WAIMAUKU STRUCTURE PLAN –

"TRANSPORT CONSTRAINTS & OPPORTUNITIES"

PREPARED FOR

RODNEY DISTRICT COUNCIL

BY

PROJENZ (2005) LIMITED

PROJECT NAME:	**Waimauku Structure Plan - "Transport Constraints & Opportunities"**
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CLIENT:	Rodney District Council
WRITTEN BY:	Dave Bennett
CHECKED BY:	S.J. Borlase, BE (Civil) CPEng MIPENZ
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PROFESSIONAL ENGINEERING PLANNING MANAGEMENT SERVICES

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1 Purpose

This document has been developed to support a "Constraints and Opportunities" report for future development at Waimauku. It is intended to represent a "snapshot" of the current situation based on existing knowledge, rather than include any new analysis. This information will be used in a second public consultation phase (of the Waimauku Structure Plan Process) which will identify options for the development of Waimauku.

2 Summary

Any future development of approximately up to 2,500 new dwellings will result in the number of trips generated in the area increasing by a factor of 10 to 20 times the current level. Any development of this scale will require its own significant transport network, comprising roads, walkways, and probably cycleways and infrastructure for public transport. It will also need to be integrated with the existing local road network and State Highway network.

Demonstrating integration of land-use and the proposed transport system would be a requirement of any Plan Variation to enable this type of development. Some specific factors which will make this challenging for Waimauku are:

- The effect that trips generated by any new development will have on the existing community.
- The interaction of State Highway 16 (SH16) with the existing local roads and community, which has already been identified by the community and the Council as worthy of investigation for improvement, regardless of any future major growth. (Issues include real and/or perceived hazards to vehicles and pedestrians and resulting impairment of access and mobility within the village.)
- The effect that trips generated by any new development will have on the operation of SH16.
- The transition from a predominantly rural environment to an urban environment where residents have different lifestyles and expectations of provision of infrastructure and services.

Any future population increase could provide some potential for increased patronage of public transport, and services could be improved if demand were sufficient.

It is recommended that as the proposed Structure Plan is developed, an Integrated Transport Assessment be developed concurrently. This is to ensure that the Structure Plan and any subsequent Plan Variation meet the requirements of ARTA's Integrated Transport Assessment guidelines[1], and also provide an interface to the State Highway system which comply with Transit New Zealand and Rodney District Council design standards.

3 Background

3.1 Current and Proposed Level of Development

Waimauku's current population is 930 (2006 Census). In the Waimauku village there are approximately 396 lots/dwellings, with sufficient space under current zoning for a further 308 lots/dwellings if development occurs at an intensity of 800m² (as proposed under "Variation 60 – Township Policy Areas" to the Proposed District Plan 2000).

[1] ARTA – "Integrated Transport Assessment Guidelines", Oct 2006

The proposed structure planning exercise will assess the feasibility any future development in the study area. There are no growth figures that are required to be met, however, the 6000 people (approximately 2,500 households) recommended to be reallocated in the Kumeu-Huapai Central Area Plan (2005) has been used as an upper limit for the purposes of this transport constraints and opportunities report. This does not mean in any way that the Council has accepted this figure for the future growth of Waimauku.

3.2 Village Layout

Waimauku has become developed on both sides of SH16.
Features of the village layout include:

- North of SH16 there are approximately:
  - 1/3 of the village's houses
  - 1/3 of the village's land currently zoned for residential development
  - approximately 10 retail businesses including a service station
  - the "triangle" shopping development incorporating a small supermarket and 14 shops

- South of SH16 there are approximately:
  - 2/3 of the village's houses
  - 2/3 of the village's land currently zoned for residential development
  - the primary school
  - community facilities included a lawn bowls club, tennis club, RSA, pony club and kindergarten

At the centre of the village there is a major intersection where SH16, Muriwai Road and Waimauku Station Road meet.

3.3 Existing Transport Infrastructure

State Highway 16

Waimauku has become developed on both sides of SH16. SH16 has a corridor width which varies between 30 and 50 metres and a speed limit of 70 km/h through the township. On SH16, the estimated annual average daily traffic (AADT) volume is 13,000 vehicles per day on the eastern side of the SH16 / Muriwai Road / Waimauku Rd intersection and 7,500 on the western side[2]. SH16 fulfils a number of roles including being the primary route between Auckland and Helensville and an alternative route to SH1 between Auckland and Wellsford.

