## 2 PHYSICAL RESOURCES

## **B2.1 TRANSPORT NETWORKS — ISSUES**

#### ROAD, RAIL AND AIRFIELDS

- Integration of land use and transport planning to control the demand for transport and also to achieve more sustainable travel within and beyond the district.
- Effects of activities on the safe and efficient operation of the transport network particularly roads, railway lines, cycleways, footpaths and airfields.
- A transport network that facilitates a sustainable transport system to meet the future needs of a growing population.
- Adverse effects including noise and vibrations from roads and rail networks and from the operation of aircraft utilising Christchurch international Airport and other airfields, on surrounding land uses and the environment.

Noise, vibration and other effects from roads, railway lines and airfields on the environment.

- Effects on the operation of transport networks from adjoining land uses.
- Accessibility and effects of transport on energy use and the environment.

Effects of transport on energy use and the environment.

#### Introduction

Transport systems move people, goods and services throughout Selwyn District and between the District and other areas. The major transport networks in the Selwyn District are road, railway lines and airfields—Transport networks also come within the ambit and general definition of utilities.

Selwyn District is experiencing continuing population growth necessitating the integration of transport and land use planning to reduce dependence on private motor vehicles (minimising energy use) through the provision of infrastructure designed to promote and achieve good connectivity and linkages to and through developments including access to public transport, walking and cycling routes. There is an increasing need to integrate land use and transport planning through the district and with adjoining districts.

### **Roading Network and Pathways**

The roading network is the main transportation link in the District. Transit The New Zealand Transport Agency manages all State Highways and the Selwyn District Council manages all other public roads in the District. Some landowners have private roads or rights of way for access to or over their property. State Highways 1, 73, 75 and 77 pass through Selwyn District. Some landowners have private roads or rights of way for access to or over their property. The District has many kilometres of road for its size. Many roads are sealed, but there is a large number of unsealed roads in the rural area The district has just over 2400km of formed roads. Just over half of the road network is sealed, the remainder un-sealed. There is also approximately 950 kilometres of unformed "paper" roads within the District. These road networks provide for a

range of modes including walking, cycling, equestrians, stock droving, public transport, freight and private motor vehicles.

There is an increasing network of formed pathways within the District, some of these are shared use (for both walking and cycling). The main existing pathway is the Little River Railtrail however provision for similar paths between townships is being made.

Paths need to be strategically located to ensure they meet the needs of the potential users. Paths may be provided in a variety of locations both on and off road and or located within the road reserve but separated from the carriageway. There is also potential to utilise reserves and esplanade strips / reserves for walking and cycling pathways, often these areas have higher amenity than a road and are popular for recreational users but also add to the overall walking and cycling network for commuters and local trips.

The interaction of pathways with other transport networks also needs to be considered, commonly pathways for example cross roads and vehicle crossings.

## **Railway Lines**

There are two railway lines running through the District: the Midland line which runs east-west, and the South Island Main Trunk railway line which runs north-south. <u>These are owned and managed by ONTRACK (a division of NZ Railways Corporation).</u>

#### **Airfields**

[No Change]

## **Issue 1**

## **Integrating Land Use and Transport**

Land use patterns can exacerbate the adverse effects of transport and result in a high dependency on the use of private motor vehicles. Initiatives such as the Greater Christchurch Urban Development Strategy (UDS) and the Regional Policy Statement (RPS) have identified where growth may be appropriate. The identification of future growth also requires consideration and integration of the strategic provision of transport infrastructure.

To reduce demand for transport and hence dependency on private motor vehicles, a network that facilitates more sustainable transport is required. This necessitates good connectivity (the linking of local facilities, adjoining land and surrounding neighbourhoods through interconnectivity of transport networks) and permeability (choice and ease of movement through the network) within and between urban areas in the district as well as to destinations in surrounding districts.

In order to reduce adverse effects associated with transport, Selwyn District also needs to improve and promote the accessibility (ensuring all users, particularly active transport users have access to and through the network) and permeability for sustainable travel modes such as walking, cycling and public transport.

The provision of good quality infrastructure for pedestrian, cycle and other sustainable modes is necessary to promote and provide for alternatives to private motorised transport. Good pedestrian and cycle links must be located such that they provide a direct route between key land use destinations and activities.

Selwyn District has a number of urban areas separated by large areas of rural land use. A significant number of persons commute daily between Selwyn District and Christchurch. Given these characteristics, the provision or improvement of public transport services between townships and to Christchurch may require the provision of land for transit exchanges such as park and ride schemes.

## **Issue 12**

## Safe and Efficient Use of the Transport Network

Activities occurring alongside roads, railway lines or airfields the transport network can affect transport safely and efficiency the safe and efficient operation of the transport system.

#### **Road Network**

Activities occurring both alongside and within the space occupied by transport networks can affect how safely and efficiently these networks operate. Roads carry a variety of traffic: motor vehicles; towed vehicles (boats and caravans); heavy vehicles; cyclists; pedestrians; and stock, all of which move at different speeds. These different uses within the road network create the potential for accidents and reduce the efficiency and effectiveness of the road in meeting the transport needs of any one group of road users. This problem is not so apparent for railway lines and airfields, which primarily deal with one mode of transport.

<u>Activities</u> occurring on land adjoining roads can adversely affect their safety and efficiency in several ways:

- Activities which generate lots of people or vehicles on opposite sides of a road or railway line can increase the number of people and vehicles crossing these networks, e.g. when a school and sportsgrounds are located on opposite sides of a main road or railway line.
- Cars parked on roadsides and incorrectly-positioned signs or structures can reduce the visibility of intersections, vehicle crossings or railway crossings.
- Cars parked on roadsides reduce the carriageway width available to motorists and cyclists travelling along the road.
- Vehicle crossings sited too close to intersections or on bends or 'blind spots' can obscure the visibility of oncoming traffic and other road users.
- Roadways, which are not designed or formed to the standard necessary to carry the volume or type of traffic using them (including <u>active non-motorised</u> modes), can create safety problems and congestion.
- Signs along roadsides can distract drivers' attention for too long, particularly if the sign is hard to read or contains too much information.
- Inappropriately-sited signs, or inappropriately-designed vehicle crossings, entranceways or intersections can cause motorists to make sudden manoeuvres (stops or turns) or delay the vehicle exiting the traffic stream, in particular heavy vehicles that require more space to turn.
- Other utilities are often located in (or under) road reserves. The installation, maintenance or replacement of utilities within the road reserve can disrupt traffic flows and affect safety and access to sites.
- Areas in the approach paths to airfields or airports need to be clear of very high structures, to enable the airfield or airport to operate within Civil Aviation Authority regulations.

For example, a school or sports ground without on-site parking.

- Visibility along roads and at vehicle crossings and intersections can be impaired by: parked vehicles, signs or structures; or inappropriately designed or positioned vehicle crossings.
- Roads which are not designed or formed to the standard necessary to carry the volume or type of traffic using them, can create safety problems and congestion.
- Activities or signs along roadsides can distract driver's attention, if the sign is hard to read.
- Sudden driving manoeuvres may occur if activities have insufficient warning signs or inadequately designed access and egress.
- Other utilities are often located in (or under) roads. The installation, maintenance or replacement of these utilities within the road reserve can affect traffic flow, safety and access to sites.
- Stock droving on roads has the potential to cause conflict between farmers and road users.

These effects are can be compounded by the speed limit in the rural area (100km/hr) on roads that are, for example, winding, have narrow carriageways or are icy in winter.

#### **Heavy Vehicles**

Heavy vehicle use on roads <u>may</u> increases with changes in rural land uses. In Selwyn District the activities most likely to lead to increases in heavy vehicles are increases in forestry and dairy conversions <u>and the general transporting of freight (including stock, rural products and farm machinery).</u> Tourism ventures may lead to increases in bus trips. <u>Freight passing through the district is most likely to be on State Highways, arterials and other specific routes (i.e. over dimension routes and routes where increased tonnage may be permissible).</u>

Heavy vehicles pay for the additional wear and tear on roads through road user charges. An upgrade to a particular road may be required to strengthen it for heavy vehicles associated with a new activity. For example: strengthening a bridge or culvert, widening the carriageway, or providing a turning area.

## Stock

[No Change]

#### **Resident Growth**

Residential density is increasing in the rural area particularly within 30km of Christchurch. Many of these residents live in the rural area predominately for lifestyle reasons and commute between Selwyn District and Christchurch City (see Section 4.1). This activity has two effects on the road network:

- More people using arterial routes between Selwyn and Christchurch contributing to congestion.
- Higher expectations about the standard to which roads in the rural area should be formed.

A paper published by Statistic New Zealand (Statistics New Zealand, 2008, Workforces on the move: An examination of commuting patterns to the cities of Auckland, Wellington and Christchurch) stated that the 2006 census revealed that around 7,700 people commute from Selwyn District to Christchurch City for work. A study undertaken for the Council (Barber, 1999, Energy Use and Settlement) estimates that between 4,000 and 5,000 people commute daily between Selwyn District and Christchurch City Staff at Christchurch City Council are Of particular concerned about the effects of additional is traffic using the Ellesmere/Sabys Roads route, as it passes volumes entering and leaving Christchurch City travelling through the residential areas at of Hornby, Halswell and Hoon Hay and townships such as Prebbleton. Selwyn District Council is concerned about effects on Prebbleton Township of additional traffic along Springs Road, and on

Lincoln Township along Ellesmere Road and James StreetGerald Street and access to State Highway 1 at Rolleston township and the Izone industrial area.

Another effect of subdivision and residential growth in the rural area appears to be a demand for roads in the rural area to be sealed, even when there are insufficient vehicle numbers on the road to warrant sealing. The demand is greatest on roads which lead into the City and roads which lead to Arterial Roads into the City. Therefore, the demand may be to reduce perceived travel time to Christchurch.

The Council <u>funds road maintenance and upgrades</u> anticipates recovering the majority of its <u>funds for road upgrades</u> from rates income and <u>or LTNZNZTA</u> subsidies <u>through the National Land Transport Programme</u>. However, the LTCCP Development Contribution Policy <u>also</u> provides for development contributions to be taken in specific situations where the road improvements provide a direct benefit to the development being considered or the development itself requires the upgrade of the roading network adjacent to the development. <u>This may require Council also providing supporting funding.</u>

## **Railway Lines**

Pedestrians, motorists, stock and other road users moving across railway lines can also create potential safety hazards. The two main trunk railways lines in the Selwyn District cross many roads. Not all railway crossings in the District have bells or barrier arms, so visibility at railway line crossings is very important for both train drivers and motorists. Railway crossings need to be appropriately designed for the number and type of vehicles using them. Where activities increase the number of people or vehicles crossing the railway line, any effects on the safety of the crossing need to be mitigated.

#### **Airfields**

#### [No Change]

#### **Pathways**

In order to encourage active travel modes and increase connectivity through rural areas it is necessary to establish a greater provision for walking, cycling and shared paths. Such paths need to be strategically located to ensure they meet the needs of the potential users. Such paths may be provided in a variety of locations both on and off road and or located within the road reserve but separated from the carriageway. The main existing pathway is the Little River Railtrail.

The interaction of such pathways with other transport networks also needs to be considered, often pathways must cross roads and vehicle crossings as such the location and design of the path particularly where it may interact with other transport networks needs consideration.

#### Issue 3

## **Future Transport Network**

The Christchurch Rolleston Environs Transportation Study (CRETS)¹ identified the issue of efficient travel within and beyond the district to meet the future needs of the growing population

<sup>&</sup>lt;sup>1</sup> CRETS commenced in 2000 and is a partnership between SDC, NZTA, CCC, ECAN and CIAL to investigate and develop a transport strategy to accommodate transport growth and demand in the greater Christchurch area up to and beyond 2021. CRETS was adopted by SDC in 2007.

in both Selwyn District and Christchurch City and the increasing demand for travel between these districts.

There is an identified need to provide adequate capacity and ensure a good level of service on State Highways, arterial and collector roads between townships, to Christchurch City and other major destinations around Selwyn District. This requires upgrading existing links and providing new roads to encourage the use of main roads and avoid adverse effects of through traffic particularly on the townships of Rolleston, Lincoln, Prebbleton and Templeton.

Main routes need to provide for the future expansion of public transport services within Selwyn District to Christchurch City and other major destinations. In conjunction with public transport, there is also a need to provide off road cycle and pedestrian links between townships to offer alternatives to private motor vehicle travel as part of the overall strategy to meet the travel demands associated with growth.

Many of the future transport network issues facing Selwyn District cross territorial boundaries and require co-operative planning of the timing and funding of road upgrades in the short, medium and long term, with other stakeholder partners such as Christchurch City Council, New Zealand Transport Agency, Environment Canterbury and the Christchurch International Airport. These include upgrading the road network, new motorways, public transport and walking and cycling links.

Future local transport networks need to be designed to ensure long term sustainability of the land transport system and to ensure future roads created by subdivisions are appropriately located within the existing road network to accommodate all potential road users including buses, pedestrians and cyclists.

In the next 40 years freight demands are expected to double in the Canterbury region. The efficient movement of freight is beneficial to the district and needs to be considered in the planning of the transport network. The future network may see the establishment of freight hubs and inland ports to cater for this growth by providing efficient opportunities to store, distribute and transfer freight between different transport modes e.g. sea, air, road and rail.

Future transport solutions may require utilisation of a variety of transport modes including alternatives to road transport. Viable opportunities to diversify the transport network via utilisation of alternatives to road transport need to be considered. The movement of freight via rail has been identified as an opportunity to control heavy vehicle use of the road networks where a practical and viable opportunity exists.

#### Issue 24

## Effects <u>of transport networks</u> on the Environment and Surrounding Land uses

The operation of transport networks can also adversely affect the activities and surrounding environment. Examples include:

- Noise and vibration from heavy vehicles on road and rail.
- Dust and dirt from heavy vehicles, particularly stock trucks and coal trains.
- Reduced safety and amenity values from either increased traffic or from heavy vehicles servicing or passing through residential areas.
- Noise from aircraft flying overhead, as they approach and take off from, airports.

- Effects of constructing or maintaining roads, <u>pedestrian and cycling pathways and or</u> railway lines on adjoining waterbodies and wetlands.
- The visual effects from road <u>and pathway</u> construction on slopes or bridges across waterbodies.
- The effects of noise, vibration, <u>emissions, glare</u> or dust from roads, railway lines or airfields on adjoining residents and reverse sensitivity effects.
- The effects of stormwater run-off on the adjacent environment, particularly run-off if it flows directly into streams.
- The effects of stock droving on road surfaces and road verges.

Increasing growth and development pressures are exacerbating such adverse effects in the Rural zone which can be more sensitive to these effects compared to most urban areas. It is therefore becoming increasingly important to integrate land use and transport planning.

## Issue 35

## <u>Effects on the Operation of Transport Networks From Adjoining Land</u> Uses (**Reverse Sensitivity Effects**)

## **Reverse Sensitivity Effects**

Sometimes nearby residents complain about these effects, and try to restrict the activity to reduce the effects. This 'reaction' is known as a reverse sensitivity effect. It <u>often</u> occurs when <u>for</u> <u>example</u>:

- People buy or build houses next to busy roads, <u>pathways</u>, railways lines or airfields and do not expect the effects
- The traffic using the road, railway line or airfield changes and the effects increase.

Often these effects can cause nearby residents to complain, and try to restrict:

- the type of vehicles which use the road;
- the speed of vehicles; or
- the times when trains, aircraft and ancillary activities (such as loading of freight) operate

Increasing urban growth and development pressures are exacerbating such adverse effects in the Rural zone which can be more sensitive to these effects compared to most urban areas. By taking an integrated approach to land use and transport planning such effects can be avoided or minimised.

## **Christchurch International Airport**

[No Change]

### Issue 46

## **Accessibility, Energy Use and Diversity of Transport Modes**

## **Effects of Transport on Energy Use and the Environment**

One of the core functions of transport infrastructure is to provide safe, efficient and effective transport options. Another is to ensure that both the transport options and adjoining land uses are accessible to the people who use them.

Transport involves energy use. The most common forms of transport in New Zealand rely on the consumption of non-renewable carbon-based fuels (petrol, diesel, etc) and the use of private motor vehicles. Carbon-based fuels are thought to contribute to increased concentrations of earbon-dioxide (CO<sub>2</sub>) in the atmosphere. These increases could cause changes to atmospheric and climatic conditions (the Greenhouse Effect). Private motor vehicles are not as efficient, in terms of fuel consumed per weight transported, as other modes of transport (Regional Policy Statement, 1998, p. 215). The New Zealand Transport Strategy indicates that around one third of all vehicle trips are less than 2km and the majority less than 6km. Although a number of these trips may be linked to form tours or trip chains there are still around a quarter of these tours which are less than 4km long and around half are less than 10km long². A large proportion of private motor vehicle trips are made by a single occupant. Travel by private motor vehicle is inefficient in terms of fuel consumption and environmental effects per weight transported.

The provision of transport infrastructure and the use siting and design of transport infrastructure and land use patterns can cause and exacerbate adverse effects on the environment. These effects may-include "green house" gas emissions with atmospheric and climatic changes. The adverse effects of transport on energy efficiency and air quality are indentified by the RPS as a resource management issue for the whole of Canterbury. In addition, direct effects of transport on the environment of the Selwyn District may result, such as: air pollution, noise and vibration, contaminated stormwater run-off from roads, loss of public amenity including effects on visual amenity, natural character and areas of significant flora and fauna, effects on ancestral lands, sites and other taonga of value to Tāngata Whenua, spread of noxious weeds from road verges, loss of land to roads and to the parking of vehicles and effects on sites of heritage value.

The Regional Policy Statement instructs District Councils to promote land use and settlement patterns which reduce the demand for transport, especially by private motor vehicles. The RPS (Plan Change 1) also seeks to ensure that planning and provision of transport infrastructure is integrated with development and settlement patterns to reduce network congestion, reduce dependency on private motor vehicles, reduce emission of contaminants to air and water, reduce energy use and promote the use of sustainable transport modes.

The Regional Policy Statement identifies adverse effects of transport (particularly private motor vehicles) on energy efficiency and air quality, as resource management issues in Canterbury (Chapter 12, Policy 1, p. 189, Chapter 13, Policy 9, p. 215, Chapter 15, Policy 3, p. 235). The Regional Policy Statement instructs district councils to promote land use and settlement patterns which reduce the demand for transport, especially private motor vehicles (Chapter 13, p. 215).

Existing settlement patterns in Selwyn District include concentrations of people in growing townships separated by rural areas. This settlement pattern results in large commuter travel distances and heavy reliance on private motor vehicles. The existing nature of Selwyn District and the anticipated increase in future population growth makes it imperative to integrate future

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<sup>&</sup>lt;sup>2</sup> O'Fallon, C., Sullivan, C. 2005. Trip chaining: understanding how New Zealanders link their travel. *Transfund New Zealand Research Report No.* 268. Pg.46, Table 5.9

land use and transport planning to ensure that new development and a variety of transport infrastructure and modes are sustainable, functional and accessible.

Within the Selwyn District, transport networks need to be upgraded and when necessary new networks provided to improve accessibility and provide for sustainable travel options to reduce both local and wider environmental effects of travel. Transport routes linking townships pass through the rural area, and as such the rural area will also benefit from the promotion of sustainable modes of transport, for example the Christchurch to Little River Railtrail pathway.

