SECTION 9 -TRANSPORTATION

INTRODUCTION

Land transport infrastructure, and roading in particular, is a significant component of the environment. The road network is essential to the Districts economic activity and to the convenience and wellbeing of residents and visitors.

State Highways 1 and 82 are the principal transportation system within the Waimate District, and are of national importance. In addition to the State Highways administered by the NZ Transport Agency Council administers 1336 km of local roads. The Main South Railway runs parallel to State Highway 1.

Vehicle use is associated with most activities throughout the District and so requires consideration in terms of its effects on the environment and on the transport system as a whole. The main traffic issues within the District the increasing heavy traffic and movement of stock and impacts of these activities on the safety and efficiency of the roading network and on the amenity of the surrounding areas.

Trees, hedges and shelter belts, can have significant impact on the safety of the roading system. Vegetation can impede driver visibility, disrupt road drainage systems, or cause shading of the carriageway resulting in icing during the winter months, which can have severe consequences in terms of public safety. Road bends, road intersections and railway level crossings are particularly dangerous to the safety of motorists and accordingly adequate sight lines are to be preserved.

OBJECTIVES AND POLICIES

Objective 1 - Parking, Loading and Access
Vehicle parking, loading and access which is accessible and sufficient to meet the anticipated demands for each activity while minimising the adverse effects of such facilities.

Explanations and Reasons

- Parking, loading and access are integral parts of the larger overall road transport system. Sufficient spaces need to be provided for parking and loading facilities, while access needs to be designed to permit the safe entry and exit of vehicles onto roads.

Policy 1A - Efficiency and Amenity
To have on-site parking, loading, manoeuvring and access standards to the extent required to provide for the needs of each activity while maintaining the efficiency, safety and amenity of the road hierarchy in the District**.**

Explanation and Reasons

- As for Objective 1
- Off-street parking and loading is required for each activity in the Business 3, Residential and Rural Zones to minimise the adverse effects on road safety and efficiency of vehicles parking and manoeuvring on-street. This requirement is triggered when a new activity establishes on a site or when there is a change to the activity or building. The provision of off-street parking and loading for activities minimises the adverse effects on the safety and efficiency of the road from such activities and enables the retention of on-street parking for short-term visitors to an area. The level of parking provided for is one which provides for the off-street parking requirements for the activity for all but the very busiest times.
- The provision of off-street parking also improves the visual amenity of streets by reducing the level of long term on-street vehicle parking, particularly within residential areas. Maintenance of amenity within these

areas is considered importance and the screening of off-street parking areas is to be encouraged. It is not always appropriate to require the full provision of off-street parking needed to satisfy demand. Cultural, conservation and educational facilities often provide large areas of open space and high amenity values which would be lost if large areas were turned into formed car-parking.

- On-street parking is considered appropriate within some business areas, particularly within Queen Street where the provision off-street parking may not be practical and may alter the appearance of the area.
- Controls on the position and design of access points to properties are required to minimise the adverse effects resulting from the queuing and manoeuvring of vehicles entering or leaving properties, and to ensure the safe functioning of the road network.

Objective 2 - Road Network
An efficient and effective road network that allows the District to function and develop with minimal conflict between land uses, traffic and people.

Explanation and Reasons

- It is important to plan the road network in conjunction with surrounding land uses to provide accessibility to all parts of the District, while minimising conflicts between the efficient functioning of the road network and other activities.

Policy 2A - An Efficient and Functional Road Network
To protect the function and efficient use of the road network through a hierarchy of roads and to control the establishment of land use activities in order to achieve compatibility with the roads they front.

Explanation and Reasons

- As for Objective 2
- The hierarchical network provides for the efficient and safe movement of goods and people, while minimising conflicts which arise between traffic requirements and the environment of surrounding areas.
- The roading network is a valuable resource which should not be compromised by adjacent land uses which result in traffic hazards and reduce efficiency.

