## 20. REPORT OF THE ENVIRONMENT AND TRAFFIC COMMITTEE - 18 FEBRUARY 2002

| Officer responsible | Author   |
|---------------------|--|
| Community Advocate  | Gina Clarke, Community Secretary, DDI 941-6615 |

The purpose of this report is to submit the following report and recommendations for the Board's consideration.

# Report of the Environment and Traffic Committee meeting held on Tuesday, 18 February 2003 at 8.00am in the Boardroom, Linwood Service Centre.

**Present:** Yani Johanson (Chairperson), Bob Todd, Linda Rutland, Rod Cameron and John Freeman.

John Freeman arrived at 8.10am and was present for Clauses 2, 3, 4 and 6 and part of Clause 5.

Bob Todd was absent for part of Clause 3.

### 20.1. ELECTION OF CHAIRPERSON

The Committee resolved to appoint Yani Johanson as Chairperson of the Committee.

### 20.2. LINWOOD AVENUE/WORCESTER STREET INTERSECTION

| Officer responsible  | Author                     |
|----------------------|----------------------------|
| City Streets Manager | Mike Calvert, DDI 941-8611 |

The purpose of this report is to inform the Board of the traffic management options for the Worcester Street/Linwood Avenue intersection in response to concerns expressed by residents about the limitations of the existing layout.

### BACKGROUND

To fully understand the basis of the decisions which have been made with respect to the Linwood/Worcester intersection it is appropriate to take a moment to look at the transport planning history, which has led to the development of the roading network in the city.

In 1958 the Canterbury Regional Council in conjunction with the Territorial Authorities of the Greater Christchurch area developed the concept of a road hierarchy for Christchurch. This followed the worldwide trend to plan roads by their function rather than treating all roads in a similar fashion. The hierarchy developed was the basis of the Master Transport Plan and became the cornerstone of all subsequent planning for the roading hierarchy in the city. It is based on the "Rooms and Corridors" concept, which provides for purpose-built arterial roads to carry the majority of the traffic (corridors) enabling the local roads between these corridors (rooms) to carry less traffic by only having to cater to local access traffic. By developing the high traffic density corridors money can be invested more economically by targeting it to specific areas.

In the years since its development there have been a number of reviews of the hierarchy, which have resulted in some changes to individual street classifications, although the bones of the structure have remained largely intact. The hierarchy is laid out in the City Plan and the issue as to whether there should be a road hierarchy at all was again traversed during the Proposed City Plan development process in 1995. The hierarchy provides a basis for policy decisions as to how various roads should be constructed, marked, planted and how they should look and feel to drive, ride or walk along.

Intersection treatments form an extremely important area of planning the network, as the way in which an intersection is constructed will have impacts on the safety and of the whole area, not just at the intersection. It is normal policy on major arterial roads such as Linwood Avenue to control intersections with other classified roads through the use of signals or roundabouts, and to only provide priority controls at local roads. This helps to direct the traffic onto the appropriately designed routes and retains the local roads as low traffic environments.

Within the road hierarchy in Christchurch, Linwood Avenue is classified as a major arterial and Worcester Street is classified as a local road.

### HISTORY

Linwood Avenue, from Gloucester Street to Worcester Street, was reconstructed in its present form as a four lane, median divided road in 1988. At the time of reconstruction it was proposed that the solid median be carried through the intersection with Worcester Street to close it off to through traffic. The public consultation pamphlet released at the time (attached) had the following to say regarding the intersection of Linwood Avenue with Worcester Street. *"It is also necessary for safety and to reduce through traffic in Worcester Street to carry the median unbroken across Worcester Street."* Due to public opposition to the proposed restrictions to access, the intersection was reconstructed at that time with a gap in the median to allow all traffic movements to be undertaken.

In the 5 year period between June 1993 and 1998 there were 20 crashes at the intersection. It was again suggested by City Streets staff that, on safety grounds, the median should be closed to vehicular traffic. Whilst there was some public support for the idea a number of people objected to the closure and at the time there was also a bus service, which used this route. The intersection was consequently redesigned to allow for right turns into Worcester Street from Linwood Avenue. The reconstructed intersection has improved safety dramatically and in the four years since the work was completed in 1998 there has only been 1 crash at this site. An LTSA listing of the crashes at this intersection since 1993 is attached.

