

Chapter 8 — Transportation

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SECTION 1 — TRANSPORTATION GENERAL

8.1 INTRODUCTION

8.1.1 Transportation Land Resources

The land transportation system of Manukau City is made up by roads, motorways, the railway, cycleways and footpath networks. The demand for transport arises from the need to move people and goods between various residential, business and recreational activities into and across the City and must be managed efficiently to promote the City's economic and social wellbeing. The effects of transport on the environment and the inhabitants of the City, are however significant and these must be managed in an integrated manner to reduce these effects, particularly in the urban areas where these effects are greatest.

8.1.2 The Resource Management Act 1991

The Resource Management Act promotes the sustainable management of natural and physical resources in a way which enables people and communities to provide for their social, economic and cultural wellbeing. This includes managing the effects of activities on the environment, and sustaining the potential of resources to meet the needs of future generations. The transportation system and the way it operates is covered by these objectives. The relationship between transport and land use is particularly important in this respect, as is the management of the effects of transport such as noxious gas emissions and water pollution. Management of transportation under the Resource Management Act must be related to resource management outcomes, including reduced environmental effects and greater energy efficiency, and the District Plan is one means of achieving these outcomes.

The Resource Management Act provides the opportunity to address the wider issue of the environmental effects of transport through national and regional policy statements, as well as at the district and city level through district plans. The objectives, policies and methods contained in this District Plan have therefore been developed to recognise and reflect those identified in the Auckland Regional Policy Statement (also formulated under the Resource Management Act) developed by the Auckland Regional Council.

8.2 RESOURCE MANAGEMENT ISSUES

Section 75 of the Resource Management Act allows for District Plans to state the significant resource management issues of the district. The issues that result from the operation of the transportation system have been identified in this section. [\[AM89\]](#)

Many of these issues have, and will continue to be, greatly influenced by decisions made at a national level. These decisions include those relating to changes in passenger transport funding, vehicle standards, the provision for used-vehicle imports on a large scale, provision for market led and relatively low fuel prices and deregulation of the transport industry. It is, nevertheless, also important that each territorial authority ensures the most efficient use is made of the resources available to it in order to promote the sustainable management of natural and physical resources and the efficiency of its own transport network.

8.2.1 Benefits of Having a Good Land Transportation System and Road Network.

People, business and communities are dependant upon a good land transportation system in order to enhance their social, economic and cultural well being. The land transport system includes roads and it's

associated footpaths, cycle lanes, bus lanes and facilities such as bus shelters and transit centres; independent pathways, cycleways and busways; railways and rail stations; waterways and ferry facilities.

The dominant component of the transportation system now and in the foreseeable future within the city is its roading network. Provisions within the City for road transport and premises primarily accessed by motor vehicle, including roads, property accesses, parking facilities, and loading facilities, are thus of considerable importance. The management and enhancement of the road transport system and the vehicular access to premises it serves, in conjunction with similar consideration of other transport modes as is appropriate, is therefore an important focus of this District Plan.

8.2.2 Transportation Activities Generate Significant Adverse Effects on the Environment and the Socio-economic Wellbeing of Communities

There are environmental costs from transportation and the lifestyle it supports. Much of these costs arise out of the transportation system's increasing reliance on road transport and the use of private and heavy vehicles to move people and goods. This reliance on road transport has significant implications for the viability of other modes of travel and the energy efficiency of the overall transportation network. Other adverse environmental effects of road transport include:

- the emission into the air of a variety of pollutants, with effects ranging from localised fumes and smog to increasing global carbon dioxide concentrations, and the consumption of non renewable energy resources;
- the discharge into water courses of vehicles wastes washed from roads and parking areas. This can have significant impacts on local marine life and ecosystems;
- the effects generated by the extraction of large quantities of stone, aggregate and bitumen required for road building and maintenance;
- the large quantities of raw materials and energy required for the manufacturing of vehicles;
- the deterioration of traffic, pedestrian and cyclist safety;
- the visual effects of roads and parking/vehicle storage areas; and
- noise from traffic, particularly near residential areas.

8.2.3 The Transportation System is a High User of Non-renewable Energy, and Present Trends Indicate that this System is Becoming Less Energy Efficient

The road vehicles presently use over 80% of the energy supplied to the New Zealand transport sector and present trends point towards even greater travel and fuel use.

Reduced energy efficiency in the transportation sector has implications at both a local and national level. These include higher costs for energy and increased dependence on overseas energy sources. Increased energy use places greater demands on the environment both at points of energy extraction and consumption.

8.2.4 A Failure to Provide for the Present and Future Transportation Needs of the City will Lead to Adverse Effects

The Resource Management Act is concerned with the community's social, economic and cultural wellbeing (under the Act, environment “includes ecosystems and their constituent parts, including people and their communities”). The transportation system has many benefits for people and society in general, by providing mobility, accessibility and employment.

Given present trends, it is likely that the transportation network will have to provide for the travel demands of an increasing population and continuing urban development within the metropolitan limits, and also for increased trip making and vehicle ownership rates. These factors point towards growing traffic volumes and a corresponding increase in congestion. While it is projected that there will be a continuing increase in demand for journeys between Manukau City to the Auckland Isthmus, even greater growth in demand for transport is forecast to occur for trips within South Auckland itself.

If the future transport needs of the City are not provided for, this will lead to increased travel costs and times and reductions in safety, amenity and mobility.

8.2.5 The Past Pattern of Development in Manukau City Has Not Always Encouraged the Use of Sustainable Modes of Transport

Manukau City is a low density, suburban style city which, like other large urban areas in New Zealand, is highly dependent on long-range mobility and the private automobile in order to access employment, commercial, community and recreational activities. In particular, the growth that has occurred at the Manukau City Centre, and in the Wiri and East Tamaki industrial areas, has partially resulted from the accessibility these areas have to main roading corridors (including development of the southern motorway and the Pakuranga Bridge). In addition, these types of activities have been fairly rigidly separated by means of zoning techniques so that residents are often forced to travel significant distances between where they live and where they carry out their work, shopping or recreation.

Costs are incurred by society from a City form based around the high availability of road-based private transportation. These include:

- the dispersal of land use activities, which results in a greater need to travel, with increased reliance on private vehicles and the significant economic costs associated with vehicle ownership and operation;
- the location of land uses which are increasingly dependent on private vehicles for access to them, which has implications for the mobility needs of the transport disadvantaged; and
- the severance of neighbourhoods and communities by transportation developments.

8.2.6 Land Use Activities Can Adversely Affect the Safe and Efficient Operation of the Adjacent Roding Resource

The road transportation network itself is an important and valuable resource as defined within the Act which requires mitigation of the potential adverse effects of adjacent activities and activities within it.

The role of the road transport network is to provide for through movement and local access in a safe and efficient manner for all modes of transport. The treatment of access within a road affects the development potential of adjoining land. Land use activities can in turn affect the operation of the road transport network through, for example, inappropriate access arrangements which hold up or pose a hazard to through-moving traffic.

Safety, efficiency and amenity related effects can also arise if the various components of the road transport network cannot meet the demands placed upon them. This can be as a result of their initial design, subsequent modifications to that design or subsequent effects from landuse activity.

8.2.7 The Ability to Efficiently and Effectively Provide Passenger Transport Services to the City is Greatly Influenced by its Built Form and the Way the Transport Network is Laid Out Within that City

There are many resource management related reasons for supporting passenger transport as a mode of travel. Generally the increased use of passenger transport results in reductions in the adverse effects outlined under Issue 8.2.2. Additionally, increasing person per vehicle occupancy rates increases the person carrying capacity of the primary road network and reduces the need to increase its vehicle carrying capacity.

The way the transport network is laid out affects the ability to provide direct routes through neighbourhoods, for buses to conveniently use these routes, and the quality of pedestrian access to them.

The built form of the City and in particular the density of potential passenger transport ridership origins and destinations around routes is also an important determinant of the efficiency and effectiveness of any passenger transport system.

8.2.8 Walking and Cycling are Sustainable Modes of Transportation Which Have Not Been Fully Provided For or Encouraged in Manukau City

Walking and cycling are energy efficient and sustainable modes of travel which have not been able to meet their potential role as facilities for these modes are often not well integrated into the transportation network of the City. These modes offer increased opportunities for individual mobility, personal fitness and recreation. Generally, however, the level of pedestrian access within Manukau City is poor, with often considerable distances between local roads and bus routes in most residential areas, while cycleway provision is only provided in limited areas.

8.3 OBJECTIVES

8.3.1 To minimise or mitigate any adverse effects on the environment arising from the development, maintenance and use of the transportation system.

(This objective relates to Issues 8.2.2, 8.2.3 and 8.2.5)

8.3.2 To maximise energy efficiency and accessibility within the transportation network and encourage the use of energy efficient modes of transport.

(This objective relates to Issues 8.2.1, 8.2.3, 8.2.5, 8.2.7 and 8.2.8)

8.3.3 To co-ordinate land use and transportation planning and decision making so as to achieve a transport system that provides for the safe, efficient and convenient movement of people and goods.

(This objective relates to Issues 8.2.1, 8.2.4, 8.2.5, 8.2.6 and 8.2.7)

8.3.4 To provide for appropriate roading improvements in growth areas to support all transport modes.^[AM123]

(This objective relates to Issues 8.2.1, 8.2.2, 8.2.5, 8.2.6 and 8.2.7)

8.4 POLICIES AND METHODS

8.4.1 The transportation network should be managed in such a way that:

- (a) transport generated carbon dioxide and noxious gas emissions and the consumption of non-renewable fuels is reduced;
- (b) ensures a pattern of development and supporting infrastructure which permits the City to be efficiently and effectively served by passenger transport services;
- (c) caters for the movement of people and goods;
- (d) traffic-generating activities in sensitive environments are discouraged where these would have significant adverse effects;
- (e) the adverse environmental effects of any new and existing transportation network facilitates are avoided, remedied or mitigated.
- (f) the design and siting of developments close to high density corridors should be compatible with the use of that corridor. [AM123]

(This policy relates to objectives 8.3.1 and 8.3.2)

Explanation/Reasons

The Resource Management Act requires the promotion of sustainable management of natural and physical resources. The above policies aim to improve energy efficiency and reduce overall energy use (particularly of non-renewable fuels) and to minimise the overall effects of transportation on the environment and in particular ecosystems.

These policies are designed to direct Manukau City towards a more sustainable urban form, and enhance the wellbeing, opportunities and convenient movement of all people, including the transport disadvantaged. The policies also reflect the goals of the Auckland Regional Policy Statement and the Auckland Regional Land Transport Strategy.

Methods

- Increased development densities on selected land near defined passenger transport routes or centres.
- Indicate future through routes within structure plans and the planning maps that provide continuous connection through the areas they serve and ensure they are designed, to allow convenient use by passenger transport vehicles.
- Require a high standard of pedestrian access to collector and primary roads.
- Require activities within commercial centres to provide for passenger transport facilities at the time of development.
- Provide passenger transport facilities and promote passenger transport services.
- Provide walking and cycling routes. [AM123]
- Encourage development densities as specified in Appendix H of the RPS. [AM123]

8.4.2 The continued development of the transportation network should:

- (a) achieve acceptable levels of accessibility, mobility, safety and convenience for all sections of the community;
- (b) provide convenient and safe road and cycle/footpath linkages to activity centres and local facilities;
- (c) have clear physical distinctions between the primary and secondary road network, based on function, traffic volumes, vehicle speeds, public space and environmental amenity;
- (d) minimise the adverse effects of adjacent activities on the operation of the roading network and ensure that all access and egress to and from roads is suitable for and compatible with the function and amenity of the road;
- (e) avoid, remedy, or mitigate the adverse effects of the roading network and transportation activities on the environment;
- (f) make provision for the likely future transport and development needs of the City, in particular ensuring high density centres are not compromised by inappropriate transport infrastructure;[\[AM123\]](#)
- (g) ensure transport effects, traffic generating characteristics and demand for various modes of transport are taken into account when providing for land use activities.
- (h) not be compromised by inappropriate land use or subdivision and supports and takes into account the anticipated land uses;[\[AM123\]](#)
- (i) ensure land use and transport integration;[\[AM123\]](#)
- (j) direct high trip generating activities to corridors with good public transport when such activities are unable to locate within high density centres and corridors;[\[AM123\]](#)
- (k) ensure that in growth centres all transport modes are considered when roading improvements occur.[\[AM123\]](#)

(This policy relates to objective 8.3.1, 8.3.3 and 8.3.4)[\[AM123\]](#)

Explanation/Reasons

The above policies provide direction in terms of the location of proposed new transportation developments. The Plan also seeks to address the overall needs of the transport system as a whole at the time of subdivision and development. In particular in growth centres concept plans need to consider roading improvements that support all transport nodes.[\[AM123\]](#)

Methods

- Classifying and zoning of roads in the road network according to function;
- Control of land use and activities within the road network and the design of access where this is necessary to ensure safe and efficient road operation and adequate access to properties;
- Designation of land for future road works or passenger transport corridors;

- Indicating the proposed alignment of roads and dedicated passenger transport corridors which are independent of any roads, which the Council will require to be built as part of the land subdivision and development process; and
- Addressing transport, including passenger transport, issues at the time of subdivision and development.

8.4.3 The development of new or existing urban areas should give regard to:

- the ability to effectively service new and existing urban areas with passenger transport
- the provision of safe and convenient pedestrian and cyclist access to community facilities, places of work and shopping areas;
- facilitating improved cyclist and pedestrian linkages within neighbourhoods; and
- the provision of cycleways in the construction or reconstruction of primary network roads.

(This policy relates to objective 8.3.2)

Explanation/Reasons

The Resource Management Act promotes the sustainable management of natural and physical resources, and the above policies aim to move the City towards a more sustainable overall transportation network. The policies also work towards addressing the need to reduce the City's dependence on non-renewable fossil fuels, and the lack of mobility faced by people without access to private transport or who choose to use alternative forms of transport. A development layout which promotes accessibility to existing and likely future passenger transportation services can encourage use of public transportation. The policies also reflect and support the objectives and policies of the Auckland Regional Policy Statement and the Auckland Regional Land Transport Strategy.

Methods

- To ensure that the built form and transport network layout of the development facilitates passenger transport
- To ensure the provision of footpaths on access, collector and primary streets.
- To provide a direct network of cycle routes within the local street network, and to promote the use of such streets for cycling.

8.5 TRANSPORTATION STRATEGY

8.5.1 Introduction

The strategy for the management of transportation activities and infrastructure is to minimise adverse effects on the environment and ensure that transportation requirements are more fully integrated and co-ordinated with land use activities and the development of the City's urban form.

8.5.2 Land Use and Transport

The Plan provides for some concentrating of business activities together at key community focal points as a means of creating significant travel and potential passenger transport transit destinations. There are some opportunities to also achieve high density residential development around developing major commercial centres which would serve to increase the population catchment that have convenient access to these transit locations.

In making provision for continued urban development within the City the Council is providing an appropriate mix of residential and employment activities. This is to ensure that the present deficit of jobs relative to resident labour force is not worsened thereby increasing the need to travel elsewhere for employment opportunities.

8.5.3 Rooding

The strategy is based on the need to provide for the continued efficient and safe transportation of people and goods within this network, and to ensure that the effects of traffic on social and environmental amenity are minimised.

The definition of a city-wide roading hierarchy in which roads are classified and zoned is the basic technique upon which many of the District Plan's transportation related rules rely for implementation. This classification is based on a national standard to ensure consistency with neighbouring districts. This hierarchy differentiates between primary roads, which are designed to provide for the safe and efficient movement of through traffic, and secondary roads, which place greater emphasis on direct property access.

Roads have been zoned within the Plan so as to provide for appropriate levels of through-travel and property access and to minimise the adverse effects arising from activities within the zones.

The main outcome of roading hierarchy and zoning approach for the District Plan is that the roading hierarchy will provide a basis for traffic generation and access elements to be applied to nearby land use activities and thereby control the adverse effects of those activities on the road network. This addresses the fact that the main environmental effect from land on adjacent roads arises from the conflict between access and parking needs and the needs of through traffic. Use of the road, in turn, can create safety and amenity effects on the users of land. The level of conflict depends on the type of land use and the amount and type of traffic that travels past it on the road. Effective management of both land activities and road use is proposed to resolve these conflicts.

The transport system will be developed to provide for increased future travel needs in a way that does not adversely affect the environment and reinforces the preferred urban development strategy. The District Plan therefore provides for the completion of the primary road network, with an increased emphasis on the movement of persons rather than vehicles to ensure the most efficient use of this network.

8.5.4 Passenger Transport

An important objective of the District Plan strategy is to improve the energy efficiency of the transportation system and reduce dependence on the private motor vehicle as a primary means of travel. The Council's strategy is to elevate the passenger transport system to a position where it plays a significant role in the City's transportation system. This strategy is also designed to increase the person and goods carrying capacity of the primary road network and provide for a more efficient use of this infrastructure. The Plan includes provisions which promote a City form which supports the provision of passenger transport through the way that transport system is laid out at the time of subdivision, and the provision of passenger transport facilities within the main commercial centres.

The Plan also protects, by way of a rail zone, the existing North Island Main Trunk Railway corridor as an important component of the City's transport network, and provides for potential new light rail routes as another means of accommodating existing and future travel demand.

8.5.5 Sustainable Modes

A strategy within the District Plan is to provide an efficient movement network to pedestrians and cyclists, particularly when serving pedestrian-intensive origin and destination points. This will include the development of new urban areas so that subdivision layouts are more responsive to pedestrian and cyclist needs and maximise safety for these sustainable modes of travel.

8.6 IMPLEMENTATION

8.6.1 Regulatory Methods

8.6.1.1 Roding Hierarchy

The establishment of a roding hierarchy is designed to achieve the following environmental outcomes:

- Reduced adverse effects of through traffic on the amenity of local roads;
- A transportation system which supports the District Plan's development policies and provides for the efficient movement of people and goods;
- A framework under which the primary roding network can be protected from the adverse effects of adjacent land use activities.

The hierarchy of roads within the City has been classified according to its functions, utilising the five categories recommended in the Transit NZ publication *"Highway Planning Under the Resource Management Act 1991"*. These classifications are explained within Table 1 below. [AM89]

Table 1

	Category	Description	Routes Included	Road Types in accordance with Appendix 2 Chapter 9	Road Zone
Primary Network	National Routes	Roads which: <ul style="list-style-type: none"> form part of a network of national significance are a significant element in the national economy 	<ul style="list-style-type: none"> Motorways State Highways Limited Access Roads 	<ul style="list-style-type: none"> Motorways 	Primary
	Regional Arterials	Roads which are: <ul style="list-style-type: none"> of strategic regional importance, and; a significant element in the regional economy 	<ul style="list-style-type: none"> Roads providing significant intraurban links all other roads of regional or interregional importance 	<ul style="list-style-type: none"> Regional Arterials 	Primary
	District Arterials	Roads which are: <ul style="list-style-type: none"> of strategic district importance, and a significant element in the local economy 	<ul style="list-style-type: none"> links between residential, business or recreational land use activities 	<ul style="list-style-type: none"> District Arterials 	Primary
Secondary Network	Collector Routes	Routes which are; <ul style="list-style-type: none"> locally preferred between or within areas of population or activities complementary to district arterials 	<ul style="list-style-type: none"> links between local roads and arterials 	<ul style="list-style-type: none"> Through Roads Business Roads with a collector road function 	Secondary
	Local Roads	Roads whose primary function is property access	All other roads servicing land use activity	<ul style="list-style-type: none"> Local Roads Business Roads without a collector road function Culs de Sac Service Lanes Private Ways Accessways 	Secondary

(a) Primary Network

The Primary road network comprises National Routes, Regional Arterials and District Arterials. These are portrayed in Appendices 1A and 1B to the planning maps. The main function of these classes of road is to provide for the through-movement of vehicles between main centres of traffic generation and attraction, and also to provide for passenger transport routes. Consequently, vehicle access to properties is a secondary function of these roads and is prohibited or restricted in some circumstances in order to minimise conflict with the through traffic function.

Roads portrayed in Appendix 1A to the planning maps were those functioning as National Routes, Regional Arterials or District Arterials at the time of notification of the Plan. However, in the future some of them will revert to a higher level in the roading hierarchy when planned improvements are completed. The land required for these improvements is identified on the planning maps. Others will revert to a lower level in the roading hierarchy when additional new major roads are constructed. The proposed future Primary road network is portrayed in Appendix 1B to the planning maps.

If a particular road is experiencing a distinct change in function, Council will consider its reclassification. Such reclassification will be carried out through the Plan change procedure pursuant to Section 73 and the First Schedule of the Resource Management Act.

(b) **Secondary Network**

The Secondary road network comprises Collector Routes and Local Roads. These are not specifically identified on the planning maps. However, most proposed new Collector Routes are identified by means of a “Proposed Road” notation within the planning maps.

The main function of roads in the Secondary network is to provide access to properties with some through movement and collector role in appropriate situations to link with roads in the Primary network.

Some passenger transport services will operate on appropriate through-roads in the Secondary network.

Historically, the development of the City’s road network has not always been designed in a hierarchial manner resulting in places where minor local roads intersect directly with major roads.

Structure plans within the Future Urban Areas chapter (Chapter 16) and the planning maps include proposed Collector Routes in an indicative form. When subdivision occurs, Local Roads shall join these Collector Routes whenever practicable and shall not connect directly into the Primary network. In particular, cul-de-sac development onto the Primary network shall not be approved where alternatives exist.

It will be a general requirement that roads shall only intersect with roads in the same level in the hierarchy or one level above or below, in order to develop and maintain an efficient city-wide network.

8.6.1.2 Road Zones

This Plan provides for two road zones, based on the types of activity associated with the various road hierarchy classifications. These zones cover all land in the City which are legal road within the meaning contained in the Local Government Act 1974, and required for transportation purposes at the time of notification of the Plan. The rules applying to activities within the road zones also apply to land vested as road during the life of the Plan through subdivision or acquisition for that purpose by Council. In some cases activities within roads are controlled through legislation other than the Resource Management Act, such as Council Bylaws, the Government Roading Powers Act 1989, the Land Transport Management Act 2003 and the Transport Act 1962. [AM89]

Certain works and activities within the road zones will require a resource consent. Usually consent as a restricted discretionary activity is required as not all adverse effects may be able to be addressed by way of condition. In most cases this consent will be acquired as part of the overall consents required for a subdivision or land use activity. However, in some cases works may not be linked to another resource consent and may require a resource consent in their own right. Resource consent for a landuse activity may be refused or be subject to conditions on traffic generation if issues relating to associated road works or their access arrangements and likely traffic generation can not be resolved.

8.6.1.3 Other Provisions Relating to Roads**(a) Rooding Standards**

Whenever a proposed subdivision involves the dedication of new roads or service lanes, and whenever existing roads are reconstructed, these shall in general comply with the road classification and standards contained in Chapter 9, Appendix 2. This is to ensure that roads are of a sufficient standard to safely perform their role within the rooding hierarchy.

(b) Access Arrangements

The design of access to and from a site has the potential to greatly influence the safety, operation and amenity of the adjoining road. This design needs to reflect the traffic generation associated with a site and also traffic volumes and characteristics on the road. The issue of access is most sensitive where high traffic generating activities or access onto a primary road are involved.

The Plan contains basic rules and standards relating to access and also requires restricted discretionary activity resource consent for activities affecting access to and from the primary road network. This is because adverse effects from some access proposals may not be capable of being resolved through conditions of consent.

(c) Service Lanes

Proposed service lanes are shown on the planning maps within some business areas. These service lanes shall be formed and dedicated on the development of the affected land and shall be a charge on all developers deriving access from them. They are generally required to serve business zone properties located on arterial and through roads for loading and unloading, and to avoid conflict with through traffic and/or pedestrians.

8.6.1.4 Cycle and Pedestrian Movement

In order to improve energy efficiency within the transport network, the District Plan contains a number of provisions relating to the needs of pedestrians and cyclists. This includes assessment criteria relating to the way the transport network is laid out and developed (refer Chapter 9 — Land Modification and Subdivision). Within that chapter there are also rules relating to the provision of footpaths, cycle facilities, and accessways. Other assessment criteria within this chapter and the Business Areas Chapter address development as to its impact on pedestrian amenity and convenience.

8.6.1.5 Passenger Transport

The Plan makes the following provisions for passenger transport supporting infrastructure:

(a) Passenger Transport Facilities

Passenger Transport facilities such as seats and shelters to a certain scale are permitted activities within all zones within the City. Larger Transport Centre facilities such as Transit Centres or Interchanges are permitted activities within the road zones but within other zones are subject to the rules relating to buildings and structures applying within those zones. New Rapid Transit Systems such as rail, light rail or trams are also provided for city-wide subject to consent as a discretionary activity. This is to permit the Council to assess and address any local adverse effects arising from the introduction of such systems.

(b) Rail Zone

The District Plan provides for a Rail Zone which seeks to protect the existing rail corridor and infrastructure as a strategic resource. This right of way is important now and in the future as an energy efficient alternative to roads in the movement of people and freight.

8.6.1.6 Provision for Future Transport Needs

The future primary road network shown on Appendix 1B to the planning maps includes proposed roads yet to be constructed, and existing roads which will be widened to appropriate standards or which will be managed within existing boundaries. The New Zealand Transport Agency and Manukau City Council have identified land required for new roads and road widening either by designation or by proposed road notation with the planning maps. Control of activities on roads is achieved in two ways. The New Zealand Transport Agency holds current designations for State Highways (except State Highway 20B for which a Notice of Requirement process is underway (as at November 2009)) while the Council has adopted a road zoning technique.