Any new development needs to be appropriately located within the transport network (including roads and pathways) that are accessible, connected, safe, well designed and appropriately located to encourage the use of active transport. New developments should also consider the ability to accommodate future public transport systems.

## TRANSPORT NETWORKS — STRATEGY

The Rural Volume of the District Plan uses the following basic strategy to address transport issues:

#### **Integration of Land use and Transport**

 Policies and rules that reflect the need for an integrated approach to land-use and transport planning to avoid adverse effects of development.

#### **Safe and Efficient Use**

- A road classification (referred to as a road hierarchy) is used to identify and manage roads in the district based on their function and roles.
- Rules for: the design and siting of roads; vehicle crossings; vehicle access ways; car parking; and roadside signs, and activities on and alongside the road, based on the classification of the road.
- Policies to manage and plan the growth of townships to reduce effects of traffic movements on to or across main roads or across railway lines.
- A policy and rule to manage the height of structures near airfields.
- A policy to encourage network utility operators to minimise the effects of their activities in road reserves, on traffic flow and efficiency.
- A policy and rule to maintain visibility along railway lines and to avoid access to properties across railway lines.

#### **Future Transport Network**

- Policies and rules to encourage the development of roads and subdivisions which provide for sustainable transport modes (both on and off road).
- Rules for the provision of cycle parking.
- Policies and rules to encourage development patterns that reduce the need to travel long distances and enable short trips to be undertaken by more sustainable travel modes.
- Policies and rules that ensure the long term protection of transport systems including transport corridors

#### **Effects on Surrounding Land-use**

- Rules to control the minimum building setback from road boundaries
- Rules to control the orientation and frontage of new residential developments adjoining arterial roads and state highways.

## **Safe and Efficient Transport Networks**

 Each road in the District is based on its function and the volume of traffic using it (see Appendix 9).
 Policies and rules to manage:
- Design of roads; and
<ul> <li>Activities on and alongside roads;</li> </ul>
Based on the classification of the road.
 A policy and rule to maintain visibility along railway lines and to avoid access to properties across railway lines.

## A policy and rule to manage the height of structures near airfields.

## **Environmental Effects and Reverse Sensitivity**

- A policy to encourage <u>roading transport</u> authorities to reduce the effects of constructing and maintaining roads on the surrounding environment.
- A policy and rule to manage the location of new airfields relative to houses.
- A policy and rules to protect existing airfields and the flightpaths to Christchurch International Airport from reverse sensitivity effects within the area covered by airport-noise contours.
- A policy to promote the provision of, and encourage the use of, sustainable modes of transport within the rural area.
- The Plan policies encourage growth patterns that limit new residential areas to be developed parallel with and along main roads or railway lines.

### TRANSPORT NETWORKS — OBJECTIVES

**ROAD, PATHWAYS, RAIL AND AIRFIELDS** 

## **Objective B2.1.1**

An integrated approach to land use and transport planning to ensure the safe and efficient operation of the District's roads, pathways, railway lines and airfields is not compromised by adverse effects from activities on surrounding land or by residential growth.

The safe and efficient operation of roads, railway lines and airfields is not compromised by effects of new land uses.

### **Objective B2.1.2**

An integrated approach to land use and transport planning to manage and minimise Aadverse effects on the of transport networks on adjoining land uses, and to avoid "reverse sensitivity" effects on the operation of transport networks. environment from constructing and maintaining roads and rail links are mitigated.

## **Objective B2.1.3**

<u>Future road networks and transport corridors are designed, located and protected, to promote and provide for: sustainable transport modes; and alternatives to road movement of freight such as rail.</u>

## **Objective B2.1.4**

Adverse effects of land transport networks on natural or physical resources or amenity values, are remedied or mitigated, including adverse effects on the environment from construction, operation and maintenance.

## **Objective B2.1.35**

Continued operation of existing airfields without adverse noise effects on land uses near airfields or under flight-paths to airfields including Christchurch International Airport while ensuring such resources are not compromised by inappropriate development of noise-sensitive land use activities.

#### **Explanation and Reasons**

Transport networks are vital to <u>provide and improve accessibility (ensuring all users, particularly active modes have access to services) to</u> social, <u>cultural and</u> economic activities in the District. <u>People need access to quality transport networks, to move themselves and their goods safely and <u>efficiently.</u> Activities alongside roads, <u>pathways</u>, railway lines and airfields can affect <u>the safe and efficient operation of the transport networks.</u></u>

They need to operate safely and efficiently. Activities alongside roads, railway lines and airfields can affect their safety and efficiency. Objective B2.1.1 is to ensure these effects do not occur. The objective relates to land uses, because this is the function of district councils under the Act. Other legislation addresses the safe operation of motor vehicles, trains and aircraft. Objective B2.1.1 is achieved by policies and rules to:

- Ensure roads are formed and maintained to a standard to accommodate the volume and type of traffic.
- Avoid land uses creating hazards alongside roads and railway lines or around airfields.

At the same time, residents living near transport networks sometimes object to effects such as noise, dust and vibration from the network. Objectives B2.1.1 and B2.1.2 are centred on ensuring transport networks operate safely and efficiently while not adversely affecting people living nearby.

Objective B2.1.2 recognises the potential impacts land use and transport can have on each other. Managing and mitigating such effects necessitates an integrated approach to the planning of transport systems and surrounding land uses.

Integrated assessments become increasingly important where activities are proposed out of zone, areas of land are rezoned, land is subdivided or activities that generate significant levels of traffic (all modes) are proposed.

The fundamental purpose of an integrated assessment from a transport perspective is to consider the accessibility of any proposal, for a range of modes and the ability to improve the accessibility for all modes. Other important considerations relate to how well the proposal fits with the objectives and policies of the wider area, the nature and scale of traffic (not just motorised)

associated with the proposal and the impact on the existing transport network including any changes needed to meet appropriate policies and standards or improve connectivity (the linking of local facilities, adjoining land and surrounding neighbourhoods through connected transport networks) particularly for active modes.

An integrated land use and transport planning approach will manage the effects of urban growth and development on the existing transport network, manage the effects of transport networks on land uses and integrate the provision of new sustainable transport modes into the network based on anticipated urban growth.

The ebjective B2.1.3 relates to improving the permeability (providing choice and ease of movement through the network) and accessibility of the transport network in terms of the design, form, function and location of roads for example to achieve greater connectivity, as well as the provision for sustainable modes of travel. Providing a high level of connectivity can reduce travel distances and make active modes more attractive and efficient for users where such provision can have environmental and social benefits.

Objective B2.1.3 recognises that future solutions to transport particularly in and through rural areas need to consider sustainable transport modes. Consideration shall be given to the potential for public transport and expanding the active transport network and utilising and promoting the movement of freight via existing and future rail infrastructure.

Whilst the majority of sustainable transport options are focussed in urban areas, the road network in the rural area provides key transport links between townships, and as such needs to allow for public transport, cycle and pedestrian routes. An example is the Rail Trail cycleway.

Roads, pathways and rail links may pass through or alongside bush areas, waterbodies and wetlands, over slopes, and over or near sites of special cultural or heritage values. Objective B2.1.24 addresses the effects which the construction and maintenance of roads, pathway and rail links may have on the surrounding area. Roads and railways are maintained by requiring authorities using designations (see Part A, Section 2.6), so District Plan rules do not apply Objective B2.1.24 is implemented using a combination of: advocacy; encouraging good practice among requiring authorities; and the Council's power under section 176(A) of the Act to approve outline plans for designations. Objective B2.1.3-5 protects existing airfields and Christchurch International Airport from potential reverse sensitivity effects caused by residential activities locating too close to airfields or underneath the flight paths to Christchurch International Airport while ensuring that adverse effects of noise on other land uses in the District are limited. The objective is achieved by policies and rules to manage residential density in the rural area generally and under the flight paths to Christchurch International Airport, specifically. The policies and rules require additional noise insulation in houses erected in the area covered by the 55 dBA Ldn noise contour for Christchurch International Airport (see the Planning Maps).

### TRANSPORT NETWORKS — POLICIES AND METHODS

## **ROADS AND PATHWAYS**

### **Policy B2.1.1**

Apply a road hierarchy classification in Selwyn District to recognise the different functions and roles of the Districts roads.

Manage the Districts road network based on the function of each road and the volume of traffic it carries.

## **Policy B2.1.2**

Manage effects of activities on the safe and efficient operation of the District's existing and planned road network, considering the classification and function of each road in the hierarchy.

When the function of a road or the volume of traffic on it changes:

 Ensure the road is upgraded to comply with the Council's Engineering Design Standards 2000 (see Appendix 10).

#### NOTE:

The upgrading of State Highways is undertaken by Transit New Zealand to their own standards.

## **Policy B2.1.3**

Recognise and protect the primary function of Manage roads classified as Strategie State Highways or Arterial Roads in Appendix 9, primarily to ensure the safe and efficient flow of through traffic en route to its destination.

## Policy B2.1.4

Recognise all other roads in the District as providing equally important functions of:

- carrying 'through' traffic;
- providing access to properties; and
- providing pedestrian, cycle and stock access to properties.

## **Policy B2.1.4(a)**

Ensure all sites, allotments or properties have legal access to a legal road which is formed to the standard necessary to meet the needs of the activity considering:

- the number and type of vehicle movements generated by the activity;
- the road classification and function; and
- any pedestrian, cycle, public transport or other access required by the activity.

### **Policy B2.1.4(b)**

Avoid adverse effects on the safe flow of traffic along State Highways and Arterial Roads from new property access or activities which generate a high level of traffic movements.

## **Policy B2.1.5**

<u>Promote the strategic planning of transport networks to achieve a high level of connectivity and provision for sustainable transport including public transport, cycling and walking.</u>

**Explanation and Reasons** 

Every road in the District is classified using a combination of destination (the link the road provides), and the number of vehicles using it and the function of the road. The standards rules for the design and formation of roads, vehicle accessways, and vehicle crossings; and

the rules for land uses, alongside roads, are based on the classification the road has in the road hierarchy. Road classifications are listed in **Part E**, Appendix 9.

Roads classified as Strategic Roads in the road hierarchy carry large volumes of traffic between destinations, often at high speeds. Due to the volume and speed of traffic, the function of Strategic Roads to carry through traffic takes precedence over other functions of these roads. Policy B2.1.3 ensures activities which may affect this function such as: property access; signs; car parking; and stock droving are managed. The Strategic Roads in Selwyn District are listed in Appendix 9. They include all State Highways and Springs Road.

Policy B2.1.4 ensures all other roads in Selwyn District are managed to balance each of their functions equally. The Plan uses rules to manage effects of activities both alongside and within the road reserve. Within the road reserve, the Council and Transit New Zealand can also control activities through their powers under the LGA and the Transit New Zealand Act 1989, respectively.

Roads classified as State Highways are highest in the road hierarchy, they are required to accommodate connections by arterial roads, collector and local roads in a very controlled manner. Due to the higher volume and speed of traffic, the function of State Highways to carry 'through' traffic takes precedence over other functions of these roads. Activities which may affect this function such as: property access; signs; car parking; and stock droving are managed.

Arterial Roads connect the districts townships and other important places and activities together, including across district boundaries. They are medium capacity roads and have intersection priority over other roads lower in the hierarchy. They can provide a continuity of linkage between State Highways and collector roads and may be required to accommodate inter town bus services. Arterial roads are required to minimize, and control local road and property access to ensure they operate efficiently.

Collector Roads are low to medium capacity roads typically in urban areas that have an increased degree of access compared to other roads higher in the hierarchy. In some situations they may link smaller rural communities to the arterial road network. They provide a continuity of linkage between arterial roads and local roads and are the most likely used, in conjunction with arterial roads, to accommodate bus routes. Collector roads are required to balance the necessary traffic movement function against the property access function that they also need to provide.

Local Roads make up the largest proportion of the districts rural roads, and almost entirely their function is to provide for access to properties and adjoining land uses. They are not intended to act as main through routes for traffic, and generally have lower traffic volumes. They are not specifically identified in this Plan as there are no specific planning polices associated with them.

Policy B2.1.2 ensures all collector and local roads in Selwyn District are managed to balance each of their functions in respect to their classification within the road hierarchy. Within the road reserve, the Council and the New Zealand Transport Agency can also control activities through their powers under the Local Government Act and the Government Roading Powers Act 1989, respectively.

It is important to consider the location and design of new roads within the context of existing and anticipated transport networks and adjoining land use patterns. Policy B2.1.5 acknowledges that the strategic planning of transport networks to achieve a high level of connectivity and providing for sustainable transport (including public transport, cycling and walking) modes can reduce dependence on private motor vehicles with associated environmental, social and other benefits. In respect to future public transport provision reference is made to the guide on "Providing for Passenger Transport within your subdivision".

Developments can affect the classification of a road by increasing volume of traffic. When a development changes the volume or type of traffic on a road, the LTCCP Development

Contribution Policy enables Council to take development contributions to pay for road upgrades (see Section B4.2). This may include the forming of any unformed legal road to provide access to a property. The forming of any unformed legal road necessary to provide access to a development or activity is the responsibility of those wishing to utilise the road.

Appendix 10 outlines the standards for road design and vehicle crossings, for roads as classified. These standards are taken from the Council's Engineering Design Standards 2000. These standards also stipulate standards for construction of roads and other utilities to be vested in the Council.

#### **Methods**

#### **Road Hierarchy**

Appendix 9.

#### **District Plan Rules**

- Road Formation
- Vehicle Accessways
- Vehicle Crossings
- Car Parking
- Intersection Distances
- Outdoor Signs
- Subdivision rules
- Outline Development Plans

### <u>Bylaw</u>

- Stock Droving
- Traffic and Parking
- Speed Limits

#### **LTCCP**

- Development Contribution Policy
- Community Outcomes

Design Guide for residential subdivision in the urban living zones

## **Policy B2.1.6**

<u>Avoid adverse effects of on-road parking and loading generated by surrounding land uses on rural roads.</u>

### **Policy B2.1.7**

Provide for pedestrian safety, security, circulation and access within parking areas by considering the interaction of vehicle access and manoeuvring, circulation, loading and parking, with likely pedestrian routes onto the site and between car and cycle parks, and building entrances.

#### **Explanation and Reasons**

The majority of rural roads have a narrow carriageway and do not provide adequate width or sealed shoulders to allow for parking. Parking on grassed berms can damage the berm and drainage systems (for example, swales) and result in dust nuisance, spread of noxious weeds as well as mud and other deleterious material being deposited on the sealed carriageway. The provision of parking off-road avoids the potential for additional conflict associated with vehicles manoeuvring to and from road side parking with high speed vehicles on the frontage road. The type of traffic on rural roads for example heavy or over width vehicles and farm machinery that needs to use the road sides for access, can also exacerbate these effects. In addition to adverse effects on the safety, efficiency and other roles and functions of the road, road side parking in rural areas can have a noticeable impact on the character and amenity of the surrounding rural area.

Activities (particularly those with high visitor parking demand) with larger parking areas require the consideration of pedestrian safety, security, circulation and access within parking areas to be balanced against vehicle access and circulation in order to encourage people to walk and cycle within townships and provide for safe movement of pedestrians within the site, to and from motor vehicles and cycle parks.

Significant improvements for pedestrian circulation within a site can be achieved through consideration of the location of vehicle access and manoeuvring areas relative to pedestrian entrances to sites, parking areas and the building entrance and does not always require provision of separate pedestrian facilities.

#### **Methods**

#### **Road Hierarchy**

Appendix 9.

#### **District Plan Rules**

- Vehicle manoeuvres
- Subdivision

#### **LTCCP**

Development Contribution Policy

#### **District Plan Rules**

- Road formation
- Vehicle Accessways
- Vehicle crossings
- Car parking
- Intersection distances
- Outdoor signs
- Subdivision rules
- Outline Development Plans

#### **Bylaw**

- Stock droving
- Traffic Control and Parking
- Speed Limits

## Policy B2.1.58

Ensure roadside signs are designed and positioned so they can be read quickly and clearly by motorists without causing prolonged distraction from the road or sudden vehicle manoeuvres.

**Explanation and Reasons** 

Traffic safety is paramount and efficient traffic flow is important, to efficiently move people and freight throughout the District. Signs that are incorrectly sited or designed may be hard to read and cause drivers to be distracted from the road for too long. Similarly, if signs are not sited far enough away or roadside activities have insufficient room for vehicles to move safely onto or off the road, they can cause drivers to make sharp or sudden manoeuvres which may disrupt traffic flow or cause an accident. The District Plan can reduce potential adverse effects on traffic safety or flow, caused by incorrectly positioned roadside structures such as signs, intersections, vehicular vehicle crossings and roadside stalls.

## Policy B2.1.79

Ensure buildings are set back a sufficient distance from road boundaries to maintain good visibility for pedestrians, cyclists and motorists, to allow safe access and egress.

**Explanation and Reasons** 

Buildings positioned too close to road boundaries can affect the visibility of pedestrians, cyclists and motorists. If garage doors are parallel to the road it is desirable that there is sufficient room for a motor vehicle to park in front of the garage and off the footpath when stopping to open the garage door. Policy B2.1.9 is to ensure that buildings are setback a sufficient distance from roads, to ensure road safety is not adversely affected.

The policy is implemented by rules for setbacks of buildings from road boundaries. Setbacks are also required to mitigate reverse sensitivity arising from road noise.

## Policy B2.1.610

Ensure vehicle crossings, intersections, vehicular accessways pathways, roadside signs, and noticeboards and roadsidestalls are designed and positioned to ensure good visibility for motorists and pedestrians all road users, and to allow safe passage, access and egress.

**Explanation and Reasons** 

If vehicle accessways and intersections are located too close to one another, visibility is insufficient for motor vehicles to manoeuvre on and off the road safely.

## **Policy B2.1.11**

Ensure roads are designed, constructed, maintained and upgraded to an appropriate standard to carry the volume and types of traffic safely and efficiently.

As land use changes, the volume and type of traffic (including active modes) on a road also changes. As roads get busier, they require different design standards to ensure safe and efficient traffic movements. Upgrades may include widening, strengthening, improved lighting and additional footpaths to provide sufficient capacity for the traffic volumes expected.

#### **Methods**

#### **District Plan Rules**

- Subdivision
- Roads and Vehicle Accessways

## Policy B2.1.812

<del>Discourage <u>Avoid</u></del> new property access directly on to <u>Strategie the State Highway or Arterial</u> Roads, unless there is no alternative legal access available, or effects on the safe and efficient flow of traffic along the road will be minor.

#### **Explanation and Reasons**

Traffic safety is paramount and efficient traffic flow is important, in the District. The District Plan can reduce potential effects on traffic safety or flow, caused by incorrectly positioned roadside signs, intersections, vehicular accessways and roadside stalls.

Policy B2.1.6 manages the design and positioning of vehicle crossings, vehicular accessways, intersections and roadside signs and staffs, to ensure safe vehicle access and egress.

Policy B2.1.7 manages the position of buildings in relation to road boundaries for similar reasons.

Policy B2.1.812 prevents additional vehicle access directly on to roads classified as **Strategic State Highway or Arterial** Roads in the road hierarchy, unless: there is no alternative legal access to the property; or effects on passing traffic will be minor. The Policy and Rule apply to both:

- Additional vehicle crossings on existing properties; and
- New vehicle crossings created when allotments are subdivided and sold.