Objective 3 - Road Safety
The maintenance and improvement of a road transport network which is safe for all road uses including cyclists and pedestrians

Explanation and Reasons

- Conflicting requirements of motor vehicles, cyclists and pedestrians leads to a potential for accidents, many of which are avoidable. By providing for a safe road environment, injuries and road deaths as well as damage to property will be reduced.

Policy 3A- A Safe Road Network

To maintain and improve road safety by providing for an efficient and functional roading network and controlling activities which may compromise road safety.

Explanation and Reasons

- As for Objective 3
- Road safety and efficiency are closely related. To be safe, roads need to be efficient which in turn enables all road users (including cyclists and pedestrians) to use the District's roads with minimum conflict.
- Activities such as loading and unloading have the potential to compromise road safety. By including rules to control such activities, their potential to compromise safety can be more easily monitored and where necessary, controlled.

RULES - TRANSPORTATION

1. ACTIVITIES

Any activity that meets the parking, access and loading Site Standards in Rule 2 below is a Permitted Activity with regard to transportation requirements**.**

Where those standards cannot be met the activity shall be a Restricted Discretionary Activity**,** with Council's discretion restricted to the matter(s) of non-compliance.

These provisions shall apply where:

a an activity is established on a site, or
b there is a change of activity, or
c a building(s) is constructed or substantially reconstructed, altered or added to.

Nothing in these provisions shall limit the power of the Council to require or impose conditions or standards in respect of applications for resource consent.

2. SITE STANDARDS

2.1 Minimum Parking Space Requirements

2.1.1 Within the Rural Zone, Residential Zones or Business 3 Zone, the following (Table 9.1) shall be the minimum number of parking spaces to be provided at all times on the same site for any activity. The required parking spaces shall be available for residents, staff and visitors at all times during the hours of operation of the activity.

2.1.2 If any activity is not listed below, the activity closest in nature to the new activity should be used. Where there are two or more similar activities, the activity with the higher parking rate shall apply. Where there are two or more different activities on the site, the total requirement for the site shall be the sum of the parking requirements for each activity.

2.1.3 Where an activity is a Restricted Discretionary Activity under the Zone Rules Table 9.1 shall be used as a guide by the Council to determine an appropriate level of parking provision.

Table 9.1 - Minimum Parking Space Requirements

ACTIVITY	PARKING SPACES REQUIRED
Residential unit	1 space per residential unit
Visitor accommodation	1 space per 2 staff plus for Motels: 1 space per unit. All other visitor accommodation units: 1 space per 5 beds
Commercial activities	4.5 spaces per 100m^2 gross floor area plus 1 space per 100m^2 outdoor display area
Industrial activity	1.5 spaces per 100m² gross floor area
Meeting places and entertainment facilities	1 space per 10m^2 public area or 10 seats, whichever is greater
Drive-through facility	5 queuing spaces per booth or facility
Sports fields	15 spaces per hectare

ACTIVITY	PARKING SPACES REQUIRED
Hospitals	1 space per 5 beds plus 1 space per 2 staff
Health Care Services	2 spaces per professional plus 1 space per 2 staff
Offices	2 spaces per 100m^2 gross floor area
Restaurants and taverns	10 spaces per 100m^2 public area
Educational facilities	1 space per 1 staff plus 1 space per 10 students over the legal driving age; except for pre-schools and day-care facilities for children under 5 years of age 1.5 spaces per 10 children
Elderly Persons Housing	1 space per residential unit; except care homes 2 spaces per 6 clients.
Recreational facilities/activities	1 space per 4 persons designed to be accommodated

2.2 Assessment of Parking Areas

2.2.1 Where an assessment of the required parking standards results in a fractional space any fraction under one half shall be disregarded and any fraction of one half or more shall be counted as one space.

2.2.2 The area of any parking space or spaces provided and of vehicular access drives and aisles provided within a building shall be excluded from the assessment of gross floor area of that building for the purpose of ascertaining the total number of spaces required.

