agency.~~
 - ~~v. The impacts of construction traffic where a development will require a significant amount of construction work.~~
- ~~f. An assessment of how the transport network will be designed to accommodate infrastructure and services, stormwater, lighting, landscaping and street trees. For larger scale non-residential developments this should include consideration of underground electrical supply system for electric vehicle charging stations.~~
- g. Identification of any necessary mitigation measures that will be required to address any impacts on the transport network, including:
 - i. Potential mitigation measures needed both within the proposed development and on the immediately adjacent transport network surrounding the development including any improvements, upgrades, alterations or extensions to the transport network (including at level crossings).
 - ii. Any mitigation required to achieve convenient and safe operation of access points and loading areas for all users.
 - ~~iii. How the design and layout of the proposed activity maximises opportunities, to the extent practical, for travel other than by private car.~~
 - ~~iv. Where appropriate, the use of Crime Prevention Through Environmental Design principles and techniques to mitigate any safety issues for pedestrians or cyclists.~~
 - ~~v. A description of measures that will be put in place to mitigate against the effects of the construction process.~~

Transport (TRA)

- vi. A summary of the ITA Integrated Transport Assessment including key findings and implications that the development will have for transport including any proposed mitigation measures.

Note:

1. *For further guidance on Integrated Transport Assessments refer to Appendix A of New Zealand Transport Agency Research Report No.422, "Integrated Transport Assessment Guidelines", Abley et al, November 2010.*

TRA-REQ2

Information Requirement

1. Any application pursuant to TRA-R16 shall include an Integrated Transport Assessment prepared by a suitably qualified professional, ~~and~~ which shall include the following:
 - a. The details required under TRA-REQ1. A description of the site characteristics, existing development, existing traffic conditions and trip generation, surrounding land uses, proposed activity and its intensity, and future development potential of the site.
 - b. An assessment of the features of the existing transport network, including the following (where relevant to the proposal):
 - i. Existing access arrangements, on-site car parking and crossing locations.
 - ii. Existing internal vehicle and pedestrian circulation.
 - iii. Existing walking and cycling networks.
 - iv. Existing public transport service routes and frequencies including bus stops and lanes.
 - v. Hours of operation for non-residential activities.
 - vi. The adjacent transport network road hierarchy and the safety of the transport network in the vicinity including crash history if relevant.
 - vii. The location and type of any existing level crossings in the locality.
 - c. A description of the estimated number of trips which will be generated by each transport mode (public transport, walking, cycling and private vehicles, including heavy vehicles).
 - d. An assessment of the suitability of the proposal for all users within the development and connecting to the adjacent transport network. This shall include assessments of:
 - i. The accessibility of the development for public transport and how the design of the development will encourage public transport use by considering the attractiveness, safety, distance and suitability of the walking routes to the nearest bus stop.
 - ii. The accessibility of the development for pedestrians and cyclists and how the design of the development will encourage walking and cycling, particularly to nearby destinations such as reserves, other public spaces and commercial or community facilities.
 - iii. Any safety implications that may detract from walking or cycling to/from the development.
 - iv. The accessibility of the development by private motor vehicles and the suitability of the proposed access and use of the site with respect to the safe, efficient and effective functioning of the transport network.

Transport (TRA)

- e. An evaluation of the effects of the development on the surrounding transport network, including:
 - i. Impacts on the operation of public transport infrastructure, and any vehicle and pedestrian/cyclist conflicts likely to arise from vehicle movements to and from the development.
 - ii. The impacts that any additional vehicle movements are likely to have on the capacity and operation of the adjacent road network, including any intersections and level crossings.
 - iii. For heavy vehicle trips per day, whether there are any effects from these trips on roading infrastructure.
 - iv. Where the development will directly impact the state highway, a summary of consultation with the New Zealand Transport Agency.
 - v. The impacts of construction traffic where a development will require a significant amount of construction work.
- f. An assessment of how the transport network will be designed to accommodate infrastructure and services, stormwater, lighting, landscaping and street trees. For larger scale non-residential developments this shall include consideration of underground electrical supply system for electric vehicle charging stations.
- g. Identification of any necessary mitigation measures that will be required to address any impacts on the transport network, including:
 - i. Potential mitigation measures needed both within the proposed development and on the transport network surrounding the development including any improvements, upgrades, alterations or extensions to the transport network (including at level crossings).
 - ii. Any mitigation required to achieve convenient and safe operation of access points and loading areas for all users.
 - iii. How the design and layout of the proposed activity maximises opportunities, to the extent practical, for travel other than by private car.
 - iv. Where appropriate, the use of Crime Prevention Through Environmental Design principles and techniques to mitigate any safety issues for pedestrians or cyclists.
 - v. A description of measures that will be put in place to mitigate against the effects of the construction process.
 - vi. A summary of the Integrated Transport Assessment including key findings and implications that the development will have for transport including any proposed mitigation measures.
- h. An overview of the transport implications of existing land uses and any land use characteristics that affect the proposal, in the wider surrounding area, that will affect assessment of the proposal. This shall consider projected growth predictions and predicted annual average daily traffic.
- i. An assessment of the traffic volumes on the surrounding wider transport network ~~near~~ near serving the development and any intersections that will be affected by the proposal. Include consideration of the existing peak-hour congestion near the site, level of service, turning volumes, and comparisons between peak and interpeak conditions.
- j. A description of any proposed transport upgrades or changes within the vicinity of the proposed development such as known intersection or road upgrades, cycle infrastructure, parking restrictions or public transport upgrades or changes. If the proposed development is to be

Transport (TRA)

staged this description shall consider how the proposal will correspond with planned transport upgrades.

- k. An assessment of the proposal's consistency with relevant strategic documents including the Blue/Green Network Strategy for Whangarei City, the Walking and Cycling Strategy and the Whangarei Transport Strategy.
- l. An assessment of the overall suitability of the site to accommodate the proposed activity and its transportation effects in a manner that is consistent with relevant District and Regional transport policies and objectives.

Note:

1. *For further guidance on Integrated Transport Assessments refer to Appendix A of New Zealand Transport Agency Research Report No.422, "Integrated Transport Assessment Guidelines", Abley et al, November 2010.*

TRA-REQ3

Information Requirement – New Roads and Major Roothing Alterations to an Existing Public Road

1. Any application pursuant to TRA-R17 – R18 shall include a detailed assessment including the following:
 - a. The details required under TRA-REQ2.
 - b. A roading layout plan, including:
 - i. The provision of landscaping and street trees.
 - ii. The provision of on-street parking.
 - iii. The provision of street lighting and amenities (e.g. benches, bus shelters, etc.).
 - iv. Geometric design.
 - v. Drainage design.
 - vi. Road marking and signage.
 - vii. Traffic calming devices.
 - viii. Utility service locations.
 - ix. Sight distance plans.
 - x. Clear distinction between public and private assets.
 - c. Consideration of the sufficiency of space within the legal road reserve for proposed and potential future street trees, landscaping and/or underground and overhead services and structures.
 - d. An assessment of traffic volumes and vehicle operating speeds.
 - e. An assessment of how the road design is compatible with the character and amenity of the surrounding environment taking into account urban design and Crime Prevention Through Environmental Design principles.