SH16 / Muriwai Road / Waimauku Station Road Intersection

Features of the SH16 / Muriwai Road / Waimauku Rd Intersection:

- Approx 60% of vehicles approaching the intersection on SH16 travel straight through the intersection and carry on along SH16.[3]
- The estimated AADT on Muriwai Road is 7,200 vehicles per day and on Waimauku Station Road is 2,500[4]
- There is a horizontal curve in SH16 at the intersection, and a crest vertical curve on SH16 to the west, which partially obscure vision of oncoming traffic.

[2] Transit published data and RDC RAMM data
[3] GHD - "Waimauku Station Road / Muriwai Road / SH16 Intersection – Project Feasibility Report" Dec 2006
[4] RAMM, Feb 2007

- Muriwai Road provides access to Muriwai Beach and therefore has some periods of very high traffic demand. During these periods significant queuing occurs in traffic travelling to Waimauku as most traffic needs to execute a right turn onto SH16.
- While the intersection doesn't have a high accident record, the combination of geometry and travel speeds on SH16 mean that there are significant hazards for those crossing or turning right from Muriwai Road or Waimauku Station Road.

The nature of the highway through the town means that many local trips involve crossing SH16, which can be hazardous (either by motor vehicle, walking or cycling), but particularly for pedestrians as there is no pedestrian crossing.

Rodney District Council has commissioned investigations into improving the safety and performance of the intersection. A design and cost estimate of the preferred option of a roundabout (GHD, 2006) has been presented to Transit New Zealand, but no response has been received to date. Transit New Zealand has made no provision for improvements to this intersection or nearby sections of State Highway 16 in its 10 Year State Highway Forecast.

Public Transport Services

Waimauku is currently served by the 056, 065, 066 and 067 bus routes which operate between Helensville and Britomart. For commuters to the Auckland CBD, there are three services which leave Waimauku between 6:20am and 7:15am on weekdays, and three which leave Britomart between 4:45 and 6:45 pm. Travel times for these services vary between 50 and 65 minutes.[5]

The weekday off-peak services between Waimauku and the City are six from Waimauku and five from Britomart, with the latest services leaving Waimauku at 5:20pm and Britomart at 6:05pm. Travel times vary between 65 and 80 minutes, with the majority of services taking longer routes through Henderson and/or Massey. There is also one service per day (055) in each direction between Waimauku and New Lynn.

On weekends, there are four services in each direction between Waimauku and the City, with travel times between 57 and 74 minutes.

An informal Park and Ride facility exists in Waimauku, with capacity for approximately 15 cars. There is no surveillance or lighting provided to enhance security.

3.4 Current Community Concerns and Priorities Regarding Transport

Phase 1 consultation (October 2006) on the proposed Waimauku Structure Planning process highlighted the following primary concerns among the community regarding transportation. (A full report on the consultation feedback can be seen at: http://www.rodney.govt.nz/waimauku/report_feedback.pdf .)

Safety of Local Trips

Particular concerns were expressed about the safety of school pupils crossing SH16 to travel between their home and school, and also the safety when accessing school bus stops adjacent to the school.

Provision of Footpaths in Urban Areas

Concern was expressed that the footpath network expected to serve some recent developments had not been completed.

[5] MAXX Bus Timetable – March 2007

Safety of Transport in Rural Areas
It was suggested that footpaths / cycleways / bridle paths could be provided on some specified rural roads. It was also suggested that the current 100 km/h speed limit was inappropriately high for some rural roads. Speed humps were also suggested in some locations as a way to reduce travel speeds.

Provision of Public Transport Services and Facilities
Increased frequency / improved services of buses was suggested, as was provision of a Park & Ride facility for bus passengers. Provision of passenger rail services was also suggested, in some cases with services extended as far as Helensville.

Preservation of the Character of the Village
Some indicated that they didn't want the character of the village to be damaged by high volumes of traffic generated by any new development.