2.3 Size of Parking Spaces

2.3.1 All required parking spaces other than for residential units, and associated manoeuvre areas are to be designed to accommodate a 90 percentile design motor car (refer Appendix C) and shall be laid out in accordance with Appendix D, or in accordance with the Australian/New Zealand Standard 2890.1:2004 Parking Facilities (and any subsequent amendments).

2.4 Car Spaces for People with Disabilities

2.4.1 Car parking areas shall include spaces for people with disabilities provided at the rate of:

a. 1-20 total car parks: Not less than 1 accessible space
b. 21-50 total car parks: Not less than 2 accessible spaces
c. For every additional 50 car parks or part thereof: Not less than 1 accessible space.

2.4.2 Car parking for people with disabilities shall be located as close as practicable to the building entrance and should comply with the Building Code or New Zealand Standard 4121:2001 Design for Access and Mobility (and any subsequent amendments). The spaces should be on a level surface, be clearly signed and have a minimum stall width of 3.5 metres.

2.5 Cycle Spaces

2.5.1 Within the Rural Zone, Residential Zones or Business 3 Zone, any activity shall provide 1 cycle parking space per 20 required car parks, with a minimum of 1 space. This rule shall not apply to residential activities in the Residential Zones.

2.5.2 All required cycle parking shall be provided on the same site as the activity and located as close as practicable to the building main entrance and shall be clearly visible to cyclists entering the site, be well lit and secure. The type of stand must comply with the Engineering Code of Practice requirements for cycle parking rack systems.

2.6 Bus Spaces

2.6.1 Where the number of visitors or customers arriving or departing by bus or coach is equal to or exceeds 30 persons per day, bus/coach spaces may be provided in lieu of car parking spaces. The number of spaces to be provided shall be based on the following:

a. the number of visitors/customers provided for by the bus/coach spaces shall be the same as the number of visitor/customers who visit the site by bus/coach; and

b. the number of equivalent car parking spaces per bus/coach space shall be 40 divided by the average number of occupants in each car which visits the sites.

2.7 Cash-in-Lieu

2.7.1 A cash payment may be made in lieu of part or all of the parking requirement in areas where the Council is anticipating creation of public parking that would serve the area of the development. The basis of the cash payment in lieu of parking is to be:

a. The area of land per required parking space is to be 25 square metres.

b. The rate at which cash in lieu is charged is calculated at the current market value of the land.

2.8 Reverse Manoeuvring

2.8.1 On-site manoeuvring for a 90 percentile car shall be provided to ensure that no vehicle is required to reverse either onto or off a site where:

a. Any development has access to an arterial road (refer Rule 3)

b. Any development requiring 4 or more car spaces having access onto a collector road.

c. Any development which is required to provide 10 or more parking spaces.

2.8.2 On-site manoeuvring for a 90 percentile truck shall be provided to ensure that no truck is required to reverse onto or off a site where any development requires loading areas or trade vehicle storage having access onto an arterial or a collector road. Refer Rule 3 for the Roading Hierarchy.

2.9 Residential Parking Spaces

2.9.1 Any residential parking spaces required by this Plan shall have the minimum internal dimensions of 2.5m width and 5.0m depth.

2.9.2 The minimum width of the entrance to a single garage shall be no less that 2.4 metres wide. The manoeuvre area from the property to the garage entrance shall be designed to accommodate a 90 percentile motor car as set out in Appendix C.

2.10 Queuing

2.10.1 Queuing space shall be provided for within off-street parking areas for all vehicles entering a parking or loading area where conflict with vehicles already on site is likely to arise. The required queuing space length shall be in accordance with Table 9.2 following.

Table 9.2 - Queuing Space Lengths

Number of Parking Spaces	Minimum Queuing Space Length
0 – 20	5.5
21 – 50	10.5
51 – 100	15.0
101 – 150	19.5
151 - or over	24.0

2.10.2 Where the parking area has more than one access the number of parking spaces may be apportioned between the accesses in accordance with their potential usage.

