SECTION 9 -TRANSPORTATION

INTRODUCTION

State Highways 1 and 82 are the principal transportation system within the Waimate District, and are of national importance. 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.

ISSUES

Issue 1 - Providing For Vehicle Parking, Loading and Access

Description

In Waimate where the traffic generated by most activities is not significant the issue relating to vehicles is the extent to which on-site parking and access and loading requirements are needed for developments given the expectations of efficiency and amenity for various areas within the District. In the main business areas on and adjoining Queen Street sufficient on-street parking is available supported by some on-site parking at the rear of buildings. If on-site parking was required the practicality of developing many properties would be significantly reduced. The appearance of these areas would also change and possibly degrade with parking areas rather than buildings dominating.

In the residential areas the amenity of these areas is more easily affected by on-street parking of cars particularly if this is on a regular basis.

While access and loading facilities are not always required, it is desirable that loading be carried out in a way that least interferes with pedestrian movement along footpaths and vehicle parking.

Relevant Objectives and Policies

- Parking, Loading and Access - Objective 1 and Policy 1A

Issue 2 - Providing For an Efficient and Functional Roading Network

Description

The transportation of nearly all goods and people within the District is undertaken by vehicles using the road network, and this situation Is unlikely to change in the medium term. It is therefore necessary to provide for the efficient functioning of the existing road infrastructure and to plan for extensions to the network to accommodate anticipated changes. The planning of the network also needs to take into account the finite character of natural and physical resources. For example, it may be preferable in certain circumstances to increase existing road capacities rather than taking more land to construct new links.

Relevant Objectives and Policies

- Road Network - Objective 2 and Policy 2A

Issue 3 - Providing for a Road Network Which is Safe for All Users

Description

Conflicts are inevitable as a result of the different requirements of each type of road user (i.e. motorist, cyclist and pedestrians). Conflicts are also inevitable between vehicles, although in many cases these conflicts are avoidable. Controls relating to access, manoeuvring, parking and loading can play an important part in reducing the potential for conflict. Other Council initiatives such as accident data recording and traffic management can also reduce road user conflicts, and provide for safer roads.

Relevant Objectives and Policies

- Parking, Loading and Access - Objective 3 and Policy 3A

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.

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 certain zones to minimise the adverse effects on road safety and efficiency of vehicles parking and manoeuvring on-street.
- On-street parking can detract from the amenity of some areas, and off-street parking needs to be screened to provide for a more attractive visual amenity.
- 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.

Anticipated Environmental Results

Objective 1 and its policy are anticipated to result in the following outcomes:

- Safe and efficient roading system
- A low rate of on-street parking in residential areas
- A medium to high rate of on-street parking in the Business 1 and 2 areas.

Methods of Implementation

Objective 1 and its policy will be implemented through the following methods:

District Plan Rules

- Rules - Transportation and subdivision standards for new roads

Other Legislation

- Roading Authority powers under the Local Government Act.

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.

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.

Anticipated Environmental Results

Objective 2 and its policy are anticipated to result in the following outcomes:

- Increased efficiency and effectiveness of the road transport network
- A reduction in traffic congestion
- More efficient use of private vehicles leading to greater energy savings
- Improved accessibility for all road users
- Reduced conflicts between motorists, cyclists and pedestrians

Methods of Implementation

Objective 2 and its policy will be implemented through the following methods:

District Plan Rules

- Rules - Transportation

Other Legislation

- Roading Authority powers under the Local Government Act.

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

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.

Anticipated Environmental Results

Objective 3 and its policy are anticipated to result in the following outcomes:

- A reduction in road injuries and deaths throughout the district
- A reduction in damage to public and private property
- Greater control over activities which have the potential to compromise road safety

Methods of Implementation

Objective 3 and its policy will be implemented through the following methods:

District Plan Rules

- Rules - Transportation

Other Legislation

- Roading Authority powers under the Local Government Act.

REASONS FOR RULES

Parking and Loading Space Requirements

- 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.

Parking and Loading Area Design

- 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.

Reverse Manoeuvring

- 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.

Queuing Spaces

- 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 as the number of cars in the parking area increases the potential number of arrivals and departures rises, increasing the probability of vehicles having to queue.

Distances of Vehicle Crossings from Intersections

- 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.

Roading Hierarchy

- 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.

RULES - TRANSPORTATION

1 ACTIVITIES

Any activity which does not provide for parking, access and loading in accordance with the Site Standards in Rule 2 below shall be a **Discretionary Activity** in respect of 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

a Minimum Parking Space Requirements

The following (Table 1) shall be the minimum number of parking spaces to be provided at all times on the same site for any activity in the Rural Zone, Residential Zone or Business 3 Zone. The required parking spaces shall be available for residents, staff and visitors at all times during the hours of operation of the activity.

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.

Where an activity is a Discretionary Activity Table 1 shall be used as a guide by the Council to determine an appropriate level of parking provision.

Table 1 - Minimum Parking Space Requirements

ACTIVITY	PARKING SPACES REQUIRED
Residential unit	1 space per residential unit
Visitor accommodation	1 space per 5 beds plus 1 space per 2 staff
Commercial activities	3 spaces per 100m^2 gross floor area plus 2 spaces per 100m^2 outdoor display area
Industrial activity	2 spaces per 100m^2 workshop area plus 1 space per 100m^2 storage space
Meeting places and entertainment facilities	1 spaces 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
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 15 years of age
Elderly Persons Housing	1 space per residential unit
Recreational facilities/activities	1 space per 4 persons designed to be accommodated

b Assessment of Parking Areas

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.

