



**AGENDA FOR A MEETING OF THE NEW LYNN COMMUNITY BOARD TO BE HELD  
IN THE NEW LYNN COMMUNITY CENTRE, 45 TOTARA AVENUE, NEW LYNN,  
WAITAKERE, ON MONDAY, 4 DECEMBER 2006,  
COMMENCING AT 7.30 PM.**

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**1 APOLOGIES**



**2 CONFIRMATION OF MINUTES**

Meeting Minutes - Monday, 30 October 2006

**RECOMMENDATION**

That the minutes of the Meeting of the New Lynn Community Board held on Monday, 30 October 2006, as circulated, be taken as read and now be confirmed.



**3 URGENT BUSINESS**

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 provides that where an item of business is not on the agenda, it may only be dealt with at the meeting if:

- (i) the Board by resolution so decides; and
- (ii) the Chairman has explained at the beginning of the meeting (when open to the public) that the item will be raised for discussion and decision, why the item is not on the agenda, and why it cannot be delayed until a subsequent meeting.

The Board may make a decision on a matter determined to be urgent.

**NOTE:** Urgent business need not be dealt with now and may be delayed until later in the meeting.



#### 4 **PUBLIC FORUM**

For guidance of Community Board Members, the Council's Standing Orders have the following provisions in regard to Public Forum.

- (i) members of the public wishing to address the Board in Public Forum shall furnish their names to the Chairman at the beginning of the meeting; and
- (ii) the Chairman shall determine the order of speakers, and allow five minutes for speaking time;
- (iii) questions by members are to be confined to obtaining information or clarification on matters raised by the speaker.

Section 46A(7A) of the Local Government Official Information and Meetings Act 1987 provides that no resolution, decision, or recommendation may be made in respect of any specific item of business not on the agenda except to refer the items to a subsequent meeting for further discussion. Therefore, no decision may be made on matters raised in Public Forum. However, written reports on matters raised may be requested from the Chief Executive Officer.



#### 5 **CHAIRMAN'S REPORT**

This will be our last official Board meeting of the year.

##### **TOLLING PROPOSAL**

*A1* Another busy month learning about Transit New Zealand Tolling for the Western Ring Route. We as one of the most affected parties need to oppose this suggested tolling. It is unfair for the residents to pay while other parts of Auckland need not contribute but have had tremendous improvements to their roading network over the years. We have been neglected for far too long yet have been promised this route for many years. The existing Hillsborough Road is totally inadequate, as attached at page A1.

##### **LOCAL BODY GOVERNMENT**

This undemocratic process of no public consultation deciding on the future of Auckland contravenes the Local Government Act 2002. It runs rough shot over its citizen's democratic right.

##### **NATIONAL STADIUM**

Again the same situation. No consultation, lack of information, or the final cost to ratepayers or taxpayers. But my personal concern is the yearly running cost. It must also have an impact on many existing facilities such as Mt Smart Stadium, the Showgrounds in Greenlane which is due to be revamped, Manukau and North Shore Stadiums and in a smaller way, perhaps our own stadium.

## **GOVERNMENT RATES INQUIRY**

Government released the terms of reference, membership and other details of the independent inquiry into local government rates. There is no provision to look into what council should or should not be doing. This should have been included as was anticipated by many ratepayers.

## **AUCKLAND REGIONAL COUNCIL PARKS CONSULTATION**

A2-A12

I received an Auckland Regional Council discussion document on the proposed Waitakere Ranges Regional Parks Management Plan. This is the first part of the consultation. We are asked to comment if we wish. Your direction please. Submissions must be in by 15 December 2006, as attached at pages A2 to A12.

## **VERBAL REPORT ON OTHER MEETINGS**

At the time of writing this report the following meetings were planned to be held.

- Glengary Road residents meeting - issue Subdivision.
- Long Term Council Community Plan 2007/2008 budget workshop.

## **PROPOSED AUCKLAND REGIONAL PEST MANAGEMENT STRATEGY 2007 - 2012: CALL FOR SUBMISSIONS**

A13-A14

A letter is attached at pages A13 to A14.

## **FINAL**

Tomorrow 5 December 2006 will be St Nicholas day. Last year we had the unexpected pleasure of his visit to our Board meeting which fell on his birthday. The year 2006 is coming to a closure and the traditional season and holidays are upon us. I wish to acknowledge the staff, especially the staff we deal with almost daily, Jack Burton, Charlie Inggs, Michael Riley and Jean Andrews and last but not least our Community Board Secretary, Audrey Chan. Without her ever ready smile, our meetings would not be the same. Thank you all, the Community, Councillors, Board members, staff and their families. Have a safe and enjoyable Christmas and New Year.

Happy Holiday








## **RECOMMENDATION**





That the Chairman's Report be received.





Pim van der Voort, JP  
**CHAIRMAN**










6 **COMMITTEE SECRETARY'S REPORT**

	<b>Issue</b>	<b>Comments</b>	<b>Reporting Council Officer</b>
1.	Tamariki Playground Upgrade Officer's Report	The playground has now been installed and opened to the public. Landscape planting will be carried out in 2006/2007.	David Barker  836 8000 Ext 8306
2.	Olympic Park, Avondale Stream Restoration Officer's Report	Planting has been completed along the banks of the Stream. Construction of the viewing structures and boardwalk is complete.	Debbie Chapman  836 8000 Ext 8303
3.	New Lynn Township Streetscape Design-Great North Road, from Hugh Brown Drive/Todd Triangle to Rewarewa Walkway/Memorial Drive Officer's Report	An investigation on the upgrade of the nine light poles to match the new lighting in Todd Triangle and Great North Road is currently being undertaken by a lighting consultant. An update with cost estimates for new lighting and other small improvements will be presented back to the Board for comment in February 2007. There is a budget of \$100,000 in the 2006/2007 financial year for minor improvements only to this section of Great North Road.	Andreas Lilley  836 8000 Ext 8553
4.	Olympic Park New Bridge and Structures Officer's Report	The bridge structure was positioned on site in November 2006. Works are continuing with the completion of decking and installation of tension cables. Completion will be achieved by the end of December 2006.	Andreas Lilley  836 8000 Ext 8553
5.	Barrons Green Car Park Development Officer's Report	This project is proceeding to tender in December 2006 with a start of construction anticipated for January 2007.	Andreas Lilley  836 8000 Ext 8553
6.	Barrons Green Playground Upgrade Officer's Report	The renewal of the play facility at Barrons Green is planned for the 2006/2007 financial year. Initial consultation was carried out in April 2006. The final concept design has been sent to all residents within a 500 metre radius of the Reserve.  Building consent is currently being sought. Physical works are proposed to be carried out in February/March 2007.	David Barker  836 8000 Ext 8306
7.	Rewarewa Walkway Design Officer's Report	The initial investigations have revealed issues with the possible provision of a walkway in the area. Further investigations are now underway. A report will be presented to the Board in early 2007.	Grant Jennings  836 8000 Ext 8537

	Issue	Comments	Reporting Council Officer
8.	Vodafone NZ Limited Structures at Lawson Park, Archibald Park and Golf Road Domain  2 May 2005  Resolution No. 721/2005	Negotiations between Vodafone NZ Limited and Council on the terms and conditions of a telecommunications licence have not been concluded. Council is now in the process of negotiating with three sports clubs based at each of the three parks, regarding a share of the licence fee.	Warren Ogilvie  836 8000 Ext 8561
9.	Naming of Internal Access Road at Olympic Park  3 July 2006  Resolution No. 1270/2006	At its August 2006 meeting the City Development Committee was presented with a report seeking approval for the naming of the internal access road at Olympic Park.  The City Development Committee approved that this access road be named "Portage Eco Way".  A direction sign is being prepared for the internal access road and consultation will be undertaken with the parties involved, prior to installation.	Tracey Hamilton  836 8000 Ext 8969
10.	Timber Pergola at Manawa Wetland  29 May 2006  Resolution No. 913/2006	Designs for the pergola have been completed. Building consents are currently being processed. Construction will commence once consents have been granted.	Laura Mitchell / Katherine Slack  836 8000 Ext 8779
11.	Community Board Minor Parks Projects  2 October 2006  Resolution No. 1875/2006	The status of each project is as follows:  <ul style="list-style-type: none"> <li>• <b>Green Bay Community Corner:</b> Installation of the seat will be carried out in November 2006;</li> <li>• <b>Prospect Park:</b> Installation of the tables will be carried out in November 2006;</li> <li>• <b>Harold Moody Reserve:</b> Installation of these seats will be carried in November 2006;</li> <li>• <b>Taupiko Reserve:</b> Submissions concerning this project are currently being considered;</li> <li>• <b>Poturi Reserve Swings:</b> Awaiting confirmation from Poturi Stream Neighbourhood Support on their commitment.</li> </ul>	Laura Mitchell / Katherine Slack  836 8000 Ext 8779

