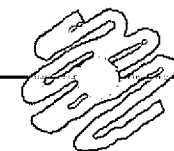


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THE STRUCTURE PLAN



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The Structure Plan

6.1 INTRODUCTION

The Structure Plan proposals reflect the strategic planning concepts as well as the objectives as set out in the previous sections.

The proposals for the Structure Plan are reflected in:

- Figure 15 : Conceptual Land Uses
- Figure 16: Proposed Roding Framework
- Figure 17 : Proposed Bus Route
- Figure 18 : Traffic and Pedestrians
- Figure 19 : Ped Shed (New and existing conditions)
- Figure 20 : Land Uses and Roding Framework
- Figure 21 : Artists' Impression of proposed retail focus area

6.2 DEVELOPMENT PROPOSALS

The development proposals provide guidelines for future land use development as well as the provision of a supporting roading framework. The proposals are indicative and flexible. The proposed spatial land use framework allows for the different land use types to overlap. Overlapping between the proposed industrial and limited business areas, is for instance, accommodated.

6.2.1 Land Uses

6.2.1.1 Rural Residential

Spatial Description	Density	Land Use Type
<ul style="list-style-type: none"> • area bounded by Newman and Spur Roads and the Weiti River • area south of Whangaparaoa Road and north of Weiti River • area north of War Memorial Park and Weiti River 	Minimum 5000 m ²	<ul style="list-style-type: none"> • Rural activities • Residential

The proposal is to allow subdivisions to a minimum of 5000m² in the rural residential area on the outskirts of the study area. This will form a transition from rural uses to urban uses and cater for a growing market for lifestyle accommodation close to town.



6.2.1.2 Rural Residential and Limited Business

Spatial Description	Density	Land Use Types
<ul style="list-style-type: none"> strip of land south of industrial area in Forge Road extending west of East Coast Road up to ALPURT 	Minimum 5000 m ²	<ul style="list-style-type: none"> rural activities residential home industries e.g. arts and crafts

The above proposed land use will provide a buffer zone between the industrial and rural residential development. The limited business activities will also provide additional work opportunities in the region.

It is suggested that up to 10 employees per site be allowed for limited business purposes with a maximum area of 30 m² per worker.

6.2.1.3 Residential

Medium Density

Spatial Description	Density	Land Use Type
<ul style="list-style-type: none"> west and south of Blanc Road area west of East Coast Rd. and south of SH1 a strip of land east of the new motorway and south of Wainui Rd. area east of Titan Place along SH1 	350 – 700 m ² per unit	<ul style="list-style-type: none"> single standing dwelling units



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High Density

Spatial Description	Density	Land Use Type
<ul style="list-style-type: none"> strip of land along southern river banks of Weiti River east of the War Memorial Park a pocket north of the proposed Curley Avenue extension and the river 	150 – 350 m ² per unit	<ul style="list-style-type: none"> apartments townhouses

The structure plan allows for a horseshoe shape of residential development around the north, west and south of the business core. This latches on to the few remaining houses in Blanc Road and Blue Gum Avenue.

Densities should generally increase towards the centre where amenity is provided by the river views and the attractiveness of the retail core.

It is proposed that the medium density residential development along Blanc Road accommodate cost effective housing in order to widen the range of house types in the region.

The high density residential development along the river will provide the opportunity to utilise the river banks as a scenic asset. The proposal is to develop apartments with a maximum height of three storeys, and to integrate it with commercial activities. Offices and shops can for example be developed on the ground floor with the apartments above. The “village character” of Silverdale should be maintained with the development of the high density residential units.

6.2.1.4 Retail/Commercial

Spatial Description	Land Use Type
<ul style="list-style-type: none"> expand the existing retail focus area to the west (the area bounded by SH1 to the south, the War Memorial Park to the west and the Weiti River) 	<ul style="list-style-type: none"> bulk retail retail offices service retail vehicle sales restaurants entertainment facilities

The proposed business area should be developed in such a way as to support the existing retail focus area. The existing and new development should form an integrated unit, which serves in all the needs of the local as well as the regional community.