Major primary roading projects provided for in the District Plan include the south-western motorway, a new airport northern access and the Lambie Drive-Great South Road link. A transportation study is in progress to determine the preferred means to accommodate existing and future travel demand through the corridor which connects the East Tamaki, Botany, Howick and Pakuranga areas with Auckland Isthmus. It is known as the Auckland Manukau Eastern Transport Initiative (AMETI) and is likely to comprise a package of measures including road, bridge and intersection widening; traffic management measures and means to enhance public transport, cycling and walking. Another study is in progress to address the future transport requirements for the Redoubt Road - Mill Road corridor in order to provide sufficient capacity for future growth. Following selection of the preferred option for these projects, route protection measures will be undertaken including road widening and / or designation.

Route design criteria for many routes in the primary road network are found in Appendix 1 to this chapter. These will enable users of the District Plan to ascertain the proposed form and function of each route, as well as the range of traffic management techniques that may be implemented to ensure that the route can operate safely and efficiently.

Provision is made in the primary road network for Light Rail infrastructure to be established as a use within the boundaries of existing roads. Te Irirangi Drive provides for a wider than usual median to accommodate Light Rail infrastructure.

[AM98]

8.6.1.7 Adverse Effects from Transport

Adverse effects from transport are addressed throughout the Plan. Specification of a roading hierarchy seeks to keep unnecessary through traffic out of the secondary road network. There are also provisions aimed at preventing high traffic generating activities from locating within local residential streets and assessment criteria relating to any impacts on amenity from the traffic generation associated with an activity. The Land Modification and Subdivision Chapter of the Plan contains provisions addressing adverse effects from work within roads. It also assesses the design of the transport system against a number of environmental criteria including impact on the landform, existing vegetation and water quality. The planting of street trees is now required within new residential streets as a means of improving their amenity.

8.6.1.8 Manukau City Consolidated Bylaw 2008

In addition to the District Plan, the Manukau City Consolidated Bylaw 2008 contains rules regarding matters within roads relating to parking and traffic controls, bus shelters, street traders, temporary signs and vehicle crossings.

[AM89]

8.6.2 Implementation — Non-regulatory Methods

8.6.2.1 Other Council Methods

8.6.2.1.1 Annual Plan and Expenditure

The Annual Plan is a mechanism by which Council's objectives and policies can be achieved. In relation to transportation matters, the Annual Plan determines the level of Council expenditure on the City's transportation network and infrastructure, and identifies the level of central government and regional council funding for various transport projects, contracts and works within Manukau City.

8.6.2.1.2 Strategic Plan

The Council's Strategic Plan will set out the long term strategic and investment directions which the Council, in consultation with the community, wishes to take in the development of the City. One of the Strategic Plan's objectives will be to realise a sustainable and integrated city transportation system which is designed:

- for the safe and efficient movement of people and goods;
- for an economically and environmentally sustainable future;
- to be integrated with land use patterns and policies.

[AM67]

8.6.2.1.3 Advocacy and Education

The Council has a strong advocacy role in transportation issues determined at a local, national and regional level. For example, the Council's document '*Passenger Transport for Manukau in the 1990s*' (released in 1993) is a strategy designed to identify some actions which can be taken to improve passenger transport and the environment in which it operates. This document was updated a decade later as '*Taking People Places — Manukau City Council's Strategic Plan for Passenger Transport 2004-14*' and advocates the following:

[AM89]

- the reorientation of services to better reflect the distribution of land use activities and employment and thereby more adequately meet contemporary travel needs;
- the introduction of passenger transport supportive land use planning measures in addition to the existing planning for roading;
- the provision of appropriate infrastructure, information and fare structures to make the passenger transport system user-friendly for existing and potential patrons; and
- the identification of land use planning measures to support the passenger transport system.

The Council also regularly involves itself in road safety issues and the promotion of passenger transport services as an advocate and educator.

8.6.2.1.4 Council as network utility operator

The Council also has a role as roading asset manager under the Local Government Act and Transport Act in the management and upkeep of the City's roads and transport networks.

8.6.2.2 Auckland Regional Council Methods

(a) Regional Policy Statement and Regional Land Transport Strategy

The major direction of transport policy in Auckland is set by the Regional Policy Statement (RPS). This document is a statement of how the natural and physical resources of the Region are to be used, developed and protected.

The components of transport policy from the RPS are more fully developed through the Regional Land Transport Strategy (RLTS) which has been prepared under Section 2 of Schedule 7 of the Land Transport Management Act 2003. The RLTS must:

- contribute to an affordable, integrated, safe, responsive and sustainable land transport system
- assist economic development
- assist safety and personal security
- improve access and mobility
- protect and promote public health
- ensure environmental sustainability

[AM89]

8.6.2.3 Auckland Regional Transport Authority Methods

The Auckland Regional Transport Authority (ARTA) was established under the Local Government (Auckland) Amendment Act 2004 with the following responsibilities for the Auckland Region:

- planning, funding and developing the regional land transport system;
- operational planning and funding for all passenger transport modes;
- promotion of walking, cycling and transport demand management;
- co-ordination and prioritisation of all roading except state highways.

It is the principal agency with responsibility for giving effect to the Region's transport goals as set out in the Auckland Regional Land Transport Strategy. ARTA produces a number of statutory and non statutory plans and guidelines including:

- the Auckland Transport Plan;
- the Regional Land Transport Programme;
- the Sustainable Transport Plan;
- the Regional Public Transport Plan;

- Land Use and Transport Guidelines.

The Local Government (Auckland) Amendment Act requires ARTA to avoid adverse effects on the environment from its plans and activities to the extent reasonable in the circumstances.

[AM89]

8.6.2.4 Role of National Policy and Transport Service Providers

(a) Ministry for the Environment

The Ministry for the Environment was established by the Environment Act 1986. The Ministry is required to report to Cabinet, or a Cabinet Committee, on policies or projects with significant environmental implications (including new state highway proposals).

(b) Ministry of Transport

The Ministry of Transport administers transport legislation and as the Government's principal transport policy advisor, develops high-level transport policy. It is the Minister of Transport's agent for managing the interface with the transport Crown entities, including the New Zealand Transport Agency.

[AM89]

(c) New Zealand Transport Agency

The New Zealand Transport Agency (NZTA) was established under the Transport Management Amendment Act 2008 with the principal objective to undertake its functions in a way that contributes to "an affordable, integrated, safe, responsive and sustainable land transport system."

The NZTA brought together the functions of the former Land Transport New Zealand and Transit New Zealand entities. It provides an integrated approach to transport planning, funding, and delivery including:

- management of the state highway system
- management of land transport funding including administration of land transport revenue and regional fuel taxes, and the disbursement and monitoring of transport subsidies to local authorities and other agencies through the Land Transport Programme
- management of land transport safety policy, standards, investigations and reviews
- regulation of land transport activities

The NZTA and the Ministry of Transport must take into account the National Land Transport Strategy, and be guided by the Government Policy Statement which sets out the outcomes and short to medium term impacts which the government wishes to achieve. It does this through the allocation of transport subsidies and the National land Transport Programme.

[AM98]

New Zealand Transport Agency managed roads within Manukau City include the Southern Motorway, (State Highway 1), State Highways 20, 20A, and 20B. These routes are identified as national routes within Appendices A1 and A2 to the planning maps. The New Zealand Transport Agency holds designations over State Highways 1,

20 and 20A and a Notice of Requirement process is (as at November 2009) underway in respect of State Highway 20B. This means that any works within them require the consent of the designating authority as well as compliance with those District Plan provisions relating to activities not covered by the designation.

[AM89] [AM98]

8.7 ANTICIPATED ENVIRONMENTAL RESULTS

The anticipated environmental results of the transportation objectives, policies and methods are:

- Greater use of passenger transport with a resulting reduction, or halted growth in private vehicle trip-making reduced use of non-renewable fossil fuels and environmental effects and a more efficient use of transportation infrastructure;
- Improved amenity in the City in terms of air quality and reduced growth in traffic congestion;
- Reduced travel distances between activities and a corresponding decrease in transport and energy costs; and
- Improved accessibility by passenger transport, cyclists and pedestrians to different activities and to goods and services;
- Reduction in conflicts between different transportation modes;
- Improved safety in the transportation network;
- Reduced environmental effects on areas traversed by primary roads; and
- Defined functions for all roads throughout the City, promoting appropriate types treatment of access and levels and types of vehicle travel on each road.

8.8 PROCEDURES FOR MONITORING

In order to assess the suitability and effectiveness of the objectives, policies and methods in achieving the anticipated environmental results contained in this section, the Council will develop a monitoring programme (see Chapter 1, Section 1.7.3) which may include the following monitoring procedures:

- Monitoring trends in the safety of the City's transportation system through the New Zealand Transport Agency accident statistics.
- Monitoring the effects of motor vehicle exhausts on local air quality, and run-off from existing road surfaces on local water quality in liaison with the Auckland Regional Council.
- Monitoring of the Auckland Regional Council passenger transport patronage surveys, with similar surveys to be carried out within the City in liaison with the Auckland Regional Council.
- Analysis of census data relating to mobility and transport.
- Monitoring of traffic volumes and speeds within roads through the use of traffic count data.
- Monitoring traffic noise from existing roads.

Section 2 of Schedule 7 of the Land Transport Management Act of the Transit New Zealand Act also requires the Auckland Regional Council to prepare report on progress in its implementation of the Regional Land Transport Strategy every three years. This provides a monitoring system at the regional level, over

which Manukau City Council has an influence as a party to the Regional Land Transport Committee, and through input into the six yearly preparation of the Regional Land Transport Strategy.

[AM89]

8.9 DESCRIPTION AND EXPLANATION OF ZONES

8.9.1 Primary Road Zone

This zone identifies national, regional and district arterial routes (including state highways) that traverse the City, and is primarily concerned with providing for the safe and efficient through-movement of vehicles. Provision for direct property access is a secondary function.

8.9.2 Secondary Road Zone

This zone includes collector and local roads and service lanes and accessways which provide for locally generated vehicle movements and for direct property access. These roads are typically low speed traffic environments which provide for comparatively safe cycle and pedestrian activity. This can be improved where necessary by the addition of traffic calming measures designed to divert traffic or reduce the speed of traffic.

8.10 RULES – ACTIVITIES

Rule

8.10.1 Activities in Road Zones

All roads existing at the time of notification of this Plan have been zoned within the planning maps. The following rules shall also apply to all land vested in Council as legal road pursuant to Section 316 of the Local Government Act 1974 after the date of notification of this Plan.

2nd and 3rd paragraphs removed [AM31]

Rule

8.10.2 Road Zone Definition

8.10.2.1 Existing zones have been identified on the planning maps and these shall generally follow legal road boundaries. Where Primary Road Zone roads intersect with Secondary Road Zone roads, the Primary Road Zone shall have precedence, and the zone boundary shall be projected through the intersection at the same width as the Primary Zone road (including vertically in instances of grade separation).

Where Primary Zone roads and Secondary Zone roads meet at a roundabout-controlled intersection, the Primary Zone shall include the roundabout and extend to points on the corner of the intersection where a tangent of 45° to the immediate centreline of the Primary Zone (on both sides in the case of four-way intersections) meets the corner of the road reserve boundary. Where the 45° tangent meets more than one point on the road reserve boundary, the furthest point from the roundabout shall apply. Figure 8.1 illustrates the above points.

8.10.2.2 Indicative Road and Road Widening Underlying Zones**(a) Indicative Road Widening**

The underlying zone shall be the land use zone adjacent to the indicative road widening.

(b) Indicative Road Alignments:

The underlying zone shall be the land use zone adjacent to the indicative road where the same land use zone applies on both sides of the indicative road, or

Where an indicative road forms the boundary between two different land use zones, then the underlying zone for the land covered by the road shall be either:

- (i) In the case where the land on both sides of the road is in one title, the adjacent land use zone shall apply to the land covered by the indicative road up to the mid point of the indicative road alignment,

or

- (ii) Where the zone follows or bisects a property boundary, the zone applying to the adjacent balance of the site shall apply to the land covered by the indicative road up to the property boundary.

(c) Disposal of Land Not Required For The Construction of Proposed Road

- (i) Where a road is constructed on a different alignment to the indicative alignment depicted on the Planning Maps with the result that a portion of zoned land is created without the potential to form a complying lot, the subdivisional and development Rules applying to the land adjacent to it shall apply.

[AM31]

8.10.2.3 Proposed Road or Road Widening to be removed upon construction of the road

When the construction of a road or Road Widening is complete to the indicated standard and the land is vested as road, the Proposed Road or Road Widening notation shall be removed from, or amended on the Planning Maps without further formality.

[AM31]

8.10.2.4 Zoning of New Roads

- (a) At such time as land is vested as Road or Service Lane it shall automatically be rezoned Secondary Road Zone or, if indicated as Future Primary Road on Appendix 1B to the Planning Maps, Primary Road Zone.
- (b) In respect of the proposed road over Hayman Park extending Putney Way west to Lambie Drive, a Business 3 zone, as shown on Figure 14.6, shall apply:-
 - (i) from a minimum of 2 stories above the road zone; and
 - (ii) for a length of 90 metres from Lambie Drive. [AM112]

Explanation/Reason

The above Rule will apply where land is vested as road through subdivision, Road Widening or the completion of designated road works. This will enable the District Plan Maps to be updated to show land vested as road with the appropriate Road Zone. [AM31]

Rule**8.10.3 ACTIVITY TABLES**

Unless Special circumstances exist, a resource consent application for a Restricted Discretionary Activity for non-compliance with Development and Performance Standards 8.11.7.1, 8.11.7.2, 8.11.7.3, 8.11.7.5, 8.11.7.6, 8.11.7.7 and 8.11.7.8 shall not be notified and the written approval of affected persons need not be obtained.

In the tables below the terms used have the following meanings:

P = Permitted Activity

P+ = Permitted Activity but subject to other legislation procedures or consent processes

C = Controlled Activity

R(D) = Restricted Discretionary Activity

D = Discretionary Activity

N/C = Non-Complying Activity

(a) Activities within the Road Zone

The table below refers to activities within the road zones:

ACTIVITY	CLASSIFICATION
Road works associated with a subdivision	Refer Chapter 9 — Land Modification and Subdivision
Road works associated with a land use activity (excluding subdivision)	R(D)
Road works (not associated with a land use activity or subdivision) described in Rule 8.11.9.1 and complying with the performance criteria within that section [AM98]	P+
Road works not associated with a land use activity or subdivision described in Rule 8.11.9.2 or not in compliance with the performance criteria within section 8.11.9.1, and not undertaken by Council [AM98]	R(D)
The construction, siting or modification of buildings excluding those classified as utility services or otherwise provided for within this activity table	D
The construction or modification of parking bays not undertaken by Council [AM98]	R(D)
Signs	Refer Rule 5.14 Chapter 5 — General Procedures and Rules
Utility Services	Refer Rules Chapter 7 — Utilities Chapter
Planting of Street Trees	P+
	Refer also Rules Chapter 9 “Land Modification and Subdivision” and Rules Chapter 6 “Heritage” for Removal of Street Trees
Rapid Transit systems including light rail, monorail, or rail and associated stations	D
Road works (not associated with a land use activity or subdivision) and the construction or modification of parking bays undertaken by Council [AM98]	P+
Street trading	P+

ACTIVITY	CLASSIFICATION
Property access and egress	Refer table below
The erection, marking, maintenance or repair of bus shelters and parking controls	P+
The transportation of people and goods and any other activities not resulting in physical changes within the zone	P+

Note: Applicants' attention is drawn to the need to also obtain the consent of Council as property owner and asset manager of the road when erecting buildings and structures or signs within the road zone. A resource consent does not constitute that authorisation.

(b) **Access and Traffic Generation**

The following table assesses activities on the basis of their design of access and determines when such activities will require particular consideration to assess their overall effects on the road network and vehicle traffic environment. The table applies city-wide.

ACTIVITY	CLASSIFICATION
Any non-residential activity that results in the construction or modification of vehicle access points (or parking areas serving these access points) onto the primary road network, or within 50 metres of the projected road boundary of intersections onto the urban primary road network	R(D)
Any activity that results in the construction or modification of vehicle access points (or parking areas serving these access points) onto the rural primary road network	R(D)
Any residential developments with more than four household units sharing the same driveway onto an urban primary road	R(D)
Activities with access arrangements not complying with Rule 8.11.7	R(D)
Non-residential activities with access arrangements complying with Rule 8.11.7 which do not access onto a primary road or within 50 metres of intersection with an urban primary road	P
Residential developments with access arrangements complying with Rule 8.11.7 including any residential development with four or fewer than four household units sharing the same driveway into an urban primary road [AM31]	P

Explanation/Reasons

The provision of access from roads to adjoining properties, road works and other activities which result in physical changes to land within the road zone have the potential to generate adverse effects in areas such as traffic safety, the operation of the road network and transportation system and the ability to develop land adjacent to roads. The above tables also show that many activities within roads are governed by rules or controls outside of the Resource Management Act process. The activity tables should be read in conjunction with the other District Plan provisions applying to other activities. In classifying any application for consent the most onerous classification shall apply.

8.11 RULES — DEVELOPMENT AND PERFORMANCE STANDARDS

RULES 8.11.1 TO 8.11.5 APPLY CITY-WIDE WITHIN ALL ZONES.

Rule

8.11.1 Development and Subdivision to be in Accordance with Proposed Roads and Road Widening

No development, activity or subdivision shall be constructed, erected, or implemented in a manner that would prevent proposed roads and road widening being formed in general accordance with those contained within the planning maps and structure plan policies and maps contained within the Plan.

Rule

8.11.2 Rooding Hierarchy and Land Subdivision

Survey plans of subdivision shall not be approved which show classes of road less than collector routes intersecting directly onto the primary road network where this could be avoided by an alternative subdivision layout, except where provided for within Appendix 1 to this chapter or the structure plan for an area.

Rule

8.11.3 Traffic Sight Lines at Road-rail Crossings

Buildings or other structures erected on front sites abutting a railway line shall be located to comply with traffic sight lines at road-rail level crossing as shown in Figure 8.2 appended to this chapter.

8.11.4 Rapid Transit Systems

8.11.4.1 Rules

Applications to construct or modify rapid transit systems shall be assessed city-wide as follows:

Business 2, 3, 4, 5, 6	Controlled Activity
All other zones	Discretionary Activity

The assessment criteria for Discretionary Activity consent is contained within 8.11.4.2.

The relevant general assessment criteria for Controlled Activities applying within the above Business Zones apply to rapid transit systems within those zones.

The following rules and performance standards also apply:

Noise	Rule 5.18.3
Vibration	Rule 5.18.4
Artificial Lighting	Rule 5.18.2

8.11.4.2 Assessment Criteria — Discretionary Activities

- (a) Whether the proposal will have an adverse effect on the safety of the rooding network.

- (b) Whether the proposal will have an adverse effect on the amenity values of the roads or adjoining properties it locates within.
- (c) Whether the proposal will generate unreasonable levels of noise, artificial light or vibration exceeding the limits stated within Rules 5.18.3, 5.18.2 and 5.18.4.
- (d) Whether the proposal will generate dust, smoke fumes or other discharges to air which potentially would detract from the amenity values of the area.
- (e) Any mitigating effects in terms of energy use improvements, accessibility, reduced vehicle travel resulting from the proposal.
- (f) The availability of alternative routes or designs which would achieve the same or similar result, with fewer adverse effects.

Explanation/Reasons

Although supported on resource management grounds, Rapid Transit Systems have the potential to generate significant adverse effects at a local level. The route selection and design of any proposed system needs to be carefully evaluated so as to minimise any potential adverse effects.

Rule

8.11.5 Passenger Transport Facilities Excluding Rapid Transit Systems

Passenger transport facilities include shelters, seats and signage (identifying the facility and containing route information) for the use of passenger transport services or patrons. The construction or modification of said facilities shall be assessed city-wide as follows:

- *Seats at bus stops* permitted within all zones.
- *Shelters not exceeding 4 metres in length and 2 metres in width or 2.5 metres in height* are permitted activities within all zones.
- Yard and height in relation to boundary provisions shall not apply to these shelters.
- *Transport Centres* (including Transit Centres or Transit Interchanges) serving several vehicles and *shelters exceeding 4 metres in length, 2 metres in width, or 2.5 metres in height* shall be subject to the rules applying to buildings and structures within the zones within which they are located (excepting any yard provisions) but are permitted within the road zones.
- *Signage or markings ancillary to a bus stop* shall be permitted activities within all zones.

Explanation/Reasons

The above provisions apply to all land within the City and address effects on traffic safety and the provision and operation of the City's transportation network.

THE FOLLOWING RULES APPLY WITHIN THE ROAD ZONES:**Rule****8.11.6 Parking Bays****8.11.6.1 Rules**

Parking bays formed within the road zones that are not constructed by Council require consent as a restricted discretionary activity. In addition to the assessment criteria contained within 8.11.6.4 the following rules shall apply.

- (i) Their dimensions and manoeuvring areas available shall be in accordance with Figure 8.5.
- (ii) In the case of the parking bays adjoining through roads or industrial/commercial roads there must be a total depth in accordance with Figure 8.5 between the commencement of the stall depth and the centre line of the adjoining road carriageway.
- (iii) In the case of parking bays adjoining primary roads there shall be a total depth in accordance with Figure 8.5 between the commencement of the stall depth and the adjoining road carriageway as defined by either a projection of the kerb or marked edgeline.
- (iv) No parking bays shall be located within prohibited areas as defined within Rule 8.11.7.3.

[AM98]

8.11.6.2 Matters for Discretion — Restricted Discretionary Activity

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications for any activity to construct or modify parking bays within the road zone and may impose conditions in respect of each:

- (i) The location, design and appearance of the parking bays;
- (ii) Any works necessary to address adverse effects from the activity on street trees, passenger transport facilities, traffic, pedestrians, or utility services;
- (iii) The management and use of any parking bays.

8.11.6.3 Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.11.6.4 Assessment Criteria

When assessing an application for a restricted discretionary activity to construct or modify parking bays within the road zones the Council will have regard to the following assessment criteria:

- (a) The likely frequency and duration of use and whether this will have any adverse effects on the safety or efficient operation of the adjoining road network.
- (b) Whether the proposal would result in any adverse effects on pedestrians, passenger transport facilities, or utility services.
- (c) Whether there is any non-compliance with Rule 8.11.6.1.
- (d) Whether the proposal meets the relevant general assessment criteria for road works contained within 8.12.1.

Explanation/Reasons

The provision of parking bays within the road zones should be implemented and designed in such a way that they are accessible and the functioning of the adjoining road (including pedestrian paths) is not adversely affected.

Rule
8.11.7 Site access

Rule
8.11.7.1 Vehicle Crossing Design

- (i) Vehicle crossings shall intersect with the carriageway at an angle of between 45° and 90°.
- (ii) Vehicle crossings shall comply with the following minimum and maximum widths. This rule also applies to vehicle crossings shared by more than one property.

	Minimum Width of Crossing at Boundary ¹	Maximum Width of Crossing at rear of footpath or at the Boundary in absence of a footpath	Total Width of Crossing at Kerb
Residential Vehicle Crossings serving one unit	2.5 metres	4.5 metres	Width at boundary plus 3 metres
Residential Vehicle Crossings serving 2–4 units	2.7 metres	4.5 metres	Width at boundary plus 3 metres
Residential Vehicle Crossings serving 5–15 units	4.5 metres	6.0 metres	Width at boundary plus 3 metres
Non-residential activities			
one way	3.0 metres	6.0 metres ²	Width at boundary plus 4.6 metres
two way	6.0 metres [AM98]	9.0 metres	
Crossings serving rear lots Business 5 and 6 zones	6.0 metres	9.0 metres	Width at boundary plus 4.6 metres

[AM31]

Notes

- 1 Minimum widths may be increased as a condition of resource consent.
- 2 The maximum width may be increased to 9 metres where the crossing is required to be used to accommodate the tracking path of large heavy vehicles and to ensure compliance with Rule 8.11.7.5.

Applicants are advised that in addition to the provisions of the District Plan there are also Council bylaws relating to the construction or alteration of vehicle crossings.

[AM31]

Rule
8.11.7.2 Gradients

- (a) The grade of vehicle crossings shall not exceed 1:5 for residential activities and 1:8 for other activities. For curved ramps and driveways, the gradient is measured along the inside radius.

- (b) Where vehicle crossings exit onto a primary road and are used by heavy vehicles, the first 15 metres of the crossing shall be approximately at the same level as the primary road.

Rule**8.11.7.3 Prohibited Areas**

No vehicle crossing shall be located within those frontages of a property at intersections defined within Figure 8.3.

Rule**8.11.7.4 Separation of Driveways**

The following minimum separation distances shall apply to vehicle crossings serving non-residential activities:

- (i) Three metres between vehicle crossings as measured at the kerb.
- (ii) 1.5 metres between the vehicle crossing and the applicant's side of property boundary as measured at the kerb and perpendicular to the kerb. This provision shall not apply in respect of vehicle crossings shared by adjoining properties.

Rule**8.11.7.5 Swept Paths**

All vehicle crossings serving non-residential activities within the primary road network, or within roads within which the centreline is defined shall be designed to accommodate the swept path of the largest vehicle expected to use it. When turning left the vehicle must not be required to cross the road centreline.

Rule**8.11.7.6 Separate Entry and Exits**

Where activities provide separate entry and exit crossings they are to be clearly marked as such.