Strategic State Highway and Arterial roads are managed primarily to carry high volumes of "through" traffic at high speeds, safely and efficiently. In the rural area, the maximum speed limit on Strategic these roads is 100 km/hr. As residential density increases, residential and business activities are starting to creep that seek to locate beyond the speed restricted area increase the chance of vehicle conflicts between adjoining land uses and traffic on the frontage road. The corresponding rule makes vehicle crossings on to Strategic State Highway Roads a restricted discretionary activity (needs a resource consent) if the speed limit exceeds 70km/hr. The Council (as the consent authority) will consider matters such as: whether the property can have access from another road; the location of the vehicular accessway vehicle crossing; and the number and type of vehicles and other modes using it.

It is important to consider the location and design of new roads within the context of existing and anticipated transport networks and adjoining land use patterns.

Please note: Existing property access on to **Strategie State Highway** Roads may be an "existing use" under section 10 of the Act (see Part A, Section 2.3).

#### **Methods**

#### **District Plan Rules**

Outdoor signs and noticeboards

#### Roadside stalls on Strategic Roads

- Utilities
- Access
- Building setbacks from road boundaries

## Policy B2.1.913

Avoid planting trees or hedges in positions or allow them to grow to heights where they will shade roads for prolonged periods during winter.

#### **Explanation and Reasons**

Trees and hedges are often planted along the road boundaries of properties for shelter. Sometimes trees are planted up to property boundaries in plantation to maximise the size of plantations or to avoid having narrow strips of unkempt land along property boundaries. Trees or hedges planted close to the road boundary on the north side of the road can shade the carriageway for the whole day in the winter months when the sun is at low angles. There are many examples throughout the District of stretches of road which remain icy throughout the whole day because of trees and hedges shading the road. This adverse effect can be mitigated by planting trees or hedges a sufficient distance back from the road boundary or by keeping hedges and shelter belts trimmed to a height, so that they do not cast shadows over the road during the middle of the day.

Please note: Existing trees and hedges may be an "existing use" under section 10 of the Act (see Part A, Section 2.3)

**Methods** 

#### Local Government Act, S.355

**District Plan Rules** 

Tree Planting

Advocacy

Negotiation with landowners

### Policy B2.1.1014

Ensure property gates are designed and positioned to leave adequate space for motor vehicles to move off the carriageway before stopping to open them.

**Explanation and Reasons** 

Traffic hazards are created if vehicles cannot move off the carriageway before stopping to open gates. Policy B2.1.<del>10</del>\_14 is implemented by a rule which sets out a minimum distance for a gate

to be set back from the road boundary of the property. The distance depends on whether the gate is swung so it can be opened towards the property or only opened towards the road.

Method

District Plan Rules

Gates

## Policy B2.1.1115

Promote stock droving practices that <u>are safe, controlled</u> <u>and</u> alert motorists that stock are ahead and which minimise disruption to traffic flow <del>along Strategic and Arterial Roads</del>.

**Explanation and Reasons** 

Droving stock along <u>and across</u> roads is an integral part of the <u>use of the road corridor in the</u> rural environment. The risk of accidents between motorists and stock increases as roads get busier. Stock move more slowly than motor vehicles and some motorists hesitate about driving through stock <u>and areas where stock effluent has been left on the road</u>. The potential for conflict <u>appears is</u> greatest on main routes <u>into Christchurch</u>, <u>during busy times however can create significant disruptions and be a hazard to motorists particularly those unaccustomed to such rural activities. The Council will not prevent stock droving along <u>or across</u> roads in the Rural zone <u>where it occurs in a controlled manner</u>, except where Policy B2.1.<u>12-16</u> applies. Stock droving is part of the rural environment, and roads were used to drive stock long before motor cars. Rather, Policy B2.1.<u>1115</u> manages the issue by requiring <u>good</u> stock droving practices <u>which give including providing</u> adequate warning to motorists; and <u>which</u> moveing stock along roads as quickly and orderly as practical. Policy B2.1.<u>1115</u> is implemented through the Council's stock droving bylaws.</u>

**Method** 

Bylaw

Stock droving

## Policy B2.1.<del>12</del>16

Require dairy farms to have alternative access for milking herds to milking sheds other than along formed, legal road reserves.

**Explanation and Reasons** 

Policy B2.1.<u>1215</u> requires dairy farms to have other means by which to move dairy cows between milking sheds and grazing paddocks, than along legal road reserves. <u>This is particularly prudent where dairy cows have to cross roads between milking sheds and grazing areas.</u> The legal road reserve includes both the carriageway and the grass berms.

The Policy applies specifically to dairy herds because they have the greatest effect on the road reserve; due to the frequency of stock movements.

This practice eauses premature wear to the road tar seal damages the road surfacing, road side drains and water races and can lead to slippery driving conditions where effluent and mud is carried and deposited onto the road carriage way. Dairy herds trampling in the road berm churns

up the frontage outside other people's properties <u>affecting private vehicle crossings</u>, <u>making them unpleasant to use</u>.

Method

[No Change]

## **Policy B2.1.17**

Encourage people to walk or cycle within and between townships by providing a choice of routes for active transport modes and ensuring there is supporting infrastructure such as parking for cycles, at destinations.

### **Explanation and Reasons**

All of Selwyn District's townships are small enough that business and community facilities are within easy walking or cycling distance for residents. The Council cannot 'force' residents not to use cars, but it can help develop walkways, cycleways and street designs which make walking or cycling safer and more pleasant.

To be useful cycleways and walkways need to: be easy to access; be perceived as "safe" to use; and lead to focal points such as shops, recreation areas or the school. The provision of well designed facilities at destinations, such as cycle parking and seating, and also signage will help to support the use of cycleways and walkways. Where new pedestrian / cyclist links are provided, the width of the corridor should depend on its length, as the longer the corridor the wider it should be to maintain visibility through the link from both ends.

The Council is required to have regard to the Regional Land Transport Strategy (RLTS) in preparing its District Plan. The RLTS promotes the use of alternative (sustainable) modes of transport (e.g. buses, bicycles, and walking). It is therefore considered that the above policy integrates with the policies of the RLTS.

Methods

Selwyn District Walking and Cycling Strategy

Goals and Action Plan

#### **District Plan Policies**

To assess plan changes to rezone land for expansion of towns

#### **District Plan Rules**

Subdivision, provisions for cycleways/ walkways

#### Subdivision Design Guide

Layout and conceptual design

Selwyn District Council Engineering Code of Practice

Design

#### **LTCCP**

Funding to assist communities to develop walkways and cycleways

## Policy B2.1.1318

Encourage network utility operators to <u>co-ordinate</u>, install and maintain <u>and repair</u> utilities located in the road reserve, at times and in ways which <u>reduce minimise any</u> potential effects on traffic <u>(all road users)</u> flow, <u>traffic</u> safety, <u>amenity or and activities on adjoining land including</u> access to properties.

**Explanation and Reasons** 

The maintenance or repair of roads and the installation, repair or replacement of pipes, cables and other utilities laid <u>under\_within</u> the road <u>reserve</u> disrupts traffic flow <u>and use by other road users</u>. The noise, dust and vibration from these works, and difficulty getting access into or out of properties can also adversely affect residents and businesses.

<u>Utilities are sought to be installed in a coordinated manner to avoid issues associated with</u> continual disruption to road users and infrastructure and perceived inefficiencies by the public.

Much of this sort of work is done by requiring authorities using designations or special statutory powers. The Council will encourage network utility operators to consider these matters when developing work programmes, particularly for non-emergency work.

Methods

[No Change]

## **RAILWAY LINES**

## **Policy B2.1.19**

Encourage viable alternatives to road transport such as the movement of freight via rail.

**Explanation and Reasons** 

<u>Future solutions to transport particularly through rural areas may necessitate alternatives to road transport.</u> The use of existing and future rail infrastructure may facilitate more efficient movement of freight throughout and beyond the District.

Method

<u>District Plan Rules - rail ways</u>

## Policy B2.1.<u>1520</u>

Ensure structures and plantings do not impair the visibility of railway lines and road/rail crossings for motorists, pedestrians, cyclists or train drivers.

**Explanation and Reasons** 

Railway crossings are hazardous places and not all crossings have bells or barrier arms <u>or other</u> <u>appropriate warning devices.</u> Visibility of railway crossings is as important as visibility at any

intersection. Some land alongside railway lines has building line restrictions to ensure visibility is not impaired.

Method

[No Change]

## Policy B2.1.1621

Avoid any property having access to a formed, legal road over acress a railway line.

**Explanation and Reasons** 

Pedestrians and vehicles should not have to cross a railway line to obtain access on to a formed legal road from their property. The crossing of railway lines, except at controlled level crossings, is dangerous.is best undertaken at controlled road level crossings as other situations can be dangerous where the necessary standards and controls cannot be provided.

Method

District Plan Rule

Property access

## **Policy B2.1.22**

Ensure any new development is designed and located to minimise the need for pedestrians, cyclists, motorists or other road users (including stock) to cross railway lines.

**Explanation and Reasons** 

Where new development is proposed, consideration should be given to the location of the land relative to any railway line: in particular; whether pedestrians or motorists need to cross the railway line to access the main road out of the town or to access business or community facilities. Where a township has been confined wholly or largely to one side of a railway line, this pattern should continue unless there are other resource management reasons to avoid continuing to expand the township in that area.

Methods

**District Plan Rules** 

Property access

**District Plan Policy** 

To assess plan changes to rezone land for expansion of townships

## **AIRFIELDS** [NO CHANGES]

# EFFECTS ON THE ENVIRONMENT AND REVERSE SENSITIVITY EFFECTS

## **ROADS AND RAILWAY LINES**

## Policy B2.1.2125

To encourage noise sensitive activities to be adequately set back from **Strategic State Highway and Arterial** Roads.

**Explanation and Reasons** 

The Strategic State Highway and Arterial Roads within the District perform a valuable function as a transport network and represent a considerable investment of public funds. The ability of these roads to continue functioning as a part of an at the highest level in the important transport network cannot be jeopardised by inappropriate land uses being established along them that could suffer from reverse sensitivity effects. Requiring noise sensitive activities to be set back from these routes is one means of mitigating adverse effects of traffic noise.

Method

**District Plan Rules** 

Building Position

## **Policy B2.1.26**

<u>Encourage heavy vehicles to use routes which bypass townships, where practical, and avoid new residential development along heavy vehicle bypasses.</u>

**Explanation and Reasons** 

Heavy vehicles travelling through townships can adversely affect:

- Residential amenity values through dust, noise and vibration;
- Perceptions of safety, especially for cyclists and pedestrians; and
- Roads, if they are not designed for heavy vehicles.

Policy B2.1.26 encourages heavy vehicles to use routes that bypass rather than bisect townships, to avoid these effects. The preferred method to achieve this is to design ring roads and bypasses that are quicker and easier to use, than roads which bisect townships. Consequently, once a bypass or heavy vehicle route is created, it is important that it is not adversely affected by new residential or business activities occurring along the route, and then trying to slow or restrict the traffic using it.

**Methods** 

Selwyn District Council Engineering Code of Practice

Road design

**Asset Management Plans** 

Roads

#### **District Plan Policies**

 To assess plan change requests to rezone land for the expansion of townships around heavy vehicle routes or bypasses

#### **Bylaws**

To prohibit heavy vehicle use of roads if necessary

## Policy B2.1.2427

Discourage adverse effects from constructing or maintaining roads or railway lines on the natural environment, landscape values, and sites with heritage or cultural values.

**Explanation and Reasons** 

Roads and railway lines traverse or adjoin parts of the rural area with special values. Constructing and maintaining them can affect the environment. For example: disturbing historic or cultural sites; placing sediment in wetlands and waterbodies; clearing vegetation; or visual effects on slopes. Roads and railway lines are managed by designations; so District Plan rules do not apply. The Council can use its powers under section 176(A) of the Act (to approve outline plans for designations) and advocacy, to encourage adverse effects to be mitigated.

Method

#### Advocacy

Discussions with network utility operators

### CHRISTCHURCH INTERNATIONAL AIRPORT

[No changes to Policies]

**Methods** 

#### **District Plan Rules**

- Residential density
- Noise insulation

#### **District Plan Policies**

Residential density and subdivision

# TRANSPORT NETWORKS — ANTICIPATED ENVIRONMENTAL RESULTS

The following environmental **results outcomes** are expected to occur from implementing Section B2.1:

#### Roads and Access

- All roads are formed and maintained to the standard necessary to carry the type and volume of traffic using them, safely and efficiently.
- Strategic State Highway and Arterial Roads are the most efficient roads for carrying "through" traffic.
- The visibility of roads, intersections, vehicle crossings and railway crossings is not impaired.

Visibility is maintained for motorists and pedestrians at vehicle crossings and intersections, and for motorists, pedestrians and train drivers at road/rail crossings.

- Roadside signs are easy and quick for motorists to read, with large letters and symbols.
- Adverse effects of residential and business growth in Selwyn District on road links into Christchurch City are addressed.
- Roadside stalls and vehicular accessways vehicle crossings are located along straight stretches of road with good visibility and with plenty of room to manoeuvre safely on and off the road.
- Fewer impacts from the construction, maintenance and repair of roads or other utilities in road reserves, on people and the environment and areas along side roads are replanted post construction.

Areas along roadsides and railway lines are not damaged or are replanted when roads or railway lines are constructed, repaired or realigned.

- The number of dairy cows driven along <u>or across</u> roads to milking sheds does not increase.
- Greater provision for public transport and active modes such as walking and cycling.
- The avoidance of situations that may give rise to reverse sensitivity and reduce the future viability and or efficiency of transport systems.
- New settlement and residential activities occur closer to places of work or existing townships.

#### **Pathways**

- Greater provision of and improvement of existing on and off road pathways, footpaths and cycleways.
- Improved accessibility and connectivity through the rural area by active travel modes.

#### Railways

- The safe operation of the District's railway lines is not reduced or impeded by land use activities.
- Properties do not have access directly over railway lines.
- Visibility along railway lines and at road/rail crossings is maintained.
- Opportunities for movement of freight via rail are encouraged

#### **Airfields**

- The height restrictions around West Melton Airfield and Hororata Domain are retained.
- Adequate distances between airfields, helipads and dwellings are maintained.
- Residential density is maintained at 1 house per 4 hectares or less in areas affected by noise from the flight paths to Christchurch International Airport and remains able to operate 24 hours a day.

## TRANSPORT NETWORKS — MONITORING

See Part E, Appendix 1.

## TRANSPORT NETWORKS — INFORMATION

- Road Classification
- Selwyn District Council Walking and Cycling Strategy
- Selwyn District Council Subdivision Design Guide
- Selwyn District Council Engineering Code of Practice
- Selwyn District Council Asset Management Plans
- Councils LTP

[No changes to B2 beyond this section]

PART B

## 3 PEOPLE'S HEALTH, SAFETY AND VALUES

[No changes to B3.1-3.3]

## **B3.4 QUALITY OF THE ENVIRONMENT — ISSUES**

- Activities which affect the character of the rural area or which make it a less pleasant place to live or work in.
- "Reverse Sensitivity" from activities with incompatible affects locating too close to each other.

**Introduction** [No change]

**QUALITY OF THE ENVIRONMENT — STRATEGY** [NO CHANGE]

**QUALITY OF THE ENVIRONMENT — OBJECTIVES** [NO CHANGE]

QUALITY OF THE ENVIRONMENT — POLICIES AND METHODS [NO CHANGE]

## **RURAL CHARACTER**

## REVERSE SENSITIVITY EFFECTS

## **Policy B3.4.18**

Ensure <u>new or upgraded road infrastructure and</u> new or expanding activities, which may have adverse effects on surrounding properties, are located and managed to mitigate these potential effects.

## **Policy B3.4.19**

Protect existing lawfully established activities in the Rural zone from potential for reverse sensitivity effects with other activities which propose to establish in close proximity.

**Explanation and Reasons** 

Policy B3.4.18 and B3.4.19 manage reverse sensitivity effects in the rural area. Policy B3.4.18 requires a resource consent for activities to set up which are likely to affect surrounding properties. This gives an opportunity for affected parties to participate in the consent process and for the Council to ensure those effects are mitigated to a satisfactory level. The policy also acknowledges that new roads and the upgrading of transport infrastructure needs to be managed to mitigate reverse sensitivity effects.

Policy B3.4.19 protects activities which are established from potential reverse sensitivity effects caused by potentially incompatible activities locating close to them. The most common activity is erecting houses. Other potentially incompatible activities include: restaurants; schools; and other forms of residential or visitor accommodation. This policy is necessary to enable established businesses to operate efficiently and with some certainty, and to avoid creating unpleasant living environments for people. The most common tool to mitigate reverse sensitivity effects is to maintain appropriate buffers or separation distances between activities. However, there may be other methods which can be used to avoid reverse sensitivity effects.

Part B, Section 2.1 Transport contains specific policies to manage reverse sensitivity effects with odour; and with transport routes.

[No other Changes to B3]

PART C

## 1 RURAL RULES — EARTHWORKS

#### **Notes**

- 1. Rule 1 Earthworks, does not apply to any of the following activities:
  - Any <u>earthworks</u> associated with digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees, providing ducting for fibre optic cables, or drilling bores.
- 2. Rule 1 Earthworks does apply to <u>earthworks</u> associated with harvesting forests or <u>tracks</u> into areas to harvest forests.
- 3. Rules 9.16. and 9.17 apply to blasting and vibration. Rule 8 Waste Generation, Storage and Disposal applies to offal pits and landfills.

- 4. <u>Earthworks</u> affecting any <u>archaeological site</u> require the consent of the New Zealand Historic Places Trust (refer to Part B, Section 3.3 Archaeological Sites).
- 5. PERMITTED ACTIVITIES do not require a resource consent. OTHER ACTIVITIES do require a resource consent.

## 1.1 EARTHWORKS AND CONTAMINATED LAND

Discretionary Activities — Earthworks and Road and Access Formation

1.1.1 Any earthworks for the purposes of creating or forming; a road, or access to serve any future allotment(s), shall be a discretionary activity unless the road or access forms part of an approved subdivision consent or is provided for within a designation.

## 1.12 EARTHWORKS AND CONTAMINATED LAND

[Renumber all following provisions]

#### **Reasons for Rules**

... .... ..

Resource consents are needed for <u>earthworks</u> which involve: shifting contaminated soil; steep vertical cuts (soil erosion and visual effects); raising the level of land which floods; land near waterbodies and special cultural sites; and shifting large volumes of material. The volume control is to ensure that large excavation works are properly filled and the <u>site</u> rehabilitated, and to protect 'significant ecological sites' from damage or destruction (see Part B, Section 1.2). <u>Earthworks for the purposes of creating or forming, a road, or access to future allotment(s), prior to subdivision approval, have the potential to undermine the potential to achieve an integrated transport network. Consideration needs to be given to the location, form, safety, efficiency connectivity and permeability of the transport network and the relationship with other infrastructure. Rule 2.1.1.7 exempts earthworks associated with road or access formation where such works are covered by approved subdivision consent or form part of a designation. The exemptions recognise that the necessary considerations have been undertaken during respective the approval processes.</u>

Rule 1.2 manages <u>earthworks</u> in areas which contain sites of special significance to tangata .... ...