	Issue	Comments	Reporting Council Officer
12.	Rankin Avenue - Improved Lighting for a Pedestrian Crossing and Re-painting of Road Markings 3 July 2006 Public Forum	The road markings in Rankin Avenue have now been re-marked. The pedestrian crossing in Rankin Avenue will be placed on the 2006/2007 works programme for installation of new crossing flood lighting.  This will be completed by 1 February 2007.	Paul Schischka  836 8000 Ext 8742
13.	Intersection of Glendale Road and Oates Road 31 October 2005 Resolution No. 2076/2005	Further investigations into this intersection show that the limited reserve width and the gradient of the surrounding land make the installation of a roundabout or seagull island impractical without a very high level of expenditure.  Practical options in this location are limited to the status quo, reconfiguration of the crossing to a more conventional 'T' junction arrangement or a change to the existing priority control type.  A full report on this matter will be presented to the Board at its meeting on 4 December 2006.	Paul Schischka  836 8000 Ext 8742
14.	Rua Road Pedestrian Crossing 31 July 2006 Public Forum	The request will be investigated in November 2006.  Accident investigation and pedestrian counts will be carried out and a report will be submitted to the Board's 5 March 2007 meeting.	Hussam Abdul-Rassol  836 8000 Ext 8961
15.	Traffic Safety Issues Outside 155 and 157 Golf Road 30 October 2006 Resolution No. 2049/2006 Public Forum	This is being investigated and a report will be submitted to the Board's 5 February 2007 meeting.	Duncan Campbell  836 8000 Ext 8019

	Issue	Comments	Reporting Council Officer
16.	<p>Proposed Lease of Former Wardens Office to the Maori Wardens</p> <p>30 October 2006</p> <p>Resolution No. 2056/2006</p>	<p>This report was referred to the Finance and Operational Performance Committee, which passed the following resolution at its meeting held on 6 November 2006:</p> <p><i>“1. That the Proposed Lease of the Former Waitakere Wardens Office to the Maori Wardens report be received.</i></p> <p><i>2. That the Chief Executive Officer be given authority to negotiate and execute a lease with the Maori Wardens for the building located at 3090 Great North Road, New Lynn (Lot 3 DP 58669).</i></p> <p><i>3. That a report be brought back to City Development Committee on progress of the contract of Safe Waitakere with the Maori Wardens.”</i></p> <p>2110/2006</p>	<p>Tina Hemsworth</p> <p> 836 8000</p> <p>Ext 8130</p>
17.	<p>Traffic Problem in Woodglen Road near Woodvale Intersection</p> <p>3 April 2006</p> <p>Resolution No. 550/2006</p> <p>Public Forum</p>	<p>Options for the improvement is now under consultation. The recommended option will be reported to the Board's 5 February 2007 meeting.</p>	<p>Adam Moller</p> <p> 836 8000</p> <p>Ext 8750</p>
18.	<p>Road Survey on Gardner Road Calming Effects on Willerton Avenue and Parker Avenue</p> <p>1 May 2006</p> <p>Resolution No. 694/2006</p> <p>Public Forum</p>	<p>The traffic counts were undertaken during November 2006.</p> <p>A report will be presented to the Board's 5 February 2007 meeting.</p>	<p>Adam Moller</p> <p> 836 8000</p> <p>Ext 8750</p>

<b>REPORTS PENDING</b>			
<b>Subject</b>	<b>Date Requested</b>	<b>Report Due</b>	<b>Reporting Officer</b>
Project Twin Streams Four Monthly Progress Report	1 August 2005 Resolution No. 1445/2005  Last updated 30 October 2006	5 March 2007	Tony Miguel  836 8000 Ext 8294
Hutchison Avenue - Street Litter and Weeds in Kerbs and Channels	4 September 2006 Resolution No. 1636/2006  Public Forum	5 February 2007	Grant Jennings  836 8000 Ext 8537
Council/Police Liaison Group	4 September 2006 Resolution No. 1638/2006  Public Forum	5 February 2007	Mark Maxlow  836 8000 Ext 8713
Glengarry Road Subdivision Issues	30 October 2006 Resolution No. 2048/2006  Public forum	5 February 2007	Roger Wilson  836 8000 Ext 8086
Facilities in the Park for BMX Bikes	30 October 2006 Public Forum	5 February 2007	Grant Jennings  836 8000 Ext 8537

### **RECOMMENDATION**

That the Committee Secretary's Report for 4 December 2006 be received.

Report prepared by: Audrey Chan, Committee Secretary.



## **7 RANKIN AVENUE, NEW LYNN - NEW NO STOPPING CONTROLS**

### **PURPOSE OF THE REPORT**

The purpose of this report is to seek the New Lynn Community Board's approval for four new No Stopping controls outside number 10 Rankin Avenue, New Lynn.

### **BACKGROUND**

The business owner at number 10 Rankin Avenue contacted Council with concerns regarding vehicles constantly parking close to the vehicle crossings and obstructing the access to the business building. The business owner has requested Council consider installing No Stopping controls next to the driveways to ensure drivers are able to gain sufficient sight distance when exiting on to Rankin Avenue.

## STRATEGIC CONTEXT

Council's 'Integrated Transport and Communication' platform provides the strategic context for this report. The vision is for public transport and communications systems that provide fast, effective services, and for city travel facilitated by integrated, environmentally responsible, and innovative design, with a focus on meeting the essential needs of all, for access, communication, and safety.

No Stopping controls can be applied to ensure efficient, safe movement on roads by keeping traffic lanes and visibility lines clear.

## ISSUES

The business owner mentioned that vehicles are constantly parking very close to the driveways, which reduces the sight distance for drivers when exiting on to Rankin Avenue. This causes a safety hazard.

Rankin Avenue is classified as a collector road, which has estimated 12,000 vehicle movements per day. The business owner stated that vehicles parked alongside Rankin Avenue belong to commuters using the New Lynn Transport Centre, which indicates that vehicles will park for long hours next to the subject vehicle crossings.

A Council engineer visited the site and investigated the issue. According to Land Transport New Zealand's 'Guideline for Visibility at Driveways', for the type of driveways such as number 10 Rankin Avenue, drivers are supposed to gain sight distance of at least 45 metres in order to enter into the adjacent road lane safely. Based on this requirement, it is proposed to install a series of 'No Stopping Controls' next to the driveways of number 10 Rankin Avenue in order to ensure that drivers exiting from those driveways to Rankin Avenue are able to gain sufficient sight distance.

The occupants of properties adjacent to the proposed parking control were consulted regarding the proposed changes. No replies have been received.

A15 The locations of the proposed new parking control are shown on the aerial photograph as attached at page A15.

## Decision Making

This proposal is presented with due consideration of relevant criteria, as promulgated in Section 77 of the Local Government Act 2002. The principal community outcome to be derived is an improvement in the level of traffic management resulting in an increase in safety and convenience for residents of the City.

## RESOURCES

The proposed parking controls can be implemented under the Annual Plan 2006/2007 maintenance budgets.

## CONCLUSION

The proposed new No Stopping controls are recommended to ensure that the vehicles are parked in a defined area without obstructing the adjacent vehicle crossings.