Rule**8.11.7.7 Impact on Street Furniture, Street Trees and Traffic Signs**

No vehicle crossing shall result in the removal or relocation of a street tree, traffic signals, street light, bus shelter, traffic sign, or street furniture without the consent of Council first being obtained.

Rule**8.11.7.8 Access Provisions Applying to Service Stations and Truck Stops**

Service stations or truck stops shall comply with the following rules:

- (a) The visibility at vehicle crossings shall comply with the standard contained within assessment criteria 8.12.2.3(a).
- (b) Vehicle crossings for truck stops may be increased to a maximum width of 12 metres as measured at the footpath, or boundary where no footpath exists.
- (c) Fuel pumps and other reselling devices shall be located a minimum of 12.0 metres (20.0 metres for truck stops) from the mid-point of the property boundary edge of any vehicle crossing to the site (the property boundary having been adjusted for any proposed road widening).

- (d) Manoeuvre areas to bulk delivery fill points shall comply with the minimum radius tracking curve for a typical semi-trailer design (see Figure 8.9).
[AM31]
- (e) Manoeuvre areas to fuel pumps and other fuel reselling devices shall comply with the minimum radius tracking curve for the 90 percentile car (see Figure 8.7).

Explanation/Reasons

The design and location of vehicle crossings impacts on traffic and pedestrian safety and the operation of the road network. Vehicle crossings can also adversely affect the streetscape and amenity of areas. The above rules are the minimum standards applying to permitted activities. These may be departed from subject to a restricted discretionary resource consent having regard to the assessment criteria outlined within Rule 8.11.8.

8.11.8 Any Activity with Access Arrangements not in Compliance with Rule 8.11.7

8.11.8.1 Matters for Discretion

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications for any activity to construct or utilise access arrangements not in compliance with Rule 8.11.7 and may impose conditions in respect of each:

- (i) The location and design of access to a site.
- (ii) Any works within a road required to facilitate access to a site, or to mitigate the adverse effects of an activity on the operation or safety of the roading network.
- (iii) The site layout as it relates to carparking and loading areas and internal circulation
- (iv) The scale, management and operation of an activity as it relates to its traffic generation.

8.11.8.2 Public Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.11.8.3 Assessment Criteria

When assessing an application for a restricted discretionary activity to construct or utilise access arrangements in non-compliance with Rule 8.11.7, the Council will have regard to the following assessment criteria.

- (a) (i) the size, shape and contour of the site and the manner of development thereon; or
- (iii) the existing constraints such as buildings, trees and other impediments; or
- (iv) Whether the amenities of any place, object or building identified in Chapter 6 are likely to be adversely affected through compliance with Rule 8.11.7; or
- (v) special or unusual characteristics relating to the use of the particular site of such a kind to render it unnecessary to adhere to the access requirements specified in Rule 8.11.7; and
- (b) (i) Any effects on traffic or pedestrian safety or the operation of the adjoining road network.
- (ii) Any adverse effects on the amenity of the streetscape.
- (iii) Any adverse effect on an activity's ability to comply with the parking and loading requirements specified within Rule 8.24.
- (iv) The traffic-generating characteristics of the proposed activity including any need to accommodate large vehicles, and the existing and likely future traffic patterns within the adjoining roads.

Explanation/Reasons

The rules relating to access address basic traffic safety and amenity effects that can arise from the design of access to a site or activity.

In some cases it may not be practical or necessary to adhere to these standards. Where traffic safety or amenity is not affected or where compliance would result in outweighing adverse effects on a site's parking and loading, then Council may grant a resource consent to permit a non-complying design to be constructed or utilised.

8.11.9 Performance Standards for Road Works not Associated with a Land Use Activity or Subdivision

8.11.9.1 The following road works not associated with a land use activity or subdivision shall be permitted activities within the road zones:

- The maintenance, repair or reconstruction of existing roads and road works;
- The erection, installation or alteration of traffic signs, marker posts, sight rails, pavement markers or markings, guard rails, street lighting, pedestrian crossings or refuges, traffic islands for the channelisation of traffic;
- Emergency works required to make operational or safe parts of the transport system damaged by a defined natural or human phenomenon;
- The construction of footpaths of at least 1.4 metres width located in accordance with Figure 7.1 (Network Utility Locations — Chapter 7);
- Parking bays complying with Rule 8.11.6.1 except on primary roads;

- Seal extensions within rural roads;
- The installation of roundabouts or traffic signals except within the existing or future primary road network;
- Modifications or improvements to existing intersections contained within the existing road zone;
- Carriageway widening within secondary urban or rural roads provided that the widths do not exceed those stated within Appendix 2, Chapter 9.

Provided that such works which are not undertaken by Council:

- Do not prevent a previously possible turning movement to or from a vehicle crossing, frontage of an underdeveloped site with no alternative access or intersection;
- Do not result in a change in the number of through lanes within a road;
- Do not involve altering the level of the road by more than 150mm;
- Do not involve earthworks of 1000m³ or more;
- Do not involve reductions in the capacity of stormwater systems present within the road zones.
- Comply with all other provisions relating to activities within the road zones contained in the Plan.

[AM98]

8.11.9.2 Unless the works are undertaken by Council, a resource consent application for a restricted discretionary consent is required for road works not covered by the above definition including (but not limited to) new traffic signals or roundabouts within the primary road zones, bus priority lanes, new toll facilities, parking bays on primary roads, cycleways, road widening beyond the standards outlined within Appendix 2 of Chapter 9, new bridges and roads and any works expressly designed to divert or reduce the speed of traffic within a road.

[AM98]

8.11.10 Heritage and Amenity

- (i) Refer Chapter 6 — Heritage
- (ii) Scheduled Heritage Resources. (See Chapter 6, Heritage, Schedules 6A to 6G and Rules relating to these resources).
- (iii) No activity shall involve:
 - (a) The modification, damage or destruction of any recorded or unrecorded archaeological site pursuant to the Historic Places Act 1993 unless an authority to modify, damage or destroy an archaeological site has been granted by the New Zealand Historic Places Trust.

8.12 RULES — MATTERS FOR CONTROL — RESTRICTED DISCRETIONARY ACTIVITIES

8.12.1 Activity Requiring Restricted Discretionary Consent for Road Works Associated With a Land Use Activity or Not in Accordance With Performance Standard 8.11.9

8.12.1.1 Matters for Discretion

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications for any activity involving road works associated with a land use activity or not in accordance with Performance Standard 8.11.9.

- (i) The design and construction of any road works;
- (ii) Any works, measures, or land required to address adverse effects of road work on the operation and safety of the transport network or utility services contained within it;
- (iii) Land modification and development matters outlined with Rules 9.10 and 9.11, Chapter 9;
- (iv) Any works, measures, or land required to address the adverse effects of road works on property access/egress or the amenity of the street or neighbouring properties.

8.12.1.2 Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.12.1.3 Assessment Criteria

When assessing an application for restricted discretionary activity for road works, the Council will have regard to the following assessment criteria.

Whether:

- (i) Road works comply with the standards contained within Chapter 9 and the Council's Engineering Performance Standards;
- (ii) The roading design and layout and treatment of access to land is contrary to that contained within the planning maps, structure plan policies contained within Chapter 16 of the Plan, and Appendix 1 to this chapter;
- (iii) Carriageways and footpaths are of sufficient width, design, and formation to accommodate both existing and anticipated traffic flows and movements within them. Whether any widening of the area of road seal beyond that required for a standard or permitted vehicle crossing will result in the width of the adjoining berm being diminished below either the standard berm widths specified within Appendix 2 of Chapter 9, or the existing berm widths within the road, whichever is the lesser.

- (iv) Road works are designed and implemented so as to safely provide for the planned vehicle types, traffic flows and movements, and modes of travel using it. This includes providing adequate visibility and avoiding the creation of potential traffic hazards;
- (v)
 - (a) Road works affect the quality of access to adjoining land or intersections (where, in the interests of traffic safety or management, some impact on access is necessary then the standard of access shall still be assessed as to whether it still permits the viable use of the land by the existing or permitted uses);
 - (b) Road works associated with intersections or accesses to properties are integrated with and avoid conflict with existing or planned intersections or access points;
 - (c) In instances where access arrangements or works affect the potential for access along the frontage of adjoining properties the consent of those property owners has been obtained;
- (vi) Road works adversely affect the operation of the primary road network in terms of safety, travel time, capacity or congestion;
- (vii) Road works ensure that the safety and standard of provision for pedestrians, cyclists and passenger transport is at least commensurate to that existing prior to the works; whether road works on major passenger transport routes affect the ability of passenger transport vehicles to negotiate their routes and drop off or pick up passengers at regular intervals;
- (viii) Road works affect the role of road within the City's roading hierarchy or result in the diversion of traffic to roads that are not designed for or capable of accommodating it;
- (ix) There is any effect from road works on the amenity of the road and adjoining properties in terms of noise, visual impact, vibration, smell, or dust, and the availability practicality and cost of alternatives, the overall level of effects where one of the criteria is in conflict with another, any mitigating factors, or anything within the local road environs that makes compliance impractical or undesirable;
- (x) The matters relating to land modification and development outlined within Chapter 9 of the Plan.

Note: In assessing traffic engineering design issues, design solutions in accordance with the Council's engineering standards, New Zealand Transport Agency or 'AUSTROADS' guidelines shall be generally acceptable, except where contrary to a specific provision of the plan or where they do not meet the foregoing assessment criteria.

[AM89]

8.12.2 Activity Requiring Restricted Discretionary Consent to Access the Primary Road Network

8.12.2.1 Matters for Discretion

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications for any activity defined within Table 8.10.3(b) involving access to a road within the primary

road network or within 50 metres of an intersection with a primary road and may impose conditions in respect of each.

- (i) The location and design of access to a site, including pedestrian access.
- (ii) Any works within a road required to facilitate access to a site or mitigate the adverse effects of an activity and safety of the operation or the roading network or any utility service.
- (iii) The site layout as it relates to pedestrian and passenger transport access, carparking and loading areas and internal circulation.
- (iv) The scale, management and operation of an activity as it relates to its traffic generation.
- (v) The management or apportionment of internal parking and loading spaces.

8.12.2.2 Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.12.2.3 Assessment Criteria

When assessing an application for a restricted discretionary activity to obtain or modify access to a primary road or to a road within 50 metres of an intersection with a primary road, the Council will have regard to the following assessment criteria.

(a) Sight Distance

Whether vehicles crossings are located near curves or crests where sight distance along the road is restricted or at locations where drivers will not have good vision of approaching traffic when entering or leaving the crossing. Whether there is sufficient visibility along the road to allow a driver entering or leaving to select a gap to cross or join the traffic stream without necessitating a major speed adjustment by the through traffic.

This criteria can be assessed by reference to the following table:

85 percentile speed (kph)	50 or below	60	70	80	90	100	110	120
Minimum required sight distance (m)	80	105	130	165	210	250	290	330

Visibility shall be measured from points 1.1 metres above the road surface in the following locations:

- Visibility for traffic turning into an access shall be measured from the road centreline opposite the access or wherever else the vehicles stop before turning right towards oncoming traffic.
- Visibility for exiting traffic shall be measured from a point 2 metres from the kerbline to points in both directions along the road centreline.

(b) Effect on Intersections

Whether traffic to or from an activity will adversely affect the safe or efficient operation of any nearby intersection or break in a median. Whether the relationship of vehicle crossings and pedestrian paths to the proposed or planned nearby intersection design is likely to result in unsafe or illegal traffic movements.

As a guide a vehicle crossing will potentially have an adverse effect if it is located within the following distances outlined within the table below and Figure 8.4 on the approaches or departures from an intersection with a regional arterial or national route as measured from the projected road boundary. This effect may be less where traffic is unable to turn right to or from the vehicle crossing.

Type of Intersection	Distance on Regional Arterial/National Route		Distance on other road	
	Approach	Departure	Approach	Departure
Regional Arterial/National Route with Regional Arterial/National Route	25	25	25	25
District Arterial with Regional Arterial/National Route	25	15	10	10
Other Road with Regional Arterial/National Route	25	10	6	6

(c) Effect on the Operation of the Roding Network

Whether turning traffic can safely exit and enter the site without obstructing other traffic on the road network or creating a traffic hazard.

Whether the on-road or on-site queuing space is sufficient to accommodate traffic waiting to enter the site without adversely impacting on traffic or pedestrians on the adjoining road network.

Whether the capacity of the adjoining road network is sufficient to accommodate traffic generated by the activity.

Whether the design of access is contrary to any criteria contained within Appendix 1 to this chapter.

(d) Relationship to other Activities and Works within the Road

Whether traffic conflicts will be created between traffic entering and exiting a site or sites in close proximity to one another.

Whether the access and egress arrangements will adversely affect the ability to access or egress neighbouring sites.

Whether there is a functional relationship between adjoining activities that would result in traffic utilising the adjoining road network to travel between them.

(e) Internal Conflicts on Site

Whether the internal circulation and carparking layout and exits and entries are designed to avoid traffic conflict that may result in congestion on the adjoining roads.

(f) Impact on Road

Whether the proposed design will adversely impact on bus stops and shelters, street trees and furniture, pedestrian crossings, taxi stands and pedestrian or cyclist safety or other works and buildings within the adjoining road.

(g) Parking Demand

Whether the proposed activity is likely to generate a demand for parking (short-term or long-term) within the adjoining roads and the effect this will have on the operation or safety of the adjoining road network.

Whether on site facilities have been provided to cater for any short-term parking demand of a drop off or pick up nature.

(h) Impact on Utility Services

Whether the access design will have any effect on utility services including stormwater and overland flowpaths.

In assessing the above the Council will also have regard to the following:

- Existing and likely future traffic characteristics and volumes (including that of pedestrians) within the adjoining roads.
- The traffic generating characteristics of the activity including by vehicle type and time of day, the total likely number of turning movements into and out of the site, and the routes vehicles will take to or from the site.
- The existing and any likely future design of the adjoining roads and access arrangements.
- The availability of alternative access options and the practicability of implementing a complying design.

Explanation/Reasons

The degree of Council intervention into the access associated with activities is at its highest on the primary road network. Inappropriate design at these points has the highest potential for adverse effects in terms of traffic safety and the efficient operation of the network.

In such cases the needs of through traffic and the overall roading network take priority over the quality of access to adjoining properties. The Council may restrict or prohibit access to certain activities if the adverse effects are unacceptable and can not be resolved through design solutions.

In some cases the District Plan requires heavy traffic generating activities to be assessed against the above criteria even if they do not access directly onto the primary road network.

8.13 ASSESSMENT CRITERIA: SPECIFIC DISCRETIONARY ACTIVITIES

8.13.1 Any Activity Requiring Discretionary Consent to Construct, Site or Modify Any Building or Structure Within the Road Zones

8.13.1.1 Assessment Criteria

For all discretionary activity resource consent applications to erect buildings or structures (excluding road works, passenger transport facilities or utility services) within the road zones, Council will have regard to the following assessment criteria and relevant matters set out in Section 104 of the Act.

- (a) Any design, location and appearance rules and assessment criteria which apply to the erection of buildings and structures within the adjoining land.
- (b) Whether the proposal will have any adverse effect on the safety and efficiency of the existing and likely future network in the area and whether they cause confusion or distraction to drivers or present a hazard to moving vehicles, or adversely affect the visibility of drivers.
- (c) Whether the proposal will have any adverse effect on the amenity values of the road and adjoining properties.
- (d) Whether the proposal will have any adverse effect on existing or likely future pedestrian traffic or utility services within the road.
- (e) Whether the proposal has made provision for any parking demand that may be associated with it.
- (f) Whether reasons exist to locate the building within the road zone as opposed to other zoned land within the vicinity.

Explanation/Reasons

Buildings or structures within the road zones are expected not to adversely impact on the functioning of the road or the amenity of the street and adjoining properties. Even where generating no immediate adverse effects buildings within road zones can adversely affect the future ability to make improvements to the transport system or provide further utility services. There should therefore be mitigating or functional reasons to justify a building being sited within the road zone.

8.14 RAPID TRANSIT AND RAIL ZONES

There are two zones within the City that provide for alternatives to road based transport modes. Each zone has a different purpose. The Rail Zone applies to the existing rail line and protects it as a strategic transportation corridor by providing for uses related to the movement of people and goods within that corridor. The Manukau Rapid Transit Link Overlying Zone provides for a proposed rapid transit link from the Main Trunk Railway Line in the vicinity of Wiri Station to Manukau City Centre.

8.14.1 RAIL ZONE

The Rail Zone is intended to protect the existing rail corridor for rail transport as an important component of the City and Regional transportation network, and to indicate potential future additions to this corridor. The

Rail Zone also makes provision for other forms of transport which are primarily focused on the movement of people and / or goods, such as busways. The rail corridors themselves are also important in terms of their inter-relationship with the land use activities adjoining those corridors.

8.14.1.1 Activity Table

In the table below the terms used have the following meaning:

P = Permitted Activity

C = Controlled Activity

ACTIVITY	ACTIVITY STATUS
Any facility designed primarily for the movement of people and/or goods	P
Any activity of a temporary nature being a permitted activity in the zoning of adjoining properties	C
Water, sewage, gas, electricity and communication services or lines	P
Accessory buildings and structures for any of the foregoing permitted activities	C

8.14.1.2 Rule

- (i) Refer Chapter 6 — Heritage
- (ii) Scheduled Heritage Resources. (See Chapter 6, Heritage, Schedules 6A to 6G and Rules relating to these resources).
- (iii) No activity shall involve:
 - (a) The modification, damage or destruction of any recorded or unrecorded archaeological site pursuant to the Historic Places Act 1993.

8.14.1.3 Assessment Criteria — Controlled Activities

Any application for a Controlled Activity will be assessed against the following criteria:

- (a) Any proposed building or structure must be located so as not to impede or prevent the use of and land within the zone for transportation or communication purposes;
- (b) The scale and external appearance of any building and structure shall generally be required to be compatible with buildings in adjoining zones unless the very nature and purpose of the building or structure makes this inappropriate. The applicant must demonstrate that the building is of a temporary nature, and can be removed if required; and
- (c) Appropriate buffer areas may be required between the proposed development and any adjoining residential zones so as to protect aural and visual privacy.

8.14.1.3.1 In granting any consent to a Controlled Activity, the Council may impose conditions of consent on the following matters:

- The location of the building or structure;

- The scale and external appearance of the building or structure;
- The duration of time for which consent is given to a temporary activity;
- The location, design and number of parking spaces required; and
- The provision of buffer areas, hours of operation and/or the imposition of noise controls, on residential zone interfaces.

Explanation/Reasons

The activities permitted in the Rail Zone are those that are involved in the role of the land as a conveyor of people, goods and utilities. Activities which may prevent or inhibit this role are not provided for in the zone.

Activities consented to as Controlled Activities will generally be those which require little building development and which do not impose restrictions on the use of land for its transportation purpose. So that such activities do not adversely impact on the amenity of adjoining properties, they will be restricted to those which are Permitted Activities in the dominant zoning of adjoining properties.

8.14.2 MANUKAU RAPID TRANSIT LINK OVERLYING ZONE

The purpose of this zone is to facilitate the implementation of a rapid transit link from the Main Trunk Railway Line in the vicinity of Wiri Station to Manukau City Centre. A rapid transit link to the City Centre would form part of the regional rail system and would enhance accessibility to the City Centre by providing access via an alternative to road based modes. A rapid transit link would also have the potential to provide the nucleus for a more expansive regional rapid transit network, possibly including a link to East Tamaki. The implementation of this link would improve the provision of energy efficient modes of transportation in the City in accordance with Objective 8.3.2 and is consistent with the Regional Land Transport Strategy.

This zone covers an area of land between the Main Trunk Railway Line and Manukau City Centre which broadly represents the preferred alignment for the rapid transit link. The zone is an overlying zone designed to provide for the implementation of the rapid transit link in order to enable further provision of energy efficient modes of transportation in the City.

Rule

8.14.2.1 Activity Table

In the table below the terms used have the following meaning:

C = Controlled Activity

ACTIVITY	ACTIVITY STATUS
Rapid Transit Systems and associated activities.	C
Activities which have an adverse effect on any scheduled Heritage Resources in Schedules 6A–6G	Refer to Rules in Chapter 6 Heritage

The meaning of a Rapid Transit System is defined in Chapter 18. Without limiting the definition in Chapter 18, “associated activities” included in the provisions of this zone shall include the following:

Overhead wires and supporting poles, substations, signalling and communication equipment and cabling, station platforms and buildings, signage, lighting and surveillance cameras, noise barriers and fences, park and ride carparks and intermodal transfer facilities.

Activities which lie outside the above definition of a Rapid Transit System and associated activities shall be assessed under the rules applying to the applicable underlying zone.

Rule**8.14.2.2 Notification**

- (i) The owners of the Manukau City Shopping Centre shall be served notice of applications for Rapid Transit Systems and associated if either: **[AM111]**
 - (a) the main building envelope of the Manukau City Centre Station or any other associated works or facilities, are to be located or undertaken within the shopping centre car park, being the following lots:
 - lot 30 DP 86286
 - lot 31 DP 86286
 - lot 32 DP 75412
 - lot 15 DP 86286
 - lot 53 DP 75412
 - (b) if a minimum of 140 car parking spaces are not reserved within lot 1 DP 87801 for “Park and Ride” passengers using the rapid transit link, such parks to be available for use at the time the Manukau City Centre Station commences operation.
- and
- (ii) Unless the circumstances in (i)(a) or (i)(b) apply, notice of application for Rapid Transit Systems and associated activities need not be served on persons who may be adversely affected.

[AM23]**Rule****8.14.2.3 Matters for Control**

Council reserves control over the following matters and may impose conditions in respect of each of these.

- (a) Design and external appearance of buildings and structures
- (b) Carparking, and vehicular and pedestrian access to, over and underneath the Rapid Transit System
- (c) Noise, vibration and artificial lighting
- (d) Landscaping, design and site layout
- (e) Road — Rail Level Crossings
- (f) Location and design of route, services, facilities and structures.
- (g) Monitoring of car parking.

[AM23]

8.14.2.4 Assessment Criteria — Controlled Activities

When assessing an application for a controlled activity resource consent for the construction of a rapid transit system or associated activities within this zone, Council will have regard to the following assessment criteria and any relevant matters set out in Section 104 of the Act:

(a) Design and External Appearance of Buildings and Structures

Whether the design of structures and buildings, including scale, form and colour, will not detract from the visual amenity values of the area.

(b) Carparking and Vehicular and Pedestrian Access to, over and underneath the Rapid Transit System

(i) Whether the alignment of the rapid transit system and location of the associated facilities and structures provides for appropriate pedestrian linkages between the rapid transit system, adjacent sites and main pedestrian routes within the City Centre.

(ii) Whether vehicular access to the rapid transit system provides for safe and convenient access, including regard to any adverse effects on the need for carparking, the safe and efficient operation of the adjoining road network and of private vehicle crossings in the vicinity. Whether the vehicular access has a minimal adverse effect on pedestrian access and safety.

(iii) Whether the operators of the rapid transit system provide sufficient carparking, or make other arrangements, so as to avoid, remedy or mitigate any adverse effects on carparking provided for other nearby activities.

(iv) Whether the location and design of the carparking areas provides for convenience, a safe and efficient internal circulation pattern and the avoidance of the detrimental visual effect of large areas of sealed parking unrelieved by landscaping.

(v) The performance standards contained within the following Rules will be used as a guide, where applicable, when assessing the provision of parking and access:

Parking Bays	Rule 8.11.6
Site Access	Rule 8.11.7
General Assessment Criteria:	
Parking and Access	Rule 8.25

(c) Noise, Vibration and Artificial lighting

(i) Whether the rapid transit system will generate excessive noise, vibration or artificial light which could have adverse effects on other activities located near or adjacent to the rapid transit link.

(ii) The performance standards contained within the following Rules will be used as a guide, where applicable, when assessing the effects of noise, vibration and artificial lighting generated by the rapid transit system:

Artificial Lighting	Rule 5.18.2
Noise	Rule 5.18.3
Vibration	Rule 5.18.4

- (d) Landscaping, Design and Site Layout
 - (i) Whether the layout and landscaping provides for efficient pedestrian and vehicular access and egress within the site and provides an attractive visual environment which enhances the amenity of the area.
 - (ii) Whether the layout and landscaping at stations adequately provides for the safety and security of people using the rapid transit system. This includes whether adequate lighting is provided and there is adequate visual permeability. The design should enable people at stations to see around them, to provide a sense of security and people in the surrounding area to see into the station to provide passive surveillance.
- (e) Road – Rail Level Crossings
 - (i) Whether road — rail level crossings are designed to provide for the safe and efficient movement of road and rail traffic.
 - (ii) The performance standards contained within Rule 8.11.3 will be used as a guide when assessing the design of road — rail level crossings within this zone.
- (f) Location and Design of Route, Services, Facilities and Structures

Whether any potential adverse environmental effects arising from the proposed location of the rapid transit system route, services, facilities and structures can be effectively avoided, remedied or mitigated by an alternative alignment or design.

Explanation/Reasons

This zone has been designed to facilitate the implementation of a rapid transit link to Manukau City from the Main Trunk Line. The proposed rapid transit link is an important element in the further provision for energy efficient modes of transportation within the City. As an overlying zone, this zone provides for rapid transit systems and associated activities in a defined area which generally covers the preferred alignment for the route. The area covered by the zone is largely designated for motorway purposes. In order to avoid, remedy or mitigate such adverse effects, Council has retained control over certain aspects of the proposed rapid transit link.