The work undertaken has resulted in definite and obvious safety benefits at this intersection although there has been some negative feedback from the public with respect to the limitations on through movements along Worcester Street across the Linwood Avenue intersection and there is now also an issue with people driving the wrong way through the right turn bays.

### ACCESS ALONG WORCESTER STREET

Safety problems at intersections frequently occur due to particular movements creating problems for drivers misjudging speeds or becoming impatient and making bad decisions. This is why safety improvements will often either restrict/stop particular movements, or control them and take the decision making out of the driver's hands to some extent or other (eg roundabouts and signals). Because drivers do not like to have their mobility restricted, safety works are often compromised to provide some measure of access and decisions are normally made weighing the access issues against the safety of the alternatives.

In the case of the Linwood/Worcester intersection it has been suggested by some residents that the break in the median should be reopened to all traffic and controlled by traffic signals or a roundabout. Whilst this would address some of the safety concerns at this site it would invariably lead to more crashes than the present arrangement. It would also not address the planning issues with regard to the function of Worcester Street. The opening of the median would lead to far higher flows of traffic using this road to head into the central city from the eastern suburbs and vice versa. This is in direct contradiction to the stated function of a local road in the City Plan, which is to "...function almost entirely as access ways and are not intended to act as through routes for motor vehicles." The function of the road is being reflected in the centre of the city by the Council decision to close the road at Latimer Square and it would also be prudent, both in terms of safety and efficiency, to also close the median gap at Fitzgerald Avenue.

### **RIGHT TURN BAYS**

It has been reported that there are a small number of drivers performing illegal manoeuvres at the right turn bays by driving through these facilities the wrong way to link with the other section of Worcester Street by driving across Linwood Avenue instead of using Gloucester Street, which is a controlled cross junction. This does not seem to be creating a safety hazard but there is obviously the potential for crashes to be created by movements which have not been specifically allowed for in the design.

# 1. Do Nothing

To undertake no further changes at the intersection is obviously the cheapest option. The intersection is currently operating safely and efficiently, although there is the reported issue of the illegal manoeuvres by drivers through the right turn bays. Having been advised of the issue the Council should not ignore the potential safety hazards involved in these manoeuvres.

# 2. Revise Existing Layout

Setting aside for the moment the issue of access, the concern regarding the misuse of the existing facilities could possibly be resolved quite cheaply and easily through some minor adjustments to the central islands. Although this is subject to more detailed investigation of the design (eg lane widths and swept paths for larger vehicles). This would make the manoeuvre far more difficult to undertake for car drivers, although the need to provide for large vehicles means there will always be the ability to travel through it the wrong way, but it would be almost impossible for trucks to negotiate in the wrong direction.

# 3. Close the Median

The option of a full closure of the median would be a cheap and simple procedure to undertake, although it is unlikely to receive support from many local residents. The bus route which previously travelled along Worcester Street was re-routed onto Gloucester Street in association with the north-east suburbs review some 2 years ago and is therefore not now an issue in this debate. The closure would stop all illegal manoeuvres and is obviously the safest option, notwithstanding the fact that it does reduce access into Worcester Street.

# 4. Traffic Signals

Traffic signals could be installed at the intersection, although there is currently no money budgeted for any work at this location. The cost of providing traffic signals at the Worcester Street/Linwood Avenue intersection would be of the order of \$150,000. The installation of signals does not fit with any of the objectives and policies in the City Plan for the development of the roading hierarchy and would be against good transport planning principles. The introduction of signals would encourage motorists to use Worcester Street as a through road and would inevitably require further works to be undertaken along the route to provide for the increase in traffic.

# 5. Roundabout

A roundabout would be an extremely expensive option, requiring the acquisition of land to provide for a fully complying multi-lane facility. It is estimated that a roundabout at this location would be likely to cost between \$500,000 and \$750,000. As with any roundabout it would introduce difficulties for cyclists along both Linwood Avenue and Worcester Street. As with the signals option, it does not fit with any of the objectives and policies in the City Plan for the development of the roading hierarchy and would be against good transport planning principles.

# DISCUSSION

The intersection of Worcester Street with Linwood Avenue currently works safely and efficiently, other than the occasional illegal manoeuvre undertaken by some motorists. Whilst this has not, so far, resulted in any reported crashes, there is the increased potential for crashes to occur. The manoeuvres could be minimised through either the closure of the median, or the extension of the existing islands. The former would be most effective in terms of safety, but is unlikely to receive public support. The latter would reduce the problem and retain a higher level of access for local traffic. It should be noted, however that there is currently no money in the budget for any works at the Worcester Street/Linwood Avenue intersection.