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.

c Size of Parking Spaces

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.

d Car Spaces for People with Disabilities

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

- for 10 to 50 spaces
- for up to 100 total spaces
- plus 1 more for every additional 50 spaces.

Car parking for people with disabilities shall be located as close as practicable to the building entrance and should comply with the Building Code. The spaces should be on a level surface and be clearly signed.

e Cycle Spaces

Sufficient cycle spaces shall be provided for all staff, customers and visitors who work at or visit the site or who are engaged in or visit the activity. All cycle spaces shall be provided on the site to which they relate, shall be covered and shall permit cycles to be locked to a cycle stand or other fixed structure.

f Bus Spaces

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:

i 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

ii 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.

g Cash-in-Lieu

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:

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

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

h Reverse Manoeuvring

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:

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

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

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

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.

i Residential Parking Spaces

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

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.

j Queuing

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 2 following.

Table 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

k Loading

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

i For transport depots or other similar activities, not less than 9m in depth.

ii For retail premises, offices, warehouses, bulk stores, industries, service industries and other similar uses, not less than 8m.

iii Offices and other non-goods handling activities, where the gross floor area is less than 500m2, and where on street parking is available for occasional servicing by larger vehicles, 6m long, 3m wide and 2.6m high.

iv 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.

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

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

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

l Surface of Parking and Loading Areas

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.

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.

m Landscaping

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.

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

n Standards of Vehicle Crossings / Accesses

All vehicular crossings / accesses

i onto a State Highway used for private access purposes shall be designed and constructed in accordance with Appendix H - Private Access Standards.

ii 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 - Commercial Access. For the purposes of determining the number of vehicle trips per day, the following shall apply:

- trips shall be averaged over a month
- one heavy vehicle trip shall be equivalent to 6 vehicle trips.

iii onto a sealed road, other than a State Highway or in the Rural Zone, shall be formed 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, which ever 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.

iv onto a sealed road in the Rural Zone, other than a State Highway, shall be formed 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 9.2n(xi).

v Onto an unsealed road in the Rural Zone shall be formed 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.

vi 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.

vii 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.

viii 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.

ix all vehicular crossings/accesses shall be at the owners expense.

x 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

xi 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 and constructed 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 H for Heavy vehicle swept paths.)

xii 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.

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

o Length of Vehicle Crossings

The following crossing lengths shall apply:

Table 3 - Crossing Lengths

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

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

p Distances of Vehicle Crossings from Intersections

No part of any vehicle crossing shall be located closer to the intersection of any roads other than the distances permitted in the following Table.

Table 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

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.

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 Code.

Refer Rule 3 for roading hierarchy.

q Sight Distances from Vehicle Crossings

Unobstructed sight distances, in accordance with the minimum sight distances specified in Table 5, shall be available from all vehicle crossings.

Table 5: MINIMUM SIGHT DISTANCES (METRES) **				
		FRONTAGE ROAD CLASSIFICATION		
		Local	**Collector**	**Arterial**
Posted Speed Limit	* Operating Speed Limit			
50	60	55	65	115
60	70	85	85	140
70	80	105	105	175
80	90	130	130	210
100	120	230	230	330

Footnotes:

** Distances are based on the Approach Sight Distance and Safe Intersection Sight Distance tables in NAASRA, Intersections AT Grade (1) assuming Reaction Times on 1.5 seconds on local roads with operating speeds up to 60 km/h and 2.0 seconds for all other speeds and all collector and arterial roads.

* Speed limit based on operating speed being the stated speed limit plus 15%. Distances are based on the approach sight distances specified in the Land Transport Safety Authority document "Guidelines for Visibility of Driveways".

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

Where the legal road speed limit is 50km/h, the above rule shall only apply to Arterial roads.

r Road/Rail Level Crossings

All road/rail level crossings shall comply with the standards specified in Appendix E.

3 ROAD HIERARCHY

Arterial Roads:	State Highway 1
	State Highway 82
	McNamaras Road
	Middle Road
	Old Ferry Road
	Pareora River Road (to Craigmore Valley Road)
	Holme Station Road
	High Street
Collector Roads:	Craigmore Valley Road (to Timunga Road)
	Glenavy Tawai Road
	Hakataramea Valley Road (to Cattle Creek)
	Hunter-Makikihi Road

Waimate-Hunter Road
Lucks Road and Willowbridge Road (to Bradshaws Road)
Serpentine Valley Road (to Pentland Hills Road)
Waihao Back Road
Brasells Bridge Road
Parsonage Road (urban)
Pareora Gorge Road (Craigmore Valley to Boundary)
Mill Road (urban)
Victoria Terrace (urban)

Local Roads: All other roads.

4 NON-NOTIFIED RESOURCE CONSENTS

Resource consents in relation to the following matters shall be non-notified.

Discretionary Activities:

- size of parking spaces 2a
- disabled car spaces 2d
- cycle spaces 2e
- cash-in-lieu 2g
- reverse manoeuvring 2h
- residential parking spaces 2i
- queuing 2j
- loading areas 2k
- surface of parking and loading areas 2l
- landscaping 2m
- all access rules 2n,o,p & r

5 ASSESSMENT MATTERS - RESOURCE CONSENTS

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.

Parking and Loading Provision

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.

Parking and Loading Area and Entranceway Design

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.

Access

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 - commercial Access Guidelines" and "Appendix H - Rural Service Stations and Truck Stop Guidelines".