8.14.2.5 Monitoring of car parking requirements

The utilisation of any car parking spaces provided in conjunction with any application for resource consent with Lot 1 DP 87801 for the purpose of “Park and Ride” passengers using the rapid transit link shall be monitored by the Council. If the results of such monitoring support it, the provision of / or location of such car parking spaces may be reduced with the agreement of the owner of the Manukau Shopping Centre.

[AM23]

SECTION 2 — PARKING AND VEHICLE CIRCULATION

8.15 INTRODUCTION

The provision and management of parking, loading and internal (on-site) circulation plays a significant role in the ability of people to access land use activities for work, recreation, shopping and business, and directly impacts on the use of the private motor vehicles as a primary mode of transport to these activities. Accessways, parking and on-site manoeuvring areas are not only resources which require appropriate management, but are also important components of the City's transportation system. The District Plan is the means by which the correct level and type of vehicle access and parking is provided to ensure people and communities are able to carry out their day-to-day activities as safely and efficiently as possible.

Parking and loading and associated access and circulation areas as a specific land use activity are not mentioned in the Resource Management Act. However, with the Act's emphasis on the management of the adverse effects of activities on the environment, and given the potential effects of parking areas, the Council has a clear role in addressing the role of parking and within the overall transportation network.

8.16 RESOURCE MANAGEMENT ISSUES

Vehicle parking areas (both private and public) form part of the larger road network and influence the use and operation of the road network.

8.16.1 The Parking of Vehicles Can Create Adverse Effects on Amenity, Accessibility and the Operation of the Transport Network

The insufficient provision of parking to meet the parking demand associated with an activity can lead to adverse effects. Parked vehicles can detract from the streetscape and where illegally parked can obstruct footpaths or damage berms. The level of vehicular accessibility to nearby properties can be adversely affected by outside vehicles parking in their carparking spaces or close to their vehicle crossings. Roadside parking can also adversely affect the safe and efficient operation of the transport network.

8.16.2 The Over-provision or Poor Design of Parking Areas Can Lead to Adverse Effects

The over-provision of parking areas where they are not required is a waste of land which could be used for other purposes. The poor design and management of parking areas can be a deterrent to their use and lead to them being underutilised in favour of other parking. Poorly designed parking areas can impact on traffic and pedestrian safety within a carpark. They can also affect the safe and efficient operation of the adjoining road network by encouraging vehicles to reverse out of sites or to use the adjoining road to circulate between parts of a carpark.

8.17 OBJECTIVES

8.17.1 To Minimise the Effects of Parking and Loading Generated by Land Use Activities on the Road Network and Adjacent Land Use Activities

(This objective relates to Issues 8.16.1 and 8.16.2)

8.17.2 To Minimise Adverse Effects Arising from the Poor Design or Over-provision of Parking

(This objective relates to Issue 8.16.2)

8.18 POLICIES

8.18.1 Land use activities should be designed and laid out in a manner that:

- (a) provision is made for parking and loading for present and future demands generated by the activity;
- (b) the parking and vehicle circulation provided is designed to ensure its safe and convenient use by the intended users.

(This policy relates to objectives 8.17.1 and 8.17.2)

Explanation/Reasons

In general, all new developments and new activities will be required to provide adequate and appropriately designed off-street parking. This will facilitate the efficient use of existing roads, and reduce the potential adverse effects of parked vehicles in adjacent areas.

Methods

- Rules that define parking requirements for different activity types and standards for access and internal circulation.

8.18.2 Flexibility and efficient land use should be provided for and encouraged by:

- (a) joint development and multiple use of parking facilities where peaks of parking demand do not coincide;
- (b) reduced parking requirements where it can be shown that a lower rate of provision can be justified; and
- (c) accepting monetary payments or passenger transport facilities in lieu of parking spaces on-site in specified circumstances.

(This policy relates to objective 8.17.2)

Explanation/Reasons

In certain locations the scale or location of parking areas can have adverse effects on the adjacent transport network in terms of traffic conflicts, decreased safety, increased congestion, noise and visual intrusion. Performance standards have been placed on the provision of parking and loading areas and departures from these standards require resource consent so that the individual effect of each proposal can be assessed.

Methods

- Rules and assessment criteria are provided to define when more flexible parking arrangements may be permitted.

8.19 PARKING STRATEGY

The strategy for parking and loading requirements recognises that:

- The provision of adequate parking facilities is necessary to facilitate the efficient movement of traffic on the road network and to reduce the potential for traffic hazards and inconvenience to vehicle operators. The number of parking spaces has therefore been based on the type of activity the parking area is associated with. Where these standards can not be met, an assessment of an activity's effects will take into account:
 - the level of parking or loading demand;
 - the level of parking turnover; and
 - the classification of the adjoining road.
- The management of on-street parking and publicly-owned car parks is designed to ensure the efficient use of the parking resource and to allow this resource to be equitably shared between competing demands. As vehicle users attempt to access parking as close to their destination as possible, parking spaces close to commercial areas are in the highest demand. By providing a mix of parking types (such as time restricted parking), a turnover of those parking spaces with the highest demand can be achieved.

8.20 IMPLEMENTATION

- (a) Parking standards have been determined to ensure the provision of adequate and appropriately designed on-site parking. This is designed to facilitate the efficient movement of traffic on the road network and to reduce the potential for traffic hazards and inconvenience to vehicle operators.
- (b) Where an activity is unable to provide the required level of parking spaces, the Council is able to take 'cash-in-lieu' and provide spaces in a nearby location.
- (c) The design of parking areas has impacts on the use and accessibility of an activity. Parking areas which are inaccessible, poorly designed or too restrictive, are less likely to be used and therefore tend to generate problems of off-site parking on the surrounding road network.

To ensure a good standard of parking and loading is provided in conjunction with land use activities, the District Plan rules describe appropriate guidelines for car park layout and design. These include considerations of practicality, efficiency, safety, circulation and manoeuvring.

- (d) Council has provided parking areas at a number of the City's commercial centres, including Howick, Manurewa and Pakuranga. The management and enforcement of on-street parking and publicly owned carparks is designed to ensure the efficient use of the parking resource to be equitably shared between competing demands.

8.21 ANTICIPATED ENVIRONMENTAL RESULTS

Parking and loading facilities will be provided in conjunction with land use activities in a way that minimises the impact of vehicles accessing those activities and on the safety and efficiency of the adjacent road network. Parking areas will be designed, formed and maintained at a level that maximises the functionality of the transportation system, and landscaped in a manner that enhances the overall amenity of the City.

8.22 PROCEDURES FOR MONITORING

In order to assess the suitability and effectiveness of the objectives, policies and methods in achieving the anticipated environmental results of the parking standards and rules contained in this section, the Council will develop a monitoring programme (see Chapter 1, Section 1.7.3) which may include the following monitoring procedures:

- Monitoring the number of complaints received regarding off-site and illegal parking
- Monitoring the number of vehicle crashes attributed to vehicles parked off-site or vehicles entering or leaving sites.
- Monitoring parking and traffic generation data collected by itself and from other sources.

8.23 PARKING AND VEHICLE CIRCULATION RULES

Rule

8.23.1 Activity Table

The following table assesses activities on the basis of their parking and vehicle circulation design determines when such activities will require particular consideration to assess their overall effects on the road network and vehicle traffic environment. The table applies city-wide unless stated otherwise. In the table below the terms used have the following meanings:

P = Permitted Activity;

R(D) = Discretionary Activity over which Council has restricted the matters for its discretion;

D = Discretionary Activity;

Parking, Loading and Internal Circulation

ACTIVITY	CLASSIFICATION
Any activity which constructs, modifies or utilises parking and loading areas designed in compliance with Rule 8.24	P
Any activity which construct, modifies or utilises parking and loading areas not in compliance with Rules 8.24.5, 8.24.6 and 8.24.7	R(D)
Any activity where the number of parking and loading spaces does not comply with Rules 8.24.1 and 8.24.3	R(D)

Notes:

- 1 This includes stand alone public or private carparking areas.

- 8.23.1.1** Unless Special Circumstances exist, a resource consent application for a Restricted Discretionary Activity shall not be notified and the written approval of affected persons need not be obtained.

Explanation/Reasons

The above activity table relates to the parking and loading serving an activity and should be read in conjunction with the other District Plan provisions applying to that activity. In classifying any application for consent the most onerous classification shall apply.

8.24 RULES — DEVELOPMENT AND PERFORMANCE STANDARDS

8.24.1 Rules Relating to the Provision of Parking

Rule

8.24.1.1 Obligation of Owners or Occupiers

Every owner or occupier who constructs, alters, or adds to any building or changes the use of any site in any zone shall make provision for off-road parking in accordance with the requirements of this chapter.

All parking areas shall be provided on the site or sufficiently close to it to ensure their ready use by vehicles or traffic generated by the use of the site.

Rule

8.24.1.2 Number of Parking Spaces to be Provided

- (a) Subject to subclause (b) of this clause the minimum number of parking spaces to be provided in relation to the use of any particular building or site shall be determined in accordance with Schedule 8A appended to this part.
- (b) The provisions of this clause shall not limit the power of the Council to impose conditions as to the provisions of lesser or greater numbers of parking spaces based on such facts, submissions, special characteristics and merits of any planning application.

Rule

8.24.1.3 Diminution of Land Available

- (a) The parking area that is made available about a building in compliance with the requirements for off-road parking shall not be diminished by the subsequent construction of any structure, by the storage of goods, or by any other activity, but a private garage may be erected subject to the limitations imposed by the rules for the zone in which the garage is to be located.
- (b) For proposals to build over parking areas, including public car parks or joint parking areas serving nearby activities, the parking requirement shall be that associated with the proposed activity plus the existing number of parking spaces.

Rule

8.24.1.4 Allocation of Parking Spaces

The owner or occupier of a site shall not unreasonably allocate or manage the parking spaces so as to prevent staff, fleet vehicles, visitors or particular occupiers associated with that site from utilising this parking.

Rule**8.24.1.5 Yard Space May be Used**

The parking requirement in respect of any site in any zone may be satisfied by the use of part of any yard of that site provided that the part so used shall not:

- (a) impede vehicular access and movement on the site;
- (b) infringe any open space provided to meet the minimum private open space requirement for each unit in a multiple household unit development;
- (c) infringe any landscaping provision required by the landscape design Rule 8.24.5(g).

Rule**8.24.1.6 Assessing Parking Requirements**

In assessing the number of spaces provided in relation to the floor area of any building, vehicle access and parking spaces and loading spaces including an access area around them up to 3 metres in depth from the vehicle using the loading spaces contained within the building shall not be included in the calculation of the floor area.

Where the number of spaces required is based on the number of persons employed or to be accommodated on the premises the owner or occupier shall indicate the expected total number of those persons.

Where a site zoned Business 1 has a front boundary which has been set back to dedicate a strip of land within the road for the construction of a parking bay, then the number of spaces so created will be credited against the parking requirement for any activities established on the site *provided that* the parking bay satisfies the requirements of Rule 8.11.6.

Rule**8.24.1.7 Fractional Spaces**

When the assessment of the number of parking spaces required in respect of the use of any land or building results in a fraction, a fraction under one half shall be disregarded and fractions of one half or more shall require an additional parking space.

Rule**8.24.1.8 Estimating Parking Requirements**

Where it is not possible to establish the parking requirement of a particular development of land in a business zone because the ultimate use of the development is unknown, the Council may at the time of application for a resource consent require that sufficient land be set aside to provide parking spaces on the basis of the highest parking requirement that could be made in respect of activities permitted in the zone where the land is located. In any such case the Council (by way of a consent for a restricted Discretionary Activity) may allow a lesser area to be provided for parking until the ultimate parking requirement can be established. The owner shall ensure that the area from time to time provisionally available for parking on the site is large enough to avoid employee/visitor parking having to park off-site.

Rule**8.24.1.9 Joint Parking Areas**

Two or more owners may provide a parking area for the combined use of their several sites ("a joint parking area") where the number of parking spaces so provided satisfies the total parking requirements for all the activities of all the sites intended to be served by the joint parking area.

Explanation/Reasons

The above rules are designed to ensure that all activities make adequate provision on-site for the parking demands they generate. This is to ensure that any overspill parking from the activity does not reduce the safety, efficiency and amenity of the adjacent road network. Minimum standards also avoid individual activities externalising their parking demand onto adjacent roads or properties.

Activities may, where no adverse effect can be shown, apply through a restricted Discretionary Activity consent application to provide a lesser amount of parking than that required by Schedule 8A. The assessment criteria for such applications are contained within 8.24.2.

8.24.2 Providing a Number of Parking Spaces Fewer than that Required Under Rule 8.24.1**8.24.2.1 Matters for Discretion**

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications for any activity to provide a number of parking spaces fewer than that required under Rule 8.24.1 and may impose conditions in respect of each:

- (i) The location and design of access to a site.
- (ii) The site layout as it relates to carparking and loading areas and internal circulation.
- (iii) The scale, management and operation of an activity as it relates to its traffic loading and parking generation.
- (iv) The management and apportionment of use of parking and loading spaces within a site.
- (v) Any works agreements or contributions required to mitigate effects arising from the fewer number of parking spaces.

8.24.2.2 Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.24.2.3 Assessment Criteria

When assessing an application for a restricted discretionary resource consent to an activity providing fewer parking spaces than that required under Rule 8.24.1, the Council will have regard to the following assessment criteria:

Whether

- (a) (i) The size, shape and contour of the site and the manner of development thereon delay the provision of parking spaces or make it impossible to provide them; or
- (ii) It is unlikely that the required number of parking spaces can be satisfactorily provided because of existing constraints such as buildings, trees, physical access and other impediments; or
- (iii) The site is to be used for the elderly as defined in part of the Plan, and estimated demand does not warrant the number required under Schedule 8A; or
- (iv) The amenities of any place, object or building identified in Part 6 of the Scheme are likely to be adversely affected; or
- (v) There are special or unusual characteristics relating to the use of the particular site of such a kind to render it unnecessary to adhere to the parking requirements for that use specified in Schedule 8A; or
- (vi) Where several activities are proposed on the one site (or within joint parking areas provided pursuant to Rule 8.24.1.9) and those activities do not generate a maximum parking demand at the same time, and the number of parking spaces provided on that site are sufficient to meet the demand for parking at all times; or
- (vii) Whether there is an available supply of parking in the vicinity (on-street parallel parking is not generally considered a viable alternative) sufficient to meet the existing and likely future parking needs of that area; or
- (viii) For temporary uses (major) the applicant has submitted for the approval of the Council, a parking/traffic management plan covering all aspects of off-street and on-street parking associated with the proposed use, and including detailed procedures to ensure the efficient and safe movement of all traffic generated by the proposed use; or
- (ix) Whether the applicant has entered into an agreement with other parties for the use of their parking at times when they are not using it or has set aside an area of land upon which additional parking could be provided if required; or
- (x) For retail activities where it can be demonstrated that the nature of the activity in terms of the size of the goods being sold, turnover and customer generation that does not warrant compliance with the parking requirement for shops and where parking has been provided in accordance with the following ratio — 1 space for every 30 metres of gross shopping floor area plus 1 for every 40 metres of other activities; and
- (xi) The applicant is providing cash-in-lieu of parking pursuant to 8.26.1 or passenger transport facilities equivalent to the value of any parking shortfall; and
- (b) (i) Any likely effect of the non-compliance with Rule 8.24.1 on the character and amenity of the surrounding area and the operation and safety of the adjoining road network.

- (ii) Any likely adverse effect of the non-compliance with Rule 8.24.1 on the use of carparking provided for neighbouring activities.
- (iii) Whether in the event that the proposed activity ceases that there is sufficient parking provided on site to meet the likely needs of future uses occupying the site.

Explanation/Reasons

Schedule 8A sets out the parking requirements for each activity. In some cases there are valid reasons why lesser amounts of parking can be provided because they are not required, or because to provide them would result in adverse effects. In such cases where the non-provision of parking will not result in unacceptable adverse effects then a restricted discretionary or discretionary activity resource consent to provide a lesser amount of parking may be granted.

Rule

8.24.3 Provision of Loading Space

- (a) With the exception of service stations and truck stops every owner or occupier who constructs, or who substantially reconstructs or adds to any building or changes the use of any site in a Business Zone, or any activity elsewhere which generates delivery trips by heavy vehicles, shall make adequate provision on the site for a loading space. Separate loading spaces shall be provided for each occupier of the site if more than one is required.
- (b) Part of any yard of a site may be used to provide a loading space for any site provided that the loading space and method of loading shall at no time:
 - (i) cause the footpath or access to the rear of the site or access to an adjacent property to be blocked; or
 - (ii) create a traffic hazard on the road.
- (c) **Number of Loading Spaces to be Provided**

The number of loading spaces to be provided in respect of any of the following uses on any particular site shall be determined according to the following table:

(a) Industrial, Warehouse, Wholesale and Retail Premises:	
Gross Floor Area of Activity (Square Metres)	Number of Off-Road Loading Spaces to be Provided
0–5,000	1
5,001–10,000	2
Over 10,000	2 + 1 for every additional 5,000m ² of gross floor area
(b) Offices, Hotels, Hospitals and Other Activities not mentioned in (a) above:	
Gross Floor Area of Activity (Square Metres)	Number of Off-Road Loading Spaces to be Provided
0–20,000	1
20,001–50,000	2
Over 50,000	2 + 1 for every additional 25,000m ² of gross floor area
(c) Service Stations and Truck Stops	
No loading space is required provided that it can be demonstrated that there is adequate space on the service station forecourt for loading activities to take place without adversely affecting vehicle manoeuvring on the site.	

(d) **Assessing Loading Spaces to be Provided**

In assessing the number of loading spaces to be provided, vehicle access and parking areas, loading spaces and the area immediately around them up to 3 metres in depth from a vehicle using the loading space and common pedestrian areas contained within the building shall not be included in the calculation of the floor area.

8.24.4 Provision of Fewer Loading Bays than that Required Under Rule 8.24.3

8.24.4.1 Matters for Discretion

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications for any activity to providing a number of loading spaces fewer than that required under Rule 8.24.3 and may impose conditions in respect of each:

- (i) The location and design of access to a site.
- (ii) The site layout as it relates to carparking and loading areas and internal circulation.
- (iii) The scale, management and operation of an activity as it relates to its traffic loading and parking generation.
- (iv) The management and apportionment of use of parking and loading spaces within a site.
- (v) Any works agreements or contributions required to mitigate effects arising from the fewer number of loading spaces.

8.24.4.2 Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.24.4.3 Assessment Criteria

When assessing an application for a restricted Discretionary resource consent application for activities not complying with the loading bay requirements of Rule 8.24.3 the Council will have regard to the following assessment criteria.

- (a) Whether in relation to any site it can be shown that:
 - (i) the provision of off-roading loading need not be made; or
 - (ii) the shape of the site precludes the provision of off-road loading; or
 - (iii) the floor area of the building is not greater than 200m² and the site is not part of a major development; and

- (b) In every case kerbside loading would not cause any undue traffic hazard, or where there belongs to the site an easement or covenant entitling its owner and successors in title to use a loading area on an adjacent site adequate to serve the site, the sites of any other owners having the same right, and the site on which the loading areas is situated.

Explanation/Reasons

Rule 8.24.3 sets out the loading requirements for activities. In some instances the provisions of loading facilities to this standard may not be required. In such cases where a lesser standard will not result in adverse effects, a Discretionary resource consent to provide a lesser number of loading bays may be granted.

Rule

8.24.5 Design of Parking and Circulation Areas

All parking in the form of a parking lot or a parking building, whether developed by the Council or by any other person or jointly by Council and any other person shall conform with layout, access and any other requirements of this section.

(a) Vehicle Dimensions

Each parking space to be provided in terms of this Section shall be in accordance with the dimensions specified in Figure 8.5 and suitably laid out to accommodate a 90 percentile motor car as defined by the New Zealand Transport Agency. The dimensions and tracking curve of this vehicle are shown in Figure 8.7.

[AM31][AM89]

(b) Reverse Manoeuvring

Except for the following, all parking areas shall be designed to ensure that vehicles are not required to reverse either onto or off the site; and are not required to execute more than a three point turn to exit the site based on the 90 percentile motor car as defined within Figure 8.7.

- (i) Parking serving a single household unit on a site provided that the driveways do not access onto a primary road (as defined within Appendices 1 and 2 to the planning maps);
- (ii) Parking serving two household units on a front or corner site *provided that* the driveways do not access onto a primary road network;
- (iii) Parking serving three or four units on a front or corner site where an individual unit is served by a separate driveway and the driveways do not access onto a primary road network.

(c) Vehicle Queuing

Sites shall be laid out in such a way that vehicles using or waiting to use fuel dispensers, ticket vending machines, remote ordering facilities and devices, entrance control mechanisms, or other drive through facilities shall not queue into the adjoining road or obstruct entry to or exit from the site.

The minimum distance between any such service point and the mid point of the property boundary edge of any vehicle crossing to the site shall be 12 metres (the property boundary having been adjusted for any proposed road widening).

(d) **Garage Dimensions for 90 Percentile Motor Car**

The minimum internal dimensions for a garage to accommodate a 90 percentile motor car as defined by the New Zealand Transport Agency shall be 5.5m (length) by 3m (width). The width of the doorway of the garage shall be in accordance with the minimum stall widths specified in Figure 8.5. The minimum dimensions for a carport shall be 5m (length) by 3m (width).

[AM89]

(e) **Design and Constructional Details**

All public and private parking areas shall comply with the following requirements:

- (i) Except in respect of a site used, or to be used by a single household unit, the parking spaces and access drives and aisles required in respect of the site in question shall, before the commencement of the Permitted Activity of that site, be formed, sealed and permanently marked or laid out in accordance with approved plans to the Council's satisfaction.
- (ii) The parking area shall be maintained at all times so as not to create a dust nuisance.
- (iii) Stormwater drainage from the parking area shall be constructed to the satisfaction of the Council.
- (iv) Provision shall be made to illuminate access driveways and pedestrian areas within public parking areas used during the hours of darkness. Illumination shall not be directed towards any adjacent residentially zoned land. — Refer also to Rule 5.18.2 Artificial Lighting.
- (v) Parking areas at service stations and service garages may be provided to accommodate two rows of parked vehicles (nose to tail) provided that there is adequate aisle space provided at the rear of the second row of spaces to allow for the removal of both vehicles in succession.
- (vi) Parking areas and signs and markings shall be maintained by the owner or occupier so that at all times they remain legible and available for use by vehicles.
- (vii) The design of motor vehicle access driveways or ramps shall be in accordance with the standards specified in Figure 8.6 appended to this Chapter.

(f) **Provisions for Disabled Persons**

Where it is proposed to establish the use of any land or erect any building and that use or building is listed in Schedule 2 of the Building Act 2004; carparking spaces for the exclusive use of vehicles driven by persons with disabilities or any person accompanying a person or persons with disabilities, shall be provided as follows:

[AM89]

- (i) no fewer than one carparking spaces for the disabled shall be provided where the total number of carparking spaces is between 1 and 10; no fewer than two carparking spaces for the disabled shall be provided where the total number of parking spaces is between 11 and 99; and one additional carparking spaces for the disabled for each additional 50 parking spaces or part thereof.

- (ii) Such carparking space or spaces shall be credited towards the number of carparking spaces required by this Scheme.
- (iii) Such carparking spaces shall be designed in accordance with the requirements of the New Zealand Standard Specification 4121 (1985). Access from such carparking spaces to buildings shall also be designed in accordance with these standards and carparking spaces shall be so located to ensure that the distance to be traversed is as short as possible.

(g) **Landscape Design of Parking Areas**

Parking areas containing 100 or more parking spaces shall be designed with landscaped dividers or islands to provide separate parking bays each containing not more than 100 carparking spaces. The dividers or islands shall be planted with well developed specimen trees capable of growing to a height of approximately 6 metres within 10 years of planting when providing trees and shrubs, safety aspects such as sight distances must not be compromised.

Explanation/Reasons

The above design requirements are to ensure that carparking spaces are able to be used and do not adversely impact on adjoining roads or properties.

The provision for disabled persons is also included and is obtained from the Building Code. Any departures from the above rules are subject to an application for consent as a restricted discretionary activity. The assessment criteria for such applications are included within Rule 8.24.8.

Rule

8.24.6 Additional Performance Standards Applying to Parking Areas Servicing Non-residential Activities

All non-residential activities shall ensure that the parking areas serving them meet the following performance standards.

- (i) The design and layout of parking areas shall be such that vehicles are not required to reverse a distance of greater than 30 metres to enter or exit any right angled parking space (or 10 metres for any other angled or parallel parking space) or to exit any parking aisle in the event that the parking spaces within the aisle are occupied.
- (ii) Where there are several separate parking areas within a site (or sites where joint parking areas are involved), then internal vehicular access between the parking areas shall be provided so that vehicles do not have to use the adjoining road network to travel between carparks.

Explanation/Reasons

Carparking layouts with blind aisles or that require extensive reversing, may result in lower occupation rates, internal and external congestion, and conflicts between vehicles. One effect of provision (i) is that a resource consent is required where vehicles need to reverse a distance of greater than 10m to enter or exit angled or parallel parking spaces along an aisle, so as to confirm that they are supported by adequate manoeuvring and/or circulation areas. A maximum of 3 angled or 2 parallel spaces could be accommodated in a 10 m length of aisle.