PART C

## <u>4 rural rules — road**sing and**</u> <u>transport</u>

# 4.1 ROADING AND OUTSTANDING NATURAL LANDSCAPE AND PORT HILLS AREAS

## Permitted Activities — Road<u>s</u>ing and Outstanding Landscape and Port Hills Areas

- 4.1.1 The forming, installation, upgrading, maintenance or replacement of any <u>road</u> shall be a permitted activity if the following condition is met:
  - 4.1.1.1 In any area shown on the Planning Maps as an Outstanding Landscape Area or the Port Hills Area, the formation of any <u>road</u>, <u>pathway</u>, road bridge or <u>vehicular vehicle</u> accessway is limited to the maintenance of existing <u>roads</u>, <u>pathways</u>, road bridges or <u>vehicular vehicle</u> accessways.

## Restricted Discretionary Activities — Roadsing and Outstanding Landscape and Port Hills Areas

- 4.1.2 Any activity which does not comply with Rule 4.1.1 shall be a restricted discretionary activity if all of the following standards and terms are met:
  - 4.1.2.1 The <u>road</u> is located in an area shown on the Planning Maps as:
    - (a) An Outstanding Landscape Area in the High Country or the Malvern Hills; or
    - (b) The Lower Slopes of the Port Hills; and
    - (c) The road or utility structure has to be located within that area.
- 4.1.3 Under Rule 4.1.2, the Council shall restrict its discretion to consideration of:
  - 4.1.3.1 Whether the <u>site</u> is appropriate for the <u>road</u> and any associated infrastructure, considering the topography, stability and prominence of the <u>site</u> and the extent to which the <u>site</u> and surrounds have been modified by existing <u>roads</u>, <u>buildings</u> and <u>utility structures</u>;
  - 4.1.3.2 The design and siting of the road and any associated infrastructure;
  - 4.1.3.3 The need for, species and design of any planting in the <u>road</u> reserve, to mitigate visual effects;
  - 4.1.3.4 Whether there are alternative <u>sites</u> available for the <u>road</u> and the costs, technical feasibility and practicality of using an alternative site:
  - 4.1.3.5 Any positive effects which may offset any adverse effects;
  - 4.1.3.6 Any monitoring or review conditions.

## 4.4 ROADING AND ENGINEERING STANDARDS

### **Permitted Activities — Roading and Engineering Standards**

- 4.4.1 The forming, installation, upgrading, maintenance or replacement of any <u>road</u> shall be a permitted activity if the following standards are met:
  - 4.4.1.2 Any <u>road</u> is formed to the relevant <del>design and formation</del> standards set out in Appendix <u>E</u>10<u>.3</u>;

4.4.1.3 Any <u>road</u> complies with the relevant separation and sight distance standards set out in Appendix 10:

Except that rule 4.4 shall not apply to works undertaken by Council within the Road Reserve in Councils capacity as Road Controlling Authority.

**Discretionary Activities — Roading and Engineering Standards** 

4.4.2 Any activity which does not comply with Rule 4.4.1 shall be a discretionary activity.

**Notes:** The Council may refer to its **Engineering Design Standards <u>2001</u> Engineering Code of Practice** to assist it in deciding on any resource consent application made under Rule 4.4.2, where appropriate.

Rule 4.4.1.1 does not apply to private <u>roads</u>, <u>vehicular vehicle accessways</u> or <u>tracks</u> which are intended to be used solely by persons owning or occupying the <u>property and are not located within the road reserve</u>. The rules do apply to <u>vehicular vehicle accessways</u> or private <u>roads</u> which are shared between properties, or which are used to provide public access (with landholder's consent).

# 4.5 VEHICULAR VEHICLE ACCESSWAYS AND VEHICLE CROSSINGS

Permitted Activities — <del>Vehicular</del> <u>Vehicle</u> Accessways and Vehicle Crossings

- 4.5.1 The forming, installation, upgrading, maintenance or replacement of any <u>vehicular</u> <u>vehicle accessway</u> or <u>vehicle crossing</u> shall be a permitted activity if the following conditions are met:
  - 4.5.1.1 Any part of any <u>vehicular vehicle accessway</u> does not have a gradient greater than:
    - (a) 1:6 vertical; or
    - (b) 1:20 horizontal.

**Note:** Rule 4.5.1.1 does not apply to private <u>roads</u>, <u>vehicular vehicle</u> accessways or <u>tracks</u> which are intended to be used solely by persons owning or occupying the property and are not located in the road reserve.

The rules do apply to <u>vehicular vehicle</u> accessways or private <u>roads</u> which are shared between properties, or which are used to provide public access (with landholder's consent).

- 4.5.1.2 Any <u>vehicular vehicle</u> accessway is formed to the relevant design and formation standards set out in Appendix  $\underline{\mathbf{E}}$ 10.2.
- 4.5.1.3 Any <u>vehicle vehicular accessway crossing</u> complies with the relevant separation and sight distance standards set out in Appendix <u>E</u>10.2
- 4.5.1.4 Any vehicle crossing:
  - (a) Is designed and sited to comply with the relevant standards set out in Appendix <u>E10.3</u>;

- (b) Which has a gate positioned across the <u>vehicle crossing</u>, has the gate either opening inwards towards the <u>property</u> and away from the <u>road</u>; or setback a minimum distance of 10 metres from the <u>road boundary</u>;
- 4.5.1.5 Any <u>vehicle crossing</u> providing vehicle <u>access</u> to a sealed <u>road</u> is <u>formed</u> and sealed <u>to the lesser of</u>:
  - (a) For tThe full length of the vehicle crossing; and (from the edge of the sealed carriageway to the road boundary of the property), or;
  - (b) From the edge of the carriageway to the property entrance or For the first 10 metres from the sealed carriageway., whichever is lesser.
- 4.5.1.6 Any <u>access</u> to a State Highway <u>or Arterial Road</u> complies with the following:
  - (a) No legal <u>access</u> is available from another <u>road</u>;
  - (b) The traffic generated through the <u>access</u> to the State Highway <u>or Arterial Road</u> is less than 100 <u>ecm/d</u>
  - (c) The <u>vehicular-vehicle</u> accessway or <u>vehicle crossing</u> complies with the performance criteria given in <u>Appendix E10.2.2</u>, <u>E10.2.3</u> and <u>E10.2.4</u> <u>Table</u> <u>5A regarding sight distance</u>, <u>clearance from intersections</u>, and <u>minimum access spacing</u>;
  - (d) For an access with less than 30 ecm/d, the vehicle crossing is designed and formed in accordance with Diagram E10.B1 for State Highways or E10.C2 for arterial roads;
  - (e) For an <u>access</u> with between 30 and 100 <u>ecm/d</u>, the <u>vehicle</u> <u>erossing</u> and localised <u>road</u> widening is designed and formed in accordance with Diagram E10.B2 <u>for State Highways or Arterial</u> <u>Roads;</u>
  - (f) For any access to a collector road, the vehicle crossing is designed and formed in accordance with Diagram E10.C2;
  - (f<u>d</u>) Provision is made for manoeuvring on <u>site</u>, so that reverse manoeuvring onto the State Highway <u>or Arterial Road</u> is not required.
- 4.5.1.7 Shared access to more than 6 sites (or potential sites) shall be formed and vested legal road and not by a private accessway.
- 4.5.1.8 Any site with more than one road frontage to a road that is formed and maintained by Council, shall have access to the formed and maintained (and legal) road with the lowest classification.

Note: For example, where a site has frontage to both an arterial road and a local road access shall be to the local road.

## Restricted Discretionary Activities — <del>Vehicular Vehicle</del> Accessways and Vehicle Crossings

- 4.5.2 Any activity which does not comply with Rule 4.5.1.6 shall be a restricted discretionary activity.
- 4.5.3 The Council shall restrict its discretion to the exercise of:

- 4.5.3.1 Whether the crossing is sufficiently removed from an intersection having regard to traffic volumes on the <u>roads</u>, and any other factors that will prevent conflict and confusion between vehicles turning at the crossing or at the intersection;
- 4.5.3.2 The adequacy of available sight distances having regard to the 85th percentile **operating** speed of vehicles on the <u>road</u>;
- 4.5.3.3 Whether there is a need to separate entry and exit in order to reduce potential traffic confusion and conflict;
- 4.5.3.4 Whether the physical form of the <u>road</u> will minimise the adverse effects of <u>access</u> (e.g. whether the <u>road</u> offers good visibility; whether a solid median barrier will stop unsafe right turns or a flush median will assist right hand turns etc);
- 4.5.3.5 Whether particular mitigation measures such as a deceleration or turning lane are required due to speed or volume of vehicles on the <u>road</u>;
- 4.5.3.6 The design of the crossing to enable traffic exiting the <u>site</u> to safely enter the traffic stream;
- 4.5.3.7 The location and design of the crossing in relation to pedestrian and cycle safety;
- 4.5.3.8 Whether there is adequate queuing and parking space on site so that vehicles do not queue over <u>vehicle crossings</u> or on <u>a</u> State Highway <u>or Arterial Road</u>;
- 4.5.3.9 Any potential cumulative effects of extra <u>access</u> points on the function of the State Highway <u>or Arterial Road</u>;
- 4.5.3.10 Any relevant accident history of the State Highway or Arterial Road in the vicinity of the <u>site</u>; and
- 4.5.3.11 The particular traffic characteristics of an existing or proposed activity, including expected traffic generation, types of vehicles etc.

## Discretionary Activities — Vehicular Vehicle Accessways and Vehicle Crossings

4.5.4 Any activity which does not comply with Rules 4.5.1.1, 4.5.1.2, 4.5.1.3, **er** 4.5.1.4(a), **4.5.1.7** or **4.5.1.8** shall be a discretionary activity.

**Note:** The Council may refer to its **Engineering Design Standards Engineering Code of Practice** to assist it in deciding on any resource consent application made under Rule 4.5.4, where appropriate.

## Non-Complying Activities — <del>Vehicular</del> <u>Vehicle</u> Accessways and Vehicle Crossings

4.5.5 Any activity which does not comply with Rules 4.5.1.4(b), and 4.5.1.5 or 4.5.1.6 shall be a non-complying activity.

## **4.6 VEHICLE PARKING AND CYCLE PARKING**

## **Permitted Activities — Vehicle Parking and Cycle Parking**

- 4.6.1 Any activity in the Rural Zone which provides car parking in accordance with the following standards shall be a permitted activity.
  - 4.6.1.2 Three **carparking** spaces on-site for each <u>dwelling</u> with a family flat; and
  - 4.6.1.3 For any other activity:
    - (a) all car parking required by the Plan associated with an activity must be located either on-site or on land adjoining the site and not on the road reserve; and
    - (b) all loading (including unloading) associated with an activity must be undertaken on-site or on land adjoining the site and not within the road reserve; and
  - 4.6.1.4 All car parking and loading spaces formed areas shall comply with to the relevant all standards set out in Appendix £10.1.
- 4.6.2 Any activity which provides sufficient space on site for any cycle parking shall be a permitted activity.
- 4.6.32 Any activity on a <u>site</u> which has a vehicle manoeuvring area of sufficient size to enable any vehicle to turn on the <u>site</u> and not have to reverse onto the <u>road</u> shall be a permitted activity if:
  - 4.6.**32**.1 The site is used for any activity other than residential activities; or
  - 4.6.**32**.2 The <u>site</u> has <u>access</u> to a <u>strategic road State Highway</u> or an arterial <u>road</u> listed in Appendix 9.
- 4.6.4 Any activity on a <u>site</u> which has a vehicle manoeuvring area that is designed to comply with the relevant standards set out in Appendix 10 shall be a permitted activity.
- 4.6.<u>53</u> Any activity which involves the provision of goods or services to the general public shall be a permitted activity if the following conditions are met:
  - 4.6.3.3 Provision is made for on-site cycle parking.

## **Controlled Activities – Vehicle Parking and Cycle Parking**

4.6.6 Any development or redevelopment of a parking area with a total of 40 or more parking spaces shall be a controlled activity, in respect to safety, circulation and access for pedestrians within the site and moving past vehicle crossings.

# Restricted Discretionary Activities — Vehicle Parking and Cycle Parking

4.6.67 Any activity which does not comply with Rule 4.6.53 shall be a restricted discretionary activity.

- 4.6.78 The Council shall restrict its discretion to consideration of:
  - 4.6.**78**.1 Whether there is likely to be a demand for parking for mobility impaired person, given the nature of the activities being undertaken on the <u>site;</u>
  - 4.6.**78**.2 Whether there is any need to provide specific car parking for mobility impaired persons on the <u>site</u>, given the size and nature of the <u>car parking</u> area and the location of the activity relative to the car parking area; and
  - 4.6.78.3 Any monitoring or review conditions.

## **Discretionary Activities — Vehicle Parking and Cycle Parking**

4.6.89 Any activity which does not comply with any of Rules 4.6.1, 4.6.2 or 4.6.4 shall be a discretionary activity.

**Non-Complying Activities — Vehicle Parking and Cycle Parking** 

4.6.910 Any activity which does not comply with Rule 4.6.32 shall be a non-complying activity.

## 4.7 TRAFFIC SIGHT LINES — ROAD/RAIL CROSSINGS

## **Permitted Activities — Traffic Sight Lines Road/Rail Crossings**

- 4.7.1 The following shall be permitted activities:
  - 4.7.1.1 Any building if the building is positioned so that it does not encroach within the line of sight for any railway crossing as shown in Appendix 10-Diagram E10.E
  - 4.7.1.2 Any tree if the tree is planted so that it does not encroach within the line of sight for any railway crossing as shown in Appendix 10, Diagram E10.E

Note: The NZTA Traffic Control Devices Manual provides further guidance on level crossings.

### Non-Complying Activities — Traffic Sight Lines Road/Rail Crossings

4.7.2 Any building or tree which does not comply with Rules 4.7.1 shall be a non-complying activity.

#### **Reasons for Rules**

Rule 4 manages effects of establishing, maintaining, upgrading and replacing <u>roads</u>, <u>vehicular</u> <u>vehicle</u> <u>accessways</u>, <u>vehicle crossings</u> and <u>carparking car parking</u> on the environment. The rules should be read in conjunction with Rule 1 – Earthworks.

Many activities involving <u>roads</u> are undertaken by requiring authorities, using designations. In these cases, the <u>District Plan</u> rules may not apply (see section 10 of the <u>Act</u>). However, it is still necessary to have rules in the Plan, because:

 Often <u>roads</u> are formed by private developers as part of subdivisions or land uses. The <u>roads</u> are then vest<u>ed</u> in the Council. The plan needs to have rules for the undertaking of these activities, so the Council can manage the standard of <u>roads</u> which will vest in the Council:

- It is consistent with Part II and section 32 of the <u>Act</u> to provide for activities which have only minor effects on the environment as permitted activities.

Rule 4 follows a similar format to Rules 1, 2 and 3. Activities involving <u>roads</u> require resource consents: in areas of Outstanding Landscape, areas prone to flooding, and Silent File and Wāhi Taonga Management areas; and on Wāhi Taonga and <u>Mahinga Kai sites</u>. New <u>roads</u> in areas of outstanding landscape require a resource consent, and the applicant will need to demonstrate that the activity needs to locate in these areas, given that they have not been greatly modified by road<u>sing</u>. While the Plan recognises that some <u>roads</u> may be necessary in these areas, they are not encouraged.

Rules 4.4 to 4.6 set standards for the forming of <u>roads</u>, <u>vehicular accessways</u>, <u>vehicle crossings</u> and car parking as permitted activities. These standards are based on the Council's Engineering <u>Design Standards 2001Code of Practice</u>. The rules apply irrespective of whether <u>roads</u>, <u>vehicular vehicle accessways</u> and <u>vehicle crossings</u> are formed when land is subdivided or when <u>buildings</u> are erected.

Rights of way (ROW) have historically been problematic in the Selwyn District. In some instances further development of sites has resulted in a large number of sites with a shared access. Whilst limited shared access can be useful such as where houses front a reserve or waterway the potential number of users needs to be limited. The provision of long ROWs is not conducive to achieving a high degree of connectivity, permeability and accessibility for vehicular and non-vehicular access. Where access to a larger number of sites (or potential sites) is required this should be by way of local roads.

A lack of visibility for road/rail level crossings raises implications for road users and traffic safety.

For that reason, buildings and tree plantings are not permitted if they encroach within the line of sight of a railway crossing as shown in Appendix 13 (Diagram E10.E). This rule reflects the importance of maintaining lines of sight for traffic safety.

The majority of rural roads have a narrow carriageway and do not provide adequate width or sealed shoulders to allow for parking, many of these roads also have higher speed limits which can exacerbate potential safety issues. The provision of parking off-road also ensures vehicles are accessing the parking area at an appropriately formed and located point. Road side parking in rural areas can have a noticeable impact on the character and amenity of the surrounding area.

Activities with larger parking areas require the consideration of pedestrian safety, security, circulation and access within parking areas to be balanced against vehicle access and circulation in order to encourage people to walk to and within townships and provide for safe movement of pedestrians within the site, and moving past vehicle crossings.

Significant improvements for pedestrian circulation within a site can be achieved through consideration of the location of vehicle access and manoeuvring areas relative to pedestrian entrances to sites, parking areas and the building entrance and does not always require provision of separate pedestrian facilities.

The provision of rule 4.6.6 is not intended to suggest that parking areas of this size are generally anticipated in rural zones. The intention of the rule is to ensure that if such a parking area does occur, attention is drawn to the consideration of pedestrians within parking areas (including movement between cycles / cars and the building entrance) and at vehicle crossing points.

PART C

### 9 RURAL RULES - ACTIVITIES

#### [NO CHANGES TO 9.1-9.12]

#### 9.13 ACTIVITIES AND VEHICLE MOVEMENTS

#### **Permitted Activities — Activities and Vehicle Movements**

- 9.13.1 Any activity which does not exceed the following maximum number of <u>vehicle</u> movements shall be a permitted activity:
  - 9.13.1.1 Road Unformed and, or not maintained by Council:
    - (a) For any commercial or industrial related activity where <u>access</u> is required off an unformed and un-maintained <u>road</u>, excluding normal farming activities: Nil.
    - (b) For any individual <u>property access</u> off an unformed and unmaintained <u>road</u>: 15 <u>equivalent car movements per day (ecm/d)</u> per <u>site</u>.
  - 9.13.1.2 Road Formed, and Sealed and maintained by Council:
    - (a) State Highway and Arterial and Strategic Roads (as identified in Appendix 9): 30 ecm/d per site averaged over any one week period).
    - (b) Local and Collector Roads: 60 ecm/d per site (averaged over any one week period).
  - 9.13.1.3 Road Formed, and Unsealed and maintained by Council:
    - (a) 60 ecm/d per site (averaged over any one week period).

#### Note:

- 1. Rule 9.13.1 does not apply to <u>vehicle movements</u> between <u>sites</u> within a <u>property;</u> relocating of premises; or any other <u>temporary activity</u>.
- 2. For the purposes of Rule 9.13.1.2, Local <u>roads</u> are those <u>roads</u> which are not listed in Appendix 9 as <u>State Highways</u> <u>Strategic Roads</u>, Arterial Roads, or Collector Roads.
- 3. Rule 9.13.1 does not apply to the areas shown on the Planning Maps as the Existing Development Areas for Terrace Downs and Grasmere refer to the provisions in Appendix 21 (Terrace Downs) or Appendix 22 (Grasmere).
- 4. Rule 9.13.1 does not apply to existing plantations.