### RECOMMENDATIONS

1. That the Rankin Avenue, New Lynn - New No Stopping Controls report be received.
2. That in relation to **RANKIN AVENUE, NEW LYNN:**
  - (a) That, in accordance with the powers conferred by virtue of the Local Government Act 1974, the Land Transport Act 1998, the Transport Act 1962 and the Waitakere City Council Bylaw No.7, 1991 - Traffic, the following controls be now resolved to be specified and imposed, namely,
    - (i) on the east kerb line of **RANKIN AVENUE** starting from the north edge of the vehicle crossing which is 77 metres further north from point where the east edge of the kerb line of **RANKIN AVENUE** meets the north edge of the kerb line of **MARGAN AVENUE** and alongside the kerb line extend to a point 12 metres further north a new **NO STOPPING AT ALL TIMES** control be put in place.
    - (ii) on the east kerb line of **RANKIN AVENUE** starting from the south edge of the vehicle crossing which is 122 metres further north from point where the east edge of the kerb line of **RANKIN AVENUE** meets the north edge of the kerb line of **MARGAN AVENUE** and alongside the kerb line extend to a point 4 metres further south a new **NO STOPPING AT ALL TIMES** control be put in place.
    - (iii) on the east kerb line of **RANKIN AVENUE** starting from the north edge of the vehicle crossing which is 131 metres further north from point where the east edge of the kerb line of **RANKIN AVENUE** meets the north edge of the kerb line of **MARGAN AVENUE** and alongside the kerb line extend to a point 12 metres further north a new **NO STOPPING AT ALL TIMES** control be put in place.
    - (iv) on the east kerb line of **RANKIN AVENUE** starting from the south edge of the vehicle crossing which is 161 metres further north from point where the east edge of the kerb line of **RANKIN AVENUE** meets the north edge of the kerb line of **MARGAN AVENUE** and alongside the kerb line extend to a point 4 metres further south a new **NO STOPPING AT ALL TIMES** control be put in place.
3. That the appropriate signage and/or road markings, in accordance with the provisions of Land Transport Rule: Traffic Control Devices 2004 - Rule 54002 hereby be approved to be put in place to properly establish, delineate and record the said parking limitations and controls.

Report prepared by: Jinjiang Zhong, Transport Engineer.



## 8 NORTHALL ROAD, NEW LYNN - NEW NO STOPPING CONTROL

### PURPOSE OF THE REPORT

The purpose of this report is to seek the New Lynn Community Board's approval for a new No Stopping control in Northall Road, New Lynn.

### BACKGROUND

A resident has contacted Council requesting that a new No Stopping control be installed in the street next to the existing no stopping line on Northall Road, where it intersects with Titirangi Road. This is to prevent drivers from parking in a location which will cause hazards to the flow of traffic.

### STRATEGIC CONTEXT

Council's 'Integrated Transport and Communication' platform provides the strategic context for this report. The vision is for public transport and communications systems that provide fast, effective services, and for city travel facilitated by integrated, environmentally responsible, and innovative design, with a focus on meeting the essential needs of all, for access, communication, and safety.

No Stopping At All Times controls can be applied to ensure efficient, safe movement on roads by keeping traffic lanes and visibility lines clear.

### ISSUES

The lane width of Northall Road, where it intersects with Titirangi Road is 4.1 metres and there is a centre island in the middle of the road. The resident is concerned that the end point of the existing no stopping line on the south side of the kerb line, which starts from the intersection with Titirangi Road, is too close to the end point of the island. Therefore if a vehicle is parked immediately next to the existing no stopping line, further traffic will be obstructed due to the insufficient clearance between the parked vehicle and the existing island.

An engineer's survey reveals that the length of the carriageway between the end point of the island and the end point of the existing no stopping line is 5 meters. If one vehicle is parked next to the no stopping line, the parked vehicles will cause hardship for the flow of traffic to manoeuvre between the parked vehicle and the existing island. Also it is possible for vehicles to run over the island in order to pass any parked vehicle due to the limited available space between the island and the parked vehicle.

It is therefore recommended to extend the existing no stopping line to a location which will eliminate the hazard from the parked vehicle to the flow of traffic.

A16 The locations of the proposed 'No Stopping' controls are indicated as attached at page A16.

### Decision Making

This proposal is presented with due consideration of relevant criteria, as promulgated in Section 77 of the Local government Act 2002. This principal community outcome to be derived is an improvement in the level of traffic management resulting in an increase in safety and convenience for residents of the City.

## RESOURCES

The proposed road markings can be implemented under the Annual Plan 2006/2007 transport assets maintenance budget.

## CONCLUSION

The proposal to install No Stopping controls in Northall Road is recommended to improve road user safety.

## RECOMMENDATIONS

1. That the Northall Road, New Lynn - New No Stopping Control report be received.
2. That in relation to **NORTHALL ROAD, NEW LYNN**:
  - (a) That, in accordance with the powers conferred by virtue of the Local Government Act 1974, the Land Transport Act 1998, the Transport Act 1962 and the Waitakere City Council Bylaw No.7, 1991 - Traffic, the following controls be now resolved to be specified and imposed, namely,
    - (i) on the south kerb line of **NORTHALL ROAD** starting from the end point of the existing **NO STOPPING LINE** and extending to a point a further 7 meters east along the south kerb line a new **NO STOPPING AT ALL TIMES** control be put in place.
3. That the appropriate signage and/or road markings, in accordance with the provisions of Land Transport Rule: Traffic Control Devices 2004 – Rule 54002 be hereby approved to be put in place to properly establish, delineate and record the said parking control.

Report prepared by: Jinjiang Zhong, Transport Engineer.



## 9 ARAWA STREET, NEW LYNN - NEW TEMPORARY BUS STOPS

### PURPOSE OF THE REPORT

The purpose of this report is to seek the New Lynn Community Board's approval for two new temporary bus stops in Arawa Street, New Lynn.

### BACKGROUND

Council plans to establish new temporary bus stops to provide formalised bus stops near railway stations. This will enable buses to replace trains while work on the double-tracking of the Western Line is taking place, and in other cases when trains are replaced by buses. This will give certainty and reassurance to rail customers of service continuity. Currently buses replace trains in areas where double-tracking work is taking place on Saturdays and public holidays.

## STRATEGIC CONTEXT

Council's 'Integrated Transport and Communication' platform provides the strategic context for this report. The vision is for public transport and communications systems that provide fast, effective services and for city travel facilitated by integrated, environmentally responsible and innovative design, with a focus on meeting the essential needs of all, for access, communication, and safety.

Correctly marked and sign posted bus stops are desirable to both notify public transport users of the pick up and drop off locations for bus services and to keep these locations clear of other vehicles.

## ISSUES

Council and Stagecoach staff have travelled around the area near the Fruitvale rail station and identified two locations as appropriate places to establish proposed temporary bus stops.

It is proposed to mark temporary bus stops at the following locations:

1. on the north kerb line of Arawa Street outside number 73
2. on the south kerb line of Arawa Street between the vehicle crossings of number 76 and 78.

A consultation letter was sent to occupants of properties adjacent to the proposed new bus stop. No reply was received.

A17

The locations of the proposed changes are indicated as attached at page A17.

## Decision Making

This proposal is presented with due consideration of relevant criteria, as promulgated in Section 77 of the Local Government Act 2002. The principal community outcome to be derived is an improvement in the level of traffic management resulting in an increase in safety and convenience for residents of the City.

## RESOURCES

The proposed new bus stops can be implemented under the Annual Plan 2006/2007 road maintenance budgets.

## CONCLUSION

The proposal to install two new temporary bus stops in Arawa Street is recommended to allow continuity of public transport services during disruptions to train services arising from the rail duplication project.

## RECOMMENDATIONS

1. That the Arawa Street, New Lynn - New Temporary Bus Stops report be received.
2. That in relation to **ARAWA STREET, NEW LYNN**:
  - (a) That, in accordance with the powers conferred by virtue of the Local Government Act 1974, the Land Transport Act 1998, the Transport Act 1962 and the Waitakere City Council Bylaw No.7, 1991 - Traffic, the following controls be now resolved to be specified and imposed, namely,
    - (i) on the north kerb line of **ARAWA STREET** starting from a point 15 metres west from the west edge of the vehicle crossing of 73A **ARAWA STREET** and extending west along the kerb line to a point 15 meters further west a new **TEMPORARY BUS STOP** parking control be put in place.
    - (ii) on the south kerb line of **ARAWA STREET** starting from the east edge of the vehicle crossing of 76 **ARAWA STREET** and extending west along the kerb line to the west edge of the vehicle crossing of 78 **ARAWA STREET** a new **TEMPORARY BUS STOP** parking control be put in place.
3. That the appropriate signage and/or road markings, in accordance with the provisions of Land Transport Rule: Traffic Control Devices 2004 - Rule 54002 be hereby approved to be put in place to properly establish, delineate and record the said parking limitations and restrictions.