2.10.3 Queuing space length shall be measured from the road boundary to the nearest vehicle control point or point where conflict with vehicles already on the site may arise.

2.11 Loading

2.11.1 Every loading space shall be of a useable shape and shall be of the following dimensions:

a. For transport depots or other similar activities, not less than one loading space with a minimum depth of 9m.

b. For retail premises, offices, warehouses, bulk stores, industries, service industries and other similar uses, not less than one space with a minimum depth of 8m.

c. Offices and other non-goods handling activities, where the gross floor area is more than 500m², not less than one space with a minimum depth of 6m.

d. Notwithstanding anything to the contrary in the foregoing clauses, where articulated trucks are used or intended to be used in connection with any site, sufficient loading space not less than 11m in depth shall be provided.

e. No loading space shall be less than 3.8m in height.

f. No loading space shall be less than 3.5m in width, or such greater width as is required for adequate manoeuvring.

2.11.2 Where practicable, vehicles involved in loading or unloading and all loading or unloading activities shall not be undertaken on any road or road reserve.

2.12 Surface of Parking and Loading Areas

2.12.1 The surface of all parking, loading and trade vehicle storage areas (except parking areas for residential units requiring less than three spaces) shall be formed, paved or otherwise maintained so as not to create a dust or noise nuisance.

2.12.2 The first 6.0m of such areas (as measured from the road boundary) shall be formed and surfaced to ensure that material such as mud, stone chips or gravel is not carried onto any footpath, road or service lane.

2.13 Vegetation, Trees and Landscaping

2.13.1 Trees and vegetation shall not be in a position where they would restrict visibility of drivers within 50m of an intersection or corner of a road.

2.13.2 Trees and vegetation shall not be in a position where they would cause icing of a road as a result of shading the road between 10am and 2pm on the shortest day.

2.13.3 Landscaping shall not adversely affect the visibility of motorists leaving a site or create an unsafe environment for persons using the car park or the adjacent footpath.

2.13.4 All car parking areas containing 5 or more spaces shall have a landscape strip 1.5m deep along the road frontage.

2.14 Standards of Vehicle Crossings/Accesses

2.14.1 All vehicular crossings/accesses onto a State Highway used for private access purposes shall be designed and constructed in accordance with Appendix H - Private Access Standards.

2.14.2 All vehicular crossings/accesses onto State Highway 82 south of Waihao Back Road used for retail purposes shall, where vehicle trips exceed 60 vehicles per day, be designed and constructed in accordance with Appendix H. For the purposes of determining the number of vehicle trips, and/or equivalent vehicle movements per day, the following shall apply:

a. trips calculated either as an annual average, or as a weekly average, whichever is the greater to cater for seasonal peaks.
b. one heavy vehicle trip shall be equivalent to 6 vehicle trips.

2.14.3 All vehicular crossings/accesses onto a sealed road, other than a State Highway or in the Rural Zone, shall be formed and maintained to an all-weather standard with the first 5.5m of the access (as measured from the carriageway) or the full berm width of the adjoining road, whichever is the greater, being formed and sealed or paved to ensure that material such as mud, stone chips or gravel is not carried on to a sealed road.

2.14.4 All vehicular crossings/accesses onto a sealed road in the Rural Zone, other than a State Highway, shall be formed and maintained to an all-weather standard and shall not result in the migration of material such as mud, stone chips or gravel on to the road. Where an access is used regularly, that is one that is used by vehicles on a regular basis including for the purposes of accesses to dwellings and buildings, the access shall be sealed for 1.5 metres from the edge of the existing seal. Where material such as mud, stone chips or gravel is found to migrate onto the road, the first 5.5m of the access (as measured from the carriageway) or the full berm width of the adjoining road, whichever is the grater, shall be formed and sealed or paved. Note compliance with this standard does not exempt from standard 2.14.11.

2.14.5 All vehicular crossings/accesses onto an unsealed road in the Rural Zone shall be formed and maintained to an all-weather standard and shall not result in the migration of material such as mud, stone chips or gravel on the road. All weather standard means compacted level metal surfacing with a maximum particle size surface material of 20mm.