A change in intersection control to signals or a roundabout is not an option which would be recommended by the City Streets Unit as this will lead to an increase in crashes at this location and would be totally contradictory to the development of the roading hierarchy.

### CONCLUSION

There has been a lot of discussion over the years relating to the best way to control traffic at the intersection of Worcester Street with Linwood Avenue. The current layout is a result of these discussions. Whilst there is a minor issue regarding illegal manoeuvres through the right turn bays, the layout works efficiently and safely. There are few benefits to opening the intersection to once again allow for full access through Worcester Street and this would be against the stated policies of the Council.

In pure traffic terms the best course of action would be to close the median gap altogether, resolving the issue of illegal manoeuvres and the potential safety problems at this location. However, accepting that all previous consultation has shown the desire for some level of access from Linwood Avenue, it is recognised that the extension of the existing islands (subject to detailed design) would provide a more pragmatic solution to the reported problem.

### Staff Recommendation:

That the design of the intersection of Worcester Street with Linwood Avenue be reviewed to limit the number of illegal manoeuvres through the right turn bays.

### Committee Recommendation:

That Tim Barnett, MP be given the opportunity to discuss the report with the Committee before any decision is made on the report. (Note: This meeting was scheduled for 4.30pm on Monday, 3

March 2003, in the Boardroom, Linwood Service Centre.)

# Chairperson's Recommendation: For discussion.

## 20.3. EASTGATE SHOPPING CENTRE - TRAFFIC MANAGEMENT

| Officer responsible                                    | Author                                    |
|--|---|
| City Streets Manager                                   | Jeff Owen, Traffic Engineer, DDI 941 8971 |
| Corporate Plan Output: Street Markings and Signs 9.6.9 |   |

The purpose of this report is to provide the Committee with information and seek various recommendations on traffic management issues at the Eastgate Shopping Centre. It will address four issues:

Current pedestrian practises crossing Buckleys Road adjacent to Eastgate Shopping Centre Installation of a pedestrian facility in Cranley Street outside the Linwood Library Kerbside parking management on Buckleys Road outside the shopping centre's pedestrian entrances

Traffic management within the shopping centre's car parks

### BACKGROUND

In January 2002 the Board received a report outlining a recent pedestrian crossing facility upgrade on Buckleys Road and that the planned pedestrian traffic signals at this location should not proceed. The Board recommended to the Sustainable Transport and Utilities Committee:

That the Board support a decision not to proceed with the installation of pedestrian traffic signals on Buckleys Road adjacent to Eastgate Shopping Centre.

That consideration be given to spending the funds in the Hagley/Ferrymead Community Board area.

That the needs of pedestrians in this area continue to be monitored and reported on to the Board at the first meeting of the Board in 2003.

This report will address item 3 above by reporting on the current situation in this area. It will also investigate the issues of a pedestrian facility in Cranley Street, kerbside parking restrictions on Buckleys Road outside the Eastgate Shopping Centre and traffic management in the shopping centre's car park.

### PEDESTRIAN FACILITY - BUCKLEYS ROAD

A survey of current pedestrian activity of how they cross Buckleys Road between Linwood Avenue and Russell Street has recently been carried out. The survey matched the day and times of the previous surveys. Buckleys Road can be crossed at any location but five locations are generally used. They are the traffic signals at Linwood Avenue, a break in the median landscaping outside McDonalds (old money machine site), over the chain in the median, the pedestrian facility outside the mall entrance and adjacent to the bus stop outside Countdown. The previous upgrade of the crossing point outside the shopping centre's pedestrian access has been a great success. Pedestrians are encouraged to cross here and are walking to this point in great numbers than ever before.

The total numbers of pedestrians crossing Buckleys Road has fallen slightly, a 3% decrease over the previous survey. This can be attributed to possibly the time of year and the actual weather conditions on the day. As can be seen from the survey results (attached) all crossing points had a reduction in use except for the pedestrian crossing facility at the shopping centre's entrance becoming more popular with a 35% increase.

While the survey was being conducted some other interesting observations were noted.

The maximum delay to pedestrians crossing Buckleys Road at the shopping centre's entrance was 10 seconds.

The chain barrier on the median effectively eliminated pedestrians crossing at this location. They were all construction workers from the shopping centre's redevelopment.