Report prepared by: Jinjiang Zhong, Transport Engineer.



## **10 INTERSECTION OF OATES ROAD AND GLENDALE ROAD, GLEN EDEN**

### **PURPOSE OF THE REPORT**

The purpose of this report is to seek approval in principle from the New Lynn Community Board to reconfigure the intersection of Oates Road and Glendale Road, Glen Eden.

### **BACKGROUND**

At its meeting held on 31 October 2005 the New Lynn Community Board considered a report on traffic issues at the intersection of Glendale Road and Oates Road. The report recommended that the intersection be reconfigured to reduce the number of accidents that were occurring at the intersection due to an unusual intersection layout. In response to the report the Board made the following resolution:

*“That following discussion by the New Lynn Community Board further investigation be undertaken on the traffic issues at the intersection of Oates Road and Glendale Road and that a report be brought back to the Board on the outcome of the investigation.”*

2076/2005

## STRATEGIC CONTEXT

Council's 'Integrated Transport and Communication' platform provides the strategic context for this report. The vision is for public transport and communications systems that provide fast, effective services, and for city travel facilitated by integrated, environmentally responsible, and innovative design, with a focus on meeting the essential needs of all, for access, communication, and safety.

Reconfiguration of this intersection will ensure public safety and efficient flow of traffic around the Glen Eden Town Centre.

## ISSUES

### Current Situation

A21 The intersection of Glendale Road and Oates Road is configured in an unusual manner. It is a 'T' junction with the intersection priority control, a 'give way' control, on one of the branches of the 'T' rather than the stem as is usual. This unusual layout was originally intended to encourage traffic to use a by-pass route around the Glen Eden Town Centre. This bypass is shown as attached at page A21.

The intersection of Glendale Road and Oates Road has a high number of reported accidents, with accidents with a particular type being especially pronounced. The five year accident record (2001 to 2005) shows 12 accidents on the Land Transport New Zealand accident database:

- 5 accidents involved vehicles south bound on Glendale Road moving off the 'Give Way' control and striking vehicles turning right from Oates Road into Glendale Road.
- 3 accidents involved vehicles entering or leaving private properties at, or near the intersection and colliding with other vehicles.
- 2 accidents involved vehicles south bound on Glendale Road moving off the 'Give Way' control and striking vehicles turning right from Glendale Road into Oates Road.
- 1 'nose to tail' type accident where a vehicle waiting at the 'Give Way' control in Glendale Road was stuck from behind by another vehicle.
- 1 accident where a north bound vehicle on Glendale Road swerved to avoid a vehicle turning right from Oates Road into Glendale Road and stuck a nearby parked vehicle.

All accidents were non-injury accidents. The Land Transport New Zealand accident database does not contain a record of all accidents that have occurred, only accidents reported by the police are listed. It is likely that one or more unreported accidents have occurred at the intersection in the last 5 years.

Failure to give way accidents comprise the bulk of the reported accidents at the intersection, with vehicles leaving the 'Give Way' control on Glendale Road and colliding with vehicles turning right from Oates Road into Glendale Road, being a particularly common accident type. It is believed that the underlying cause of these accidents is that drivers are unfamiliar with turning priority rules at intersections with the priority control a branch of the 'T' junction, rather than the stem.

The current intersection layout has the advantage of reducing operating speeds through the intersection and this may be the reason for the lack of injury accidents reported at the intersection. The low radius curve for vehicles moving between Oates Road and Glendale Road discourages high speed movements. There is a traffic island located adjacent to the kerb line on the east side of the intersection which has a chicane like effect for the northbound through movement on Glendale Road. Southbound through movements on Glendale Road are slowed by the need for drivers to slow before passing the 'Give Way' control.

Drivers waiting behind the limit line at the existing 'Give Way' control have good sight lines to oncoming traffic and are able to easily observe the entire intersection.

### Traffic Count

A traffic count has been undertaken at the intersection and the results are summarised below:

#### Traffic Volumes at the intersection of Glendale Road and Oates Road

Approach	Movement	8.00 - 9.00 am	12.15 - 1.15 pm	5.00 - 6.00 pm
		Vehicles/Hour	Vehicles/Hour	Vehicles/Hour
Glendale Road Northern Approach	Left Turn	129	108	127
	Through movement	178	201	303
Glendale Road Southern Approach	Right Turn	348	183	211
	Through movement	298	183	213
Oates Road	Right Turn	42	26	72
	Left Turn	117	149	448
<b>Total</b>		1112	850	1374

### Potential Options for Change

#### Traffic Signals

Traffic signals can reduce average delay times experienced by motorists at intersections with high traffic volume, but in situations where low to moderate traffic volumes exist like the intersection of Glendale Road and Oates Road the average delay experienced by motorists is likely to be more than at an intersection controlled by a 'Give Way' or 'Stop' control only. Total cycle time for a three approach signalised intersection with low to moderate traffic volumes would be in the order of 60 to 90 seconds per cycle.

In situations where traffic signals are installed at low volume intersections there can be issues with drivers not complying with the signals, especially in evenings and other off-peak times.

The width of the sealed carriageways close to the intersection is 10 metres kerb face to kerb face on Glendale Road and 13 metres kerb face to kerb face on Oates Road. A 10 metre wide carriageway is relatively narrow for signals and it is difficult to be certain that no major changes to kerb line locations would be needed to signalise the intersection without undertaking detailed design. The proximity of property boundaries and slope of the ground around the intersection means that any movement of kerb lines may be very costly. A 10 metre carriageway would allow two approach lanes and one departure lane for both of the Glendale Road approaches to the intersection.

## Roundabout

Roundabouts require a level surface or close to level surface within the circulation area to allow heavy vehicles to turn safely through the intersection. The land area required by roundabouts is greater than required for a signalised or 'Give Way' controlled intersection to allow the circulation area to be formed. Property boundaries around the intersection of Oates Road and Glendale Road are close to the existing carriageway, especially on the southeast corner of the intersection where there is a house very close to the edge of the property boundary. Construction of a roundabout at this intersection would require significant amounts of land to be acquired from nearby property owners.

Glendale Road slopes down from north to south on both sides of the intersection with Oates Road. Oates Road slopes upward from east to west on the approach to the intersection with Glendale Road. To create a sufficiently large flat area within the intersection to allow construction of a roundabout the gradient of all approach roads to the intersection would need to be altered, as would adjacent property access ways.

The need to acquire nearby private land and undertake a large amount of earthworks make a roundabout at the intersection of Glendale Road and Oates Road prohibitively expensive.

## Change in Location of Priority Control

The priority control for the intersection could be moved from Glendale Road's northern approach to the intersection to the Oates Road approach to the intersection. This would result in a 'T' junction with the intersection priority control on the stem of the 'T' rather than the branch. This is a very common intersection configuration where rules concerning turning priorities are familiar to drivers.

A22 A preliminary design sketch showing this scheme is included as attached at page A22. This scheme is recommended by this report to be implemented at the intersection of Glendale Road and Oates Road. This scheme eliminates the unusual placement of the intersection priority control which drivers find confusing thereby eliminating the underlying cause of the accident pattern observed at the intersection.

This scheme would require some reshaping of existing traffic islands. The preliminary estimated cost of undertaking this work is approximately \$50,000. Before this scheme could be implemented a detailed design would need to be undertaken, consultation done with effected parties and a safety audit carried out by a third party.

A 'Stop' control rather than a 'Give Way' control is recommended for this potential change. Driver sight lines for drivers in Oates Road approaching the intersection with Glendale Road are restricted by a house and a large hedge on the southeast corner of the intersection. To have adequate sight lines to other traffic drivers need to come to a stop at the intersection.

Driver sight lines from Oates Road to traffic travelling south from Glendale Road's northern approach are limited by a crest in the road outside the Playhouse Theatre and Glen Eden Library. Measurements undertaken by Council staff indicate that a driver stopped in Oates Road at the intersection with Glendale Road can see an object at a height of 1 metre above the surface of the road from a distance of approximately 70 metres from the intersection. This sight distance is lower than is desirable, but is within acceptable limits. To help mitigate this limited sight distance it is recommended that a high skid resistance seal be applied to the surface of Glendale Road's north approach to the intersection if the proposed relocation of the priority control is implemented.