4 Infrastructure Requirements Of Any Future Development

4.1 Local Road Network

Likely Infrastructure Requirements:

- Internal transport system comprising roads, walkways, cycleways, public transport facilities, parking facilities.
- Interfaces with and likely upgrades to existing local road network.

Likely Issues Requiring Resolution:

- Consideration needs to be given to the location of retail businesses, recreational and educational facilities relative to the new residential developments.
- Hierarchy and function of new roads, and changes to hierarchy and function of existing roads.

ARC's and ARTA's concerns are likely to include (but are not necessarily limited to):

- Access to Muriwai Regional Park
- The extent to which the overall layout provides attractive access for residents to likely public transport routes.
- The extent to which the density of properties contributes to the viability of public transport services.

4.2 Access to / Interaction with SH16

Likely Infrastructure Needs:

- Changes in function of and possible upgrades to existing intersections of SH16 with Waimauku Station Road, Muriwai Road and/or Factory Road.
- New intersections where any new roads meet SH16.
- Possible new / upgraded walking, cycling or public transport facilities within the SH16 corridor.
- Possible revised speed limits.

Likely Issues Requiring Resolution:
Transit NZ's concerns are likely to include (but not necessarily be limited to):

- Maintaining levels of service for SH16 through-traffic (especially travel times).
- Any new hazards resulting from altered or new intersections with SH16.

- "Downstream" effects of development-induced traffic volume increase in areas such as Kumeu / Huapai.
- Potential for reverse-sensitivity.
- Adverse effects on perception of SH16 as alternative route from Auckland to Wellsford.

5 Likely Public Transport Needs Of Any Future Development

5.1 Improvements and Changes to PT Services

- Any future population increase could provide some potential for increased patronage of public transport. (Any future development could double or triple the combined population of Waimauku and Helensville.) If patronage was sufficient, bus services could be improved by extending operating hours and / or increasing frequency.

5.2 Improvements and Changes to PT Infrastructure

- As well as appropriate bus stops and shelters, there may be potential for establishment of a high-standard Park and Ride facility in the Waimauku area, to service both some of any new development and the surrounding rural areas.

Note: - Potential for Increased Use of Rail

- ARTA's Rail Development Plan indicates that by 2016 passenger rail services could be extended to Kumeu (2 trains per hour), but no further. (The extent of double-tracking by then would be Swanson.) The plan also indicates that by 2030, services could extend to Helensville if it becomes a "high-density population centre". It may be difficult to justify provision of rail services over buses from the perspectives of both overall cost (including infrastructure) and travel time.

6 Statutory Requirement To Integrate Land Use And Transport

There is a statutory requirement for major developments in the Auckland Region to demonstrate Integration of Land Use and Transport. Attachment 1 explains the legislative background, the processes and parties likely to be involved in meeting this requirement.

7 Recommendations

It is recommended that as the proposed Structure Plan is developed, an Integrated Transport Assessment be developed concurrently, addressing the issues outlined in this document. This is to ensure that the Structure Plan and any subsequent Plan Variation meet the requirements of ARTA's Integrated Transport Assessment guidelines[1], and also provide a safe and practicable interface to the State Highway system. The following agencies (as well as other key stakeholders) should be involved in the development of the Integrated Transport Assessment:

- Transit New Zealand
- Land Transport New Zealand
- Auckland Regional Council
- Auckland Regional Transport Authority

8 Related Projects

The following related projects are planned or currently being carried out. Developments from these should be monitored so that the Integrated Transport Plan is based on the most current data and recognises any related initiatives.

- Development of new Auckland Region Traffic Model – ARC (coarse modelling scheduled to be available from April 2007)
- Development of "Northern and Western Rodney Transportation Planning Model", Beca, commissioned by Rodney District Council (planned completion July 2007)
- State Highways 1 and 16 Strategy Study (Auckland to Wellsford) – Transit NZ
- Park and Ride Study – Silverdale North – Rodney DC (scope includes Western Rodney) (planned completion December 2007)

Attachment 1 – Land-Use Transport Integration

1 Legislative Background

The *Local Government (Auckland) Amendment Act 2004* requires the Council to change the Rodney District Plan prepared under the Resource Management Act 1991 to integrate the land transport and land use provisions and make those provisions consistent with the Auckland Regional Growth Strategy.