Vehicles at the Linwood Avenue traffic signals always gave way to pedestrians crossing Buckleys Road with the green signal.

The average delay for pedestrians crossing Buckleys Road at the traffic signals at Linwood Avenue was 90 seconds.

50% of pedestrians crossing here chose to walk north up Buckleys Road and cross onto the median near the old money machine location. The delay at this location was approximately 10 seconds.

No conflicts were observed of pedestrian verses vehicle at any location surveyed.



**Pedestrian Survey Crossing Locations** 

In the last report it was stated that there was one pedestrian injury crash that had been reported to the Police in the last five years in this area. Since that time there has been no further pedestrian related crashes reported. The pedestrian crash rate in this area is well below the average for this type of environment.

In conclusion the existing pedestrian crossing facility at the shopping centre's entrance on Buckleys Road is performing very well. It has attracted pedestrians to this point. Delays for pedestrians are minimal with no conflicts with vehicles observed over the survey period. The proposed traffic signals that were planned for this location but are now abandoned would have increased the delay time considerably. To avoid being delayed some pedestrians would have ignored the signals and crossed against them.

# **CRANLEY STREET – PEDESTRIAN CROSSING FACILITY**

Concern has been expressed at the lack of a pedestrian crossing facility on Cranley Street outside the Linwood Library for people wishing to cross between Eastgate Shopping Centre, the library and the medical centre. An ever increasing number of customers visit these establishments in one trip. Cranley Street is now the main entrance to Eastgate's 1300 onsite car parks. The Woolston (33) bus uses Cranley Street and the shopping centre's car park for its route through to Russell Street. Paired bus stops are located on Cranley Street outside the library to service Eastgate Shopping Centre, the library and the medical centre. Passengers wishing to travel back to Woolston must cross Cranley Street. A recent pedestrian survey was carried out to assess the current activity in the immediate area. The survey was carried out on Wednesday 5 February 2003. The results show that mid morning there are two pedestrians per minute crossing Cranley Street. As can be seen from the survey results (attached) two locations have been identified as preferred crossing points, directly outside the library at the bus stops and to the north of the library car park. The number of pedestrians crossing Cranley Street between Eastgate, the Linwood Library and the medical centre observed in the survey periods equates to two movements each minute. Over the three survey periods the total number crossing the road was nearly identical to each other and it can be concluded that of the periods not surveyed the numbers crossing Cranley Street will be similar.

To help pedestrians cross the road in safety the proposal shows two pedestrians island and associated road markings (a plan showing this proposal will be tabled at the meeting). The effect of positioning an island outside the library will slow vehicles accessing the shopping centre's main car park but also provide a pedestrian safety refuge at this pedestrian desire line. The second island north of the library will slow vehicles exiting the car park via Cranley Street but more importantly provide a safe zone at this desired crossing point. Access to McDonald's car park and drive through, and the library's car park are maintained.

Currently there is no funding for this facility within the City Streets budget. If it was included in the requested projects within the 'Pedestrian Safety Initiatives/Crossing Facilities' category in the 5 Year Capital Expenditure Programme it is doubtful whether it would be funded in the new fifth year of this programme. Knowing that the requests far out strip the budget for this category and if the Board considers this project to be have a high priority in its area it may be appropriate for the Board to consider funding this project from its Project or Discretionary funds.

In conclusion there is a need to provide a pedestrian crossing facility on Cranley Street adjacent to Eastgate Shopping Centre and the Linwood Library. A second facility will assist pedestrians wishing to cross from the library to the shopping centre's main car park. This will also slow vehicles at the bend leaving the car park via Cranley Street. As the Woolston bus services use this area, and this road is the main access into the car park, kerbside parking will continue to be banned as shown on the plan to be tabled.

### **BUCKLEYS ROAD – KERBSIDE PARKING MANAGEMENT**

The developer of Eastgate Shopping Centre and the centre's manager have approached the Council to change the kerbside parking restrictions at the centre's pedestrian entrances on Buckleys Road. Currently the area is an approved construction zone that will be removed when construction is completed in April this year.

They have requested that a P5 Loading Zone be established immediately outside the entrances on Buckleys Road with the remainder having a P30 time restriction. The loading zone is required for deliveries to the new food court area located immediately inside the centre between the two pedestrian entrances. It would also serve as an area for passenger drop off and pickup from the centre. Most of the ATM money machines will be located within the centre in close proximity to the food court and the loading zone will help customers access these machines. The P30 parking restriction to the south of the loading zone will provide for longer term parking if that is what is required. The plan below shows this proposal.