2.14.6 All vehicular crossings/accesses for 10 or less residential units or activities which generate fewer than 100 “normal” car traffic movements per day, shall have standard vehicle culverts and crossings to carry car traffic.

2.14.7 All vehicular crossings/accesses for drive-in accesses and other activities shall have heavy duty vehicle culverts and crossings shall be constructed to carry all types of road traffic.

2.14.8 All vehicular crossings/accesses in any other case vehicle crossings/accesses shall be constructed pursuant to Council standards, from the roadway to the road or service land boundary of the site.

2.14.9 All vehicular crossings/accesses shall be constructed and maintained at the owners expense.

2.14.10 Vehicle access shall cross the property boundary at an angle of 90 degrees, plus or minus 15 degrees and vehicle crossings shall intersect with the carriageway at an angle of between 45 degrees and 90 degrees

2.14.11 In Rural zones heavy traffic accesses, including those for milk tankers and stock trucks, and any necessary extension of the carriageway width (on either side) shall be designed, constructed and maintained to carry the volume and weight of traffic likely to use the access. The surface shall be constructed to the same standard as the adjoining road carriageway. The access and carriageway extensions shall also be of sufficient area and width to provide for the swept path (turning area) of these heavy vehicles. (Refer to Appendix C for heavy vehicle swept paths.)

2.14.12 Where a lot abuts a State Highway, alternative access to any other road shall be used unless it is impractical for physical or traffic management reasons.

2.14.13 All vehicular accesses shall be designed to ensure efficient drainage, which will be implemented by providing culverts where necessary.

2.14.14 Movement of milking dairy herds across any of the following roads shall only be by means of an underpass:

- Bathgates Road (Starts: SH82, Ends: Molloys Road)
- Blue Cliffs Road (Starts: Kane Lane, Ends: Talbot Road)
- Brasells Bridge Road (Starts: Pareora River Road, Ends: District Boundary)
- Browns Road (Starts: High Street, Ends: Parsonage Road)
- Craigmore Valley Road (Starts: Pareora River Road, Ends: Timaunga Road)
- Foleys Road (Starts: SH1, Ends: Hannaton Road)
- Glenavy-Tawai Road (Starts: SH1, Ends: Old Ferry Road)
- Hakataramea Valley Road (Starts: SH82, Ends: Homestead Road)
- Holme Station Road (Starts: Pareora River Road, Ends: Pareora River Bridge
- Horsnells Road (Starts: SH1, Ends: Morven Road)
- Ikawai Middle Road (Starts: SH82, Ends: Tawai-Ikawai Road)
- Lower Hook Road (Starts: SH1, Ends: Waimate Hunter Road)
- Lucks Road (Starts: SH1, Ends: Fletchers Road)
- Makikihi Hunter Road (Starts: SH1, Ends: Teschemaker Valley Road)
- Manchesters Road (Starts: Molloys Road, Ends: Mitchell Road)
- Maytown Road (Starts: Timaru Road, Ends: Hannifins Road)
- McNamaras Road (Starts: Molloys Road, Ends: SH1)
- Mill Road (Starts: Hunts Road, Ends: Kirks Road)
- Molloys Road (Starts: McNamaras Road, Ends: SH1)
- Morven Road (Starts: Maclean Street, Ends: Horsnells Road)
- Old Ferry Road (Starts: SH1, Ends: Glenavy-Tawai Road)
- Pareora Gorge Road (Starts: Evans Crossing Road, Ends: Pareora River)
- Pareora River Road (Starts; SH1, Ends: Evans Crossing Road)
- Parsonage Road (Starts: Butchers Lane, Ends: Waimate Hunter Road)
- Racecourse Road (Starts: Williams Street, Ends: Park Road)
- Serpentine Valley Road (Starts: SH82, Ends: Zig Zag Road)
- Stokes Road (Starts: Crowes Road, Ends: Morven Beach Road)
- Tawai-Ikawai Road (Starts: Ikawai-Middle Road, Ends: Old Ferry Road)
- Te Akatarawa Road (Starts: Fishermens Bend Road, Ends: Benmore Dam)
- Waihao Back Road (Starts: SH82, Ends SH1)
- Waimate Hunter Road (Starts: Whitneys Road, Ends: Makikihi Hunter Road)
- All other roads within the District Plan zoned Residential

Note: The design and location of the underpass will require approval from the Road Controlling Authority.