Under the *Land Transport Act 1998,* regional land transport committees develop regional land transport strategies. Under the *Land Transport Management Act 2003*, Transit NZ and regional and local councils prepare land transport programmes for the purposes of seeking financial assistance from Land Transport NZ.

Land use planning is primarily managed under the *Resource Management Act 1991*, with the development of regional policy statements and regional and district plans. Growth strategies generally developed at the regional level, also have a strong influence on land use development and transport planning. The *Local Government Act 2002* provides powers for the planning of the transport system and land use, particularly through the development of long-term council community plans.

While the *Land Transport Act, Land Transport Management Act,* the *Local Government Act,* and the *Resource Management Act* (RMA) have similar objectives, the functions are carried out under separate processes and often in isolation from each other. Changes to legislation have intended to address this problem, in particular:

- Local authorities may use the long-term council community plans consultation process for the purposes of consulting on their land transport programmes.
- Regional councils have a specific function of "**strategic integration of infrastructure with land use** through objectives, policies and methods".
- When local authorities are preparing or changing plans that they must have regard to "management plans and strategies prepared under other Acts".

2 Roles of Authorities Involved in Land-Use Transport Integration:

Land Transport New Zealand
In pursuing its statutory objective and carrying out its functions, Land Transport NZ participates in planning processes through influencing long-term council community plans and decisions on plan changes and variations, applications for land use consents and notices of requirement for designations. Under the *Resource Management Act 1991*, Land Transport NZ has no specific function, duty or power but can be involved as a 'person' in both informal (prelodgement) and formal (submissions and hearings) processes for subdivision and land use development, plans and policies. Land Transport New Zealand will take an interest in projects on a case by case basis in order to obtain sustainable and integrated outcomes for the transport network.
(Source: Participation in land Use Planning Process – Land Transport New Zealand, 2006)

Transit New Zealand
Transit is strongly focused on:

- Developing and vigorously protecting an integrated hierarchy of roads at national, regional and local levels;
- Recognising state highways at the top of the roading hierarchy and taking strong action to protect their strategic functions, in order to promote economic development and social and environmental well being;
- Ensuring Transit is involved at the beginning of development proposals and local authority planning to ensure the development of integrated land use and transport solutions; ensuring Transit is recognised as an affected party for land use developments that generate traffic onto or near state highways; and
- Actively participating in Resource Management Act 1991 and Transit New Zealand Act 1989 processes, in particular, to oppose any unacceptable reduction in the function of state highways caused by land use developments seeking direct or indirect access to the state highway network.

(Source: Planning Policy Manual Supplement, September 2005, Transit New Zealand.)

Auckland Regional Transport Authority
ARTA is recognised as an "affected party" (under S93 of the RMA when consents are publicly notified)
as it has a statutory responsibility under the Local Government (Auckland) Amendment Act (2004) to plan, fund and develop the Auckland regional land transport network in a way that contributes to an integrated, safe, responsive and sustainable land transport system for the Auckland region. ARTA also expect that a consent authority would consider ARTA an affected party under S94 (when a consent is not notified) due to its responsibility to plan, fund and develop the Auckland region's transport network.
(Source: Integrated Transport Assessment Guidelines, 2006)

Auckland Regional Council
The ARC seek to ensure consistency of local authority transport initiatives with the Auckland Regional Land Transport Strategy 2005 which "recognises that better integration of land use and transport, and the development of an urban form which is less reliant on motor vehicles, are critical in retaining good accessibility while reducing the environmental impact of transport". The Council participates in RMA processes for transport projects, subdivision and land use development, and development of plans and policies.

Rodney District Council
The Council has multiple roles relating to integration of land use and transport in that it:

- Provides and manages the local transport network.
- Advocates for the community on wider transport issues such as State Highways and public transport.
- Determines the contents of District Plan (zoning rules) and administers the process for approval of land use change.
- Has a responsibility to support the ongoing economic development of the District.

The Council will often need to take a defensive position against one or more of the other agencies, as they have no specific interest in supporting development in Rodney, and will often take a position opposing the proposed land use change.