# Restricted Discretionary Activities — Activities and Vehicle Movements

- 9.13.2 Any activity which does not comply with Rule 9.13.1 shall be a **restricted** discretionary activity. **The Council's discretion may include but shall not be limited to:**
- 9.13.3 Under Rule 9.13.2, the Council shall restrict its discretion to consideration of:

- 9.13.32.1 Any works required to the <u>road</u> to upgrade it to the standards set out in the Council's <u>Engineering Design Guidelines 2001Code of Practice</u>:
- 9.13.32.2 Any potential adverse effects of traffic on the amenity values of surrounding residents and on other uses of the <u>road</u>, including (but not limited to) stock droving;
- 9.13.2.3 In respect to the integration of land use and transport, the appropriateness of the location within the existing and planned road network.
- 9.13.32.34 The position and design of any <u>vehicle crossing</u> or vehicle <u>access</u> and egress;
- 9.13.32.45 Any positive effects which may offset any adverse effects; and
- 9.13.2.6 Any other relevant matters including relevant objectives and policies.
- 9.13.32.57 Any monitoring or review conditions.

[NO CHANGES TO 9.14 OR 9.15]

#### 9.16 ACTIVITIES AND NOISE

#### **Permitted Activities — Activities and Noise**

9.16.1 Except as provided in 9.16.3 below, any activity shall be conducted so as to comply with the <u>noise limits</u> and within the time frames stated in the following tables in order to be a permitted activity:

Table C9.2 - Maximum noise limits at any Living Zone boundary.

Hours	Noise Limit
7.30am - 8.00pm	55 dBA L <sub>10</sub>
	85 dBA L <sub>max</sub>
8.01pm - 7.29am	40 dBA L <sub>10</sub>
	70 dBA L <sub>max</sub>

Table C9.3 – <u>Noise limits</u> assessed at the <u>notional boundary</u> of any <u>dwelling</u>, rest home, hospital, or classroom in any <u>educational facility</u> except where that <u>dwelling</u>, rest home, hospital or classroom is located within a Living zone.

Hours	Noise Limit
7.30am – 8.00pm	60 dBA L <sub>10</sub> 85 dBA L <sub>max</sub>
8.01pm - 7.29am	45 dBA L <sub>10</sub> 70 dBA L <sub>max</sub>

#### **Notes:**

Rule 9.14 applies to take off or landing of aircraft.

Rule 9.15 applies to noise from audible bird scaring devices.

**Discretionary Activities — Activities and Noise** 

9.16.2 Any activity which does not comply with Rule 9.16.1 shall be a discretionary activity.

# 9.21 ACTIVITIES AND CLEARANCE OF INDIGENOUS VEGETATION AND INDIGENOUS PLANT SPECIES

#### Note:

These rules are an interim measure to protect potential areas of significant conservation value until the notification of a variation (or plan change) addressing <u>indigenous vegetation</u>. These interim rules and any appendices, definitions and methods that are specific only to these rules are to be reconsidered as part of the variation process. The Council undertakes to review these rules with a view to notifying a variation (or plan change) by 28 February 2009.

There are rules both for the clearance of areas containing <u>indigenous vegetation</u> which covers plant communities as defined in the Plan and for the clearance of individual threatened indigenous plant species. Rules 9.21.1.1 and 9.21.1.2 apply down to the level of individual plants; Rules 9.21.1.3 to 9.21.1.6 apply to <u>indigenous vegetation</u> communities as defined. The effect of the definition of <u>indigenous vegetation</u> is that it is permitted to clear indigenous species if the area to be cleared does not meet the criteria contained in the definition of <u>indigenous vegetation</u> and as long as none of the individual plants to be destroyed are listed in Appendix 13 or Appendix 14.

# Permitted Activities — Activities and Clearance of Indigenous Vegetation and Indigenous Plant Species

9.21.1 The clearance of <u>indigenous vegetation</u> and indigenous plant species shall be a permitted activity provided that all of the following conditions are met:

#### [No Change]

- 9.21.2 Rule 9.21.1 does not apply to the following:
  - 9.21.2.4 Maintenance of existing utilities (including irrigation infrastructure), tracks, pathways drains, structures, roads, fire breaks and fence lines but not their extension:

# Discretionary Activities — Activities and Clearance of Indigenous Vegetation and Indigenous Plant Species

9.21.3 Any activity which does not comply with Rule 9.21.1.4, 9.21.1.5 or 9.21.1.6 shall be a discretionary activity.

# Non-Complying Activities — Activities and Clearance of Indigenous Vegetation and Indigenous Plant Species

9.21.4 Any activity which does not comply with Rule 9.21.1.1, 9.21.1.2, 9.21.1.3 or 9.21.1.4 shall be a non-complying activity.

#### **Reasons for Rules**

... .... ...

The rule also allows the Council to consider effects of additional traffic on nearby residents and other road users. Residents and other road users on Local Roads may not be used to large volumes of traffic. Other activities such as stock droving may occur quite frequently and may not be managed by Council bylaws. On Collector and Arterial roads and <a href="Strategic Roads">Strategic Roads</a> State Highways, residents and other road users should expect, and be used to, higher volumes of traffic.

[No other changes to Reasons for Rules]

PART C

### 10 RURAL RULES - SUBDIVISION

#### **Notes**

- 1. The subdivision of any land is not a permitted activity. (This means that subdivision requires a resource consent).
- 2. If a subdivision is a controlled or restricted discretionary activity, the Council will restrict its discretion to the matters listed in the relevant rule under the headings 'Matters over which the Council has reserved control' or 'Matters subject to the Council's Discretion'.
- 3. If subdivision is a discretionary or a non-complying activity, the Council is required to consider all relevant matters under sections 104, 104B and 104D of the RMA.
- 4. Rule 10 applies to the subdivision of land, within the meaning of Section 218 of the RMA.
- 5. The design of any <u>road</u>, <u>vehicular-vehicle</u> accessway, <u>right of way</u> or <u>vehicle crossing</u> must comply with Rule 4: Road<u>sing and Transport</u>.
- 6. Any earthworks associated with subdivision of land must comply with Rule 1: Earthworks.
- 7. Erecting any <u>dwelling</u> or other <u>building</u> on any land must comply with Rule 3: Buildings, or Rule 4: Road<u>sing-and Transport</u>; or Rule 9: Activities.
- 8. Irrespective of any rules in this Plan, the transitional regional plan contains rules for minimum <u>allotment</u> sizes needed to treat and dispose of effluent on-site without a discharge permit. Therefore, Environment Canterbury should be contacted.
- 9. Underlined words are defined in Part D of the Plan.
- 10. The subdivision of any land adjoining a State Highway which is a Limited Access Road (LAR) firstly requires consent obtainable from Transit New Zealand The New Zealand Transport Agency. This is in addition to the subdivision application that is made with the Selwyn District Council. For any other LAR the consent is required from the Selwyn District Council in addition to the subdivision application.
- 11. Works affecting any <u>archaeological sites</u> require the consent of the New Zealand Historic Places Trust Pouhere Taonga (refer Part B, Section 3.3,) "Archaeological Sites").

- 12. <u>Development contributions</u> under the LTCCP Development Contribution Policy will be taken where network infrastructure, community infrastructure or reserves have to be constructed or expanded as a direct result of growth from development.<sup>V30</sup>
- 13. Attention is drawn to the provisions of any relevant zone/activity rules for land use activities that may be associated with subdivisions. Should an activity not meet any one or more of those rules, then application for consent will also need to be made in respect to those rules.
- 14. Any application arising from non-compliance with land use rules in the zone/activity standards caused by the proposed subdivision shall be considered jointly with the subdivision consent (in accordance with s.91 of the Act).

#### **10.1 SUBDIVISION GENERAL**

Controlled Activities — Subdivision General

10.1.1 Any subdivision of land shall be a controlled activity if all of the following standards and terms are met:

[No change 10.1.1.1-10.1.1.4]

- 10.1.1.5 Any <u>allotment</u> created has legal <u>access</u> to a formed and maintained legal <u>road</u>, other than a <u>road</u> listed <u>in Appendix 9</u> as a <u>Strategic Road State</u> <u>Highway, or listed as an Arterial Road and the speed limit is 70km/hr or greater, in Appendix 9</u>;
- 10.1.1.6 Any <u>road</u>, right of way or other <u>vehicular vehicle</u> accessway is designed and formed to comply with Rules 4.4 and 4.5 for permitted activities (for <u>strategic roads State Highway</u> they have to comply with the design criteria in Appendix 10):
- 10.1.1.7 The corner of any allotment at any road intersection shall be splayed with a diagonal line reducing each boundary by a minimum of:
  - (a) 6m x 6m for local roads
  - (b) 10m x 10m for collector roads
  - (c) 15m x 15m for arterial and State Highway roads.

Note: Where roads of different classifications intersect, the splay applied to both road boundaries shall be that required for the higher classification (State Highways are the highest in the classification hierarchy then arterial, collector and local roads are lowest), so for example where a local road and a collector road intersect the corner splays shall be 10mx10m.

[No further Changes to 10.1.1]

10.1.2 Under Rule 10.1.1, the Council shall reserve control over all of the following matters:

#### **Corner Splays**

- 10.1.2.3 Any new allotment that does not comply with the corner splay standard of Rule 10.1.1.7 is a restricted discretionary activity.
- 10.1.2.4 Under Rule 10.1.2.3, the Council shall restrict its discretion to consideration of effects on the efficient functioning of any road, and the safety of road users.

#### **Point Strips**

10.1.2.9 Where in the course of subdivision a new road, cycle way or pedestrian link is constructed and vested that will or could provide frontage to other land, that other land (with subdivision potential) can be separated from the new road, cycle way or pedestrian link by a point strip, and an agreement will be entered into by the first subdivider with the Council, to ensure the benefiting owner pays a fair share towards the cost of providing the frontage road, cycle way or pedestrian link.

The point strip(s) will transfer to Council on the deposit of the plan for each stage of the subdivision.

The point strip agreement sets the amount to be paid, which will be updated from the date of signature of the agreement by the Consumers Price Index. Such agreements will be held by the Council and can be identified by the point strip separating the subsequent property from frontage to the road, cycle way or pedestrian link.

Note: Point Strips may also be required to prevent access to any road. See. Rule 10.1.2.10.

#### [NO CHANGES 10.2-10.5]

#### 10.6 SUBDIVISION AND ROAD ACCESS

#### **Restricted Discretionary Activities — Subdivision and Road Access**

- 10.6.1 Any subdivision of land which does not comply with Rule 10.1.1.5 shall be a restricted discretionary activity if all of the following standards and terms are met:
  - 10.6.1.1 the <u>allotment</u> has <u>access</u> to a legal <u>road</u> (whether formed or unformed) and
  - 10.6.1.2 that <u>access</u> is not obtained by crossing a railway line.
- 10.6.2 Under Rule 10.6.1, the Council shall restrict its discretion to consideration of:
  - 10.6.2.1 All of the matters listed in Rule 10.1.2.
  - 10.6.2.2 For <u>access</u> on to a <u>Strategic Road</u> State Highway <u>or Arterial Road</u>:

- (a) Whether the <u>access</u> will adversely affect the safe and efficient flow of traffic along the <u>Strategic Road</u>-State Highway <u>or Arterial Road</u>, including any cumulative effects of multiple <u>vehicular accessways</u> on to the <u>Strategic Road</u>-State Highway <u>or Arterial Road</u>;
- (b) The number, design and siting of any <u>vehicular vehicle</u> <u>accessway(s)</u> or <u>vehicle crossing(s)</u>;
- (c) Whether the <u>allotments</u> created can be designed to have legal <u>access</u> on to an alternative legal <u>road of lower classification</u> other than a <u>Strategic Road</u>, and whether this alternative <u>access</u> is appropriate;
- 10.6.2.3 For access on to an unformed or unmaintained road:
  - (a) The standard to which the <u>road</u>, any <u>vehicular vehicle</u> accessway, and any <u>vehicle crossing</u> will be formed or maintained to serve the activity;
  - (b) Who will be responsible for forming or maintaining the <u>road</u> to the required standard; and
- 10.6.2.4 Any positive effects which may offset any adverse effects.

#### **Non-Complying Activities — Subdivision and Road Access**

10.6.3 Any subdivision of land which does not comply with Rule 10.6.1 shall be a non-complying activity.

# 10.7 SUBDIVISION – <del>VEHICULAR</del> <u>VEHICLE ACCESSWAYS</u> AND VEHICLE CROSSINGS

# Discretionary Activities — Subdivision – <del>Vehicular</del> <u>Vehicle</u> Accessways and Vehicle Crossings

10.7.1 Any subdivision of land which does not comply with Rule 10.1.1.6 shall be a discretionary activity.

[NO CHANGES 10.8-10.10]

#### **10.11 SUBDIVISION AND BOUNDARY ADJUSTMENTS**

#### **Controlled Activities — Subdivision and Boundary Adjustments**

- 10.11.1 The subdivision of land by the altering of boundaries between <u>allotments</u> shall be a controlled activity provided all of the following standards and terms are met:
  - 10.11.1.1 The <u>allotments</u> subject to the boundary adjustment shall adjoin one another.
  - 10.11.1.2 There shall be no increase in the number of <u>allotments</u> created as a result of the boundary adjustment.

- 10.11.1.3 No <u>allotment</u> shall be created which is smaller than the smallest allotment existing prior to the boundary adjustment.
- 10.11.1.4 The boundary adjustment shall not result in any increase in the potential number of <u>dwellings</u> which may be erected on any <u>allotment</u> subject to the boundary adjustment, in compliance with Rule 3.10 than the number which could have been erected on that <u>allotment</u> prior to the boundary adjustment.
- 10.11.1.5 The corner of any allotment at any road intersection shall be splayed with a diagonal line reducing each boundary by a minimum of:
  - (a) 6m x 6m for local roads
  - (b) 10m x 10m for collector roads
  - (c) 15m x 15m for arterial and State Highway roads.

Note: Where roads of different classifications intersect, the splay applied to both road boundaries shall be that required for the higher classification (State Highways are the highest in the classification hierarchy and local roads are lowest), so for example where a local road and a collector road intersect the corner splays shall be 10mx10m.

- 10.11.2 Any boundary adjustment which complies with Rule 10.11.1 shall not be notified and shall not require the written approval of affected parties.
- 10.11.3 The Consent Authority shall retain its control over all of the following matters:
  - 10.11.3.1 All those matters listed in Rule 10.1.2.
  - 10.11.3.2 The mechanism(s) which shall be used to ensure the boundary adjustment does not increase the potential number <u>dwellings</u> able to be erected on any allotment subject to the boundary adjustment.

#### **Non-Complying Activities — Subdivision and Boundary Adjustments**

10.11.4 Any boundary adjustment which does not comply with Rule 10.11.1 shall be a non-complying activity, unless it complies with one of the rules for subdivision under Rules 10.1 to 10.10, in which case the activity shall be assessed under that rule.

#### **Reasons for Rules**

... .... ...

Rule 10.1.1.4 The 300 metre buffer distance does not apply to that part of the Living 2A Zone at the intersection of Shands and Blakes Roads, Prebbleton and legally described as Lots 1, 2 and 10 DP 54204 and Lot 1 DP 21798 in respect of the existing Tegel Foods Ltd poultry operation located on Lot 1 DP 53738 as the Council is satisfied that other methods have effectively addressed any reverse sensitivity effects.

Rules 10.6 and 10.7 address the effects of access and effects of subdivision on the function, safety and efficiency of the road network.

PART D

### **DEFINITIONS**

- This section lists the meaning of underlined words used in this Plan in alphabetical order.
- Where reference is made to an interpretation provided in a particular act, and is marked with an asterisk (\*), the meaning is provided at the end of this section, to assist readers.
- Any singular definition includes the plural and vice versa.
- Words and phrases defined in section 2 of the Act take the same meaning for the purposes of this Plan.

#### A

**Access**: means that area of land over which lawful vehicular or pedestrian access is obtained to a legal road.

Accessway: see Vehicle accessway.

Arterial Road: means any road identified as an arterial road in the road hierarchy classification as listed in Appendix 9. They connect areas of district importance not already provided by State Highways. Arterial roads connect the districts townships and other important places and activities together, including across district boundaries. Arterial roads are required to minimize, and control local road and property access to ensure they operate efficiently. They are subject to access controls in this Plan.

#### C

**Collector Road:** means any road identified as a collector road in the road hierarchy classification as listed in Appendix 9. Their prime role is to distribute and collect local traffic within and between neighbourhood areas. In some situations they may link smaller rural communities to the arterial road network. Collector roads are required to balance the necessary traffic movement function against the property access function that they also need to provide.

Cycleway / Cyclist Link: See Pedestrian / Cycle Link

#### D

<u>Design speed</u> in respect to roads <u>is</u> the speed used for the design of geometric features of a road carriageway that influence vehicle operation. Design speed should not be less that the 85<sup>th</sup> percentile speed (which is known as the operating speed).

**Industrial Activity**: means any activity involving the <u>manufacturing</u> production, processing, assembly, disassembly, packaging, servicing, testing, repair, direct handling, distribution and/or warehousing of any materials, goods, products, machinery or vehicles, but excludes mining, mineral exploration and quarrying and, for the avoidance of doubt, harvesting activities associated with plantation forestry. For the purpose of this definition an industrial activity is further defined as being either of the following:

(a) Rural Based Industrial Activity: means an Industrial Activity that involves the use of raw materials or primary products which are derived directly from the rural environment, including agricultural, pastoral, horticultural, forestry, viticultural and crops.

 $\Omega$ 

(b) Other Industrial Activity: means any other Industrial Activity that is not defined as a "rural based industrial activity", as stated in (a) above.

#### L

Local Road: (includes cul de sacs): means a road that is not intended to act as main through routes for traffic as their primary function is to provide property access, and they generally have lower traffic volumes. Any road in the district that is not a State Highway, Arterial or Collector road is a 'local road and not specifically identified in this Plan.

#### <u>O</u>

<u>Operating Speed:</u> The speed at which motor vehicles generally operate (85th percentile speed) on a particular road. Where operating speeds are unknown they are assumed to be the posted speed limit plus 10km/hr.

#### P

**Parking Areas:** means a continuous portion of a site, sites, allotment, allotments or part of any site or allotment on which parking for motor vehicles is provided and includes associated access.

Pathway: Pathway: means a formed path for pedestrians and, or cyclists.

Pedestrian-cyclist link: means a green transport corridor for pedestrians and, or cyclists that for example links a road to a road, or a road to a reserve or facility. They are also known as 'walkway/cycleway links'. There is generally a path provided within the corridor for pedestrians and cyclists to share.

**Point Strip**: includes any strip of land adjoining the site or end of a road, the purpose of which is to prevent access on to that road from land adjoining the point strip. <u>Point strips may also be for the purpose of protecting the opportunity to achieve future transport links between adjoining <u>blocks of land.</u> A point strip is usually (though not exclusively) up to 200mm wide.</u>

**Posted Speed Limit:** the legal and sign posted speed limit that applies to the road as per the Selwyn District Council Speed Limits Bylaw.