2.15 Length of Vehicle Crossings

2.15.1 The following crossing lengths shall apply:

Table 9.3 - Crossing Lengths

Land Use	Length of Crossing (m)	
	Minimum	Maximum
Residential	3.0	6.0
Other	4.0	9.0

2.15.2 The length of culverts and crossings shall be the actual length of channel covers or the length of the fully dropped curb.

2.16 Distances of Vehicle Crossings from Intersections

2.16.1 No part of any vehicle crossing shall be located closer to the intersection of any roads other than the distances permitted in Table 9.4. Refer Rule 3 for the Roading Hierarchy.

Table 9.4 - Minimum Distance of Vehicle Crossings from Intersections

Frontage Road	Intersecting Road Type (Distance in Metres)					
	Urban			Rural		
	Arterial	Collector	Local	Arterial	Collector	Local
Arterial	65	50	30	270	200	200
Collector	35	35	15	85	55	55
Local	20	20	15	85	55	55

2.16.2 Distances shall be measured parallel to the centre line of the roadway of the frontage road from the nearest edge of the carriageway of the intersecting road. Where the roadway is divided the edge of the dividing strip nearest to the vehicle crossing shall for the purposes of this control be deemed the centre line.

2.16.3 Where the boundaries of the site do not allow the provision of any vehicle crossing whatsoever in conformity with the above distances a single vehicle crossing may be constructed provided it is located adjoining an internal boundary of the site in the position which most nearly complies with the provisions of this Section.

2.16.4 Refer Rule 3 for Roading Hierarchy.

2.17 Sight Distances from Vehicle Crossings

2.17.1 Unobstructed sight distances, in accordance with the minimum sight distances specified in Table 9.5, shall be available from all vehicle crossings.

Table 9.5: MINIMUM SIGHT DISTANCES (METRES)[1]

Posted speed limit (km/hr)	85 percentile operating speed, measured at the site (or if above not known, posted speed plus 10 km/hr)	Minimum sight distance standard (m)
30	40	28
40	50	44
50	60	63
60	70	86
70	80	115
80	90	140
90	100	170
100	110	210

Footnotes:
[1] Based on Minimum Safe Intersection Sight Distances in Austroads Guide to Traffic Engineering Practice Part 5, Interactions at Grade

Sight distances shall be measured as set out in Appendix H.

2.18 Road/Rail Level Crossings

2.18.1 All road/rail level crossings, including sight distance and visibility standards on adjoining land, shall comply with the standards specified in the NZTA Traffic Control Devices Manual, Part 9: Level Crossings (and any subsequent amendments).

2.19 Heavy Vehicle Generation

2.19.1 No activity shall exceed the 20 heavy vehicle movements per day, per site (averaged over a one week period)

2.19.2 Rule 2.19.1 does not apply to:

a. vehicle movements between sites within a property or the relocating of premises; or
b. vehicle movements on state highways; or
c. activities which have a duration of less than 31 consecutive days.

3. ROAD HIERARCHY

Arterial Roads:	State Highway 1 State Highway 82 McNamaras Road
Collector Roads:	Pareora River Road Pareora Gorge Road Old Ferry Road Tawai Ikawai Road (from Old Ferry Road to Ikawai Middle Road) Ikawai Middle Road
Local Roads:	All other roads.

4. NON-NOTIFIED RESOURCE CONSENTS

Resource consents in relation to the following matters shall be non-notified and shall not require the written approval of affected parties.