Rule**8.24.7****Design of Loading Spaces****(a) Location**

A loading space or loading spaces shall be so located as to fulfil the purpose for which loading is required in relation to the functional design of the building and the area and shape of the site. The extent of the area required for manoeuvring in respect of any loading space shall be sufficient to accommodate the largest vehicle that is expected to utilise the loading space. In determining that area there shall be taken as a minimum guide:

- (i) for shops, offices, hotels, servicing premises and other similar uses, a typical medium truck using a 10 metre turning radius is to be employed as shown in Figure 8.8;
- (ii) for freight depots, carriers' depots, warehouses, manufacturing premises, bulk stores, truck terminals and other similar activities, a typical large rigid truck using a 10 metre turning radius is to be employed as shown in Figure 8.8.1

[AM31]

(b) Loading Docks Fronting Roads or Service Lanes

The minimum dimensions for a loading dock fronting directly on to a road or service lane shall be sufficient to accommodate the largest vehicle that is expected to utilise the loading space. As a minimum guide they shall be 3.5m wide by 3.5m high by 7.5m deep measured from the road or service lane boundary of the site. In the case of a loading dock to be used by articulated vehicles the dock shall not be less than 11m deep measured from the road or service lane boundary of the site.

(c) Reverse Manoeuvring

Except for loading areas with access to a cul-de-sac or service lane, all loading areas shall be designed to ensure that the vehicles using them are not required to reverse either onto or off the site and are not required to execute more than a three point turn to exit the site (based on the appropriate truck tracking curve).

In complying with the above the truck tracking curve shall not track over any defined parking spaces required to satisfy Rule 8.24.1 or require a vehicle to reverse more than 30 metres on site.

Explanation/Reasons — Loading Standards

Loading space standards are designed to reduce the potential and/or necessity for loading activity on public roads, service lanes or accessways. These standards are included because such activity can pose safety risks, and impact on the operation function of the roading network.

Where it is recommended for particular uses or circumstances that greater turning radii be adopted, Transit NZ Research Report 32 (TNZ RR32) should be referred to as a guide. It should be noted that the above standards are minimums and assume slow speeds with trained drivers and little opposing or following traffic. Where these are not present the adoption of more generous tracking curves is recommended.

[AM31]

8.24.8 Any Activity Requiring Restricted Discretionary Consent to Construct or Utilise Parking and Loading Facilities Not in Compliance with Rules 8.24.5, 8.24.6 and 8.24.7

8.24.8.1 Matters for Discretion

Council reserves discretion over the following matters for restricted discretionary activity resource consent applications to construct or utilise parking and loading facilities not in compliance with Rules 8.24.5, 8.24.6 and 8.24.7 and may impose conditions in respect of each:

- (i) The location and design of access to a site.
- (ii) The site layout as it relates to carparking and loading areas and internal circulation.
- (iii) The scale, management and operation of an activity as it relates to its traffic loading and parking generation.
- (iv) The management and apportionment of use of parking and loading spaces within a site.

8.24.8.2 Notification

The presumption of the Plan is that consent applications covered by this section need not be notified if:

Written approval has been obtained from every person, who, in the opinion of the consent authority, may be adversely affected by the granting of the resource consent unless, in the authority's opinion, it is unreasonable in the circumstances to require the obtaining of every such approval.

Notwithstanding this, the Council may require any such application to be notified pursuant to Section 94(5) of the Act where it considers special circumstances to exist.

8.24.8.3 Assessment Criteria

When assessing an application for a restricted discretionary activity to construct or utilise parking and loading facilities not in compliance with Rules 8.24.5, 8.24.6 and 8.24.7 the Council will have regard to the following assessment criteria:

- (a) (i) Whether the size, shape and contour of the site and the manner of development thereon make it impossible to comply with the above rules; or
- (ii) Whether it is unlikely that a design complying with the above rules can be satisfactorily provided because of existing constraints such as buildings, trees, physical access and other impediments; or
- (iii) Whether the amenities of any place, object or building identified in Part 6 of the Scheme are likely to be adversely affected through compliance with the above rules; or
- (iv) Whether there are special or unusual characteristics relating to the use of the particular site of such a kind to render it unnecessary to adhere to the parking and loading design requirements for that use specified in the above rules; or
- (v) Whether the nature of the parking demand generated by an activity including matters relating to turnover, nature of the occupier, occupancy rates render it

necessary to comply with the parking and loading design requirements specified in the above rules; and

- (b) (i) Whether the proposed design will adversely affect the functionality, practicality, and convenience of use of the carpark for the intended users.
- (ii) Whether the design is likely to adversely impact on traffic safety or the operation of the adjoining road network.
- (iii) Whether there are likely to be any adverse effects on the amenity of adjoining properties or roads.
- (iv) With regard to Rule 8.24.6 whether the proposed design is likely to encourage reverse manoeuvring or additional trip making on the adjoining road network.

Explanation/Reasons

The parking and loading design rules are to ensure that carparks are functional and convenient to use by the intended users. Poorly designed carparks and internal circulation can lead to parking not being utilised and adverse effects on the operation of the adjoining road network. In some cases, however, it may not be practical or necessary to adhere to these standards. Where the parking spaces can still conveniently be utilised by the intended user, or there are alternative design solutions which afford satisfactory circulation and on-site manoeuvring, then the Council may grant a resource consent to permit a non-complying design to be constructed or utilised.

8.25 GENERAL ASSESSMENT CRITERIA: PARKING AND ACCESS

8.25.1 Any non-residential activity requiring controlled, restricted discretionary or discretionary consent within the plan for which parking and access has been listed as a matter for control

8.25.1.1 Matters for Discretion

Council reserves discretion over the following matters for the Plan for which parking and access has been listed as a matter for control for restricted discretionary activity resource consent applications for any non-residential activity and may impose conditions in respect of each:

- (i) The location and design of cycle, pedestrian and vehicular access to a site.
- (ii) The site layout as it relates to pedestrian paths, carparking and loading areas and internal circulation.
- (iii) The scale, management and operation of an activity as it relates to its traffic, loading and parking generation.
- (iv) The management and apportionment of use of parking and loading spaces within a site.
- (v) Any works agreements or contributions required to mitigate parking and access effects on adjoining properties or roads.

8.25.1.2 Assessment Criteria

When assessing any application for controlled, restricted discretionary (for which parking and access have been listed as matters for control), or discretionary consent for non-residential activities, the Council will have regard to the following parking and access related criteria.

Whether:

- (a) There is good, convenient circulation provided between carparking aisles and between entry and exits and carparking spaces that is clear to the intended user.

Internal traffic volumes or characteristics dictate that main circulation aisles and access points need to be widened or traffic management devices such as parking controls, markings, signs and islands, medians or intersection controls, be employed to safely manage this traffic.
- (b) Parking spaces are located so as to be attractive and convenient to the intended user having regard to their design, security, distance from entrances, and profile.
- (c) Parking spaces and their associated manoeuvring area are located so as to adversely affect the safety and operation of entrances and exits and main circulation aisles and internal intersections. In particular, whether larger or high turnover carparks have adequate separation between parking spaces and entries or exits.
- (d) There is likely to be conflict between any loading, drive-through or pick up facilities provided on site and traffic using entries, exits or the main internal circulation aisles.
- (e) There is adequate provision for on-site pedestrian movements or whether there is likely to be conflict between on-site pedestrian and vehicular movements. In particular, this will apply to areas where there are likely to be concentrations of pedestrian and vehicles such as entrances to buildings and the main access points to a site.
- (f) Any disabled parking spaces are located close to elevators, ramps, pedestrian paths and building entrances.
- (g) There are particular staff, fleet, or visitor parking needs that need to be provided for in the design and management of a carpark.
- (h) There is any likely adverse effect on the amenity of adjacent activities arising from the design of parking areas, including that from noise (including from loading areas), vibration and headlight glare.
- (i) Those relevant assessment criteria relating to site access contained within 8.12.2 of the Plan.

In assessing the above, the Council will also have regard to the following:

- Existing and likely future traffic characteristics and volumes (including pedestrian) within the adjoining roads.
- The traffic generating characteristics of the activity including by vehicle type and time of day, the total likely number of turning movements into and out of the site, and the routes vehicles will take to or from the site.
- The existing and any likely future design of the adjoining roads and access arrangements.
- The availability of alternative access or design options and the practicability of a complying design with the above criteria.

8.26 FINANCIAL CONTRIBUTIONS

Rule

8.26.1 Acceptance of Cash in Lieu of Parking Spaces

- (a) Where it is not reasonable or practicable to make provision for the parking requirement in respect of any site on that site or sufficiently close to it for constant use by vehicles in connection with that site, the Council may instead of enforcing the provision, accept as a condition of resource consent payment of a sum of money not exceeding the cost including land value, of providing the parking requirement on that site. Alternatively Council may elect to accept a sum based on the cost of providing any parking shortfall on land in the vicinity of the site or the cost of providing parking on a nearby site set aside for carparking purposes, providing that this sum does not exceed that specified above.
- (b) Any payment made under subsection (a) of this rule shall be kept in a separate account in the Council's name and applied by the Council from time to time as opportunity offers in the acquisition of land and the making of provision for parking as close as, is reasonable and practicable to the site in respect of which the parking area was required to be provided.

Notwithstanding the above Council may apply not more than half of any payment made under Section (a) of this rule on passenger transport infrastructure in the vicinity of the site providing that the site and use of the site in question would benefit from the provision of this infrastructure.

- (c) When the cash in lieu of parking is used by Council to provide parking spaces, a number of parking spaces equivalent to their respective contribution to the cost of formulation will be made available for use by the owners of sites for which cash in lieu of parking has been accepted.

Explanation/Reasons

Cash in lieu is a voluntary mechanism by which the Council may accept cash in lieu of parking and use that money to provide parking elsewhere. It provides flexibility where it is not practicable to provide parking on a site and the opportunity exists for Council to provide parking in the near vicinity.

Rule

8.26.2 CONDITIONS OF RESOURCE CONSENT REQUIRING FINANCIAL CONTRIBUTION

The following financial contributions may be required as a condition of resource consent in the following circumstances.

(a) Traffic Management Works

Applicants shall be required to meet the reasonable costs of all access and traffic management works (including any additional land required to accommodate these works) associated with an activity to the extent that such works are required to meet safety access egress, or amenity considerations related to the activity or where the works are required to mitigate a likely adverse effect from the activity on the safety or operation of the transport network.

(b) Parking Controls

Applicants shall be required to meet the costs of installation and construction of on and off-site signs, markings, barriers and other physical structures for parking control purposes and for the maintenance of on-site parking control signs, markings, barriers

or other physical parking structures required as a condition of consent to address likely adverse effects from an activity or subdivision.

(c) **Bonds**

The applicant may be required or the Council may accept instances where a requirement of consent is being deferred that an applicant enter into a bond in the form prescribed by the Council for the performance of any condition of discretionary or restricted discretionary activity granted pursuant to the provisions of this chapter.

(d) **Legal, Administration and Other Costs**

Such amount as is fair and reasonable towards its legal, administration and other costs associated with the provision of services relating to transportation and the parking matters up to and including the completion of the development or commencement of the activity.

Explanation/Reasons

The basis for the above financial contributions is that applicants meet the fair and reasonable costs of servicing their activity and the cost of addressing any potential adverse effects arising from their activity.

Parking controls and works within a road may be required to address potential adverse effects from activities on the adjoining road network.

Bonds may be appropriate in some circumstances to protect the Council from the cost it would incur in the event of the non-performance of a condition and where adverse effects need to be addressed.

8.27 Schedule 8A

ACTIVITY	PARKING SPACES TO BE PROVIDED
Amusement Galleries	1 for every 20m ² of gross floor area.
Auction Rooms and Second Hand Marts	1 for every 50m ² of gross floor area of building plus 1 for every 100m ² of open space on the site used for storage purposes, plus 1 for every permanent employee employed on site or operating from the site at any one time.
Banks	1 for every 35m ² of gross floor area
Boarding houses	1 for every three persons the building is designed to accommodate, plus 1 for every two non-resident employees employed on site or operating from the site at any one time.
Building Improvement Centres	1 for every 30m ² of retail and display area of building, plus 1 for every 40m ² of other floor space, plus 1 for every 100m ² of open space used for outdoor display.
Car and Boat Sales Showrooms and Yards	2 for a display of up to 20 cars or boats in this showroom or yard plus, 1 for every additional 10 cars or boats displayed, plus 1 for every employee employed on site or operating from the site at any one time.
Child Care Premises	1 for every staff member employed on site or operating from the site at any one time, plus 1 for every ten children where there is parental participation in the daily operation of the facility, plus a suitable drop off area.
Churches and Church Halls	1 for every 5 persons to be accommodated <i>provided that</i> where a church and a hall are erected on the same site and are not used at the same time, the minimum requirement applicable shall be the maximum requirement in respect of such church or hall, whichever is the greater.
Cinemas and Theatres	1 for every 3.5 persons the building is designed to accommodate.
Cleaning Depots	1 for every 40m ² of gross floor area.
Coffee Bars and Tearooms	1 for every 20m ² of gross floor area.
Community Centres, Community Halls and Community Houses	1 for every 3.5 persons the building is designed to accommodate.
Community Welfare Services	1 for every two persons employed on site or operating from the site at any one time, plus 1 for every interview room or booth used by visitors.
Conference Centres	1 for every 3.5 persons the building is designed to accommodate.
Container Depots and Terminals	1 for every two persons employed on site or operating from the site at any one time.
Cultural, Social and Recreational Purposes (Premises)	1 for every 3.5 persons the building is designed to accommodate.
Educational facilities for adults including tertiary education facilities	2 for every 3 staff employed on site or operating from the site at any one time, plus 1 for every 3.5 adult students present on site at any one time
Electricity Substations (Bulk Supply Substation)	1 for every two persons employed on site or operating from the site at any one time
Equipment Hire (excluding video hire outlets)	1 for every 40m ² of gross floor area.
Funeral Director's Premises and Mortuary Chapel	1 for every five persons the building is designed to accommodate.
Furniture Showrooms	1 for every 30m ² of display and retail floor space, plus 1 for every 40m ² of other floor space.

ACTIVITY	PARKING SPACES TO BE PROVIDED
Garden Centres and Nurseries (excluding shops selling plants and gardening merchandise there is no outdoor display)	1 for every 500m ² of gross land area of the site where used for garden centre purposes, plus 1 for every two persons employed on site or operating from the site at any one time, plus 1 for every 40m ² of enclosed indoor selling area.
Greenhouses	1 for every three non-resident employees on site or operating from the site at any one time.
Gymnasiums and Physical Fitness Activities	1 for every two staff employed on site or operating from the site at any one time, plus 1.5 for every customer service room or booth, or one for every 3.5 persons to be accommodated, whichever is greater.
Hairdressing and Beauty Salons	1 for every 20m ² of gross floor area.
Health Studios	1 for every two staff employed on site or operating from the site at any one time, plus 1.5 for every customer service room or booth, or 1 for every 3.5 persons to be accommodated, whichever is the greater
Home Enterprises [AM61]	Where there are non-resident employees or visitors to the site, in addition to the parking required for the dwelling, one space shall be provided for each non- resident employee, plus one for visitors.
Homes for the Aged	1 for every three persons the building is designed to accommodate, plus 1 for every resident employee, plus 1 for every two non-resident employees employed on site or operating from the site at any one time.
Household Units except in the Gateway and Village Apartment precincts of the Pine Harbour Zone [AM135]	2 for every household unit.
Household Units in the Gateway and Village Apartment precincts of the Pine Harbour Zone [AM135]	1 for every 1 bedroom or studio unit 1.5 for every 2 bedroom unit 2 for every 3 or more bedroom unit Plus (for all units) 1 visitors car park for every five units.
Housing for the Elderly and Kaumatua Housing	1 for every four household units plus 1 for every resident caretaker or warden.
Horse Riding Clubs and Riding Schools	10 motor vehicle and trailer (all weather) spaces for every property and adequate vehicle turning area.
Hotels	1 for every four guest rooms, plus 1 for every two fulltime staff employed on site or operating from the site at any one time <i>provided that</i> where the premises are also licensed, additional parking shall be provided in accordance with the parking requirements below, excepting that any restaurant space which serves as hotel dining room shall not be required to provide parking for the number of hotel guests catered for in the dining room, plus 1 for every 3.5 persons to be accommodated within restaurant or bars.
Industrial Premises	1 for every 45m ² of gross floor area of buildings, plus 1 for every 100m ² of open space used for industrial purposes, or 1 for every two persons to be employed on site or operating from the site at any one time whichever requirement is the greater.
Markets — Indoor	One for every 15m ² of gross floor area occupied by the market
Outdoor	3.5 for every stall provided, plus the requirements of this Schedule for other onsite uses.
Medical Service Premises and Health Centres and Industrial Health Centres	1 for each medical practitioner or professional person employed on site or operating from the site at any one time, plus 1 for every two assisting staff employed on site or operating from the site at any one time, plus 2 for every surgery or inspection room or booth.

ACTIVITY	PARKING SPACES TO BE PROVIDED
Medical and Analytical Laboratories	1 for each professional person employed on site or operating from the site at any one time, plus 1 for every two assisting staff employed on site or operating from the site at any one time, plus 1 for every public counter or treatment room.
Minor Household Unit [AM60]	1 for every minor household unit
Motor Vehicle Trimmers, Painters and Upholsterers	3 for every workshop bay on the premises, plus 1 for every person employed.
Network Utilities	1 for every person employed on site or operating from the site at any one time, or an area on site sufficient to accommodate a service vehicle for unstaffed sites over 100m ² .
Offices	1 for every 20m ² of gross floor area for: (a) areas open to the public including reception areas; and (b) staff areas serving public counter functions; plus 1 for every 40m ² of gross floor area for areas not open to the public.
Pleasure Craft (Launching of)	5 motor vehicle and trailer spaces for every 1m width of launching ramp, provided that for the purpose of this requirement a motor vehicle and trailer space shall have minimum dimensions of 10m (length) by 3m (width).
Pleasure Craft (Berthing and Mooring of)	0.8 for every berth or mooring space provided in the adjacent boat harbour anchorage or marina.
Private and Public Hospitals	1 for every three patients' bed spaces, plus 1 for every resident medical practitioner or professional staff employed on site or operating from the site at any one time, plus 1 for every two other full-time staff employed, plus 1 for every visiting medical practitioner present at any one time.
Professional Service Rooms for Veterinary Activities and plus Professional Offices	1 for every professional person employed on site or operating from the site at any one time 1 for every consulting room or surgery or interview room, plus 1 for every additional 40m ² of gross floor area of building.
Quarrying and Related Activities conducted within the same site	1 for every 45m ² of gross floor area of building, or 1 for every two persons to be employed on site or operating from the site at any one time, whichever requirement is the greater.
Recreation and Entertainment Facilities (excluding those otherwise mentioned)	1 for every 3.5 persons the facility is designed to accommodate
Restaurants (Licensed and Non-Licensed) and Reception Lounges	1 for every four persons the building is designed to accommodate, plus 1 for every two staff employed on site or operating from the site at any one time, plus where a restaurant has a drive-in takeaway service, adequate drive-in facilities shall be provided to avoid parking and traffic conflict on the site.
Residential and Non-Residential Clubs	1 for every three persons the building is designed to accommodate.
Schools (Public or Private — Primary and Intermediate)	2 for every three staff members employed on site or operating from the site at any one time and suitable drop off area.
Schools (Public Secondary)	2 for every three staff members employed on site or operating from the site at any one time, plus 1 for every 30 pupils aged 15 years and over, plus suitable drop off area.
Schools (Private Secondary)	2 for every three staff members employed on site or operating from the site at any one time, plus 1 for every 15 pupils aged 15 years and over, plus suitable drop off area.

ACTIVITY	PARKING SPACES TO BE PROVIDED
Service Garages and Service Stations including Motor Vehicle Body Repair Premises	5 for every lubrication bay, mechanical repair or working bay for the first two bays (except that this may be reduced to 2 per bay where vehicles are serviced while the driver waits), plus 2 for every additional lubrication, mechanical repair or working bay, plus 1 for a spare parts sales counter, plus 1 for every 40m ² of retail shop space for the first 240m ² of retail shop space and an additional space for every 100m ² of retail shop space above 250m ² , plus 1 for every person employed on site or operating from the site at any one time.
Shops	One for every 20m ² of gross shopping floor area plus one for every 40m ² of other uses excluding common pedestrian areas and loading spaces and the area around them used for unloading
Stalls for the direct sale of farm produce (Rural Zones)	6 for every property and adequate vehicle turning area and access and egress which can be achieved without undue disruption to traffic.
Totalisator Agency Board Premises	1 for every two persons employed on site or operating from the site at any one time, plus 1 for every 20m ² of gross floor area of public space on the premises.
Takeaway Food Bars	1 for every 20m ² of gross floor area.
Taverns	1 for every 3.5 persons to be accommodated.
Technical Services	1 for every 40m ² of gross floor area.
Temporary Activities (a) Temporary activities involving the assembly of 100 or more members of the public for any of the following purposes: - educational, religious, social, cultural, sporting or community activities and events, - indoor or outdoor recreation and entertainment.	1 for every 3.5 persons to be accommodated
(b) Temporary Activities involving the following operations: — exhibitions and auctions — markets and stalls	1 for every 15m ² of gross floor area of building or 3.5 for every stall provided.
Travellers' Accommodation (including motels, holiday flats and motor tourists' lodges)	1 for every accommodation unit, plus 1 for every two persons employed on site or operating from the site at any one time, plus 1 for every 3.5 persons to be accommodated within a restaurant or bar area, excepting that restaurant space which serves as a dining areas for guests shall not be required to provide parking for guests.
Video Hire Outlet	1 for every 20m ² of gross floor space.
Warehouses, Stores, Storage Yards, Trucking and Carrier Depots	1 for every 100m ² of gross floor area of building, plus 1 for every 100m ² of open space used for industrial purposes, or 1 for every two persons to be employed on site or operating from the site at any one time, whichever requirement is the greater.
Warehouse Shop for trade supply and retail to general public operated conjunction with a warehouse	1 for every 20m ² of gross floor area of in warehouse shop.
Wharekai (dining halls) and Wharehenui (meeting houses) in the Papakainga Zone	1 for every five persons the building is designed to accommodate, <i>provided that</i> the parking requirement shall only be assessed on the 'wharekai' in a marae.

ACTIVITY	PARKING SPACES TO BE PROVIDED
Wool Stores	1 for every 300m ² of gross floor area for wool store floor area up to 20,000m ² , plus 1 for every 600m ² of gross floor area for all wool store floor area in excess of 20,000m ² , or 1 for every two persons to be employed on site or operating from the site at any one time whichever requirement is the greater.
Any other activity not specified	To be determined having regard to the characteristics and circumstances of the particular proposed activity.