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The existing and proposed retail areas should support each other by catering for different needs:

- the existing retail focus area maintain the character of providing for smaller retail e.g. boutiques etc. It is however proposed to uplift the current restriction on the maximum floor area of 250m².
- the proposed development area to the south provide for bulk retail supermarkets and leisure activities.

6.2.1.5 Industrial

Spatial Description	Land Use Type
<ul style="list-style-type: none"> • strip of land south of Forge Road • various pieces of land in Tavern, Blue Gum and Foundry Roads • the primary school site 	<ul style="list-style-type: none"> • service industry • manufacturing • retail and manufacturing

The proposed industrial development will form an integrated unit with the existing industrial area. Accessibility to these areas is essential in order to ensure viability.

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6.2.1.6 Public Open Space

Spatial Description	Land Use Type
<ul style="list-style-type: none"> • the property forming a peninsula along the Weiti River situated just west of the Palm Court (Pt 21 of 2385 m² in size) • strip of land along the banks of the Weiti River of between 10 and 40 m. 	<ul style="list-style-type: none"> • public park • walkways • riverbank protection

The proposed central public park will provide a focus area within the retail component with the opportunity for businesses to overlook on the riverbank and park, and will create a pleasant atmosphere for the public as well as shop owners.

Entertainment and recreational facilities can also be provided along the riverbanks.



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6.2.1.7 Low intensity, recreation/leisure related uses

Spatial Description	Land Uses
<ul style="list-style-type: none"> strip of land along the southern boundary of SH1, stretching from East Coast Road up to ALPURT 	<ul style="list-style-type: none"> active recreational/leisure activities and uses incidental thereto, which could include limited retail*¹. The following uses and adverse effects should not be allowed: <ul style="list-style-type: none"> high density commercial activities*² multiple access points from SH1 noxious activities

*¹ The proposed recreation/leisure related land use should form an integrated unit with the Silverdale War Memorial Park to the north. In this way an attractive entrance into Silverdale should be accomplished. It will also serve as a buffer zone between SH1 and the proposed residential development to the south.

*² High density commercial activities should not be allowed on this land due to the following reasons:

- The commercial/retail activities should be centralised to avoid urban sprawl of the retail area;

- The land uses along the entrance routes of Silverdale should be uniform and provide a pleasant and friendly character of the town.

6.2.2 Roading Framework and Traffic

It is essential that the proposed and existing land uses be supported by an effective roading framework, which would enhance the accessibility and traffic flow.

In light of the above, the following roading and traffic frameworks are proposed and should be allowed for during the development of effected properties:

6.2.2.1 Main Collector Roads

- A road connecting the Wainui Road / Waterloo Road intersection in the north with State Highway 1 in the south - east. This road runs from the Wainui Road / Waterloo Road intersection southwards and then south - eastwards to cross the Weiti River at a point north - east of the Bowling Club. It then runs eastwards crossing the proposed Curley Avenue extension and then sweeps south-east to connect with State Highway 1 with only left turn in and left turn out movements permitted. This proposed road would provide access to the proposed pocket of residential development just west of the War Memorial Park.
- Extending Small Road to the south roughly parallel to ALPURT. It is proposed to upgrade Small Road to serve



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as a main collector road. Only left turn in and left turn out movements from and into State Highway 1 are however permitted.

- A road linking Small Road with East Coast Road to the east.
- A link road between Curley Avenue and East Coast Road. This proposed road will cross the Weiti River and enhance the access to Silverdale.
- Extend Newman Road to provide a link between East Coast Road and the Duck Creek /Spur Road intersection. It is proposed to upgrade Newman Road to serve as a collector road for the rural residential area.
- It is also proposed to upgrade Spur Road to serve as a collector road.