TRA – Appendix 1

Appendix 1A. Minimum On-site Car and Bicycle Parking Requirements

Car parking and bicycle parking spaces shall be provided on-site in accordance with Table TRA 1 for sites outside of the car parking exemption area detailed in Appendix 1F.

Table TRA 1. Minimum on-site car and bicycle parking requirements

Activity	Required Car Parking Spaces	Required Bicycle Parking Spaces	
Residential Activities			
Principal Residential Unit	1 per unit within the High-density <u>Medium Density Residential Zone</u> 1 per 1 –2 bedroom unit in all other zones 2 per 2 <u>3+</u> bedroom unit in all other zones	Nil	
Minor Residential Unit	1 per unit	Nil	
Multi-unit d <u>Development</u>	1 per unit within the High-density <u>Medium Density Residential Zone</u> 1 per studio or single <u>1</u> bedroom unit in all other zones 2 per 2+ <u>two or more</u> bedroom residential units in all other zones Plus 1 visitor car parking space for every 4 residential units provided	Long stay: 1 per unit without a dedicated garage <u>Long stay: 1 per residential unit without a dedicated garage, for developments of 20 or more residential units.</u> <u>Short stay: 1 per 20 residential units.</u>	
Supported Residential Care Home	0.3 spaces per bed	Long stay: 1 per employee	
<u>Retirement Village</u>	1 space per individual retirement village unit <u>Plus 0.3 visitor/staff spaces per individual retirement village unit and hospital bed</u>	<u>Long stay: 1 per 15 employees</u>	
Commercial Activities			
Retail	Motor Vehicle Sales	1 per 20 vehicle display spaces, Plus 1 per additional 50m ² GFA	Long stay: 1 per 15 employees
	Trade Suppliers, Garden Centres, Marine Retail and Hire Premises	1 per 60m ² GFA, Plus 1 per 100m ² of outdoor storage	
	Grocery Store	1 space per 25m ² GFA	Long stay: 1 per 15 employees Short stay: 1 per 400m ² GFA
	Other Retail (less than 600m ² GFA)	1 space per 30m ² GFA	
	Other Retail (greater than 600m ² GFA)	1 space per 60m ² GFA	
Food and Beverage <u>Activity</u>	1 space per 20m ² GFA and outdoor seating area	Long stay: 1 per 15 <u>0</u> employees Short stay: 1 per 350m ² GFA	

TRA – Appendix 1

Activity		Required Car Parking Spaces	Required Bicycle Parking Spaces
Commercial Services and Funeral Homes		1 space per 50m ² GFA	Long stay: 1 per 150 employees Short stay: 1 per 400m ² GFA
Service Stations		1 space per 30m ² GFA for service station retail space	Long stay: 1 per 15 employees
Visitor Accommodation		1 space per bedroom	
Entertainment Facilities		1 per 5 persons the facility is designed to accommodate for facilities with a specified number of seats or occupants. For all other facilities, 5 spaces per 100m ² GFA	Long stay: 1 per 150 employees Short-stay: 2 parks plus 1 per 1,000m ² GFA
<u>General Commercial</u>		<u>1 space per 50m² GFA</u>	<u>Long stay: 1 per 15 employees</u>
Industrial Activities			
Industrial activities	Repair and Maintenance Services	4 per repair/lubrication bay, Plus 1 per additional 50m ² GFA	Long stay: 1 per 30 employees
	Manufacturing and Storage	1 space per 100m ² GFA plus 1 space per 100m ² outdoor storage and display	
	Other industrial activities	1 per 50m ² GFA, or 0.7 per employee (where the number of staff is known), whichever results in requiring a lower amount of on-site parking	
<u>Activities within the Oil Refinery Precinct (if activity not stated above)</u>		1 permanent parking space per employee on-site at any time, provided that during periods of shut downs and maintenance when extra parking is required, this does not have to be permanently marked but must be provided on-site.	Nil
<u>Activities within the Port Zone</u>		0.75 parking spaces per employee engaging in port-related activities on-site at any time, provided that during periods of shut downs and maintenance when extra parking is required this does not have to be permanently marked but must be provided.	
<u>Activities within the Fonterra Kauri Milk Processing Site</u>		Nil	
Community Activities			
Place of Assembly		1 per 5 persons the facility is designed to accommodate for facilities with a specified number of seats or occupants. For all other facilities, 5 spaces per 100m ² GFA	Long stay: 1 per 15 employees Short-stay: 2 parks plus 1 per 1,000m ² GFA

TRA – Appendix 1

Activity		Required Car Parking Spaces	Required Bicycle Parking Spaces
Recreation Facilities (<u>excluding public playgrounds</u>)		15 spaces per hectare, or 0.2 per person the facility is designed to accommodate	Short-stay: 3 parks plus 3 per ha
Public Playgrounds		Nil	Nil
Emergency Services		1 per employee	Nil
Care Centre		0.10 per child or other person, other than staff plus 0.5 per employee	Long stay: 1 per 15 employees
Hospital		1 space per 2 beds plus 1 per 2 employees	Long stay: 1 per 15 employees
Educational Facilities	Primary and Secondary Schools	1 space per 2 employees, plus: 1 space per 25 students (<u>to be allocated as visitor parking</u>) plus one 99% car loading bay (<u>or pick-up / drop-off bay</u>) per 100 students (primary) 1 space per 50 students (secondary)	Long stay: 1 per 15 employees, plus: Short stay: 1 per 20 students
	Tertiary Facilities	1 space per 2 employees, plus 1 space per 8 students	Long stay: 1 per 15 employees, plus: Short stay: 1 per 15 students
	Pre-school and Childcare Facility	1 space per 10 children (<u>to be allocated as visitor parking</u>), plus one 99% car loading bay (<u>or pick-up / drop-off bay</u>) per 100 children, plus 1 per 2 employees	Long stay: 1 per 5 employees
General Community		1 per 5 persons the facility is designed to accommodate for facilities with a specified number of seats or occupants. For all other facilities, 5 spaces per 100m ² GFA	Long stay: 1 per 15 employees Short-stay: 2 parks plus 1 per 1,000m ² GFA
Rural Production Activities			
Forestry		1 per 2 employees on-site	Nil
Other Rural Production Activities		Nil	
Other			
Mineral Extraction		4 per 5 employees on-site	Nil
Boat Sheds, Marinas, Moorings		0.5 per berth or craft to be accommodated	Nil
Rural Centre Service Activity		1 space per 30m ² GFA	Long stay: 1 per 10 employees Short stay: 1 per 300m ² GFA
General Public Amenities		Nil	Nil
Network Utilities			