Restricted Discretionary Activities**:**

- size of parking spaces 2.3.1
- car spaces for people with disabilities 2.4
- cycle spaces 2.5
- cash-in-lieu 2.7
- reverse manoeuvring 2.8
- residential parking spaces 2.9
- queuing 2.10
- loading areas 2.11
- surface of parking and loading areas 2.12
- vegetation, trees and landscaping 2.13
- all access rules 2.14, 2.15, 2.16, 2.18

5. REASONS FOR RULES AND ASSESSMENT MATTERS

In considering whether or not to grant consent or impose conditions, the Council shall have regard to, but not be limited by, the following assessment matters: All activities that do not comply either with **Transportation Rules** shall be a Discretionary Activity in relation to those matters of non-compliance.

5.1 Parking and Loading Space Requirements

Reasons: Where an activity establishes on a site, there is change of activity, or buildings are altered, they are required to supply off-street parking and loading areas for vehicles normally generated by the residents, staff and visitors to the activity. This includes not only a requirement to provide parking spaces for cars, buses and cycles, but also parking for people with disabilities. The provision of off-street parking and loading for activities minimises the adverse effects on the safety and efficiency of the road from on-street parking, loading and manoeuvring vehicles. It also enables the retention of on-street parking for short-term visitors to an area, particularly in residential areas where on-street parking is needed for the convenience of visitors to residential properties. Provision of off-street parking also improves the visual amenity of streets by reducing the level of long term on-street vehicle parking.

The parking requirements have been categorised under broad activity headings each of which generate different parking requirements. Surveys of the parking generation of different activities provide a basis for the standards for calculating the number of parking spaces required. The parking standards for most activities have been set at a level which provides for the off-street parking requirements for all but the very busiest times.

It is not always appropriate to require the full provision of off-street parking needed to satisfy demand. Cultural, conservation and educational facilities often provide large areas of open space and high amenity values which would be lost if large areas were turned into formed car-parking.

Assessment Matters:

a. Whether it is physically practicable to provide the required parking or loading spaces on the site in terms of the existing location of buildings, access to the road, topography and utility location.
b. Whether there is an adequate alternative supply of parking or loading spaces in the vicinity. In general, on-street parking is not considered an alternative.
c. Whether there is another site in the immediate vicinity that has available parking or loading spaces which are not required at the same time as the proposed activity. In such a situation the Council will require the associated parking or loading spaces to be secured in some manner.
d. Whether a demonstrably less than normal incidence of parking or loading will be generated by the proposal, such as due to specific business practice, type of customer, bus transportation.
e. Whether the Council is anticipating providing public car-parking that would serve the vicinity of the activity, and whether a cash payment towards such public car-parking can be made in lieu of part or all of the parking requirement.
f. Whether a significant adverse effect on the character and amenity of the surrounding area will occur as a result of not providing the required parking or loading space.
g. The extent to which the safety and efficiency of the surrounding roading network would be adversely affected by parked and manoeuvring vehicles on the roads.
h. Any cumulative effect of the lack of on-site parking and loading spaces in conjunction with other activities in the vicinity not providing the required number of parking or loading spaces.

5.2 Parking and Loading Area and Entranceway Design

Reasons: The design of the parking and loading areas are based on 90-percentile design vehicles. The dimensions of these vehicles and their associated turning circle requirements are such that 90 percent of the vehicles in New Zealand comply with their requirements. Critical manoeuvre areas have been calculated to allow 99 percent of vehicles to use them. These areas are bounded by immovable objects such as walls and columns and it is therefore important to provide the space to allow vehicles to manoeuvre easily.

Controls over the surfacing of parking and loading areas have been included to protect the amenity of surrounding properties and public places from noise and dust nuisance. The controls are also intended to avoid deterioration of road and footpath surfaces or vehicle and pedestrian safety through loose surfacing material being carried onto footpaths, roads or service lanes.