6.2.2.2 Internal Link Roads

- Extend Blanc Road to the south to provide access to proposed residential development.
- Link Blue Gum Road with Foundry Road to the south.
- Link Furnace Place with Ingot Place to the east.
- A road linking Flexman Place with the southern end of Titan Place.
- A loop road between the southern end of Ingot Place and Forge road.

All the above roads and links are indicative and their alignment may vary to accommodate site development constraints and opportunities.

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6.2.2.3 Traffic Regulators

Although State Highway 1 will remain a main access road to Orewa and Whangaparaoa, it is essential to regulate the traffic in such a way as to create a safe environment for pedestrians. It must thus also serve the purpose of an urban road.

The following traffic regulators are proposed in order to ensure effective traffic flow and management as well as to create a pleasant atmosphere for pedestrians:

- Traffic lights at the following intersections :
 - East Coast Road (including the proposed link road to Curley Avenue) and State Highway 1.
 - Silverdale Street and State Highway 1.
 - Wainui Road and State Highway 1.
 - Whangaparaoa Road extension and State Highway 1.

Traffic lights at the Wainui Road / State Highway 1 intersection will require an amendment to the Silverdale North Structure Plan, since no right turns in and from Wainui Road are accommodated in the plan.

This intersection is however essential in providing access to the proposed residential development north of Silverdale. Traffic lights at this intersection will also enhance the traffic movement and provide safer access.

Traffic lights are preferred to roundabouts due to the following reasons:

- Shortage of space at the intersection between Silverdale Street and State Highway 1.



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- The volume of traffic in Wainui Road compared to that in State Highway 1 and the number of right turns in State Highway 1 is not large enough to allow for a balanced flow of traffic.
- Speed limit of 60 km/h in State Highway 1 (the portion from Hilltop to the new motorway (ALPUR)).

6.2.2.4 Pedestrian Traffic

In order to enhance the accessibility of properties by pedestrians and to create a pleasant atmosphere for them to move around, the following are proposed:

- Allowing for pedestrian crossings at the proposed traffic lights.
- Allowing for walkways (starting from the bus transfer point) in the following areas :
 - within the existing retail focus area
 - linking the existing retail focus area with the proposed development by allowing for pedestrian bridges across the Weiti River
 - along the river
 - along State Highway 1
- Provision of street furniture.
- Planting of trees along main roads.

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6.2.2.5 Parking

The following additional parking facilities are proposed:

- A park and ride facility east of the bowling club. The proposed park and ride can provide additional parking for the bowling club and adjacent sports facilities on weekends and at night. The proposed supermarket can also utilise the park and ride. (The property currently belongs to Council).
- Parking area receiving access from Curley Avenue, situated north of Weiti River (Site 1). This is private land and should coincide with future redevelopment of the site.

6.2.2.6 Bus Route

The proposed bus route is planned in such a way to provide easy flow for bus traffic and to meet both operational and passenger needs. The proposed route is characterised by two “loops” for bus traffic from different directions, namely:

- **“Wainui Road – Silverdale Street loop”**
 - accommodates south bound bus traffic travelling on State Highway 1 from Orewa
 - buses travel up in Wainui Road in a northerly direction
 - then southwards in Silverdale Street
- **“Curley Avenue – Silverdale Street loop”**
 - accommodates north bound bus traffic travelling on State Highway 1 and East Coast Road from Auckland



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- buses travel in northerly direction in the proposed link road between Curley Avenue and East Coast Road
- then southwards in Silverdale Street

The proposed park and ride facility can be utilised by bus traffic travelling in both directions on State Highway 1. A bus stop should however be provided along State Highway 1 opposite the proposed Park and Ride in order to serve bus traffic travelling to Auckland.

A **bus transfer point** is proposed in front of the post shop in Silverdale Street with sheltered seating facilities on the northern corner of Silverdale Street and Agency Lane. This bus transfer point will be able to accommodate at least four buses at a time. Car parking taken up by this allocation can be accommodated at the existing bus transfer point on the opposite side of the street, once the proposed bus transfer point is developed.