Compliance Standards:

TRA – Appendix 1

1. *Short stay bicycle parking space shall not be required in the City Centre Zone.*
2. *Where there are multiple activities on the site and each activity requires vehicle parking, the total vehicle parking shall be the combined total requirement for all activities (not including any reduction factor under Appendix 1E).*
3. *If any activity is not represented above the activity closest in nature to the new activity shall be used, or where there are two or more similar activities in the table above, the activity with the higher parking rate shall apply.*

Note:

1. *Where parking is provided, the Building Code requires parking spaces to be provided for people with disabilities and accessible routes from the parking spaces to the associated activity or road. The dimensions and accessible route requirements are detailed in the New Zealand Building Code D1/AS1 New Zealand Standard for Design for Access and Mobility –Buildings and Associated Facilities (NZS 4121:2001).*

TRA – Appendix 1

Appendix 1B. Maximum On-site Car Parking in Parking Exemption Area

Any activity located in the Car Parking Exemption Area identified in Appendix 1F shall provide no more on-site car parking spaces than those specified in Table TRA 2.

Table TRA 2. Maximum on-site car parking in parking exemption area

Activity	Maximum Car Parking Spaces
Residential Unit	Maximum: 1 per unit
Visitor Accommodation	Maximum: 1 per 2 units
Commercial Services	Maximum: 1 per 50m ² GFA

TRA – Appendix 1

Appendix 1C. Minimum On-site Loading Space Requirements

Loading spaces shall be provided on-site in accordance with Table TRA 3 for sites outside of the car parking exemption area detailed in Appendix 1F.

Table TRA 3. Minimum on-site loading space requirements

Activity Class	GFA Threshold	Loading Space Requirement
Industrial and Retail Activities (goods handling activities)	Up to 300m ²	Nil
	Greater than 300m ² up to 5,000m ²	1
	Greater than 5,000m ² up to 10,000m ²	2
	Greater than 10,000m ²	3 spaces plus 1 space for every additional 10,000m ²
Commercial Services, Visitor Accommodation, Hospitals and Other Activities not included above-	Up to 2,000m ²	Nil
	Greater than 2,000m ² up to 20,000m ²	1
	Greater than 20,000m ² up to 50,000m ²	2
	Greater than 50,000m ²	3 spaces plus 1 space for every additional 25,000m ²

Compliance Standards:

1. Where there are multiple activities on the site and each activity requires loading spaces, the total loading spaces shall be the combined total requirement for all activities.
2. The minimum dimensions of loading spaces shall be:
 - a. For industrial activities – 11m long and 3.5m wide.
 - ~~e.~~ b. For any loading spaces designed to accommodate articulated vehicles – 18m long and 3.5m wide.
 - ~~b.~~ c. For all other activities – 9m long and 3.5m wide.

TRA – Appendix 1

Appendix 1D. Minimum End-of Trip Facilities Requirements

Where long stay bicycle parking spaces are provided, end-of-trip facilities shall be provided on-site in accordance with Table TRA 4, except for residential activities.

Table TRA 4. Minimum on-site end-of-trip facilities requirements

Number of Long Stay Bicycle Parking Spaces On-Site	Minimum Number of Showers	Minimum Number of Changing Rooms
5 – 50	2	2
51 – 100	4	
Every additional 100 spaces	2 additional	

TRA – Appendix 1

Appendix 1E. Minimum On-site Car Parking Reduction Factors

Any activity which meets any of the reduction factors detailed in Table TRA 5 is permitted to reduce the required on-site car parking spaces accordingly.

Table TRA 5. Minimum on-site car parking reduction factors

Parking Reduction Factor		Permitted Minimum Parking Requirement Reduction
1	Located within a 200 <u>400m</u> walk of a public transport stop with a frequency of at least 30 minutes on weekdays between 7am <u>0700</u> and 6pm <u>1800</u> .	0 to 50m: up to 10% reduction per service <u>transport stop</u> 51m to 425 <u>200m</u> : up to 6% reduction per service <u>transport stop</u> 201m to 400m: up to 2% reduction per service <u>transport stop</u> ; Up to a maximum of 20% if in proximity to multiple <u>transport stops</u> .
2	Located within a 400m walk from a car parking lot containing at least 50 car parking spaces that are available for use by the public.	0 to 50m: up to 10% reduction 51m to 200m: up to 6% reduction 201m to 400m: up to 2% reduction
3	Located within a 400m walk of a City Centre parking exemption zone (Appendix 1E) or a Local Commercial or Neighbourhood Commercial Zone.	0 to 50m: up to 10% reduction 51 to 200m: up to 6% reduction 201 to 400m: up to 2% reduction
4	Located within 1.2km of a designated cycle route.	0 to 150m: up to 10% reduction: 151m to 600m: up to 6% reduction 601m to 1200m: up to 2% reduction
5 <u>3</u>	Developments that contain a mix of both residential activities and activities where people are employed on-site.	Up to 5% reduction
6 <u>4</u>	Bicycle parking spaces are provided on-site beyond the requirements under Rule TRA-R2 and the site is located within 1.2km of a <u>designated cycle route</u> .	1 less car parking space per 5 bicycle parking spaces provided, up to a total of 2 less car parking spaces
7	Internal landscaping is provided within the parking area or immediately adjacent to the parking area beyond the requirements under Rule TRA-R11.	1 less car parking space per 25m² of landscaping provided, up to a total of 2 less car parking spaces

Compliance Standard:

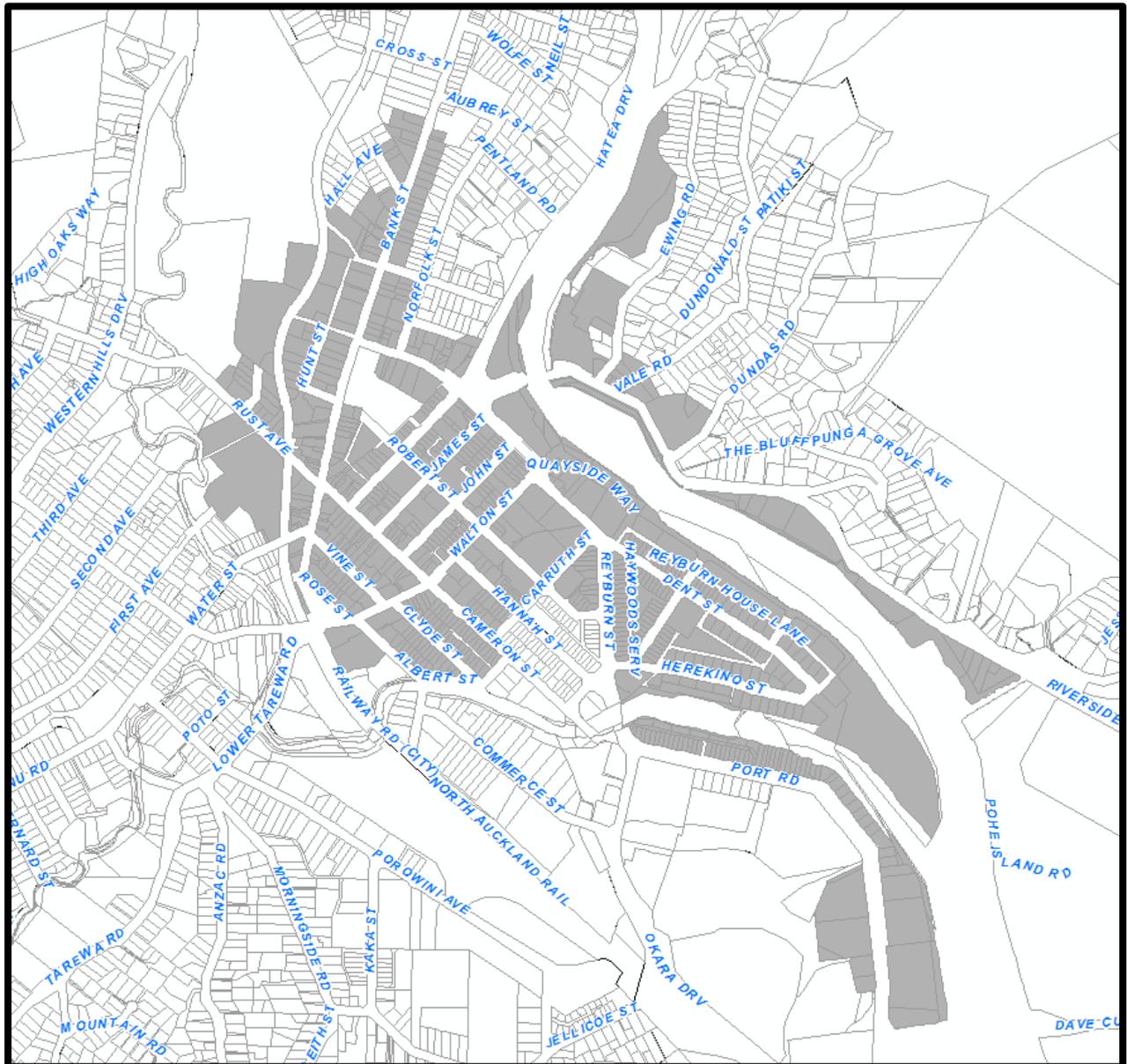
1. Where an activity meets multiple parking reduction factors, the minimum parking reduction bonuses may be added together up to a total reduction of 30%.

TRA – Appendix 1

Appendix 1F. Car Parking and Loading Space Exemption Areas

Any activity located solely within the shaded area shown in Figure TRA 2 is exempt from providing the minimum car parking and loading spaces required in Appendix 1A and 1C and is subject to the maximum on-site car parking stated in Appendix 1B.

Figure TRA 2. Car parking and loading space exemption area

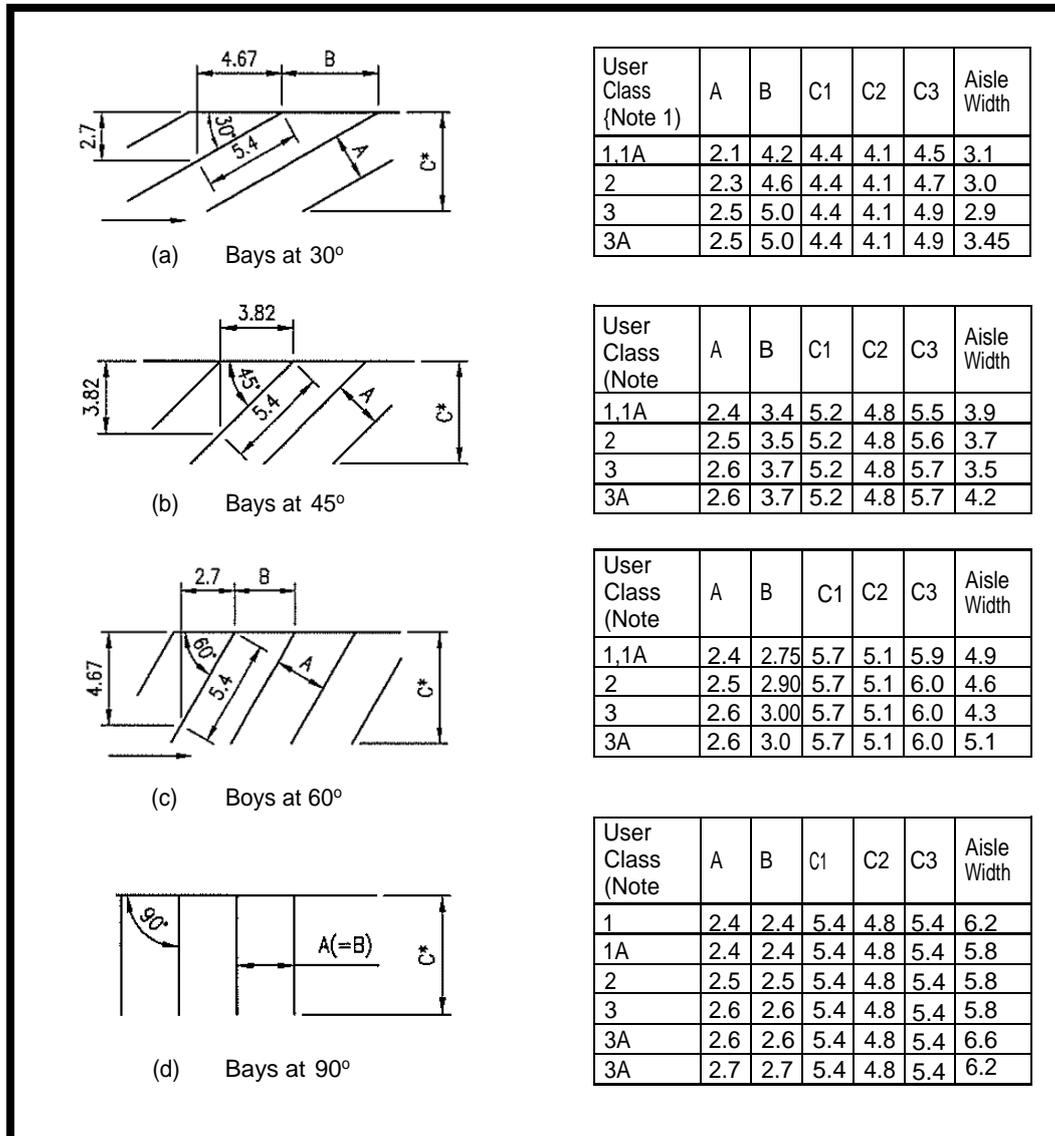


TRA – Appendix 1

Appendix 1G. Minimum Car Parking Space Dimensions

Any car parking space shall comply with the minimum dimensions in Figures TRA 3 and TRA 4:

Figure TRA 3. Minimum car parking space dimensions (in metres) for angled parking spaces



Note:

1. Parking space dimensions will vary for mobility car park spaces.

Compliance Standards:

1. Dimension C is selected as follows:

C1 - Where parking is to a wall or high kerb not allowing any overhang.

C2 - Where parking is to a low kerb which allows 600mm overhang.

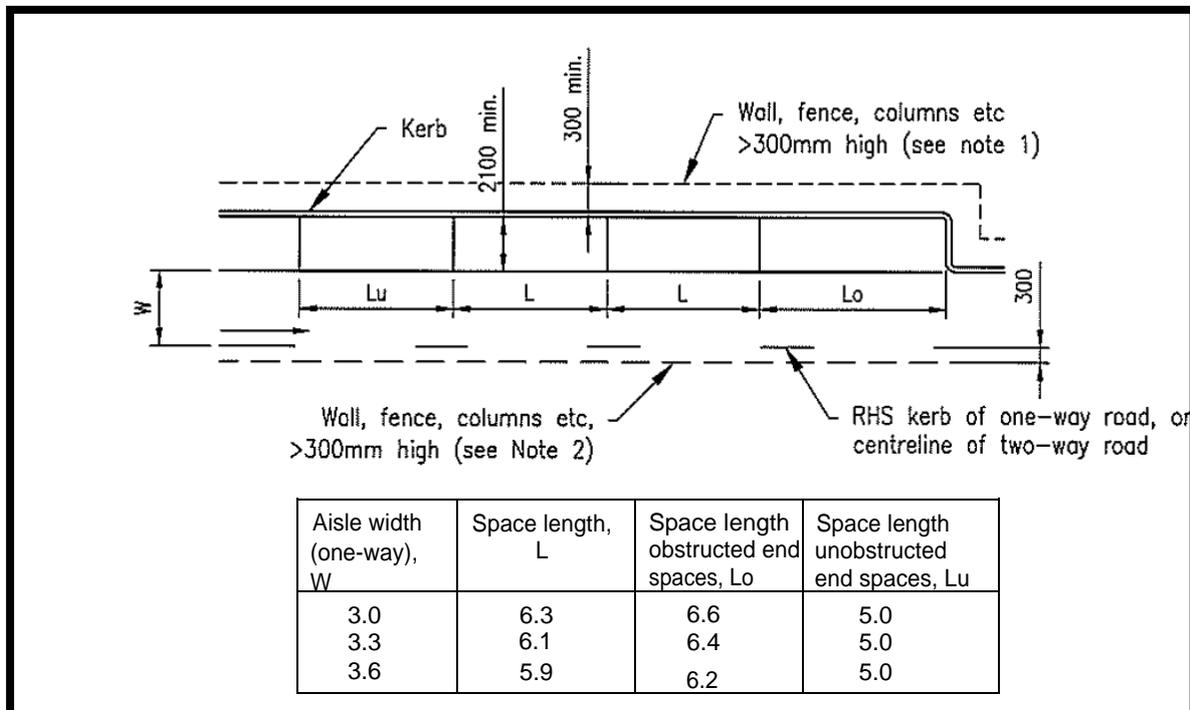
C3 - Where parking is controlled by wheel stops installed at right angles to the direction of parking, or where the ends of parking spaces form a saw tooth pattern.

TRA – Appendix 1

2. Classifications of off-street car parking facilities are as follows (the two Class 3A options given for 90° parking are alternatives of equal standing):

User Class	Required Door Opening	Required Aisle Width	Examples of Uses
1	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day-parking)-
1A	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only. Otherwise as for User Class 1	Residential, domestic and employee parking-
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)-
3	Full opening, all doors	Minimum for single manoeuvre entry and exit	Short-term city and town centre parking, parking stations, hospitals and medical centres-
3A	Full opening, all doors	Additional allowance above minimum single manoeuvre width to facilitate entry and exit-	Short term, high turnover parking at shopping centres-

Figure TRA 4. Minimum car parking space dimensions (in metres) for parallel parking spaces



Compliance Standards:

1. Spaces shall be located at least 300mm clear of obstructions higher than 150mm such as walls, fences and columns.

TRA – Appendix 1

2. *Where the opposite side of the aisle is bounded by obstructions higher than 150mm, Dimension W shall be increased by at least 0.3m.*
3. *If a single space is obstructed at both ends, a further 0.3m shall be added to dimensions in this column.*
4. *Where the aisle is two-way, but parking is on one side only, its width shall be increased by 3.0m minimum.*
5. *Where parallel parking is provided on both sides of a two-way aisle, the aisle widths shown shall be provided on each side of the aisle centre line.*
6. *For parallel parking on both sides of a one-way aisle the aisle width shall be at least twice that shown.*

TRA – Appendix 2

Appendix 2A. Vehicle Crossings Per Site

The number of vehicle crossings per site shall not exceed those stated in Table TRA 6.

Table TRA 6. Maximum number of vehicle crossings per site

Site Frontage (m)	Hierarchy Class of Road Frontage				
	Low Volume	Access	Secondary Collector	Primary Collector	Arterial
0 - 16	1	1	1	1	1
17 - 60	2	2	1	1	1
61 -100	3	3	2	1	1
>100	3	3	3	2	1

Compliance Standards:

1. *Where a site has frontage to more than one road, the vehicle entrance must be onto the road that has the lower class in the transport network hierarchy.*
2. *Where there is more than one road frontage, the frontage measurement will only apply to the road front approved for gaining entrance.*
3. *Service stations are permitted to provide two crossings per site.*
4. *Paddock entrances in the Rural Production or Rural Living Zones, with less than 10 vehicle movements per month, are exempt from the maximum number of vehicle crossings per site detailed in Table TRA 6.*

Note:

1. *Vehicle access to all state highways is managed by the New Zealand Transport Agency under the Government Roading Powers Act 1989 and access requires the approval the New Zealand Transport Agency.*

TRA – Appendix 2

Appendix 2B. Vehicle Crossing Distances from Intersections

Any vehicle crossing shall comply with the minimum distance from intersections as stated in Table TRA 7. Distances are measured along the centreline of the frontage road from the centreline of the vehicle Crossing to the edge of the carriageway of the intersecting road.