Proposed Kerbside Parking Restrictions – Buckleys Road

### TRAFFIC MANAGEMENT WITHIN THE SHOPPING CENTRE'S CARPARKS

Concern has been expressed at the lack of consistency with road markings and controls within shopping centre car parks as compared to legal roads throughout the City. For instance, give way controls with no road markings or give way road markings with no sign are common. This all leads to confusion to the motorist.

Cranley Street is a legal road controlled by the Council that leads into Eastgate Shopping Centre's car park. The roadway continues through to join Chelsea Street. It also runs north adjacent to the centre's car parking building but within the car park to join Russell Street. Both Chelsea and Russell Streets' intersections are of a tee configuration. However the motorist is unaware that the car park is on private land and not a legal road. The transition from legal to private road is at the 90-degree bend on Cranley Street outside the Linwood Library. The roads within the car park and Cranley Street are marked to different standards.

This is currently being investigated by City Streets staff in conjunction with Eastgate Shopping Centre's Manager with a view to changing some road markings to make the same consistent with current road marking standards.

## Committee

- **Recommendation:** 1. That the information be received.
  - 2. That all existing parking restrictions on the east side of Buckleys Road commencing at its intersection with Linwood Avenue and extending in a northerly direction for a distance of 158.5 metres be revoked.
  - That the stopping of vehicles be prohibited (at any time) on the east side of Buckleys Road commencing at its intersection with Linwood Avenue and extending in a northerly direction for a distance of 82.5 metres.
  - 4. That a P30 Parking Restriction be created on the east side of Buckleys Road commencing at a point 82.5 metres from its intersection with Linwood Avenue and extending in a northerly direction for a distance of 39 metres.
  - That a P5 Loading Zone be created on the east side of Buckleys Road commencing at a point 121.5 metres from its intersection with Linwood Avenue and extending in a northerly direction for a distance of 37 metres.
  - 6. That the current taxi stand site on Buckleys Road be reviewed after the Eastgate Mall development work is completed.

# Chairperson's Recommendation:

That the recommendation be adopted.

### 20.4 CYPRESS STREET: EASTERN SIDE IMPROVEMENTS

The Committee considered a report on proposed improvements to the eastern side of Cypress Street in front of the Memorial Park Cemetery. The Committee was advised that an updated report would be available within the next two months.

The Committee received the information.

### Chairperson's

**Recommendation:** That the information be received.

### 20.5 CORRESPONDENCE – TRAFFIC DISTURBANCES, ESPLANADE AND PRECINCTS, SUMNER

The Committee considered a letter from Gerald Austin regarding his concerns about traffic in Sumner. The Committee also considered an Esplanade concept plan submitted by Mr Austin. A copy of Mr Austin's letter and plan have been separately circulated to Board members.

The Committee requested that:

- 1. Information be sought from Noise Control regarding stereo and exhaust noise generated by Esplanade traffic.
- 2. Feedback be sought from the Council's Youth Advocate regarding the youth social problems in Sumner.
- 3. The local Community Constable be invited to address the Board on the issue.

# Committee

Recommendation:

That a working party consisting of Yani Johanson, Bob Todd, Linda Rutland, Rod Cameron, John Freeman and Anna Crighton be established to address the Esplanade traffic issue with other Ferrymead Board members being notified of working party meetings and given the opportunity to attend.

# Chairperson's Recommendation:

That the recommendation be adopted.

### 20.6 SPECIAL PURPOSE (FERRYMEAD) ZONE LAND USE OPTIONS

The Committee received a presentation from David Campbell (Planner, City Plan Team) on the current Special Purpose (Ferrymead) Zone. The Council has undertaken to revisit the land use options for the lower Heathcote Valley. Land uses are limited by the Special Purpose (Ferrymead) Zone and associated rules contained in the proposed City Plan. The Special Purpose (Ferrymead) Zone is an interim measure and zoning options to replace this zone need to be formulated. Mr Campbell requested that any feedback from the Board on possible land use options for the Special Purpose (Ferrymead) Zone be received by the end of March 2003.

| Committee<br>Recommendation:     | That the information be received. |
|----------------------------------|-----------------------------------|
| Chairperson's<br>Recommendation: | That the information be received. |