Although landscape plantings associated with parking areas are desirable to improve visual amenity, a control has been included to ensure such plantings do not create unsafe conditions for pedestrian and vehicle movements.

Assessment Matters:

a. Any adverse effects on the safety and security of people and vehicles using the facility.
b. The extent to which the safety of pedestrians, both on and off the site, will be affected.
c. Any adverse effects on the amenity and character of surrounding properties and public areas.
d. The extent to which there will be any adverse effect on the safety and efficiency of the frontage road.

e. The extent to which any reduction in the design characteristics will result in the parking and loading area and/or associated entrance and manoeuvring areas being impractical, inconvenient or unsafe to be used by vehicles or pedestrians.

5.3 Access

Reasons: Control of accesses where people move from roads to a property or vice versa is essential both for safety and efficiency reasons. There is real potential for turning movements onto and off roads to result in collisions. For this reason the Plan sets standards for the location, number and design of access to reduce the potential for collisions. In particular it encourages access from side roads rather than state highways so that through traffic is less inconvenienced.

Accesses also need to be controlled to ensure their formation does not result in degradation of carriageways or verges and in particular the seal edge is not broken.

Assessment Matters:

a. Whether adequate sightlines are available from alternative access points.
b. The extent to which the safety and efficiency of the adjoining road would be compromised by an access point located closer to an intersection than is permitted by the Plan.
c. The extent to which conflicts between vehicles will be created by vehicles queuing across the vehicle crossing; confusion between vehicles turning at the crossing or the intersection; inadequate rate of driver assimilation of data, thereby adversely affecting the safety of the road.
d. Whether the hours of operation of activities on the site coincide with the peak flows and vehicle queues on the road.
e. Whether the speed and volume of vehicles on the road will increase the adverse effects of the access on the safety of road users.
f. Whether the geometry of the road will mitigate the adverse effects of the access.
g. Whether vehicular crossings/accesses comply with the design guidelines as specified in Appendix H.

5.4 Reverse Manoeuvring

Reasons: On-site manoeuvring is required for all sites on arterial roads, shared access and where a large number of vehicle movements onto and off a site are expected. This helps to protect the efficiency and safety of the roads by minimising the number of vehicles required to reverse onto or off a site, which is the cause of approximately 10% of accidents at driveways. Arterial and collector roads have the most protection applied to them as their function is to carry the largest volumes of traffic at the highest level of efficiency.

5.5 Queuing Spaces

Reasons: Queuing space lengths are required at the entrance to car-parking and loading areas to provide an area off the street for cars to queue while waiting for manoeuvring vehicles, or for a parking space. This protects the safety and efficiency of the frontage road from the effects of vehicles requiring to queue on the street, blocking trafficable lanes. The length of the queuing space varies according to the number of parking spaces catered for in the parking area. This is because the number of cars in the parking area increases the potential number of arrivals and departures thereby increasing the probability of vehicles having to queue.

5.6 Distances of Vehicle Crossings from Intersections

Reasons: In order to simplify the driving task by reducing potential conflict points and areas of distraction, there is a requirement to locate entrances at varying distances from intersections depending on the function of the road. Arterial roads typically carry the highest traffic volumes at higher operating speeds. Distances therefore need to be greater on these roads to allow

for driver reaction times and also for longer queuing distances at intersections. It also reduces confusion for drivers who may not otherwise be able to tell whether an indicating vehicle is intending to turn at the driveway or the intersection. Similarly, principal and collector roads carry higher traffic volumes at higher operating speeds than local roads and distances of vehicle crossings from intersections are accordingly required to be greater on these roads.

5.7 Roading Hierarchy

Reasons: A planned roading hierarchy provides a means of minimising the conflicts which may arise between providing for traffic requirements, and the effects on the surrounding environment, by giving each road a classification. More certainty can be provided for road users through the use of different design and access criteria for each road classification. This in turn ensures that road safety and efficiency is maintained or improved. The road hierarchy for the Waimate District is listed in Rule 3.