The proposed reconfiguration would require the removal of the traffic island on the east side of the intersection and would also allow higher traffic speeds on Glendale Road in both directions around the intersection. Higher traffic speeds may result in an increase in the severity of any accidents which occur at the intersection.

There is a 'zebra' pedestrian crossing outside the Glen Eden Library in Glendale Road. The crest in the road outside the Playhouse Theatre restricts driver sight lines to this crossing when approaching from the south along Glendale Road. The removal of the traffic island on the east side of the intersection will allow higher traffic speeds on the approach to this crossing. Drivers get a good view of the crossing just before they cross the crest at a point approximately 60 metres from the crossing. To slow vehicles approaching the crossing it is recommended that the existing traffic island outside the theatre be widened to narrow the traffic lane used by north bound vehicles.

### **Prohibit Right Turn from Oates Road and Change Existing 'Give Way' Control to a 'Stop' Control**

The most common accident type recorded in the Land Transport New Zealand's Accident Database is vehicles headed south along Glendale Road from the 'Give Way' control, failing to give way to traffic turning right from Oates Road into Glendale Road. This right turn movement was involved in 6 of the 12 accidents reported by the police at the intersection in the last five years.

The traffic count undertaken shows that the number of vehicles turning right from Oates Road into Glendale Road is very low. The volume of traffic making this movement is 4.2% of the total traffic movements at the intersection. The majority of traffic making this turn would originate from either Captain Scott Road or Wilson Road, then head west along Oates Road, turn right into Glendale Road before proceeding north to West Coast Road. Good alternatives exist for this route and traffic from Wilson Road or Captain Scott Road can easily access West Coast Road either via the intersection of Captain Scott Road and West Coast Road, or via Glenmall Place.

It would be possible to prohibit right turns from Oates Road into Glendale Road using 'no right turn' signs. This would be low cost and quick to implement.

The 163 bus route requires the bus to make a right turn from Oates Road into Glendale Road. There is no easy alternative route for a bus that would take it to the correct bus stops in Glen Eden if this right turn were prohibited. If this change were made then consideration should be given to excluding buses from the prohibition on turning right out of Oates Road.

Enforcement of a 'no right turn' control is under the jurisdiction of the police. Police resources are limited and it is unlikely that drivers who fail to comply with the control would be caught. Drivers leaving the 'Give Way' control may be less likely to watch for vehicles making a prohibited turning movement and if there are high numbers of drivers who do not comply with the control this may result in additional accidents at the intersection.

Seven of the 12 accidents reported at the intersection in the last 5 years involved vehicles leaving the 'Give Way' control from the Glendale Road northern approach failing to give way to other traffic. Replacing the existing 'Give Way' control with a 'Stop' control would give drivers on the non-priority approach more time to check for conflicting traffic before entering the intersection. Driver compliance with 'Stop' controls is poor and this change is likely to be of very limited effectiveness, but can be implemented quickly and at low cost by signage and marking changes.

Option	Advantages / Disadvantages
Install Traffic Signals	<p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Would be an effective measure for resolving the current accident problems caused by drivers confused with an unusual intersection layout.</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• Expensive to install.</li> <li>• Higher average delay times on all approaches than current configuration.</li> <li>• 'Red light running' may be a problem at some times of day due to low traffic volumes.</li> <li>• Some acquisition of private land near the intersection may be required.</li> <li>• Current carriageway widths are marginal for traffic signals. Some widening may be needed.</li> </ul>
Construct a Roundabout	<p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Slows traffic on all approaches to the intersection reducing accident severity.</li> <li>• Average delay times for motorists lower than signals.</li> <li>• Likely to be very effective at eliminating the types of accidents currently occurring.</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• The gradient of the ground in and around the intersection has a moderate gradient; major earthworks would be required to get flat surfaces needed for a roundabout.</li> <li>• Acquisition of private property around the new roundabout will be required.</li> <li>• Will be very expensive to construct.</li> </ul>
Move the Intersection Priority Control from Glendale Road to Oates Road	<p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Lower cost than a roundabout or traffic signals.</li> <li>• Creates an intersection configuration that is familiar to drivers, eliminating driver confusing problems that are the cause of the recorded accident pattern at the intersection.</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• Traffic speeds through the intersection on Glendale Road are likely to increase, greater severity of accidents possible.</li> <li>• Driver sight lines from Oates Road to Glendale Road are marginal, failure to give way accident pattern may develop.</li> </ul>

Option	Advantages / Disadvantages
Change the Glendale Control on Glendale Road to a Stop Control. Prohibit Right Turns from Oates Road into Glendale Road	<p><b>Advantages</b></p> <ul style="list-style-type: none"><li>• Very inexpensive.</li><li>• Can be done very quickly.</li><li>• Bans the turning movement associated with many of the recorded crashes.</li></ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"><li>• Is likely to be of very limited effectiveness in resolving current accident patterns observed.</li><li>• Driver compliance with 'no right turn' control is likely to be low. This may result in accidents involving vehicles failing to give way to vehicles unexpectedly making a prohibited turn.</li></ul>

### Decision Making

This proposal is presented with due consideration of relevant criteria, as promulgated in Section 77 of the Local government Act 2002. This principal community outcome to be derived is an improvement in the level of traffic management resulting in an increase in safety and convenience for residents of the City.

### RESOURCES

This report seeks the Board's endorsement of the proposed intersection reconfiguration before detailed design work is undertaken. This design work can be funded from the Annual Plan 2006/2007.

Once the detailed design has been completed cost estimates will be prepared. A preliminary cost estimate for this work is \$50,000. If the estimate is over the \$50,000 a further report will come back to the Board depending on the cost of improvements, the works may be able to be funded from the 2007/2008 Annual Plan.

### CONCLUSION

The recorded accident history contained in the Land Transport New Zealand Accident Database shows 12 non-injury accidents at the intersection of Glendale Road and Oates Road in the last 5 years. Six of these accidents were associated with the right turn from Oates Road into Glendale Road. It is believed that the underlying cause of this accident pattern is the unusual placement of the 'Give Way' control at the intersection which creates a set of turning priorities that many drivers are not familiar with.

### RECOMMENDATIONS

1. That the Intersection of Oates Road and Glendale Road, Glen Eden report be received.
2. That the detailed design for the Intersection of Oates Road and Glendale Road, Glen Eden, be reported back to the New Lynn Community Board for approval.

Report prepared by: Paul Schischka, Transport Engineer.



## 11 **PRESSURE STANDARDISATION PROGRAMME**

### **PURPOSE OF THE REPORT**

The purpose of this report is to advise the New Lynn Community Board of plans to implement the second stage of a programme to standardise water pressure throughout the City.

### **BACKGROUND**

One of the Council's long term strategic tasks in promoting Council as an "eco city" is to further reduce water demand in the city and to maintain a low level of water losses from the aging water distribution system.

As part of the Council's Water Cycle Strategy that promotes demonstrating sustainable water management solutions at a local level, Council successfully implemented the first stage of a pressure standardisation programme during the period from 1996 to 1999. Due to the success of this programme and other water loss initiatives, Waitakere City Council is recognised as one of the industry leaders in demonstrating good water management practice, particularly in the fields of pressure management and leak reduction programmes. Pressure management is now recognised as one of the fundamental elements of any innovative water demand and asset management strategy. This is due to numerous benefits which can be achieved by implementing pressure management. The benefits include:

- Demand Management - Less consumption from pressure related uses of water;
- Demand Management - Reduced leakage and fewer new leaks;
- Asset Management - Extended useful life of infrastructure due to lower system pressure;
- Asset Management - Reduced maintenance costs due to reduced frequency of main breaks;
- Customer Service - Better service due to less water supply interruptions.

In order to build on the successes achieved, it is proposed to implement a second stage of the pressure management programme.

### **STRATEGIC CONTEXT**

The Council's Three Waters strategic platform aims to establish Waitakere as a centre of innovative water management. One of the measures to achieve this is to further reduce domestic water use by 25% by 2025.