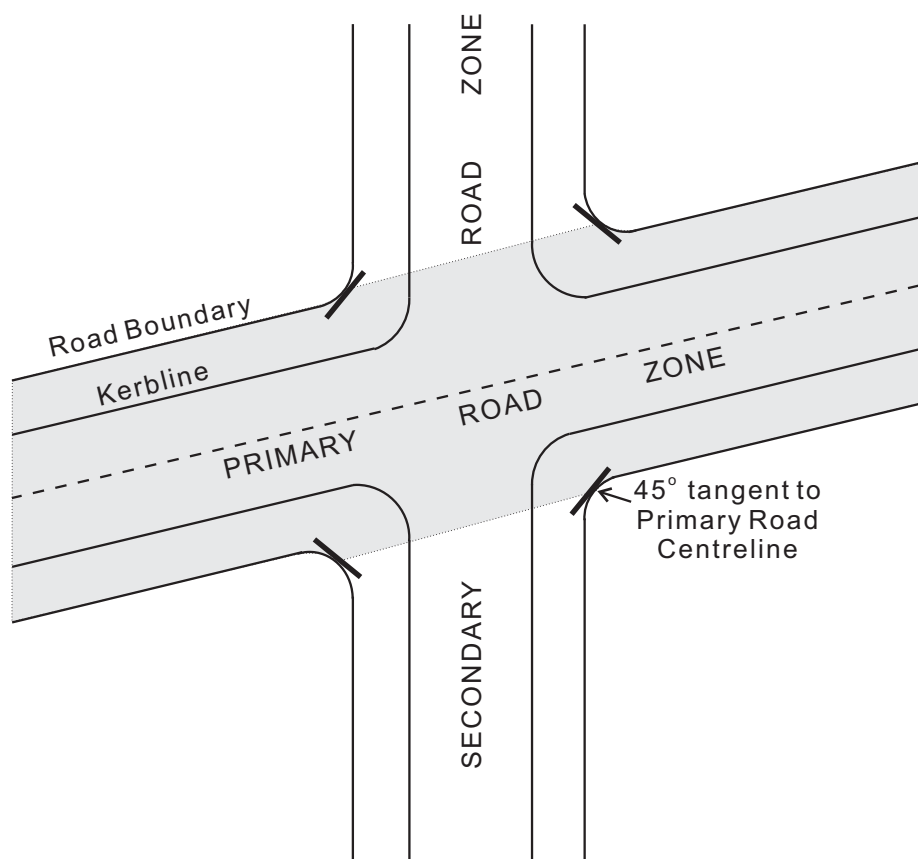


FIGURE 8.1 ROAD ZONE BOUNDARY DEFINITION

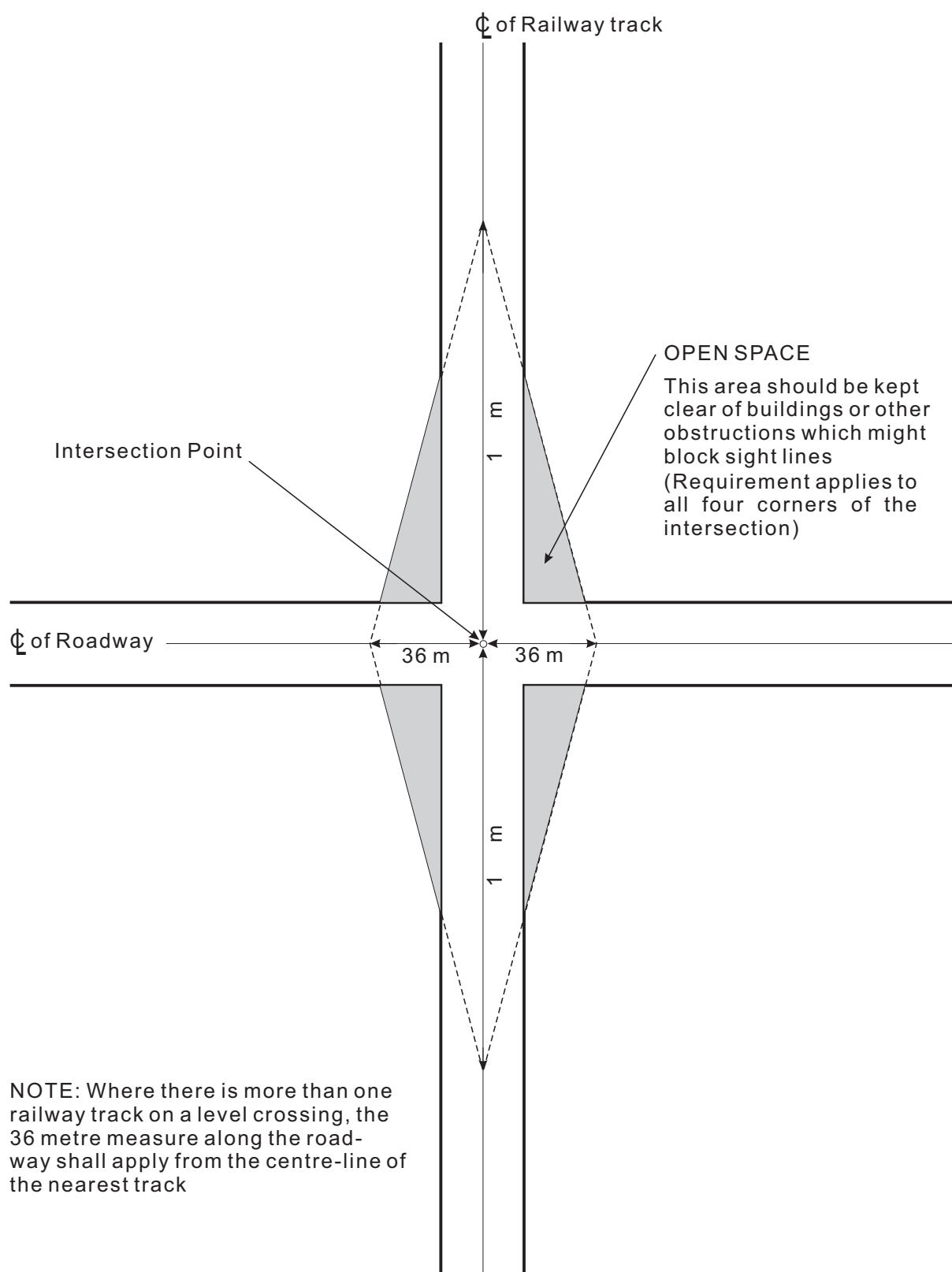


FIGURE 8.2 TRAFFIC SIGHT LINES AT ROAD — RAIL CROSSINGS

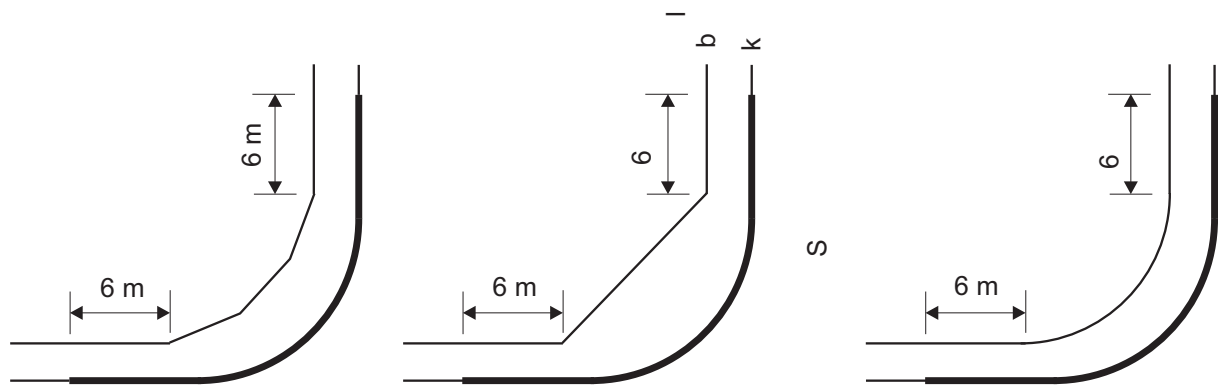


FIGURE 8.3 AREAS PROHIBITED FOR VEHICLE CROSSINGS

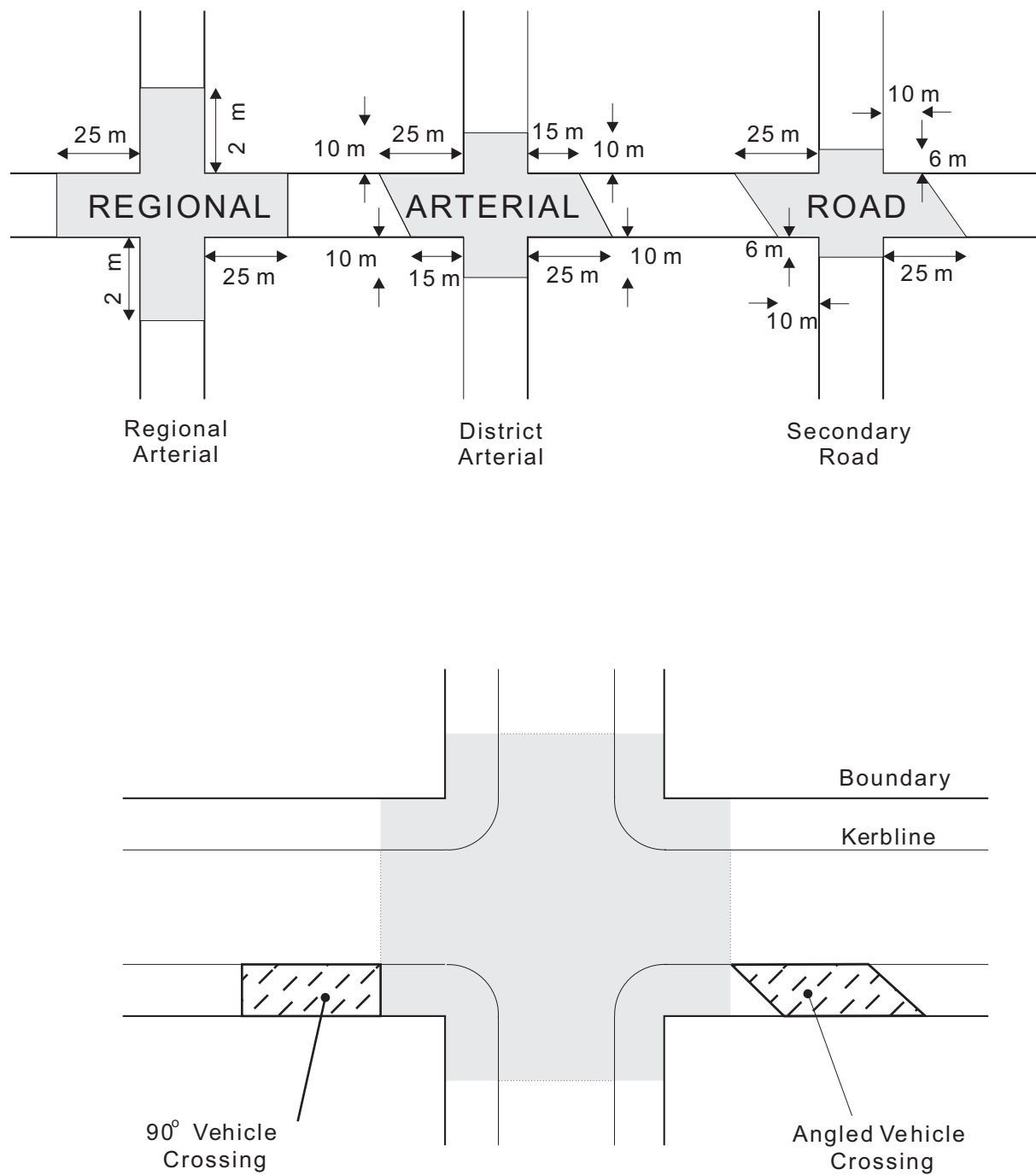
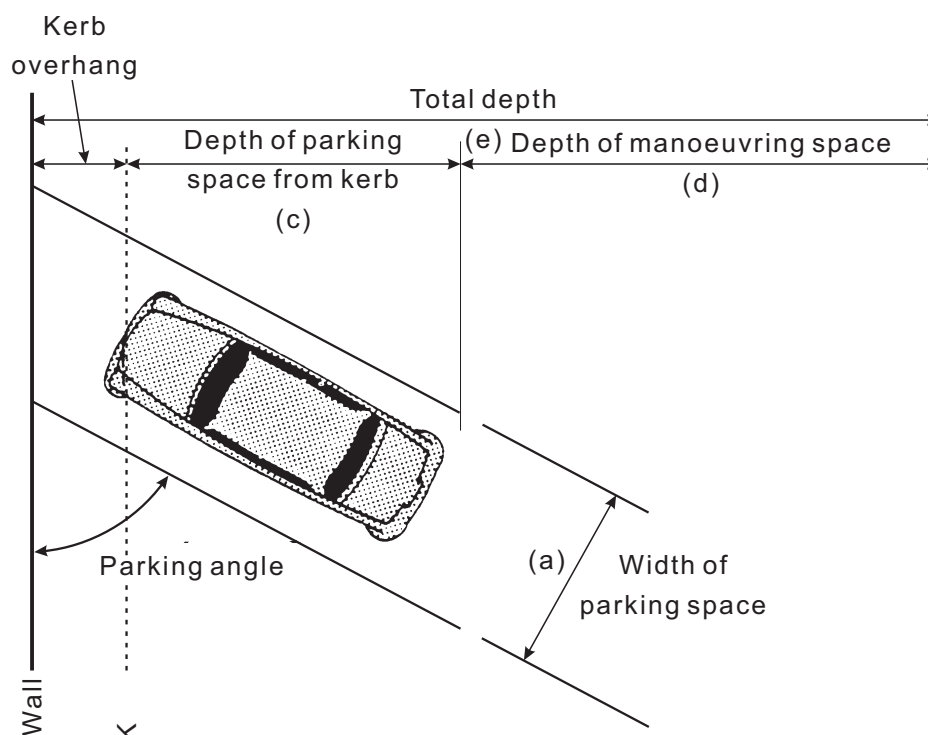


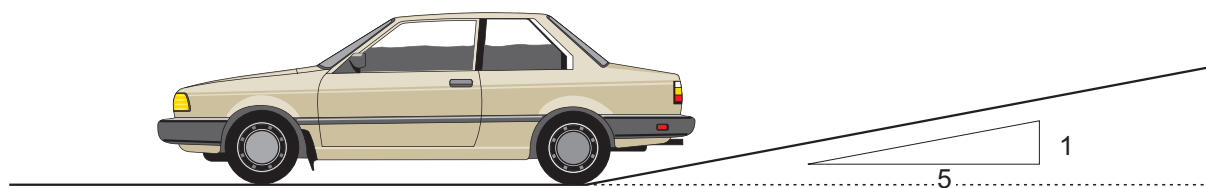
FIGURE 8.4 INTERSECTION CONTROL AREAS



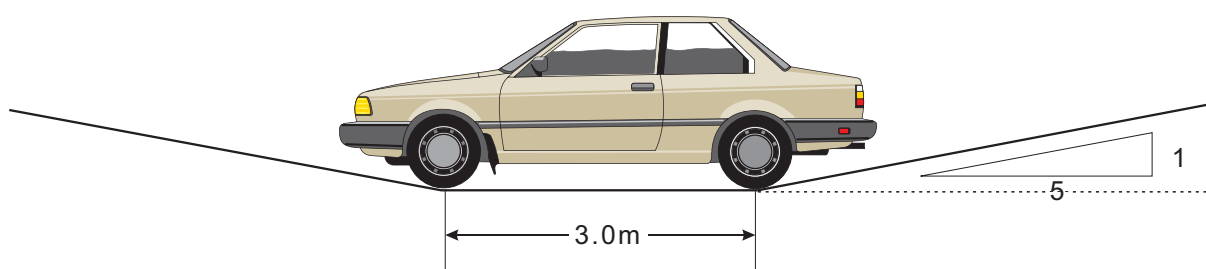
Type of Parking		Stall Width (a)	Stall Depth from wall (b) from kerb (c)		Manoeuvre Aisle Width (d)	Total Depth (e)
Parking Angle	Type	ALL MEASUREMENTS ARE IN METRES				
90 ⁰	Nose in	2.5	4.9	3.9	7.7	12.6
		2.6			7.0	11.9
		2.8			6.6	11.5
75 ⁰	Nose in	2.5	5.2	3.9	6.3	11.5
		2.6			5.2	10.4
		2.8			4.1	9.3
60 ⁰	Nose in	2.5	5.2	4.2	4.1	9.3
		2.6			3.5	8.7
		2.8			3.2	8.4
45 ⁰	Nose in	2.5	4.9	4.1	2.6	7.5
		2.6			2.4	7.3
		2.8			2.3	7.2
30 ⁰	Nose in	2.5	4.0	3.4	2.4	6.4
		2.6			2.4	6.4
		2.8			2.3	6.3
0 ⁰	Parallel	2.5	Stall length 6.1m		3.7	

Note: Ministry of Transport recommends a minimum manoeuvre aisle width of 3.7m

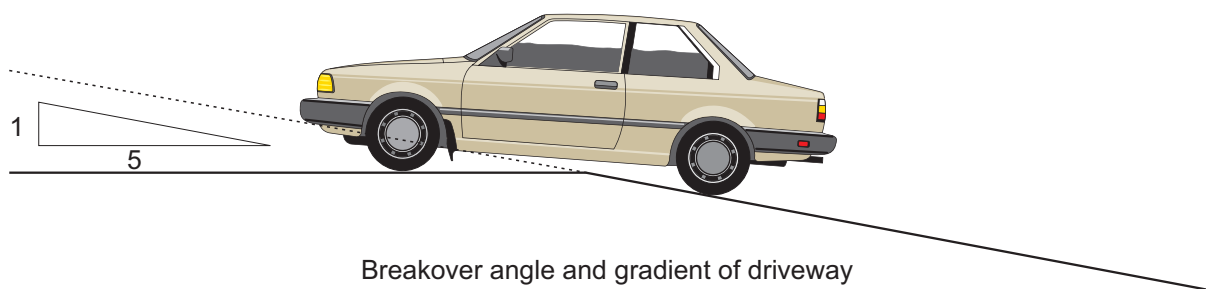
FIGURE 8.5 CARPARKING LAYOUT



Departure angle and gradient of driveway
1 in 5 maximum

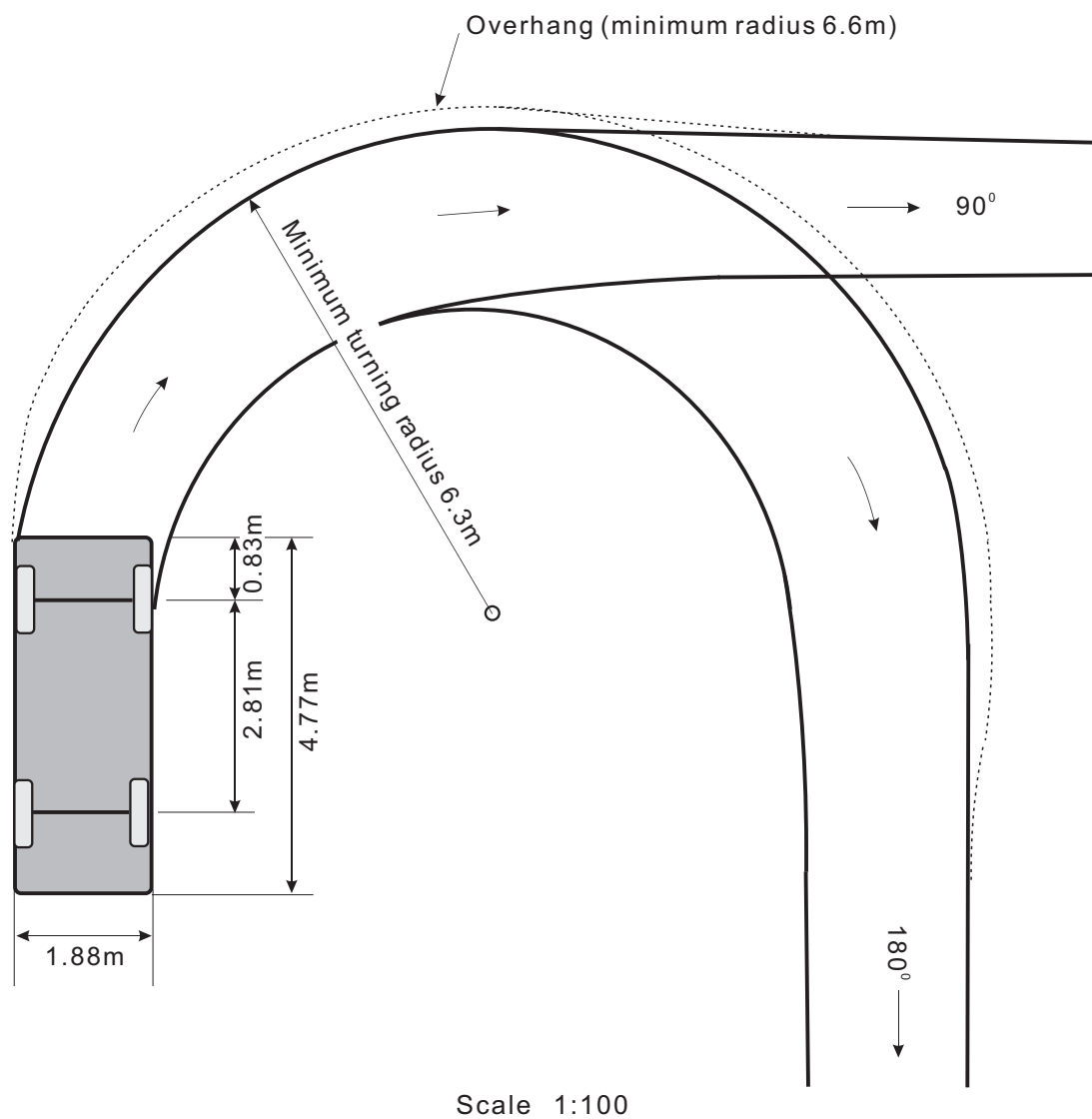


Access drive grade change
1 in 5 maximum at 3.0m minimum distance from kerb



Breakover angle and gradient of driveway
1 in 5 maximum - not to scale

FIGURE 8.6 STANDARDS FOR MOTOR VEHICLE ACCESS FOR PUBLIC AND PRIVATE PARKING AREAS

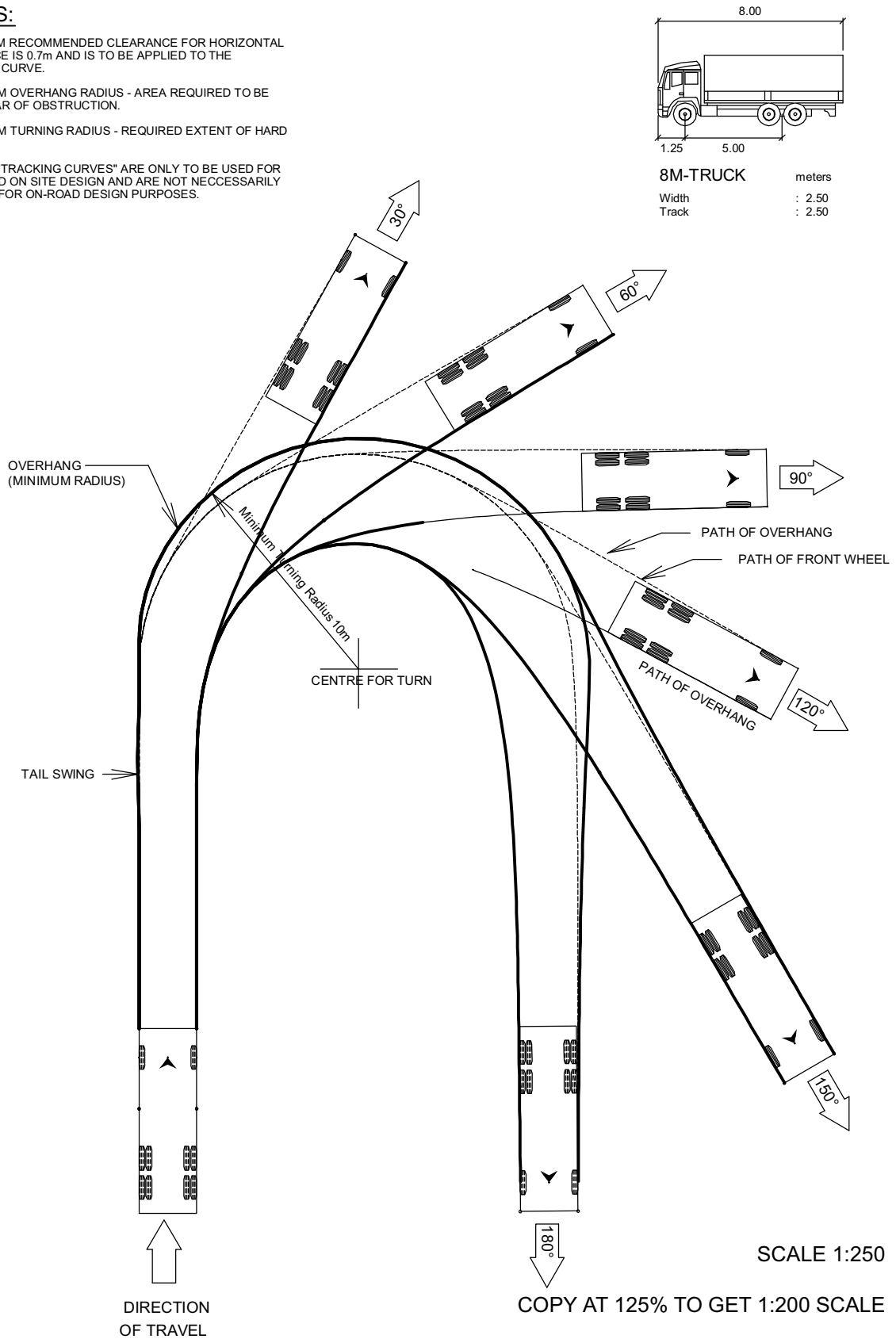


- Note:
- Minimum recommended clearance for both sides of the vehicle is 600mm
 - Minimum turning radius - required extent of hard surface
 - Minimum overhang radius - area required to be kept clear of obstruction

FIGURE 8.7 MINIMUM RADIUS TRACKING CURVE FOR 90 PERCENTILE CAR

NOTES:

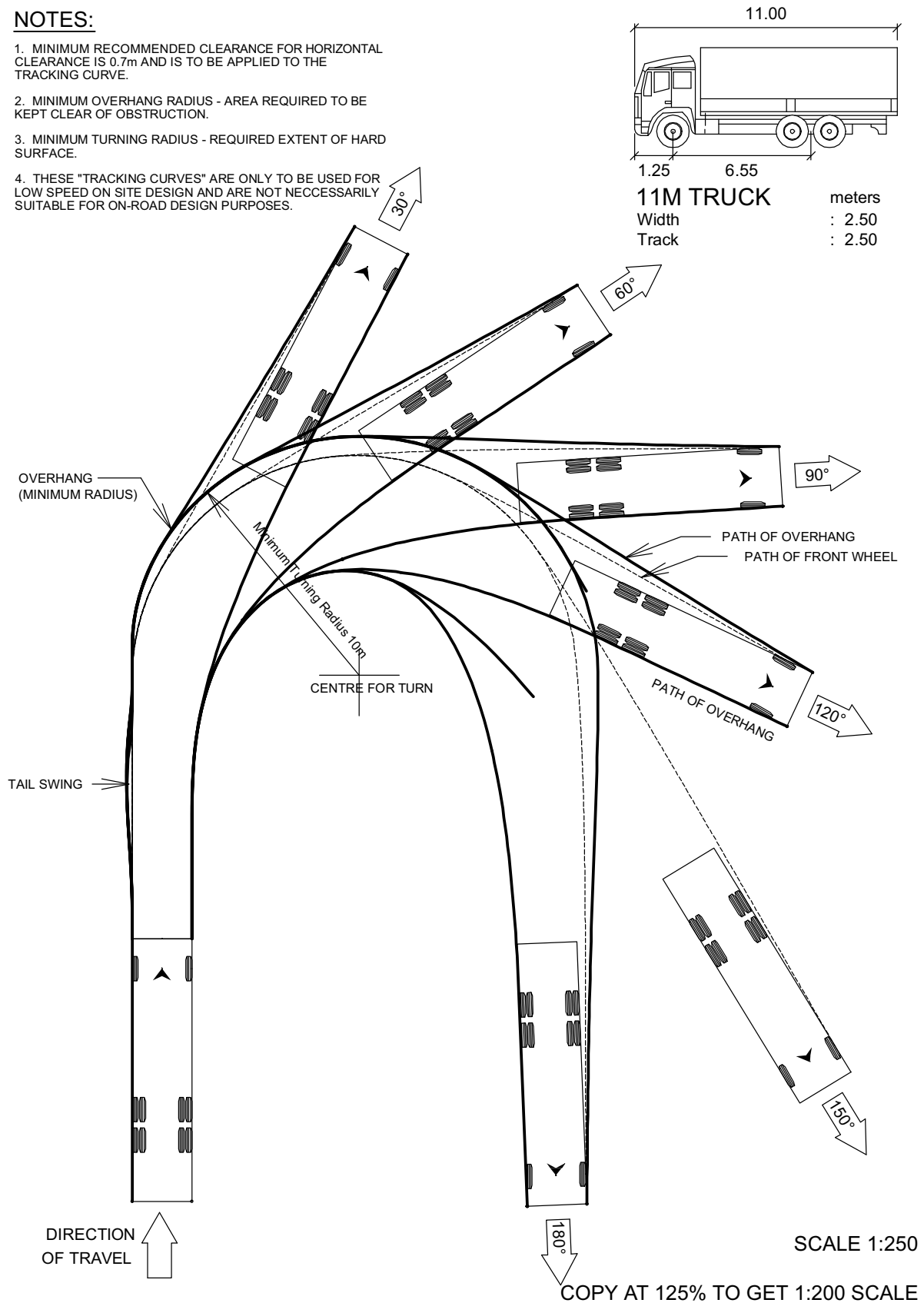
1. MINIMUM RECOMMENDED CLEARANCE FOR HORIZONTAL CLEARANCE IS 0.7m AND IS TO BE APPLIED TO THE TRACKING CURVE.
2. MINIMUM OVERHANG RADIUS - AREA REQUIRED TO BE KEPT CLEAR OF OBSTRUCTION.
3. MINIMUM TURNING RADIUS - REQUIRED EXTENT OF HARD SURFACE.
4. THESE "TRACKING CURVES" ARE ONLY TO BE USED FOR LOW SPEED ON SITE DESIGN AND ARE NOT NECESSARILY SUITABLE FOR ON-ROAD DESIGN PURPOSES.