#### R

**Redevelopment** in respect to any parking area includes:

Any change to the nature or type of park area users resulting from associated changes in land use (e.g. from office user to retail user), or

Any alterations to the parking area which change the pedestrian or vehicle circulation within or around the parking area, or

The reconstruction, repositioning, relocation or addition, of more than five parking spaces within any one year period.

**Road**: shall have the same meaning as defined in section 315 of the Local Government Act 1974 \* and shall include roads to be vested.

#### S

**Secure:** with respect to cycle parking, means that cyclists and their bicycles are not exposed to danger or harm; for example cycle parking is not located where manoeuvring vehicles could collide with a cyclist and or their parked bicycle; also that the cycle parks are not located where there is no visibility from a public space (i.e. a road or car parking area).

Strategic Road: includes any road listed as a Strategic Road in Appendix 9.

State Highway: means any road that is identified as a State Highway in the road hierarchy classification as listed in Appendix 9. State Highways are under the control of the New Zealand Transport Agency. They are high capacity and high speed roads of national importance providing inter-district and regional links between towns, cities, ports and other places of significance. State Highways are constructed and managed to high standards to ensure they operate correctly, including managing both road and property access to them. They are subject to access controls in this Plan.

#### V

Vehicle Crossing: includes any formed vehicle entrance or exit point from any site on to any road, and includes that part of the road boundary across which the vehicle access is obtained and any culvert, bridge or kerbing. means the area within the road reserve over which vehicles move from the carriageway to a site. The width of a vehicle crossing shall be defined as the formed width at the property boundary. The length of the crossing is the distance from the edge of the carriageway to the property boundary

Vehicular Vehicle Accessway: means that part of any site which is used to provide vehicular access into or through the site, but does not include a road within the meaning of section 315 of the Local Government Act 1974. any area of land, the primary purpose of which is to provide access between the body of any allotment(s) or site(s) and any road reserve. Accessway includes any rights of way, access lot, access leg or private road.



Walkway: See Pedestrian / Cycle Link

PART E

### **APPENDIX 9**

#### ROADING HIERARCHY

Road Name	Location	Classification
Aylesbury Road	SH 1 (Main South Road) to Bealey Road	Collector Road

Birches Road  Burnham Road  Coleridge Road  Cordys Road  Deans Road  Hororat  SH 77 (West C	West Coast Road) to  Road to James Street  Ide Road to SH 1 (Main South  Rakaia Gorge Road) to  beks Road  The Milnes Road  Chamebush Road) to SH 73  Coast Road)  Road to Springston  Iton to Brookside Road	Arterial Road  Arterial Road  Arterial Road  Arterial Road  Collector Road  Arterial Road  Arterial Road
Burnham Road  Coleridge Road  SH 77 (Hummon  Cordys Road  Deans Road  SH 77 (West Company)	Rakaia Gorge Road) to ocks Road  Ta to Milnes Road  (Homebush Road) to SH 73  Coast Road)	Arterial Road  Arterial Road  Arterial Road  Collector Road
Coleridge Road  SH 77 ( Hummo  Cordys Road  Deans Road  SH 77 ( (West C	Rakaia Gorge Road) to beks Road  Ta to Milnes Road  CHomebush Road) to SH 73  Coast Road)  Road to Springston	Arterial Road  Arterial Road  Collector Road
Cordys Road Hororal  Deans Road SH 77 (West C	Checks Road  Check	Arterial Road  Collector Road
Deans Road SH 77 (West C	Homebush Road) to SH 73 Coast Road) Road to Springston	Collector Road
(West C	Road to Springston	
Ellocation Boad Carings		Arterial Road
——————————————————————————————————————	ton to Brookside Road	
Ellesmere Junction Road Springs	<del></del>	Arterial Road
Ellesmere Road Trices F	Road to Lincoln Tai Tapu Road	Collector Road
Feredays Road Leeston	n to Southbridge Rakaia Road	Arterial Road
High Street Willis R	oad to Southbridge	Arterial Road
Hororata Road Duncar	ns Road to Coaltrack Road	Arterial Road
Leaches Road Rockwo	ood Road to SH 72 (Rakaia Road)	Arterial Road
Leeston Dunsandel Road Station	Street to Irvines Road	Collector Road
Leeston Road Springs	ton to Doyleston	Arterial Road
Leeston Road Drain R	oad to Station Street	Arterial Road
Lincoln-Tai Tapu Road Hausch	ilds Road to Edward Street	Arterial Road
	ridge Rakaia Road to SH 1 South Road)	Arterial Road
Milnes Road Rockwo	ood Road to Cordys Road	Arterial Road
Old West Coast Road Chatter Road	tens Road to Waddington	Arterial Road
Shands Road Marshs Road	Road to Ellesmere Junction	Arterial Road
Southbridge Leeston Road Fereda	ys Road to Willis Road	Arterial Road
Southbridge Rakaia Road Fereda	ys Road to Main Rakaia Road	Arterial Road
Springs Road Marshs	Road to Prebbleton	Strategic Road
Springs Road Prebble	oton to Collins Road	Strategic Road
SH 1 (Main South Road) Full len	gth in District	Strategic Road
SH 73 Full len	gth in District	Strategic Road

Road Name	Location	Classification
<del>SH 75</del>	Full length in District	Strategic Road
SH 77	Full length in District	Strategic Road
Telegraph Road	SH 1 (Main South Road) to Darfield	Collector Road
Trices Road	Knights Stream Bridge to Ellesmere Road	Collector Road
Waimakariri Gorge Road	Tramway Road to Waimakariri Gorge Bridge	Arterial Road
Weedons Road	Ellesmere Junction Road to Shands Road	Arterial Road
Whitecliffs Road	SH 77 (Homebush Road) to Whitecliffs	Collector Road

#### PART E

### **APPENDIX 9**

### **ROAD HIERARCHY**

Road Name	То	From	Classification	Location	Volume
Aylesbury Road	Bealey Road	Main South Road (SH1)	<u>Arterial</u>		township
Bangor Road (SH77)	<u>Darfield</u>	Homebush Road (SH77)	State Highway	includes Darfield	township/ rural
Barker Street	West Belt	new road south	<u>Collector</u>	<u>Lincoln - links to</u> new urban areas	<u>township</u>
Bealey Road	West Coast Road (SH73)	Hororata <u><b>Road</b></u>	Arterial	includes Hororata	township/ rural
Birchs Road	Springs Road	James Street	Collector	Prebbleton <u>to</u> <u>Lincoln</u>	township/ rural
Blakes Road	Shands Road	Springs Road	<u>Collector</u>	<u>Prebbleton</u>	township
Boundary Road	James Street	<u>Lincoln Rolleston</u> <u>Road</u>	<u>Collector</u>	<u>Lincoln</u>	township/ rural
Bray Street	South Terrace (SH73)	Cardale Street	<u>Arterial</u>	Darfield	<u>township</u>
Bridge Street	Hororata Road	Homebush Road (SH77)	Arterial	Coalgate	township
Brookside Road	Byron Street	Dunns Crossing Road	Collector	Rolleston	township
Browns Road	<u>Hororata</u> <u>Dunsandel Road</u>	Main South Road (SH1)	Collector	<u>Dunsandel</u>	<u>township</u>
Browns Road	Main South Road (SH1)	Tramway Road	Collector	<u>Dunsandel</u>	<u>township</u>
Burnham Road	Main South Road (SH1)	Ellesmere Junction Road	Arterial		<u>rural</u>
Byron Street	Brookside Road	Rolleston Drive	Collector	Rolleston	township
Cardale Street	Bray Street	Telegraph Road	<u>Arterial</u>	Darfield	township
Cardale Street	Mathias Street	Bray Street	<u>Collector</u>	Darfield	township
Cardale Street	Telegraph Road	Greendale Road	<u>Collector</u>	Darfield	township
Chattertons Road (Shared District Boundary Road)	Old West Coast Road	West Coast Road (SH73)	<u>Arterial</u>		-

Road Name	То	From	Classification	Location	Volume
Christchurch Akaroa Road (SH75)	District Boundary (Halswell)	District Boundary (Motukarara)	State Highway	includes Tai Tapu, Motukarara	township/ rural
Coaltrack Road	Bridge Street	Homebush Road (SH77)	Collector	Coalgate	township
Coleridge Road	Rakaia Gorge Road (SH77)	Acheron Avenue	<u>Collector</u>	includes Coleridge	township/ rural
Cordys Road	Hororata Road	Milnes Road	Arterial	includes Hororata	township/ rural
Courtenay Road	Old West Coast Road	(SH73)		includes Kirwee	township/ rural
Cunningham Street	Pound Road	High Street	Collector	<u>Leeston</u>	township
Dawsons Road (Shared District Boundary Road)	Main South Road (SH1)	West Coast Road (SH73)	<u>Arterial</u>	-	<u>rural</u>
Deans Road	West Coast Road (SH73)	Homebush Road (SH77)	<u>Arterial</u>		<u>rural</u>
Derretts Road	Dunsandel Road	Bealey Road	<u>Arterial</u>	_	rural
Oryden Avenue Rolleston Drive  Drive Road  Lowes Road		Overbury Crescent	Collector	Rolleston	township
Dunns Crossing Lowes Road Road		Main South Road (SH1)	<u>Arterial</u>	Rolleston	township
Dunsandel Road Hororata  Dunsandel Ro		Derretts Road	<u>Arterial</u>	-	<u>rural</u>
<u>East Maddisons</u> <u>Road</u>	<u>ad</u>		Rolleston	township	
Edward Street	Gerald Street	Ellesmere Road  Gerald Street	Arterial	Lincoln	township/ rural
Ellesmere Junction Road	oad		Arterial		township/ rural
Ellesmere Road	Edward Street	Trices Road	<u>Arterial</u>	Lincoln to Halswell	township/ rural
Feredays Road	High Street	Southbridge Rakaia Road	Arterial	includes Leeston	township/ rural
Gerald Street	Edward Street	Springs Road	Arterial	Lincoln	township
Goulds Road	Lowes Road	Oak Tree Lane	Collector	Rolleston	township
Greendale Road	McLaughlins Road	Cardale Street	Collector	<u>Darfield</u>	township
Hamptons Road	Waterholes Road	Springs Road	<u>Arterial</u>		<u>rural</u>
High Street (Leeston)	Station Street	Feredays Road	Collector	<u>Leeston</u>	township
High Street (Southbridge)	Southbridge Leeston Road	Brook Street	Collector	Southbridge	<u>township</u>
Homebush Road (SH77)	Bangor Road (SH77)	<u>Wairiri Road</u> (SH77)	State Highway	<u>includes</u> Coalgate, Glentunnel	township/ rural
<u>Hororata Dunsandel</u> <u>Road</u>	Main South Road (SH1)	<u>Highfield Road</u>	Collector	<u>Dunsandel</u>	<u>township</u>
Hororata Dunsandel Road	<u>Highfield Road</u>	<u>Dunsandel Road</u>	<u>Arterial</u>	<u>includes</u> <u>Dunsandel</u>	township/ rural
Hororata Road	Bealey Road	Bridge Street	Arterial	Hororata	township/ rural
Hoskyns Road	West Coast Road (SH73)	Main South Road (SH1)	<u>Arterial</u>	Includes access to Izone Industrial	township/ rural
Izone Drive	Jones Road	Illinois Road	Collector	Rolleston	township
James Street	Birchs Road	Gerald Street	Collector	Lincoln	township
Jones Road	Weedons Ross Road	Two Chain Road	Arterial	Includes access to Izone Industrial	township/ rural
Kimberley Road Leaches Road	Kowhai Drive Milnes Road	North Terrace Rakaia Gorge Road (SH77)	<u>Collector</u> <u>Arterial</u>	Darfield	township rural
Leeston Dunsandel Road	Tramway Road	Irvines Road	Collector	Dunsandel	township
Leeston Dunsandel	Irvines Road	Market Street	<u>Arterial</u>	Dunsandel to Leeston	township/ rural
Road				Leeston	<u>iuiai</u>
Road Leeston Lake Road Leeston Road	Station Street Ellesmere	High Street Station Street	Arterial Arterial	Leeston	township

Road Name	То	From	Classification	Location	Volume
Levi Road	Weedons Road	Lowes Road	<u>Arterial</u>	Rolleston	township/ rural
<u>Lincoln Rolleston</u> Road	Masefield Drive	Selwyn Road	<u>Arterial</u>	Includes Rolleston	township/ rural
Lincoln Rolleston Road	Selwyn Road	Boundary Road	Collector		rural
Lincoln Tai Tapu	Ellesmere Road	Christchurch	<u>Arterial</u>	Lincoln to Tai Tapu	township/
Road		Akaroa Highway (SH75)			<u>rural</u>
Lowes Road	<u>Levi Road</u>	Dunns Crossing Road	<u>Arterial</u>	Rolleston	township
Main Rakaia Road	Southbridge Rakaia Road	Main South Road (SH1)	Arterial		<u>rural</u>
Main South Road	District Boundary	District Boundary	State Highway	includes	township/
(SH1)	(Templeton)	(Rakaia River)	<u>outo ingrivaj</u>	Templeton, Rolleston, Dunsandel	rural
Market Street	High Street	Pound Road	Collector	Leeston	township
Masefield Drive	Rolleston Drive	<u>Lincoln Rolleston</u> Road	Collector	Rolleston	township
Mathias Street North Terrace West Coast Road Collector Darfield (SH73)		<u>Darfield</u>	township		
Mathias Street	West Coast Road (SH73)	Cardale Street	Collector	<u>Darfield</u>	township
McLaughlins Road	Bangor Road (SH77)	Cressy Place	Collector	<u>Darfield</u>	township
McMillan Street	North Terrace	West Coast Road (SH73)	Collector	Darfield	township
Milnes Road	Cordys Road	Leaches Road	Arterial		rural
North Belt	West Belt	James Street	Collector		township
North Terrace	Kimberley Road	Mathias Street	Collector	<u>Darfield</u>	township
Old West Coast Road	<u>District Boundary</u> (Chattertons Road)	<u>Waimakariri</u> <u>Gorge Road</u>	Arterial		<u>rural</u>
Pound Road	Market Street	<u>Cunningham</u> Street	Collector	<u>Leeston</u>	township
Rakaia Gorge Road	<u>Windwhistle</u>	District Boundary	State Highway	includes	township/
(SH77)	Road (SH77)	(Rakaia River)		Windwhistle	rural
Rembrandt Drive	Rolleston Drive	Lowes Road	Collector	Rolleston	township
Rolleston Drive	Main South Road (SH1 north)	Tennyson Street	Collector	Rolleston	township
Rolleston Drive	Tennyson Street	Main South Road (SH1 south)	Collector	Rolleston	township
Selwyn Road	<u>Lincoln Rolleston</u> Road	Shands Road	<u>Arterial</u>	-	<u>rural</u>
Shands Road	District Boundary (Marshs Road)	Ellesmere Junction Road	Arterial		<u>rural</u>
Southbridge Leeston Road	Feredays Road	<u>High Street</u> (Southbridge)	<u>Arterial</u>	<u>includes</u> Southbridge	township/ rural
Southbridge Rakaia Road	Feredays Road	Main Rakaia Road	<u>Arterial</u>		rural
Southfield Drive	Edward Street	Ryelands Drive	Collector	<u>Lincoln</u>	township
Springs Road	District Boundary	Gerald Street	Arterial	Prebbleton to	township/
Springs Road	(Marshs Road) Gerald Street	800 metres north	Collector	<u>Lincoln</u> <u>Lincoln</u>	rural township
Springston Rolleston	Lowes Road	of Collins Road Shands Road	<u>Arterial</u>	Includes Rolleston	township/
Road Station Street	Leeston Road	Leeston Lake	Arterial	Leeston	rural township
		Road			
Telegraph Road	Cardale Street	Main South Road (SH1)	Arterial	Darfield	township/ rural
Tennyson Street	Main South Road (SH1)	Lowes Road	Collector	Rolleston	township
Tosswill Road	Springs Road	Hamptons Road	<u>Collector</u>	<u>Prebbleton</u>	<u>township</u>

Road Name	То	From	Classification	Location	Volume
Tramway Road	Browns Road	<u>Leeston</u>	<u>Collector</u>	<u>Dunsandel</u>	township
		<b>Dunsandel Road</b>			
Trices Road	Springs Road	District Boundary	<u>Arterial</u>	<u>Includes</u>	township/
		(Sabys Road)		<u>Prebbleton</u>	<u>rural</u>
Two Chain Road	Jones Road	Walkers Road	<u>Arterial</u>	_	<u>rural</u>
Waimakariri Gorge	West Coast Road	District Boundary	<u>Arterial</u>	<u>includes</u>	township/
Road	(SH73)	<u>(Waimakariri</u>		Waddington	<u>rural</u>
		River)			
Wairiri Road (SH77)	Homebush Road	Windwhistle	State Highway	_	<u>rural</u>
	(SH77)	Road (SH77)			
Walkers Road	Main South Road	Two Chain Road	<u>Arterial</u>	=	<u>rural</u>
	(SH1)				
Waterholes Road	Hamptons Road	Main South Road	<u>Arterial</u>	=	<u>rural</u>
		(SH1)			
Waterholes Road	<u>Ellesmere</u>	<u>Springston</u>	<u>Collector</u>	=	<u>rural</u>
	Junction Road	Rolleston Road			
Weedons Road	Main South Road	Ellesmere	<u>Arterial</u>		<u>rural</u>
	(SH1)	Junction Road			
Weedons Ross Road	Old West Coast	Main South Road	Arterial	includes West	township/
	Road	(SH1)		Melton	<u>rural</u>
West Belt	North Belt	Barker Street	Collector	Lincoln	township
West Coast Road	District Boundary	District Boundary	State Highway	includes West	township/
<b>(</b> SH73)	(Yaldhurst)	(Arthurs Pass)		Melton, Darfield,	<u>rural</u>
				<u>Waddington</u>	
				Sheffield,	
				Springfield, Arthurs	
				Pass	
Whitecliffs Road	Homebush Road	Farr Street	Collector	Glentunnel to	township/
	(SH77)			Whitecliffs	<u>rural</u>
Windwhistle Road	Wairiri Road	Rakaia Gorge	State Highway	<u>includes</u>	township/
(SH77)	(SH77)	Road (SH77)		Windwhistle	<u>rural</u>

PART E

### APPENDIX 10

# E10.1 ROADS AND VEHICULAR ACCESSWAYS - DESIGN AND FORMATION

E10.1.1 Vehicular Accessways

E10.1.1.1 The minimum requirements for any new vehicular accessway to a site shall be in accordance with Table E10.1.

#### **Table E10.1 - Minimum Requirements for any Vehicular Accessway**

Potential No. of Sites	Longth (m)	Logal Width ( <del>m)</del>	<del>Carriagoway</del> <del>Width (m)</del>	Turning Area	Passing Bay	Footpaths
1-2	Any length	3.5	3.0	Required	Optional	Optional
<del>3-6</del>	0-50	4	<del>3.5</del>	Required	Optional	Optional
<del>3 6</del>	<del>Over 50</del>	<del>4.5</del>	4.0	Required	Required	Optional
<del>1 10</del>	All lengths	6.0	4.0	Required	<del>Optional</del>	<del>Optional</del>

#### E10.1.2 Roads

E10.1.2.1 Any new road shall be laid out and vested in the Council in accordance with the standards contained in Table E10.2.