### **ISSUES**

Pressure reduction once introduced has immediate benefits of reduced leakage and reduced number of water main breaks and bursts due to lower pressures. Water usage from taps is also reduced.

Active pressure control should be considered more as an ongoing, long term activity rather than as a one-off project. Since introducing the first stage of the City's pressure management programme in the late 1990's, it is recognised that there are further opportunities across the city for introducing pressure management, through a wider implementation of the initial programme, by improving existing schemes, and by introducing newly developed technologies. It is proposed to carry out a second stage of the pressure management programme over the next three years.

### **Wider Implementation of the Initial Programme**

In the existing water distribution system there are still many parts of the network where service pressure is higher than 1,000 kPa. Due to the harmful effects of such excessive pressure on the network and customers' plumbing systems, in many countries the maximum allowable pressure is limited to 800 or 900 kPa. An acceptable minimum pressure is 250 kPa.

Areas of the City's network where pressures are still high and where pressure standardisation can be introduced are:

- Sturges Road Supply Zone where service pressure in the lower part of the zone is higher than 1,000 kPa. By splitting the sub zone into two parts, pressures in the lower part could be reduced.
- Oratia Kaurilands Supply Zone where service pressure around the lower part of West Coast Road exceeds 1,000 kPa. Pressure in the lower serviced area could be reduced by having the trunk 250 mm line at West Coast Road used for service connections as well as a transit line.
- Titirangi Supply Zone where service pressures at lower levels, close to the coastline is between 1,000 and 1,300 kPa. By splitting the zone into two parts, pressure in the lower area could be significantly reduced.
- Glendene Supply Zone where service pressure close to the coast line is higher than 950 kPa. The zone could be split into two parts and pressure reduced in the lower part.
- Huia Village Supply Zone where along Huia Road and Foster Avenue the pressure is higher than 900 kPa.

### **Improving Existing Operational Regimes**

In parts of the City, the number of new customers has been growing more rapidly than in the rest of the system, and the actual size of these water supply zones is larger than optimal for efficient management of the network.

Water supply zones which provide service to more than 5,000 households should be further divided into smaller, better manageable sub-zones, where more efficient pressure regimes can be established, such as:

- Lincoln - Swanson Supply Zone which will serve more than 7,000 households. The zone could be split into two parts mainly along Swanson Road, and on the eastern side, service pressure could be readjusted. Two additional automatic back up supply points could be established at Don Buck and Triangle Road for improving security of supply to the overall area, and allowing better utilisation of the Massey Reservoir particularly during emergencies.
- New Lynn Supply Zone which currently provides water supply to approximately 5,000 households. The zone is expected to grow rapidly in the near future so it could be further subdivided and in the lower part close to the Whau estuary, pressure could be readjusted.

It is proposed to carry out the changes suggested above as part of the second stage of the pressure standardisation programme.

## **Introducing Newly Developed Pressure Management Technologies**

Newly developed technologies for optimising the operational management of the water supply system are now available. These need to be carefully employed by applying a “field pilot test approach” prior to being permanently implemented in the Council’s network. Such technologies, mainly related to dynamic operational management of the network, can bring additional asset management benefits in the day-to-day operation of the system as well as reducing Council’s future capital expenditure for upgrading the network. Implementation is based on utilising pressure reducing controllers at the supply points for modulating pressure in the network on an hourly basis, aiming to maintain required levels of service at the critical points in the system. By introducing such measures, the following additional benefits can be achieved:

- Reducing the requirements for upgrading the capacity of distribution system - less need for constructing new pipelines to increase the capacity of the system.
- Reduction in leakage flow rates from the system by lowering pressure during the night.
- Improving security of supply in emergencies by allowing the on-line controlling of the level of service pressure as a contingency measure.

Due to the topography of the city, this advanced asset management technique could be potentially widely implemented in more than 60% of the system, particularly in New Lynn, Henderson, Lincoln - Swanson, West Harbour, and in the northern part of the city at Hobsonville Peninsula and Whenuapai. It is envisaged that the new technology will be introduced in three or four areas over the next three years as part of this second stage pressure standardisation programme.

## **Customer Relations and Fire Sprinkler Systems**

The existing minimum level of service of 250 kPa pressure and 25 litres/minute flow at the meter to all customers will remain unchanged with this programme of pressure standardisation. The aim is to reduce excess supply pressure in the supply network and to properties. The proposed measures will be carefully planned using dynamic hydraulic modelling of the City’s network, and implemented on a staged basis.

The programme will be communicated to properties where changes are proposed as a ‘pressure standardisation programme’ as with the first stage of the programme. A letter with information about pressure management and the planned measures will be delivered to all affected customers. Public notification of the supply changes will also be made. Any customer complaints received relating to the programme will be promptly dealt with.

Throughout the implementation of the first stage of the programme, which affected around 40,000 properties, less than 1% of affected customers contacted Council with a pressure related complaint. All of these complaints were followed up promptly, with most fixed almost immediately. There were no outstanding issues that could not be resolved.

To ensure that existing fire sprinkler systems remain compliant after the pressure changes are made, a specialist fire engineer will be engaged to assess the impact of reduced pressures on the affected fire sprinkler systems. Where a problem exists, the Council will arrange the most cost effective means of overcoming the problem.

## RESOURCES

The proposed programme can largely be implemented by Council water supply staff as part of the ongoing works programme. These staff have developed expertise and professional experience in implementing pressure management during the first stage of the pressure standardisation programme. There will be minimal engagement of external consultants.

It is proposed to implement the programme progressively over the next three years. Funding for the programme was identified and included in the 2006-2016 Long Term Council Community Plan. The proposed budget for the programme over the next three years is shown below.

<b>Budget</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>
Pressure Standardisation - Stage 2	\$90,000	\$85,000	\$95,000

## CONCLUSION

Pressure management is now recognised as one of the fundamental elements of any innovative water demand and asset management strategy.

In order to build on the successes achieved from the pressure standardisation programme carried out from 1996 to 1999, it is proposed to implement a second stage of the pressure management programme.

Implementing this second stage pressure standardisation programme as outlined above will further contribute to reducing water demand for the City, by reducing water consumption and reducing leakage from the aging network. It will be a further step towards Council achieving its strategic objectives relating to demand management while also promoting the practice of sustainable water management at a local level.

The proposed measures will be carefully planned, communicated and implemented progressively as a staged defined programme over a three year period. Funding for the programme was identified and included in the 2006-2016 Long Term Council Community Plan.

## RECOMMENDATIONS

1. That the Pressure Standardisation Programme report be received.
2. That progress reports be submitted to the New Lynn Community Board at critical stages of the implementation of the Pressure Standardisation Programme.

Report prepared by: Richard Taylor, Assets and Network Manager: EcoWater.



## 12 WAITAKERE WASTEWATER MASTER PLAN

### **PURPOSE OF THE REPORT**

The purpose of this report is to provide the New Lynn Community Board with an update of the joint wastewater planning work carried out with Watercare Services Limited including a summary of the Waitakere Wastewater Master Plan completed in March 2006.

### **BACKGROUND**

Wastewater services to properties in the urban area of Waitakere are provided jointly by Council and Watercare Services Limited (Watercare). Council provides the local collector systems including 47 pumping stations, and Watercare provides bulk wastewater transmission via trunk sewer lines including the main Western Interceptor and major pumping stations, treatment at its Mangere Wastewater Treatment Plant, and discharge of treated effluent into the Manukau Harbour.

The two wastewater networks are therefore inextricably linked, and any wastewater planning initiatives need to be carried out jointly if cost effective and efficient long term solutions for wastewater servicing are to be developed successfully.

In July 2005, Council and Watercare commenced a medium term wastewater strategy for meeting the City's new objective arising from the Water and Sanitary Services Assessment, of reducing the number of wastewater overflows by 50% by 2025. It was envisaged under this 20-year strategy that Watercare and Council would be able to successfully plan and provide for growth as well as addressing local issues and joint planning initiatives. The initial 20-year strategy was chosen as it represented a reasonable medium term planning horizon and enabled coordination with the annual Asset Management Plan being published by Watercare and the Metropolitan Urban Limit shift applications.