Table TRA 7. Minimum distance of vehicle crossing from intersections

Intersection Road Classification (distance in meters)			
Frontage Road	National, Regional & Arterial	Primary & Secondary Collector	Access & Low Volume
Speed Limit 50km/hr			
Arterial	70	55	35
Primary & Secondary Collector	40	40	20
Access & Low Volume	25	25	10
Speed Limit Over 50km/hr			
Arterial	180	180	90
Primary & Secondary Collector	75	60	60
Access & Low Volume	75	60	60

TRA – Appendix 2

Appendix 2C. Vehicle Crossings Sight Distances

Any vehicle crossing shall comply with the minimum sight distance requirements as stated in Table TRA 8. Sight lines shall be contained within the road reserve.

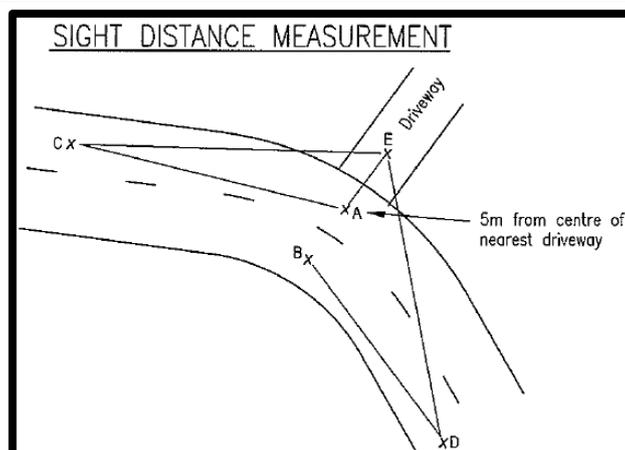
Table TRA 8. Minimum vehicle crossing sight distances

Posted Speed Limit (km/hr)	Minimum Sight Distance (m)		
	Frontage Transport Corridor Classification		
	Access & Low Volume	Primary & Secondary Collector	Arterial & Regional
40	45	50	90
50	60	70	120
60	85	90	150
70	105	120	185
80	135	145	220
90	160	175	265
100	195	210	305

Compliance Standards:

1. Access road sight distances are calculated based upon Approach Sight Distance (ASD) with Reaction Time (RT) of 1.5 seconds.
2. Collector road sight distances are calculated based upon ASD with RT of 2 seconds.
3. Arterial and Regional road sight distances are calculated based upon Safe Intersection Sight Distance (SISD) with RT of 2 seconds.
4. There shall be lines of clear sight from the driver's eye height (1.15m above ground level) along the lines detailed below:

Lines AC and BD (see diagram below).	All vehicle crossings on all roads.
Lines EC and ED (no permanent obstructions, exclude parked vehicles which might obstruct these sight lines).	All vehicle crossings on arterial, collector, access and low volume roads.
Lines EC and ED (no obstructions, parked vehicles not excluded).	All vehicle crossings on regional roads.
Points C and D are established by measuring the sight distance from Table TRA 8 along the centre of the appropriate lane from points A and B. For practical purposes A and B can be taken as opposite the centre of the driveway.	



TRA – Appendix 2

Appendix 2D. Performance Standards for Private Access

Private access shall be designed and constructed in accordance with Table TRA 9.

Table TRA 9. Private access requirements

Number of Principal Residential Units	Maximum length (m)	Minimum Legal Width (m)	Minimum Carriageway Width (m)			Footpath Width (m)	Maximum gradient	Crossfall
			Unsealed shoulder	Surfacing width	Total			
Urban								
2 - 4	50m	4.0	-	1 x 3.0	3.0 ¹	-	12.5% for the first 5m from the road boundary and 22.2% for the remainder restricted to straight sections	3%
5 - 8	100m	6.0	-	1 x 4.5	4.5	1 x 0.95		
Rural								
2	-	4.0	2 x 0.25	1 x 3.0	3.5 ¹	-	12.5% for the first 5m from the road boundary and 22.2% for the remainder	3% where sealed; 6% where unsealed
3 - 5		6.0	2 x 0.25	1 x 4.0	4.5			
6 - 8		10.0	2 x 0.25	2 x 2.75	6.0			

Notes:

1. "Urban" includes sites within:
 - a. The Rural (Urban Expansion) Zone where the net site area is less than 2,000m².
 - b. Any Urban Area Zone.
 - c. The Rural Village, Strategic Rural Industries or Ruakaka Equine Zones.
 - d. Any Green Open Space and Recreation Zone adjacent to any of the above.
2. "Rural" includes sites within:
 - a. The Rural (Urban Expansion) Zone where the net site area is equal to or greater than 2,000m².
 - b. The Rural Production or Rural Living Zones
 - c. Any Green Open Space and Recreation Zone adjacent to any of the above.
3. The New Zealand Fire Service Firefighting Supplies Code of Practice SNZ PAS 4509:2008 and NZ Building Code C/AS1 contain guidance on an adequate access to water supply for firefighting purposes.