**Table E10.2 - Roading Standards** 

Type of Road	Road Roserve W	<del>/idth (m)</del>	Carriageway Wid	<del>dth (m)</del>
	Min	Max	Min	Max
Strategic Roads	<del>20</del>	20	<del>12</del>	<del>1</del> 4
Local Roads	<del>15</del>	<del>20</del>	6.2	6.5
Arterial and Collector Roads	<del>20</del>	<del>20</del>	<del>11</del>	<del>12</del>
Cul de sac (<100m long)	14	<del>20</del>		

- E10.1.2.2 The carriageway of any new road laid out and vested in accordance with the above shall be formed and sealed.
- E10.1.2.3 Any cul-de-sac shall be constructed with turning heads of the following diameters measured kerb face to kerb face:
  - (a) 13m where there is no provision for on street parking
  - (b) 15m where there is provision for on street parking.

## E10.2 ROADS AND VEHICULAR ACCESSWAYS - SEPARATION AND SIGHT DISTANCES

E10.2.1 Distances of Vehicular Accessways From Road Intersections

E10.2.1.1 No part of any vehicular accessway shall be located closer to the intersection of any road than the minimum distances specified in Table E10.3 (the Roading Hierarchy for the District is set out in Appendix 9).

Table E10.3 – Minimum Distances of any Vehicular Accessway from Road Intersections

Vehicular Accessway Joins to	Intersecting Road Type Distances in Metres							
	Str	ategic	Ar	t <del>orial</del>	Col	lector	Le	ocal
	< 50 km/hr	> 50 km/hr	< 50 km/hr	> 50 km/hr	< 50 km/hr	> 50 km/hr	< 50 km/hr	> 50 km/hr
Strategie	<del>70</del>	<del>180</del>	<del>70</del>	<del>180</del>	<del>55</del>	<del>180</del>	<del>35</del>	90
Arterial	<del>70</del>	<del>180</del>	<del>70</del>	<del>180</del>	<del>55</del>	<del>180</del>	<del>35</del>	90
Collector	<del>50</del>	<del>75</del>	40	<del>75</del>	40	<del>60</del>	<del>20</del>	<del>60</del>
Local	<del>25</del>	<del>75</del>	<del>25</del>	<del>75</del>	<del>25</del>	60	<del>10</del>	60

- E10.2.1.2 The distance between any vehicular accessway and road intersection shall be measured along the centre line of the frontage road:
  - (a) From the point where the centre lines of the two roads intersect;
  - (b) To the point where the centre lines of the vehicular accessway and the frontage road intersect.
- E10.2.1.3 Notwithstanding Rule E10.2.1.1 above, for any:
  - (a) service station; or
  - (b) truck stop; or
  - (c) any activity which generates more than 40 vehicle movements in any one day;

No part of any vehicular accessway onto any strategic road or arterial road shall be located closer than:

- (d) 60m to the departure side of any intersection; and/or
- (e) 30m to the approach side of any intersection.

The distance shall be measured in accordance with Rule E10.2.1.2.

#### E10.2.2 Road Intersection Spacing

- E10.2.2.1 The spacing between road intersections shall comply with Table E10.4 below.
- E10.2.2.2 The distance between any two road intersections shall be measured along the centre line of the road which has both the intersections:
  - (a) From the point where the centre lines of two of the roads intersect;
  - (b) To the point where the centre lines of the other two roads intersect.

**Table E10.4 - Minimum Distance Between Intersections** 

Posted (Legal) Speed Limit (km/hr)	Distance (m)
<del>100</del>	800
80	<del>550</del>
<del>70</del>	<del>220</del>
60	<del>160</del>
<del>50</del>	<del>125</del>

E10.2.3 Sight Distances From Vehicular Accessways and Location of Property Access Relative to Intersections

E10.2.3.1 State Highways – Required Sight Distances and location of property access where traffic generation is less than 100 equivalent car movements per day (ecm/d).

#### **NOTE:**

Where traffic generation exceeds 100 eem/d, the activity is a restricted discretionary activity (refer Rule 4.5.2).

#### Table E10.5

Posted (Legal) Speed Limit (km/h)	Required Sight Distance ( <del>m)</del> (see Diagram E10.A1)	Location of Property Access Relative to Intersection (see Diagram E10.A2)		Minimum Spacing Between Adjacent Property Accesses Distance N on Diagram E10.A2 (m)
		Minimum Distance K (m)	Minimum Side Road Distance M (m)	
<del>50</del>	<del>85</del>	<del>30</del>	<del>20</del>	-
<del>60</del>	<del>115</del>	<del>50</del>	<del>30</del>	-
<del>70</del>	<del>140</del>	<del>100</del>	45	40
80	<del>170</del>	<del>120</del>	60	<del>100</del>
<del>100</del>	<del>250</del>	<del>200</del>	60	<del>200</del>

<sup>\*</sup> There shall be no more than 5 individual accesses along any 1 km section of State Highway (on both sides), measured 500m either side of a proposed access.

#### **Access Diagrams**

All accesses directly to a State Highway require design appropriate to the highway they are connecting to in order to avoid, remedy, or mitigate the adverse effects. Diagrams E10.B1 and E10.B2 provide appropriate standard designs for accesses up to 30 and 100 equivalent car movement per day respectively.

#### NOTE

Consent must be sought from Transit before any work is carried out within the State Highway reserve in relation to access construction.

**Table E10.6 - Minimum Sight Distances** 

Posted (Legal) Speed Limit (km/hr)	Sight Distances in Metres
<del>50</del>	80
<del>70</del>	140
<del>80</del>	<del>175</del>
<del>100</del>	<del>250</del>

Any sight distance measurement shall be undertaken in accordance with Diagram E10.A.

#### **E10.3 VEHICLE CROSSINGS - DESIGN AND SITING**

- E10.3.1 Vehicle access to any site from any road or service lane shall be by way of a vehicle crossing constructed at the owner's or the developer's expense.
- E10.3.2 The maximum number, spacing and width of any vehicle crossing shall comply with Table E10.7.

**Table E10.7 - Vehicle Crossing Requirements** 

Max No. of Crossings per Site Road Frontage	Distance Between Crossings (m) on Same Side of Road	Maximum Width
2	Less than 1m or greater than 7m	<del>6m</del>

- E10.3.3 Vehicle crossings to any site shall be constructed in accordance with:
  - E10.3.3.1 Diagram E10.C2 if the vehicle crossing is to provide access to a dwelling and is to a strategic road, arterial road or collector road; or
  - E10.3.3.2 Diagram E10.C1 if the vehicle crossing is to provide access to a dwelling and is to any road other than a strategic road, arterial road or collector road; or
  - E10.3.3.3 Diagram E10.D if the vehicle crossing is to provide access to a commercial activity or is a heavy vehicle access.

## E10.4 CAR PARKING AND LOADING SPACES - DESIGN AND FORMATION

- E10.4.1 Surface of Parking and Loading Spaces
  - E10.4.1.1 Any on site car parking or loading space located between the road frontage and the main entrance of any educational facility or any activity involving the retailing of goods and services to the public shall not have a metalled surface.

Note:

- (a) The reason for Rule E10.4.1.1 is to avoid the potential for stones to "fly up" from the tyres of vehicles, which may create a danger to school children and the public in general.
- (b) Table E10.8 below provides a guide for the marking out of car parking spaces in the case of the developer or landowner wishing to provide a parking surface which is formed and sealed.

**Table E10.8 - Minimum Car Park Dimensions** 

Type of User	<del>Parking</del> Angle	Stall Width (m²)	Aisle ( <sup>4</sup> )	Stall Depth (m³)
Long Term (includes tenant, employee, commuter and	<del>90</del> 0	2.4	6.2	5.4
university parking)	<del>(Perpendicular)</del> 45 <sup>0</sup>	<del>2.4</del>	4.9	5.4
	<del>30°</del>	2.4	<del>3.9</del>	<del>5.4</del>
	<del>60</del> 0	<del>2.1</del>	<del>3.1</del>	<del>5.4</del>
Medium Term (includes long term, town centre parking, sports facilities, entertainment centres, hotels, motels)	<del>90</del> e	2.5	5.8	5.4
	<del>60</del> 0	<del>2.5</del>	4.6	5.4
	45 <sup>0</sup>	<del>2.5</del>	<del>3.7</del>	<del>5.4</del>
	<del>30</del> 0	<del>2.3</del>	<del>3.0</del>	<del>5.4</del>
Short Term (includes shopping centres, supermarkets,	<del>90</del> 0	<del>2.6</del>	5.4	5.4
hospitals, medical centres)	<del>60</del> °	<del>2.6</del>	<del>4.3</del>	<del>5.4</del>
	45 <sup>0</sup>	<del>2.6</del>	<del>3.5</del>	<del>5.4</del>
	<del>30°</del>	<del>2.5</del>	<del>2.9</del>	<del>5.4</del>
			8.0	5.4
Disabled Parking (+)	All	3.6	3.7	5.4
			<del>(one way)</del>	<del>5.4</del>
All Users	<del>Parallel</del>	<del>2.5</del>	<del>5.5 (two</del> <del>way)</del>	5.4

Refer to Diagram E10.E for car parking space layout.

#### **Footnotes**

- 1. Car parking spaces for people with disabilities shall be as close as practicable to the building entrance. The spaces shall be on a level surface and be clearly signed.
- 2. Stall widths shall be increased by 300mm where they abut obstructions such as a wall, column or other permanent obstruction.
- 3. 5.0m if low kerb allows overhang, but this overhang shall not encroach on required landscape areas.
- 4. Aisle widths are given for one way operation with forward entry to spaces. Two way aisles shall be 5.5m minimum. For two way operation only 90° parking will be permitted.

In addition design guidance for parking areas in buildings may be obtained from the New Zealand Building Code D1: Access Routes or Australian Standard Off street Parking, Part 1: Car Parking Facilities, AS 2890.1 1993.

E10.4.2.1 Any area required for on-site parking or loading, other than for a residential activity, shall be available at all times for staff and visitors during the hours of operation of the activity and shall not be diminished by any subsequent erection of any structure, storage of goods, or any other use.

#### E10.4.3 Parking Spaces for Residential Activities

E10.4.2.2 Garageable parking spaces for any residential activity shall have the following minimum internal dimensions:

	Width	Depth
Single	3.1m	<del>5.5m</del>
Double	<del>5.6m</del>	<del>5.5m</del>

- E10.4.3.2 The minimum width of the entrance to a single garage shall be 2.4 metres.
- E10.4.3.3 Any other parking space for any residential activity shall have the following minimum dimensions:

Width	<del>2.5m</del>
Depth	<del>5m</del>

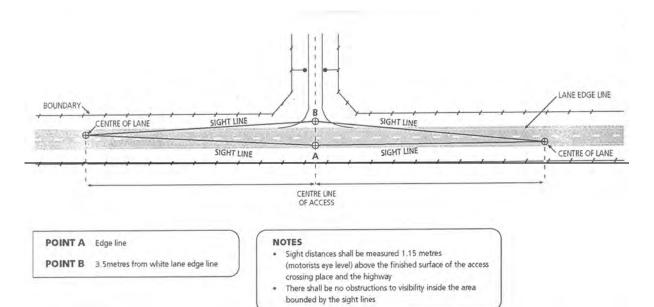
#### E10.4.4 Gradient of Parking and Loading Spaces

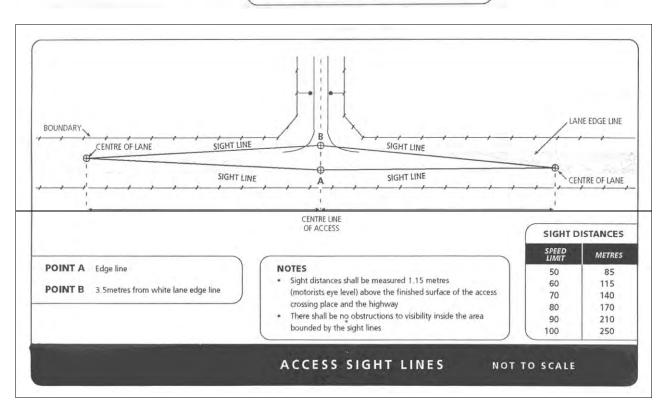
- E10.4.4.1 The gradient of any on site parking or loading area for any non-residential activity, shall be no more than:
  - (a) At 900 to the angle of parking 1:16; or
  - (b) Parallel to the angle of parking 1:20

#### **E10.5 CARPARKING AND LOADING SPACES - MANOEUVRING AREAS**

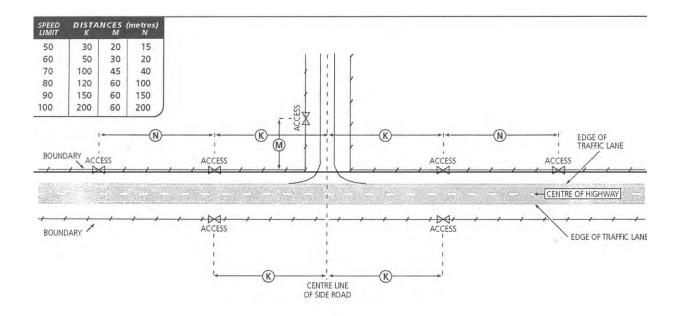
- E10.5.1 The manoeuvring area to and from any parking space shall be designed to accommodate at least a 90 percentile design motor car as set out in Diagram E10.F.
- E10.5.2 Parking spaces shall be located so as to ensure that no vehicle is required to carry out any reverse manoeuvring when entering any parking space.
- E10.5.3 The manoeuvring area to and from any loading space shall be designed to accommodate at least a 90 percentile design 2 axle truck as set out in Diagram E10.G.
- E10.5.4 No loading space shall obstruct any on site car parking space.
- E10.5.5 Vehicles shall not have to undertake more than one reverse manoeuvre when manoeuvring out of any parking or loading space.

#### **Diagram E10.A1 - Sight Distances**

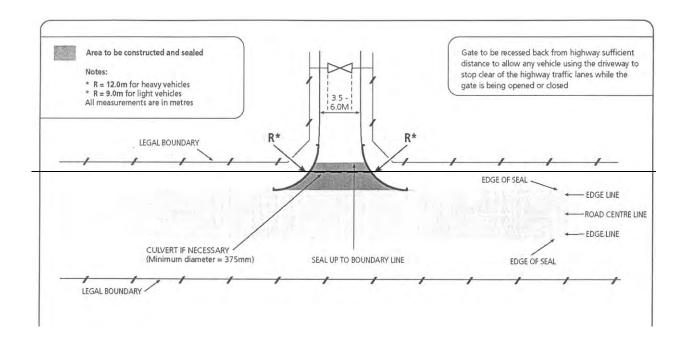




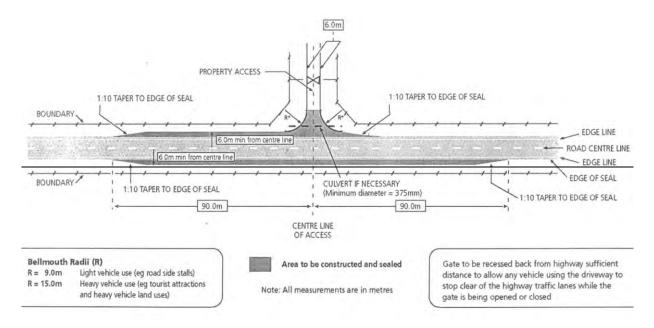
#### **Diagram E10.A2 - Access Separation From Intersections And Other Accesses**



#### Diagram E10.B1 - Low Use Access Standard (31-100 ecm/day)

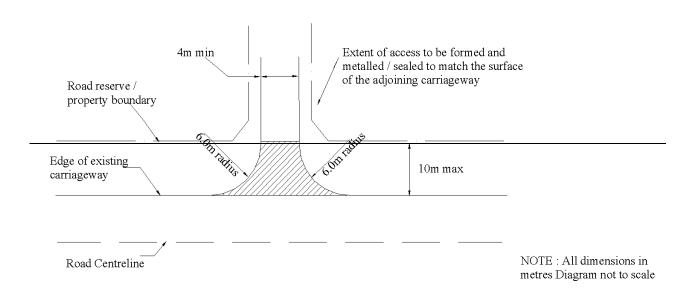


#### Diagram E10.B2 - Moderate Use Access Standard (31-100 ecm/day)



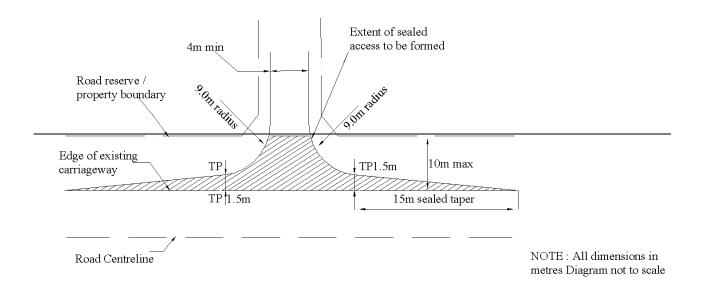
#### **Diagram E10.C1 - Vehicle Crossing**

#### RESIDENTIAL ACCESS STANDARD FOR LOCAL ROADS



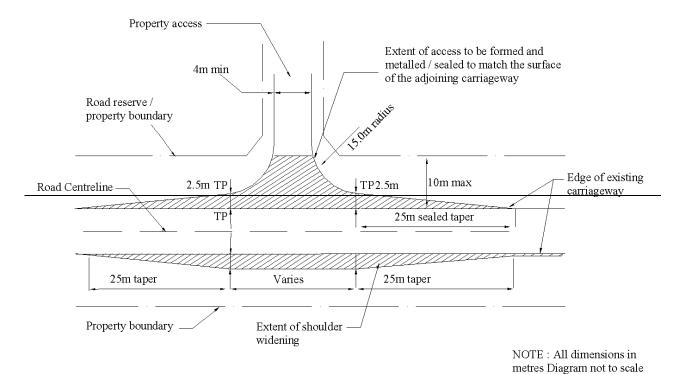
#### **Diagram E10.C2 - Vehicle Crossing**

### RESIDENTIAL ACCESS STANDARD FOR STRATEGIC, ARTERIAL AND COLLECTOR ROADS

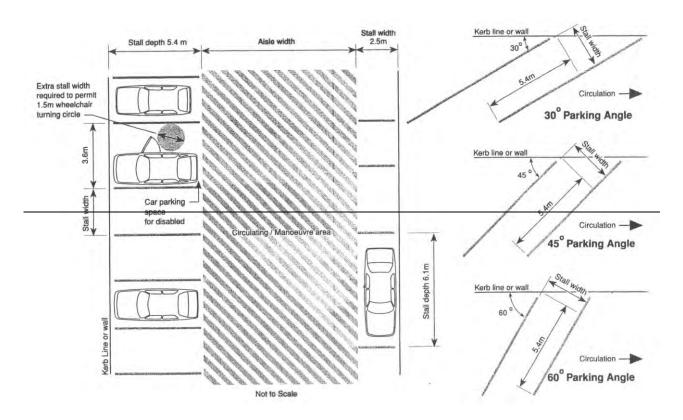


#### **Diagram E10.D - Vehicle Crossing**

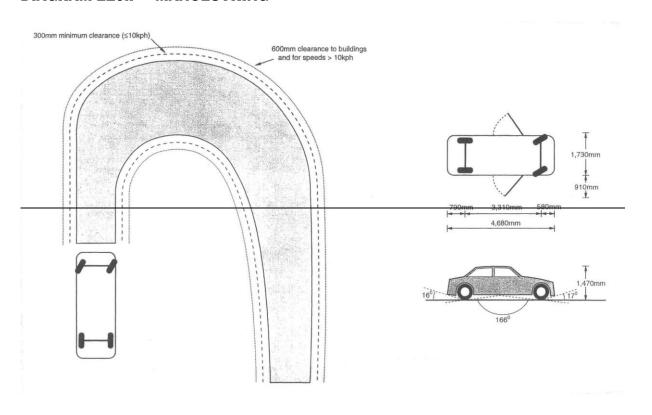
#### COMMERCIAL AND HEAVY VEHICLE ACCESS STANDARD FOR ALL ROADS



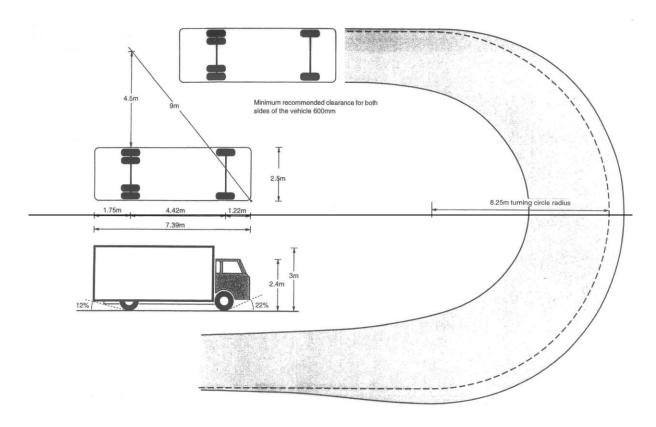
#### **DIAGRAM E10.E - CAR PARKING**



#### **DIAGRAM E10.F - MANOEUVRING**



#### **DIAGRAM E10.G - MANOEUVRING**



PART E

### **APPENDIX 10**

#### E10.1 - Parking requirements

#### E10.1.1 Surface of Parking and Loading Spaces

E10.<u>1</u>.1.1 Any on-site car parking or loading space located between the road frontage and the main entrance of any educational facility or any activity involving the retailing of goods and services to the public shall not have a metalled surface.