Following on from this work, in September 2005, Council and Watercare agreed to jointly develop a Waitakere Wastewater Master Plan that would address the longer-term issues and requirements of wastewater infrastructure and servicing of Waitakere. The design horizon for this study was 2050, which is consistent with other regional planning initiatives throughout the Auckland region. This report summarises the outcomes of this study.

The current Three Waters Project is an even longer term planning project being undertaken, covering integrated management all three waters; water supply, wastewater and stormwater, from a regional perspective.

### **STRATEGIC CONTEXT**

The Three Water's strategic objective of Council is that Waitakere will be a centre of innovative management of the three waters which includes wastewater services.

### **ISSUES**

#### **Objectives of the Waitakere Wastewater Master Plan**

The 50-year strategic master plan was designed to address the following objectives:

- Reduction / mitigation of wastewater overflows from designed overflow structures and manholes;
- Meeting the requirements of local, legislative and regional drivers;
- Reduction in the adverse effects of inflow and infiltration through control methods;
- Allowance for growth to 2050 (flow based assessment);
- Optimisation of existing infrastructure; and
- Provision of wastewater treatment and disposal options for the City.

## Key Issues

The population of Waitakere is projected to increase from 170,000 people in 2006 to over 300,000 people by 2050. This increase in population will place additional pressure on the existing wastewater system that will need to be managed effectively.

This issue has been compounded by the proposed Air Land Water Plan, which moves to place limitations on the amount and size of discharges from wastewater systems throughout the region.

Previous analysis of the wastewater system confirmed that:

- The existing wastewater system is adequate for the City's current and future (2050) dry weather flow needs.
- There are some places within the City where the wastewater system is not meeting current wet weather flow needs and becomes overloaded. This will get worse as the City continues to grow.
- The main reason the wastewater system is not meeting Council's needs is due to -
  - Increased demands placed on the system through stormwater entering the wastewater system (infiltration and inflow);
  - Increasing environmental demands; and
  - Increase in wastewater generated.

A combined network model, initially developed in 1999, was used to identify the points in both the Watercare and Council networks where the system overflows during a rainfall event. The model allows for stormwater inflow and infiltration. Calibration of the model is achieved using recorded flow gauged information at critical points in the network, and hence areas with high inflow and infiltration have been identified over time based on actual flow gauged data.

## Assumptions

The key assumptions made for the purposes of the study are:

- A 'containment standard' target of no more than two spills per year was adopted, based on the proposed Air Land and Water Plan;
- The system must provide capacity for all dry weather flows through to 2050 allowing for the forecast increased population, including growth in the Northern Strategic Growth Area area; and
- Treatment of wastewater occurs at the Mangere Wastewater Treatment Plant site, although some options include treatment of wet weather peak flows at new treatment facilities located in the City.

## Network Performance Objectives

A review of current council policies including local and regional policies together with a review of previous studies provided the basis for the development of the 50-year Wastewater Master Plan. A series of key system performance objectives were determined to allow the development of a planning process to meet these 50-year goals. The decision making process included the following performance objectives for consideration:

- **Reduction in Manhole Overflows:** An objective to aim for reduction of manhole overflows, to protect public health.
- **Environment Custodian:** A commitment to improve the environmental performance of the system in line with Resource Management Act principles.

- **Allowing for Growth:** Provision of adequate network capacity and wastewater treatment to ensure that growth within the City is not restricted.
- **Community Education:** A community that is informed and educated on water usage and the water cycle to reduce wastewater volumes at source.
- **Control on Inflow and Infiltration:** Controlling storm inflows entering into the wastewater system.
- **Efficient Asset Renewal:** Efficient programming for the renewal of the wastewater assets within the City.
- **Effective Operation and Maintenance:** Provision of an effective network operation and maintenance programme.
- **Engineering Goals:** Motivation to improve the system performance and definition of an achievable level of service.
- **System Performance Monitoring:** Development of a long-term programme for monitoring flow and environmental indicators to ensure the objectives are being met and to provide a baseline for measuring improvements.

### Wet Weather Flow Capacity

The following summarises the findings from the modelling analysis undertaken with respect to the existing scenario with regards to wet weather flow capacity:

- The calibration exercise showed that the system suffers from a high level of groundwater infiltration particularly in Glen Eden, West Harbour, New Lynn, Massey and Henderson Valley;
- Nine overflows operated at least once during the system performance assessment using the 12 significant rainfall events from the 1999 typical year chosen. Three of these were Watercare overflows, the rest being high level Council network overflows;
- Predicted surcharging is most prominent in the Glen Eden, New Lynn and Swanson catchments.

### Wastewater Option Types

There are three main methods for arresting flows at any point in a wastewater network to reduce overflows, they are:

- **Flow reduction** - This involves reduction of flows entering the wastewater system and solutions can address the dry weather or wet weather flow components. Examples of these types of options include demand management and inflow/infiltration control.
- **Attenuation** - Flows can be attenuated thereby reducing peak flows at sensitive points in the networks, thereby reducing overflows. Such solutions can include storage of excess flows until peaks in the wastewater system have subsided. These solutions often result in increased total conveyance volumes but at reduced flow rates over longer durations.
- **More Conveyance Capacity** - Provide more conveyance capacity downstream through upsizing of existing pipelines on existing liens or diverting existing flows down new pipelines.

The ultimate option is to provide an alternative treatment facility for Waitakere other than Mangere Wastewater Treatment Plant. This could be in the form of a new wet weather treatment plant, high rate treatment at the source or an alternative regional Wastewater Treatment Plant or a combination of.

### Options Considered

The following options were considered as part of development of the master plan:

- Best Management Practices (operations based).
- Storage at overflow points.
- Inflow/ Infiltration Control.
- Rationalised Wet Weather Treatment.
- Storage at Woodbay.
- Rationalised Storage Tanks (includes storage tank at The Concourse).
- New Pipeline to Kelston.
- Glen Eden Tunnel Diversion.
- Diverting Rosebank flows to Avondale.
- The Concourse Storage Tank plus Duplication of Watercare Pump Station 25.
- Duplication of Major Trunk Sewers.
- Project Boost (Additional Watercare pump station and trunk sewer).

A23 A summary of the costs for the seven main options is presented in graphical form is attached page A23.

### Report Recommendations

The report recommends that the most effective solution for Waitakere involves a hybrid combination of storage and/ or wet weather treatment, plus a targeted inflow and infiltration control programme. Rationalised storage with inflow and infiltration control is the preferred option at this time. Furthermore, the following projects are recommended for detailed investigation with a view to implementing projects based on priority super catchments:

- The Concourse storage tank;
- Upgrades of the South Lynn, New Lynn and Titirangi Branch sewers and local downstream storage;
- Upper Glen Eden Branch sewer upgrade and local rationalised storage; and
- Lower Glen Eden Branch sewer upgrade and local rationalised storage.

A24 The overall 50-year wastewater strategy recommended in the report is outlined as attached at page A24.

The report states that the plan should be implemented and reviewed in line with the outcomes of detailed investigations and results of further analysis undertaken. This should include development of a joint flow monitoring programme and joint modelling studies with Watercare over the next two years. It is also recommended that all asset renewal programmes should be accompanied by an initial investigation into the source and extent of inflow/ infiltration problems, and should be targeted in areas of hydraulic and structural deficiency; and that Council should continue to encourage education into water usage, to maintain an environmentally responsible and sustainable approach to water and wastewater management. It will also be necessary to address the issue of infiltration and inflow from private drains and this will be reported back to the New Lynn Community Board.

## Decision Making

A25 A simple quadruple bottom line assessment of each option was carried out as part of the study, with scoring against social and cultural benefits, economic benefits and environmental benefits is included in the attached page A25. All options included inflow and infiltration control as this programme is fundamental to managing wet weather peak flows.

The top ranked citywide option under this simplified quadruple bottom line assessment is to provide rationalised storage tanks with a targeted inflow and infiltration control programme, which includes implementation of The Concourse storage tank.

## RESOURCES

There are no resource implications arising from this report. Detailed cost estimates will be prepared once the strategy has been adopted in principle and reported back to Council for approval.

## CONCLUSION

In September 2005, Council and Watercare agreed to jointly develop a Waitakere Wastewater Master Plan that would address the longer-term issues and requirements of wastewater infrastructure and servicing of Waitakere. The design horizon for this study was 2050, which is consistent with other regional planning initiatives throughout the Auckland region. This report summarises the outcomes of this study.