**FIGURE 8.8 MINIMUM RADIUS TRACKING CURVE FOR A 8M RIGID TRUCK**

[AM31]

NOTES:

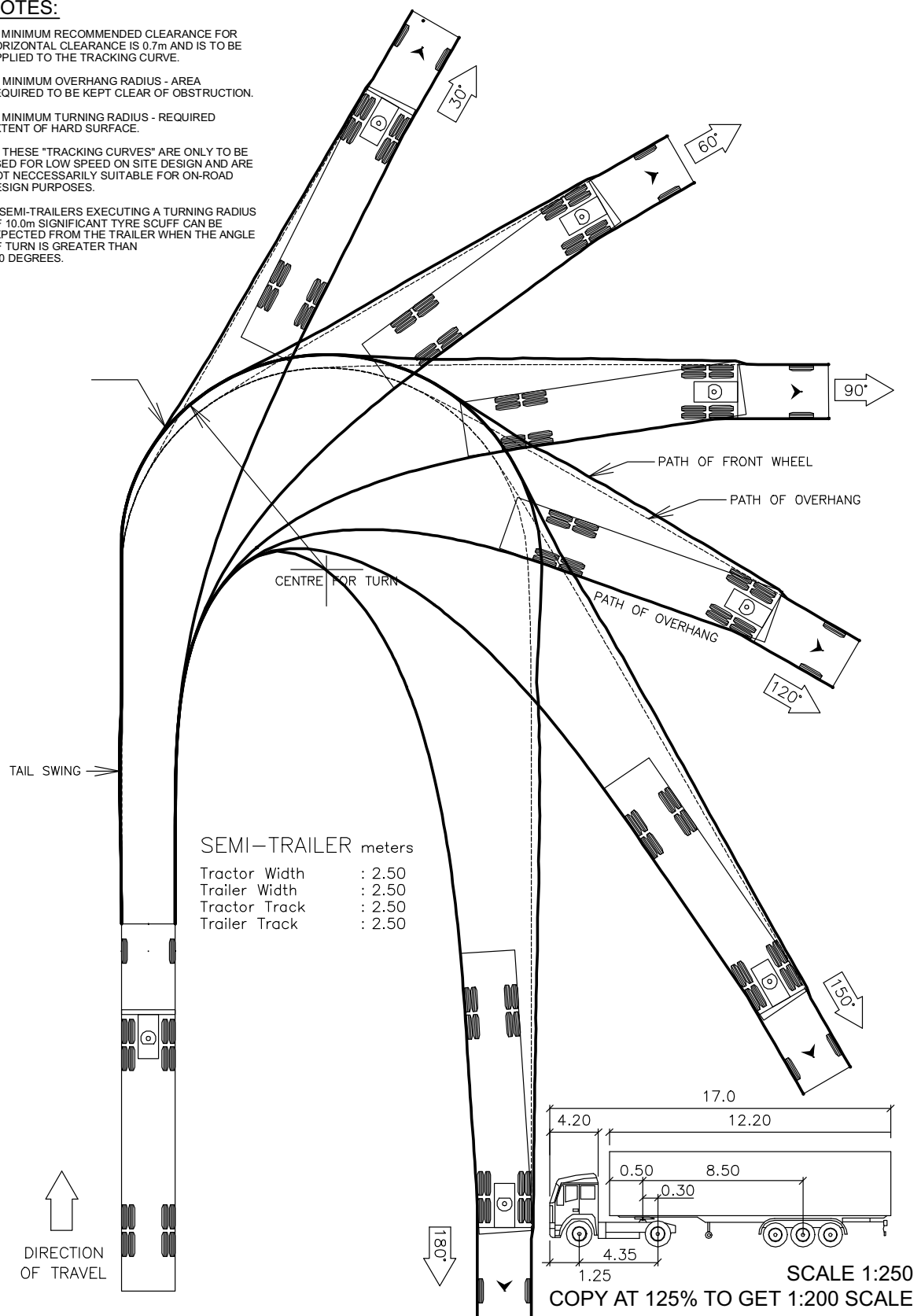
1. MINIMUM RECOMMENDED CLEARANCE FOR HORIZONTAL CLEARANCE IS 0.7m AND IS TO BE APPLIED TO THE TRACKING CURVE.
2. MINIMUM OVERHANG RADIUS - AREA REQUIRED TO BE KEPT CLEAR OF OBSTRUCTION.
3. MINIMUM TURNING RADIUS - REQUIRED EXTENT OF HARD SURFACE.
4. THESE "TRACKING CURVES" ARE ONLY TO BE USED FOR LOW SPEED ON SITE DESIGN AND ARE NOT NECESSARILY SUITABLE FOR ON-ROAD DESIGN PURPOSES.

**FIGURE 8.8.1 MINIMUM RADIUS TRACKING CURVE FOR A 11M RIGID TRUCK**

[AM31]

NOTES:

1. MINIMUM RECOMMENDED CLEARANCE FOR HORIZONTAL CLEARANCE IS 0.7m AND IS TO BE APPLIED TO THE TRACKING CURVE.
2. MINIMUM OVERHANG RADIUS - AREA REQUIRED TO BE KEPT CLEAR OF OBSTRUCTION.
3. MINIMUM TURNING RADIUS - REQUIRED EXTENT OF HARD SURFACE.
4. THESE "TRACKING CURVES" ARE ONLY TO BE USED FOR LOW SPEED ON SITE DESIGN AND ARE NOT NECESSARILY SUITABLE FOR ON-ROAD DESIGN PURPOSES.
5. SEMI-TRAILERS EXECUTING A TURNING RADIUS OF 10.0m SIGNIFICANT TYRE SCUFF CAN BE EXPECTED FROM THE TRAILER WHEN THE ANGLE OF TURN IS GREATER THAN 120 DEGREES.

**FIGURE 8.9 MINIMUM RADIUS TRACKING CURVE FOR A SEMI-TRAILER**

[AM31]

APPENDIX 1

PRIMARY NETWORK ROUTE DEVELOPMENT AND ASSESSMENT CRITERIA

8.A1.2 The Primary Road network as set out in Appendices 1A and 1B to the Planning Maps comprises National Routes, Regional Arterials and District Arterials. These may be:

- Proposed new roads.
- Existing roads to be widened to appropriate standards.
- Existing roads to be managed within their present boundaries.

This Appendix specifies the desired outcomes in respect of the function and form of each route in the existing and future primary road networks. The rules and methods by which these outcomes will be achieved are set out in the following sections of Chapter 8 — Transportation:

8.10.3 Activity Tables

8.11.7 Site Access

8.12.1 Discretionary Consent for Road Works

8.12.2 Access to the Primary Road Network

8.A1.2 National Routes

8.A1.2.1 The existing network of National Routes is shown on Appendix 1A to the Planning Maps. It comprises State Highway 1 (the Southern Motorway), State Highway 20 (completed sections of the South-Western Motorway together with sections of local roading), State Highway 20A, the northern access to Auckland International Airport, and State Highway 20B - the eastern access to Auckland International Airport.

The future network of National Routes is shown on Appendix 1B to the Planning Maps. It comprises the four State Highways with all sections of State Highway 20 having been constructed to motorway standard on its final alignment, and Wiri Station Road and Roscommon Road having been declassified to District Arterial and Regional Arterial respectively.

[AM98]

8.A1.2.2 Route Development and Assessment Criteria

8.A1.2.2.1 State Highway 1 - Southern Motorway [AM98]

The Southern Motorway runs through the City from the Tamaki River to the Papakura Stream. It is designated as State Highway 1 and classified as a National Route in the District Plan. Interchanges are located at Highbrook Drive, East Tamaki Road (Otara/Papatoetoe), Te Irirangi Drive, Manukau (Redoubt Road/Great South Road), and Hill Road (Manurewa). The Takanini interchange is just outside the District boundary. The interchanges provide for all entry/exit movements with the exception of Hill Road which is a partial interchange which only provides for entry/exit to and from the north.

North of the Hill Road interchange, the motorway is a six-lane dual carriageway facility. Between Takanini and Hill Road interchanges, the north-bound crawler lane effectively provides a total of five lanes.

The State Highway 20 to State Highway 1 project in Central Manukau involves construction of the full motorway standard connection between these two routes with provision of all-way entry/exit between both motorways. This project is due for completion in 2010 and involves several alterations to the local roading network throughout the Manukau Central area. (Refer to 8.A1.2.2.2).

All works on the Southern Motorway and its interchanges are controlled by and are the responsibility of the New Zealand Transport Agency, and will be designed to that body's standards and criteria.

8.A1.2.2.2 State Highway 20 - Southwestern Motorway [AM98]

This route is currently a mixture of completed sections of the Southwestern motorway joined by lengths of arterial road. The motorway section extends from Mangere Bridge to Roscommon Road. In Manukau Central, the arterial sections of the route include Roscommon Road, Wiri Station Road and short lengths of Great South Road and Redoubt Road associated with the Manukau split motorway interchange. The existing and future motorway sections are designated by the New Zealand Transport Agency as Southwestern Motorway, and the existing arterial road sections as State Highway 20.

Interchanges are presently located at Mahunga Drive, a split interchange at Walmsley Road/ Coronation Road, Massey Road, and Puhinui Road. There is also a full motorway standard connection to the northern airport access (State Highway 20A) at central Mangere.

In its final form, the Southwestern Motorway will provide a direct strategic link between the Southern Motorway and the southern and western parts of the Auckland Isthmus. In the medium-longer term future it will also form part of the 'Western Ring Route' which will be a strategic route through the Auckland urban area providing an alternative to State Highway 1.

The Western Ring Route will comprise: State Highway 20 from the Manukau interchange to Hillsborough (in Auckland City); the extension of State Highway 20 through the Auckland Isthmus to Waterview; the section of State Highway 16-Northwest Motorway from Waterview to Westgate; State Highway 18-Upper Harbour Highway from Westgate through Hobsonville and Greenhithe to connect with State Highway 1-Northern Motorway at its interchange with Upper Harbour Highway.

The section of State Highway 20 between the Southern Motorway and Puhinui Road is currently being constructed as part of the State Highway 20 to State Highway 1 project in the form of a four lane divided carriageway motorway. It includes a full motorway to motorway standard connection between these two routes with provision of all-way entry/exit for both motorways and full interchanges at Lambie Drive and at Cavendish Drive. The motorway and interchanges will involve several alterations to the local roading network throughout the Manukau Central area. Nesdale Avenue will connect directly into Roscommon Road. Liverpool Street and Nesdale Avenue will be renamed as Cavendish Drive when the project is completed in 2010.

As indicated in Appendices 1A and 1B to the Planning Maps, the National Route classification of State Highway 20 will transfer from local arterial roads to the Southwestern Motorway after it is completed. Thus, Wiri Station Road and the northern section of Roscommon Road will be classified downwards from National Routes. Wiri Station Road will be declassified to District Arterial and Roscommon Road to Regional Arterial.

The State Highway 20 Mangere Bridge is currently being duplicated in order to provide additional capacity and reduce congestion. When completed this project will increase the cross harbour capacity from four lanes to eight lanes plus dedicated shoulder bus lanes. The motorway is being concurrently widened to six traffic lanes plus bus lanes from Walmsley Road/Coronation Road to Queenstown Road (Onehunga).

All works on the Southwestern Motorway and its interchanges are controlled by and are the responsibility of the New Zealand Transport Agency, and will be designed to that body's standards and criteria. Similarly, while the arterial road sections of State Highway 20 remain designated as State Highway, the New Zealand Transport Agency's standards and criteria will apply to any development on and adjacent to those roads.

8.A1.2.2.3 State Highway 20A - Airport Northern Access [AM98]

The northern access to Auckland International Airport is classified as a National Route and is designated as State Highway 20A in the District Plan by the New Zealand Transport Agency. It comprises a four lane motorway connection from State Highway 20 at Central Mangere to Kirkbride Road, and George Bolt Memorial Drive, which is a four-lane divided carriageway arterial road from Kirkbride Road to Auckland International Airport. The section of George Bolt Memorial Drive between the end of the State Highway designation and Tom Pearce Drive is actually an internal airport road within the overall airport designation. This section, together with the other internal airport roads which connect State Highway 20A with State Highway 20B, are classified as a National Route because of the function they perform even though they are not public roads.

In the short-term, the section of State Highway 20A between Kirkbride Road and the Southwestern Motorway will function as a motorway terminating at Kirkbride Road by means of an at-grade, signalised intersection. All works on this section of motorway are controlled by and are the responsibility of the New Zealand Transport Agency, and will be designed to that body's standards and criteria. The section of State Highway 20A between Kirkbride Road and the Auckland International Airport will continue to function as an arterial road during that period, as will the short section of internal road within the airport designation.

In the longer term, the motorway section of the route will need to be extended southwards towards the airport and a grade-separated interchange will be required at Kirkbride Road. The design of the extended motorway will depend on a number of factors, including the development of a second airport runway parallel to and north of the existing runway, and the need to connect the business areas on the eastern and western sides of George Bolt Memorial Drive. The alignment of the new northern access motorway section will bend around the eastern end of the proposed second runway as portrayed on Appendix 1B to the Planning Maps. Connection between the Westney Road and Ascot Road business areas is provided by Verissimo Drive which in future will likely be grade separated from the new motorway link.

Control of access to George Bolt Memorial Drive can be achieved in a number of ways by the New Zealand Transport Agency. Firstly, it has wide powers as the manager of a gazetted State Highway. Secondly, it has powers as the requiring authority for the State Highway designation in the District Plan, and thirdly it has been successful in having most of the route declared to be a limited access road. Given these powers, individual property access to George Bolt Memorial Drive is not likely to be readily available.

8.A1.2.2.4 State Highway 20B - Airport Eastern Access [AM98]

The eastern access to Auckland International Airport is classified as a National Route and is State Highway 20B for the portion of its length which is outside of the area designated for airport purposes.

The route provides a two-lane connection between the South-Western Motorway and Auckland International Airport along Puhinui Road. The roads which connect State Highway 20B with State Highway 20A are internal airport roads which are classified as National Routes because of the function they perform even though they are not public roads.

The Eastern Access connects with State Highway 20 (the Southwestern Motorway) with a full interchange where it intersects with Puhinui Road.

The Eastern Access passes through predominantly rural land use activities until it enters the airport area and additional property access and road connections to this route will be discouraged. The ultimate form and treatment of access to State Highway 20B is yet to be determined.

8.A1.3 Regional Arterials [AM98]

8.A1.3.1 The existing network of Regional Arterials is shown on Appendix 1A to the Planning Maps. It comprises:

Pakuranga Road	(ref 8.A1.3.2.2)
South Eastern Highway	(ref 8.A1.3.2.3)
Ti Rakau Drive	(ref 8.A1.3.2.4)
Botany Road	(ref 8.A1.3.2.5)
Harris Road/Springs Road	(ref 8.A1.3.2.6)
Highbrook Drive	(ref 8.A1.3.2.7)
Allens Road	(ref 8.A1.3.2.7)
Smales Road	(ref 8.A1.3.2.7)
Ormiston Road	(ref 8.A1.3.2.8)
East Tamaki Road	(ref 8.A1.3.2.9)
Te Irirangi Drive	(ref 8.A1.3.2.10)
Cavendish Drive	(ref 8.A1.3.2.11)
Great South Road	(ref 8.A1.3.2.12)
Redoubt Road	(ref 8.A1.3.2.13)
Roscommon Road	(ref 8.A1.3.2.14)
Mahia Road	(ref 8.A1.3.2.15)

The future network of Regional Arterials is shown on Appendix 1B to the Planning Maps. It comprises all of the roads listed above with the addition of:

Mill Road	(ref 8.A1.3.2.13)
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The references alongside each route refer to the Route Development and Assessment Criteria that follow.

8.A1.3.2 Route Development and Assessment Criteria

8.A1.3.2.1 General [AM98]

The principal functions of Regional Arterials are to provide for the through movement of traffic and for the efficient movement of people and goods between the various geographical areas of Manukau City and the greater Auckland urban area.

Most Regional Arterials have been developed or are being progressively upgraded or constructed as four lane facilities with flush or solid medians and cycleways. There are sections of some existing Regional Arterials which are yet to be upgraded to this standard. The planning maps show a number of places where widening will be undertaken in order to provide capacity for existing and future travel demand. A range of physical works and traffic management measures that may be implemented in order to overcome adverse effects include:

- Additional traffic signals or roundabouts at intersections, at major activity entrances or major new property developments.
- Installation of solid medians.
- Closing or modifying existing breaks in medians,
- Road widening.
- Turn restrictions at non-signalised intersections.
- Parking and stopping restrictions.
- Improved lane markings and channelisation.
- Alteration of flush medians.
- Cycleways.
- Bus priority measures.

8.A1.3.2.2 Pakuranga Road [AM98]

This multi-lane Regional Arterial of varying width feeds the Panmure and Waipuna bridges, both of which are major connections to the Auckland Isthmus, and is the main access route to the Pakuranga Plaza. Many of its intersections are controlled by co-ordinated signals. Provision for minor road widening is made on the approach to the Panmure Bridge, on the approach to the Ti Rakau Drive intersection, on the departure from the Glenmore Road intersection, and opposite Pigeon Mountain Road.

The primary function of this route is the through-movement of traffic although access to existing properties must also be provided for.

Transport studies are underway to determine the options for significantly enhancing the capacity of the whole travel corridor which Pakuranga Road sits within. (Refer to 8.A1.3.2.4 in regard to these studies and AMET1.)

8.A1.3.2.3 South Eastern Highway [AM98]

This is a four-lane divided carriageway route which connects to the Auckland Isthmus, to the Southern Motorway at Mt Wellington and the Isthmus 'Industrial Edge'.

Provision has been made for improvements to its intersection with Ti Rakau Drive and Reeves Road to accommodate the additional traffic that growth will attract to this route.

Transport studies are underway to determine the options for significantly enhancing the capacity of the whole travel corridor which the South Eastern Highway sits within. (Refer to 8.A1.3.2.4 in regard to these studies and AMETI.)

8.A1.3.2.4 Ti Rakau Drive [AM98]

This multi-lane Regional Arterial has varying width and a divided carriageway for most of its length. It is a major feeder to the South Eastern Highway, Harris Road/Springs Road, the Pakuranga Plaza, the Botany Centre, and to Te Irirangi Drive. Provision has been made for road widening at its intersection with Reeves Road and the Pakuranga Motorway to enable improvements to be made to that intersection in anticipation of increased traffic flows resulting from growth.

Continuing urban development will generate traffic growth in the corridor which connects the East Tamaki, Botany, Howick and Pakuranga areas with the Auckland Isthmus. Studies are currently underway to determine the best option for increasing the capacity of the Ti Rakau Drive road corridor and the Tamaki River Bridges. This project is known as the Auckland Manukau Eastern Transport Initiative (AMETI) and will likely comprise a package of transport improvements including: road, bridge and intersection widening; traffic management measures; and public transport, walking and cycling facilities. Following selection of the preferred option, route protection and road widening measures will be introduced to the district plan maps.

The primary function of this route is the through-movement of traffic, although access to existing properties and new developments must be provided for. New subdivisions providing for individual property access to this route will be discouraged where this could have adverse effects.

8.A1.3.2.5 Botany Road [AM98]

The section of Botany Road between Cascades Road and Ti Rakau Drive is classified as a Regional Arterial and comprises four traffic lanes and a flush median.

Botany Road is a major feeder to Ti Rakau Drive and Te Irirangi Drive.

The primary function of this section of the route is the through-movement of traffic, although access to existing properties must be provided for. New subdivisions providing for individual property access to this route will be discouraged where this could have adverse effects.

The section of Botany Road north of Cascades Road is classified as a District Arterial (Refer to 8.A1.4.2.2.2.)

8.A1.3.2.6 Harris Road/Springs Road [AM98]

This four-lane Regional Arterial has varying width and is one of the main access routes serving the East Tamaki Industrial area and also carries significant volumes of through-traffic. Its major intersections are controlled by co-ordinated signals.

Industrial and commercial activities have been established along most of its frontage and there is consequently a high level of demand for access to and from these properties.

Traffic flows on this route will continue to increase as the East Tamaki and Highbrook industrial areas grow.

There are no plans to provide additional lanes on this route, although to the north of Smales Road there is sufficient land available in the road reserve to do so.

8.A1.3.2.7 Highbrook Drive/Allens Road/Smales Road (West of Te Irirangi Drive) [AM98]

This is a Regional Arterial route which feeds traffic to and through the East Tamaki and Highbrook business areas. At its western end it connects to the Southern Motorway at a full interchange, and at its centre and eastern end it connects to important north-south arterials running through the East Tamaki Corridor, namely Harris/Springs Road, Te Irirangi Drive, and Chapel Road.

Highbrook Drive and most of Smales Road have been constructed to Regional Arterial standard of four lanes with a flush median. Much of Smales Road has cycleways which will be extended in future to the whole route. The section comprising Allens Road and the part of Smales Road between Harris Road and Sir William Avenue is currently only two lanes. This section will be progressively upgraded to full Regional Arterial standard.

The section of Smales Road between Te Irirangi Drive and Chapel Road is classified as District Arterial.

8.A1.3.2.8 Ormiston Road [AM98]

Ormiston Road is a Regional Arterial which will be the main route between the Flatbush development and the Southern Motorway via East Tamaki Road. It will also be the major access road to the Flatbush Town Centre and is part of the Ormiston/Sandstone/Whitford Park route which connects the urban area with the Whitford-Maraetai Road.

The plan provides for progressive upgrading of Ormiston Road to Regional Arterial standard of four lanes plus cycleways. There is a divided carriageway (solid median) between Chapel Road and Murphys Road, and a flush median elsewhere. The section between Te Irirangi Drive and Chapel Road has not yet been upgraded. Ormiston Road is a Rural District Arterial east of the proposed edge of the urban development area.

8.A1.3.2.9 East Tamaki Road [AM98]

Between Great South Road and Springs Road, this route is an existing four-lane Regional Arterial of varying width. It provides a direct link to the Southern Motorway at the East Tamaki Road interchange and is one of the main access routes to the East Tamaki industrial area. It is also a major access to the Otara Town Centre and the Hunters Corner Shopping Centre.

Its frontage has been fully developed with a range of residential, commercial and industrial activities established along the route. Between Great South Road and the Southern Motorway, and between Prestons Road and Springs Road, the carriageway has a flush median and there is no restriction on turning movements into and out of properties. Between the Southern Motorway and Prestons Road the carriageway is divided by a solid median and property access is more limited. An off-road cycleway is being progressively installed on this section.

Traffic flows on this section of East Tamaki Road will continue to increase as the East Tamaki industrial area grows, and as the East Tamaki Corridor is progressively developed. There are no current plans to provide additional lanes on this section of East Tamaki Road.