#### Notes:

- (a) The reason for Rule E10.<u>1</u>.1.1 is to avoid the potential for stones to "fly up" from the tyres of vehicles, which may create a danger to school children and the public in general.
- (b) Table E10.1 below provides a guide for the marking out of car parking spaces in the case of the developer or landowner wishing to provide a parking surface which is formed and sealed.
- (c) The discharge of storm water from a large sealed area may require a discharge consent from Environment Canterbury.

**Table E10.1 - Minimum Car Park Dimensions** 

Type of User	Parking Angle	Stall Width 2 (m)	Aisle 4	Stall Depth <sup>3</sup> (m)
Long Term (includes tenant, employee, commuter and university parking)	90° (Perpendicular) 45° 30° 60°	2.4 2.4 2.4 2.1	6.2 4.9 3.9 3.1	5.4 5.4 5.4 5.4
Medium Term (includes long term, town centre parking, sports facilities, entertainment centres, hotels, motels)	90° 60° 45° 30°	2.5 2.5 2.5 2.3	5.8 4.6 3.7 3.0	5.4 5.4 5.4 5.4
Short Term (includes shopping centres, supermarkets, hospitals, medical centres)	90° 60° 45° 30°	2.6 2.6 2.6 2.5	5.4 4.3 3.5 2.9 8.0	5.4 5.4 5.4 5.4 5.4
Disabled Parking (1)	All	3.2-3.8	as above	5.4 5.4
All Users	Parallel	2.5	5.5 (two way)	5.4

#### **Notes on Table 10.1**

#### 1. [No Change]

E10.1.2 Availability of Parking and Loading Spaces

[No Change]

#### E10.1.3 Parking Spaces for Residential Activities

[No Change]

#### E10.1.4 Gradient of Parking and Loading Spaces

- E10.<u>1.</u>4.1 The gradient of any on-site parking or loading area for any non-residential activity, shall be no more than:
  - (a) At 90° to the angle of parking 1:16; or
  - (b) Parallel to the angle of parking 1:20

#### **E10.1.5 Carpark and loading spaces - Manoeuvring areas**

- E10.<u>1</u>.5.1 The manoeuvring area to and from any parking space shall be designed to accommodate at least the-design motor car as set out in <u>the SDC Engineering Code</u> of Practice.
- E10.<u>1</u>.5.3 The manoeuvring area to and from any loading space shall be designed to accommodate at least the-design truck as set out in <u>the SDC Engineering Code of Practice</u>.
- E10.1.5.4 No loading space shall obstruct any on-site car parking space or any formed
- E10.1.5.6 No vehicle shall be required to reverse out of any site onto a road.

#### **E10.2 – Vehicle Accessways and Crossings**

#### E10.2.1 Private Vehicle Accessways

E10.<u>2</u>.1.1The minimum requirements for any <u>shared private vehicle</u> accessway <u>for</u> a site(s) shall be in accordance with Table E10.2.

Table E10.2 - Minimum Requirements for any **Shared Private Vehicle** Accessway

Potential No. of Sites	Length (m)	Legal Width (m)	Carriageway Width (m)	Turning Area	Passing Bay
2 <u>-3</u>	Any length	<u>4.5</u>	3.0	Required	Optional
<u>4</u> -6	0-50	<u>5.0</u>	3.5	Required	Optional
<u>4-6</u>	Over 50	<u>6.5</u>	5.0	Required	Required

#### **Notes**

The legal width is greater than the carriageway width to ensure that there is space for suitable on-site stormwater management.

E10.2.1.3 Where Table E10.2 requires turning areas, turning within the shared accessway may be facilitated through the use of a hammerhead arrangement.

#### E10.2.2 Distances of <u>Vehicle Crossings</u> from Road Intersections

- E10.2.2.1 No part of any <u>vehicle crossing</u> shall be located closer to the intersection of any road than the minimum distances specified in Table E10.3 <u>except that where the boundaries of a site do not allow the provision of any vehicle crossing whatsoever in conformity with the above distances, a <u>single vehicle crossing may be constructed in the position which most nearly complies with the provisions of Table E10.3.</u> (the Roading Hierarchy for the District is set out in Appendix 9).</u>
- E10.2.2.2 No part of any vehicle crossing shall be located closer than 30 metres to the intersection of any railway line as measured from the nearest edge of the vehicle crossing to the limit line at the level rail crossing.

Table E10.3 – Minimum Distances of any Vehicle Crossing from Road Intersections

		Intersecting Road Type Distances in Metres				
Vehicle Crossing Joins to	Posted speed Km/hr	<u>State</u> <u>Highway</u>	<u>Arterial</u>	Collector	Local	
State Highway	<u>&gt; 50</u>	<u>100</u>	<u>100</u>	<u>75</u>	<u>75</u>	
	<u>≤50</u>	<u>30</u>	<u>30</u>	<u>50</u>	<u>25</u>	
<u>Arterial</u>	<u>&gt; 50</u>	100	<u>100</u>	<u>75</u>	<u>75</u>	
	<u>≤50</u>	30	<u>30</u>	<u>50</u>	<u>25</u>	
Collector	<u>&gt; 50</u>	<u>100</u>	<u>100</u>	<u>60</u>	<u>60</u>	
	<u>≤50</u>	<u>30</u>	<u>30</u>	<u>40</u>	<u>25</u>	
Local	<u>&gt; 50</u>	<u>100</u>	<u>100</u>	<u>60</u>	<u>60</u>	
	<u>≤50</u>	<u>30</u>	<u>30</u>	<u>40</u>	<u>10</u>	

- E10.2.2.3 The distance between any <u>vehicle crossing</u> and road intersection shall be measured along the centre line of the frontage road:
  - (a) From the point where the centre lines of the two roads intersect;
  - (b) To the point where the centre lines of the **vehicle crossing** and the frontage road intersect.
- E10.2.2.4 Notwithstanding Rule E10.2.2.1 above, for any:
  - (a) service station; or
  - (b) truck stop; or
  - (c) any activity which generates more than 40 vehicle movements in any one day;

No part of any <u>vehicle crossing</u> onto any <u>State Highway</u> road or arterial road shall be located closer than:

- (d) 60m to the departure side of any intersection; and/or
- (e) 30m to the approach side of any intersection.

The distance shall be measured in accordance with Rule E10.2.2.3.

#### **E10.2.3** Sight distances from Vehicle Crossings

E10.2.3.1 <u>Vehicle crossings onto roads must provide the required minimum sight</u> <u>distances in Table E10.4 and Diagram E10.A1.</u>

**Table E10.4 - Minimum Sight Distances** 

Posted (Legal) Speed Limit (km/h)	State Highway, Arterial and Collector roads Required Sight Distances (m)
<u>50</u>	<u>113</u>
<u>60</u>	140
<u>70</u>	<u>170</u>
<u>80</u>	<u>203</u>
90	240
<u>100</u>	282

#### **Notes**

<u>1.</u> Any sight distance measurement shall be undertaken in accordance with Diagram E10.A1.

There shall be no more than 5 individual <u>crossings</u> along any 1 km section of State Highway <u>and Arterial Road</u> (on both sides), measured 500m either side of a proposed access. <u>Refer to the NZTA Planning and Policy Manual and the Selwyn District Council Code of Practice.</u>

Note that where traffic generation exceeds 100 ecm/d on a State Highway or Arterial road the activity is a restricted discretionary activity (refer Rule 4.5.2).

Consent must be sought from <u>NZTA</u> before any work is carried out within the State Highway reserve in relation to access construction.

#### E10.2.4 Vehicle Crossings - Design and Siting

- E10.<u>2.4.1</u> Vehicle access to any site from any road or service lane shall be by way of a vehicle crossing constructed at the owner's or the developer's expense.
- E10.2.4.2 The maximum number of <u>residential</u> vehicle crossings shall <u>not exceed 1 per road</u> <u>frontage.</u>
- E10.2.4.3 Vehicle crossings to any site shall be constructed in accordance with:
  - E10.2.4.3.1 Diagram E10.B1 if the vehicle crossing is to provide access to a property from a State Highway with less than 30 equivalent car movements per day; or
  - E10.2.4.3.2 Diagram E10.B2 if the vehicle crossing is to provide access to a property from a State Highway with between 30 and 100 equivalent car movements per day; or
  - E10.2.4.3.3 Diagram E10.C1 if the vehicle crossing is to provide access to a dwelling and is to a local road; or

- E10.2.4.3.4 Diagram E10.C2 if the vehicle crossing is to provide access to a dwelling and is to an arterial road or provides access to any activity and is to a collector road; or
- E10.<u>2.4.3.5</u> Diagram E10.D if the vehicle crossing is to provide access to a commercial activity or is a heavy vehicle access, <u>other than State Highways</u>.

#### **E10.3** Road Standards

#### E10.3.1 Roads

- E10.<u>3</u>.1.1 Any new road shall be laid out and vested in the Council in accordance with the standards contained in Table E10.<u>5</u>.
- E10.3.1.2 For determining the carriageway width in Table E10.5, the minimum carriageway widths shall be measured from the edge of seal to edge of seal.

#### **Table E10.5 - Road Standards**

Type of Road	Road Reserve Width (m)		Carriageway Width (m)	
	Min	Мах	Min	Мах
State Highways	20	-	-	-
Arterial and Collector Roads	20	20	<u>7.5</u>	9
Local Roads (including cul de sacs up to 150m long)	15	20	6.7	I

- E10.3.1.3. The carriageway of any new road laid out and vested in accordance with the above shall be formed and sealed.
- E10.<u>3.1.4</u> Any cul-de-sac shall be constructed with <u>a</u> turning head of <u>26m</u> diameter measured kerb face to kerb face.

#### **Notes**

The Engineering Code of Practice includes more detail on the design requirements of roads and vehicle accessways.

Approval must be sought from New Zealand Transport Agency (NZTA) before any work is carried out within the State Highway reserve in relation to road construction.

#### E10.3.2 Road Intersection Spacing (all roads)

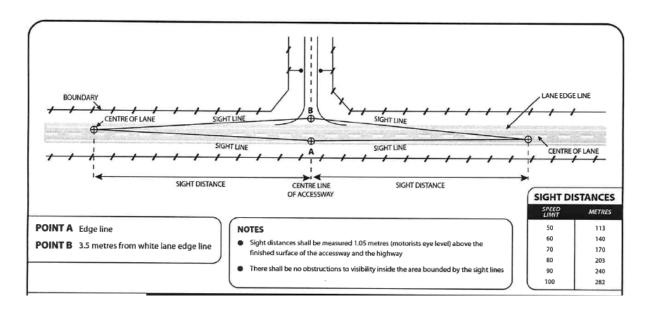
- E10.3.2.1 The spacing between road intersections shall comply with Table E10.6 below.
- E10.3.2.2 In determining intersection spacing's from Table E10.6 in accordance with E10.3.2.1, where new roads are proposed as part of any Outline Development Plan, the intersection spacing's can be designed for the proposed (future) speed limit (typically 50km/hr if within the urban limits) within the Outline Development Plan area and on immediately adjoining roads.
- E10.3.2.23 The distance between any two road intersections shall be measured along the centre line of the road which has both the intersections:
  - (a) From the point where the centre lines of two of the roads intersect;
  - (b) To the point where the centre lines of the other two roads intersect.

Table E10.6 – Minimum Distance between Intersections

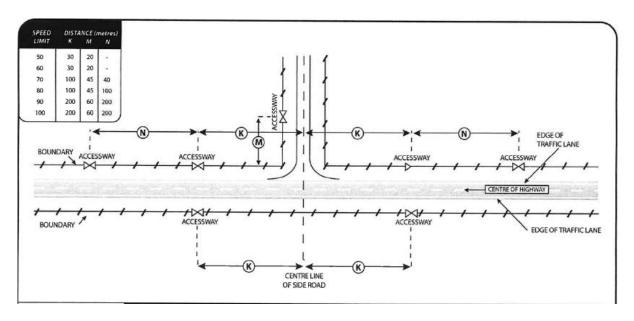
Posted (Legal) Speed Limit (km/hr)	Distance (m)
100	800
90	500
80	400
70	305
60	220
50	<u>160</u>

#### **DIAGRAMS**

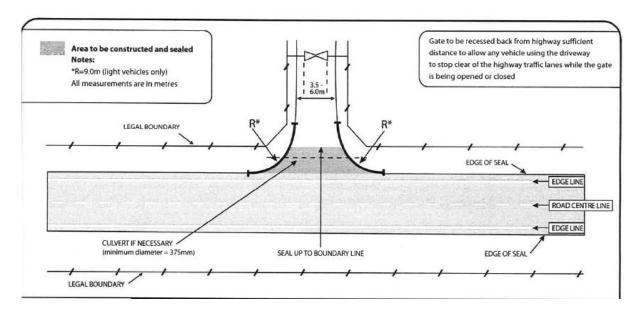
## Diagram E10.A1 – <u>Sight Distance Measurement and State Highway/Arterial</u> <u>sight distance values</u>



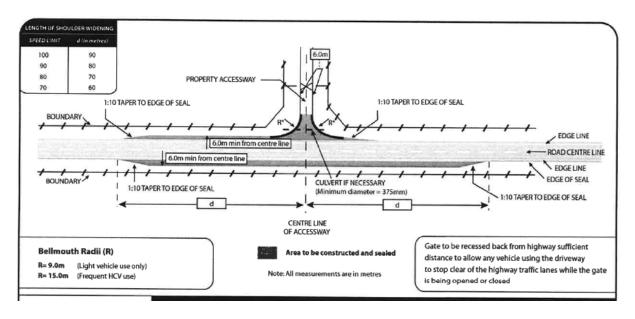
## Diagram E10.A2 – <u>State Highways and Arterial Roads</u> - Access Separation From Intersections And Other Accesses



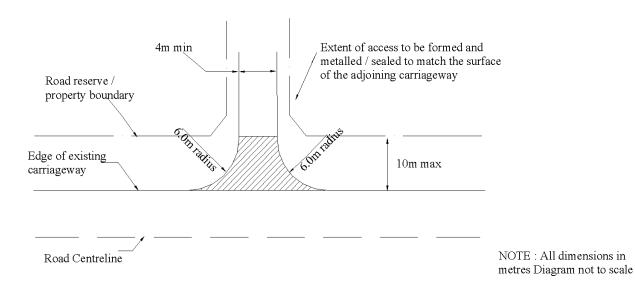
#### Diagram E10.B1 - State Highways - Low Use Access Standard (up to 30 ecm/day)



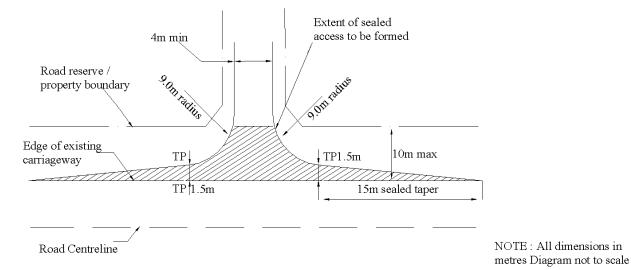
## Diagram E10.B2 – <u>State Highways and Arterial Roads</u>- Moderate Use Access Standard (31-100 ecm/day)



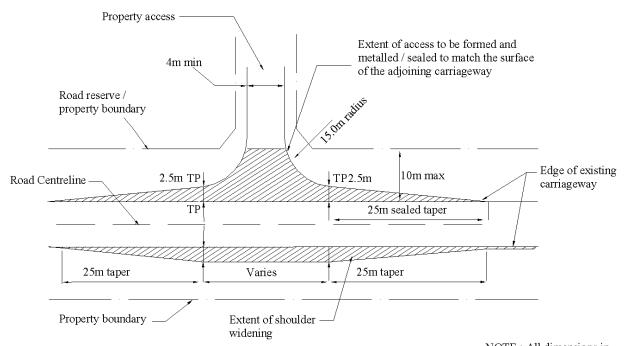
## Diagram E10.C1 – Vehicle Crossing – Residential access standard for local roads



### Diagram E10.C2 – Vehicle Crossing - Residential access standard for arterial and collector roads

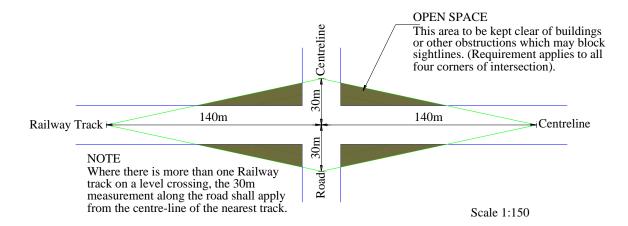


## Diagram E10.D – Vehicle Crossing – Commercial and heavy vehicle access standard for all roads



NOTE : All dimensions in metres Diagram not to scale

#### Diagram E10.E - Sight distance at railway lines



Note diagram E10E relates to rule C4.7

#### Diagram E10.F - Car parking