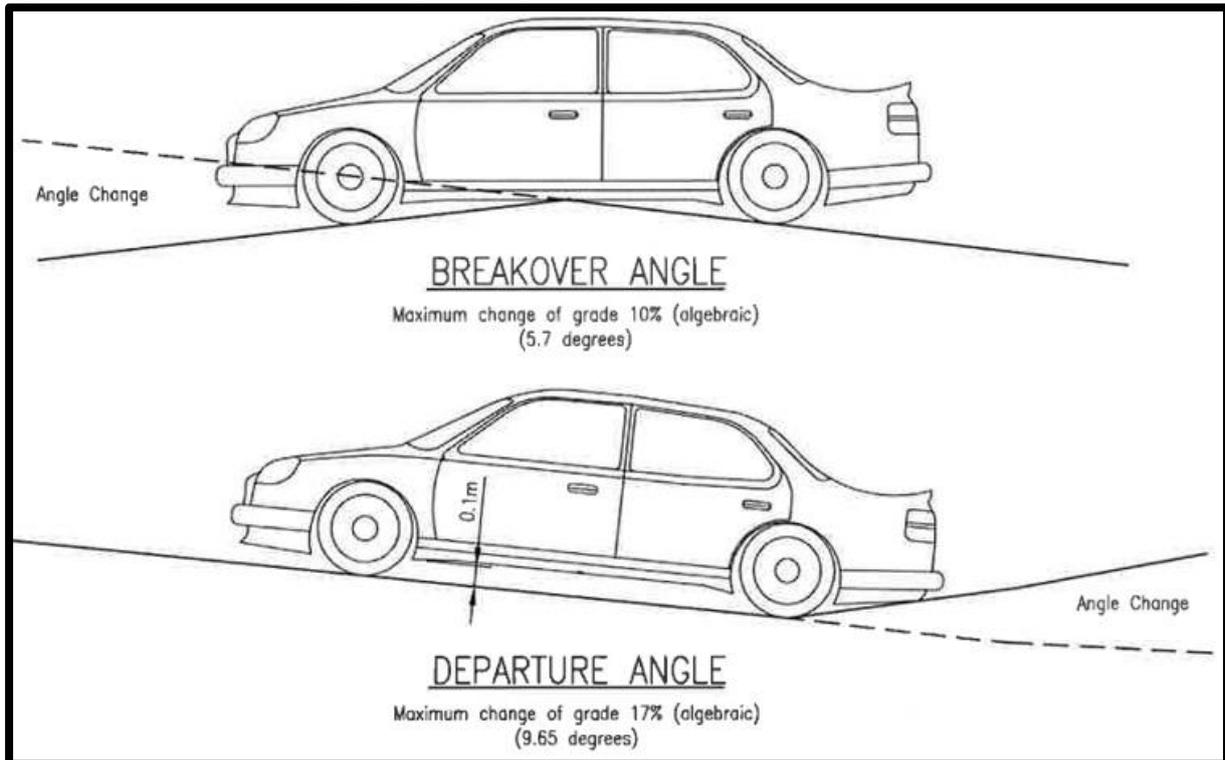
Compliance Standards:

1. Where a public sewer pump station or fire hydrant is located within, or accessed via a private accessway, the minimum total carriageway width shall be 4.0m.
2. Where a private accessway contains public wastewater reticulation the legal width shall be increased by 1.11m.

TRA – Appendix 2

3. Where a private accessway contains public water reticulation the legal width shall be increased by 0.6m.
4. For curved private accesses, the gradient is measured along the inside radius.
5. The maximum change of grade for a breakover angle on any private access is 10% and the maximum change of grade for a departure angle on any private access is 17% - see Figure TRA 5 below.

Figure TRA 5. Maximum change of grade for private access



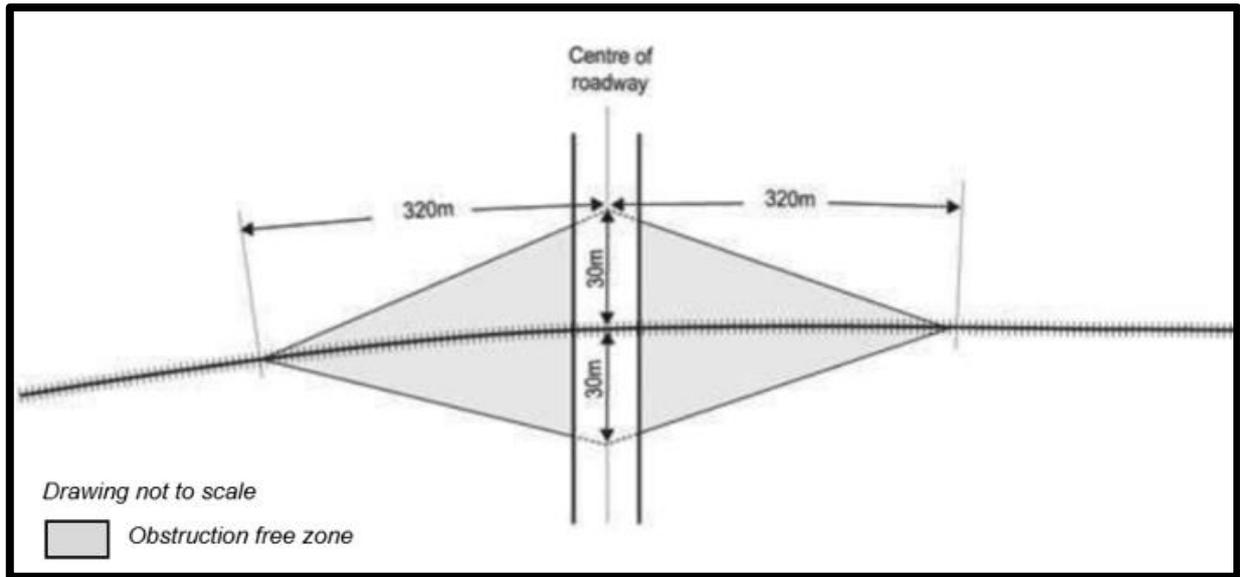
TRA – Appendix 2

Appendix 2E. Railway Level Crossing Sight Triangles and Explanations

Approach sight triangles at level crossings with Give Way signs

On sites adjacent to rail level crossings controlled by Give Way Signs, no building, major structure or planting shall be located within the shaded areas shown in Figure TRA 6. These are defined by a sight triangle taken 30m from the outside rail and 320m along the railway track.

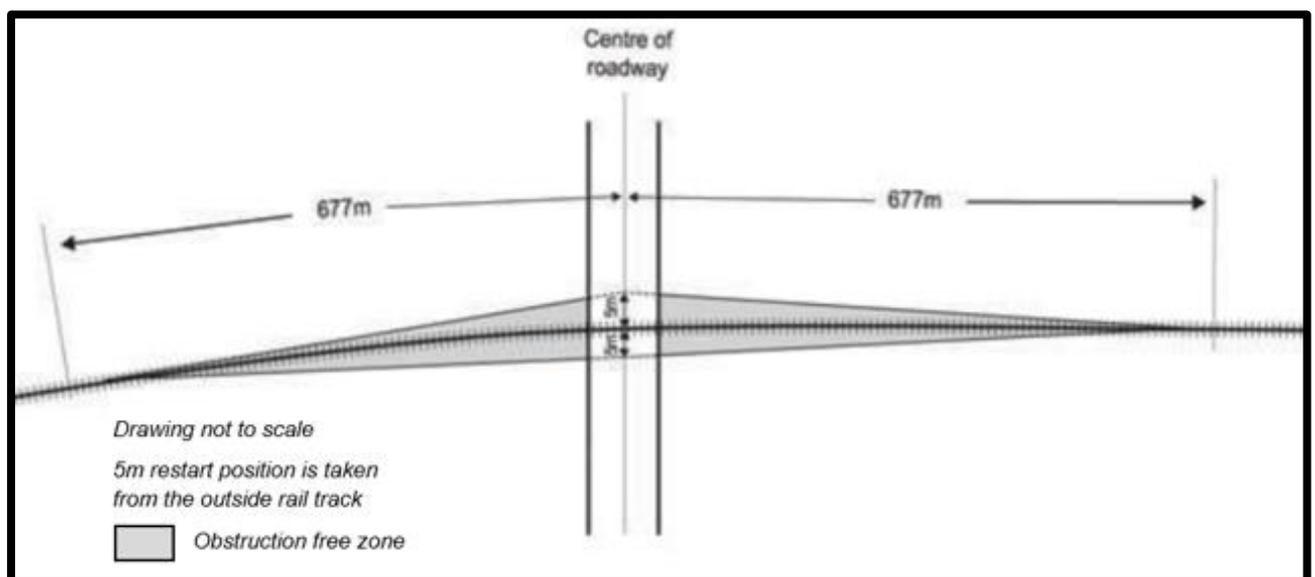
Figure TRA 6. Approach Sight Triangles for Level Crossings with “Give Way” Signs