The Waitakere Wastewater Master Plan states that the most effective solution for Waitakere involves a hybrid combination of storage and/ or wet weather treatment, plus a targeted inflow and infiltration control programme. Rationalised storage with inflow and infiltration control is the preferred option at this time. This includes the construction of a storage facility at The Concourse and in the New Lynn area. The report recommends that the plan should be implemented and reviewed in line with the outcomes of detailed investigations and results of further analysis undertaken. This should include development of a joint flow monitoring programme and joint modelling studies with Watercare over the next two years.

The proposed 50-year strategic plan recommended in the report outlines a programme to meet the key objectives outlined above in this report. The outcome confirmed current thinking, and is considered to be entirely appropriate and a sensible approach in moving forward. The outcome also confirmed earlier studies and work on the subject matter.

Further detailed reports will be submitted to the City Development Committee, Planning and Regulatory Committee, and Community Boards on various stages and implementation, including the following:

- Construction of storage tanks of the Concourse and New Lynn.
- Addressing infiltration and inflow from private drains.

## RECOMMENDATIONS

1. That the Waitakere Wastewater Master Plan report be received.
2. That progress reports be submitted to the New Lynn Community Board at critical stages of the implementation programme of the Waitakere Wastewater Master Plan.

Report prepared by: Richard Taylor, Assets and Network Manager: EcoWater.



## 13 CARTWRIGHT ROAD - IMPROVEMENT OF FOOTPATH AND VEHICLE CROSSINGS

### **PURPOSE OF THE REPORT**

The purpose of this report is to seek approval from the New Lynn Community Board to approach property owners on Cartwright Road to contribute to the improvement of footpath and vehicle crossings.

### **BACKGROUND**

Cartwright Road serves industrial/commercial businesses. Operations on this road involve a high percentage of heavy vehicle manoeuvres which have created extensive damage to footpaths and vehicle crossings that serve this area. Regular requests are received asking that repairs be carried out. To repair the total amount of damage would exceed the approved Annual Plan 2006/2007 budget.

### **STRATEGIC CONTEXT**

#### **Council Strategy**

Council's 'Integrated Transport and Communication' platform provides the strategic context for this report. The vision is for public transport and communications systems that provide fast, effective services, and for city travel facilitated by integrated, environmentally responsible, and innovative design, with a focus on meeting the essential needs of all, for access, communication, and safety.

Footpath improvements can be applied to ensure efficient, safe movement along the on-road corridor for pedestrians and adds to the aesthetic streetscape value of the road.

### **ISSUES**

An inspection of the roadway, footpaths and vehicle crossings has identified a number of issues, as follows:

- Damage has occurred to both sides of an 85 metre length of footpath on Cartwright Road and 540m<sup>2</sup> of vehicle crossings are also damaged;
- The majority of the premises on Cartwright Road are commercial/industrial and are serviced mainly by heavy vehicles;
- Cartwright Road joins Netherlands Avenue. However at the join of the roads a throat island exists to prevent trucks using Netherlands Avenue. This forces trucks to "U" turn in Cartwright Road. Additionally the narrow width of Cartwright Road (7 metre) makes it difficult for heavy vehicles to align with the vehicle crossings they wish to use. The majority of the damage to the footpaths and vehicle crossings is caused by the manoeuvres of heavy vehicles;
- Improvements to footpaths and vehicle crossings need to be completed jointly;
- Out of the required concrete volume 86% of the concrete will be used for the vehicle crossings and 14% will be used in the footpaths;
- This type of work is not eligible for Land Transport New Zealand subsidy;
- The total estimated value of the required works is \$200,000.

### **Contribution Formula**

As the funding available is \$100,000 it was suggested through the Annual Plan 2006/2007 deliberations to seek the balance of \$100,000 from the property owners.

The total contribution from owners would be distributed according to the proportional area of the vehicle crossing works fronting the properties. The property owner will not be asked to contribute for the frontage footpaths which Council will fully fund.

Based on this formula the owners' contributions vary from \$6,000 for the smallest vehicle crossing taking up approximately  $\frac{1}{4}$  the property frontage of No. 42 Cartwright Road to \$24,000 for the largest vehicle crossing taking up the full property frontage of No. 40 Cartwright Road.

If work is approved and completed, the asset will become the responsibility of Council. Any future repairs will be programmed with Council's annual footpath maintenance contract.

### **Agreement Process**

It is proposed to approach each property owner on an individual basis to discuss the issues and seek their views on the proposed contribution formula. If the owners support the proposal the work will proceed. However, if owners do not support the proposed cost sharing, the issue will need to be referred to the Annual Plan and Long Term Council Community Plan Special Committee to determine if additional funding could be allocated in the Draft 2007/2008 Annual Plan.

The results of this communication seeking owners' approval will be reported back to the New Lynn Community Board for a decision on whether to proceed with the project, or not.

### **Decision Making**

This proposal is presented with due consideration of relevant criteria, as promulgated in Section 77 of the Local Government Act 2002. The principal community outcome to be derived is an improvement in the level of traffic management resulting in an increase in safety and convenience for residents of the City.

### **RESOURCES**

There is \$100,000 available for physical works associated with this project in the Annual Plan 2006/2007 budget.

### **CONCLUSION**

The footpaths and vehicle crossings on Cartwright Road are in need of extensive repair. Pedestrian safety and the aesthetics of the street are low in this current poor condition. Total maintenance cost for the road would force the project to be deferred until full funding could be approved.

Much of the damage is created by the operations of the businesses. Non standard vehicle crossings in terms of Council's "Code of Practice" are normally not maintained by Council. However on this road the existing construction standard of the crossings is varied but most are felt to be of inadequate thickness when compared with the Code of Practice. In this respect it is considered that the owners could be asked to contribute a portion of the costs and cooperate with Council to enable the project to be completed.

### **RECOMMENDATIONS**

1. That the Cartwright Road - Improvement of Footpath and Vehicle Crossings report be received.
2. That approval be given for the Cartwright Road - Improvement of Footpath and Vehicle Crossings and Transport Assets to proceed with seeking financial contribution from the owners of businesses on Cartwright Road based on the formula described in this report.
3. That in the event of \$100,000 not forthcoming from the property owners of Cartwright Road, that a further report be submitted to the New Lynn Community Board to recommend seeking additional funding for Council to be included within the approved Annual Plan 2006/2007.

Report prepared by: Brent Piggott, Senior Transport Engineer.



### **14 BOARD MEMBERS' REPORTS**

Provision has been made on this agenda for Board Members should they so wish to submit a report on their activities during the month in regard to matters within the scope and delegations of the Board. However, to comply with the provisions of the Local Government Official Information and Meetings Act 1987, no decision may be made on matters raised in Board Members' reports.

#### **NEW LYNN COMMUNITY BOARD APPOINTMENTS**

<b>OUTSIDE ORGANISATIONS</b>	<b>APPOINTMENT</b>
Auckland Region and Far North Community Board Association Executive Committee	Gayle Marshall Pim van der Voort (alternate)
Keep Waitakere Beautiful Committee	Elizabeth Francke
Waitakere Citizen Advice Bureau	Gayle Marshall
Glen Eden Community House Management Committee	Gayle Marshall
Green Bay Community House Management Committee	Pim van der Voort Sandra Taylor (alternate)
Council/Police Liaison Group	Elizabeth Francke Sandra Taylor
New Lynn Citizens Advice Bureau	Elizabeth Francke
Youth Advocacy Advisory Group	Gayle Marshall William Buchanan (alternate)
Waitakere Road Safety Steering Group	William Buchanan Elizabeth Francke (alternate)

<b>COUNCIL COMMITTEES</b>	
Hearings Committee	Elizabeth Francke Sandra Taylor (alternate)
Community Sports Fund Allocation Subcommittee	William Buchanan Gayle Marshall (alternate)
Long Term Council Community Plan and Annual Plan Special Committee	Pim van der Voort Gayle Marshall (alternate)
<b>COMMUNITY BOARD SUBCOMMITTEE</b>	
New Lynn Community Board Street Events Subcommittee	William Buchanan
Waitemata Harbour Foreshore Reserves Management Plan Joint Subcommittee	Elizabeth Francke Sandra Taylor