(A letter received from Stage Coach Auckland is attached as Annexure B)

6.2.2.7 Development Restrictions

The following development restrictions must be imposed:

- **Set-back zones** from the river banks as described in section two. The widths of the set-back zones need to be reviewed for each property adjacent to streams and overland flow paths by calculating the stability of the stream bank, either as part of a more detailed site investigation prior to subdivision or as part of a resource consent application after subdivision.

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- **Specific site investigations** to be executed on land situated in Stability Zones B and C prior to development.

6.2.2.8 Engineering Services

As a result of the proposed spatial framework, which will guide the urban development, it is necessary to provide the following engineering infrastructure:

- augment bulk water supplies and extend the capacity of the water and sewerage systems in the medium to long term.
- stormwater management systems designed in such a way as to infiltrate surface water runoff rather than pipe it to the river.
- provide electricity infrastructure.
- In providing for future engineering services, consideration of the following should be taken :
 - land stability investigations
 - erosion control of river banks
 - design of stormwater systems which infiltrate surface water
 - protection of the ecological environment
 - protection of existing electricity infrastructure



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6.2.3 Implementation

6.2.3.1 Actions

The following actions must be taken by the Rodney District Council in order to implement the proposals as set out in the structure plan:

- Incorporate the Silverdale South Structure Plan into the District Plan.
- Purchase the land for the proposed public park.
- Reserve the land for the proposed park and ride facility, which the Council already owns.
- Designate the land for the proposed parking area in Curley Avenue, which will allow Council to purchase it at the time of site redevelopment or when the need arises.
- Designate various portions of land for the proposed walkways through the business core area.
- Designate land for the proposed roading framework.
- Undertake a water quality investigation for the Weiti River catchment area on a regular basis.
- Provide funds on the medium to long term budget for the Councils' contribution of proposed roads, bridges, walkways, bus transfer point and engineering services.
- Determine development contribution by developers for the above.
- Council should recognise the fact that the required measures should be taken to ensure the protection of the

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following environmental issues in association with the Auckland Regional Council:

- Ecological habitats;
- Aquatic environment;
- Heritage values;
- Coastal habitats.

The protection of the above mentioned environmental issues could involve further relevant studies and investigations.

- A stormwater management plan for the study area should be undertaken. This plan should take cognisance of the proposed land use and roading framework as set out in the structure plan.

6.2.3.2 Responsibility for Implementation

The implementation of the proposals set out in the Structure Plan will be undertaken through project development by both Council and the private sector. Some of the projects can be undertaken on a joint basis.

6.2.3.3 Implementation Period

The Structure Plan provides development guidelines for the medium to long term (15 to 20 years). The implementation



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period will also be determined by the initiatives of local developers. Priority projects may be executed within the next five years. However, changing circumstances will require regular updates of the plan. Council should allow for revisions every five years or sooner if required through circumstances.

6.3 COST IMPLICATIONS

The Structure Plan Proposals have been translated into numerous projects, which have been costed over a twenty year period. The summary of the envisaged projects is outlined in the table below, with details of individual projects provided in Annexure C.

TOTAL COSTS

PROJECT DESCRIPTION	COST ESTIMATE (\$)
Roading	5 235,000
Parking	585,000
Engineering services	5 200,000
Parks and other facilities	820,000
Other	18,000
TOTAL	11 858,000

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It must be noted that Council is not responsible for the implementing costs of all the above projects. Many of the above projects will be funded and implemented by the private sector. The estimated cost implication for Council is outlined in the following table.

RDC POTENTIAL SHARE

PROJECT DESCRIPTION	COST ESTIMATE (\$)
Roading	2 949,150
Parking	267,000
Engineering services	0
Parks and other facilities	480,000
Other	18,000
TOTAL	3 714,150