Restart sight triangles at level crossings

On sites adjacent to all rail level crossings, no building, major structure or planting shall be located within the shaded areas shown in Figure TRA 7. These areas are defined by a sight triangle taken 5m from the outside rail and distance A along the railway track. Distance A depends on the type of control (Table TRA 12).

Figure TRA 7. Restart Sight Triangles for all Level Crossings



TRA – Appendix 2

Table TRA 12. Required Restart Sight Distances for Figure TRA 7

Required Approach Visibility Along Tracks A (m)		
Signs only	Alarms only	Alarms and barriers
677m	677m	60m

Compliance Standards:

1. These conditions apply irrespective of whether any visual obstructions already exist.
2. Approach sight triangles under Figure TRA 6 do not apply for level crossings fitted with alarms and/or barrier arms.
3. Figures TRA 6 and 7 show a single set of rail tracks only. For each additional set of tracks add 25m to the along-track distance in Figure TRA 6, and 50m to the along-track distance in Figure TRA 7.

Note:

1. All figures are based on the sighting distance formula used in NZTA 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 110 km/h.
 - vehicle approach speed of 20 km/h.
 - fall of 8 % on the approach to the level crossing and a rise of 8 % at the level crossing.
 - 25m design truck length.
 - 90° angle between road and rail.

TRA – Appendix 3

Appendix 3. Transport Network Hierarchy

Whangarei’s roads have been classified into a hierarchy to define their purpose and expectation within the transport network. The hierarchy is two-tiered. The first tier is the One Network Road Classification, which aligns with the national system, and is shown on the Planning Maps. The second tier comprises Regionally Significant Transport Infrastructure as identified in the Regional Policy Statement for Northland 2016. The tiers overlap as some roads are classified under multiple tiers. A description of each category of the hierarchy is set out in Table TRA 132.

Table TRA 132. Transport network hierarchy

Classification	Expectation
<i>Tier 1: One Network Road Classifications</i>	
National (High Volume)	Roads that make the largest contribution to the social and economic wellbeing of New Zealand by connecting major population centres, major ports or international airports and have high volumes of heavy commercial vehicles or general traffic.
Regional	Regional roads make a major contribution to the social and economic wellbeing of a region and connect to regionally significant places, industries, ports or airports. They are also major connectors between regions and in urban areas may have substantial passenger transport movements.
Arterial	Arterial roads make a significant contribution to social and economic wellbeing, link regionally significant places, industries, ports or airports and may be the only route available to some places within the region (i.e. they may perform a significant lifeline function). In urban areas, they may have significant passenger transport movements and numbers of cyclists and pedestrians using the road.
Primary Collector	Primary Collectors are locally important roads that provide a primary distributor/collector function, linking significant local economic areas or areas of population. They may be the only route available to some places within the region and in urban areas they may have moderate passenger transport movements and numbers of cyclists and pedestrians using the road.
Secondary Collector	Secondary Collectors are roads that provide a secondary distributor/collector function, linking local areas of population and economic sites and may be the only route available to some places within this local area.
Access	Access includes all other roads. Low volume roads within this category will fall into the low volume subset.
Low Volume	All other roads are classed as low volume.
<i>Tier 2: Regionally Significant Transport Infrastructure</i>	
Strategic Tourist Routes	The tourism routes support tourist related transport users in the District. Tourism routes should positively add to visitors’ impressions of the District. Rest areas and amenities are important on Tourism Routes.
Strategic Freight Routes	Freight routes support freight movements into and out of the District. Two freight carriers that are of particular significance to the District are forestry and dairy. Freight routes will continue to support significant amounts of heavy transport while considering impacts on surrounding established and planned settlements.

TRA – Appendix 3

National Cycleway	These areas generally represent the most significant concentrations of population within Whangarei and would therefore benefit the most from a strategic approach to creating and enhancing local networks for recreational and commuting use. Additionally, the national cycleway connects wider areas of the District and Region.
-------------------	---

TRA – Appendix 4

Appendix 4. Strategic Road Protection Areas

Table TRA 143 contains details of the strategic road protection areas shown on the Planning Maps.

Table TRA 143. Strategic Road Protection Areas

Road Name	Location		Strategic Road Protection Area (metres)	
	Start	Finish	Direction	
Dent St	Bank St	Rathbone St		3 SW
Dent St	Rathbone St	Walton St	2 NE	5 SW
Dent St	Walton St	Reyburn St	4 NE	3 SW
Hatea Drive	All		12.5 from centre	
Kamo Rd	Bank St	40m from Bank St	3 W	
Kamo Rd	Kensington Ave	60m S of McClintock St	2 W	3 E
Kamo Rd	60m S of McClintock St	Western Hills Dr	2 W	5.4 E
Kamo Rd	Western Hills Dr	Burling Ave		5E
Kamo Rd	Burling Ave	70m S of Adams Pl		2 E
Kamo Rd	Whau Valley Rd	550m N of Whau Valley Rd	1.6 W	
Kiripaka Rd	Waiatawa Rd	Corks Rd	12.5 from centre	
Maunu Rd	Water St Intersection with Central Ave and Walton St	SH 1N	3 S	2 N
Mill Rd	Nixon St	Whareora Rd	2.5 W	2.5 E
Okara Drive	Commerce St	Port Rd	11 from centre	
Rathbone St	Robert St	Dent St		3 SE
Tarewa Rd	Porowini Ave	Otaika Rd	11 from centre	
Waiatawa Rd	Whareora Rd	Kiripaka Rd	12.5 from centre	
Walton St	Bank St	Dent St		4 E

Compliance Standards:

1. "x from centre" refers to a distance taken from the centre of the existing legal road. The legal road width varies in these locations and it is not practical to define Strategic Road Protection Areas from the existing edge of the legal road.
2. All other Strategic Road Protection Areas are expressed as the distance from the frontage of sites.

Note:

1. Abbreviations for directions:
 N = north NE = north-east
 S = south SW = south-west
 E = east SE = south-east
 W = west NW = north-west