8.A1.3.2.10 Te Irirangi Drive [AM98]

This Regional Arterial runs through the East Tamaki corridor and provides a major link between Howick/Pakuranga and Manukau Central. In view of its strategic importance in the Primary Road network, high standards have been used in its development. These include restrictions on the type and location of intersections, and on access. For example, north of Dawson Road, access to and from adjacent residential properties is highly restricted. Adjacent properties have frontage to service lanes which run parallel to Te Irirangi Drive. These service lanes connect to Te Irirangi Drive adjacent to signalised intersections. The route comprises four moving lanes with a continuous median, broken only at major intersections, which is sufficiently wide to accommodate Light Rail infrastructure, should investment be made in that transport mode in the future.

The section between Dawson Road and the Southern Motorway has been largely constructed as a four-lane divided carriageway facility, although to lower standards than those north of Dawson Road. This section runs through residential development which was established prior to the extension of Te Irirangi Drive to Ti Rakau Drive, and except for the eastern side of the route between Dawson Road and Boundary Road, there is a high property access requirement. On road cycle lanes exist between Great South Road and Boundary Road, which are proposed to extend to Ormiston Road by 2012, and eventually to Ti Rakau Drive.

A major New Zealand Transport Agency transportation study is currently in progress, examining the future design of the motorway network in the Manukau Central locality. The study will address the location of all interchanges with the local road network, and it is possible that a new connection with the Southern Motorway may be proposed at Orlando Drive. In that event, the strategic role of the East Tamaki Central Arterial will be even more significant and greater emphasis will need to be placed on its through-traffic function.

8.A1.3.2.11 Cavendish Drive - Liverpool Street - Nesdale Avenue [AM98]

This is an important cross-town route through the Manukau Central business area which for most of its length adjoins established commercial and industrial activities. It has been constructed as a divided carriageway facility with a solid median between Great South Road and Lambie Drive, and as an undivided carriageway with a flush median from Lambie Drive to Roscommon Road. This is in order to balance its through movement of traffic and its property access functions.

The route has on-road cycle lanes and no provision for kerbside parking.

When the State Highway 20 to State Highway 1 Motorway Link is completed in 2010, Nesdale Avenue will connect directly into Roscommon Road at a new full interchange with the motorway. Liverpool Street and Nesdale Avenue will be renamed as Cavendish Drive at that time.

8.A1.3.2.12 Great South Road [AM98]

This is a Regional Arterial of strategic importance, paralleling the Southern Motorway between Otahuhu and Takanini which runs through intensive urban development including residential, commercial and industrial activities.

Some sections of the route are two-lanes, others are four-lanes. Generally its carriageway is undivided with flush medians, although a solid median has been provided in the vicinity of Manukau City Centre.

The route provides for high levels of both through-traffic and local access. It contains a large number of signalised intersections and is a major access to the Hunters Corner, Manukau City and Southmall shopping centres.

It is proposed to install cycle lanes on the full length of Great South Road by 2012, with some sections having been already completed.

Road widening has been incorporated in the District Plan to enable the provision of additional lanes in the Southmall locality. New subdivisions and development providing for individual property access to this route between Manukau Central and Browns Road will be discouraged where this could have adverse effects.

8.A1.3.2.13 Redoubt Road/Mill Road [AM98]

Redoubt Road is classified as a Regional Arterial between Great South Road and Hollyford Drive. It has a solid median and comprises six lanes plus turning bays where it approaches and passes through the Manukau Motorway interchange. Between Hollyford Drive and Hilltop Road, Redoubt Road has district urban arterial status. The remainder of the Redoubt Road-Mill Road route through to the District Boundary is a two lane Rural Arterial with sub-standard geometry.

A transportation study is being undertaken to establish the specific details of a future multimodal link based on these two roads. This new link will provide capacity for future traffic growth in the corridor which will be generated by planned development in Flatbush to the north, and in Takanini/Papakura in the south. Once the preferred scheme is selected, land requirements for its implementation will be protected by designations and indicated accordingly on the planning maps. Papakura District Council will be concurrently protecting land requirements for that part of the route which will lie within its jurisdiction.

Accordingly, Appendix 1B to the planning maps shows that the route will be reclassified to Regional Arterial status in the future.

8.A1.3.2.14 Roscommon Road [AM98]

This is a divided carriageway facility of four lanes between Wiri Station Road and Browns Road, and of two lanes between Browns Road and Clendon Town Centre. It connects with State Highway 20 at its northern end where a full motorway interchange is currently being constructed as part of the State Highway 20 to Stage Highway 1 Motorway Link. Once this project is complete, Roscommon Road will also connect directly onto the Cavendish Drive crosstown link, which in turn connects to the East Tamaki Corridor.

Between Browns Road and Clendon Town Centre, the route runs through an established residential area and there is a high local access requirement as well as its primary through-movement function. Between Browns Road and Wiri Station Road, the route runs through a partially developed industrial area. It is important that the development of this area is controlled to ensure that the through-movement of traffic continues to be the primary functions of this part of the route. Accordingly, new subdivisions and development providing for individual property access to this route will be discouraged where these could have adverse effects.

8.A1.3.2.14A Roscommon Road and Wiri Station Road: Access to the Wiri North Structure Plan Area [AM162]

The Wiri North Structure Plan Area (Figure 16.13) provides for additional business development fronting a section of Roscommon Road north of Wiri Station Road and a portion of Wiri Station Road west of the North Island main trunk rail line. The primary vehicular entrances to this area are planned to be from the signalised intersection with Vogler Drive and a new signalised intersection where Langley Road intersects with Wiri Station Road. The land fronting Roscommon Road and Wiri Station Road has been zoned Business 6. Whilst such development necessitates separate secondary access onto Roscommon Road, in order to protect the primary road function of the carriageway and manage effects, the following

outcomes are expected in respect of future property access to the Wiri North Structure Plan Area.

Intersections With Roscommon Road and Wiri Station Road

As development in the Wiri North Structure Plan Area proceeds, consideration will need to be given to whether the proposed accumulative development requires the completion of one or both of the intersections and traffic signals onto Roscommon Road and/or Wiri Station Road to be in place as indicated in the Wiri North Structure Plan. One and ultimately both of these intersections will have to be formed as significant development proceeds within the Structure Plan Area. The applicant is expected to provide evidence of consultation with the Road Controlling Authority for all applications submitted prior to the completion of both the Langley Road and Vogler Drive intersections.

Roscommon Road Frontage

Other than the proposed intersection opposite Vogler Drive there should be no more than one additional access point to Roscommon Road and in determining applications for such access onto Roscommon Road protection of the through flow of traffic and the function of the corridor should be prioritised.

To this end the use of deceleration lanes may be required and any new additional access point should provide for left in/left out movements only. Alternative access should be provided between adjacent sites utilising the access point and from each such site or activity to the internal roading network.

Wiri Station Road Frontage

Given safety concerns, there should be no additional access to Wiri Station Road beyond the proposed intersection opposite Langley Road. For safety reasons a signalised intersection with Langley Road should await the speed limit on Wiri Station Road being lowered to at most 60km/hour.

In addition to the above expected outcomes, Council may require at any stage of development or subdivision within the Wiri North Structure Plan Area, the formation of one or both proposed intersections and associated internal connections where this is considered necessary to facilitate safe and efficient access to the site and minimise the effects of traffic (existing and proposed) on the operation of the primary road network.

In addition to the above expected outcomes Rule 14.12.10.4.1 and Rule 14.13.11.2 permits consideration of when the proposed road intersections need to be in place to serve any new building activity within the Wiri North Structure Plan Area.

8.A1.3.2.15 Mahia Road [AM98]

This route provides a direct link between Roscommon Road and the Southern Motorway at Takanini.

It generally runs through established residential areas, although it is flanked by industrial development at its eastern end.

It is a two-lane facility of varying width. The District Plan provides for road widening for its length on both sides to bring it up to a standard able to accommodate two moving lanes and a flush median. Provision is also made for additional widening to accommodate intersection upgrading at Coxhead Road.

The primary function of the route is the through-movement of traffic, although full access to existing properties must also be provided for.

8.A1.4 District Arterials (Urban Area)

8.A1.4.1 The existing and proposed networks of District Arterials in the urban area are shown on Appendices 1A and 1B to the Planning Maps. They comprise the following roads which, for convenience, are grouped by locality:

Pakuranga/Howick [AM98]

Aviemore Drive

Bleakhouse Road

Botany Road (from Pakuranga Road to Cascades Road) (ref 8.A1.4.2.2.2)

Bucklands Beach Road (from Pakuranga Road to MacLeans Road)

Cascades Road

Cook Street (ref 8.A1.4.2.2.1)

Fencible Drive (ref 8.A1.4.2.2.1)

Gossamer Drive

MacLeans Road (from Bucklands Beach Road to Bleakhouse Road)

Picton Street (ref 8.A1.4.2.2.1)

Reeves Road

Ridge Road (from Bleakhouse Road to Picton Street)

Union Street

Wellington Street (from Fencible Drive to Picton Street)(ref 8.A1.4.2.2.1)

Whitford Road (west of Somerville Road)

East Tamaki/Otara [AM98]

Accent Drive

Aspiring Avenue (from Hollyford Drive to Matthews Road)

Bairds Road (from Great South Road to East Tamaki Road)

Chapel Road (ref 8.A1.4.2.2.3)

Hellabys Road

Holyford Drive

Lady Ruby Drive (from Springs Road to Accent Drive)

Matthews Road

Mill Road (South of Redoubt Road)(ref 8.A1.4.2.2.5)

Murphys Road

Ormiston Road (east of Murphys Road)(ref 8.A1.3.2.8)

Prestons Road (ref 8.A1.4.2.2.4)

Reagan Road (ref 8.A1.4.2.2.4)

Redoubt Road (from Hollyford Drive to Mill Road)(ref 8.A1.4.2.2.5)

Smales Road (from Te Irirangi Drive to Chapel Road)(ref 8.A1.3.2.7)

Stancombe Road

Manurewa [AM98]

Alfriston Road (from Great South Road to Stratford Road)

Browns Road

Everglade Drive

Grande Vue Road (from Hill Road to Motorway On Ramp)

Hill Road (from Great South Road to Stratford Road)

Orams Road

Porchester Road

Rowandale Avenue

Russell Road

Selwyn Road

Station Road

Stratford Road

Weymouth Road (from Roscommon Road to Great South Road)

Manukau Central [AM98]

Ash Road

Dalgety Drive

Druces Road (ref 8.A1.4.2.2.7)

Kerrs Road

Lambie Drive (ref 8.A1.4.2.2.7)

Plunket Avenue

Wiri Station Road (ref 8.A1.4.2.2.6)

Papatoetoe [AM98]

Bridge Street

Buckland Road

Cambridge Terrace (from Puhinui Road to Bridge Street)

Carruth Road

Huia Road

Kenderdine Road (from Bridge Street to Puhinui Road)

Kolmar Road

Portage Road (from Buckland Road to Station Road)

Puhinui Road (from Southwestern Motorway to Great South Road)

Station Road

St George Street

Tui Road (from Great South Road to Huia Road)

Wyllie Road

Mangere [AM98]

Bader Drive

Coronation Road (from Walmsley Road to the Southwestern Motorway ramps)

Favona Road

James Fletcher Drive

Kaka Street

Kirkbride Road (from McKenzie Road to Hospital Road)

Mahunga Drive

Massey Road (ref 8.A1.4.2.2.8)

McKenzie Road

Rimu Road (from Crawford Avenue to Mahunga Drive)

Tui Street

Walmsley Road

The references alongside each route refer to the Specific Route Development and Assessment Criteria that follow.

8A1.4.2 Route Development and Assessment Criteria

8A1.4.2.1 General [AM98]

District Arterials within the urban area have a dual function of providing for the through-movement of traffic as well as for property and activity access. Most District Arterials are two-lane individual carriageway facilities and can generally be effectively managed within their present boundaries to ensure that they achieve the desired through-movement and access functions. However, in newly developing areas, some District Arterials will be widened and upgraded in order to effectively perform their dual function.

Traffic management measures that may be used to effectively achieve those functions include:

- Parking and stopping restrictions
- Intersections location
- Provision of roundabouts
- Flush medians
- Edge-lining
- Lane narrowing and channelisation
- Traffic signals
- Turn restrictions
- Road widening
- Cycleways
- Bus priority measures

These measures may be implemented on all District Arterials listed in 8.A1.4.1 as may be required in order to overcome any adverse effects.

8A1.4.2.2 Specific Route Development

Routes most likely to require specific traffic management measures and treatment are as follows:

8A1.4.2.2.1 Fencible Drive/Wellington Street/Picton Street/ Cook Street

The Fencible Drive/Wellington Street route is to be developed as a bypass to the Picton Street/Cook Street route through Howick Village. Simple traffic management measures will be used and when the bypass is operational, the District Arterial classification will be moved to it from Picton Street/Cook Street. (Refer Appendices 1A and 1B to Planning Maps).

8A1.4.2.2.2 Botany Road [AM98]

Botany Road involves a transition between the District Arterial and Regional Arterial networks. The section of Botany Road between Pakuranga Road and Cascades Road is classified as a District Arterial and comprises two traffic lanes, with a flush median on some sections of the route. Traffic capacity is achieved by means of lane markings and parking restrictions. This section provides both through movement and high property access functions (Refer also to 8.A1.3.2.5).

8A1.4.2.2.3 Chapel Road [AM98]

Chapel Road is a District Arterial which runs through the East Tamaki corridor parallel and to the east of Te Irirangi Drive. For some sections of its length, the road comprises two lanes, flush median and restricted property access. For other sections its lanes are separated only by a centre line and it provides much direct property access. For some sections, such as between Stancombe Road and Ormiston Road, it has not yet been fully upgraded from Rural Arterial standard.

The route will continue to be progressively upgraded to urban District Arterial standard.

8A1.4.2.2.4 Prestons Road/Reagan Road [AM98]

This currently functions as a District Arterial providing a major link between the East Tamaki corridor and industrial area to Manukau Central. It is a two-lane facility with a flush median which runs through an established housing area. Most intersections along the route are unsignalised and there is a roundabout at its intersection with Boundary Road. There are minimal parking restrictions and there is a significant property access requirement.

Widening of the Reagan Road motorway overbridge is not contemplated at this time. However, improvements are planned at the Prestons Road/East Tamaki Road intersection, provision being made for these in the District Plan.

8A1.4.2.2.5 Redoubt Road (Hollyford Drive to Hilltop Road) [AM98]

Redoubt Road has District Arterial status between Hollyford Drive and Hilltop Road. Together with Mill Road it comprises a route south through to the boundary with Papakura District.

A transportation study is being undertaken to establish the specific details of a future multi modal link based on these two roads. This new link will provide capacity for future traffic growth in this corridor which will be generated by planned development in Flatbush to the north, and in Takanini/Papakura in the south. Once the preferred scheme is selected, land requirements for its implementation will be protected by designations and indicated accordingly on the planning maps. Papakura District Council will be concurrently protecting land requirements for that part of the route which will lie within its jurisdiction.

Accordingly, Appendix 1B to the planning maps shows that the route will be reclassified to Regional Arterial status in the future following upgrading. (Refer also to 8.A1.3.2.13.)

8A1.4.2.2.6 Wiri Station Road

This route will be reclassified as District Arterial once the Southwestern Motorway is complete (ref 8.A1.2.2.2).

8A1.4.2.2.7 Lambie Drive/Druces Extension to Great South Road [AM98]

Druces Road and Lambie Drive (between Cavendish Drive and Wiri Station Road) are classified as District Arterials. Druces Road extension through to Great South Road will be classified District Arterial once the whole of the link through the Hospital site is completed. This will be a four-lane divided carriageway facility.

8A1.4.2.2.8 Massey Road [AM98]

This is a two-lane undivided carriageway facility linking Otahuhu and the South-Western Motorway. It generally runs through an established residential area, although a significant number of small to medium business activities have located along the route. This mix of uses does create a significant level of turning movements which, in turn, detract from the ability of the route to function safely and efficiently as a through-route.

Provision is made in the District Plan for road widenings over much of its length. These are progressively being implemented and are designed to provide additional lane capacity at the large number of intersections along the route.

8A1.4.2.2.9 Murphy's Road [AM50] [AM98] [AM167]

Murphy's Road will be progressively upgraded to District arterial standard with cycle lanes. Intersection improvements and realignment of Murphy's Road are also indicated within the Planning Maps.

Murphy's Road is currently a two-lane rural District Arterial Road with a posted speed limit of 80km/hr. As Flat Bush develops, the land-uses along Murphy's Road will change from rural to urban and the road will become an increasingly important north-south link through the Flat Bush community. As surrounding development proceeds, Murphy's Road will be upgraded from a rural to an urban arterial.

In view of the strategic importance of Murphy's Road in the Primary Road Network and for the Flat Bush community, high design standards have been set for its development. For instance, there will be restrictions on adjoining property and local side road access and on the type and location of intersections.

The District Plan provides for road widening for the length of Murphy's Road on both sides. The 31m road reserve allows for a range of cross-sections along different sections of the road depending on the adjoining land-uses. The final design will be determined as part of the road upgrading project. The general intention is to accommodate two vehicle lanes in both directions, plus high quality cycle facilities, at least 2m wide footpaths and front and back berms. The front and back berm areas may be paved from road reserve boundary to kerb edge in specific locations. Other aspects that may be considered include on-street parking and landscaped central median.

The Flat Bush Transport Design Guideline (October 2010) provides some indicative cross sections for Murphy's Road. It also indicates proposed intersection treatments and key pedestrian and cyclists only crossing points.

The following outcomes are to be achieved in the development of Murphy's Road:

	KEY TRANSPORT OUTCOMES SOUGHT FOR MURPHY'S ROAD UPGRADE	ACHIEVE THROUGH
1	Four lanes for through traffic provided at all times, in addition to provision of on-street parking where required.	<ul style="list-style-type: none"> Road reserve and carriageway width provisions allow for this.
2	Through movement is prioritised along the corridor, whilst maintaining access to adjoining land-uses - although this is not expected to be directly off Murphy's Road.	<ul style="list-style-type: none"> Local side road access ideally limited to left in and left out only. Full access to be provided at controlled intersections. Local side road movements to take advantage of local grid network connectivity. No or very limited direct property access from Murphy's Road. A range of acceptable and not acceptable adjoining property access measures are outlined in the Flat Bush Transport Design Guideline (October 2010).
3	A road that acts as a connector between communities on either side of Murphy's Road.	<ul style="list-style-type: none"> Carriageway width limited as much as possible by: <ul style="list-style-type: none"> Limiting local side road access and having no or limited direct property access; Appearance of carriageway width mitigated through appropriate centre median treatment. A centre median may or may not be provided, depending on the requirements of the particular section of Murphy's Road. If a median is to be provided it should be landscaped to a high quality, i.e. it should have quality and reasonably sized trees planted in it and / or attractive ground level planting. Plain grass and / or concrete are not considered to be an acceptable solution. Berm and footpath area should be sufficiently wide and attractively landscaped to create a pleasant road-side environment and an attractive public space.
4	Ability to park on-street where there is a demand for it and to act as a traffic calming measure.	<ul style="list-style-type: none"> Road reserve allows for the provision of on-street parking where there is a likely demand for it, which will be determined by adjoining land-uses. It should be noted that on-street parking may not be able to be provided directly at and around intersections, depending on the operational requirements of the intersection.
5	Appropriate speed environment for vehicles.	<ul style="list-style-type: none"> Having a posted speed limit of 50km/hr along the entire route. Signalised intersections placed at regular intervals along the corridor. Road treatment designed to manage vehicle speeds, e.g. through provision of on-street parking, tree build-outs and potential landscaped median.
6	<p>An environment that encourages cyclists of both commuter / confident and recreational / less confident abilities (including children) to safely and comfortably use Murphy's Road as a cycle route.</p> <p>An environment that encourages pedestrian activity on the street.</p>	<ul style="list-style-type: none"> High quality and clearly delineated cycle facilities provided to cater for both confident / commuter cyclists and recreational / less confident cyclists. Preferred layout to be determined at project scheme stage, however, some indicative cross sections are provided in the Flat Bush Transport Design Guideline (October 2010). Wider footpaths. Width should be wider around key land use activities such as neighbourhood centres. No or limited direct property access off Murphy's Road. This creates a better environment for cyclists and pedestrians due to: <ul style="list-style-type: none"> removal or reduced number of vehicle crossing points to have to cross, so less conflict points with moving vehicles increasing pedestrian and cyclists amenity and safety; provides more opportunity for on-street parking provision and associated tree build outs to create a slower speed environment and higher amenity road edge; no or less driveways also presents an opportunity to provide a high quality off-road cycle facility. Signalised intersections combined with several pedestrian / cyclists only crossings at regular intervals along the corridor provide for safe pedestrian crossing opportunities. The Flat Bush Transport Design Guideline (October 2010) outlines intersection treatments to consider for Murphy's Road.

	KEY TRANSPORT OUTCOMES SOUGHT FOR MURPHY'S ROAD UPGRADE	ACHIEVE THROUGH
7	Street edge activity and passive surveillance.	<ul style="list-style-type: none"> On-street parking, where it occurs, will provide some street front activity, which creates a safer environment for pedestrians / cyclists.
8	A quality street environment.	<ul style="list-style-type: none"> Murphy's Road alignment should be kept as straight as possible to maintain long vistas created by the topography. Generous street tree provision along corridor in front berm area or in tree builds. On-street parking should be interspersed with tree build outs.

8A1.5 District Arterials (Rural Area) [AM98]

8A1.5.1 The network of District Arterials in the rural area is shown on Appendices 1A and 1B to the Planning Maps. It comprises the following roads:

Brookby Road

Clevedon Kawakawa Road

Clevedon Takanini Road

Kawakawa Orere Road

Maraetai Coast Road

Maraetai Drive

Mill Road (Ref 8.A1.5.2.2.3)

Monument Road

North Road

Orere Matingarahi Road

Ormiston Road (East of the urban development area) (Ref 8.A1.5.2.2.2)

Papakura Clevedon Road

Redoubt Road (Hilltop Road–Mill Road)

Sandstone Road (Ref 8.A1.5.2.2.2)

Twilight Road

Whitford Road (east of Sommerville Road) (Ref 8.A1.5.2.2.1)

Whitford Maraetai Road (Ref 8.A1.5.2.2.1)

Whitford Park Road (Ref 8.1A.5.2.2.2)

8A1.5.2 ROUTE DEVELOPMENT AND ASSESSMENT CRITERIA

8A1.5.2.1 General

District Arterials within the rural area have a dual function of providing for the through-movement of traffic as well as for property and activity access. Most District Arterials in the rural area are two-lane carriageway facilities and can generally be effectively managed within their present boundaries to ensure that they achieve the desired through-movement and access functions. However, in some instances widening may be necessary to provide passing lanes, crawler lanes and improvements to vertical and horizontal alignments. Because of the nature of the activities they serve, it is expected that District Arterials in rural areas will carry significant numbers of heavy vehicles.

Traffic management measures that may be used to effectively achieve the desired through-movement and access functions include:

Parking and Stopping Restrictions

Location of intersections

Location of driveways and stock loading facilities

Stop and Give Way Controls

Traffic islands

Flush medians

Edge lining

Lane narrowing

Turn restrictions

Road widening

Carriageway widening to provide for turning movements

These measures may be implemented on all District Arterials listed in 8.A1.5.1 as may be required in order to overcome any adverse effects. In addition, minor realignment opportunities may be pursued at the time of subdivision or development of adjacent properties to improve the geometry of Rural District Arterials. In implementing these measures regard will be taken of safety and visibility factors associated with the higher speed environment which prevails in rural areas. [\[AM98\]](#)

8A1.5.2.2 Specific Route Development and Assessment Criteria

Routes most likely to require specific traffic management measures and treatment are as follows:

8A1.5.2.2.1 Whitford Road/Whitford Maraetai Road [\[AM98\]](#)

This route is the main link between the urban area and Beachlands/Maraetai, Pine Harbour and the Whitford Landfill. In the summer period it provides access to popular recreational facilities bordering the Tamaki Strait. A number of proposed roading improvements including a bypass of the Whitford town centre, have been identified in the Whitford Plan Change. Land will be protected through designation procedures accordingly.

8A1.5.2.2.2 Ormiston Road/Sandstone Road/Whitford Park Road

This is an alternative link between the urban area and the Whitford Maraetai Road. Major improvements have already been made to its vertical and horizontal alignment between Chapel Road and Whitford Park Road.

This route transitions from urban Regional arterial to District arterial standard in the vicinity of its intersection with Murphy's Road and to rural arterial at the proposed urban edge of the development area.

[AM50] [AM98]

8A1.5.2.2.3 Mill Road [AM98]

Mill Road is a two lane Rural Arterial which runs between Redoubt Road (at Hilltop Road) and the Papakura District Boundary. A transportation study is being undertaken to establish the specific details of a future multi modal link based on these two roads. This new link will provide capacity for future traffic growth in the corridor which will be generated by planned development in Flatbush to the north, and in Takanini/Papakura in the south. Once the preferred scheme is selected, land requirements for its implementation will be protected by designations and indicated accordingly on the planning maps. Papakura District Council will be concurrently protecting land requirements for that part of the route which will lie within its jurisdiction.

Accordingly, Appendix 1B to the planning maps shows that the route will be reclassified to Regional Arterial status in the future following upgrading. Refers also to 8.A3.3.2.13.